



Hewlett Packard
Enterprise

HPE FlexFabric 5940 Switch Series

MIB Companion

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MIB overview

This document provides information about the management information bases (MIBs) available for the device, including public and private MIBs.

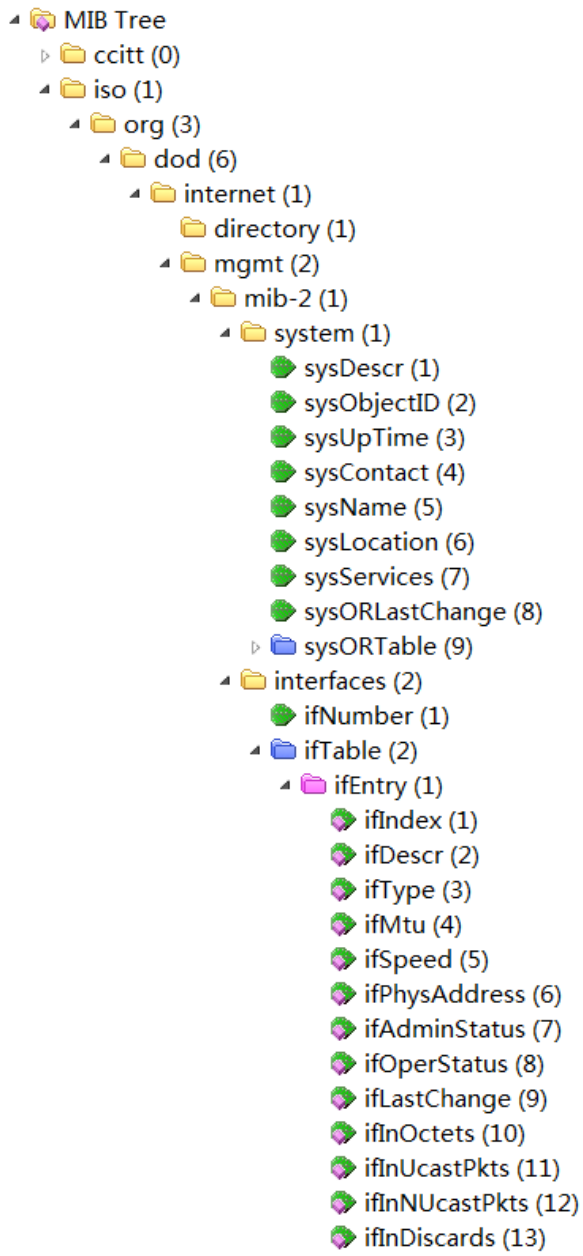
About MIBs

MIB modules and MIB files

A MIB is a collection of information organized hierarchically in a tree structure. Each node in a MIB is a managed object uniquely identified by an object identifier (OID). An OID is a dotted numeric string that uniquely identifies the path from the root node to a leaf node.

Collections of related objects are defined in MIB modules. Typically, each MIB module has a MIB file. You can run a MIB compiler to compile the MIB files of the managed device into a visualized MIB tree for the ease of management, as shown in Figure 1.

Figure 1 MIB tree after compilation



Types of MIB objects

MIB objects are classified into scalar objects, tabular objects, and notification objects. The SNMP manager can access only the instances of MIB objects.

Scalar objects

Scalar objects are single-instance objects. An example of a scalar object is `sysUpTime`, which contains only one object instance to store the time since the network management portion of the system was last initialized. The instance of a scalar object is identified by an index value of 0. When the SNMP manager accesses the instance of a scalar object, the SNMP manager must add a suffix of `.0` to the object identifier or object name, as shown below:

```
Protocol version:SNMPv2c
Operation:Get
Request binding:# Request sent by the SNMP manager
1:sysUpTime.0 (TimeTicks) null
```

```
Response binding:# Response sent by the SNMP agent (the device)
1:sysUpTime.0 (TimeTicks) 29 days 15h:25m:15s.64th (256111564)
```

Tabular objects

Tabular objects define multiple related objects in conceptual tables. You can think of a tabular object as a table in which objects are columns and their instances are rows. The objects in a table are also called columnar objects. An example of a tabular object is ifDescr, which contains multiple instances to store the descriptions of different interfaces. When the SNMP manager accesses an instance of this object, the SNMP manager must add its index value, as shown below:

```
Protocol version:SNMPv2c
Operation:Get
Request binding:# Request sent by the SNMP manager
1:ifDescr.17 (DisplayString) null
```

```
Response binding:# Response sent by the SNMP agent (the device)
1:ifDescr.17 (DisplayString) Aux0 [41.75.78.30 (hex)]
```













To access an object instance correctly, you must add its index values correctly.

Notification objects

A notification object describes an unsolicited transmission of information about an event, for example, a failure or recovery event.

For example, the following linkUp and linkDown objects describe notifications about interface up and interface down events, respectively.

```
🔗 linkUp
  Message reception date: 2020/5/29
  Message reception time: 11:01:14.435
  🕒 Time stamp: 0 days 09h:57m:21s.77th (3584177)
  🔗 Message type: Notification (Trap)
    Protocol version: SNMPv2c
    Transport: IP/UDP
  🖥️ Agent
    Address: 192.168.18.19
    Port: 25280
  🖥️ Manager
    Address: 10.112.112.122
    Port: 162
  📁 Community: v2trap
  📁 Bindings (5)
    🟢 Binding #1: sysUpTime.0 *** (TimeTicks) 0 days 09h:57m:21s.77th (3584177)
    🟢 Binding #2: snmpTrapOID.0 *** (OBJECT IDENTIFIER) linkUp
    🟢 Binding #3: ifIndex.61697 *** (InterfaceIndex) 61697 [61697]
    🟢 Binding #4: ifAdminStatus.61697 *** (INTEGER) up(1)
    🟢 Binding #5: ifOperStatus.61697 *** (INTEGER) up(1)
```

 linkDown
 Message reception date: 2020/5/29
 Message reception time: 11:01:14.432
 Time stamp: 0 days 09h:57m:16s.82th (3583682)
 Message type: Notification (Trap)
 Protocol version: SNMPv2c
 Transport: IP/UDP
 Agent
 Manager
 Community: v2trap
 Bindings (5)
 Binding #1: sysUpTime.0 *** (TimeTicks) 0 days 09h:57m:16s.82th (3583682)
 Binding #2: snmpTrapOID.0 *** (OBJECT IDENTIFIER) linkDown
 Binding #3: ifIndex.61697 *** (InterfaceIndex) 61697 [61697]
 Binding #4: ifAdminStatus.61697 *** (INTEGER) down(2)
 Binding #5: ifOperStatus.61697 *** (INTEGER) down(2)

MIB support status

A MIB module, tabular object, or scalar object is commented as "Not supported" if it is not supported by the device. To avoid unknown issues, do not access such a MIB, table, or scalar object even if it is accessible.

If a MIB is not supported, its notifications are not supported as well.

For backward compatibility and interoperability with third-party vendors, the software release might contain deprecated or obsolete MIB modules or objects. This document lists these MIB modules and objects but does not provide detailed information about them.

Obtaining SNMP notifications

To have the device send SNMP notifications to an NMS:

- Configure the device with the same SNMP version as the NMS.
- Configure a community string or SNMP user depending on the SNMP version:
 - If SNMPv1 or SNMPv2c is used, use the **snmp-agent community** command to configure a community string.
 - If SNMPv3 is used, use the **snmp-agent group** command to configure an SNMP user group, and use the **snmp-agent usm-user** command to configure an SNMPv3 user in the group.
- Enable SNMP notifications. You can use the **snmp-agent trap enable** command to enable SNMP notifications for all feature modules except the following modules:
 - Modules that do not use this command for notification control. For example, NQA uses the **reaction trap** command to control notifications.
 - Modules that use this command only for global notification control. For example, to send link state notifications for a port, you must configure the **enable snmp trap updown** command in addition to the **snmp-agent trap enable** command.

To identify the notification control commands for these two types of modules, look up the **trap** keyword in the module-specific command references.

- Use the **snmp-agent target-host** command to configure settings for reaching the NMS, including the IP address of the NMS and the authentication settings.

For more information about SNMP settings, see the network management and monitoring configuration guide for the device.

Types and severity levels of notifications

The notifications are divided into the following types:

- **Error notifications**—Created when hardware or software exceptions occur.
- **Recovery notifications**—Created when the hardware or software recovers from an error condition.
- **Informational notifications**—Created when an event occurs that typically does not require any administrative intervention.

Typically, error and recovery notifications report pairs of related events, and informational notifications report independent events. For example, a linkDown error notification is generated when a physical link is disconnected. When the physical link comes up, a linkUp recovery notification is generated. When the device is rebooted from the CLI, a coldStart informational notification is generated.

To help administrators determine whether a message requires immediate action, this document classifies notifications into the severity levels in [Table 1](#).

NOTE:

The notification type and severity level information in this document is provided only as a reference for network administrators. SNMP notifications do not contain this information.

Table 1 Notification severity levels

| Severity | Description |
|----------|---|
| Critical | Asset at risk. Immediate action required. For example, a temperature control issue is critical. |
| Major | Significant impact or risk. Immediate action required. |
| Minor | Minor impact or risk. Action required with medium to low priority. |
| Warning | Needs to be reviewed to determine whether action is necessary. |

NOTE:

The severity level of a recovery notification is typically set to Warning or the same level as its paired error notification.

The severity level of an informational notification is typically set to Warning and it might be set to a higher severity level if administrative action is desirable.

In this document, a hyphen (-) or N/A might be used to represent the Warning severity level for a recovery or informational notification.

Guidelines on MIB-based configuration and management

IMPORTANT:

- ❗ To avoid unknown issues, do not access a MIB, table, or scalar object commented as "Not supported" even if it is accessible.
-

You can configure the device by setting its supported MIB objects. To make sure the values set in MIB objects can be restored correctly from the CLI, use the following restrictions and guidelines:

- As a best practice, use visible characters from 0x21 to 0x7E, except for 0x3F, which represents the question mark (?). If you need to use a special character, make sure the CLI supports that character. For example, the CLI uses the space for delimitation and uses the question mark for help indication. If a value contains a space or question mark, the CLI might be unable to restore that value.
- Make sure the value set in the MIB object is in the value range supported in the CLI. In rare situations, an MIB object might support a different value range than the CLI. For example, an OCTET STRING type MIB object might support longer strings than the maximum length allowed in the CLI. If the value set in the MIB object exceeds the maximum length allowed in the CLI, the CLI will be unable to restore the value correctly. Conversely, if a value set in the CLI is beyond the value range for the MIB object, the system cannot set that value in the MIB object.

Using this document

This document describes MIBs in alphabetical order.

Information about scalar and tabular objects

This document presents information about scalar and tabular objects in tabular form, as shown in the following example:

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|------------------------------|------------------|-----------------|
| ifIndex (1.3.6.1.2.1.2.2.1.1) | read-only | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |

The following table provides an explanation of each field in the object information tables:

| Item | Description |
|----------------|--|
| Object (OID) | Object name and its OID. |
| Access | The value of the MAX-ACCESS clause in the MIB for the object. It defines the access rights to the object. |
| Syntax | Data type defined in the SYNTAX clause for the object in the MIB file. |
| Value range | Values or value ranges defined in the SYNTAX clause for the object in the MIB file. |
| Description | Explanation of the object. |
| Implementation | <p>Implementation of the MIB object on the device.</p> <ul style="list-style-type: none">• If the object is implemented in full compliance with the MIB, this field displays As per the MIB.• If the object is accessible but it is not supported or tested, this field displays Not supported. To avoid unknown issues, do not access such MIB objects.• Any implementation restrictions. |

For a tabular object, this document also provides information about the index or indexes used for it to identify instances and the support for table instance operations.

The support for table instance operations is presented in tabular form, as shown in the following example:

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

The following table provides an explanation of each field in the object information tables:

| Item | Description |
|-------------|---|
| Create | <p>Support of the table for the create operation and restrictions on the create operation (if any).</p> <ul style="list-style-type: none">• Supported—You can add object instances to the table.• Not supported—You cannot add object instances to the table. |
| Edit/Modify | <p>Support of the table for the modify (also called edit) operation and restrictions on the modify operation (if any).</p> <ul style="list-style-type: none">• Supported—You can modify object instances in the table.• Not supported—You cannot modify object instances in the table. |
| Delete | <p>Support of the table for the delete operation and restrictions on the delete operation (if any).</p> <ul style="list-style-type: none">• Supported—You can delete object instances from the table.• Not supported—You cannot delete object instances from the table. |

| Item | Description |
|------|--|
| Read | Support of the table for the read operation and restrictions on the read operation (if any). <ul style="list-style-type: none"> • Supported—You can read object instances in the table. • Not supported—You cannot read object instances in the table. |

Information about notification objects

This document presents information about notification objects in tabular form, as shown in the following example:

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-------------------------|-------|----------|------------------------------|----------------|
| 1.3.6.1.6.3.1.1.5.3 | Interface link failure. | Error | Major | 1.3.6.1.6.3.1.1.5.4 (linkUp) | ON |

The following table provides an explanation of each field in the object information tables:

| Item | Description |
|-----------------------|--|
| OID | OID of the notification object in the MIB. |
| Event | Description of the event that triggers the notification. |
| Type | <p>Notification type. This information helps you identify the health state of the device and filter notifications.</p> <ul style="list-style-type: none"> • Error notifications—Created when hardware or software exceptions occur. • Recovery notifications—Created when the hardware or software recovers from an error condition. • Informational notifications—Created when an event occurs that does not require any administrative actions. <p>Typically, error and recovery notifications report pairs of related events, and informational notifications report independent events. For example, a linkDown error notification is generated when a physical link is disconnected. When the physical link comes up, a linkUp recovery notification is generated. When the device is rebooted from the CLI, a coldStart informational notification is generated.</p> |
| Severity | <p>Severity of the notification. This information helps you determine whether action is required in response to the notification. SNMP notification packets do not contain this severity level information.</p> <ul style="list-style-type: none"> • Critical—Asset at risk. Immediate action required. For example, immediate action is required to take on temperature control issues. • Major—Significant impact or risk. Immediate action required. • Minor—Minor impact or risk. Action required with medium to low priority. • Warning—Needs to be reviewed to determine whether action is necessary. <p>In this document, a hyphen (-) or N/A might be used to represent the Warning severity level for a recovery or informational notification.</p> |
| Recovery notification | Created when the hardware or software recovers from an error condition. |
| Default status | <p>Default status of the notification:</p> <ul style="list-style-type: none"> • ON—The notification is enabled. • OFF—The notification is disabled. |

Variable bindings in SNMP notifications

An SNMP notification contains a list of variable bindings to describe the event that triggered the notification. By parsing the variable binding list, you can obtain information such as on which interface the event occurred and which module reported the event. In the variable binding list, each binding is a pair of object instance OID and value.

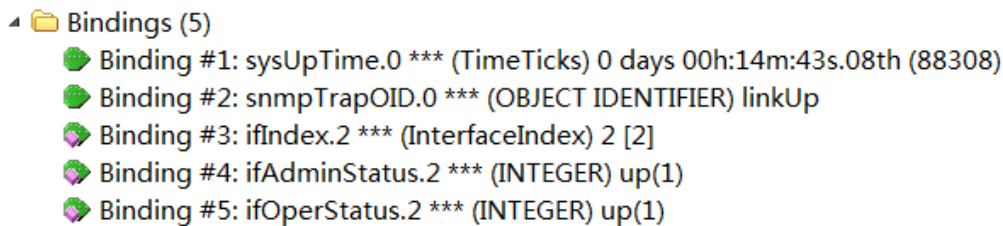
Types of bindings in the variable binding list

A variable binding list contains mandatory bindings and notification-specific bindings.

- Objects in mandatory bindings are defined in SNMP and included in every SNMP notifications.
- Notification-specific bindings differ depending on the definition of the notification object.

For example, Figure 2 shows the variable binding list in an SNMPv2 linkUp notification.

Figure 2 Variable binding list in an SNMPv2 linkUp notification

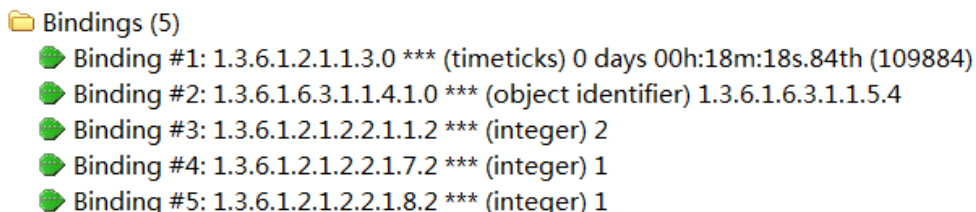


In this variable binding list, two are mandatory variable bindings and three are notification-specific bindings.

- The mandatory variable bindings contain the following object instances:
 - sysUpTime.0—Contains the time when the notification was generated. In this example, its value is 88308.
 - snmpTrapOID.0—Contains the name or OID of the notification object. In this example, the notification object is linkUp.
- The notification-specific bindings contain the following object instances:
 - ifIndex.2—Index of the interface on which the event occurred. In this example, the interface index is 2. In addition, ifIndex is also the index for the linkUp notification object.
 - ifAdminStatus.2—The administrative state of the interface. In this example, the index of the interface on which the event occurred is 2. The value for the administrative state of the interface is 1.
 - ifOperStatus.2—Status of the operation on the interface on which the event occurred. In this example, the interface index is 2. The value for the operation status is 1.

The variable binding list in Figure 2 is in a user-friendly view presented by the network management software after OID translation and numeration value conversion. Figure 3 shows the binding list without OID translation and numeration value conversion. With most network management software offerings, you can choose between the two views as needed.

Figure 3 Variable binding list in an SNMPv2 linkUp notification without



Obtaining information about indexes in variable bindings

A notification-specific variable might be an object instance identified by one index or multiple indexes. The index values are appended to the end of the object name. To obtain information about the indexes for an object instance, use the object name in the binding as the keyword to search the MIB document for the object table. Then, you can find indexing information for that table.

For example, Figure 4 shows the variable binding list in a teTunnelUp notification.

Figure 4 Variable binding list in a teTunnelUp notification

Bindings (4)

- Binding #1: sysUpTime.0 *** (TimeTicks) 0 days 00h:50m:10s.21th (301021)
- Binding #2: snmpTrapOID.0 *** (OBJECT IDENTIFIER) teTunnelUp
- Binding #3: teTunnelName.1 *** (SnmpAdminString) Tunnel1 [54.75.6E.6E.65.6C.31 (hex)]
- Binding #4: tePathName.1.0 *** (SnmpAdminString) (zero-length) [(hex)]

The teTunnelUp notification in this example contains the following notification-specific variable bindings:

- teTunnelName.1—Name of the tunnel on which the event occurred. In this example, the tunnel is identified by a value of index 1. Its tunnel name is Tunnel1.
- tePathName.1.0—The administrative status of the TE path on which the event occurred. The TE path is identified by two indexes. One index has a value of 1 and the other index has a value of 0. The value for the administrative status is a zero-length string.

To obtain information about the index or indexes of a variable, look up teTunnelName and tePathName in the document. You can then find tabular objects teTunnelTable and tePathTable, respectively. The index information is right below the tabular object name.

teTunnelTable

The table index is teTunnelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------------------------|---------------|-----------------|
| teTunnelIndex (1.3.6.1.2.1.122.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Tunnel index. | As per the MIB. |
| teTunnelName (1.3.6.1.2.1.122.1.2.1.2) | read-create | OCTET STRING | OCTET STRING (1..32) | Tunnel name. | As per the MIB. |

Because the table index for teTunnelTable is teTunnelIndex, the index value .1 in teTunnelName.1 represents the tunnel index with a value of 1.

tePathTable

The table indexes are teTunnelIndex and tePathIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------------------------|-------------------------|--------------------------|
| tePathIndex (1.3.6.1.2.1.122.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Applicable path index. | As per the MIB. |
| tePathName (1.3.6.1.2.1.122.1.3.1.2) | read-create | OCTET STRING | OCTET STRING (1..32) | Application path index. | The object is read only. |

Because the table indexes of tePathTable are teTunnelIndex and tePathIndex, the index values .1 and .0 in tePathName.1.0 represent the teTunnelIndex and tePathIndex instances with a value of 1 and 0, respectively.

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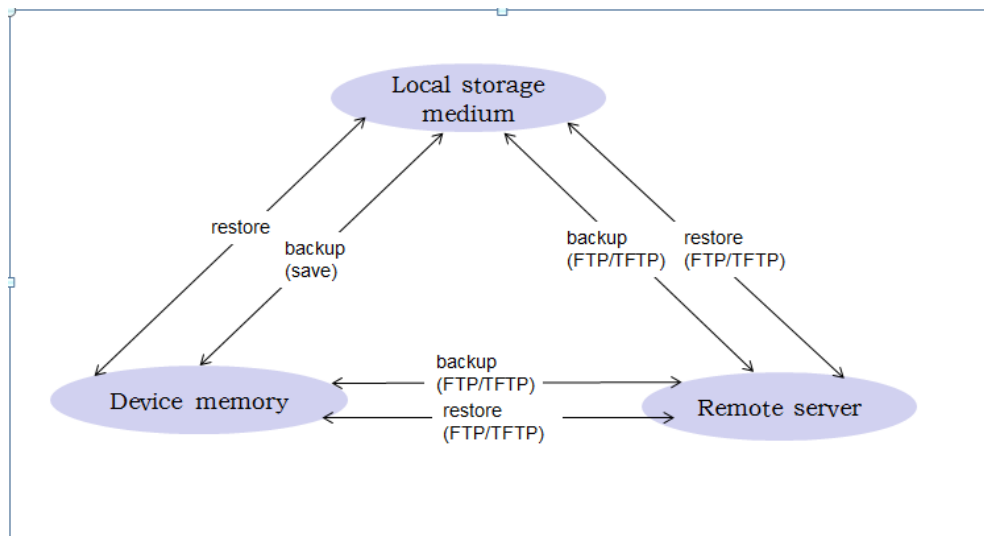
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HH3C-CONFIG-MAN-MIB

About this MIB

Use this MIB to manage the device configuration. For example, access this MIB to save, back up, or restore the configuration. This MIB also contains notifications about configuration changes.

The following figure shows the relationship among the device memory, local storage medium, and remote server in configuration backup and restoration:



MIB file name

hh3c-config-man.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cConfig(4)

Scalar objects

hh3cCfgRunModifiedLast

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| hh3cCfgRunModifiedLast (1.3.6.1.4.1.25506.2.4.1.1.1) | read-only | TimeTicks | Standard MIB values. | Time when the running configuration was last modified. | As per the MIB. |

hh3cCfgRunSavedLast

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------|-----------|-----------|----------------------|-----------------------|-----------------|
| hh3cCfgRunSavedLast | read-only | TimeTicks | Standard MIB values. | Time when the running | As per the MIB. |

| | | | | | |
|-------------------------------|--|--|--|-------------------------------|--|
| (1.3.6.1.4.1.25506.2.4.1.1.2) | | | | configuration was last saved. | |
|-------------------------------|--|--|--|-------------------------------|--|

hh3cCfgStartModifiedLast

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3cCfgStartModifiedLast (1.3.6.1.4.1.25506.2.4.1.1.3) | read-only | TimeTicks | Standard MIB values. | Time when the next-startup configuration file used currently was last modified. | As per the MIB. |

hh3cCfgLogLimitedEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cCfgLogLimitedEntries (1.3.6.1.4.1.25506.2.4.1.1.4) | read-only | Integer32 | Integer32 (0..2147483647) | Maximum number of rows in the hh3cCfgLogTable. | As per the MIB. |

hh3cCfgLogDeletedEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cCfgLogDeletedEntries (1.3.6.1.4.1.25506.2.4.1.1.5) | read-only | Counter32 | Counter32 (0..2147483647) | Total number of rows deleted from the hh3cCfgLogTable. | As per the MIB. |

hh3cCfgLogWantBackup

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------|--|--|
| hh3cCfgLogWantBackup (1.3.6.1.4.1.25506.2.4.1.1.6) | read-write | TruthValue | true(1) false(2) | Whether to backup the values of objects for the hh3cCfgLogTable. | The value for IRF-incapable devices is false. The value can be set to true for IRF-capable devices. |

hh3cCfgOperateGlobalEntryLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------|--|-----------------|
| hh3cCfgOperateGlobalEntryLimit (1.3.6.1.4.1.25506.2.4.1.2.1) | read-only | Integer32 | Integer32 (1..10) | Maximum number of rows in the hh3cCfgOperateTable. | As per the MIB. |

hh3cCfgOperateEntryAgeOutTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------|--|-----------------|
| hh3cCfgOperateEntryAgeOutTime (1.3.6.1.4.1.25506.2.4.1.2.2) | read-write | Integer32 | Integer32 (1..60) | Aging time for entries in the hh3cCfgOperateTable, in minutes. | As per the MIB. |

hh3cCfgOperateResultGlobalEntryLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------|--|-----------------|
| hh3cCfgOperateResultGlobalEntryLimit (1.3.6.1.4.1.25506.2.4.1.2.3) | read-write | Integer32 | Integer32 (1..50) | Maximum number of rows in the hh3cCfgOperateResultTable. | As per the MIB. |

hh3cCfgReset

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-----------------------|---|-----------------|
| hh3cCfgReset 1.3.6.1.4.1.25506.2.4.1.2.7 | read-write | INTEGER | normal(1) reset(2) | Reboots the device with factory defaults. | As per the MIB. |

hh3cCfgExecuteOperateResultEntryLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------|--|-----------------|
| hh3cCfgExecuteOperateResultEntryLimit (1.3.6.1.4.1.25506.2.4.1.2.6.1) | read-write | Integer32 | Integer32 (5..20) | Maximum number of rows in the hh3cCfgExecuteResultTable. | As per the MIB. |

hh3cCfgFirstTrapTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cCfgFirstTrapTime (1.3.6.1.4.1.25506.2.4.1.1.8) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time when the first notification was sent. | As per the MIB. |

hh3cCfgBackupToServerIPType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-----------------|---|-------------------------|-----------------|
| hh3cCfgBackupToServerIPType (1.3.6.1.4.1.25506.2.4.5.1) | accessible-for-notification | InetAddressType | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) | Server IP address type. | As per the MIB. |

hh3cCfgBackupToServerIP

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-------------|-----------------------|--------------------|-----------------|
| hh3cCfgBackupToServerIP (1.3.6.1.4.1.25506.2.4.5.2) | accessible-for-notification | InetAddress | OCTET STRING (0..255) | Server IP address. | As per the MIB. |

hh3cCfgBackupToServerVPNName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------------|-----------------------|--|-----------------|
| hh3cCfgBackupToServerVPNName (1.3.6.1.4.1.25506.2.4.5.3) | accessible-for-notification | DisplayString | OCTET STRING (0..255) | Name of the VPN instance to which the server IP address belongs. | As per the MIB. |

hh3cCfgRestoreType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------|----------------------|---|-----------------|
| hh3cCfgRestoreType (1.3.6.1.4.1.25506.2.4.5.7) | accessible-for-notification | INTEGER | binary(1) text(2) | 1 represents DBM configuration restoration. 2 represents text configuration restoration. | As per the MIB. |

Tabular objects

hh3cCfgLogTable

About this table

Use this table to obtain configuration change records.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cCfgLogIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|---|--|
| hh3cCfgLogIndex (1.3.6.1.4.1.25506.2.4.1.1.7.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of a configuration log. | As per the MIB. |
| hh3cCfgLogTime (1.3.6.1.4.1.25506.2.4.1.1.7.1.2) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time when the configuration log was generated. | As per the MIB. |
| hh3cCfgLogSrcCmd (1.3.6.1.4.1.25506.2.4.1.1.7.1.3) | read-only | INTEGER | cmdLine(1) snmp(2) other(3) | Type of the source command that caused the log generation. | As per the MIB. |
| hh3cCfgLogSrcData (1.3.6.1.4.1.25506.2.4.1.1.7.1.4) | read-only | INTEGER | erase(1) runningData(2) commandSource(3) startupData(4) local(5) netFtp(6) hotPlugging(7) | Source data recorded in the configuration log. | As per the MIB. |
| hh3cCfgLogDesData (1.3.6.1.4.1.25506.2.4.1.1.7.1.5) | read-only | INTEGER | unknown(1) runningData(2) commandSource(3) startupData(4) local(5) netFtp(6) hotPlugging(7) | Destination data recorded in the configuration log. | As per the MIB. |
| hh3cCfgLogTerminalType (1.3.6.1.4.1.25506.2.4.1.1.7.1.6) | read-only | INTEGER | notApplicable(1) unknown(2) console(3) terminal(4) virtual(5) auxiliary(6) | Terminal type recorded in the configuration log. | As per the MIB. |
| hh3cCfgLogTerminalUser (1.3.6.1.4.1.25506.2.4.1.1.7.1.7) | read-only | DisplayString | OCTET STRING (0..64) | Name of the user that logged in to the CLI. | If the user uses SNMP to modify the device configuration, the value of this object is the SNMPv3 username. |
| hh3cCfgLogVirHost (1.3.6.1.4.1.25506.2.4.1.1.7.1.11) | read-only | DisplayString | OCTET STRING (0..64) | Host name of the remote system recorded in the configuration log. | If the value of hh3cCfgLogTerminalType is virtual, the value of this object is the host name of the remote system connected to the system. In other situations, the value of this |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|---|---|---|
| | | | | | object is a zero-length string. |
| hh3cCfgLogUserName (1.3.6.1.4.1.25506.2.4.1.1.7.1.12) | read-only | DisplayString | OCTET STRING (0..64) | Service username recorded in the configuration log. | If the value of the hh3cCfgLogSrcData and hh3cCfgLogDesData nodes are any values other than netFtp, the value of this node is a zero-length string. |
| hh3cCfgLogServerAddress (1.3.6.1.4.1.25506.2.4.1.1.7.1.13) | read-only | IpAddress | OCTET STRING (4) | Server address recorded in the configuration log. | If the values of the hh3cCfgLogSrcData and hh3cCfgLogDesData nodes are any values other than netFtp, the value of this node is 0.0.0.0. |
| hh3cCfgLogFile (1.3.6.1.4.1.25506.2.4.1.1.7.1.14) | read-only | DisplayString | OCTET STRING (0..64) | Current configuration file name recorded in the configuration log. | As per the MIB. |
| hh3cCfgLogCommandSrcAddrType (1.3.6.1.4.1.25506.2.4.1.1.7.1.15) | read-only | InetAddressType | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) | Type of the command source address recorded in the configuration log. | Not supported. |
| hh3cCfgLogCommandSrcAddrRev (1.3.6.1.4.1.25506.2.4.1.1.7.1.16) | read-only | InetAddress | OCTET STRING (0..255) | Command source address recorded in the configuration log. | Not supported. |

hh3cCfgOperateTable

About this table

Use this MIB to manage configuration file transfers between the NMS and the device, for example, through FTP or TFTP.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

If the row status is active, you cannot modify the objects in the table.

Columns

The table index is hh3cCfgOperateIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------|--|--|---|
| hh3cCfgOperateIndex (1.3.6.1.4.1.25506.2.4.1.2.4.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of a configuration file operation. | As per the MIB. |
| hh3cCfgOperateType (1.3.6.1.4.1.25506.2.4.1.2.4.1.2) | read-create | ConfigOperationType | running2Startup(1) startup2Running(2) running2Net(3) net2Running(4) net2Startup(5) startup2Net(6) running2File(7) file2Running(8) | Operation type. | As per the MIB. |
| hh3cCfgOperateProtocol (1.3.6.1.4.1.25506.2.4.1.2.4.1.3) | read-create | INTEGER | ftp(1) tftp(2) clusterftp(3) clusterftp(4) | Protocol used for file transfer. | As per the MIB. |
| hh3cCfgOperateFileName (1.3.6.1.4.1.25506.2.4.1.2.4.1.4) | read-create | DisplayString | OCTET STRING (1..128) | Configuration file name. | As per the MIB. |
| hh3cCfgOperateServerAddress (1.3.6.1.4.1.25506.2.4.1.2.4.1.5) | read-create | IpAddress | OCTET STRING (4) | Address of the remote configuration file server. | As per the MIB. |
| hh3cCfgOperateUsername (1.3.6.1.4.1.25506.2.4.1.2.4.1.6) | read-create | DisplayString | OCTET STRING (0..40) | Username used to access the remote server. | If the value of hh3cCfgOperateType is running2Net, net2Running, net2Startup, or startup2Net and the value of hh3cCfgOperateProtocol is ftp, this node represents the username used to access the FTP server. In this case, you must specify this node for the create operation. |
| hh3cCfgOperateUserPassword (1.3.6.1.4.1.25506.2.4.1.2.4.1.7) | read-create | DisplayString | OCTET STRING (0..40) | Password used to access the remote server. | If the value of hh3cCfgOperateType is running2Net, net2Running, net2Startup, or startup2Net and the value of hh3cCfgOperateProtocol is ftp, this |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|---|---|--|
| | | | | | node represents the password used to access the FTP server. In this case, you must specify this node for the create operation. When read, this node returns a zero-length string. |
| hh3cCfgOperateEndNotificationSwitch (1.3.6.1.4.1.25506.2.4.1.2.4.1.8) | read-create | TruthValue | true(1) false(2) | Whether to notify that the operation completes. By default, the value is false. | As per the MIB. |
| hh3cCfgOperateRowStatus (1.3.6.1.4.1.25506.2.4.1.2.4.1.9) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | A row entry cannot be modified if its row status is active. |
| hh3cCfgOperateServerPort (1.3.6.1.4.1.25506.2.4.1.2.4.1.10) | read-create | Integer32 | Integer32 (0..65535) | Remote port number. If the value is an invalid port number, the default port number is used. | As per the MIB. |
| hh3cCfgOperateServerAddrType (1.3.6.1.4.1.25506.2.4.1.2.4.1.11) | read-create | InetAddressType | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) | Address type of the remote server. | Supports only ipv4, ipv6, and dns. |
| hh3cCfgOperateServerAddrRev (1.3.6.1.4.1.25506.2.4.1.2.4.1.12) | read-create | InetAddress | OCTET STRING (0..255) | Address of the remote server. | If the value of the hh3cCfgOperateServerAddrType object is ipv4, ipv6, or dns, you must specify this object. An IPv4 address is in dotted decimal notation. An IPv6 address is a colon-separated hexadecimal string. A DNS address is a string of up to 253 characters. |
| hh3cCfgOperateServerVPNName (1.3.6.1.4.1.25506.2.4.1.2.4.1.13) | read-create | DisplayString | OCTET STRING (0..255) | Name of the VPN instance to which the remote server belongs. | As per the MIB. |

hh3cCfgOperateResultTable

About this table

Use this table to obtain the creation result of rows in the hh3cCfgOperateTable.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

A row is automatically created or deleted in this table for each row created or deleted in the hh3cCfgOperateTable.

Columns

The table index is hh3cCfgOperateResultIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|--|---|--|
| hh3cCfgOperateResultIndex (1.3.6.1.4.1.25506.2.4.1.2.5.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of the hh3cCfgOperateResultIndex table. | As per the MIB. |
| hh3cCfgOperateResultOptIndex (1.3.6.1.4.1.25506.2.4.1.2.5.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Index of a configuration file operation in the hh3cCfgOperateTable. | As per the MIB. |
| hh3cCfgOperateResultOpType (1.3.6.1.4.1.25506.2.4.1.2.5.1.3) | read-only | ConfigOperationType | running2Startup(1) startup2Running(2) running2Net(3) net2Running(4) net2Startup(5) startup2Net(6) running2File(7) file2Running(8) | Type of the operation. | As per the MIB. |
| hh3cCfgOperateState (1.3.6.1.4.1.25506.2.4.1.2.5.1.4) | read-only | ConfigOperationStateType | opInProgress(1) opSuccess(2) opInvalidOperation(3) opInvalidProtocol(4) opInvalidSourceName(5) opInvalidDestName(6) opInvalidServerAddress(7) opDeviceBusy(8) opDeviceOpenError(9) | Operation state type. | If the value is opFileOpenError(13), the configuration file might be invalid, might not exist, or might not be accessible. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|--|---|--|
| | | | opDeviceError(10) opDeviceNotProgrammable(11) opDeviceFull(12) opFileOpenError(13) opFileTransferError(14) opFileChecksumError(15) opNoMemory(16) opAuthFail(17) opTimeout(18) opUnknownFailure(19) opInvalidConfigFile(20) opSlaveFull(21) opCopyToSlaveFailure(22) | | |
| hh3cCfgOperateTime (1.3.6.1.4.1.25506.2.4.1.2.5.1.5) | read-only | TimeTicks | Standard MIB values. | Time when the configuration started. | As per the MIB. |
| hh3cCfgOperateEndTime (1.3.6.1.4.1.25506.2.4.1.2.5.1.6) | read-only | TimeTicks | Standard MIB values. | Time when the configuration was finished. | As per the MIB. |
| hh3cCfgOperFailReason (1.3.6.1.4.1.25506.2.4.1.2.5.1.7) | read-only | DisplayString | OCTET STRING (0..255) | Failure reason of the configuration file operation. | As per the MIB. |
| hh3cCfgOperateFailCmd (1.3.6.1.4.1.25506.2.4.1.2.5.1.8) | read-only | DisplayString | OCTET STRING (0..512) | Command that caused the configuration file operation failure. | As per the MIB. |
| hh3cCfgOperateFailCmdView (1.3.6.1.4.1.25506.2.4.1.2.5.1.9) | read-only | DisplayString | OCTET STRING (0..264) | View in which the command was executed and caused the configuration file operation failure. | As per the MIB. |
| hh3cCfgOperateFailCmdReason (1.3.6.1.4.1.25506.2.4.1.2.5.1.10) | read-only | DisplayString | OCTET STRING (0..255) | Failure reason. | Possible failure reasons: <ul style="list-style-type: none"> Failed to execute command. Failed to parse command. |

hh3cCfgExecuteResultTable

About this table

Use this table to obtain execution results about the startup2Running, net2Running, and file2Running operations created in the hh3cCfgOperateTable.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

A row is automatically created in this table for each row created in the hh3cCfgOperateTable if the operation type of the row in the hh3cCfgOperateTable is startup2Running, net2Running, or file2Running.

Columns

The table index is hh3cCfgExecuteResultIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|--|---|-----------------|
| hh3cCfgExecuteResultIndex (1.3.6.1.4.1.25506.2.4.1.2.6.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of a configuration file execution result. | As per the MIB. |
| hh3cCfgExecuteResultOptIndex (1.3.6.1.4.1.25506.2.4.1.2.6.2.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Index of a configuration file execution in the hh3cCfgOperateTable. | As per the MIB. |
| hh3cCfgExecuteResultOpType (1.3.6.1.4.1.25506.2.4.1.2.6.2.1.3) | read-only | ConfigOperationType | running2Startup(1) startup2Running(2) running2Net(3) net2Running(4) net2Startup(5) startup2Net(6) running2File(7) file2Running(8) | Operation type of the configuration file execution. | As per the MIB. |
| hh3cCfgExecuteState (1.3.6.1.4.1.25506.2.4.1.2.6.2.1.4) | read-only | ConfigOperationStateType | opInProgress(1) opSuccess(2) opInvalidOperation(3) opInvalidProtocol(4) opInvalidSourceName(5) opInvalidDestName(6) opInvalidServerAddress(7) opDeviceBusy(8) opDeviceOpenError(9) | Configuration file execution status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| | | | opDeviceError(10) opDeviceNotProgrammable(11) opDeviceFull(12) opFileOpenError(13) opFileTransferError(14) opFileChecksumError(15) opNoMemory(16) opAuthFail(17) opTimeout(18) opUnknownFailure(19) opInvalidConfigFile(20) opSlaveFull(21) opCopyToSlaveFailure(22) | | |
| hh3cCfgExecuteTime (1.3.6.1.4.1.25506.2.4.1.2.6.2.1.5) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time when the configuration file execution started. | As per the MIB. |
| hh3cCfgExecuteEndTime (1.3.6.1.4.1.25506.2.4.1.2.6.2.1.6) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time when the configuration file execution ended. | As per the MIB. |

Notifications

The following information describes the notifications included in the HH3C-CONFIG-MAN-MIB module.

hh3cCfgManEventlog

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.4.2.1 | Configuration change event. | Informational | N/A | N/A | ON |

Description

This notification is generated as follows:

| Configuration source (hh3cCfgLogSrcCmd) | Source data (hh3cCfgLogSrcData) | Destination data (hh3cCfgLogDesData) | Notification generation |
|--|------------------------------------|---|---|
| cmdLine(1) | runningData(2) | startupData(4) | This notification is generated when the |

| Configuration source (hh3cCfgLogSrcCmd) | Source data (hh3cCfgLogSrcData) | Destination data (hh3cCfgLogDesData) | Notification generation |
|--|------------------------------------|---|---|
| | | | save command is used. |
| snmp(2) | startupData(4) | runningData(2) | <p>The system automatically detects the running configuration at intervals (on majority devices, the interval is 10 minutes).</p> <p>This notification is generated when the system detects that new configuration is submitted to the running configuration.</p> |

Status control

ON

CLI: Use the **snmp-agent trap enable configuration** command.

OFF

CLI: Use the **undo snmp-agent trap enable configuration** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------------|-------|---------|----------------------------------|
| 1.3.6.1.4.1.25506.2.4.1.1.7.1.3 (hh3cCfgLogSrcCmd) | Configuration source. | No | INTEGER | cmdLine(1) snmp(2) |
| 1.3.6.1.4.1.25506.2.4.1.1.7.1.4 (hh3cCfgLogSrcData) | Source data. | No | INTEGER | runningData(2) startupData(4) |
| 1.3.6.1.4.1.25506.2.4.1.1.7.1.5 (hh3cCfgLogDesData) | Destination data. | No | INTEGER | runningData(2) startupData(4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check the system running configuration. If necessary, save the running configuration.

hh3cCfgOperateCompletion

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|--------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.4.2.2 | A configuration operation completed. | Informational | N/A | N/A | ON |

Description

This notification is generated when a configuration operation performed through the hh3cCfgOperateTable completes if the value of hh3cCfgOperateEndNotificationSwitch is true.

Parameters included in this notification vary by operation type. For more information, see the online help for the NMS.

Status control

ON

- CLI: Use the **snmp-agent trap enable configuration** command.
- MIB: Set hh3cCfgOperateEndNotificationSwitch to true(1).

OFF

- CLI: Use the **undo snmp-agent trap enable configuration** command.
- MIB: Set hh3cCfgOperateEndNotificationSwitch to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------------|-------|---------------------|---|
| 1.3.6.1.4.1.25506.2.4.1.2.4.1.2 (hh3cCfgOperateType) | Operation type. | No | ConfigOperationType | running2Startup(1) startup2Running(2) running2Net(3) net2Running(4) net2Startup(5) startup2Net(6) |
| 1.3.6.1.4.1.25506.2.4.1.2.5.1.5 (hh3cCfgOperateTime) | Operation start time. | No | TimeTicks | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.4.1.2.5.1.4 (hh3cCfgOperateState) | Operation status. | No | INTEGER | opInProgress(1) opSuccess(2) opInvalidOperation(3) opInvalidProtocol(4) opInvalidSourceName(5) opInvalidDestName(6) opInvalidServerAddresses(7) opDeviceBusy(8) opDeviceOpenError(9) opDeviceError(10) opDeviceNotProgrammable(11) opDeviceFull(12) opFileOpenError(13) opFileTransferError(14) opFileChecksumError(15) opNoMemory(16) opAuthFail(17) |

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------|-------|---------------|---|
| | | | | opTimeOut(18) opUnknownFailure(19) opInvalidConfigFile(20) opSlaveFull(21) opCopyToSlaveFailure(22) |
| 1.3.6.1.4.1.25506.2.4.1.2.5.1.6 (hh3cCfgOperateEndTime) | Operation end time | No | TimeTicks | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.4.1.2.5.1.7 (hh3cCfgOperFailReason) | Failure reason. | No | DisplayString | OCTET STRING (SIZE (0..255)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cCfgInvalidConfigFile

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.4.2.3 | An invalid file was used for configuration restoration. | Informational | N/A | N/A | ON |

Description

This notification is generated when the system detects that the configuration file used for configuration restoration is invalid.

Status control

ON

CLI: Use the `snmp-agent trap enable configuration` command.

OFF

CLI: Use the `undo snmp-agent trap enable configuration` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------|-------|---------------------|----------------------------------|
| 1.3.6.1.4.1.25506.2.4.1.2.4.1.2 (hh3cCfgOperateType) | Operation type. | No | ConfigOperationType | net2Running(4) net2Startup(5) |
| 1.3.6.1.4.1.25506.2.4.1.2.4.1.4 (hh3cCfgOperateFileName) | Configuration file name. | No | DisplayString | OCTET STRING (SIZE (1..128)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the configuration file is valid and use a valid configuration file for configuration restoration.

hh3cCfgBackupToServerSuccess

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.4.4.0.1 | A configuration file was backed up to a server successfully. | Informational | N/A | N/A | ON |

Description

This notification is generated when a configuration file is backed up to a server successfully.

Status control

ON

CLI: Use the `snmp-agent trap enable configuration` command.

OFF

CLI: Use the `undo snmp-agent trap enable configuration` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------------|-----------------|
| 1.3.6.1.4.1.25506.2.4.4.1 (hh3cCfgBackupToServerIPType) | Server IP address type. | No | InetAddressType | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.2 (hh3cCfgBackupToServerIP) | Server IP address. | No | InetAddress | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.3 (hh3cCfgBackupToServerVPNName) | Name of the VPN instance to which the server IP address belongs. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.4 | File transfer | No | INTEGER | As per the MIB. |

| | | | | |
|-------------------------------------|---------|--|--|--|
| (hh3cConfigBackupToServerTransType) | method. | | | |
|-------------------------------------|---------|--|--|--|

Recommended action

No action is required.

Description

This notification is generated when the system fails to back up a configuration file to a server.

Status control

ON

CLI: Use the `snmp-agent trap enable configuration` command.

OFF

CLI: Use the `undo snmp-agent trap enable configuration` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------------|-----------------|
| 1.3.6.1.4.1.25506.2.4.4.1 (hh3cCfgBackupToServerIPType) | Server IP address type. | No | InetAddressType | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.2 (hh3cCfgBackupToServerIP) | Server IP address. | No | InetAddress | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.3 (hh3cCfgBackupToServerVPNName) | Name of the VPN instance to which the server IP address belongs. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.4 (hh3cConfigBackupToServerTransType) | File transfer method. | No | INTEGER | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.3 (hh3cConfigBackupToServerFailedReason) | Backup failure reason. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.4.4.4 (hh3cConfigBackupToServerErrorCode) | Backup failure error code. | No | INTEGER | As per the MIB. |

Recommended action

Handle the issue according to the failure reason.

hh3cCfgRestoreSuccess

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.4.4.0.3 | The main startup configuration file was restored | Informational | N/A | N/A | ON |

| | | | | | |
|--|---------------|--|--|--|--|
| | successfully. | | | | |
|--|---------------|--|--|--|--|

Description

This notification is generated when the main startup configuration file is restored successfully.

Status control

ON

CLI: Use the `snmp-agent trap enable configuration` command.

OFF

CLI: Use the `undo snmp-agent trap enable configuration` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.2.4.4.6 (hh3cCfgRestoreType) | Configuration restoration type. | No | INTEGER | binary(1) text(2) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-FLASH-MAN-MIB

About this MIB

Use this MIB to obtain information about storage media, partitions, and files as well as manage files on the storage media.

MIB file name

hh3c-flash-man.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cFlash(5)

Scalar objects

hh3cFlhSupportNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| hh3cFlhSupportNum (1.3.6.1.4.1.25506.2.5.1.1.1) | read-only | Integer32 | Standard MIB values. | Maximum number of storage media supported by the system. | As per the MIB. |

hh3cFlhUsageRate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|-----------|----------------------|---------------------|-----------------|
| hh3cFlhUsageRate (1.3.6.1.4.1.25506.2.5.1.4.1) | accessible-for-notification | Integer32 | Standard MIB values. | Current disk usage. | As per the MIB. |

hh3cFlhUsageRateThreshold

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-----------|----------------------|------------------|-----------------|
| hh3cFlhUsageRateThreshold (1.3.6.1.4.1.25506.2.5.1.4.2) | accessible-for-notification | Integer32 | Standard MIB values. | Usage threshold. | As per the MIB. |

hh3cFlhNameForTrap

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------------|----------------------|-------------|-----------------|
| hh3cFlhNameForTrap (1.3.6.1.4.1.25506.2.5.1.4.3) | accessible-for-notification | DisplayString | Standard MIB values. | Disk name. | As per the MIB. |

Tabular objects

hh3cFlashTable

About this table

Use this table to obtain information about storage media.

Notifications

The following information describes the notifications included in the HH3C-FLASH-MAN-MIB module.

hh3cFlhOperNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.5.1.3.1 | A file operation completed. | Informational | N/A | N/A | ON |

Description

This notification is generated when a file operation completes if the value of hh3cFlhOperEndNotification is true.

The parameters included in this notification vary by file operation. For more information, see the online help for the NMS.

Status control

ON

MIB: Set hh3cFlhOperEndNotification to true(1).

OFF

MIB: Set hh3cFlhOperEndNotification to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|--------------------------|---|
| 1.3.6.1.4.1.25506.2.5.1.2.1.1.9 (hh3cFlhOperStatus) | File operation status. | No | Hh3cFlashOperationStatus | opInProgress(1) opSuccess(2) opInvalid(3) opInvalidProtocol(4) opInvalidSourceName(5) opInvalidDestName(6) opInvalidServerAddresses(7) opDeviceBusy(8) opDeviceOpenError(9) |

| | | | | |
|--|--|--|--|--|
| | | | | opDeviceError(10) opDeviceNotProgram mable(11) opDeviceFull(12) opFileOpenError(13) opFileTransferError(14) opFileChecksumError(15) opNoMemory(16) opAuthFail(17) opTimeout(18) opUnknownFailure(19) opDeleteFileOpenErro r(20) opDeleteInvalidDevice (21) opDeleteInvalidFunci on(22) opDeleteOperationErr or(23) opDeleteInvalidFileNa me(24) opDeleteDeviceBusy(25) opDeleteParaError(26) opDeleteInvalidPath(2 7) opDeleteFileNotExistl nSlave(28) opDeleteFileFailedInSl ave(29) opSlaveFull(30) opCopyToSlaveFailur e(31) |
|--|--|--|--|--|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Handle the issue according to the file operation result.

hh3cFlhUsageOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.5.1.4.0.1 | The disk usage exceeded the threshold. | Informational | N/A | N/A | ON |

Description

This notification is generated when the disk usage exceeds the alarm threshold.

Status control

None.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------------|-------|---------------|----------------------|
| 1.3.6.1.4.1.25506.2.5.1.5.1 (hh3cFlhUsageRate) | Current disk usage. | No | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.5.1.5.2 (hh3cFlhUsageRateThreshold) | Disk usage threshold. | No | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.5.1.5.3 (hh3cFlhNameForTrap) | Disk name. | No | DisplayString | Standard MIB values. |

Recommended action

Verify that the disk space is insufficient and clear unnecessary files as needed.

hh3cFlhUsageResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.5.1.4.0.2 | The disk usage dropped below the threshold. | Informational | N/A | N/A | ON |

Description

This notification is generated when the disk usage drops below the alarm threshold.

Status control

None.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.5.1.5.1 (hh3cFlhUsageRate) | Current disk usage. | No | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.5.1.5.2 | Disk usage threshold. | No | Integer32 | Standard MIB values. |

| | | | | |
|---|------------|----|---------------|----------------------|
| (hh3cFlhUsageRateThreshold) | | | | |
| 1.3.6.1.4.1.25506.2.5.1.5.3 (hh3cFlhNameForTrap) | Disk name. | No | DisplayString | Standard MIB values. |

Recommended action

No action is required.

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HH3C-ISSU-MIB

About this MIB

Use this table to perform in-service software upgrade (ISSU) operations.

You can obtain information from the hh3clssuTestResultTable and clssuUpgradeResultTable objects only if you have performed test or install operations by using the hh3clssuUpgrageImageTable object.

MIB file name

hh3c-issu.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3clssuUpgrade(133)

Scalar objects

hh3clssuOpType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|-----------------|-----------------|
| hh3clssuOpType (1.3.6.1.4.1.25506 .2.133.1.1.2.1) | read-write | INTEGER | none(1) done(2) test(3) install(4) rollback(5) | ISSU operation. | As per the MIB. |

hh3clssulImageFileOverwrite

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|--|-----------------|
| hh3clssulImageFileOverwrite (1.3.6.1.4.1.25506 .2.133.1.1.2.2) | read-write | TruthValue | true(1) false(2) | Enables or disables ISSU to overwrite the current image file when copying the upgrade image file to the node to be upgraded. | As per the MIB. |

hh3clssuOpTrapEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------|---------------------------------|-----------------|
| hh3clssuOpTrapEnable (1.3.6.1.4.1.25506 .2.133.1.1.2.3) | read-write | TruthValue | true(1) false(2) | SNMP ISSU notification control. | As per the MIB. |

hh3clssuOpStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|---------------------|-----------------|
| hh3clssuOpStatus (1.3.6.1.4.1.25506 .2.133.1.1.2.4) | read-only | INTEGER | none(1) failure(2) inProgress(3) success(4) rollbackInProgress(5) rollbackSuccess(6) | ISSU upgrade state. | As per the MIB. |

hh3clssuFailedReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|--------------------------|-----------------------------|-----------------|
| hh3clssuFailedReason (1.3.6.1.4.1.25506 .2.133.1.1.2.5) | read-only | DisplayString | OCTET STRING (0..255) | ISSU upgrade failure cause. | As per the MIB. |

hh3clssuOpTimeCompleted

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|--------------------------|--|-----------------|
| hh3clssuOpTimeCompleted (1.3.6.1.4.1.25506 .2.133.1.1.2.6) | read-only | DisplayString | OCTET STRING (0..255) | Time when the ISSU operation finished. | As per the MIB. |

hh3clssuLastOpType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|--------------------------|-----------------|
| hh3clssuLastOpType (1.3.6.1.4.1.25506 .2.133.1.1.2.7) | read-only | INTEGER | none(1) done(2) test(3) install(4) rollback(5) | Previous ISSU operation. | As per the MIB. |

hh3clssuLastOpStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-----------------------|---------------------------------------|-----------------|
| hh3clssuLastOpStatus (1.3.6.1.4.1.25506) | read-only | INTEGER | none(1) failure(2) | State of the previous ISSU operation. | As per the MIB. |

| | | | | | |
|-----------------|--|--|--|--|--|
| .2.133.1.1.2.8) | | | inProgress(3) success(4) rollbackInProgress(5) rollbackSuccess(6) | | |
|-----------------|--|--|--|--|--|

hh3clssuLastOpFailedReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|--------------------------|--|-----------------|
| hh3clssuLastOpFailedReason (1.3.6.1.4.1.25506.2.133.1.1.2.9) | read-only | DisplayString | OCTET STRING (0..255) | Cause of the most recent ISSU upgrade failure. | As per the MIB. |

hh3clssuLastOpTimeCompleted

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|--------------------------|---|-----------------|
| hh3clssuLastOpTimeCompleted(1.3.6.1.4.1.25506.2.133.1.1.2.10) | read-only | DisplayString | OCTET STRING (0..255) | Time when the previous ISSU operation finished. | As per the MIB. |

hh3clssuCompatibleResultStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|----------------------------------|-----------------|
| hh3clssuCompatibleResultStatus (1.3.6.1.4.1.25506.2.133.1.2.1.1) | read-only | INTEGER | none(1) inCompatible(2) compatible(3) failure(4) | ISSU compatibility check result. | As per the MIB. |

hh3clssuCompatibleResultFailedReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|--------------------------|--|-----------------|
| hh3clssuCompatibleResultFailedReason (1.3.6.1.4.1.25506.2.133.1.2.1.2) | read-only | DisplayString | OCTET STRING (0..255) | Cause of ISSU compatibility check failure. | As per the MIB. |

Tabular objects

hh3clssuUpgradelmageTable

About this table

Use this table to set the image file for an ISSU or obtain information about the image file.

- To verify the validity of the upgrade image file and obtain the recommended ISSU method, perform a test operation.
- To do an ISSU, perform the install operation.
- To roll back the software, perform the rollback operation.
- To clear the records of operations for the most recent ISSU, perform the done operation.

As shown in [Figure 1](#), perform a test operation only in initial state. After you perform the test operation, perform an install operation depending on the test operation result.

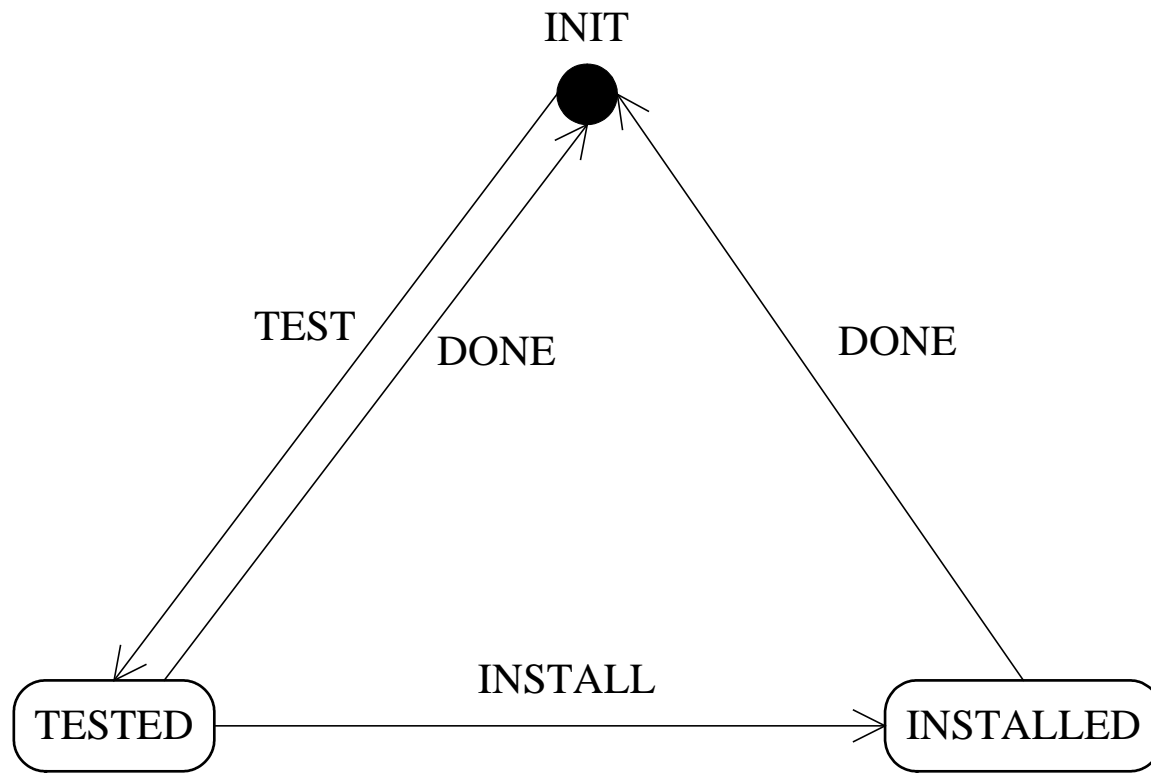
You can perform a done operation to change the ISSU state to the initial state after you have performed a test, install or rollback operation. The done operation clears hh3clssuUpgradelmageTable, restores the FileOverwrite and TrapEnable objects to their default values.

You can perform a rollback whenever you like. However, the operation does not take effect if you have only performed a test operation.

After you issue a rollback instruction, the system moves the current opType, opStatus, opFailedReason, and opTimeCompleted values to their respective LastOp entries if a rollback is allowed.

Five minutes later after an install or rollback operation succeeds, the system copies the current OpType, OpStatus, OpFailedReason, and OpTimeCompleted values to their respective LastOp objects. Another five minutes later, all these Op objects are restored to their default values.

Figure 1 ISSU operations



Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

When you create an instance, you must also specify hh3clssuUpgradelmageType, hh3clssuUpgradelmageURL, and hh3clssuUpgradelmageIndexRowStatus.

Columns

The table index is hh3clssuUpgradelmageIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---|-------------------|--|
| hh3clssuUpgradelmageIndex (1.3.6.1.4.1.25506.2.133.1.1.1.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Image file index. | As per the MIB. |
| hh3clssuUpgradelmageType (1.3.6.1.4.1.25506.2.133.1.1.1.1.2) | read-create | INTEGER | boot(1) system(2) feature(3) ipe(4) patch(5) | Image file type. | As per the MIB. |
| hh3clssuUpgradelmageURL (1.3.6.1.4.1.25506.2.133.1.1.1.1.3) | read-create | DisplayString | OCTET STRING (1..127) | Image file path. | As per the MIB. |
| hh3clssuUpgradelmageRowStatus (1.3.6.1.4.1.25506.2.133.1.1.1.1.4) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3clssuTestResultTable

About this table

Use this table to obtain the result of an ISSU test operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clssuTestResultIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|---|---|-----------------|
| hh3clssuTestResultIndex (1.3.6.1.4.1.25506.2.133.1.2.2.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Test result index. | As per the MIB. |
| hh3clssuTestDeviceChassisID (1.3.6.1.4.1.25506.2.133.1.2.2.1.2) | read-only | Integer32 | Integer32 (0..255) | Chassis number of the node on which the test operation was performed. | As per the MIB. |
| hh3clssuTestDeviceSlotID (1.3.6.1.4.1.25506.2.133.1.2.2.1.3) | read-only | Integer32 | Integer32 (0..255) | Slot number of the node on which the test operation was performed. | As per the MIB. |
| hh3clssuTestDeviceCpuID (1.3.6.1.4.1.25506.2.133.1.2.2.1.4) | read-only | Integer32 | Integer32 (0..7) | CPU number of the node on which the test operation was performed. | As per the MIB. |
| hh3clssuTestDeviceUpgradeWay (1.3.6.1.4.1.25506.2.133.1.2.2.1.5) | read-only | INTEGER | none(1) reboot(2) sequenceReboot(3) issuReboot(4) serviceUpgrade(5) fileUpgrade(6) incompatibleUpgrade(7) | Recommended ISSU upgrade method. | As per the MIB. |

hh3clssuUpgradeResultTable

About this table

Use this table to obtain the result of an ISSU install operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clssuUpgradeResultIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|----------------------|---|-----------------|
| hh3clssuUpgradeResultIndex (1.3.6.1.4.1.25506.2.133.1.2.3.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Table index of hh3clssuUpgradeResultTable. | As per the MIB. |
| hh3clssuUpgradeDeviceChassisID (1.3.6.1.4.1.25506.2.133.1.2.3.1.2) | read-only | Integer32 | Integer32 (0..255) | Chassis number of the node on which ISSU was performed. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|--|--|-----------------|
| hh3clssuUpgradeDeviceSlotID (1.3.6.1.4.1.25506.2.133.1.2.3.1.3) | read-only | Integer32 | Integer32 (0..255) | Slot number of the node on which ISSU was performed. | As per the MIB. |
| hh3clssuUpgradeDeviceCpuID (1.3.6.1.4.1.25506.2.133.1.2.3.1.4) | read-only | Integer32 | Integer32 (0..7) | CPU number of the node on which ISSU was performed. | As per the MIB. |
| hh3clssuUpgradeState (1.3.6.1.4.1.25506.2.133.1.2.3.1.5) | read-only | INTEGER | init(1) loading(2) loaded(3) switching(4) switchover(5) committing(6) committed(7) rollback(8) rollback(9) | Node state. | As per the MIB. |
| hh3clssuDeviceUpgradeWay (1.3.6.1.4.1.25506.2.133.1.2.3.1.6) | read-only | INTEGER | none(1), reboot(2) sequenceReboot(3) issuReboot(4) serviceUpgrade(5) fileUpgrade(6) incompatibleUpgrade(7) | ISSU method for the node. | As per the MIB. |
| hh3clssuUpgradeDeviceStatus (1.3.6.1.4.1.25506.2.133.1.2.3.1.7) | read-only | INTEGER | waitingUpgrade(1) inProcess(2) success(3) failure(4) | Current upgrade state of the node. | As per the MIB. |
| hh3clssuUpgradeFailedReason (1.3.6.1.4.1.25506.2.133.1.2.3.1.8) | read-only | DisplayString | OCTET STRING (0..255) | Upgrade failure cause. | As per the MIB. |

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HH3C-SYS-MAN-MIB

About this MIB

Use this MIB to manage the system time and daylight saving time, obtain the current configuration file and the version file, reboot the device, and upgrade device software. This MIB also contains notifications about configuration changes.

MIB file name

hh3c-sys-man.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSystemMan(3)

Scalar objects

hh3cSysLocalClock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|---------------------------|--|-------------------------------------|
| hh3cSysLocalClock (1.3.6.1.4.1.25506.2.3.1.1.1) | read-write | DateAndTime | OCTET STRING (8) | System time. | As per the MIB. |
| hh3cSysSummerTimeEnable (1.3.6.1.4.1.25506.2.3.1.1.2.1) | read-only | INTEGER | enable(1) disable(2) | Enables or disables using daylight saving time. | As per the MIB. |
| hh3cSysSummerTimeZone (1.3.6.1.4.1.25506.2.3.1.1.2.2) | read-write | DisplayString | OCTET STRING (0..255) | Name for the daylight saving time schedule. | As per the MIB. |
| hh3cSysSummerTimeMethod (1.3.6.1.4.1.25506.2.3.1.1.2.3) | read-write | INTEGER | oneOff(1) repeating(2) | Implementation method of daylight saving time. | Supports only the repeating method. |
| hh3cSysSummerTimeStart (1.3.6.1.4.1.25506.2.3.1.1.2.4) | read-write | DateAndTime | OCTET STRING (8) | Start time of the daylight saving time schedule. | As per the MIB. |
| hh3cSysSummerTimeEnd (1.3.6.1.4.1.25506.2.3.1.1.2.5) | read-write | DateAndTime | OCTET STRING (8) | End time of the daylight saving time schedule. | As per the MIB. |
| hh3cSysSummerTimeOffset (1.3.6.1.4.1.25506.2.3.1.1.2.6) | read-write | Integer32 | Integer32 (0..86399) | Time to be added to the standard time. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|---|---|---|
| hh3cSysClockProtocol (1.3.6.1.4.1.25506.2.3.1.1.4.1) | read-write | INTEGER | none(1) ntp(2) ptp(3) interface(4) | Method for obtaining the system time. | Implementation varies by product. |
| hh3cSysClockProtocolSrcMdc (1.3.6.1.4.1.25506.2.3.1.1.4.2) | read-write | Integer32 | Integer32 (0..2147483647) | MDC as the system time source. Default: 1. | Implementation varies by product. |
| hh3cSysClockProtocolSrcContext (1.3.6.1.4.1.25506.2.3.1.1.4.3) | read-only | Integer32 | Integer32 (0..2147483647) | Context as the system time source. Default: 1. | Implementation varies by product. |
| hh3cSysLocalClockString (1.3.6.1.4.1.25506.2.3.1.1.3) | read-write | OCTET STRING | OCTET STRING (16..24) | System time in the format of strings. | As per the MIB. Same with hh3cSysLocalClock. |
| hh3cSysReloadSchedule (1.3.6.1.4.1.25506.2.3.1.3.1) | read-write | Integer32 | Integer32 (0..2147483647) | Reload entry index. | The device reboots if the value of the object is 1 on the occurrence of the reload operation. |
| hh3cSysReloadAction (1.3.6.1.4.1.25506.2.3.1.3.2) | read-write | INTEGER | reloadUnavailable(1) reloadOnSchedule(2) reloadAtOnce(3) reloadCancel(4) | Reload action. | As per the MIB. |
| hh3cSysReloadTag (1.3.6.1.4.1.25506.2.3.1.3.4) | read-write | SnmpTagValue | OCTET STRING (0..255) | Tag of the reload entry. | As per the MIB. |
| hh3cSysCFGFileNum (1.3.6.1.4.1.25506.2.3.1.5.1) | read-only | Integer32 | Integer32 (0..2147483647) | Number of configuration files. | As per the MIB. |
| hh3cSysBtmLoadMaxNumber (1.3.6.1.4.1.25506.2.3.1.6.1.1) | read-only | Integer32 | Integer32 (0..2147483647) | Maximum number of bootrom load entries. | As per the MIB. |
| hh3cSysPackageNum (1.3.6.1.4.1.25506.2.3.1.7.1) | read-only | Integer32 | Integer32 (0..2147483647) | Number of packages. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|---|--|--|
| hh3cSysPackageOperateEntryLimit (1.3.6.1.4.1.25506.2.3.1.7.3) | read-write | Integer32 | Integer32 (0..2147483647) | Maximum number of package file operation entries. | Maximum number of instances in hh3cSysPackageOperateTable, in the range of 1 to 128. The default is 32. If the number of the instances reaches the limit, the most recent instance overwrites the earliest one. |
| hh3cSysIpeFileNum (1.3.6.1.4.1.25506.2.3.1.8.1) | read-only | Integer32 | Integer32 (0..2147483647) | Number of IPE files. | As per the MIB. |
| hh3cSysSetBootImageAction (1.3.6.1.4.1.25506.2.3.1.9.1.1) | read-write | INTEGER | none(1) done(2) bootLoadPrimary(3) bootLoadSecondary(4) bootLoadPrimarySecondary(5) bootPrimary(6) bootSecondary(7) bootPrimarySecondary(8) loadPrimary(9) loadSecondary(10) loadPrimarySecondary(11) | Sets images as primary boot images, secondary boot images, or both. | Supports only none(1), done(2), bootLoadPrimary(3), bootLoadSecondary(4), and bootLoadPrimarySecondary(5). Verify the result after setting boot images or performing boot image loading. To avoid next upgrade being affected, clear the upgrade records after the upgrade. As a best practice, verify that the upgrade files and the upgrade records are empty before the next upgrade. |
| hh3cSysSetBootImageFileOverWrite (1.3.6.1.4.1.25506.2.3.1.9.1.2) | read-write | TruthValue | true(1) false(2) | Selects whether to overwrite the existing image files during boot image setting. | As per the MIB. |
| hh3cSysSetBootImageRemoveIpeFile (1.3.6.1.4.1.25506.2.3.1.9.1.3) | read-write | TruthValue | true(1) false(2) | Selects whether to delete the specified IPE file after boot image setting. | As per the MIB. |
| hh3cSysSetBootImageStatus (1.3.6.1.4.1.25506.2.3.1.9.1.4) | read-only | INTEGER | none(1) doing(2) success(3) failed(4) | Status of boot image setting operation or boot image loading operation. | As per the MIB. |
| hh3cSysSetBootImageFailedReason | read-only | DisplayString | OCTET STRING (0..255) | Failure reason for boot image setting | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|--------|--------|-------------|---------------------------|----------------|
| n (1.3.6.1.4.1.25506 .2.3.1.9.1.5) | | | | or boot image loading. | |

Tabular objects

hh3cSysCurTable

About this table

This table contains information about the current system configuration file, device software, and bootrom files.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSysCurEntPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|------------------------------|---|-----------------|
| hh3cSysCurEntPhysicalIndex (1.3.6.1.4.1.25506 .2.3.1.2.1.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | Device entity index. | As per the MIB. |
| hh3cSysCurCFGFileIndex (1.3.6.1.4.1.25506 .2.3.1.2.1.1.2) | read-only | Integer32 | Integer32 (0..2147483647) | Configuration file index. | As per the MIB. |
| hh3cSysCurImageIndex (1.3.6.1.4.1.25506 .2.3.1.2.1.1.3) | read-only | Integer32 | Integer32 (0..2147483647) | Image file index. | Not supported |
| hh3cSysCurBtmFileName (1.3.6.1.4.1.25506 .2.3.1.2.1.1.4) | read-only | OCTET STRING | OCTET STRING (1..64) | Name of the current bootrom file. | Not supported |
| hh3cSysCurUpdateBtmFileName (1.3.6.1.4.1.25506 .2.3.1.2.1.1.5) | read-only | OCTET STRING | OCTET STRING (1..64) | Name of the bootrom file after the upgrade. The bootrom file will be used for the next boot. | Not supported |

hh3cSysReloadScheduleTable

About this table

This table specifies reboot entries for device reboot.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

You must specify hh3cSysReloadScheduleIndex, hh3cSysReloadEntity, and hh3cSysReloadRowStatus when you create a row. hh3cSysReloadEntity must be a valid entity. The entity index from hh3cSysReloadScheduleIndex must be the same with the index of hh3cSysReloadEntity.

An entity supports only one reload table. Entries in Active status are not configurable.

Columns

The table index is hh3cSysReloadScheduleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|--|---|
| hh3cSysReloadScheduleIndex (1.3.6.1.4.1.25506.2.3.1.3.3.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of the hh3cSysReloadScheduleTable. | As per the MIB. |
| hh3cSysReloadEntity (1.3.6.1.4.1.25506.2.3.1.3.3.1.2) | read-create | Integer32 | Integer32 (0..2147483647) | Entry in entPhysicalTable, which is the entity to be reloaded. | As per the MIB. |
| hh3cSysReloadConfigFile (1.3.6.1.4.1.25506.2.3.1.3.3.1.3) | read-create | Integer32 | Integer32 (0..2147483647) | Entry in hh3cSysImageFileTable. | The value 0 indicates that the entity does not specify the next-startup configuration files. |
| hh3cSysReloadImage (1.3.6.1.4.1.25506.2.3.1.3.3.1.4) | read-create | Integer32 | Integer32 (0..2147483647) | Entry in hh3cSysCFGFileTable. | Not supported |
| hh3cSysReloadReason (1.3.6.1.4.1.25506.2.3.1.3.3.1.5) | read-create | DisplayString | OCTET STRING (0..255) | Reason for system reloading. | As per the MIB. |
| hh3cSysReloadScheduleTime (1.3.6.1.4.1.25506.2.3.1.3.3.1.6) | read-create | DateAndTime | OCTET STRING (8) | Time when the reload action will occur. | As per the MIB. |
| hh3cSysReloadRowStatus (1.3.6.1.4.1.25506.2.3.1.3.3.1.7) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | As per the MIB. |
| hh3cSysReloadScheduleTagList (1.3.6.1.4.1.25506.2.3.1.3.3.1.8) | read-create | SnmpTagList | OCTET STRING (0..255) | Tag list for the entry. | If the value of hh3cSysReloadSchedule is valid, the value of hh3cSysReloadScheduleTagList is ignored. |

hh3cSysCFGFileTable

About this table

This table contains information about the configuration files of the system, including file names and file sizes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSysCFGFileIndex.

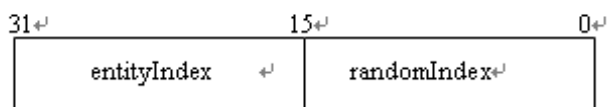
| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|------------------------------|---------------------------|-----------------|
| hh3cSysCFGFileIndex (1.3.6.1.4.1.25506.2.3.1.5.2.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | Configuration file index. | As per the MIB. |
| hh3cSysCFGFileName (1.3.6.1.4.1.25506.2.3.1.5.2.1.2) | read-only | DisplayString | OCTET STRING (0..255) | Configuration file name. | As per the MIB. |
| hh3cSysCFGFileSize (1.3.6.1.4.1.25506.2.3.1.5.2.1.3) | read-only | Integer32 | Integer32 (1..2147483647) | Configuration file size. | As per the MIB. |
| hh3cSysCFGFileLocation (1.3.6.1.4.1.25506.2.3.1.5.2.1.4) | read-only | DisplayString | OCTET STRING (0..255) | Configuration file path. | As per the MIB. |

hh3cSysBtmLoadTable

About this table

This table upgrades bootrom and contains information about bootrom upgrade records, including bootrom file names, result of the upgrade operation, and upgrading time.

This table index consists of the two parts as shown in the following figure:



The value of entityIndex is entPhysicalIndex, which is the entity index of entPhysicalClass as module. The value of randomIndex is determined by users. The value of hh3cSysBtmLoadIndex is calculated as follows:

$hh3cSysBtmLoadIndex = (entityIndex \ll 16) \mid randomIndex$

For example, a file in flash:/boot.bin path is a valid bootrom file, the value of entPhysicalIndex is 2 for the current operating MPU, and the random index specified by users is 1. Then, the value of hh3cSysBtmLoadIndex is 131073. To create an entry based on the above information, you must configure the entry settings as follows:

hh3cSysBtmFileName.131073 = "flash:/boot.bin"

hh3cSysBtmFileType.131073 = 'main(1)'

hh3cSysBtmRowStatus.131073 = 'createAndGo'

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

You must specify hh3cSysBtmFileName, hh3cSysBtmFileType, and hh3cSysBtmRowStatus when you create a row.

A file specified by hh3cSysBtmFileName must exist and be valid. You must set hh3cSysBtmFileType to **main** and hh3cSysBtmRowStatus to **CreateAndGo**.

Columns

The table index is hh3cSysBtmLoadIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|--|---|
| hh3cSysBtmLoadIndex (1.3.6.1.4.1.25506.2.3.1.6.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Table index, consisting of two parts, high 16 bits and low 16 bits. | As per the MIB. |
| hh3cSysBtmFileName (1.3.6.1.4.1.25506.2.3.1.6.2.1.2) | read-create | OCTET STRING | OCTET STRING (1..64) | Bootrom file for the next boot. | As per the MIB. |
| hh3cSysBtmFileType (1.3.6.1.4.1.25506.2.3.1.6.2.1.3) | read-create | INTEGER | main(1) none(2) | Type of the bootrom file for the next boot. | As per the MIB. For the indexes with the same high 16 bits, this object can only be main(1). If the object is none(2), the corresponding bootrom file cannot be used for the next boot. |
| hh3cSysBtmRowStatus (1.3.6.1.4.1.25506.2.3.1.6.2.1.4) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | As per the MIB. An existing entry cannot be modified. |
| hh3cSysBtmErrorStatus (1.3.6.1.4.1.25506.2.3.1.6.2.1.5) | read-only | INTEGER | invalidFile(1) inProgress(2) success(3) failed(4) | Entry creation status, which indicates an entry is being created, has been created, or failed to be created. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|----------------------|-----------------|
| hh3cSysBtmLoadTime (1.3.6.1.4.1.25506.2.3.1.6.2.1.6) | read-only | TimeTicks | Standard MIB values. | Entry creation time. | As per the MIB. |

hh3cSysPackageTable

About this table

This table contains information about package files of the operating system, including basic package file information and operations on package files.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cSysPackageIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|--------------------------------|-----------------|
| hh3cSysPackageIndex (1.3.6.1.4.1.25506.2.3.1.7.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Table index. | As per the MIB. |
| hh3cSysPackageName (1.3.6.1.4.1.25506.2.3.1.7.2.1.2) | read-only | DisplayString | OCTET STRING (0..255) | Package file name. | As per the MIB. |
| hh3cSysPackageSize (1.3.6.1.4.1.25506.2.3.1.7.2.1.3) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | Package file size, in bytes. | As per the MIB. |
| hh3cSysPackageLocation (1.3.6.1.4.1.25506.2.3.1.7.2.1.4) | read-only | DisplayString | OCTET STRING (0..255) | Package file path. | As per the MIB. |
| hh3cSysPackageType (1.3.6.1.4.1.25506.2.3.1.7.2.1.5) | read-only | INTEGER | boot(1) system(2) feature(3) patch(4) | Type of the package file. | As per the MIB. |
| hh3cSysPackageAttribute (1.3.6.1.4.1.25506.2.3.1.7.2.1.6) | read-write | INTEGER | none(1) primary(2) secondary(3) primarySecondary(4) | Attribute of the package file. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|---------------|--|-------------------------------------|---------------------------------------|
| hh3cSysPackageStatus (1.3.6.1.4.1.25506.2.3.1.7.2.1.7) | read-only | INTEGER | active(1) inactive(2) | Status of the package file. | As per the MIB. |
| hh3cSysPackageDescription (1.3.6.1.4.1.25506.2.3.1.7.2.1.8) | read-only | DisplayString | OCTET STRING (0..255) | Description of the package file. | As per the MIB. |
| hh3cSysPackageFeature (1.3.6.1.4.1.25506.2.3.1.7.2.1.9) | read-only | DisplayString | OCTET STRING (0..255) | Feature of the package file. | As per the MIB. |
| hh3cSysPackageVersion (1.3.6.1.4.1.25506.2.3.1.7.2.1.10) | read-only | DisplayString | OCTET STRING (0..255) | Version of the package file. | As per the MIB. |
| hh3cSysPackageLoadAttribute (1.3.6.1.4.1.25506.2.3.1.7.2.1.11) | read-create | INTEGER | none(1) primary(2) secondary(3) primarySecondary(4) | Load attribute of the package file. | Supports only none(1) and primary(2). |
| hh3cSysPackageModel (1.3.6.1.4.1.25506.2.3.1.7.2.1.12) | read-only | DisplayString | OCTET STRING (0..63) | Device type of the package file. | As per the MIB. |

hh3cSysPackageOperateTable

About this table

This table manages package files.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

You must specify hh3cSysPackageOperateIndex, hh3cSysPackageOperateIndex, hh3cSysPackageOperateStatus, and hh3cSysPackageOperateRowStatus when you create a row. The package file specified by hh3cSysPackageOperateIndex must be a valid feature package.

Columns

The table index is hh3cSysPackageOperateIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|------------------------------|--------------------------------|-----------------|
| hh3cSysPackageOperateIndex (1.3.6.1.4.1.25506.2.3.1.7.4.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Entry index. | As per the MIB. |
| hh3cSysPackageOperatePackIndex | read-create | Integer32 | Integer32 | Index of the specified package | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|---|-----------------|
| x (1.3.6.1.4.1.25506.2.3.1.7.4.1.2) | | | (1..2147483647) | file. | |
| hh3cSysPackageOperateStatus(1.3.6.1.4.1.25506.2.3.1.7.4.1.3) | read-create | INTEGER | active(1) inactive(2) | Activation or deactivation of the package file. | As per the MIB. |
| hh3cSysPackageOperateRowStatus(1.3.6.1.4.1.25506.2.3.1.7.4.1.4) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | As per the MIB. |
| hh3cSysPackageOperateResult(1.3.6.1.4.1.25506.2.3.1.7.4.1.5) | read-only | INTEGER | opInProgress(1) opSuccess(2) opUnknownFailure(3) opInvalidFile(4) opNotSupport(5) | Operation result. | As per the MIB. |

hh3cSysIpeFileTable

About this table

This table contains information about IPE files.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSysIpeFileIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|-------------------------------|--------------------------|-----------------|
| hh3cSysIpeFileIndex (1.3.6.1.4.1.25506.2.3.1.8.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of an IPE file. | As per the MIB. |
| hh3cSysIpeFileName (1.3.6.1.4.1.25506.2.3.1.8.2.1.2) | read-only | DisplayString | OCTET STRING (0..255) | IPE file name. | As per the MIB. |
| hh3cSysIpeFileSize (1.3.6.1.4.1.25506.2.3.1.8.2.1.3) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | IPE file size, in bytes. | As per the MIB. |
| hh3cSysIpeFileLocation | read-only | DisplayString | OCTET STRING | IPE file path. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|--------------------------|-------------------------------|-----------------|
| (1.3.6.1.4.1.25506.2.3.1.8.2.1.4) | | | (0..255) | | |
| hh3cSysIpeFileModel (1.3.6.1.4.1.25506.2.3.1.8.2.1.5) | read-only | SnmpTagList | OCTET STRING (0..255) | Device model in the IPE file. | As per the MIB. |

hh3cSysIpePackageTable

About this table

This table contains information about packages in IPE files.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are hh3cSysIpeFileIndex and hh3cSysIpePackageIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|----------------------------------|-----------------|
| hh3cSysIpePackageIndex (1.3.6.1.4.1.25506.2.3.1.8.3.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | IPE package index. | As per the MIB. |
| hh3cSysIpePackageName (1.3.6.1.4.1.25506.2.3.1.8.3.1.2) | read-only | DisplayString | OCTET STRING (0..255) | Package file name. | As per the MIB. |
| hh3cSysIpePackageSize (1.3.6.1.4.1.25506.2.3.1.8.3.1.3) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | Package file size, in bytes. | As per the MIB. |
| hh3cSysIpePackageType (1.3.6.1.4.1.25506.2.3.1.8.3.1.4) | read-only | INTEGER | boot(1) system(2) feature(3) patch(4) | Type of the package file. | As per the MIB. |
| hh3cSysPackageDescription (1.3.6.1.4.1.25506.2.3.1.8.3.1.5) | read-only | DisplayString | OCTET STRING (0..255) | Description of the package file. | As per the MIB. |
| hh3cSysIpePackageFeature (1.3.6.1.4.1.25506.2.3.1.8.3.1.6) | read-only | DisplayString | OCTET STRING (0..255) | Feature of the package file. | As per the MIB. |
| hh3cSysIpePackageVersion (1.3.6.1.4.1.25506.2.3.1.8.3.1.7) | read-only | DisplayString | OCTET STRING (0..255) | Version of the package file. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|-------------------------|----------------------------------|-----------------|
| hh3cSysIpePackageModel (1.3.6.1.4.1.25506.2.3.1.8.3.1.8) | read-only | DisplayString | OCTET STRING (0..63) | Device type of the package file. | As per the MIB. |

hh3cSysIpeFileOperateTable

About this table

This table manages IPE files.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

You must specify hh3cSysIpeFileOperateIndex, hh3cSysIpeFileOperateIndex, hh3cSysIpeFileOperateAttribute, and hh3cSysIpeFileOperateRowStatus when you create a row.

Columns

The table index is hh3cSysIpeFileOperateIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|---|----------------------------|---|
| hh3cSysIpeFileOperateIndex (1.3.6.1.4.1.25506.2.3.1.8.4.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Entry index. | If the entity index is 1, IPE files will be decompressed to the active MPU. |
| hh3cSysIpeFileOperateFileIndex (1.3.6.1.4.1.25506.2.3.1.8.4.1.2) | read-create | Integer32 | Integer32 (1..2147483647) | Index of an IPE file. | The value of this object is an instance index in hh3cSysIpeFileTable. |
| hh3cSysIpeFileOperateAttribute (1.3.6.1.4.1.25506.2.3.1.8.4.1.3) | read-create | INTEGER | none(1) primary(2) secondary(3) primarySecondary(4) | Attribute of the IPE file. | As per the MIB. |
| hh3cSysIpeFileOperateRowStatus (1.3.6.1.4.1.25506.2.3.1.8.4.1.4) | read-create | INTEGER | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | As per the MIB. |
| hh3cSysIpeFileOperateResult (1.3.6.1.4.1.25506.2.3.1.8.4.1.5) | read-only | INTEGER | opInProgress(1) opSuccess(2) opUnknownFailure(3) opInvalidFile(4) opDeviceFull(5) | Operation result. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--------------------|-------------|----------------|
| | | | opFileOpenError(6) | | |

hh3cSysBootPackageTable

About this table

This table specifies boot images.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

The value of hh3cSysBootPackageIndex must exist in hh3cSysPackageTable when you create a row. Before specifying boot images, make sure hh3cSysBootIpeTable is empty.

Columns

The table index is hh3cSysBootPackageIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---|--------------|---|
| hh3cSysBootPackageIndex (1.3.6.1.4.1.25506.2.3.1.9.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Table index. | Same with the index of a package file in hh3cSysPackageTable. |
| hh3cSysBootPackageRowStatus (1.3.6.1.4.1.25506.2.3.1.9.2.1.2) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cSysBootIpeTable

About this table

This table specifies IPE files for startup.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

The value of hh3cSysBootIpeIndex must exist in hh3cSysIpeFileTable when you create a row. Before specifying IPE files, make sure hh3cSysBootPackageTable is empty.

Columns

The table index is hh3cSysBootIpeIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---|-----------------|--|
| hh3cSysBootIpeIndex (1.3.6.1.4.1.25506.2.3.1.9.3.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | IPE file index. | Same with the index of an IPE file in hh3cIpeFileTable. |
| hh3cSysBootIpeRowStatus (1.3.6.1.4.1.25506.2.3.1.9.3.1.2) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cSysSetBootImageResultTable

About this table

This table contains operation result of setting boot images. To clear the records in this table, set hh3cSysSetBootImageAction to **done(2)**.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSysSetBootImageResultIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|-------------------|---|
| hh3cSysSetBootImageResultIndex (1.3.6.1.4.1.25506.2.3.1.9.4.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Table index. | Same with the entity index of the device. |
| hh3cSysSetBootImageResultStatusOfEachCard (1.3.6.1.4.1.25506.2.3.1.9.4.1.2) | read-only | INTEGER | none(1) doing(2) success(3) failed(4) | Operation status. | As per the MIB. |
| hh3cSysSetBootImageFailedReasonOfEachCard (1.3.6.1.4.1.25506.2.3.1.9.4.1.3) | read-only | DisplayString | OCTET STRING (0..255) | Failure reason. | As per the MIB. |

Notifications

The following information describes the notifications included in the HH3C-SYS-MAN-MIB module.

hh3cSysClockChangedNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|--------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.3.2.1 | System time change | Informational | Warning | - | ON |

Description

This notification is generated when the system time is modified manually by the administrators, or is modified automatically by the clock protocol.

Status control

ON

CLI: Use the `snmp-agent trap enable system` command.

OFF

CLI: Use the `undo snmp-agent trap enable system` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------|-------|-------------|---------------------------------|
| 1.3.6.1.4.1.25506.2.3.1.1.1 (hh3cSysLocalClock) | System time after modification | No | DateAndTime | OCTET STRING (SIZE (8 11)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that the timing configuration at the back end is correct.
2. Modify the timing program that has been automatically invalid.

hh3cSysReloadNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.3.2.2 | The system reboot policy took effect or changed | Informational | Warning | - | ON |

Description

This notification is generated when the reboot schedule configuration is to take effect or becomes invalid because of system time change.

Status control

ON

CLI: Use the `snmp-agent trap enable system` command.

OFF

CLI: Use the `undo snmp-agent trap enable system` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------------|---|
| 1.3.6.1.4.1.25506.2.3.1.3.3.1.4 (hh3cSysReloadImage) | Image file used by the system reboot policy. | No | Integer32 | 0..2147483647 |
| 1.3.6.1.4.1.25506.2.3.1.3.3.1.3 (hh3cSysReloadCfgFile) | Configuration file used by the system reboot policy. | No | Integer32 | 0..2147483647 |
| 1.3.6.1.4.1.25506.2.3.1.3.3.1.5 (hh3cSysReloadReason) | Reason for system reboot. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.3.1.3.3.1.6 (hh3cSysReloadScheduleTime) | Scheduled time at which the system reboot occurs. | No | DateAndTime | OCTET STRING (SIZE (8)) |
| 1.3.6.1.4.1.25506.2.3.1.3.2 (hh3cSysReloadAction) | Reload action of the system reboot policy. | No | INTEGER | reloadUnavailable(1) reloadOnSchedule(2) reloadAtOnce(3) reloadCancel(4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. If the system reboot policy is to take effect, wait for the system to reboot.
2. If this notification is generated because of system time change, reconfigure the reboot schedule based on the new system time.

hh3cSysStartUpNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.3.2.3 | A system software image file became invalid | Informational | Warning | - | ON |

Description

This alarm occurs when the system fails to boot with the main packages or IPE files and boots with the backup packages or IPE files. The main packages or IPE files might be incompatible with the device.

Status control

ON

CLI: Use the `snmp-agent trap enable system` command.

OFF

CLI: Use the `undo snmp-agent trap enable system` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------|-------------|
| 1.3.6.1.4.1.25506.2.3.1.4.2.1.5 (hh3cSysImageType) | Type of the system software image files | No | INTEGER | backup(2) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that the system software image files are correct.
2. If the issue persists, contact H3C Support.

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HH3C-UI-MAN-MIB

About this MIB

Use this MIB to define alarms on user authentication. This MIB also contains notifications about user login changes.

MIB file name

hh3c-ui-man.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cUIMgt(2)

Scalar objects

hh3cTerminalUserName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------------|----------------------|-----------------------|-----------------|
| hh3cTerminalUserName (1.3.6.1.4.1.25506.2.2.1.1.2.1) | accessible-for-notification | DisplayString | Standard MIB values. | Name of a login user. | As per the MIB. |

hh3cTerminalSource

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------------|----------------------|---|-----------------|
| hh3cTerminalSource (1.3.6.1.4.1.25506.2.2.1.1.2.2) | accessible-for-notification | DisplayString | Standard MIB values. | Login method, including Console, AUX, TTY, and VTY. | As per the MIB. |

hh3cTerminalUserAuthFailureReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|---------|--|---|-----------------|
| hh3cTerminalUserAuthFailureReason (1.3.6.1.4.1.25506.2.2.1.1.2.3) | accessible-for-notification | INTEGER | exceedRetries(1) authTimeout(2) otherReason(3) | Failure reason for user authentication. | As per the MIB. |

hh3cVtyCurrentVty

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------|-----------------------------|------------|--------------|----------------|-----------------|
| hh3cVtyCurrentVty | accessible-for-notification | Unsigned32 | Standard MIB | Number of used | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|--------|--------|-------------|-------------|----------------|
| y (1.3.6.1.4.1.25506 .2.2.1.1.2.4) | fy | | values. | VTY lines. | |

hh3cVtyMaxVty

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|------------|-------------------------|---|-----------------|
| hh3cVtyMaxVty (1.3.6.1.4.1.25506 .2.2.1.1.2.5) | accessible-for-noti fy | Unsigned32 | Standard MIB values. | Maximum number of VTY lines that the system allows users to log in to concurrently. | As per the MIB. |

hh3cVtyThreshold

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|------------|-------------------------|-------------------------------|-----------------|
| hh3cVtyThreshold (1.3.6.1.4.1.25506 .2.2.1.1.2.6) | accessible-for-noti fy | Unsigned32 | Standard MIB values. | VTY usage alarm threshold. | As per the MIB. |

Notifications

The following information describes the notifications included in the HH3C-UI-MAN-MIB module.

hh3cLogIn

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------------|------------|---------------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.2.1.1.3.0.1 | User login | Informational | - | - | ON |

Description

This notification is generated when a user logs in to the system.

Status control

This alarm cannot be cleared.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------------|---------------------------------|
| 1.3.6.1.4.1.25506.2.2.1.1.2.1 (hh3cTerminalUserName) | Username. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.2.1.1.2.2 (hh3cTerminalSource) | User line, including console, AUX, TTY, and VTY. | No | DisplayString | OCTET STRING (SIZE (0..255)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cLogOut

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.2.1.1.3.0.2 | User logout | Informational | - | - | ON |

Description

This notification is generated when a user logs out of the system.

Status control

This alarm cannot be cleared.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------------|------------------------------|
| 1.3.6.1.4.1.25506.2.2.1.1.2.1 (hh3cTerminalUserName) | Username. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.2.1.1.2.2 (hh3cTerminalSource) | User line, including AUX, TTY, and VTY. | No | DisplayString | OCTET STRING (SIZE (0..255)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cLogInAuthenFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.2.1.1.3.0.3 | User authentication failed | Informational | - | - | ON |

Description

This notification is generated when a user failed to log in to the system.

Status control

This alarm cannot be cleared.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------------|--|
| 1.3.6.1.4.1.25506.2.2.1.1.2.1 (hh3cTerminalUserName) | Username. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.2.1.1.2.2 (hh3cTerminalSource) | User line, including AUX, TTY, and VTY. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.2.1.1.2.3 (hh3cTerminalUserAuthFailureReason) | Failure reason for user authentication. | No | INTEGER | exceedRetries(1) authTimeout(2) otherReason(3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cVtyUsageExceed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506. 2.2.1.1.3.0.4 | The number of used VTY lines reached or exceeded the alarm threshold. | Informational | - | - | ON |

Description

This notification is generated when the number of used VTY lines reaches or exceeds the alarm threshold.

Status control

This alarm cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------|-------------------------|
| 1.3.6.1.4.1.25506.2.2.1.1.2.4 (hh3cVtyCurrentVty) | Number of used VTY lines. | No | Integer | Standard MIB values. |

| | | | | |
|---|---|----|---------|----------------------|
| 1.3.6.1.4.1.25506.2.2.1.1.2.5 (hh3cVtyMaxVty) | Maximum number of VTY lines that the system allows users to log in to concurrently. | No | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.2.1.1.2.6 (hh3cVtyThreshold) | VTY usage alarm threshold. | No | Integer | Standard MIB values. |

Recommended action

Release user lines.

hh3cVtyUsageResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.2.1.1.3.0.5 | VTY usage alarm was cleared. | Informational | - | - | ON |

Description

This notification is generated when the number of used VTY lines drops below the VTY usage alarm threshold.

Status control

This alarm cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.2.2.1.1.2.4 (hh3cVtyCurrentVty) | Number of used VTY lines. | No | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.2.1.1.2.5 (hh3cVtyMaxVty) | Maximum number of VTY lines that the system allows users to log in to concurrently. | No | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.2.1.1.2.6 (hh3cVtyThreshold) | VTY usage alarm threshold. | No | Integer | Standard MIB values. |

Recommended action

No action is required.

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RFC1213-MIB

About this MIB

The protocol-related objects and tables defined in this MIB are redefined and replaced by protocol-specific MIBs as follows:

- For information about interfaces, see the IF-MIB MIB document.
- For information about IP and ICMP, see the IP-MIB MIB document.
- For information about TCP, see the TCP-MIB MIB document.
- For information about UDP, see the UDP-MIB MIB document.
- For information about SNMP, see the SNMPv2-MIB MIB document.

MIB file name

rfc1213.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).system(1)

Scalar objects

sysDescr

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------|-----------|---------------|-----------------------|--------------------------------------|-----------------------------------|
| sysDescr (1.3.6.1.2.1.1.1) | read-only | DisplayString | OCTET STRING (0..255) | A textual description of the entity. | Implementation varies by product. |

sysObjectID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|-----------|-------------------|----------------------|--|-----------------------------------|
| sysObjectID (1.3.6.1.2.1.1.2) | read-only | OBJECT IDENTIFIER | Standard MIB values. | The vendor's authoritative identification of the network management subsystem contained in the entity. | Implementation varies by product. |

sysUpTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------|-----------|-----------|----------------------|--|-----------------|
| sysUpTime (1.3.6.1.2.1.1.3) | read-only | TimeTicks | Standard MIB values. | The time (in hundredths of a second) since the network management portion of the system was last re-initialized. | As per the MIB. |

sysContact

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------|------------|---------------|-----------------------|---|--|
| sysContact (1.3.6.1.2.1.1.4) | read-write | DisplayString | OCTET STRING (0..255) | The textual identification of the contact person for this managed node, together with information how to contact this person. | Implementation varies by product. Restores the default value by setting a zero-length string. |

sysName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------|------------|---------------|-----------------------|--|--|
| sysName (1.3.6.1.2.1.1.5) | read-write | DisplayString | OCTET STRING (0..255) | An administratively-assigned name for this managed node. | Implementation varies by product. A valid name is a string of 1 to 64 characters. |

sysLocation

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|------------|---------------|-----------------------|---------------------------------------|--|
| sysLocation (1.3.6.1.2.1.1.6) | read-write | DisplayString | OCTET STRING (0..255) | The physical location of this device. | Implementation varies by product. Restores the default value by setting a zero-length string. |

sysServices

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|-----------|-----------|------------------|--|--|
| sysServices (1.3.6.1.2.1.1.7) | read-only | Integer32 | INTEGER (0..127) | A value which indicates the set of services that this entity primarily offers. | <p>The value is calculated as follows:</p> $78 (2^{(2-1)} + 2^{(3-1)} + 2^{(4-1)} + 2^{(7-1)})$ <p>Layer functionality:</p> <ul style="list-style-type: none">• 2—Datalink/subnetwork (such as bridges)• 3—Internet (such as IP gateways).• 4—End-to-end (such as TCP).• 7—Applications (such as SMTP). |

Tabular objects

atTable

About this table

This table contains information about ARP entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are atIfIndex and atNetAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|------------|-----------------|----------------------|--|-----------------------------------|
| atIfIndex (1.3.6.1.2.1.3.1.1.1) | read-write | INTEGER | Standard MIB values. | The interface on which this entry's equivalence is effective. | Supports only the read operation. |
| atPhysAddress (1.3.6.1.2.1.3.1.1.2) | read-write | PhysAddress | Standard MIB values. | The media-dependent physical address. | Supports only the read operation. |
| atNetAddress (1.3.6.1.2.1.3.1.1.3) | read-write | Network Address | Standard MIB values. | The network address (for example, the IP address) corresponding to the media-dependent physical address. | Supports only the read operation. |

ipRouteTable

About this table

This table contains information about IP routes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ipRouteDest.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|------------|-----------|---|---|-----------------------------------|
| ipRouteDest(1.3.6.1.2.1.4.21.1.1) | read-write | IpAddress | OCTET STRING (4) | The destination IP address of this route. | Supports only the read operation. |
| ipRouteIfIndex(1.3.6.1.2.1.4.21.1.2) | read-write | INTEGER | Standard MIB values. | The index value which uniquely identifies the local interface through which the next hop of this route should be reached. | Supports only the read operation. |
| ipRouteMetric1(1.3.6.1.2.1.4.21.1.3) | read-write | INTEGER | Standard MIB values. | The primary routing metric for this route. | Supports only the read operation. |
| ipRouteMetric2(1.3.6.1.2.1.4.21.1.4) | read-write | INTEGER | Standard MIB values. | An alternate routing metric for this route. | Supports only the read operation. |
| ipRouteMetric3(1.3.6.1.2.1.4.21.1.5) | read-write | INTEGER | Standard MIB values. | An alternate routing metric for this route. | Supports only the read operation. |
| ipRouteMetric4(1.3.6.1.2.1.4.21.1.6) | read-write | INTEGER | Standard MIB values. | An alternate routing metric for this route. | Supports only the read operation. |
| ipRouteNextHop(1.3.6.1.2.1.4.21.1.7) | read-write | IpAddress | OCTET STRING (4) | The IP address of the next hop of this route. | Supports only the read operation. |
| ipRouteType(1.3.6.1.2.1.4.21.1.8) | read-write | INTEGER | INTEGER {other(1), invalid(2), direct(3), indirect(4)} | The type of route. | Supports only the read operation. |
| ipRouteProto(1.3.6.1.2.1.4.21.1.9) | read-only | INTEGER | INTEGER {other(1), local(2), netmgmt(3), icmp(4), egp(5), ggp(6), hello(7), rip(8), is-is(9), es-is(10), ciscoIgrp(11), bbnSpfIgp(12), ospf(13), bgp(14)} | The routing mechanism via which this route was learned. | As per the MIB. |
| ipRouteAge(1.3.6.1.2.1.4.21.1.10) | read-write | INTEGER | Standard MIB values. | The number of seconds since this route was last updated or otherwise determined to be | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|------------|-------------------|----------------------|---|-----------------------------------|
| | | | | correct. | |
| ipRouteMask(1.3.6.1.2.1.4.21.1.11) | read-write | IpAddress | OCTET STRING (4) | Indicates the mask to be logical-ANDed with the destination address before being compared to the value for the ipRouteDest object. | Supports only the read operation. |
| ipRouteMetric5(1.3.6.1.2.1.4.21.1.12) | read-write | INTEGER | Standard MIB values. | An alternate routing metric for this route. | Supports only the read operation. |
| ipRouteInfo(1.3.6.1.2.1.4.21.1.13) | read-only | OBJECT IDENTIFIER | Standard MIB values. | A reference to MIB definitions specific to the particular routing protocol which is responsible for this route, as determined by the value specified in the route's ipRouteProto value. | As per the MIB. |

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HH3C-LICENSE-MIB

About this MIB

Use this MIB to manage the feature licenses on the device.

MIB file name

hh3c-license.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cLicense(145)

Scalar objects

hh3cLicenseNotifyEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------|
| hh3cLicenseNotifyEnable (1.3.6.1.4.1.25506.2.145.1.1) | read-write | TruthValue | true(1), false(2) | Enables or disables all license module notifications. | As per the MIB. |

hh3cLicenseOpEntryMaxNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|---------------------|--|-----------------|
| hh3cLicenseOpEntryMaxNum (1.3.6.1.4.1.25506.2.145.1.2) | read-write | Unsigned 32 | Unsigned 32 (1..20) | Maximum number of entries can be recorded in hh3cLicenseOpTable. | As per the MIB. |

hh3cLicenseNextFreeOpIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|----------------------|------------------------|-----------------|
| hh3cLicenseNextFreeOpIndex (1.3.6.1.4.1.25506.2.145.1.3) | read-only | Unsigned 32 | Standard MIB values. | The hh3cLicenseOpIndex | As per the MIB. |

| | | | | | |
|--|--|--|--|---|--|
| | | | | appropriate value used for creating an entry in hh3cLicenseOpTable. | |
|--|--|--|--|---|--|

hh3cLicenseBindValidityPeriodRemaining

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-------------|----------------------|--|-----------------|
| hh3cLicenseBindValidityPeriodRemaining (1.3.6.1.4.1.25506.2.145.3.1.1) | accessible-for-notify | Unsigned 32 | Standard MIB values. | Remaining days before a license expires. | As per the MIB. |

Tabular objects

hh3cLicenseDevInfoTable

About this table

This table displays the device SN and DID information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cLicensePhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|----------------------|---|-----------------|
| hh3cLicensePhysicalIndex (1.3.6.1.4.1.25506.2.145.2.1.1.2) | accessible-for-notify | Physical index | Standard MIB values. | Index of hh3cLicenseDevInfoTable, depending on entPhysicalIndex in the ENTITY-MIB module. | As per the MIB. |
| hh3cLicenseSN (1.3.6.1.4.1.25506.2.145.2.1.1.2) | read-only | SnmpAdminString | OCTET STRING(0..255) | Device serial number. | As per the MIB. |
| hh3cLicenseDeviceIDType (1.3.6.1.4.1.25506.2.145.2.1.1.3) | read-only | INTEGER | INTEGER{invalid(1), | Type of device ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|---|---|-----------------|
| | | | keyString(2), file(3) } | | |
| hh3cLicenseDeviceID (1.3.6.1.4.1.25506.2.145.2.1.1.4) | read-only | SnmpAdminString | OCTET STRING(0..255) | Device ID. | As per the MIB. |
| hh3cLicenseHardwareInfo (1.3.6.1.4.1.25506.2.145.2.1.1.5) | read-only | SnmpAdminString | OCTET STRING(0..255) | Device hardware information. | As per the MIB. |
| hh3cLicenseMaxNum (1.3.6.1.4.1.25506.2.145.2.1.1.6) | read-only | Unsigned 32 | Standard MIB values. | Maximum number of licenses that can be installed on the device. | As per the MIB. |
| hh3cLicenseUsedNum (1.3.6.1.4.1.25506.2.145.2.1.1.7) | read-only | Unsigned 32 | Standard MIB values. | Number of installed licenses. | As per the MIB. |
| hh3cLicenseRecyclableNum (1.3.6.1.4.1.25506.2.145.2.1.1.8) | read-only | Unsigned 32 | Standard MIB values. | Number of recyclable storage for licenses. | As per the MIB. |
| hh3cLicenseInstallType (1.3.6.1.4.1.25506.2.145.2.1.1.9) | read-only | INTEGER | invalid(1), installInChassis(2), installInSlot(3), installInCPU(4) | Type of license installation. | As per the MIB. |
| hh3cLicenseFileStoragePath (1.3.6.1.4.1.25506.2.145.2.1.1.10) | read-only | SnmpAdminString | OCTET STRING(0..255) | Storage path of license files. | As per the MIB. |

hh3cLicenseGeneralTable

About this table

This table displays the general license information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cLicenseIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------------|--|---------------------------------------|-----------------|
| hh3cLicenseIndex (1.3.6.1.4.1.25506.2.145.2.2.1.1) | accessible-for-notify | Unsigned 32 | Standard MIB values. | License ID. | As per the MIB. |
| hh3cLicenseFeature (1.3.6.1.4.1.25506.2.145.2.2.1.2) | read-only | SnmpAdminString | OCTET STRING(0..1024) | Name of a licensed feature. | As per the MIB. |
| hh3cLicenseProductDescr (1.3.6.1.4.1.25506.2.145.2.2.1.3) | read-only | OCTET STRING | OCTET STRING(0..1024) | Product description in the license. | As per the MIB. |
| hh3cLicenseFileDescr (1.3.6.1.4.1.25506.2.145.2.2.1.4) | read-only | SnmpAdminString | OCTET STRING(0..1024) | Description of a license file. | As per the MIB. |
| hh3cLicenseState (1.3.6.1.4.1.25506.2.145.2.2.1.5) | read-only | INTEGER | invalid(1), inuse(2), usable(3), expired(4), uninstalled(5), unusable(6) | State of an installed license. | As per the MIB. |
| hh3cLicenseActivationFile (1.3.6.1.4.1.25506.2.145.2.2.1.6) | read-only | SnmpAdminString | OCTET STRING(0..255) | Name of an installed activation file. | As per the MIB. |
| hh3cLicenseActivationKey (1.3.6.1.4.1.25506.2.145.2.2.1.7) | read-only | SnmpAdminString | OCTET STRING(0..255) | Installed activation key. | As per the MIB. |
| hh3cLicenseLicenseKey (1.3.6.1.4.1.25506.2.145.2.2.1.8) | read-only | SnmpAdminString | OCTET STRING(0..255) | Installed license key. | As per the MIB. |
| hh3cLicenseUninstActivationFile (1.3.6.1.4.1.25506.2.145.2.2.1.9) | read-only | SnmpAdminString | OCTET STRING(0..255) | Uninstall file. | As per the MIB. |
| hh3cLicenseUninstActivationKey (1.3.6.1.4.1.25506.2.145.2.2.1.10) | read-only | SnmpAdminString | OCTET STRING(0..255) | Uninstall key. | As per the MIB. |
| hh3cLicenseType (1.3.6.1.4.1.25506.2.145.2.2.1.11) | read-only | INTEGER | unknown(1), permanent(2), daysRestricted(3), trialDaysRestricted(4), dateRestricted(5), trialDateRestricted(6), countRestricted(7), trialCountRestricted(8) | License type by validity period. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|----------------------|--|-----------------|
| hh3cLicenseInstalledTime (1.3.6.1.4.1.25506.2.145.2.2.1.12) | read-only | DateAnd Time | Standard MIB values. | Time when a license was installed. | As per the MIB. |
| hh3cLicenseUninstalledTime (1.3.6.1.4.1.25506.2.145.2.2.1.13) | read-only | DateAnd Time | Standard MIB values. | Time when a license was uninstalled . | As per the MIB. |
| hh3cLicenseDaysLeft (1.3.6.1.4.1.25506.2.145.2.2.1.14) | read-only | Unsigned 32 | Standard MIB values. | Remaining days of a license. | As per the MIB. |
| hh3cLicenseValidityStart (1.3.6.1.4.1.25506.2.145.2.2.1.15) | read-only | DateAnd Time | Standard MIB values. | Start date for a date-restricted license. | As per the MIB. |
| hh3cLicenseValidityEnd (1.3.6.1.4.1.25506.2.145.2.2.1.16) | read-only | DateAnd Time | Standard MIB values. | End date for a date-restricted license. | As per the MIB. |
| hh3cLicenseExpiredDays (1.3.6.1.4.1.25506.2.145.2.2.1.17) | read-only | Unsigned 32 | Standard MIB values. | Expiration date for a date-restricted license. | As per the MIB. |
| hh3cLicenseCount (1.3.6.1.4.1.25506.2.145.2.2.1.18) | read-only | Unsigned 32 | Standard MIB values. | Effective number of a quantity-based license. | As per the MIB. |

hh3cLicenseFeatureTable

About this table

This table displays summary information about feature licenses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLicensePhysicalIndex and IMPLIED hh3cLicenseFeatureName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------|-----------|--------|-------------|-------------|-----------------|
| hh3cLicenseFeatureName | read-only | SnmpAd | OCTET | Name of | As per the MIB. |

| | | | | | |
|--|-----------|-----------|--|---------------------------------|-----------------|
| (1.3.6.1.4.1.25506.2.145.2.3.1.1) | | minString | STRING(1..31) | a licensed feature. | |
| hh3cLicenseFeatureState (1.3.6.1.4.1.25506.2.145.2.3.1.2) | read-only | INTEGER | notLicensed(1), trialLicense(2), formalLicense(3), serverLicense(4), preLicense(5) | Licensing state of the feature. | As per the MIB. |

hh3cLicenseOpTable

About this table

This table is used to install or uninstall licenses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cLicenseOpIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------------------|---|---|-----------------|
| hh3cLicenseOpIndex (1.3.6.1.4.1.25506.2.145.2.4.1.1) | accessible-for-notify | Unsigned 32 | Standard MIB values. | Operation ID. | As per the MIB. |
| hh3cLicenseOpPhysicalIndex (1.3.6.1.4.1.25506.2.145.2.4.1.2) | read-create | PhysicalIndexOrZero | Integer32 | Entity index of an MPU or CPU for an operation, depending on entPhysicalIndex in the ENTITY-MIB module. | As per the MIB. |
| hh3cLicenseOpType (1.3.6.1.4.1.25506.2.145.2.4.1.3) | read-create | INTEGER | compress(1), delete(2), installActivationFile(3), installActivationKey(4), installLicenseKey(5), uninstallActivationFile(6), uninstallActivationKey(7), uninstallLicenseKey(8) | Operation type. | As per the MIB. |
| hh3cLicenseOpString (1.3.6.1.4.1.25506.2.145.2.4.1.4) | read-create | SnmpAdminString | OCTET STRING (0..255) | License key, activation key, or | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|---|--|-----------------|
| | | | | activation file that was installed or uninstalled. | |
| hh3cLicenseOpNotifyEnable (1.3.6.1.4.1.25506.2.145.2.4.1.5) | read-create | TruthValue | true(1), false(2) | Enables or disables hh3cLicenseOpCompletion. | As per the MIB. |
| hh3cLicenseOpRowStatus (1.3.6.1.4.1.25506.2.145.2.4.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |
| hh3cLicenseOpState (1.3.6.1.4.1.25506.2.145.2.4.1.7) | read-only | INTEGER | opInProgress(1), opSuccessful(2), opFailed(3) | Operation status. | As per the MIB. |
| hh3cLicenseOpFailedReason (1.3.6.1.4.1.25506.2.145.2.4.1.8) | read-only | SnmpAdminString | OCTET STRING (0..255) | Detailed cause of an operation failure. | As per the MIB. |
| hh3cLicenseOpEndTime (1.3.6.1.4.1.25506.2.145.2.4.1.9) | read-only | TimeTicks | OCTET STRING | System time when an operation was executed. | As per the MIB. |

Notifications

The following information describes the notifications included in the HH3C-LICENSE-MIB module.

hh3cLicenseOpCompletion

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.145.3.0.1 | Notification of license operation completion. | Informational | - | - | ON |

Description

This notification is generated when a license operation was completed according to the requirements of the network management system (NMS).

The parameters in the notification are related to the executed operation. As a best practice, see NMS online help system for parameter descriptions.

Status control

ON

MIB: Set hh3cLicenseOpNotifyEnable to true(1)

OFF

MIB: Set hh3cLicenseOpNotifyEnable to false(2)

Objects

| OID (object) | Description | Index | Type | Value range |
|---|---|-------|---------------------|--|
| 1.3.6.1.4.1.25506.2.145.2.4.1.1 (hh3cLicenseOpIndex) | Operation ID. | Yes | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.145.2.4.1.2 (hh3cLicenseOpPhysicalIndex) | Entity index of an MPU or CPU for an operation, depending on entPhysicalIndex in the ENTITY-MIB module. | No | PhysicalIndexOrZero | Integer32 (0..2147483647) |
| 1.3.6.1.4.1.25506.2.145.2.4.1.3 (hh3cLicenseOpType) | Operation type. | No | INTEGER | compress(1) delete(2) installActivationFile(3) installActivationKey(4) installLicenseKey(5) uninstallActivationFile(6) uninstallActivationKey(7) uninstallLicenseKey(8) |
| 1.3.6.1.4.1.25506.2.145.2.4.1.4 (hh3cLicenseOpString) | License key, activation key, or activation file that was installed or uninstalled. | No | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.145.2.4.1.7 (hh3cLicenseOpState) | Operation status. | No | INTEGER | opInProgress(1) opSuccessful(2) opFailed(3) |
| 1.3.6.1.4.1.25506.2.145.2.4.1.8 (hh3cLicenseOpFailedReason) | Detailed cause of an operation failure. | No | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue:

1. Verify the license operation result.
2. If the issue persists, contact H3C Support.

hh3cLicenseActivationFileLost

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------------------------|--------------|----------|--------------------------------------|----------------|
| 1.3.6.1.4.1.25506.2.145.3.0.2 | Notification of activation file loss. | Fault Alarms | Major | 1.3.6.1.4.1.25506.2.145.3.0.3(hh3cLi | ON |

| | | | | | |
|--|--|--|--|------------------------------|--|
| | | | | censeActivationFileRestored) | |
|--|--|--|--|------------------------------|--|

Description

This notification is generated when an activation file was lost or damaged and will be issued continuously until the fault is solved.

Status control

ON

MIB: Set hh3cLicenseOpNotifyEnable to true(1)

OFF

MIB: Set hh3cLicenseOpNotifyEnable to false(2)

Objects

| OID (object) | Description | Index | Type | Value range |
|--|---|-------|-----------------|---------------------------------|
| 1.3.6.1.4.1.25506.2.145.2.1.1.1 (hh3cLicensePhysicalIndex) | Index of hh3cLicenseDevInfoTable, depending on entPhysicalIndex in the ENTITY-MIB module. | Yes | PhysicalIndex | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.145.2.2.1.6 (hh3cLicenseActivationFile) | Name of an installed activation file. | No | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue:

1. Copy the backup activation file to the flash:/license directory to recover the license. If the backup activation file is lost or no activation file is backed up, contact H3C Support.
2. If the issue persists, contact H3C Support.

hh3cLicenseActivationFileRestored

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.145.3.0.3 | Notification of successful activation file recovery. | Notification of recovery. | - | - | ON |

Description

This notification is generated when an activation file was recovered successfully.

Status control

ON

MIB: Set hh3cLicenseOpNotifyEnable to true(1)

OFF

MIB: Set hh3cLicenseOpNotifyEnable to false(2)

Objects

| OID (object) | Description | Index | Type | Value range |
|--|---|-------|-----------------|---------------------------------|
| 1.3.6.1.4.1.25506.2.145.2.1.1.1 (hh3cLicensePhysicalIndex) | Index of hh3cLicenseDevInfoTable, depending on entPhysicalIndex in the ENTITY-MIB module. | Yes | PhysicalIndex | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.145.2.2.1.6 (hh3cLicenseActivationFile) | Name of an installed activation file. | No | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

No action is required.

hh3cLicenseExpired

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.145.3.0.4 | Notification of license expiration. | Informational | Major | - | ON |

Description

This notification is generated when a license expired.

Status control

ON

MIB: Set hh3cLicenseOpNotifyEnable to true(1)

OFF

MIB: Set hh3cLicenseOpNotifyEnable to false(2)

Objects

| OID (object) | Description | Index | Type | Value range |
|--|---------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.145.2.3.1.1 (hh3cLicenseFeatureName) | Name of a licensed feature. | No | SnmpAdminString | OCTET STRING (SIZE (1..31)) |
| 1.3.6.1.4.1.25506.2.145.2.3.1.2 (hh3cLicenseFeatureState) | Licensing state of the feature. | No | INTEGER | notLicensed(1) trialLicense(2) formalLicense(3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Install a new license. If you need to purchase a new license, contact H3C Support.
2. If the issue persists, contact H3C Support.

hh3cLicenseExpireWarning

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.145.3.0.5 | A license is about to expire. | Informational | Warning | - | ON |

Description

This notification is generated when a license is about to expire. The notification will be issued continuously until the notification condition is cleared.

Status control

ON

MIB: Set hh3cLicenseOpNotifyEnable to true(1)

OFF

MIB: Set hh3cLicenseOpNotifyEnable to false(2)

Objects

| OID (object) | Description | Index | Type | Value range |
|---|--|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.145.2.3.1.1 (hh3cLicenseFeatureName) | Name of a licensed feature. | No | SnmpAdminString | OCTET STRING (SIZE (1..31)) |
| 1.3.6.1.4.1.25506.2.145.2.3.1.2 (hh3cLicenseFeatureState) | Licensing state of the feature. | No | INTEGER | notLicensed(1) trialLicense(2) formalLicense(3) |
| 1.3.6.1.4.1.25506.2.145.3.1.1 (hh3cLicenseBindValidityPeriodRemaining) | Remaining days before the license expires. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Install a new license before the license expires. If you need to purchase a new license, contact H3C Support.
2. If the issue persists, contact H3C Support.

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ENTITY-MIB

About this MIB

Use this MIB to manage types of physical entities in a device in a tree structure and relationships between these physical entities. Through this MIB, you can obtain the relationship structure between the physical entities on the device and the related data and status of the physical entities.

An entry index in entPhysicalTable is referred to as an entity index, which is assigned by the product. Each entity uniquely identifies a hardware option on the device, such as fans, power supplies, memory modules, CPUs, service modules, and ports.

A network manager obtains the physical entity arrangement and inclusion relationship on the device by calculating the instance values of entPhysicalContainedIn and entPhysicalParentRelPos in the entPhysicalTable. Doing so can avoid assigning physical entity indexes in depth-first or breadth-first order.

RFC 4133 obsoletes RFC 2737, and adds support for the CPU entity type.

This MIB also contains notifications about configuration changes.

MIB file name

rfc4133-entity.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).entityMIB(47)

Scalar objects

entLastChangeTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|----------------------------|---|-----------------|
| entLastChangeTime (1.3.6.1.2.1.47.1.4.1) | read-only | TimeStam p | Standard MIB values. | The value of sysUpTime at the time a conceptual row is created, modified, or deleted in this MIB. | As per the MIB. |

Tabular objects

entPhysicalTable

About this table

This table contains information about physical entities, including entity indexes, names, serial numbers, version numbers, and manufacturing information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is entPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------|--|--|---|
| entPhysicalIndex (1.3.6.1.2.1.47.1.1.1.1.1) | not-accessible | PhysicalIndex | Integer32 (1..2147483647) | The index for this entry. | As per the MIB. |
| entPhysicalDescr (1.3.6.1.2.1.47.1.1.1.1.2) | read-only | SnmpAdminString | OCTET STRING (0..255) | A textual description of the physical entity. | As per the MIB. |
| entPhysicalVendorType (1.3.6.1.2.1.47.1.1.1.1.3) | read-only | AutonomousType | OBJECT IDENTIFIER | An indication of the vendor-specific hardware type of the physical entity. | Implementation varies by product. The hardware types are defined in HH3C-ENTITY-VENDORTYPE-OID-MIB. An agent should set this object to an enterprise-specific registration identifier value indicating the specific equipment type in detail. |
| entPhysicalContainedIn (1.3.6.1.2.1.47.1.1.1.1.4) | read-only | PhysicalIndexOrZero | Integer32 (0..2147483647) | The value of entPhysicalIndex for the physical entity which contains this physical entity. | As per the MIB. |
| entPhysicalClass (1.3.6.1.2.1.47.1.1.1.1.5) | read-only | PhysicalClass | other(1), unknown(2), chassis(3), backplane(4), container(5), powerSupply(6), fan(7), sensor(8), module(9), port(10), stack(11), cpu(12) | An indication of the general hardware type of the physical entity. | As per the MIB. |
| entPhysicalParentRelPos (1.3.6.1.2.1.47.1.1.1.1.6) | read-only | Integer32 | Integer32 (-1..2147483647) | An indication of the relative position of this child component among all its sibling components. | As per the MIB. |
| entPhysicalName (1.3.6.1.2.1.47.1.1.1.1.7) | read-only | SnmpAdminString | OCTET STRING (0..255) | The textual name of the physical entity. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------------|-----------------------------|---|-----------------------------------|
| entPhysicalHardwareRev (1.3.6.1.2.1.47.1.1.1.1.8) | read-only | SnmpAd minString | OCTET STRING (0..255) | The vendor-specific hardware revision string for the physical entity. | As per the MIB. |
| entPhysicalFirmwareRev (1.3.6.1.2.1.47.1.1.1.1.9) | read-only | SnmpAd minString | OCTET STRING (0..255) | The vendor-specific firmware revision string for the physical entity. | As per the MIB. |
| entPhysicalSoftwareRev (1.3.6.1.2.1.47.1.1.1.1.10) | read-only | SnmpAd minString | OCTET STRING (0..255) | The vendor-specific software revision string for the physical entity. | As per the MIB. |
| entPhysicalSerialNum (1.3.6.1.2.1.47.1.1.1.1.11) | read-write | SnmpAd minString | OCTET STRING (0..32) | The vendor-specific serial number string for the physical entity. | Implementation varies by product. |
| entPhysicalMfgName (1.3.6.1.2.1.47.1.1.1.1.12) | read-only | SnmpAd minString | OCTET STRING (0..255) | The name of the manufacturer of this physical component. | As per the MIB. |
| entPhysicalModelName (1.3.6.1.2.1.47.1.1.1.1.13) | read-only | SnmpAd minString | OCTET STRING (0..255) | The vendor-specific model name identifier string associated with this physical component. | As per the MIB. |
| entPhysicalAlias (1.3.6.1.2.1.47.1.1.1.1.14) | read-write | SnmpAd minString | OCTET STRING (0..32) | Alias for the physical entity. | Implementation varies by product. |
| entPhysicalAssetID (1.3.6.1.2.1.47.1.1.1.1.15) | read-write | SnmpAd minString | OCTET STRING (0..32) | This object is a user-assigned asset tracking identifier (as specified by a network manager) for the physical entity and provides non-volatile storage of this information. | Implementation varies by product. |
| entPhysicalIsFRU (1.3.6.1.2.1.47.1.1.1.1.16) | read-only | TruthValu e | true(1), false(2) | This object indicates whether or not this physical entity is considered a field replaceable unit by the vendor. | As per the MIB. |
| entPhysicalMfgDate (1.3.6.1.2.1.47.1.1.1.1.17) | read-only | DateAnd Time | OCTET STRING (8 | This object contains the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|----------------------------|---|-----------------------------------|
| | | | 11) | date of manufacturing of the managed entity. | |
| entPhysicalUris (1.3.6.1.2.1.47.1.1.1.18) | read-write | OCTET STRING | OCTET STRING (0..65535) | This object contains additional identification information about the physical entity. | Implementation varies by product. |

entAliasMappingTable

About this table

This table contains zero or more rows, representing mappings of logical entity and physical component to external MIB identifiers.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are entPhysicalIndex and entAliasLogicalIndexOrZero.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|------------------------------|---|-----------------|
| entAliasLogicalIndexOrZero (1.3.6.1.2.1.47.1.3.2.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | The value of this object identifies the logical entity that defines the naming scope for the associated instance of the entAliasMappingIdentifier object. | As per the MIB. |
| entAliasMappingIdentifier (1.3.6.1.2.1.47.1.3.2.1.2) | read-only | RowPointer | Standard MIB values. | The value of this object identifies a particular conceptual row associated with the indicated entPhysicalIndex and entLogicalIndex pair. | As per the MIB. |

entPhysicalContainsTable

About this table

This table contains information about the container/containee relationships between physical entities.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are entPhysicalIndex and entPhysicalChildIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|------------------------------|--|-----------------|
| entPhysicalChildIndex (1.3.6.1.2.1.47.1.3.3.1.1) | read-only | PhysicalIndex | Integer32 (1..2147483647) | The value of entPhysicalIndex for the contained physical entity. | As per the MIB. |

Notifications

The following information describes the notifications included in the ENTITY-MIB module.

entConfigChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.47.2.0.1 | The value of entLastChangeTime changed | Informational | Major | N/A | ON |

Description

This notification is generated when an entity on the device, including cards, subcards, power supplies, fans, or storage controllers, is installed, removed, reset, or registered. It can be utilized by an NMS to trigger logical/physical entity table maintenance polls.

An agent should not generate more than one entConfigChange notification event in a given time interval (five seconds is the suggested default).

If additional configuration changes occur within the throttling period, then notification-events for these changes should be suppressed by the agent until the current throttling period expires.

An NMS should periodically check the value of entLastChangeTime to detect any missed entConfigChange notification-events.

Status control

This alarm cannot be cleared.

Objects

N/A

Recommended action

To resolve the issue:

1. Verify that the entity is operating correctly.
2. If this alarm is caused by an acknowledged manual operation, no action is required.

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HH3C-COMMON-SYSTEM-MIB

About this MIB

Use this MIB to perform basic operations on the device. For example, access this MIB to reboot the device, obtain basic system information such as reboot mode and system operating mode, and send poweroff alarms. This MIB also contains notifications about device operation changes.

MIB file name

hh3c-common-system.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cSystem(6)

Scalar objects

hh3cReboot

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|------------|---------|-----------------------------|---------------------|-----------------|
| hh3cReboot (1.3.6.1.4.1.25506.6.7) | read-write | INTEGER | normal(0) , reboot(1) | Reboots the device. | As per the MIB. |

hh3cSysBootTest

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-------------------------------|--------------------------|---------------------------------------|
| hh3cSysBootTest (1.3.6.1.4.1.25506.6.10) | read-only | INTEGER | coldStart(1), warmStart(2) | Boot mode of the system. | Implementation varies by the product. |

hh3cSystemWorkingModeDefault

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--------------------------------|-----------------------------------|
| hh3cSystemWorkingModeDefault (1.3.6.1.4.1.25506.6.14.2) | read-only | Integer32 | Integer32 (1..2147483647) | Default system operating mode. | Implementation varies by product. |

hh3cSystemWorkingModeCurrent

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------------|---|--------------------------------------|
| hh3cSystemWorkingModeCurrent (1.3.6.1.4.1.25506.6.14.3) | read-only | Integer32 | Integer32 (1..21474 83647) | Current system operating mode. | Implementation varies by product. |

hh3cSystemWorkingModeNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------------------|--|--|
| hh3cSystemWorkingModeNext (1.3.6.1.4.1.25506.6.14.4) | read-write | Integer32 | Integer32 (1..21474 83647) | The system operating mode for the next startup. | Implementation varies by product. For the modified operating mode to take effect, reboot the device, The new operating mode will take effect on the entire device. |

hh3cSysFirstTrapTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|-----------|----------------------------|--|---|
| hh3cSysFirstTrapTime (1.3.6.1.4.1.25506.6.11.10) | accessible-for- notify | Timeticks | Standard MIB values. | Time when a trap is sent for the first time. | Implementation varies by product. Supports only some traps. |

hh3cSysBannerMOTD

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|------------------------------|--------------------|-----------------|
| hh3cSysBannerMOTD (1.3.6.1.4.1.25506.6.11.11) | read-write | OCTETS TRING | OCTET STRING (0..2000) | Banner message. | As per the MIB. |

Tabular objects

hh3cSystemDiagInfoTable

About this table

This table creates diagnosis files for the system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cSystemDiagInfoIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|--|---|
| hh3cSystemDiagInfoIndex (1.3.6.1.4.1.25506.6.13.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Entry index. | As per the MIB. |
| hh3cSystemDiagInfoFilename (1.3.6.1.4.1.25506.6.13.1.2) | read-create | DisplayString | OCTET STRING (0..255) | Diagnosis file name. | As per the MIB. The system uses the default file name if you do not specify a file name during row creation. |
| hh3cSystemDiagInfoRowStatus (1.3.6.1.4.1.25506.6.13.1.3) | read-create | RowStatus | active(1),notInService(2),notReady(3),createAndGo(4),createAndWait(5),destroy(6) | Row status. | As per the MIB. |
| hh3cSystemDiagInfoOperationEndTime (1.3.6.1.4.1.25506.6.13.1.4) | read-only | TimeStamp | Standard MIB values. | Time when the operation was completed. | As per the MIB. |
| hh3cSystemDiagInfoOperationState (1.3.6.1.4.1.25506.6.13.1.5) | read-only | INTEGER | opInProgress(1),opSuccess(2),opFailure(3) | Operation status. | As per the MIB. |
| hh3cSystemDiagInfoOperationFailureReason (1.3.6.1.4.1.25506.6.13.1.6) | read-only | DisplayString | OCTET STRING (0..255) | Failure reason. | As per the MIB. |

hh3cSystemWorkingModeTable

About this table

This table contains information about the system operating modes supported on the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSystemWorkingModelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|------------------------------|---|-----------------------------------|
| hh3cSystemWorkingModelIndex (1.3.6.1.4.1.25506.6.14.1.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of a system operating mode. | Implementation varies by product. |
| hh3cSystemWorkingModeName (1.3.6.1.4.1.25506.6.14.1.1.2) | read-only | DisplayString | OCTET STRING (1..32) | Name of the system operating mode. | Implementation varies by product. |
| hh3cSystemWorkingModeDescr (1.3.6.1.4.1.25506.6.14.1.1.3) | read-only | DisplayString | OCTET STRING (1..128) | Description of the system operating mode. | Implementation varies by product. |

Notifications

The following information describes the notifications included in the HH3C-COMMON-SYSTEM-MIB module.

hh3cRebootSendTrap

Basic information

| OID (object name) | Event | Type | Severity | Recovery notification | Default status |
|-------------------------|-------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.6.8.3 | The device is to reboot | Informational | Warning | N/A | ON |

Description

This notification is generated two seconds before the `reboot` command is used to reboot the device.

Status control

This alarm cannot be cleared.

Objects

N/A

Recommended action

No action is required.

hh3cSysColdStartTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------|---------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.6.8.4 | A cold boot was performed | Informational | Warning | N/A | ON |

Description

This notification is generated when a cold boot is performed on the device.

Status control

This alarm cannot be cleared.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.6.11.10 (hh3cSysFirstTrapTime) | Time when the alarm occurred. | N/A | TimeTicks | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cSysWarmStartTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------|---------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.6.8.5 | A warm boot was performed | Informational | Warning | N/A | ON |

Description

This notification is generated when a cold boot is performed on the device.

Status control

This alarm cannot be cleared.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.6.11.10 (hh3cSysFirstTrapTime) | Time when the alarm occurred. | N/A | TimeTicks | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-ENTITY-EXT-MIB

About this MIB

Use this MIB to obtain entity extended information. Access this MIB to monitor specific entity data, which facilitates management and monitoring on the product through network management.

Products supporting this MIB must first support the ENTITY-MIB MIB.

The following tables show the relationship between the entity extended properties and device entities. Implementation varies by product.

| Entity | hh3cEntityExtAdminStatus (R/W) |
|-------------|--------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | Yes |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtOperStatus (R) |
|--------------|-----------------------------|
| chassis | No |
| backplane | No |
| container | No |
| power Supply | Yes |
| fan | Yes |
| sensor | No |
| module | Yes |
| port | Yes |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtStandbyStatus (R) |
|-------------|--------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | Yes |
| sensor | No |
| module | Yes |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtAlarmLight (R) |
|-------------|-----------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtCpuUsage (R) |
|-------------|-------------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes(Only support the Module Level1) |
| port | No |
| stack | No |
| other | No |

| Entity | hh3cEntityExtCpuUsage (R) |
|---------|---------------------------|
| unknown | No |

| Entity | hh3cEntityExtCpuUsageThreshold (R/W) |
|-------------|--------------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes(Only support the Module Level1) |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtMemUsage (R) |
|-------------|-------------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes(Only support the Module Level1) |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtMemUsageThreshold(R/W) |
|-------------|-------------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes(Only support the Module Level1) |

| Entity | hh3cEntityExtMemUsageThreshold(R/W) |
|---------|-------------------------------------|
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtMemSize (R) |
|-------------|-------------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes(Only support the Module Level1) |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtUpTime (R) |
|-------------|-------------------------|
| chassis | Yes |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtTemperature (R) |
|-------------|------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | Yes |

| Entity | hh3cEntityExtTemperature (R) |
|---------|------------------------------|
| fan | Yes |
| sensor | Yes |
| module | Yes |
| port | No |
| stack | No |
| other | Yes |
| unknown | No |

| Entity | hh3cEntityExtTemperatureThreshold(R/W) |
|-------------|--|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | Yes |
| fan | Yes |
| sensor | Yes |
| module | Yes |
| port | No |
| stack | No |
| other | Yes |
| unknown | No |

| Entity | hh3cEntityExtVoltage(R) |
|-------------|-------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtVoltageLowThreshold(R/W) |
|-------------|---------------------------------------|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtVoltageHighThreshold(R/W) |
|-------------|--|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | No |
| stack | No |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtCriticalTemperatureThreshold(R/W) |
|-------------|--|
| chassis | No |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | Yes |
| module | No |
| port | No |
| stack | No |
| other | No |

| Entity | hh3cEntityExtCriticalTemperatureThreshold(R/W) |
|---------|--|
| unknown | No |

| Entity | hh3cEntityExtMacAddress (R) |
|-------------|-----------------------------|
| chassis | Yes |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | No |
| port | No |
| stack | Yes |
| other | No |
| unknown | No |

| Entity | hh3cEntityExtErrorStatus (R) |
|-------------|------------------------------|
| chassis | No |
| backplane | Yes |
| container | Yes |
| powerSupply | Yes |
| fan | Yes |
| sensor | Yes |
| module | No |
| port | Yes |
| stack | No |
| other | Yes |
| unknown | Yes |

| Entity | hh3cEntityExtManuSerialNum (R) |
|-------------|--------------------------------|
| chassis | Yes |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes |

| Entity | hh3cEntityExtManuSerialNum (R) |
|--------|--------------------------------|
| port | No |
| cpu | No |

| Entity | hh3cEntityExtManuBuildInfo (R) |
|-------------|--------------------------------|
| chassis | Yes |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes |
| port | No |
| cpu | No |

| Entity | hh3cEntityExtMacAddressCount (R) |
|-------------|----------------------------------|
| chassis | Yes |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes |
| port | Yes |
| cpu | No |

| Entity | hh3cEntityExtManuBOM (R) |
|-------------|--------------------------|
| chassis | Yes |
| backplane | No |
| container | No |
| powerSupply | No |
| fan | No |
| sensor | No |
| module | Yes |
| port | No |
| cpu | No |

| Entity (R/W: Read/Write) | POWERS SUPPLY | FAN | CHASSIS | CONTAINER | MODULE | PORT | CPU |
|---|------------------|-----|---------|-----------|--------|------|-----|
| hh3cEntityExtAdminStatus (R/W) | | | | | | Yes | |
| hh3cEntityExtOperStatus (R) | Yes | Yes | | | Yes | Yes | |
| hh3cEntityExtStandbyStatus (R) | | Yes | | | Yes | | |
| hh3cEntityExtAlarmLight (R) | | | | | | | |
| hh3cEntityExtCpuUsage (R) | | | | | Yes | | |
| hh3cEntityExtCpuUsageThreshold (R/W) | | | | | Yes | | |
| hh3cEntityExtMemUsage (R) | | | | | Yes | | |
| hh3cEntityExtMemUsageThreshold (R/W) | | | | | Yes | | |
| hh3cEntityExtMemSize (R) | | | | | Yes | | |
| hh3cEntityExtUpTime (R) | | | Yes | | | | |
| hh3cEntityExtTemperature (R) | | | | | | | |
| hh3cEntityExtTemperatureThreshold (R/W) | | | | | | | |
| hh3cEntityExtVoltage (R) | | | | | | | |
| hh3cEntityExtVoltageLowThreshold (R/W) | | | | | | | |
| hh3cEntityExtVoltageHighThreshold (R/W) | | | | | | | |
| hh3cEntityExtCriticalTemperatureThreshold | | | | | | | |
| hh3cEntityExtMacAddress | | | Yes | | | | |
| hh3cEntityExtErrorStatus | | | | | | | |

NOTE:

- **Yes** indicates that the extended property is supported.
 - If the read operation returns **no such name/instance**, the object is not supported in the current entity instance.
-

MIB file name

hh3c-entity-ext.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cEntityExtend(6)

Scalar objects

hh3cEntityExtTrapDescription

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|----------------------|-----------------------------------|-----------------|
| hh3cEntityExtTrapDescription (1.3.6.1.4.1.25506.2.6.2.1.1) | accessible-for-notify | SnmpAdminString | OCTET STRING(0..255) | Detailed information of the trap. | As per the MIB. |

hh3cEntityExtECCParityAlarmStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------|--|---|-----------------|
| hh3cEntityExtECCParityAlarmStatus (1.3.6.1.4.1.25506.2.6.2.1.2) | accessible-for-notify | INTEGER | other(1), l1cache(2), l2cache(3), sdram(4), mac(5), tcam(6), ingressbuffer(7), egressbuffer(8), lpm(9), controlmemory(10) | Resource type of the chip on which an ECC error or parity check error occurs. | As per the MIB. |

hh3cEntityExtSFPIInvalidInDays

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|----------------------|---|-----------------|
| hh3cEntityExtSFPIInvalidInDays (1.3.6.1.4.1.25506.2.6.2.1.3) | accessible-for-notify | Integer32 | Standard MIB values. | Remaining valid days of a transceiver module. | As per the MIB. |

hh3cEntityExtFirstTrapTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|----------------------|--|-----------------|
| hh3cEntityExtFirstTrapTime (1.3.6.1.4.1.25506.2.6.2.1.4) | accessible-for-notify | TimeTicks | Standard MIB values. | Time when a trap is sent for the first time. | As per the MIB. |

Tabular objects

hh3cEntityExtStateTable

About this table

This table contains information about entity extended properties, including administrative status, operation status, CPU usage, CPU usage threshold, memory usage, and memory usage threshold.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cEntityExtPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-------------------|---|---|--|
| hh3cEntityExtPhysicalIndex (1.3.6.1.4.1.25506.2.6.1.1.1.1) | accessible-for-notify | Integer32 | Integer32 (1..2147483647) | The index for this entry, which is the same with the value of entPhysicalIndex in ENTITY-MIB. | As per the MIB. |
| hh3cEntityExtAdminStatus (1.3.6.1.4.1.25506.2.6.1.1.1.2) | read-write | Hh3cAdminState | notSupported(1), locked(2), shuttingDown(3), unlocked(4) | Administrative status for this object. | <ul style="list-style-type: none">Does not support notSupported(1) or shuttingDown(3).locked—The resource is disabled.shuttingDown—The resource is available only the current entity.unlocked—The resource is not disabled. |
| hh3cEntityExtOperStatus (1.3.6.1.4.1.25506.2.6.1.1.1.3) | read-only | Hh3cOperState | notSupported(1), disabled(2), enabled(3), dangerous(4) | Operation status | <ul style="list-style-type: none">disabled—The resource is not operable.enabled—The resource or part of the resource is operable. |
| hh3cEntityExtStandbyStatus (1.3.6.1.4.1.25506.2.6.1.1.1.4) | read-only | Hh3cStandbyStatus | notSupported(1), hotStandby(2), coldStandby(3), providingService(4) | Standby status. | <ul style="list-style-type: none">notStandby—The resource is not providing services, but it can provide services without being initialized. The resource in this status also contains information about the resources being backed up.coldStandby—The resource is not providing services, but it can operate.providingService—The resource is providing |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|--|---|--|
| | | | | | services. |
| hh3cEntityExtAlarmLight (1.3.6.1.4.1.25506.2.6.1.1.1.5) | read-only | Hh3cAlarmStatus | BITS { notSupported(0), underRepair(1), critical(2), major(3), minor(4), alarmOutstanding(5), warning(6), indeterminate(7) } | Alarm status for this entity. | <p>Not supported.</p> <p>An integer indicates an alarm status as follows:</p> <ul style="list-style-type: none"> 0—notSupported. This indicates that none of the subsequent statuses is present. 1—underRepair. This indicates that the resource is being repaired. 2—critical. This indicates that one or multiple critical faults occurred on the resource. 3—major. This indicates that one or multiple major faults occurred on the resource. 4—minor. This indicates that one or multiple minor faults occurred on the resource. 5—alarmOutstanding. This indicates that one or multiple alarms occurred on the resource and might cause system interruption. 6—warning. This indicates that one or multiple warning faults occurred on the resource. 7—indeterminate. This indicates that one or multiple indeterminate faults occurred on the resource. |
| hh3cEntityExtCpuUsage (1.3.6.1.4.1.25506.2.6.1.1.1.6) | read-only | Integer32 | Integer32 (0..100) | CPU usage for this entity. The statistics interval for CPU usage is 5 seconds. | As per the MIB. |
| hh3cEntityExtCpuUsageThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.7) | read-write | Integer32 | Integer32 (0..100) | CPU usage alarm threshold in percentage. Value range: 1 to 100. | As per the MIB. |
| hh3cEntityExtMemUsage (1.3.6.1.4.1.25506.2.6.1.1.1.8) | read-only | Integer32 | Integer32 (0..100) | Memory usage for this entity in percentage. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|--|--|--|
| hh3cEntityExtMemUsageThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.1.9) | read-write | Integer32 | Integer32 (0..100) | Memory usage alarm threshold in percentage. | As per the MIB. |
| hh3cEntityExtMemSize (1.3.6.1.4.1.25506.2.6.1.1.1.1.10) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Memory size for this entity, in bytes. The memory is a 32-bit wide memory. | As per the MIB. |
| hh3cEntityExtUpTime (1.3.6.1.4.1.25506.2.6.1.1.1.1.11) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Uptime for the entity., in seconds. | As per the MIB. |
| hh3cEntityExtTemperature (1.3.6.1.4.1.25506.2.6.1.1.1.1.12) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Temperature of the entity. | Implementation varies by product. The value 65535 indicates that the object is not supported. |
| hh3cEntityExtTemperatureThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.1.13) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Temperature of the entity. | Implementation varies by product. The value 65535 indicates that the object is not supported. |
| hh3cEntityExtVoltage (1.3.6.1.4.1.25506.2.6.1.1.1.1.14) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Voltage for the entity. | Implementation varies by product. |
| hh3cEntityExtVoltageLowThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.1.15) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Low-voltage threshold for the entity. | Implementation varies by product. |
| hh3cEntityExtVoltageHighThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.1.16) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | High-voltage threshold for the entity. | Implementation varies by product. |
| hh3cEntityExtCriticalTemperatureThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.1.17) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Critical high-temperature threshold for the entity. | Implementation varies by product. The value 65535 indicates that the object is not supported. |
| hh3cEntityExtMacAddress (1.3.6.1.4.1.25506.2.6.1.1.1.1.18) | read-only | MacAddress | OCTET STRING (6) | MAC address of the entity. | If the type of the entity is stack , the value of this object is bridge MAC address of the current device. If this object is not supported in the current entity instance, the value of this object is fixed at 00.00.00.00.00.00. |
| hh3cEntityExtErrorStatus (1.3.6.1.4.1.25506.2.6.1.1.1.1.19) | read-only | INTEGER | notSupported(1), normal(2), postFailure(3), entityAbsent(4), poeError(11), stackError(21), stackPortBlocked(22), | Alarm status for the entity, which is a supplement to hh3cEntityExtOperStatus. | <ul style="list-style-type: none"> notSupported(1)—The entity does not support this object. normal(2)—The entity is normal. For ports, the object does not differentiate 10 Mbps, 100 Mbps, 1000 Mbps, duplex or half duplex |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---|--|--|
| | | | stackPortFailed(23), sfpRecvError(31), sfpSendError(32), sfpBothError(33), fanError(41), psuError(51), rpsError(61), moduleFaulty(71), sensorError(81), hardwareFaulty(91) | | <p>ports. For fans, power supplies, cards, SFP ports, and stack ports, the object indicates they are normal.</p> <ul style="list-style-type: none"> • postFailure(3)—The entity fails during POST. • entityAbsent(4)—The entity is absent. • poeError(11)—A power supply fault occurs on the PoE port. • stackError(21)—An issue occurs on the stack port during the stacking process. • stackPortBlocked(22)—The stack port is in standby status in the resilient daisy chain. • stackPortFailed(23)—The stacking process fails on a stack port after the stacking is enabled on the stack port. • sfpRecvError(31)—A fault occurs in the inbound direction of an SFP port. • sfpSendError(32)—A fault occurs in the outbound direction of an SFP port. • sfpBothError(33)—A fault occurs in both the inbound and outbound directions of an SFP port. • fanError(41)—A fan fault is present. • psuError(51)—A power supply fault is present. • rpsError(61)—An RPS fault is present. • moduleFaulty(71)—A card fault is present. • sensorError(81)—A sensor fault is present. • hardwareFaulty(91)—A hardware fault occurs on the entity. |
| hh3cEntityExtCpuMaxUsage (1.3.6.1.4.1.25506.2.6.1.1.1.20) | read-only | Integer32 | Integer32 (0..100) | Peak CPU usage during the most recent 1-minute interval. | As per the MIB. |
| hh3cEntityExtLowerTemperatureThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.21) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Low-temperature threshold for the entity. | Implementation varies by product. The value 65535 indicates that the object is not |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|--|--|--|
| | | | | | supported. |
| hh3cEntityExtShutdownTemperatureThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.22) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Shutdown temperature threshold. Notifies and shuts down the device when the threshold is reached. | Implementation varies by product. The value 65535 indicates that the object is not supported. |
| hh3cEntityExtPhyMemSize (1.3.6.1.4.1.25506.2.6.1.1.1.23) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Memory size for this entity, in bytes. The memory is a 32-bit wide memory. | As per the MIB. |
| hh3cEntityExtPhyCpuFrequency (1.3.6.1.4.1.25506.2.6.1.1.1.24) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | CPU frequency of the entity, in MHz. | Implementation varies by product. |
| hh3cEntityExtFirstUsedDate (1.3.6.1.4.1.25506.2.6.1.1.1.25) | read-only | DateAndTime | OCTET STRING (8) | The date used for the first on the entity. | Implementation varies by product. |
| hh3cEntityExtCpuAvgUsage (1.3.6.1.4.1.25506.2.6.1.1.1.26) | read-only | Integer32 | Integer32 (0..100) | Average CPU usage for the entity during a time period. | As per the MIB. |
| hh3cEntityExtMemAvgUsage (1.3.6.1.4.1.25506.2.6.1.1.1.27) | read-only | Integer32 | Integer32 (0..100) | Average memory usage for the entity during a time period. | As per the MIB. |
| hh3cEntityExtMemType (1.3.6.1.4.1.25506.2.6.1.1.1.28) | read-only | OCTET STRING | OCTET STRING (0..64) | Memory type for the entity. | As per the MIB. |
| hh3cEntityExtCriticalLowerTemperatureThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.29) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Critical high-temperature threshold for the entity. Notifies and shuts down the device when the threshold is reached. | Implementation varies by product. |
| hh3cEntityExtShutdownLowerTemperatureThreshold (1.3.6.1.4.1.25506.2.6.1.1.1.30) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Low-temperature shutdown temperature threshold. Notifies and shuts down the device when the threshold is reached. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------------------------|--|-----------------|
| hh3cEntityExtCpuUsageRecoverThreshold(1.3.6.1.4.1.25506.2.6.1.1.1.31) | read-write | Integer32 | Integer32 (0..100) | CPU usage recovery threshold for the entity. | Not supported |
| hh3cEntityExtMemSizeRev(1.3.6.1.4.1.25506.2.6.1.1.1.32) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Memory size for this entity, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cEntityExtCpuUsageIn1Minute(1.3.6.1.4.1.25506.2.6.1.1.1.33) | read-only | Integer32 | Integer32 (0..100) | Average CPU usage for the entity during the most recent 1-minute interval. | As per the MIB. |
| hh3cEntityExtCpuUsageIn5Minutes(1.3.6.1.4.1.25506.2.6.1.1.1.34) | read-only | Integer32 | Integer32 (0..100) | Average CPU usage for the entity during the most recent 5-minute interval. | As per the MIB. |

hh3cEntityExtManuTable

About this table

This table contains manufacturing information about device entities.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cEntityExtManuPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|---------------------------|------------------------------|-----------------|
| hh3cEntityExtManuPhysicalIndex(1.3.6.1.4.1.25506.2.6.1.2.1.1.1) | accessible-for-notify | PhysicalIndex | Integer32 (1..2147483647) | Entity index. | As per the MIB. |
| hh3cEntityExtManuSerialNum(1.3.6.1.4.1.25506.2.6.1.2.1.1.2) | read-only | SnmpAdminString | OCTET STRING (0..255) | Serial number of the entity. | As per the MIB. |
| hh3cEntityExtManuBuildInfo(1.3.6.1.4.1.25506.2.6.1.2.1.1.3) | read-only | SnmpAdminString | OCTET STRING (0..255) | Version of the entity. | As per the MIB. |
| hh3cEntityExtManuBOM | read-only | SnmpAdminString | OCTET STRING | BOM number | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|---------------------------------|-----------------------------------|-----------------|
| (1.3.6.1.4.1.25506.2.6.1.2.1.1.4) | | minString | (0..255) | of the entity. | |
| hh3cEntityExtMacAddressCount (1.3.6.1.4.1.25506.2.6.1.2.1.1.5) | read-only | Unsigned 32 | Unsigned 32 (0..42949 67295) | MAC address count for the entity. | As per the MIB. |

hh3cEntityExtPowerTable

About this table

This table contains power information about all entities on the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cEntityExtPowerPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------------|-------------------------------|---|-----------------|
| hh3cEntityExtPowerPhysicalIndex (1.3.6.1.4.1.25506.2.6.1.3.1.1.1) | accessible-for-notify | PhysicalIndex | Integer32 (1..21474 83647) | Entity index for the power supply. | As per the MIB. |
| hh3cEntityExtNominalPower (1.3.6.1.4.1.25506.2.6.1.3.1.1.2) | read-only | Gauge32 | Gauge32 (0..42949 67295) | Rated power for the entity, in milliwatts. | As per the MIB. |
| hh3cEntityExtCurrentPower (1.3.6.1.4.1.25506.2.6.1.3.1.1.3) | read-only | Gauge32 | Gauge32 (0..42949 67295) | Current power for the entity, in milliwatts. | As per the MIB. |
| hh3cEntityExtAveragePower (1.3.6.1.4.1.25506.2.6.1.3.1.1.4) | read-write | Gauge32 | Gauge32 (0..42949 67295) | Average power consumed by the entity, in milliwatts. The value 0 is the only valid value, indicating that the system clears the existing records and restarts the power statistics. The other values for this object will not take effect. | As per the MIB. |
| hh3cEntityExtPeakPower | read-write | Integer32 | Integer32 (-214748 | Maximum power for the | As per the MIB. |

| | | | | | |
|-----------------------------------|--|--|---------------------------|--|--|
| (1.3.6.1.4.1.25506.2.6.1.3.1.1.5) | | | 3648..21 4748364 7) | entity, in milliwatts. The value 0 is the only valid value, indicating that the system clears the existing records and restarts the power statistics. The other values for this object will not take effect. | |
|-----------------------------------|--|--|---------------------------|--|--|

hh3cProcessTable

About this table

This table contains process information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cProcessID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------------|---------------------------------------|---|-----------------|
| hh3cProcessID (1.3.6.1.4.1.25506.2.6.1.4.1.1.1) | read-only | Unsigned 32 | Unsigned 32 (0..42949 67295) | Process ID. | As per the MIB. |
| hh3cProcessName (1.3.6.1.4.1.25506.2.6.1.4.1.1.2) | read-only | DisplaySt ring | OCTET STRING (1..32) | Process name. | As per the MIB. |
| hh3cProcessUtil5Min (1.3.6.1.4.1.25506.2.6.1.4.1.1.3) | read-only | Unsigned 32 | Unsigned 32 (0..100) | CPU usage of the process during a 5-minute interval. | As per the MIB. |

hh3cEntityExtVoltageTable

About this table

This table contains information about voltage sensors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cEntityExtPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---|--|-----------------------------------|
| hh3cEntityExtCurrentVoltage (1.3.6.1.4.1.25506.2.6.1.5.1.1.1) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Current voltage for the entity, in milliwatts. | Implementation varies by product. |
| hh3cEntityExtNominalVoltage (1.3.6.1.4.1.25506.2.6.1.5.1.1.2) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Rated voltage for the entity, in milliwatts. | Implementation varies by product. |
| hh3cEntityExtVoltageState (1.3.6.1.4.1.25506.2.6.1.5.1.1.3) | read-only | INTEGER | normal(0), low(1), tooLow(2), high(3), tooHigh(4) | Voltage status of the entity. | Implementation varies by product. |
| hh3cEntityExtVoltageMajorLowThreshold (1.3.6.1.4.1.25506.2.6.1.5.1.1.4) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Low-temperature warning threshold. | Implementation varies by product. |
| hh3cEntityExtVoltageFatalLowThreshold (1.3.6.1.4.1.25506.2.6.1.5.1.1.5) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Low-temperature fatal threshold. | Implementation varies by product. |
| hh3cEntityExtVoltageMajorHighThreshold (1.3.6.1.4.1.25506.2.6.1.5.1.1.6) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | High-temperature warning threshold. | Implementation varies by product. |
| hh3cEntityExtVoltageFatalHighThreshold (1.3.6.1.4.1.25506.2.6.1.5.1.1.7) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | High-temperature fatal threshold. | Implementation varies by product. |

Notifications

The following information describes the notifications included in the HH3C-ENTITY-EXT-MIB module.

hh3cEntityExtTemperatureThresholdNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.1 | Temperature of the entity higher than the threshold. | Error | Major | N/A | ON |

Description

This notification is generated when the temperature of the entity exceeds the upper limit.

Status control

This notification cannot be disabled.

Objects

| OID (object) | Description | Index | Type | Value range |
|---|---------------------------------------|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.12 (hh3cEntityExtTemperature) | Temperature of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.13 (hh3cEntityExtTemperatureThreshold) | Temperature threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |

Recommended action

To resolve the issue:

1. Verify that the temperature of the environment is normal. Execute the **display environment** command to obtain temperature information, including the current temperature and the temperature thresholds.
2. Identify the reason why the temperature exceeded the upper limit.

3. Verify that the temperature has dropped back to the normal.
4. If the issue persists, contact H3C Support.

hh3cEntityExtCpuUsageThresholdNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.4 | CPU usage of the entity higher than the threshold. | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.25(hh3cEntityExtCpuUsageThresholdRecover) | ON |

Description

This notification is generated when the CPU usage of the entity exceeds the threshold. The notification is sent every 60 seconds till the alarm is cleared.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.6 (hh3cEntityExtCpuUsage) | CPU usage of the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.7 (hh3cEntityExtCpuUsageThreshold) | CPU usage threshold for the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.31 (hh3cEntityExtCpuUsageRecoverThreshold) | CPU usage recovery threshold for the entity. | N | Integer32 | 0..100 |

| | | | | |
|---|---|---|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.2.1.4 (hh3cEntityExtFirstTrapTime) | Timestamp at which the notification is sent for the first time. | N | TimeTicks | Standard MIB values. |
|---|---|---|-----------|----------------------|

Recommended action

To resolve the issue:

1. If the alarm is automatically cleared, no action is required.
2. If the alarm cannot be automatically cleared, contact H3C Support.

hh3cEntityExtMemUsageThresholdNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.5 | Memory usage of the entity higher than the threshold. | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.26(hh3cEntityExtMemUsageThresholdRecover) | ON |

Description

This notification is generated when the total memory size is less than 4 GB and the memory usage of the entity exceeds hh3cEntityExtMemUsageThreshold (memory usage threshold). The notification is sent every 60 seconds till the alarm is cleared.

If the total memory size is equal to or greater than 4 GB, an hh3cEntityExtMemUsageThresholdOverTrap notification is generated when the memory usage exceeds hh3cEntityExtMemUsageThreshold.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.8 (hh3cEntityExtMemUsage) | Memory usage of the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.9 (hh3cEntityExtMemUsageThreshold) | Memory usage threshold for the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.10 (hh3cEntityExtMemSize) | Memory size of the entity. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) |

| | | | | |
|--|---|---|-----------------|--|
| | | | | shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |
| 1.3.6.1.4.1.25506.2.6.2.1.4 (hh3cEntityExtFirstTrapTime) | Timestamp at which the notification is sent for the first time. | N | TimeTicks | Standard MIB values. |

Recommended action

To resolve the issue:

1. If the alarm is automatically cleared, no action is required.
2. If the alarm cannot be automatically cleared, contact H3C Support.

hh3cEntityExtCriticalTemperatureThresholdNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.8 | Temperature of the entity higher than the critical high-temperature threshold. | Error | Critical | N/A | ON |

Description

This notification is generated when the temperature of the entity exceeded the critical high-temperature threshold. The notification is sent every 80 seconds till the alarm is cleared.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |

| | | | | |
|---|---|---|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.12 (hh3cEntityExtTemperature) | Temperature of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.17 (hh3cEntityExtCriticalTemperatureThreshold) | Critical high-temperature threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |

Recommended action

To resolve the issue:

1. Verify that the temperature of the environment is normal. Execute the **display environment** command to obtain temperature information, including the current temperature and the temperature thresholds.
2. Identify the reason why the temperature exceeded the critical high-temperature threshold.
3. Verify that the temperature has dropped back to the normal.
4. If the issue persists, contact H3C Support.

hh3cEntityInsert

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|----------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.12 | Entity installation. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the entity is installed to the device.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|-----------------|---|
| 1.3.6.1.2.1.47.1.1.1.1.2 (entPhysicalDescr) | Description of the entity. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.3 (hh3cEntityExtOperStatus) | Operation status of the entity. | N | Hh3cOperState | notSupported(1) disabled(2) enabled(3) dangerous(4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cEntityRemove

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-----------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.13 | Entity removal. | Error | Minor | 1.3.6.1.4.1.25506.2.6.2.0.12(hh3cEntityInsert) | ON |

Description

This notification is generated when the entity is removed from the device.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|-----------------|---|
| 1.3.6.1.2.1.47.1.1.1.1.2 (entPhysicalDescr) | Description of the entity. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.3 | Operation status of the | N | Hh3cOperState | notSupported(1) |

| | | | | |
|---------------------------|---------|--|--|---|
| (hh3cEntityExtOperStatus) | entity. | | | disabled(2) enabled(3) dangerous(4) |
|---------------------------|---------|--|--|---|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. If the entity was removed from the device, no action is required.
2. If the entity was not removed, verify that the entity is installed correctly.
3. If the issue persists, contact H3C Support.

hh3cEntityExtFaultAlarmOn

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.16 | Error occurrence on the entity. | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.16(hh3cEntityExtFaultAlarmOn) | ON |

Description

This notification is generate when an error occurs on the entity.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------------|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.19 (hh3cEntityExtErrorStatus) | Alarm status for the entity. | N | INTEGER | notSupported(1) normal(2) postFailure(3) entityAbsent(4) poeError(11) stackError(21) stackPortBlocked(22) stackPortFailed(23) sfpRecvError(31) sfpSendError(32) |

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|-----------------|--|
| | | | | sfpBothError(33) fanError(41) psuError(51) rpsError(61) moduleFaulty(71) sensorError(81) hardwareFaulty(91) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |

Recommended action

To resolve the issue:

1. Verify that the entity is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cEntityExtFaultAlarmOff

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.17 | Error clearance. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the entity recovers from the faulty state.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.19 (hh3cEntityExtErrorStatus) | Alarm status for the entity. | N | INTEGER | notSupported(1) normal(2) postFailure(3) entityAbsent(4) poeError(11) stackError(21) stackPortBlocked(22) stackPortFailed(23) sfpRecvError(31) sfpSendError(32) sfpBothError(33) fanError(41) psuError(51) rpsError(61) moduleFaulty(71) sensorError(81) hardwareFaulty(91) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |

Recommended action

No action is required.

hh3cEntityExtTemperatureLower

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.20 | Temperature of the entity lower than the low-temperature threshold. | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.22(hh3cEntityExtTemperatureNormal) | ON |

Description

This notification is generated when the temperature of the entity decreases below the low-temperature threshold.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1.12 (hh3cEntityExtTemperature) | Temperature of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1.21 (hh3cEntityExtLowerTemperatureThreshold) | Low-temperature threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |

Recommended action

To resolve the issue:

1. Verify that the temperature of the environment is normal. Execute the **display environment** command to obtain temperature information, including the current temperature and the temperature thresholds.
2. Identify the reason why the temperature dropped below the lower limit.
3. Verify that the temperature has increased to the normal.
4. If the issue persists, contact H3C Support.

hh3cEntityExtTemperatureTooUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.21 | Temperature of the entity higher than the shutdown temperature threshold. | Error | Critical | 1.3.6.1.4.1.25506.2.6.2.0.22(hh3cEntityExtTemperatureNormal) | ON |

Description

This notification is generated when the temperature of the entity exceeds the shutdown temperature threshold. The notification is sent every 80 seconds till the alarm is cleared.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.12 (hh3cEntityExtTemperature) | Temperature of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.22 (hh3cEntityExtShutdownTemperatureThreshold) | Shutdown temperature threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |

Recommended action

To resolve the issue:

1. Verify that the temperature of the environment is normal. Execute the **display environment** command to obtain temperature information, including the current temperature and the temperature thresholds.
2. Identify the reason why the temperature exceeded the shutdown temperature threshold.
3. Verify that the temperature has dropped back to the normal.
4. If the issue persists, contact H3C Support.

hh3cEntityExtTemperatureNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.22 | Temperature of the entity back to normal. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the temperature of the entity recovers from the abnormal status.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.12 (hh3cEntityExtTemperature) | Temperature of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.21 (hh3cEntityExtLowerTemperatureThreshold) | Low-temperature threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.13 (hh3cEntityExtTemperatureThreshold) | Temperature threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |

Recommended action

No action is required.

hh3cEntityExternalAlarmOccur

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------------|-------|----------|-------------------------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.23 | Error on a peripheral of the | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.24(hh3cEn | ON |

| | | | | | |
|--|---------|--|--|---------------------------|--|
| | entity. | | | tityExternalAlarmRecover) | |
|--|---------|--|--|---------------------------|--|

Description

This notification is generated when an error occurs on the peripheral of the entity.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue:

1. Verify that the entity is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cEntityExternalAlarmRecover

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.24 | A peripheral of the entity back to normal. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the peripheral of the entity recovers from the faulty state.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.47.1.1.1.1.7 (entPhysicalName) | Entity name. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

No action is required.

hh3cEntityExtCpuUsageThresholdRecover

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.25 | Recovery of the CPU usage from an alarm threshold. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the CPU usage of the entity recovers from the abnormal state.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.6 (hh3cEntityExtCpuUsage) | CPU usage of the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.7 (hh3cEntityExtCpuUsageThreshold) | CPU usage threshold for the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.31 (hh3cEntityExtCpuUsageRecoverThreshold) | CPU usage recovery threshold for | N | Integer32 | 0..100 |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|----------------------|
| | the entity. | | | |
| 1.3.6.1.4.1.25506.2.6.2.1.4 (hh3cEntityExtFirstTrapTime) | Timestamp at which the notification is sent for the first time. | N | TimeTicks | Standard MIB values. |

Recommended action

No action is required.

hh3cEntityExtMemUsageThresholdRecover

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.26 | Recovery of the memory usage from an alarm threshold. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the memory usage of the entity recovers from the abnormal state.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.8 (hh3cEntityExtMemUsage) | Memory usage of the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.9 (hh3cEntityExtMemUsageThreshold) | Memory usage threshold for the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.10 (hh3cEntityExtMemSize) | Memory size of the entity. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|--|
| | | | | notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |
| 1.3.6.1.4.1.25506.2.6.2.1.4 (hh3cEntityExtFirstTrapTime) | Timestamp at which the notification is sent for the first time. | N | TimeTicks | Standard MIB values. |

Recommended action

No action is required.

hh3cEntityExtMemAllocatedFailed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.27 | Memory allocation request failure. | Informational | Major | N/A | ON |

Description

This notification is generated when memory allocation for the entity failed.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------------|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.2.1.1 (hh3cEntityExtTrapDescription) | Description of the notification. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue, contact H3C Support.

hh3cEntityExtECCParityAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.28 | ECC parity check error. | Informational | Major | N/A | ON |

Description

This notification is generated when an ECC parity check error occurs on the entity.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.2.1.2 (hh3cEntityExtECCParityAlarmStatus) | Status of ECC parity check for the entity | N | INTEGER | other(1) l1cache(2) l2cache(3) sdram(4) mac(5) tcam(6) ingressbuffer(7) egressbuffer(8) lpm(9) controlmemory(10) |
| 1.3.6.1.4.1.25506.2.6.2.1.1 (hh3cEntityExtTrapDescription) | Description of the entity. | N | SnmpAdminString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue, contact H3C Support.

hh3cEntityExtMemUsageThresholdOverTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.35 | Continuous notifications of memory usage exceeding the threshold. | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.36(hh3cEntityExtMemUsageThresholdRecoverTrap) | ON |

Description

This notification is generated when the total memory size of the entity is equal to or greater than 4 GB and the memory usage of the entity exceeds hh3cEntityExtMemUsageThreshold (memory usage threshold). The notification is sent every 60 seconds till the alarm is cleared.

If the total memory size is less than 4 GB, an hh3cEntityExtMemUsageThresholdNotification notification is generated when the memory usage exceeds hh3cEntityExtMemUsageThreshold.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.8 (hh3cEntityExtMemUsage) | Memory usage of the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.9 (hh3cEntityExtMemUsageThreshold) | Memory usage threshold for the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.32 (hh3cEntityExtMemSizeRev) | Memory size of the entity. | N | Counter64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |

Recommended action

To resolve the issue:

1. If the alarm is automatically cleared, no action is required.
2. If the alarm cannot be automatically cleared, contact H3C Support.

hh3cEntityExtMemUsageThresholdRecoverTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.36 | Recovery of the memory usage from an alarm threshold. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the memory usage of the entity recovers from the abnormal state.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.8 (hh3cEntityExtMemUsage) | Memory usage of the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.9 (hh3cEntityExtMemUsageThreshold) | Memory usage threshold for the entity. | N | Integer32 | 0..100 |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.32 (hh3cEntityExtMemSizeRev) | Memory size of the entity. | N | Counter64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.2 (hh3cEntityExtAdminStatus) | Administrative status of the entity. | N | Hh3cAdminState | notSupported(1) locked(2) shuttingDown(3) unlocked(4)} |
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.5 (hh3cEntityExtAlarmLight) | Alarm status of the entity. | N | Hh3cAlarmStatus | BITS { notSupported(0) underRepair(1) critical(2) major(3) minor(4) alarmOutstanding(5) warning(6) indeterminate(7) } |

Recommended action

No action is required.

hh3cEntityExtVoltageNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.37 | Recovery of the voltage from an alarm threshold. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the voltage of the entity recovers from the abnormal state.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.1 (hh3cEntityExtCurrentVoltage) | Voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.2 (hh3cEntityExtNominalVoltage) | Rated voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.4 (hh3cEntityExtVoltageMajorLowThreshold) | Low-voltage threshold for the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.6 (hh3cEntityExtVoltageMajorHighThreshold) | High-voltage threshold for the entity. | N | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cEntityExtVoltageLower

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.38 | Voltage of the entity lower than the low-voltage | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.37(hh3cEntityExtVoltageNor | ON |

| | | | | | |
|--|------------|--|--|------|--|
| | threshold. | | | mal) | |
|--|------------|--|--|------|--|

Description

This notification is generated when the voltage of the entity drops below the low-voltage threshold.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.1 (hh3cEntityExtCurrentVoltage) | Voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.2 (hh3cEntityExtNominalVoltage) | Rated voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.4 (hh3cEntityExtVoltageMajorLowThreshold) | Low-voltage threshold for the entity. | N | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the power system of the device is normal.
2. If the issue persists, contact H3C Support.

hh3cEntityExtVoltageTooLow

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.39 | Voltage of the threshold lower than critical low-voltage threshold. | Error | Critical | 1.3.6.1.4.1.25506.2.6.2.0.37(hh3cEntityExtVoltageNormal) | ON |

Description

This notification is generated when the voltage of the entity drops below the critical low-voltage threshold. The notification is sent every 80 seconds till the alarm is cleared.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.1 (hh3cEntityExtCurrentVoltage) | Voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.2 (hh3cEntityExtNominalVoltage) | Rated voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.5 (hh3cEntityExtVoltageFatalLowThreshold) | Critical low-voltage threshold for the entity. | N | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the power system of the device is normal.
2. If the issue persists, contact H3C Support.

hh3cEntityExtVoltageHigher

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.40 | Voltage of the entity higher than the high-voltage threshold. | Error | Major | 1.3.6.1.4.1.25506.2.6.2.0.37(hh3cEntityExtVoltageNormal) | ON |

Description

This notification is generated when the voltage of the entity increases above the high-voltage threshold.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.1 (hh3cEntityExtCurrentVoltage) | Voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.2 (hh3cEntityExtNominalVoltage) | Rated voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.6 (hh3cEntityExtVoltageMajorHighThreshold) | High-voltage threshold for | N | Integer32 | Standard MIB values. |

| | | | | |
|--|-------------|--|--|--|
| | the entity. | | | |
|--|-------------|--|--|--|

Recommended action

To resolve the issue:

1. Verify that the power system of the device is normal.
2. If the issue persists, contact H3C Support.

hh3cEntityExtVoltageTooHigh

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.6.2.0.41 | Voltage of the entity higher than the critical high-voltage threshold. | Error | Critical | 1.3.6.1.4.1.25506.2.6.2.0.37(hh3cEntityExtVoltageNormal) | ON |

Description

This notification is generated when the voltage of the entity increases over the critical high-voltage threshold. The notification is sent every 80 seconds till the alarm is cleared.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.6.1.1.1.1.1 (hh3cEntityExtPhysicalIndex) | Entity index. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.1 (hh3cEntityExtCurrentVoltage) | Voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.2 (hh3cEntityExtNominalVoltage) | Rated voltage of the entity. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.6.1.5.1.1.7 (hh3cEntityExtVoltageFatalHighThreshold) | Critical high-voltage threshold for the entity. | N | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the power system of the device is normal.
2. If the issue persists, contact H3C Support.

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HH3C-INFOCENTER-MIB

About this MIB

Use this MIB to configure information center settings, including enabling the information center or configuring log buffers and log hosts. You can access this MIB to obtain information about log entries in the log buffer.

MIB file name

hh3c-infocenter.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cInfoCenter(119)

Scalar objects

hh3cICMaxLogbufferSize

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------------|----------------------------|---|-----------------|
| hh3cICMaxLogbufferSize (1.3.6.1.4.1.25506.2.119.1.1.1) | read-only | Unsigned 32 | Standard MIB values. | Maximum number of log entries that can be buffered. | As per the MIB. |

hh3cICLogbufferSize

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|----------------------------|-------------------------|-----------------|
| hh3cICLogbufferSize (1.3.6.1.4.1.25506.2.119.1.1.2) | read-write | Unsigned 32 | Standard MIB values. | Current buffer size. | As per the MIB. |

hh3cICLogbufferCurrentMessages

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------------|----------------------------|---|-----------------|
| hh3cICLogbufferCurrentMessages (1.3.6.1.4.1.25506.2.119.1.1.3) | read-only | Unsigned 32 | Standard MIB values. | Number of messages stored in the log buffer. | As per the MIB. |

hh3clCLogbufferOverwrittenMessages

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3clCLogbufferOverwrittenMessages (1.3.6.1.4.1.25506.2.119.1.1.4) | read-only | Counter32 | Standard MIB values. | Number of overwritten messages in the log buffer. | As per the MIB. |

hh3clCLogbufferDroppedMessages

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3clCLogbufferDroppedMessages (1.3.6.1.4.1.25506.2.119.1.1.5) | read-only | Counter32 | Standard MIB values. | Number of dropped messages in the log buffer. | As per the MIB. |

hh3clCMaxLoghost

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|----------------------|--|-----------------|
| hh3clCMaxLoghost (1.3.6.1.4.1.25506.2.119.2.1.1) | read-only | Unsigned 32 | Standard MIB values. | Maximum number of log hosts supported by the information center. | As per the MIB. |

hh3clCLoghostSourceInterface

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------------|----------------------|--|-----------------|
| hh3clCLoghostSourceInterface (1.3.6.1.4.1.25506.2.119.2.1.2) | read-write | InterfaceIndexOrZero | Standard MIB values. | Source interface through which log messages are sent to log hosts. | As per the MIB. |

hh3clCLogGlobalState

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------|------------|----------|-------------|-------------|-----------------|
| hh3clCLogGlobalState | read-write | TruthVal | true(1), | Selects | As per the MIB. |

| | | | | | |
|---------------------------------|--|----|----------|--|--|
| (1.3.6.1.4.1.25506.2.119.5.1.1) | | ue | false(2) | whether to enable the information center globally. | |
|---------------------------------|--|----|----------|--|--|

hh3clCLogTimestampType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------------|--|--|--|
| hh3clCLogTimestampType (1.3.6.1.4.1.25506.2.119.5.1.2) | read-write | ICTimeSt ampType | date(0), boot(1), iso(2), dateWith outYear(3), none(4), isoWithTi mezone(5) | Timestamp format for log messages. | Supports only boot, date, and none. |

hh3clCLogType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|-------------|--|-------------|-----------------|
| hh3clCLogType (1.3.6.1.4.1.25506.2.119.5.4.1) | accessible-for- notify | INTEGE R | logfile(1), diagfile(2) secfile(3) | Log type. | As per the MIB. |

hh3clCFailReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|-------------------|----------------------------|------------------------------|-----------------|
| hh3clCFailReason (1.3.6.1.4.1.25506.2.119.5.4.2) | accessible-for- notify | DisplaySt ring | Standard MIB values. | Reason for write failure. | As per the MIB. |

Tabular objects

hh3clCLogbufferContTable

About this table

This table contains log buffer information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clCLogbufferContIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|------------------------------|----------------------------|-----------------|
| hh3clCLogbufferContIndex (1.3.6.1.4.1.25506.2.119.1.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Table index. | As per the MIB. |
| hh3clCLogbufferContDescription (1.3.6.1.4.1.25506.2.119.1.2.1.2) | read-only | DisplayString | OCTET STRING (0..1600) | Content of the log buffer. | As per the MIB. |

hh3clCLoghostTable

About this table

This table specifies a log host and configures output parameters, including IP address of the log host, VPN instance, logging facility, port number of the log host, and log output destination. You can also access this table to obtain log host-related information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3clCLoghostIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|--|---|
| hh3clCLoghostIndex (1.3.6.1.4.1.25506.2.119.2.2.1.1) | not-accessible | Unsigned 32 | Unsigned32 (1..64) | Table index. | As per the MIB. |
| hh3clCLoghostIpAddressType (1.3.6.1.4.1.25506.2.119.2.2.1.2) | read-create | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Address type for the log host. | As per the MIB. |
| hh3clCLoghostIpAddress (1.3.6.1.4.1.25506.2.119.2.2.1.3) | read-create | InetAddress | OCTET STRING (0..255) | IP address of the log host. | As per the MIB. |
| hh3clCLoghostVPNName (1.3.6.1.4.1.25506.2.119.2.2.1.4) | read-create | DisplayString | OCTET STRING (0..255) | Name of the VPN instance to which the log host belongs. | As per the MIB. |
| hh3clCLoghostFacility (1.3.6.1.4.1.25506.2.119.2.2.1.5) | read-create | ICFacilityType | kernel(0), userLevel(1), mailSystem(2), systemDaemons(3), securityAuthorization(4), internallyMessages(5), linePrinter(6), networkNews(7), | Logging facility for marking different logging sources, and querying and filtering log messages. | Supports only local0(0), local1(1), local2(2), local3(3), local4(4), local5(5), local6(6), and local7(7). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------------|--|------------------------------------|----------------------------------|
| | | | uucp(8), clockDaemon(9), securityAuthorization 2(10), ftpDaemon(11), ntp(12), logAudit(13), logAlert(14), clockDaemon2(15), local0(16), local1(17), local2(18), local3(19), local4(20), local5(21), local6(22), local7(23) | | |
| hh3clCLoghostOperateRowStatus (1.3.6.1.4.1.25506.2.119.2.2.1.6) | read-create | RowStat us | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |
| hh3clCLoghostIpAddressPort (1.3.6.1.4.1.25506.2.119.2.2.1.7) | read-create | Unsigned 32 | Unsigned32 (1..65535) | Port number of the log host. | As per the MIB. |
| hh3clCLoghostTAddress (1.3.6.1.4.1.25506.2.119.2.2.1.8) | read-create | TAddress | OCTET STRING (1..255) | IP address of the log host. | Supports only IPv4 addresses. |

hh3clCDirectionTable

About this table

This table contains information about syslog output directions and specifies the enablement status of output directions.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3clCDirectionIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|----------------------------|---|---|
| hh3clCDirectionIndex (1.3.6.1.4.1.25506.2.119.3.1.1.1) | not-accessible | Unsigned 32 | Standard MIB values. | Table index. | As per the MIB. |
| hh3clCDirectionName (1.3.6.1.4.1.25506.2.119.3.1.1.2) | read-only | DisplaySt ring | OCTET STRING (1..30) | Name of a log output destination. | As per the MIB. |
| hh3clCDirectionState (1.3.6.1.4.1.25506.2.119.3.1.1.3) | read-write | TruthVal ue | true(1), false(2) | Status of the log output | Specifies whether to enable log output to the log buffer, log file, security log file, or |

| | | | | | |
|--|--|--|--|--------------|---|
| | | | | destination. | diagnostic log file. Log output to other destinations than the above destinations are all enabled. |
|--|--|--|--|--------------|---|

hh3cICModuleTable

About this table

This table contains available source modules.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cICModuleName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|------------------------|--------------------------|-----------------|
| hh3cICModuleName (1.3.6.1.4.1.25506.2.119.4.1.1.1) | read-only | DisplayString | OCTET STRING (1..8) | Name of a source module. | As per the MIB. |

hh3cICLogTable

About this table

This table specifies the log level of log messages generated by a specific module to a specific output destination, and contains the log buffer information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---|-----------|-----------|
| The module name in a row cannot contain lowercase letters and cannot be default | A row with the source module named default cannot be deleted | Supported | Supported |

Columns

The table indexes are hh3cICDirectionIndex and hh3cICModuleName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------------|--|----------------------------------|-----------------|
| hh3cICLogLevel (1.3.6.1.4.1.25506.2.119.5.2.1.1) | read-create | ICMessageLevelType | emergency(0), alert(1), critical(2), error(3), warning(4), notice(5), | Severity level of a log message. | As per the MIB. |

| | | | | | |
|---|-------------|---------------|--|-------------|-----------------|
| | | | informational(6), debug(7), invalid(8) | | |
| hh3clCLogRowStatus (1.3.6.1.4.1.25506.2.119.5.2.1.2) | read-create | RowStat us | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

Notifications

The following information describes the notifications included in the HH3C-INFOCENTER-MIB module.

hh3clCLogWriteFail

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|-------------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.119.5.3.0.1 | Failed to write the log file to the disk. | Informati onal | - | - | ON |

Description

This notification is generated when the device failed to write the log file to the disk.

Status control

N/A

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------|-------|---------------|----------------------|
| 1.3.6.1.4.1.25506.2.119.5.4.1 (hh3clCLogType) | Log type. | No | INTEGER | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.119.5.4.2 (hh3clCFailReason) | Reason for write failure. | No | DisplayString | Standard MIB values. |

Recommended action

Troubleshoot according to the failure reason.

If you cannot open the log file, contact the technical support.

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HH3C-LSW-DEV-ADM-MIB

About this MIB

Use this MIB to obtain basic device information about chassis, slots, CPUs, and ports.

MIB file name

hh3c-lsw-dev-adm.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswDeviceAdmin(18)

Scalar objects

hh3cLswSysIpAddr

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|----------------------|---------------------------------|-----------------|
| hh3cLswSysIpAddr (1.3.6.1.4.1.25506.8.35.18.1.1) | read-only | IpAddresses | Standard MIB values. | IP address of a VLAN interface. | As per the MIB. |

hh3cLswSysIpMask

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|----------------------|--|-----------------|
| hh3cLswSysIpMask (1.3.6.1.4.1.25506.8.35.18.1.2) | read-only | IpAddresses | Standard MIB values. | Subnet mask for the system IP address. | As per the MIB. |

hh3cLswSysCpuRatio

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--------------------|---|-----------------|
| hh3cLswSysCpuRatio (1.3.6.1.4.1.25506.8.35.18.1.3) | read-only | Integer32 | Integer32 (0..100) | Real-time CPU usage on the card in 1-minute intervals. For distributed devices in IRF mode, this object indicates the real-time CPU usage on the active MPU in the system. | As per the MIB. |

hh3cLswSysVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|-------------------------|---|-----------------|
| hh3cLswSysVersion (1.3.6.1.4.1.25506.8.35.18.1.4) | read-only | DisplayString | OCTET STRING (1..64) | Version of the system. For distributed devices in IRF mode, this object indicates the version of the active MPU in the system. | As per the MIB. |

hh3cLswSysTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|--------------------------|---|--|
| hh3cLswSysTime (1.3.6.1.4.1.25506.8.35.18.1.5) | read-write | DateAndTime | OCTET STRING (8 11) | System time of the device. For distributed devices in IRF mode, this object indicates the system time of the active MPU in the system. | Supports only the read operation on the non-default MDC. |

hh3cLswSysPhyMemory

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|--------------------------------|---|-----------------|
| hh3cLswSysPhyMemory (1.3.6.1.4.1.25506.8.35.18.1.13) | read-only | Unsigned 32 | Unsigned 32 (0..4294967295) | Physical memory space of the device, in bytes. For distributed devices, this object indicates the physical memory space of the active MPU in the system. | As per the MIB. |

hh3cLswSysMemory

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|--------------------------------|---|-----------------|
| hh3cLswSysMemory (1.3.6.1.4.1.25506.8.35.18.1.14) | read-only | Unsigned 32 | Unsigned 32 (0..4294967295) | System memory space, in bytes. For distributed | As per the MIB. |

| | | | | | |
|--|--|--|--------|---|--|
| | | | 67295) | devices, this object indicates the system memory space of the active MPU in the system. | |
|--|--|--|--------|---|--|

hh3cLswSysMemoryUsed

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|--------------------------------|---|-----------------|
| hh3cLswSysMemoryUsed (1.3.6.1.4.1.25506.8.35.18.1.15) | read-only | Unsigned 32 | Unsigned 32 (0..4294967295) | Used system memory, in bytes. For distributed devices, this object indicates the used system memory on the active MPU in the system. | As per the MIB. |

hh3cLswSysMemoryRatio

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|-------------------------|---|-----------------|
| hh3cLswSysMemoryRatio (1.3.6.1.4.1.25506.8.35.18.1.16) | read-only | Unsigned 32 | Unsigned 32 (0..100) | Percentage of the used system memory on the device. For distributed devices, this object indicates the percentage of the used system memory on the active MPU in the system. | As per the MIB. |

hh3cLswSysPhyMemRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|----------------------|---|-----------------|
| hh3cLswSysPhyMemRev (1.3.6.1.4.1.25506.8.35.18.1.18) | read-only | CounterBasedGauge64 | Standard MIB values. | Physical memory space of the device, in bytes. For distributed devices, this object indicates the physical memory space of the active MPU in the system. | As per the MIB. |

hh3cLswSysMemRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------|----------------------|---|-----------------|
| hh3cLswSysMemRev (1.3.6.1.4.1.25506.8.35.18.1.19) | read-only | CounterBasedGauge64 | Standard MIB values. | System memory space, in bytes. For distributed devices, this object indicates the system memory space of the active MPU in the system. | As per the MIB. |

hh3cLswSysMemUsedRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------|----------------------|---|-----------------|
| hh3cLswSysMemUsedRev (1.3.6.1.4.1.25506.8.35.18.1.20) | read-only | CounterBasedGauge64 | Standard MIB values. | Used system memory, in bytes. For distributed devices, this object indicates the used system memory on the active MPU in the system. | As per the MIB. |

Tabular objects

hh3cLswFrameTable

About this table

This table contains chassis-level information about devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cLswFrameIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------|-----------|-----------|-------------|----------------|-----------------|
| hh3cLswFrameIndex | read-only | Integer32 | Integer32 | Chassis index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|--|---|--|
| (1.3.6.1.4.1.25506.8.35.18.4.2.1.1) | | | (-2147483648..2147483647) | | |
| hh3cLswFrameType (1.3.6.1.4.1.25506.8.35.18.4.2.1.2) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Chassis type. | Implementation varies by product. |
| hh3cLswFrameDesc (1.3.6.1.4.1.25506.8.35.18.4.2.1.3) | read-write | DisplayString | OCTET STRING (0..64) | Description of the chassis. | Supports only the read operation on the non-default MDC. |
| hh3cLswSlotNumber (1.3.6.1.4.1.25506.8.35.18.4.2.1.4) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Number of slots in the current chassis. | As per the MIB. |
| hh3cLswFrameAdminStatus (1.3.6.1.4.1.25506.8.35.18.4.2.1.5) | read-only | INTEGER | normal(1), fault(2), other(3) | Chassis status. | As per the MIB. |
| hh3cLswFrameSerialNumber (1.3.6.1.4.1.25506.8.35.18.4.2.1.6) | read-only | SnmpAdminString | OCTET STRING (0..32) | Serial number of the chassis. | As per the MIB. |

hh3cLswSlotTable

About this table

This table contains card information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex and hh3cLswSlotIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|--|--------------------------|--|
| hh3cLswSlotIndex (1.3.6.1.4.1.25506.8.35.18.4.3.1.1) | read-only | Integer32 | Standard MIB values. | Card index. | As per the MIB. |
| hh3cLswSlotType (1.3.6.1.4.1.25506.8.35.18.4.3.1.2) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Card type. | Implementation varies by product. |
| hh3cLswSlotDesc (1.3.6.1.4.1.25506.8.35.18.4.3.1.3) | read-write | DisplayString | OCTET STRING (0..64) | Description of the card. | Supports only the read operation on the non-default MDC. |
| hh3cLswSlotCpuRatio (1.3.6.1.4.1.25506.8.35.18.4.3.1.4) | read-only | Integer32 | Standard MIB values. | CPU usage on the card. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|--|---|--|
| hh3cLswSlotPcbVersion (1.3.6.1.4.1.25506.8.35.18.4.3.1.5) | read-only | DisplayString | OCTET STRING (0..64) | Hardware version of the card. | As per the MIB. |
| hh3cLswSlotSoftwareVersion (1.3.6.1.4.1.25506.8.35.18.4.3.1.6) | read-only | DisplayString | OCTET STRING (0..64) | Software version of the card. | As per the MIB. |
| hh3cLswSubslotNumber (1.3.6.1.4.1.25506.8.35.18.4.3.1.7) | read-only | Integer32 | Standard MIB values. | Number of subcards. | As per the MIB. |
| hh3cLswSlotAdminStatus (1.3.6.1.4.1.25506.8.35.18.4.3.1.8) | read-only | INTEGER | not-install(1), normal(2), fault(3), forbidden(4) | Administrative status of the card. | As per the MIB. |
| hh3cLswSlotOperStatus (1.3.6.1.4.1.25506.8.35.18.4.3.1.9) | read-write | INTEGER | disable(1), enable(2), reset(3), test(4) | Operation status of the card. | Supports only reset . Supports only the read operation on the non-default MDC. |
| hh3cLswSlotPhyMemory (1.3.6.1.4.1.25506.8.35.18.4.3.1.10) | read-only | Unsigned32 | Standard MIB values. | Physical memory space of the card, in bytes. The memory is a 32-bit wide memory. | As per the MIB. |
| hh3cLswSlotMemory (1.3.6.1.4.1.25506.8.35.18.4.3.1.11) | read-only | Unsigned32 | Standard MIB values. | System memory space of the card, in bytes. The memory is a 32-bit wide memory. | As per the MIB. |
| hh3cLswSlotMemoryUsed (1.3.6.1.4.1.25506.8.35.18.4.3.1.12) | read-only | Unsigned32 | Standard MIB values. | Used system memory on the card, in bytes. The memory is a 32-bit wide memory. | As per the MIB. |
| hh3cLswSlotMemoryRatio (1.3.6.1.4.1.25506.8.35.18.4.3.1.13) | read-only | Unsigned32 | Unsigned32 (0..100) | Percentage of the system used memory on the card, in bytes. | As per the MIB. |
| hh3cLswSlotTemperature (1.3.6.1.4.1.25506.8.35.18.4.3.1.14) | read-only | Integer32 | Standard MIB values. | Temperature of the card. | Not supported |
| hh3cLswSlotPktBufFree (1.3.6.1.4.1.25506.8.35.18.4.3.1.15) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Number of free packet buffers on the card. | As per the MIB. |
| hh3cLswSlotPktBufInit (1.3.6.1.4.1.25506.8.35.18.4.3.1.16) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Number of packet buffers on the card. | As per the MIB. |
| hh3cLswSlotPktBufMin (1.3.6.1.4.1.25506.8.35.18.4.3.1.17) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Minimum number of packet buffers on the card. | As per the MIB. |
| hh3cLswSlotPktBufMiss (1.3.6.1.4.1.25506.8.35.18.4.3.1.18) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Packet loss counting in packet buffers on | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|--------------------------|---|-----------------|
| 3.1.18) | | | 4073709551615) | the card. | |
| hh3cLswSlotRunTime (1.3.6.1.4.1.25506.8.35.18.4.3.1.19) | read-only | DisplayString | OCTET STRING (0..64) | Running time of the card. | As per the MIB. |
| hh3cLswSlotMemRev (1.3.6.1.4.1.25506.8.35.18.4.3.1.20) | read-only | Counter64 | Standard MIB values. | System memory space of the card, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cLswSlotPhyMemRev (1.3.6.1.4.1.25506.8.35.18.4.3.1.21) | read-only | Counter64 | Standard MIB values. | Physical memory space of the card, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cLswSlotMemUsedRev (1.3.6.1.4.1.25506.8.35.18.4.3.1.22) | read-only | Counter64 | Standard MIB values. | Used system memory on the card, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cLswSlotModelDesc (1.3.6.1.4.1.25506.8.35.18.4.3.1.23) | read-only | DisplayString | OCTET STRING (0..255) | Description of the extended module in the slot. | As per the MIB. |
| hh3cLswSlotPktBufThreshold (1.3.6.1.4.1.25506.8.35.18.4.3.1.24) | read-write | Integer32 | Integer32 (1..100) | Threshold for the number of packet buffers on the card. | As per the MIB. |
| hh3cLswSlotSerialNumber (1.3.6.1.4.1.25506.8.35.18.4.3.1.25) | read-only | SnmpAdminString | OCTET STRING (0..32) | Serial number of the card. | As per the MIB. |

hh3cLswSubslotTable

About this table

This table contains subcard information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, and hh3cLswSubslotIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|----------------|-----------------|
| hh3cLswSubslotIndex (1.3.6.1.4.1.25506.8.35.18.4.4.1.1) | read-only | Integer32 | Standard MIB values. | Subcard index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|--|--|-----------------------------------|
| hh3cLswSubslotType (1.3.6.1.4.1.25506.8.35.18.4.4.1.2) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Subcard type. | Implementation varies by product. |
| hh3cLswSubslotPortNum (1.3.6.1.4.1.25506.8.35.18.4.4.1.3) | read-only | Integer32 | Standard MIB values. | Port number of the subcard. | As per the MIB. |
| hh3cLswSubslotAdminStatus (1.3.6.1.4.1.25506.8.35.18.4.4.1.4) | read-only | INTEGER | not-install(1), normal(2), fault(3), forbidden(4) | Status of the subacard. | As per the MIB. |
| hh3cLswSubslotFirstIfIndex (1.3.6.1.4.1.25506.8.35.18.4.4.1.5) | read-only | Integer32 | Standard MIB values. | Index of the first physical port on the subcard. | Supports only Ethernet ports. |
| hh3cLswSubslotSerialNumbe r(1.3.6.1.4.1.25506.8.35.18.4.4.1.6) | read-only | SnmpAdminS tring | OCTET STRING (0..32) | Serial number of the subcard. | As per the MIB. |

hh3cLswPortTable

About this table

This table contains port information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, hh3cLswSubslotIndex, and hh3cLswPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-----------------------------|--|-----------------------------------|
| hh3cLswPortIndex (1.3.6.1.4.1.25506.8.35.18.4.5.1.1) | read-only | Integer32 | Standard MIB values. | Port index. | As per the MIB. |
| hh3cLswPortType (1.3.6.1.4.1.25506.8.35.18.4.5.1.2) | read-only | Integer32 | Standard MIB values. | Port type. | Implementation varies by product. |
| hh3cLswPortIfIndex (1.3.6.1.4.1.25506.8.35.18.4.5.1.3) | read-only | Integer32 | Standard MIB values. | Index of the interface attached to the port. | As per the MIB. |
| Hh3cLswPortIsPlugged (1.3.6.1.4.1.25506.8.35.18.4.5.1.4) | read-only | INTEGER | unplugged(0), plugged(1) | Connection status of the port. | As per the MIB. |

hh3cLswFabricTable

About this table

This table contains fabric module channel information.

This table does not support the read operation only on the default MDC.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, hh3cLswSubslotIndex, and hh3cLswFabricChannelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-----------------------|---|-----------------|
| hh3cLswFabricChannelIndex (1.3.6.1.4.1.25506.8.35.18.4.7.1.1) | not-accessible | Integer32 | Standard MIB values. | Channel index. | As per the MIB. |
| hh3cLswFabricUtilIn (1.3.6.1.4.1.25506.8.35.18.4.7.1.2) | read-only | Integer32 | Integer32 (0..100) | Ingress utilization of the channel. | As per the MIB. |
| hh3cLswFabricUtilOut (1.3.6.1.4.1.25506.8.35.18.4.7.1.3) | read-only | Integer32 | Integer32 (0..100) | Egress utilization of the channel. | As per the MIB. |
| hh3cLswFabricPeakIn (1.3.6.1.4.1.25506.8.35.18.4.7.1.4) | read-only | Integer32 | Integer32 (0..100) | Peak ingress utilization of the channel. | As per the MIB. |
| hh3cLswFabricPeakInTime (1.3.6.1.4.1.25506.8.35.18.4.7.1.5) | read-only | DateAnd Time | OCTET STRING (8 11) | Time at which peak ingress utilization of the channel is present. | As per the MIB. |
| hh3cLswFabricPeakOut (1.3.6.1.4.1.25506.8.35.18.4.7.1.6) | read-only | Integer32 | Integer32 (0..100) | Peak egress utilization of the channel. | As per the MIB. |
| hh3cLswFabricPeakOutTime (1.3.6.1.4.1.25506.8.35.18.4.7.1.7) | read-only | DateAnd Time | OCTET STRING (8 11) | Time at which peak egress utilization of the channel is present. | As per the MIB. |

hh3cLswExtendModelTable

About this table

This table contains extended module information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cLswExtendModelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|------------------------------|-------------------------------------|-----------------|
| hh3cLswExtendModelIndex (1.3.6.1.4.1.25506.8.35.18.4.9.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Extended module index. | As per the MIB. |
| hh3cLswExtendModelDesc (1.3.6.1.4.1.25506.8.35.18.4.9.1.2) | read-only | DisplayString | OCTET STRING (0..255) | Description of the Extended module. | As per the MIB. |

hh3cLswCpuTable

About this table

This table contains CPU information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, and hh3cLswCpuIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|----------------------------------|--|
| hh3cLswCpuIndex (1.3.6.1.4.1.25506.8.35.18.4.10.1.1) | not-accessible | PhysicalIndex | Integer32 (0..2147483647) | CPU index. | As per the MIB. |
| hh3cLswCpuEntityIndex (1.3.6.1.4.1.25506.8.35.18.4.10.1.2) | read-only | Integer32 | Standard MIB values. | Index of the CPU entity. | As per the MIB. |
| hh3cLswCpuRatio (1.3.6.1.4.1.25506.8.35.18.4.10.1.3) | read-only | Unsigned 32 | Unsigned 32 (0..100) | Real-time CPU usage on the host. | As per the MIB. |
| hh3cLswCpuSoftwareVersion (1.3.6.1.4.1.25506.8.35.18.4.10.1.4) | read-only | DisplayString | OCTET STRING (0..64) | CPU software version. | As per the MIB. |
| hh3cLswCpuAdminStatus (1.3.6.1.4.1.25506.8.35.18.4.10.1.5) | read-only | INTEGER | notInstall(1), normal(2), fault(3), forbidden(4) | CPU status. | As per the MIB. |
| hh3cLswCpuOperStatus (1.3.6.1.4.1.25506.8.35.18.4.10.1.6) | read-write | INTEGER | disable(1), enable(2), reset(3), test(4) | Operation status of the CPU. | Supports reset only on the active CPU. Supports the read operation only on |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------------|----------------------|---|-----------------------------------|
| | | | | | the non-default MDC. |
| hh3cLswCpuPhyMemory (1.3.6.1.4.1.25506.8.35.18.4.10.1.7) | read-only | Counter64 | Standard MIB values. | Physical memory space of the node, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cLswCpuMemory (1.3.6.1.4.1.25506.8.35.18.4.10.1.8) | read-only | Counter64 | Standard MIB values. | System memory space of the node, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cLswCpuMemoryUsed (1.3.6.1.4.1.25506.8.35.18.4.10.1.9) | read-only | Counter64 | Standard MIB values. | Used memory on the node, in bytes. The memory is a 64-bit wide memory. | As per the MIB. |
| hh3cLswCpuMemoryRatio (1.3.6.1.4.1.25506.8.35.18.4.10.1.10) | read-only | Unsigned32 | Unsigned32 (0..100) | Percentage of the used memory on the node. | As per the MIB. |
| hh3cLswCpuUsageMinorThreshold (1.3.6.1.4.1.25506.8.35.18.4.10.1.11) | read-write | Unsigned32 | Unsigned32 (1..99) | Minor CPU usage alarm threshold. | Implementation varies by product. |
| hh3cLswCpuUsageSevereThreshold (1.3.6.1.4.1.25506.8.35.18.4.10.1.12) | read-write | Unsigned32 | Unsigned32 (2..100) | Major CPU usage alarm threshold. | Implementation varies by product. |
| hh3cLswCpuUsageRecoverThreshold (1.3.6.1.4.1.25506.8.35.18.4.10.1.13) | read-write | Unsigned32 | Unsigned32 (0..98) | CPU usage recovery threshold. | Implementation varies by product. |
| hh3cLswCpuMemoryFree (1.3.6.1.4.1.25506.8.35.18.4.10.1.14) | read-only | CounterBasedGauge64 | Standard MIB values. | Free memory, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryFreeRatio (1.3.6.1.4.1.25506.8.35.18.4.10.1.15) | read-only | Unsigned32 | Unsigned32 (0..100) | Percentage of the free memory. | As per the MIB. |
| hh3cLswCpuMemoryHighTotal (1.3.6.1.4.1.25506.8.35.18.4.10.1.16) | read-only | CounterBasedGauge64 | Standard MIB values. | Total high memory, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryHighFree (1.3.6.1.4.1.25506.8.35.18.4.10.1.17) | read-only | CounterBasedGauge64 | Standard MIB values. | Free high memory, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryLowTotal (1.3.6.1.4.1.25506.8.35.18.4.10.1.18) | read-only | CounterBasedGauge64 | Standard MIB values. | Total low memory size, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryLowFree (1.3.6.1.4.1.25506.8.35.18.4.10.1.19) | read-only | CounterBasedGauge64 | Standard MIB values. | Free low memory, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryVmallocTotal (1.3.6.1.4.1.25506.8.35.18.4.10.1.20) | read-only | CounterBasedGauge64 | Standard MIB | Total vmalloc memory, in bytes. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------------------|--|---|-----------------|
| 0) | | ge64 | values. | | |
| hh3cLswCpuMemoryVmallocUsed (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 1) | read-only | CounterB asedGau ge64 | Standard MIB values. | Used vmalloc memory, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryVmallocChunk (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 2) | read-only | CounterB asedGau ge64 | Standard MIB values. | Number of chunks for the vmalloc memory. | As per the MIB. |
| hh3cLswCpuMemoryCommitLimit (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 3) | read-only | CounterB asedGau ge64 | Standard MIB values. | Memory size that can be allocated to the system, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryCommittedAs (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 4) | read-only | CounterB asedGau ge64 | Standard MIB values. | Committed_As memory, in bytes. | As per the MIB. |
| hh3cLswCpuMemoryThresholdUnit (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 5) | read-write | INTEGE R | inMB(1), inPercenta ge(2) | Unit of memory thresholds. | As per the MIB. |
| hh3cLswCpuMemorySecureThresh old (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 6) | read-write | Unsigned 32 | Standard MIB values. | Sufficient-memory threshold for the memory. | As per the MIB. |
| hh3cLswCpuMemoryEarlyWarning Threshold (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 7) | read-write | Unsigned 32 | Standard MIB values. | Early-warning threshold for the memory. | As per the MIB. |
| hh3cLswCpuMemoryNormalThresh old (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 8) | read-write | Unsigned 32 | Standard MIB values. | Normal state threshold for the memory. | As per the MIB. |
| hh3cLswCpuMemoryMinorThreshol d (1.3.6.1.4.1.25506.8.35.18.4.10.1.2 9) | read-write | Unsigned 32 | Standard MIB values. | Minor memory alarm threshold. | As per the MIB. |
| hh3cLswCpuMemorySevereThresh old (1.3.6.1.4.1.25506.8.35.18.4.10.1.3 0) | read-write | Unsigned 32 | Standard MIB values. | Major memory alarm threshold. | As per the MIB. |
| hh3cLswCpuMemoryCriticalThresh old (1.3.6.1.4.1.25506.8.35.18.4.10.1.3 1) | read-write | Unsigned 32 | Standard MIB values. | Critical memory alarm threshold. | As per the MIB. |
| hh3cLswCpuMemoryCurrentState (1.3.6.1.4.1.25506.8.35.18.4.10.1.3 2) | read-only | INTEGE R | secure(1), earlywarni ng(2), normal(3), minor(4), severe(5), critical(6) | Current memory status. | As per the MIB. |

hh3cLswPowerTable

About this table

This table contains power supply information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, and hh3cLswPowerIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|----------------------|------------------------------------|-----------------|
| hh3cLswPowerIndex (1.3.6.1.4.1.25506.8.35.18.4.11.1.1) | read-only | Integer32 | Standard MIB values. | Power supply index. | As per the MIB. |
| hh3cLswPowerSerialNumber (1.3.6.1.4.1.25506.8.35.18.4.11.1.2) | read-only | SnmpAdminString | OCTET STRING (0..32) | Serial number of the power supply. | As per the MIB. |

hh3cLswFanTable

About this table

This table contains fan information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, and hh3cLswFanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|----------------------|---------------------------|-----------------|
| hh3cLswFanIndex (1.3.6.1.4.1.25506.8.35.18.4.12.1.1) | read-only | Integer32 | Standard MIB values. | Fan index. | As per the MIB. |
| hh3cLswFanSerialNumber (1.3.6.1.4.1.25506.8.35.18.4.12.1.2) | read-only | SnmpAdminString | OCTET STRING (0..32) | Serial number of the fan. | As per the MIB. |

hh3cLswTransceiverTable

About this table

This table contains transceiver module information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, and hh3cLswTransceiverIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|----------------------|--|-----------------|
| hh3cLswTransceiverIndex (1.3.6.1.4.1.25506.8.35.18.4.13.1.1) | read-only | Integer32 | Standard MIB values. | Transceiver module index. | As per the MIB. |
| hh3cLswTransceiverSerialNumber (1.3.6.1.4.1.25506.8.35.18.4.13.1.2) | read-only | SnmpAdminString | OCTET STRING (0..32) | Serial number of the transceiver module. | As per the MIB. |

hh3cLswCoreTable

About this table

This table contains CPU core information.

Support for this table varies by product.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, hh3cLswCpuIndex, and hh3cLswCoreIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|--|-----------------|
| hh3cLswCoreIndex (1.3.6.1.4.1.25506.8.35.18.4.15.1.1) | read-only | Integer32 | Standard MIB values. | CPU core index. | As per the MIB. |
| hh3cLswCoreUsageInLast5Sec (1.3.6.1.4.1.25506.8.35.18.4.15.1.2) | read-only | Unsigned 32 | Standard MIB values. | CPU core usage in the most recent 5-second interval. | As per the MIB. |

| | | | | | |
|--|------------|----------------|----------------------------------|--|-----------------|
| hh3cLswCoreUsageInLast1Min (1.3.6.1.4.1.25506.8.35.18.4.15.1.3) | read-only | Unsigned 32 | Standard MIB values. | CPU core usage in the most recent 1-minute interval. | As per the MIB. |
| hh3cLswCoreUsageInLast5Min (1.3.6.1.4.1.25506.8.35.18.4.15.1.4) | read-only | Unsigned 32 | Standard MIB values. | CPU core usage in the most recent 5-minute interval. | As per the MIB. |
| hh3cLswCoreThreshold (1.3.6.1.4.1.25506.8.35.18.4.15.1.5) | read-write | Unsigned 32 | Standard MIB values. | CPU core alarm threshold. | As per the MIB. |
| hh3cLswCoreState (1.3.6.1.4.1.25506.8.35.18.4.15.1.6) | read-only | INTEGER | normal(1) , warning(2) | CPU core status. | As per the MIB. |

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HH3C-LswDEVM-MIB

About this MIB

Use this MIB to obtain information the resources on the device. For example, access this MIB to obtain power supply or fan information, including their number or status.

MIB file name

hh3c-splat-devm.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswdevMMib(9)

Scalar objects

hh3cdot1qTpFdbLearnStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|----------------------------|--|-----------------------------------|
| hh3cdot1qTpFdbLearnStatus (1.3.6.1.4.1.25506.8.35.9.1.10) | read-write | INTEGER | enabled(1), disabled(2) | Enablement status of MAC address learning. | Implementation varies by product. |

hh3cDevMFirstTrapTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|----------------------|-----------------------------------|-----------------------------------|
| hh3cDevMFirstTrapTime (1.3.6.1.4.1.25506.8.35.9.1.13) | accessible-for-notify | TimeTicks | Standard MIB values. | Time when the first trap is sent. | Implementation varies by product. |

Tabular objects

hh3cdevMFanStatusTable

About this table

This table contains basic fan information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cDevMFanNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---|--|-----------------------------------|
| hh3cDevMFanNum (1.3.6.1.4.1.25506.8.35.9.1.1.1.1) | read-only | Integer32 | Standard MIB values. | Fan index. | Implementation varies by product. |
| hh3cDevMFanStatus (1.3.6.1.4.1.25506.8.35.9.1.1.1.2) | read-only | INTEGER | active(1), deactive(2), not-install(3), unsupport(4) | Fan status. | Implementation varies by product. |
| hh3cDevMFanPosFrame | read-only | Integer32 | Standard MIB values. | ID of the chassis where the fan resides. | Not supported |
| hh3cDevMFanPosSlot | read-only | Integer32 | Standard MIB values. | Slot number of the fan. | Not supported |
| hh3cDevMFanPosIndex | read-only | Integer32 | Standard MIB values. | Fan number. | Not supported |
| hh3cDevMFanMaxSpeed | read-only | Integer32 | Standard MIB values. | Maximum fan speed. | Not supported |
| hh3cDevMFanCurrentSpeed | read-only | Integer32 | Standard MIB values. | Current fan speed. | Not supported |

hh3cdevMPowerStatusTable

About this table

This table contains basic power supply information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cDevMPowerNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---|-----------------------------------|-----------------------------------|
| hh3cDevMPowerNum (1.3.6.1.4.1.25506.8.35.9.1.2.1.1) | read-only | Integer32 | Standard MIB values. | Power supply index. | Implementation varies by product. |
| hh3cDevMPowerStatus (1.3.6.1.4.1.25506.8.35.9.1.2.1.2) | read-only | INTEGER | active(1), deactive(2), not-install(3), unsupport(4) | Power supply status. | Implementation varies by product. |
| hh3cDevMPowerEntIndex (1.3.6.1.4.1.25506.8.35.9.1.2.1.3) | read-only | Integer32 | Standard MIB values. | Entity index of the power supply. | Implementation varies by product. |

hh3cdevMSlotEnvironmentTable

About this table

This table contains environment information for a card.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex, hh3cLswSlotIndex, and hh3cdevMSlotEnvironmentType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---|---|-----------------------------------|
| hh3cdevMSlotEnvironmentType (1.3.6.1.4.1.25506.8.35.9.1.3.1.1) | not-accessible | INTEGER | temperature(1), humidity(2), fog(3) | Type of the environment elements. | Implementation varies by product. |
| hh3cDevMSlotEnvironmentStatus (1.3.6.1.4.1.25506.8.35.9.1.3.1.2) | read-only | INTEGER | normal(1), upper(2), lower(3) | Status of the environment where the card resides. | Not supported. |
| hh3cDevMSlotEnvironmentValue (1.3.6.1.4.1.25506.8.35.9.1.3.1.3) | read-only | Integer32 | Standard MIB values. | Environment data for the card. | Implementation varies by product. |
| hh3cDevMSlotEnvironmentUpper Limit (1.3.6.1.4.1.25506.8.35.9.1.3.1.4) | read-write | Integer32 | Standard MIB values. | Upper limit for the environment requirements. | Not supported. |
| hh3cDevMSlotEnvironmentLower Limit (1.3.6.1.4.1.25506.8.35.9.1.3.1.5) | read-write | Integer32 | Standard MIB values. | Lower limit for the environment requirements. | Not supported. |

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HH3C-LswTRAP-MIB

About this MIB

This MIB contains information about notifications for state change of cards and resources on the device.

MIB file name

hh3c-splat-trap.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswTrapMib(12)

Scalar objects

hh3csLswTrapCpuCoreInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------------|--------------------------|--|-----------------|
| hh3csLswTrapCpuCoreInfo (1.3.6.1.4.1.25506.8.35.12.2.1) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | CPU core information in CPU notifications. | As per the MIB. |

hh3csLswTrapProcessCpuInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--------------------------|---|-----------------|
| hh3csLswTrapProcessCpuInfo (1.3.6.1.4.1.25506.8.35.12.2.1) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Process information in CPU notifications. | As per the MIB. |

hh3csLswTrapProcessMemoryInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------------|--------------------------|--|-----------------|
| hh3csLswTrapProcessMemoryInfo (1.3.6.1.4.1.25506.8.35.12.2.3) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Memory information in CPU notifications. | As per the MIB. |

hh3csLswTrapSlubInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--------------------------|--|-----------------|
| hh3csLswTrapSlubInfo (1.3.6.1.4.1.25506.8.35.12.2.4) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Slub information in CPU notifications. | As per the MIB. |

hh3cLswTrapCpuUsage

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------------|--------------------------|---|-----------------|
| hh3cLswTrapCpuUsage (1.3.6.1.4.1.25506.8.35.12.2.5) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | CPU usage information in CPU notifications. | As per the MIB. |

hh3cLswTrapCoreProcessInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--------------------------|--|-----------------|
| hh3cLswTrapCoreProcessInfo (1.3.6.1.4.1.25506.8.35.12.2.6) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Core process information in CPU notifications. | As per the MIB. |

hh3cLswCoreTrapUsage

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-------------|----------------------|--|-----------------|
| hh3cLswCoreTrapUsage (1.3.6.1.4.1.25506.8.35.12.2.7) | accessible-for-notify | Unsigned 32 | Standard MIB values. | CPU usage in the most recent 30 minutes. | As per the MIB. |

hh3cBoardAvailablePower

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|----------------------|------------------|-----------------|
| hh3cBoardAvailablePower (1.3.6.1.4.1.25506.8.35.12.2.8) | accessible-for-notify | Integer32 | Standard MIB values. | Available power. | As per the MIB. |

hh3cBoardRequiredPower

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|----------------------|-----------------|-----------------|
| hh3cBoardRequiredPower (1.3.6.1.4.1.25506.8.35.12.2.9) | accessible-for-notify | Integer32 | Standard MIB values. | Required power. | As per the MIB. |

hh3cLswAlarmInPortInNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-------------|----------------------|---------------------------|-----------------|
| hh3cLswAlarmInPortInNum (1.3.6.1.4.1.25506.8.35.12.2.10) | accessible-for-notify | Unsigned 32 | Standard MIB values. | Number of alarm in ports. | As per the MIB. |

hh3cHeartbeatTimeoutSeconds

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-------------|----------------------|--------------------------------|-----------------|
| hh3cHeartbeatTimeoutSeconds (1.3.6.1.4.1.25506.8.35.12.2.19) | accessible-for-notify | Unsigned 32 | Standard MIB values. | Heartbeat timeout, in seconds. | As per the MIB. |

Notifications

This section contains the HH3C-LswTRAP-MIB notifications.

hh3cpowerfailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.1 | Failure of a power supply | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.2(hh3cPowerNormal) | ON |

Description

This notification is generated when a power supply fails or a new power supply is inserted into the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.2.1.1 (hh3cDevMPowerNum) | Power supply ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.9.1.13 (hh3cDevMFirstTrapTime) | Timestamp of the notification. | N | TimeTicks | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the power supply is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cPowerNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.2 | Recovery of a power supply from a fault | Recovery | N/A | N/A | ON |

Description

This notification is generated when a power supply recovers from an abnormal state.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.2.1.1 (hh3cDevMPowerNum) | Power supply ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.9.1.13 (hh3cDevMFirstTrapTime) | Timestamp of the notification. | N | TimeTicks | Standard MIB values. |

Recommended action

No action is required.

hh3cPowerRemoved

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.5 | Removal of a power supply | Error | Minor | 1.3.6.1.4.1.25506.8.35.12.1.23 (hh3cPowerInserted) | ON |

Description

This notification is generated when a power supply is removed from the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.2.1.1 (hh3cDevMPPowerNum) | Power supply ID. | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that a power supply is removed from the device.
 - If the power supply is removed from the device, no action is required.
 - If the power supply is not removed from the device, verify that the power supply is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cfanfailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-----------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.6 | Failure of a fan tray | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.7(hh3cFanNormal) | ON |

Description

This notification is generated when a fan tray fails.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.1.1.1 (hh3cDevMFFanNum) | Fan tray ID. | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the fan tray is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cFanNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.7 | Recovery of a fan tray from a fault. | Recovery | N/A | N/A | ON |

Description

This notification is generated when a fan tray recovers from a fault.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.1.1.1 (hh3cDevMFFanNum) | Fan tray ID. | Y | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cBoardRemoved

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.8 | Removal of a card | Error | Minor | 1.3.6.1.4.1.25506.8.35.12.1.9(hh3cBoardInserted) | ON |

Description

This notification is generated when a card is removed from the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the card is removed from the device.
 - If the card is removed from the device, no action is required.
 - If the card is not removed from the device, verify that the card is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cBoardInserted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.9 | Insertion of a card | Recovery | N/A | N/A | ON |

Description

This notification is generated when a card is inserted into the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cBoardFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.10 | Failure or startup of a card | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.11(hh3cBoardNormal) | ON |

Description

This notification is generated when a card is starting up or a fault occurs on the card.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Member ID of the device | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the card is installed correctly.
2. If the issue persists after 24 hours, contact H3C Support.

hh3cBoardNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.11 | Initialization completion of a card | Recovery | N/A | N/A | ON |

Description

This notification is generated when a card completes initialization.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cSubcardRemove

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|----------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.12 | Removal of a subcard | Error | Minor | 1.3.6.1.4.1.25506.8.35.12.1.13(hh3cSubcardInsert) | ON |

Description

This notification is generated when a subcard is removed from the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Member ID of the device | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.4.1.1 (hh3cLswSubslotIndex) | Subslot ID | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the subcard is removed from the device.
 - If the subcard is removed from the device, no action is required.
 - If the subcard is not removed from the device, verify that the subcard is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cSubcardInsert

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.13 | Insertion of a subcard | Recovery | N/A | N/A | ON |

Description

This notification is generated when a subcard is inserted into the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.4.1.1 (hh3cLswSubslotIndex) | Subslot ID. | Y | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cPowerInserted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-----------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.23 | Insertion of a power supply | Recovery | N/A | N/A | ON |

Description

This notification is generated when a power supply is inserted into the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.2.1.1 (hh3cDevMPowerNum) | Power supply ID. | Y | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cCpuRemoved

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.25 | Removal of a non-default CPU | Error | Minor | N/A | ON |

Description

This notification is generated when a non-default CPU subcard is removed from the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the non-default CPU is removed from the device.
 - If the non-default CPU is removed from the device, no action is required.
 - If the non-default CPU is not removed from the device, verify that the non-default CPU is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cCpuFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.26 | Failure or startup of a non-default CPU | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.27(hh3cCpuNormal) | ON |

Description

This notification is generated when a non-default CPU is starting up or a fault occurs on it.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the non-default CPU is installed correctly.
2. If the issue persists after 24 hours, contact H3C Support.

hh3cCpuNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.27 | Initialization completion of a non-default CPU | Recovery | N/A | N/A | ON |

Description

This notification is generated when a non-default CPU completes initialization.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cPowerIncompatible

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.28 | Incompatibility of a power supply with the device | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.2(hh3cPowerNormal) | ON |

Description

This notification is generated when a power supply is not compatible with the device.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.9.1.2.1.1 (hh3cDevMPowerNum) | Power supply ID. | Y | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the power supply is installed correctly.
2. If the issue persists, contact H3C Support.

hh3cCpuUsageSevereNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.29 | Severe CPU usage alarm | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.30(hh3cCpuUsageSevereRecoverNotification) | ON |

Description

This notification is generated when the CPU usage increases to or above the hh3cLswCpuUsageSevereThreshold. This notification is sent at intervals of 60 seconds until the alarm is cleared.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.3 (hh3cLswCpuRatio) | CPU usage. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.11 (hh3cLswCpuUsageMinorThreshold) | Minor CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.12 (hh3cLswCpuUsageSevereThreshold) | Severe CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.13 (hh3cLswCpuUsageRecoverThreshold) | CPU usage recovery threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 | CPU core usage (top5). | N | SnmpAdminString | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|-----------------|---|
| (hh3csLswTrapCpuCoreInfo) | | | ring | (hh3cLswCpuCoreUsage-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top5) |

Recommended action

No action is required.

hh3cCpuUsageSevereRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.30 | Clearance of a severe CPU usage alarm | Recovery | N/A | N/A | ON |

Description

This notification is generated when the CPU usage decreases to or below the hh3cLswCpuUsageSevereThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.3 (hh3cLswCpuRatio) | CPU usage. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.11 (hh3cLswCpuUsageMinorThreshold) | Minor CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.12 (hh3cLswCpuUsageSevereThreshold) | Severe CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.13 (hh3cLswCpuUsageRecoverThreshold) | CPU usage recovery threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top5) |

Recommended action

No action is required.

hh3cCpuUsageMinorNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-----------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.31 | Minor CPU usage alarm | Error | Warning | 1.3.6.1.4.1.25506.8.35.12.1.32(hh3cCpuUsageMinorRecoverNotification) | ON |

Description

This notification is generated when the CPU usage increases to or above the hh3cLswCpuUsageMinorThreshold. This notification is sent at intervals of 300 seconds until the alarm is cleared.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.3 (hh3cLswCpuRatio) | CPU usage. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.11 (hh3cLswCpuUsageMinorThreshold) | Minor CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.12 (hh3cLswCpuUsageSevereThreshold) | Severe CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.13 (hh3cLswCpuUsageRecoverThreshold) | CPU usage recovery threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3cLswTrapCpuCoreInfo) | CPU core usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3cLswTrapCpuCoreInfo) | CPU core usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3cLswTrapCpuCoreInfo) | CPU core usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3cLswTrapCpuCoreInfo) | CPU core usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top4) |

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top5) | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top5) |

Recommended action

Potential risks exist. It is necessary to assess whether to take appropriate measures.

hh3cCpuUsageMinorRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.32 | Minor CPU usage alarm clearance | Recovery | N/A | N/A | ON |

Description

This notification is generated when the CPU usage decreases to or below the hh3cLswCpuUsageMinorThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |

| | | | | |
|--|-------------------------------|---|-----------------|--|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.3 (hh3cLswCpuRatio) | CPU usage. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.11 (hh3cLswCpuUsageMinorThreshold) | Minor CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.12 (hh3cLswCpuUsageSevereThreshold) | Severe CPU usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.13 (hh3cLswCpuUsageRecoverThreshold) | CPU usage recovery threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.1 (hh3csLswTrapCpuCoreInfo) | CPU core usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswCpuCoreUsage-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio -top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio -top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio -top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.2 (hh3csLswTrapProcessCpuInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessCpuRatio -top5) |

Recommended action

No action is required.

hh3cMemoryUsageEarlyWarningNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|----------------------------------|---------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.33 | Memory usage early warning alarm | Informational | N/A | 1.3.6.1.4.1.25506.8.35.12.1.34(hh3cMemoryUsageEarl | ON |

| | | | | | |
|--|--|--|--|----------------------------------|--|
| | | | | yWarningRecover Notification) | |
|--|--|--|--|----------------------------------|--|

Description

This notification is generated when the amount of free memory decreases to or below the hh3cMemoryUsageEarlyWarningThreshold. This notification is sent at intervals of 1 hours until the alarm is cleared or a higher severity alarm is generated.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------------------|-------|---------------------|----------------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThresho Id) | Sufficient memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningT hreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThresho Id) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|---------------------|--|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshol d) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshol d) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshol d) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe moryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe moryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe moryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe moryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe moryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top5) |

Recommended action

Potential risks exist. It is necessary to assess whether to take appropriate measures.

hh3cMemoryUsageEarlyWarningRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.34 | Memory usage early warning alarm clearance | Recovery | N/A | N/A | ON |

Description

This notification is generated when the amount of free memory usage increases to or above the hh3cMemoryUsageSecureThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------------------|-------------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------|-------|---------------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top5) |

| OID (object name) | Description | Index | Type | Value range |
|-------------------|-------------|-------|------|-------------|
| | | | | d-top5) |

Recommended action

No action is required.

hh3cMemoryUsageMinorNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.35 | Minor memory usage alarm | Error | Minor | 1.3.6.1.4.1.25506.8.35.12.1.36(hh3cMemoryUsageMinorRecoverNotification) | ON |

Description

This notification is generated when the amount of free memory decreases to or below the hh3cLswCpuMemoryMinorThreshold. The notification is sent at intervals of 12 hours until the alarm condition is cleared or a higher severity alarm is generated.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------|-------|---------------------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------|-------|-----------------|--|
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUse d-top5) |

Recommended action

The issue needs to be reviewed to determine whether action is necessary.

hh3cMemoryUsageMinorRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506. 8.35.12.1.36 | Minor memory usage notification clearance | Recovery | N/A | N/A | ON |

Description

This notification is generated when the amount of free memory usage increases to or above the hh3cLswCpuMemoryNormalThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------|-------|-------------------------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGa uge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 | Free memory size. | N | CounterBasedGa | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------------|---|
| (hh3cLswCpuMemoryFree) | | | uge64 | |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRadio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe |

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|-----------------|---|
| (hh3csLswTrapProcessMemoryInfo) | | | | moryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4) | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top5) |

Recommended action

No action is required.

hh3cMemoryUsageSevereNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.37 | Severe memory usage alarm | Error | Major | 1.3.6.1.4.1.25506.8.35.12.1.38(hh3cMemoryUsageSevereRecoverNotification) | ON |

Description

This notification is generated when the amount of free memory decreases to or below the hh3cMemoryUsageSevereThreshold. This notification is sent at intervals of 3 hours until the alarm is cleared or a higher severity alarm is generated.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-----------------------------------|-------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 | Chassis ID. | Y | Integer32 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------------|---|
| (hh3cLswFrameIndex) | | | | |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMe |

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|-----------------|---|
| | | | | moryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top5) |

Recommended action

The issue has significant impact on services. Immediate action is required.

hh3cMemoryUsageSevereRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.38 | Severe memory usage alarm clearance | Recovery | N/A | N/A | ON |

Description

This notification is generated when the amount of free memory usage increases to or above the hh3cMemoryUsageMinorThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------------|--|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), |

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------|-------|---------------------|---|
| | | | | severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3cLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3cLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3cLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3cLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3cLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3cLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top5) |

Recommended action

No action is required.

hh3cMemoryUsageCriticalNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-----------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.39 | Critical memory usage alarm | Error | Critical | 1.3.6.1.4.1.25506.8.35.12.1.40(hh3cMemoryUsageCriticalRecoverNotification) | ON |

Description

This notification is generated when the amount of free memory decreases to or below the hh3cMemoryUsageCriticalThreshold. This notification is sent at intervals of 1 hours until the alarm is cleared.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------------|-------------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------------|-------|---------------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top5) |

Recommended action

The issue puts the system assets and services at risk. Immediate action is required.

hh3cMemoryUsageCriticalRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.40 | Critical memory usage alarm clearance | Recovery | N/A | N/A | ON |

Description

This notification is generated when the amount of free memory usage increases to or above the hh3cMemoryUsageSevereThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------------------|-------------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.8 (hh3cLswCpuMemory) | Total memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.14 (hh3cLswCpuMemoryFree) | Free memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.15 (hh3cLswCpuMemoryFreeRatio) | Free memory ratio. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.16 (hh3cLswCpuMemoryHighTotal) | Total high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.17 (hh3cLswCpuMemoryHighFree) | Free high memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.18 (hh3cLswCpuMemoryLowTotal) | Total low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.19 (hh3cLswCpuMemoryLowFree) | Free low memory size. | N | CounterBasedGauge64 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.26 (hh3cLswCpuMemorySecureThreshold) | Sufficient memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.27 (hh3cLswCpuMemoryEarlyWarningThreshold) | Early-warning memory threshold. | N | Unsigned32 | 1 to 100, in percentage |

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------|-------|---------------------|---|
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.28 (hh3cLswCpuMemoryNormalThreshold) | Normal state memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.29 (hh3cLswCpuMemoryMinorThreshold) | Minor memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.30 (hh3cLswCpuMemorySevereThreshold) | Severe memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.31 (hh3cLswCpuMemoryCriticalThreshold) | Critical memory threshold. | N | Unsigned32 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.32 (hh3cLswCpuMemoryCurrentState) | Current memory state. | N | INTEGER | secure(1), earlywarning(2), normal(3), minor(4), severe(5), critical(6) |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.33 (hh3cLswCpuMemoryUsageThreshold) | Memory usage threshold. | N | CounterBasedGauge64 | 1 to 100, in percentage |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.3 (hh3csLswTrapProcessMemoryInfo) | Process usage (top5). | N | SnmpAdminString | Standard MIB values. (hh3cLswProcessMemoryUsed-top5) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 1). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top1) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 2). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top2) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 3). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top3) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 4). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top4) |
| 1.3.6.1.4.1.25506.8.35.12.2.4 (hh3csLswTrapSlubInfo) | Slub information (top 5). | N | SnmpAdminString | Standard MIB values. (hh3cLswSlubInfoUsed-top5) |

Recommended action

No action is required.

hh3cCoreUsageNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|----------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.3.0.1 | CPU core usage alarm | Error | Warning | 1.3.6.1.4.1.25506.8.35.12.3.0.10 (hh3cCoreUsageSevereRecoveryNotification) | ON |

Description

This notification is generated when the amount of core usage increases to or above the hh3cLswCoreThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.15.1.1 (hh3cLswCoreIndex) | CPU core ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.7 (hh3cLswCoreTrapUsage) | CPU core usage in the most recent 30 minutes. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.15.1.5 (hh3cLswCoreThreshold) | CPU core usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.5 (hh3cLswTrapCpuUsage) | CPU usage during the most recent 5 seconds, 1 minute, 5 minutes. | N | SnmpAdminString | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.6 (hh3cLswTrapCoreProcessInfo) | Process usage (top1). | N | SnmpAdminString | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.6 (hh3cLswTrapCoreProcessInfo) | Process usage (top2). | N | SnmpAdminString | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.6 (hh3cLswTrapCoreProcessInfo) | Process usage (top3). | N | SnmpAdminString | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.6 (hh3cLswTrapCoreProcessInfo) | Process usage (top4). | N | SnmpAdminString | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.6 | Process usage (top5). | N | SnmpAdminString | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------------------|-------|------------|----------------------|
| (hh3cLswTrapCoreProcessInfo) | | | | |
| 1.3.6.1.4.1.25506.8.35.18.4.15.1.7 (hh3cLswCoreMinorThreshold) | Minor CPU core usage threshold. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.15.1.8 (hh3cLswCoreRecoveryThreshold) | CPU core normal state threshold. | N | Unsigned32 | Standard MIB values. |

Recommended action

No action is required.

hh3cBoardPowerNotEnough

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.3.0.2 | Power insufficiency for a card | Error | Major | N/A | ON |

Description

This notification is generated when the power provided for a card is not enough.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.8 (hh3cBoardAvailablePower) | Available power. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.9 (hh3cBoardRequiredPower) | Required power. | N | Integer32 | Standard MIB values. |

Recommended action

Replace the power supplies with high-power ones.

hh3cAlarmInPortIn

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.35.12.3.0.3 | Electrical level state received on an alarm input port inconsistent with that configured for the port. | Informational | N/A | 1.3.6.1.4.1.25506.8.35.12.3.0.4(hh3cAlarmInPortRecover) | ON |

Description

This notification is generated when the electrical level state received on an alarm input port is inconsistent with that configured for the port.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.10 (hh3cLswAlarmInPortInNum) | Alarm input port number. | N | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cAlarmInPortRecover

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.3.0.4 | Electrical level state received on an alarm input port become consistent with that configured for the port | Recovery | N/A | N/A | ON |

Description

This notification is generated when the electrical level state received on an alarm input port becomes consistent with that configured for the port.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.12.2.9 (hh3cLswAlarmInPortInNum) | Alarm input port number. | N | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cLoadFinished

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.20 | A card finished loading of the image file. | Informational | N/A | N/A | ON |

Description

This notification is generated when a card finishes loading of the image file.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1(hh3cLswFrameIndex) | Chassis ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer | Standard MIB values. |

Recommended action

No action is required.

hh3cBootImageUpdated

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.24 | Startup software images updated. | Informational | N/A | N/A | ON |

Description

This notification is generated when the startup software images are updated.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1(hh3cLswFrameIndex) | Chassis ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer | Standard MIB values. |

Recommended action

No action is required.

hh3cRequestLoading

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.1.18 | Image loading request received. | Informational | N/A | N/A | ON |

Description

This notification is generated when the loading service end receives an image loading request.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1(hh3cLswFrameIndex) | Chassis ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer | Standard MIB values. |

Recommended action

No action is required.

hh3cBoardHeartbeatTimeout

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.35.12.3.0.46 | Heartbeat between the MPU and a card timed out. | Error | Warning | 1.3.6.1.4.1.25506.8.35.12.3.0.47(hh3cBoardHeartbeatResume) | ON |

Description

This notification is generated when the heartbeat between the MPU and a card times out.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cHeartbeatTimeoutSeconds) | Heartbeat timeout, in seconds. | N | Integer | Standard MIB values. |

Recommended action

Check the connection between the MPU and the card.

hh3cBoardHeartbeatResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.12.3.0.47 | Heartbeat between the MPU and a card resumed. | Informational | N/A | N/A | ON |

Description

This notification is generated when the heartbeat between the MPU and a card resumes.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|---------|----------------------|
| 1.3.6.1.4.1.25506.8.35.18.4.2.1.1 (hh3cLswFrameIndex) | Chassis ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.3.1.1 (hh3cLswSlotIndex) | Slot ID. | Y | Integer | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.35.18.4.10.1.1 (hh3cLswCpuIndex) | CPU ID. | Y | Integer | Standard MIB values. |

Recommended action

No action is required.

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HH3C-RES-MON-MIB

About this MIB

Use this MIB to monitor and manage state changes of cards and hardware resources on the device and enable the device to send notifications.

MIB file name

hh3c-res-mon.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cResMon(169)

Scalar objects

hh3cResMonMinorResendEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|--|-----------------|
| hh3cResMonMinorResendEnable(1.3.6.1.4.1.25506.2.169.1.1) | read-write | TruthValue | true(1), false(2) | Enabling status of the minor resource depletion alarm resending feature. | As per the MIB. |

hh3cResMonOutputEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------|---|---|-----------------|
| hh3cResMonOutputEnable(1.3.6.1.4.1.25506.2.169.1.2) | read-write | BITS | BITS {syslog(0), snmpNotification(1), netconfEvent(2)} | Destinations for resource depletion alarms. | As per the MIB. |

Tabular objects

hh3cResMonConfigTable

About this table

Use this table to configure resource monitoring settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cResMonChassisIndex, hh3cResMonSlotIndex, hh3cResMonCpuIndex, and hh3cResMonResourceName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|----------------------------|--|-----------------|
| hh3cResMonChassisIndex (1.3.6.1.4.1.25506.2.169.2.1.1.1) | read-only | Unsigned 32 | Standard MIB values. | Member ID of the device. | As per the MIB. |
| hh3cResMonSlotIndex (1.3.6.1.4.1.25506.2.169.2.1.1.2) | read-only | Unsigned 32 | Standard MIB values. | Slot number. | As per the MIB. |
| hh3cResMonCpuIndex (1.3.6.1.4.1.25506.2.169.2.1.1.3) | read-only | Unsigned 32 | Standard MIB values. | CPU ID. | As per the MIB. |
| hh3cResMonResourceName (1.3.6.1.4.1.25506.2.169.2.1.1.4) | read-only | OCTET STRING | OCTET STRING (1..31) | Resource name. | As per the MIB. |
| hh3cResMonThresholdUnit (1.3.6.1.4.1.25506.2.169.2.1.1.5) | read-write | INTEGER | absolute(1), percentage(2) | Method for specifying resource depletion thresholds. | As per the MIB. |
| hh3cResMonMinorThreshold (1.3.6.1.4.1.25506.2.169.2.1.1.6) | read-write | Unsigned 32 | Standard MIB values. | Minor resource depletion threshold. | As per the MIB. |
| hh3cResMonSevereThreshold (1.3.6.1.4.1.25506.2.169.2.1.1.7) | read-write | Unsigned 32 | Standard MIB values. | Severe resource depletion threshold. | As per the MIB. |

hh3cResMonInfoTable

About this table

Use this table to obtain information about hardware resources.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cResMonChassisIndex, hh3cResMonSlotIndex, hh3cResMonCpuIndex, and hh3cResMonResourceName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------|-------------------------------|--|-----------------|
| hh3cResMonUnit (1.3.6.1.4.1.25506.2.169.2.2.1.1) | read-only | INTEGER | absolute(1), percentage(2) | Expression method for the resource thresholds | As per the MIB. |
| hh3cResMonCurrent (1.3.6.1.4.1.25506.2.169.2.2.1.2) | read-only | Unsigned 32 | Standard MIB values. | Amount of the used resource. | As per the MIB. |
| hh3cResMonFree (1.3.6.1.4.1.25506.2.169.2.2.1.3) | read-only | Unsigned 32 | Standard MIB values. | Amount of the free resource. | As per the MIB. |
| hh3cResMonTotal (1.3.6.1.4.1.25506.2.169.2.2.1.4) | read-only | Unsigned 32 | Standard MIB values. | Total size of resource. | As per the MIB. |

Notifications

hh3cResMonMinorNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.169.3.0.1 | Minor resource depletion alarm occurred | Error | Minor | 1.3.6.1.4.1.25506.2.169.3.0.2(hh3cResMonMinorRecoverNotification) | ON |

Description

This notification is generated when the amount of the free resource decreased to or below the hh3cResMonMinorThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.169.2.1.1.1 (hh3cResMonChassisIndex) | Member ID of the device | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.2 (hh3cResMonSlotIndex) | Slot number | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.3 (hh3cResMonCpuIndex) | CPU ID | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.4 (hh3cResMonResourceName) | Resource name | Y | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.5 (hh3cResMonThresholdUnit) | Expression method for resource depletion thresholds | N | INTEGER | absolute(1), percentage(2) |
| 1.3.6.1.4.1.25506.2.169.2.1.1.6 (hh3cResMonMinorThreshold) | Minor resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.7 (hh3cResMonSevereThreshold) | Severe resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.1 (hh3cResMonCurrent) | Amount of the used resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.2 (hh3cResMonFree) | Amount of the free resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.3 (hh3cResMonTotal) | Total size of resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.3.1.1 (hh3cResMonAdditionalInfo) | Additional information | N | OCTET STRING | Standard MIB values. |

Recommended action

This issue has minor impact on the current services. To avoid more serious issues, take actions at an appropriate time or perform further observation.

hh3cResMonMinorRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.169.3.0.2 | Minor resource depletion alarm cleared | Recovery | N/A | N/A | ON |

Description

This notification is generated when the amount of the free resource increased to or above the hh3cResMonMinorThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.169.2.1.1.1 (hh3cResMonChassisIndex) | Member ID of the device | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.2 (hh3cResMonSlotIndex) | Slot number | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.3 (hh3cResMonCpuIndex) | CPU ID | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.4 (hh3cResMonResourceName) | Resource name | Y | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.5 (hh3cResMonThresholdUnit) | Expression method for resource depletion thresholds | N | INTEGER | absolute(1), percentage(2) |
| 1.3.6.1.4.1.25506.2.169.2.1.1.6 (hh3cResMonMinorThreshold) | Minor resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.7 (hh3cResMonSevereThreshold) | Severe resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.1 (hh3cResMonCurrent) | Amount of the used resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.2 (hh3cResMonFree) | Amount of the free resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.3 (hh3cResMonTotal) | Total size of resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.3.1.1 (hh3cResMonAdditionalInfo) | Additional information | N | OCTET STRING | Standard MIB values. |

Recommended action

No action is required.

hh3cResMonSevereNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.169.3.0.3 | Severe resource depletion alarm occurred | Error | Major | 1.3.6.1.4.1.25506.2.169.3.0.4(hh3cResMonSevereRecoverNotification) | ON |

Description

This notification is generated when the amount of the free resource increased to or above the hh3cResMonSevereThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.169.2.1.1.1 (hh3cResMonChassisIndex) | Member ID of the device | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.2 (hh3cResMonSlotIndex) | Slot number | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.3 (hh3cResMonCpuIndex) | CPU ID | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.4 (hh3cResMonResourceName) | Resource name | Y | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.5 (hh3cResMonThresholdUnit) | Expression method for resource depletion thresholds | N | INTEGER | absolute(1), percentage(2) |
| 1.3.6.1.4.1.25506.2.169.2.1.1.6 (hh3cResMonMinorThreshold) | Minor resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.7 (hh3cResMonSevereThreshold) | Severe resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.1 (hh3cResMonCurrent) | Amount of the used resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.2 (hh3cResMonFree) | Amount of the free resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.3 (hh3cResMonTotal) | Total size of resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.3.1.1 (hh3cResMonAdditionalInfo) | Additional information | N | OCTET STRING | Standard MIB values. |

Recommended action

The issue has significant impact on current services. Immediate action is required.

hh3cResMonSevereRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.169.3.0.4 | Severe resource depletion alarm cleared | Recovery | N/A | N/A | ON |

Description

This notification is generated when the amount of the free resource is increased to or above hh3cResMonSevereThreshold.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.169.2.1.1.1 (hh3cResMonChassisIndex) | Member ID of the device | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.2 (hh3cResMonSlotIndex) | Slot number | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.3 (hh3cResMonCpuIndex) | CPU ID | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.4 (hh3cResMonResourceName) | Resource name | Y | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.5 (hh3cResMonThresholdUnit) | Expression method for resource depletion thresholds | N | INTEGER | absolute(1), percentage(2) |
| 1.3.6.1.4.1.25506.2.169.2.1.1.6 (hh3cResMonMinorThreshold) | Minor resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.7 (hh3cResMonSevereThreshold) | Severe resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.1 (hh3cResMonCurrent) | Amount of the used resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.2 (hh3cResMonFree) | Amount of the free resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.3 (hh3cResMonTotal) | Total size of resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.3.1.1 (hh3cResMonAdditionalInfo) | Additional information | N | OCTET STRING | Standard MIB values. |

Recommended action

No action is required.

hh3cResMonUsedUpNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.169.3.0.5 | Resource used up alarm occurred | Error | Critical | 1.3.6.1.4.1.25506.2.169.3.0.6(hh3cResMonUsedUpRecoverNotification) | ON |

Description

This notification is generated when the resource is used up.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.169.2.1.1.1 (hh3cResMonChassisIndex) | Member ID of the device | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.2 (hh3cResMonSlotIndex) | Slot number | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.3 (hh3cResMonCpuIndex) | CPU ID | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.4 (hh3cResMonResourceName) | Resource name | Y | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.5 (hh3cResMonThresholdUnit) | Expression method for resource depletion thresholds | N | INTEGER | absolute(1), percentage(2) |
| 1.3.6.1.4.1.25506.2.169.2.1.1.6 (hh3cResMonMinorThreshold) | Minor resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.7 (hh3cResMonSevereThreshold) | Severe resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.1 (hh3cResMonCurrent) | Amount of the used resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.2 (hh3cResMonFree) | Amount of the free resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.3 | Total size of | N | Unsigned32 | Standard MIB |

| | | | | |
|---|------------------------|---|--------------|----------------------|
| (hh3cResMonTotal) | resource | | | values. |
| 1.3.6.1.4.1.25506.2.169.3.1.1 (hh3cResMonAdditionalInfo) | Additional information | N | OCTET STRING | Standard MIB values. |

Recommended action

The issue puts system assets and services at risk. Immediate action is required.

hh3cResMonUsedUpRecoverNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.169.3.0.6 | Resource used up alarm cleared | Recovery | N/A | N/A | ON |

Description

This notification is generated when the free resource increases from zero up.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.169.2.1.1.1 (hh3cResMonChassisIndex) | Member ID of the device | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.2 (hh3cResMonSlotIndex) | Slot number | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.3 (hh3cResMonCpuIndex) | CPU ID | Y | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.4 (hh3cResMonResourceName) | Resource name | Y | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.5 (hh3cResMonThresholdUnit) | Expression method for resource depletion thresholds | N | INTEGER | absolute(1), percentage(2) |
| 1.3.6.1.4.1.25506.2.169.2.1.1.6 (hh3cResMonMinorThreshold) | Minor resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.1.1.7 (hh3cResMonSevereThreshold) | Severe resource depletion threshold | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.1 (hh3cResMonCurrent) | Amount of the used resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.2 | Amount of the free | N | Unsigned32 | Standard MIB |

| | | | | |
|---|------------------------|---|--------------|----------------------|
| (hh3cResMonFree) | resource | | | values. |
| 1.3.6.1.4.1.25506.2.169.2.2.1.3 (hh3cResMonTotal) | Total size of resource | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.169.3.1.1 (hh3cResMonAdditionalInfo) | Additional information | N | OCTET STRING | Standard MIB values. |

Recommended action

No action is required.

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HH3C-TRANSCEIVER-INFO-MIB

About this MIB

Use this MIB to obtain information about transceiver modules, including vendor information and physical transmission characteristics.

MIB file name

hh3c-transceiver-info.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cTransceiver(70)

Tabular objects

hh3cTransceiverInfoTable

About this table

Use this table to obtain information about transceiver modules.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|----------------------|--|-----------------|
| hh3cTransceiverHardwareType (1.3.6.1.4.1.25506.2.70.1.1.1.1) | read-only | OCTET STRING | Standard MIB values. | Hardware type of the transceiver module, such as single mode (SM). | As per the MIB. |
| hh3cTransceiverType (1.3.6.1.4.1.25506.2.70.1.1.1.2) | read-only | OCTET STRING | Standard MIB values. | Type of the transceiver module, such as SFP. | As per the MIB. |
| hh3cTransceiverWaveLength (1.3.6.1.4.1.25506.2.70.1.1.1.3) | read-only | Integer32 | Standard MIB values. | Wavelength of the transceiver module, in nm. | As per the MIB. |
| hh3cTransceiverVendorName (1.3.6.1.4.1.25506.2.70.1.1.1.4) | read-only | OCTET STRING | Standard MIB values. | Vendor name of the transceiver module. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|---|---|---|
| hh3cTransceiverSerialNumber (1.3.6.1.4.1.25506.2.70.1.1.1.5) | read-only | OCTET STRING | Standard MIB values. | Serial number of the transceiver module. | As per the MIB. |
| hh3cTransceiverFiberDiameterType (1.3.6.1.4.1.25506.2.70.1.1.1.6) | read-only | INTEGER | fiber9(1), fiber50(2), fiber625(3), copper(4), unknown(65535) | Fiber diameter for the transceiver module, in microns (μm). | As per the MIB. |
| hh3cTransceiverTransferDistance (1.3.6.1.4.1.25506.2.70.1.1.1.7) | read-only | Integer32 | Standard MIB values. | Maximum transmission distance of the transceiver module, in meters. | As per the MIB. |
| hh3cTransceiverDiagnostic (1.3.6.1.4.1.25506.2.70.1.1.1.8) | read-only | TruthValue | true(1), false(2) | Whether the transceiver module supports digital diagnosis. | As per the MIB. |
| hh3cTransceiverCurrentTXPower (1.3.6.1.4.1.25506.2.70.1.1.1.9) | read-only | Integer32 | Standard MIB values. | Current transmit power of the transceiver module, in dBm, accurate to 0.01 dBm. | The object returns 2147483647 when read if the device does not support this parameter. |
| hh3cTransceiverMaximumTXPower (1.3.6.1.4.1.25506.2.70.1.1.1.10) | read-only | Integer32 | Standard MIB values. | Maximum transmit power of the transceiver module, in dBm, accurate to 0.01 dBm. | The object returns 2147483647 when read if the device does not support this parameter. |
| hh3cTransceiverMinimumTXPower (1.3.6.1.4.1.25506.2.70.1.1.1.11) | read-only | Integer32 | Standard MIB values. | Minimum transmit power of the transceiver module, in dBm, accurate to 0.01 dBm. | The object returns 2147483647 when read if the device does not support this parameter. |
| hh3cTransceiverCurrentRXPower (1.3.6.1.4.1.25506.2.70.1.1.1.12) | read-only | Integer32 | Standard MIB values. | Current receive power in dBm of the transceiver module, accurate to 0.01 dBm. | The object returns 2147483647 when read if the device does not support this parameter. |
| hh3cTransceiverMaximumRXPower (1.3.6.1.4.1.25506.2.70.1.1.1.13) | read-only | Integer32 | Standard MIB values. | Maximum receive power of the transceiver module, in dBm, accurate to 0.01 dBm. | The object returns 2147483647 when read if the device does not support this parameter. |
| hh3cTransceiverMinimumRXPower (1.3.6.1.4.1.25506.2.70.1.1.1.14) | read-only | Integer32 | Standard MIB values. | Minimum receive power of the transceiver module, in dBm, accurate to 0.01 dBm. | The object returns 2147483647 when read if the device does not support this parameter. |
| hh3cTransceiverTemperature (1.3.6.1.4.1.25506.2.70.1.1.1.15) | read-only | Integer32 | Standard MIB values. | Current temperature of the transceiver module, in °C. | As per the MIB. |
| hh3cTransceiverVoltage (1.3.6.1.4.1.25506.2.70.1.1.1.16) | read-only | Integer32 | Standard MIB values. | Current voltage of the transceiver module, in V, accurate to 0.01 V. | As per the MIB. |
| hh3cTransceiverBiasCurrent | read-only | Integer32 | Standard MIB values. | Current bias current of the transceiver module, in mA, | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|---|
| (1.3.6.1.4.1.25506.2.70.1.1.1.17) | | | | accurate to 0.01 mA. | |
| hh3cTransceiverTempHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.18) | read-only | Integer32 | Standard MIB values. | High temperature alarm threshold in °C, accurate to 0.001 °C , for example, 49120 representing 49.120 °C | As per the MIB. |
| hh3cTransceiverTempLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.19) | read-only | Integer32 | Standard MIB values. | Low temperature alarm threshold in °C, accurate to 0.001 °C | As per the MIB. |
| hh3cTransceiverTempHiWarn (1.3.6.1.4.1.25506.2.70.1.1.1.20) | read-only | Integer32 | Standard MIB values. | High temperature warning threshold in °C, accurate to 0.001 °C | As per the MIB. |
| hh3cTransceiverTempLoWarn (1.3.6.1.4.1.25506.2.70.1.1.1.21) | read-only | Integer32 | Standard MIB values. | Low temperature warning threshold in °C, accurate to 0.001 °C | As per the MIB. |
| hh3cTransceiverVccHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.22) | read-only | Integer32 | Standard MIB values. | High voltage alarm threshold in µV, accurate to 0.01 µV. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverVccLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.23) | read-only | Integer32 | Standard MIB values. | Low voltage alarm threshold in µV, accurate to 0.01 µV. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverVccHiWarn (1.3.6.1.4.1.25506.2.70.1.1.1.24) | read-only | Integer32 | Standard MIB values. | High voltage warning threshold in µV, accurate to 0.01 µV. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverVccLoWarn (1.3.6.1.4.1.25506.2.70.1.1.1.25) | read-only | Integer32 | Standard MIB values. | Low voltage warning threshold in mV, accurate to 0.01 µV. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverBiasHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.26) | read-only | Integer32 | Standard MIB values. | High bias current alarm threshold in µA. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverBiasLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.27) | read-only | Integer32 | Standard MIB values. | Low bias current alarm threshold in µA. | As per the MIB. This object returns |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|---|
| .2.70.1.1.1.27) | | | | | 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverBiasHiWarn (1.3.6.1.4.1.25506.2.70.1.1.1.28) | read-only | Integer32 | Standard MIB values. | High bias current warning threshold in μA . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverBiasLoWarn (1.3.6.1.4.1.25506.2.70.1.1.1.29) | read-only | Integer32 | Standard MIB values. | Low bias current warning threshold in μA . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverPwrOutHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.30) | read-only | Integer32 | Standard MIB values. | High transmit power alarm threshold in μW , accurate to 0.1 μW . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverPwrOutLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.31) | read-only | Integer32 | Standard MIB values. | Low transmit power alarm threshold in μW , accurate to 0.1 μW . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverPwrOutHiWarn (1.3.6.1.4.1.25506.2.70.1.1.1.32) | read-only | Integer32 | Standard MIB values. | High transmit power warning threshold in μW , accurate to 0.1 μW . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverPwrOutLoWarn (1.3.6.1.4.1.25506.2.70.1.1.1.33) | read-only | Integer32 | Standard MIB values. | Low transmit power warning threshold in μW , accurate to 0.1 μW . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverRcvPwrHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.34) | read-only | Integer32 | Standard MIB values. | High receive power alarm threshold in μW , accurate to 0.1 μW . | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverRcvPwrLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.35) | read-only | Integer32 | Standard MIB values. | Low receive power alarm threshold in μW , accurate to 0.1 μW . | As per the MIB. This object returns 0 when read if the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|---|---|---|
| .2.70.1.1.1.35) | | | | | transceiver module does not support this parameter. |
| hh3cTransceiverRcvPwrHiWarn (1.3.6.1.4.1.25506.2.70.1.1.1.36) | read-only | Integer32 | Standard MIB values. | High receive power warning threshold in μ W, accurate to 0.1 μ W. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverRcvPwrLoWarn (1.3.6.1.4.1.25506.2.70.1.1.1.37) | read-only | Integer32 | Standard MIB values. | Low receive power warning threshold in μ W, accurate to 0.1 μ W. | As per the MIB. This object returns 0 when read if the transceiver module does not support this parameter. |
| hh3cTransceiverErrors (1.3.6.1.4.1.25506.2.70.1.1.1.38) | read-only | BITS | BITS { xcvrIOError(0), xcvrChecksum(1), xcvrTypeAndPortConfigMismatch(2), xcvrTypeNotSupported(3), wisLocalFault(4), rcvOpticalPowerFault(5), pmapmdReceiverLocalFault(6), pcsReceiveLocalFault(7), phyXSReceiveLocalFault(8), laserBiasCurrentFault(9), laserTemperatureFault(10), laserOutputPowerFault(11), txFault(12), pmapmdTransmitterLocalFault(13), pcsTransmitLocalFault(14), phyXSTransmitLocalFault(15), rxLossOfSignal(16), tecError(17), wavelengthUnlocked(18), txIsNotReadyDueToTuning(19), Unused(20-31) } | Error information about the transceiver module. | As per the MIB. |
| hh3cTransceiverVendorOUI (1.3.6.1.4.1.25506.2.70.1.1.1.39) | read-only | SnmpAdminString | OCTET STRING (0..255) | Vendor OUI of the transceiver module. | As per the MIB. |
| hh3cTransceiverRevisionNumber (1.3.6.1.4.1.25506.2.70.1.1.1.40) | read-only | SnmpAdminString | OCTET STRING (0..255) | Revision number of the transceiver module. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|----------------------------|---|-----------------|
| .2.70.1.1.1.40) | | | | | |
| hh3cTransceiverFrequency (1.3.6.1.4.1.25506.2.70.1.1.1.41) | read-only | Integer32 | Standard MIB values. | Frequency of the current ITU channel, in THz, accurate to 0.01 THz. | As per the MIB. |
| hh3cTransceiverActiveITUChannel (1.3.6.1.4.1.25506.2.70.1.1.1.42) | read-write | Unsigned32 | Unsigned32 (1..4294967295) | Index of the current ITU channel. | As per the MIB. |
| hh3cTransceiverCurrentWaveErr (1.3.6.1.4.1.25506.2.70.1.1.1.43) | read-only | Integer32 | Standard MIB values. | Wavelength offset of the current ITU channel, in nm, accurate to 0.001 nm. | As per the MIB. |
| hh3cTransceiverWaveErrHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.44) | read-only | Integer32 | Standard MIB values. | High wavelength offset alarm threshold for the current ITU channel, in nm, accurate to 0.001 nm.. | As per the MIB. |
| hh3cTransceiverWaveErrLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.45) | read-only | Integer32 | Standard MIB values. | Low wavelength offset alarm threshold for the current ITU channel, in nm, accurate to 0.001 nm. | As per the MIB. |
| hh3cTransceiverCurrentFreqErr (1.3.6.1.4.1.25506.2.70.1.1.1.46) | read-only | Integer32 | Standard MIB values. | Frequency offset of the current ITU channel, in GHz, accurate to 0.1 GHz. | As per the MIB. |
| hh3cTransceiverFrequencyErrHiAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.47) | read-only | Integer32 | Standard MIB values. | High frequency offset alarm threshold for the current ITU channel, in GHz, accurate to 0.1 GHz. | As per the MIB. |
| hh3cTransceiverFrequencyErrLoAlarm (1.3.6.1.4.1.25506.2.70.1.1.1.48) | read-only | Integer32 | Standard MIB values. | Low frequency offset alarm threshold for the current ITU channel, in GHz, accurate to 0.1 GHz. | As per the MIB. |
| hh3cTransceiverPartNumber (1.3.6.1.4.1.25506.2.70.1.1.1.49) | read-only | OCTET STRING | Standard MIB values. | Part number of the transceiver module. | As per the MIB. |
| hh3cTransceiverProductCode (1.3.6.1.4.1.25506.2.70.1.1.1.50) | read-only | OCTET STRING | Standard MIB values. | Product code of the transceiver module. | As per the MIB. |
| hh3cTransceiverOriginalSN (1.3.6.1.4.1.25506.2.70.1.1.1.51) | read-only | OCTET STRING | Standard MIB values. | Original serial number of the transceiver module. | As per the MIB. |

hh3cTransceiverChannelTable

About this table

Use this table to obtain statistics about channels of a transceiver module.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cTransceiverChannelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|------------------------------|---|--|
| hh3cTransceiverChannelIndex (1.3.6.1.4.1.25506.2.70.1.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Transceiver module channel index. | As per the MIB. |
| hh3cTransceiverChannelCurTXPower (1.3.6.1.4.1.25506.2.70.1.2.1.2) | read-only | Integer32 | Standard MIB values. | Current transmit power in dBm, accurate to 0.01 dBm. | This object returns 2147483647 when read if this parameter is not supported. |
| hh3cTransceiverChannelCurRXPower (1.3.6.1.4.1.25506.2.70.1.2.1.3) | read-only | Integer32 | Standard MIB values. | Current receiver power in dBm, accurate to 0.01 dBm. | This object returns 2147483647 when read if this parameter is not supported. |
| hh3cTransceiverChannelTemperature (1.3.6.1.4.1.25506.2.70.1.2.1.4) | read-only | Integer32 | Standard MIB values. | Current temperature in °C. | This object returns 2147483647 when read if this parameter is not supported. |
| hh3cTransceiverChannelBiasCurrent (1.3.6.1.4.1.25506.2.70.1.2.1.5) | read-only | Integer32 | Standard MIB values. | Current bias current in mA, accurate to 0.01 mA. | This object returns 2147483647 when read if this parameter is not supported. |
| hh3cTransceiverChannelBiasHiAm (1.3.6.1.4.1.25506.2.70.1.2.1.6) | read-only | Integer32 | Standard MIB values. | High bias current alarm threshold in µA. | As per the MIB. |
| hh3cTransceiverChannelBiasLoAm (1.3.6.1.4.1.25506.2.70.1.2.1.7) | read-only | Integer32 | Standard MIB values. | Low bias current alarm threshold in µA. | As per the MIB. |
| hh3cTransceiverChannelTXPwrHiAm (1.3.6.1.4.1.25506.2.70.1.2.1.8) | read-only | Integer32 | Standard MIB values. | High transmit power alarm threshold in dBm, accurate to 0.01 dBm. | As per the MIB. |
| hh3cTransceiverChannelTXPwrLoAm (1.3.6.1.4.1.25506.2.70.1.2.1.9) | read-only | Integer32 | Standard MIB values. | Low transmit power alarm threshold in dBm, accurate to 0.01 dBm. | As per the MIB. |

hh3cTransceiverITUChanTable

About this table

Use this table to obtain information about ITU channels supported on the transceiver module on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cTransceiverITUChanIdx.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------------|---|-----------------|
| hh3cTransceiverITUChanIdx (1.3.6.1.4.1.25506.2.70.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of an ITU channel on the transceiver module. | As per the MIB. |
| hh3cTransceiverITUChanFreq (1.3.6.1.4.1.25506.2.70.1.3.1.2) | read-only | Integer32 | Standard MIB values. | Frequency of the ITU channel, in THz, accurate to 0.01 THz. | As per the MIB. |
| hh3cTransceiverITUChanWaveLth (1.3.6.1.4.1.25506.2.70.1.3.1.3) | read-only | Integer32 | Standard MIB values. | Wavelength of the ITU channel, in pm. | As per the MIB. |

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HH3C-TRAP-MIB

About this MIB

Use this MIB to enable the device to send a notification to a network management station when a specific event occurs, such as a MAC address table getting full.

MIB file name

hh3c-trap.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cTrap(38)

Scalar objects

hh3cPeriodicalTrapInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-----------------------------|--|----------------------------------|
| hh3cPeriodicalTrapInterval (1.3.6.1.4.1.25506.2.38.1.6.1.1) | read-write | Integer32 | Integer32 (0 10..3600) | Interval for sending periodical traps, in seconds. | Implementation varies by product |

hh3cPeriodicalTrapSwitch

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|------------------------------|--|----------------------------------|
| hh3cPeriodicalTrapSwitch (1.3.6.1.4.1.25506.2.38.1.6.1.2) | read-write | INTEGER | enable(1) , disable(2) | Status of the periodical trap sending feature. | Implementation varies by product |

Tabular objects

hh3cTrapDesInfoTable

About this table

Use this table to configure a trap destination host address and port number.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cTrapDesInfoIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--|--|--|
| hh3cTrapDesInfoIndex (1.3.6.1.4.1.25506.2.38.1.7.1.1.1) | not-accessible | Integer32 | Integer32 (1..20) | Index of a trap destination information entry. | As per the MIB. |
| hh3cTrapDesIPAddress (1.3.6.1.4.1.25506.2.38.1.7.1.1.2) | read-create | IpAddress | Standard MIB values | Trap destination host IP address. | As per the MIB. |
| hh3cTrapDesPort (1.3.6.1.4.1.25506.2.38.1.7.1.1.3) | read-create | Integer32 | Integer32 (0..65535) | Trap destination port number. | As per the MIB. |
| hh3cTrapDesRowStatus (1.3.6.1.4.1.25506.2.38.1.7.1.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| hh3cTrapDesAddrTAddress (1.3.6.1.4.1.25506.2.38.1.7.1.1.5) | read-create | TAddress | Standard MIB values | Transport address. | As per the MIB. |

Notifications

This section contains the HH3C-TRAP-MIB notifications.

hh3cArpTabFullTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|----------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.38.1.2.4.1 | ARP table full | Informational | Major | N/A | ON |

Description

This notification is generated when the ARP table gets full.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.38.1.2.3.1 (hh3cArpTabLen) | Length of the ARP table. | N | Integer32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cRtTabFullTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.38.1.3.5.1 | Routing table full | Informational | Major | N/A | ON |

Description

This notification is generated when the routing table gets full.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.38.1.3.4.1 (hh3cRtTabLen) | Length of the routing table. | N | Integer32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNdTabFullTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.38.1.5.4.1 | ND table full | Informational | Major | N/A | ON |

Description

This notification is generated when the ND table gets full.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.38.1.5.3.1 (hh3cNdTabLen) | Length of the ND table. | N | Integer32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cPeriodicalTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.38.1.6.3.0.1 | SNMP periodical trap | Informational | N/A | N/A | ON |

Description

If no trap occurs during the interval specified by hh3cPeriodicalTrapInterval, an hh3cPeriodicalTrap is generated. If the interval is set to 0, no hh3cPeriodicalTrap will be generated.

Status control

ON

MIB: Set hh3cPeriodicalTrapSwitch to enable(1).

OFF

MIB: Set hh3cPeriodicalTrapSwitch to disable(2).

Objects

N/A

Recommended action

No action is required.

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SYSLOG-MSG-MIB

About this MIB

Use this MIB to manage syslog messages as SNMP objects and enable and view syslog message notifications.

MIB file name

rfc5676-syslog-msg.mib

Root object

iso(1).org(3).dod(6).internet(1)..mgmt(2).mib-2(1).syslogMsgMib(192)

Scalar objects

syslogMsgTable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|----------------------|--|----------------------|
| syslogMsgTableMaxSize (1.3.6.1.2.1.192.1.1.1) | read-write | Unsigned32 | Standard MIB values. | Maximum number of syslog messages in syslogMsgTable. | Default value: 1024. |
| syslogMsgEnableNotifications (1.3.6.1.2.1.192.1.1.2) | read-write | SyslogFacility | true(1),false(2) | Whether syslogMsgNotification notifications are generated. | As per the MIB. |

Tabular objects

syslogMsgTable

About this table

This table contains recent syslog messages.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is syslogMsgIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|---------------------|--------------------------|-----------------|
| syslogMsgIndex (1.3.6.1.2.1.192.1.2.1.1) | not-accessible | Unsigned32 | Standard MIB values | Index of an entry in the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|---|---|---|
|) | | | | syslogMsgTable. | |
| syslogMsgFacility (1.3.6.1.2.1.192.1.2.1.2) | read-only | SyslogFacility | kern(0), user(1), mail(2), daemon(3), auth(4), syslog(5), lpr(6), news(7), uucp(8), cron(9), authpriv(10), ftp(11), ntp(12), audit(13), console(14), cron2(15), local0(16), local1(17), local2(18), local3(19), local4(20), local5(21), local6(22), local7(23) | Facility of the syslog message. | As per the MIB. |
| syslogMsgSeverity (1.3.6.1.2.1.192.1.2.1.3) | read-only | SyslogSeverity | emerg(0), alert(1), crit(2), err(3), warning(4), notice(5), info(6), debug(7) | Severity of the syslog message. | As per the MIB. |
| syslogMsgVersion (1.3.6.1.2.1.192.1.2.1.4) | read-only | Unsigned32 | Unsigned32 (0..999) | Version of the syslog message. | As per the MIB. |
| syslogMsgTimeStamp (1.3.6.1.2.1.192.1.2.1.5) | read-only | SyslogTimeSta mp | OCTET STRING (0 10 13) | Timestamp of the syslog message. | As per the MIB. |
| syslogMsgHostName (1.3.6.1.2.1.192.1.2.1.6) | read-only | DisplayString | OCTET STRING (0..255) | Host name of the syslog message. | As per the MIB. |
| syslogMsgAppName (1.3.6.1.2.1.192.1.2.1.7) | read-only | DisplayString | OCTET STRING (0..48) | Application name of the syslog message. | As per the MIB. |
| syslogMsgProcID (1.3.6.1.2.1.192.1.2.1.8) | read-only | DisplayString | OCTET STRING (0..128) | Process ID of the syslog message. | A zero-length string indicates an unknown process ID. |
| syslogMsgMsgID (1.3.6.1.2.1.192.1.2.1.9) | read-only | DisplayString | OCTET STRING (0..32) | Message ID of the syslog message. | A zero-length string indicates an unknown message ID. |
| syslogMsgSDParams (1.3.6.1.2.1.192.1.2.1.10) | read-only | Unsigned32 | Standard MIB values | Total number of structured data element parameters carried in the syslog message. | As per the MIB. |
| syslogMsgMsg (1.3.6.1.2.1.192.1.2.1.1) | read-only | OCTET STRING | OCTET STRING (0..65535) | Message part of the syslog message. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
| 1) | | | | | |

syslogMsgSDTable

About this table

This table contains structured data elements of syslog messages.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are syslogMsgIndex, syslogMsgSDParamIndex, syslogMsgSDID, and syslogMsgSDParamName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------------|----------------------|--|-----------------|
| syslogMsgSDParamIndex (1.3.6.1.2.1.192.1.3.1.1) | not-accessible | Unsigned32 | Standard MIB values | Index of the structured data element parameters contained in a syslog message. | As per the MIB. |
| syslogMsgSDID (1.3.6.1.2.1.192.1.3.1.2) | not-accessible | DisplayString | OCTET STRING (1..32) | Name (SD-ID) of a structured data element. | As per the MIB. |
| syslogMsgSDParamName (1.3.6.1.2.1.192.1.3.1.3) | not-accessible | DisplayString | OCTET STRING (1..32) | Name of a parameter of the structured data element. | As per the MIB. |
| syslogMsgSDParamValue (1.3.6.1.2.1.192.1.3.1.4) | read-only | SyslogParamValueString | OCTET STRING (1..32) | Value of the parameter of the syslog message. | As per the MIB. |

Notifications

This section contains the SYSLOG-MSG-MIB notifications.

syslogMsgNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.192.0.1 | A syslog message generated | Informational | N/A | N/A | OFF |

Description

This notification is generated when a new syslog message is received and the value of syslogMsgGenerateNotifications is true.

Status control

ON

- CLI: Use the `snmp-agent trap enable syslog` command.
- MIB: Set syslogMsgEnableNotifications to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable syslog` command.
- MIB: Set syslogMsgEnableNotifications to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|----------------|--|
| 1.3.6.1.2.1.192.1.2.1.2 (syslogMsgFacility) | Facility of the syslog message. | N | SyslogFacility | kern(0) user(1) mail(2) daemon(3) auth(4) syslog(5) lpr(6) news(7) uucp(8) cron(9) authpriv(10) ftp(11) ntp(12) audit(13) console(14) cron2(15) local0(16) local1(17) local2(18) local3(19) local4(20) local5(21) local6(22) local7(23) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.2.1.192.1.2.1.3 (syslogMsgSeverity) | Severity of the syslog message. | N | SyslogSeverity | emerg(0) alert(1) crit(2) err(3) warning(4) notice(5) info(6) debug(7) |
| 1.3.6.1.2.1.192.1.2.1.4 (syslogMsgVersion) | Version of the syslog message. | N | Unsigned32 | 0..999 |
| 1.3.6.1.2.1.192.1.2.1.5 (syslogMsgTimeStamp) | Timestamp of the syslog message. | N | SyslogTimeStamp | OCTET STRING (SIZE 0 10 13)) |
| 1.3.6.1.2.1.192.1.2.1.6 (syslogMsgHostName) | Host name of the syslog message. | N | DisplayString | OCTET STRING (SIZE 0..255)) |
| 1.3.6.1.2.1.192.1.2.1.7 (syslogMsgAppName) | Application name of the syslog message. | N | DisplayString | OCTET STRING (SIZE 0..48)) |
| 1.3.6.1.2.1.192.1.2.1.8 (syslogMsgProclD) | Process ID of the syslog message. | N | DisplayString | OCTET STRING (SIZE 0..128)) |
| 1.3.6.1.2.1.192.1.2.1.9 (syslogMsgMsgID) | Message ID of the syslog message. | N | DisplayString | OCTET STRING (SIZE 0..32)) |
| 1.3.6.1.2.1.192.1.2.1.10 (syslogMsgSDParams) | Number of structured data element parameters carried in the syslog message. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.192.1.2.1.11 (syslogMsgMsg) | Message part of the syslog message. | N | OCTET STRING | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-LswMix-MIB

About this MIB

Use this MIB to obtain information about slot roles in an IRF fabric, trigger an active/standby or master/subordinate switchover, and obtain information about switchover records.

MIB file name

hh3c-splat-mix.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswMix(17)

Scalar objects

hh3cLswLastSwitchDate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|---|
| hh3cLswLastSwitchDate (1.3.6.1.4.1.25506.8.35.17.1) | read-only | Integer32 | Standard MIB values. | Date on which the last active/standby or master/subordinate switchover occurred. | The read operation is not supported on a non-default MDC. |

hh3cLswLastSwitchTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|---|
| hh3cLswLastSwitchTime (1.3.6.1.4.1.25506.8.35.17.2) | read-only | Integer32 | Standard MIB values. | Time when the last active/standby or master/subordinate switchover occurred. | The read operation is not supported on a non-default MDC. |

hh3cLswMpuSwitchsNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------|-----------|-----------|--------------|-----------------|--|
| hh3cLswMpuSwitchsNum | read-only | Integer32 | Standard MIB | Number of times | The read operation is not supported on a non-default |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|--------|--------|-------------|--|----------------|
| (1.3.6.1.4.1.25506.8.35.17.3) | | | values. | active/standby or master/subordinate switchovers occurred. | MDC. |

hh3cLswMpuSwitch

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-------------|--|--------------------------------------|
| hh3cLswMpuSwitch (1.3.6.1.4.1.25506.8.35.17.4) | read-write | INTEGER | switch(1) | This object triggers an active/standby or master/subordinate switchover. | The read operation is not supported. |

Tabular objects

hh3cLswXSlotTable

About this table

Use this table to obtain slot role information in an IRF fabric. For modular devices, a slot refers to an MPU or an interface module. For fix-port devices or expandable fixed-port devices, a slot refers to an IRF member device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cLswFrameIndex and hh3cLswSlotIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-----------------------------------|----------------------------------|-----------------|
| hh3cLswMainCardBoardStatus (1.3.6.1.4.1.25506.8.35.17.5.1.1) | read-only | INTEGER | master(1), standby(2), process(3) | Role of a slot in an IRF fabric. | As per the MIB. |
| hh3cLswCrossBarStatus (1.3.6.1.4.1.25506.8.35.17.5.1.2) | read-only | INTEGER | master(1), standby(2) | Cross bar role of the slot. | Not supported. |

Notifications

The following information describes the notifications included in the HH3C-LswMix-MIB module.

hh3cSlaveSwitchOver

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.17.10.1 | An active/standby or master/subordinate switchover occurred. | Informational | Minor | N/A | ON |

Description

(Centralized IRF devices.) This notification is generated when a master/subordinate switchover occurs in an IRF fabric.

(Distributed devices.) This notification is generated when an active/standby or master/subordinate switchover occurs.

Status control

This notification cannot be disabled.

Objects

N/A

Recommended action

1. Locate the issue and handle it accordingly.
 - No action is required if the switchover was performed manually.
 - If the switchover was caused by an exceptional event, you must examine the device running conditions to troubleshoot the issue.
2. If the issue persists, contact H3C Support.

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HH3C-STACK-MIB

About this MIB

Use this MIB to obtain IRF information and manage IRF fabrics.

MIB file name

hh3c-stack.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cStack(91)

Scalar objects

hh3cStackMaxMember

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| hh3cStackMaxMember (1.3.6.1.4.1.25506.2.91.1.1) | read-only | Integer32 | Standard MIB values. | Maximum number of member devices that an IRF fabric can contain. | As per the MIB. |

hh3cStackMemberNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| hh3cStackMemberNum (1.3.6.1.4.1.25506.2.91.1.2) | read-only | Integer32 | Standard MIB values. | Number of member devices that an IRF fabric contains. | As per the MIB. |

hh3cStackMaxConfigPriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| hh3cStackMaxConfigPriority (1.3.6.1.4.1.25506.2.91.1.3) | read-only | Integer32 | Standard MIB values. | The maximum priority value that can be assigned to a member device in an IRF fabric. The member priority can affect master election. | As per the MIB. |

hh3cStackAutoUpdate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------|------------|---------|-------------|-----------------------|-----------------|
| hh3cStackAutoUpdate | read-write | IINTEGE | IINTEGE | Whether an IRF fabric | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------|--------|--------|---------------------------------------|--|----------------|
| (1.3.6.1.4.1.25506.2.91.1.4) | | R | R{ disabled(1), enabled(2) } | <p>supports software auto-update.</p> <p>When you add a device to the IRF fabric, software auto-update compares the startup software images of the device with the current software images of the IRF master. If the two sets of images are different, the device automatically performs the following operations:</p> <ol style="list-style-type: none"> 1. Downloads the current software images of the master. 2. Sets the downloaded images as its main startup software images. 3. Reboots with the new software images to rejoin the IRF fabric. <p>You must manually update the new device with the software images running on the IRF fabric for the device to join the IRF fabric if software auto-update is disabled.</p> | |

hh3cStackMacPersistence

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|---|-----------------|
| hh3cStackMacPersistence (1.3.6.1.4.1.25506.2.91.1.5) | read-write | INTEGER | INTEGER { notPersist(1), persistForSixMin(2), persistForever(3) } | Status of the IRF bridge MAC persistence feature. | As per the MIB. |

hh3cStackLinkDelayInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|------------------|---|-----------------|
| hh3cStackLinkDelayInterval (1.3.6.1.4.1.25506.2.91.1.6) | read-write | Integer32 | SIZE((0..10000)) | IRF link status change report delay, in the range of 1 to 10000 milliseconds. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|--|----------------|
| | | | | If the value is set to 0, link status change events of IRF ports are reported without any delay. | |

hh3cStackTopology

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|---------------------------------|-----------------|
| hh3cStackTopology (1.3.6.1.4.1.25506.2.91.1.7) | read-only | INTEGER | INTEGER { chainConn(1), ringConn(2) } | Topology type of an IRF fabric. | As per the MIB. |

hh3cStackDomainId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|-----------------------|-----------------------------|-----------------|
| hh3cStackDomainId (1.3.6.1.4.1.25506.2.91.1.8) | read-write | Unsigned 32 | SIZE((0..4294967295)) | Domain ID of an IRF fabric. | As per the MIB. |

hh3cStackPortConfigActivate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---|---|-----------------|
| hh3cStackPortConfigActivate (1.3.6.1.4.1.25506.2.91.1.9) | read-write | INTEGER | INTEGER { none(1), set(2) } | Whether to activate IRF port configuration. | As per the MIB. |

Tabular objects

hh3cStackDeviceConfigTable

About this table

This table contains parameters about each IRF member device in an IRF fabric.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is entPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|--|-----------------|
| hh3cStackMemberID (1.3.6.1.4.1.25506.2.91.2.1.1) | read-only | Integer32 | Standard MIB values. | IRF member ID of a member device. The member ID must be unique in the IRF fabric. | As per the MIB. |
| hh3cStackConfigMemberID (1.3.6.1.4.1.25506.2.91.2.1.2) | read-write | Integer32 | Standard MIB values. | IRF member ID that will take effect at the next startup. | As per the MIB. |
| hh3cStackPriority (1.3.6.1.4.1.25506.2.91.2.1.3) | read-write | Integer32 | Standard MIB values. | IRF priority of the member device. The priority can affect master election. | As per the MIB. |
| hh3cStackPortNum (1.3.6.1.4.1.25506.2.91.2.1.4) | read-only | Integer32 | Standard MIB values. | Number of IRF ports enabled on the member device. | As per the MIB. |
| hh3cStackPortMaxNum (1.3.6.1.4.1.25506.2.91.2.1.5) | read-only | Integer32 | Standard MIB values. | Maximum number of IRF ports supported by the member device. | As per the MIB. |

hh3cStackBoardConfigTable

About this table

This table contains role information about each board in an IRF fabric. For modular devices, a board refers to an MPU. For fix-port devices or expandable fixed-port devices, a board refers to an IRF member device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is entPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|-------------|----------------------|-----------------|
| hh3cStackBoardRole (1.3.6.1.4.1.25506.2.91.3.1.1) | read-only | INTEGER | INTEGER { | IRF role of a board. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---|---|-----------------|
| | | | slave(1), master(2), loading(3), other(4) } | | |
| hh3cStackBoardBelongtoMember (1.3.6.1.4.1.25506.2.91.3.1.2) | read-only | Integer32 | Standard MIB values. | IRF member ID of the member device where the board resides. | As per the MIB. |

hh3cStackPortInfoTable

About this table

This table contains IRF port information about each member device in an IRF fabric.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are h3cStackmemberID and h3cStackPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|--|-----------------|
| hh3cStackPortIndex (1.3.6.1.4.1.25506.2.91.4.1.1) | not-accessible | Integer32 | Standard MIB values. | Logical index of an IRF port on a member device. | As per the MIB. |
| hh3cStackPortEnable (1.3.6.1.4.1.25506.2.91.4.1.2) | read-only | INTEGER R | INTEGER { disabled(1), enabled(2) } | Whether the IRF port has been enabled. If IRF physical interfaces have been bound to the IRF port, the IRF port is enabled. If no IRF physical interface has been bound to the IRF port, the IRF port is disabled. | As per the MIB. |
| hh3cStackPortStatus (1.3.6.1.4.1.25506.2.91.4.1.3) | read-only | INTEGER R | INTEGER { up(1), down(2), silent(3), disabled(4) } | Link status of the IRF port. | As per the MIB. |
| hh3cStackNeighbor (1.3.6.1.4.1.25506.2.91.4.1.4) | read-only | Integer32 | Standard MIB values. | IRF member ID of the member device connected to the IRF port. | As per the MIB. |
| hh3cStackPortForwardingPath (1.3.6.1.4.1.25506.2.91.4.1.5) | read-only | OCTET STRING | Standard MIB values. | Forwarding path information for traffic from the IRF port to other member devices in the IRF | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|--|----------------|
| | | | | fabric. The return value is a string of comma-separated IRF member IDs and the string ends with \0. | |

hh3cStackPhyPortInfoTable

About this table

This table contains information about IRF physical interfaces.

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is entPhysicalIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|---|-----------------|
| hh3cStackBelongtoPort (1.3.6.1.4.1.25506.2.91.5.1.1) | read-write | Integer32 | Standard MIB values. | Logical index of an IRF port to which an IRF physical interface is bound. | As per the MIB. |

Notifications

hh3cStackPortLinkStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.1 | The link status of an IRF port changed. | Informational | Warning | N/A | ON |

Description

This notification is generated when the link status of an IRF port changes.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|-----------|--|
| 1.3.6.1.4.1.25506.2.91.2.1.1 (hh3cStackMemberID) | IRF member ID. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.4.1.1 (hh3cStackPortIndex) | IRF port index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.4.1.3 (hh3cStackPortStatus) | Link status of the IRF port. | No | INTEGER | up(1) down(2) silent(3) disabled(4) |

Recommended action

If the IRF port is up, no action is required.

If the IRF port is not up, perform the following tasks to resolve the issue:

1. Check the operating status of the IRF fabric.
 - If the IRF fabric is being established, verify that the IRF port is up after the IRF fabric is established.
 - If the IRF fabric has been established, check the link for connectivity issues and resolve the issues.
2. If the issue persists, contact H3C Support.

hh3cStackTopologyChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.2 | The topology type of an IRF fabric changed. | Informational | Major | N/A | ON |

Description

This notification is generated when the topology type of an IRF fabric changes.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------|-----------------------------|
| 1.3.6.1.4.1.25506.2.91.1.7 (hh3cStackTopology) | Topology type of an IRF fabric. | No | INTEGER | chainConn(1) ringConn(2) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required in the following situations:

- The topology is changed by the administrator.
- The topology changes when the IRF fabric is being established.
- The topology changes from a daisy chain topology to a ring topology.

If the topology changes from ring to daisy chain in other situations, take the following measures to resolve the issue:

1. Check the running status of each member device and the link status and resolve any faulty issues.
2. If the issue persists, contact H3C Support.

hh3cStackMadBfdChangeNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.3 | The state of BFD MAD changed to normal. | Informational | N/A | N/A | ON |

Description

This notification is generated when the state of BFD MAD changes to normal.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--------------------------------|---|-------|----------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the BFD MAD-enabled interface. | No | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | BFD MAD interface name | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cStackMadBfdChangeFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.4 | The state of BFD MAD changed to failure. | Informational | Warning | hh3cStackMadBfdChangeNormal | ON |

Description

This notification is generated when the state of BFD MAD changes to failure.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|---|-------|----------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the BFD MAD-enabled interface. | No | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | BFD MAD interface name. | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the interface is up and the configuration is correct.

hh3cStackMadLacpChangeNormal

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.5 | The state of LACP MAD changed to normal. | Informational | N/A | N/A | ON |

Description

This notification is generated when the state of LACP MAD changes to normal.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|--|-------|----------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the LACP MAD-enabled interface. | No | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | LACP MAD interface name. | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cStackMadLacpChangeFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|---------------|----------|------------------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.6 | The state of LACP MAD changed to failure. | Informational | Warning | hh3cStackMadLacpChangeNormal | ON |

Description

This notification is generated when the state of LACP MAD changes to failure.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|--|-------|----------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the LACP MAD-enabled interface. | No | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | LACP MAD interface name. | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the interface is up and the configuration is correct.

hh3cStackPhysicalIntfLinkUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.7 | An IRF physical interface came up. | Informational | N/A | N/A | ON |

Description

This notification is generated when an IRF physical interface comes up.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.91.2.1.1 (hh3cStackMemberID) | IRF member ID. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.4.1.1 (hh3cStackPortIndex) | IRF port index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.6.1.1 (hh3cStackPhysicalIntfName) | IRF physical interface name. | No | OCTET STRING | OCTET STRING (1..255) |

Recommended action

No action is required.

hh3cStackPhysicalIntfLinkDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--------------------------------------|---------------|----------|-----------------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.8 | An IRF physical interface went down. | Informational | Warning | hh3cStackPhysicalIntfLinkUp | ON |

Description

This notification is generated when an IRF physical interface goes down.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.91.2.1.1 (hh3cStackMemberID) | IRF member ID. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.4.1.1 (hh3cStackPortIndex) | IRF port index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.6.1.1 (hh3cStackPhysicalIntfName) | IRF physical interface name. | No | OCTET STRING | OCTET STRING (1..255) |

Recommended action

Check the IRF physical interface status and handle the issue accordingly.

hh3cStackPhysicalIntfRxTimeout

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.91.6.0.9 | An IRF physical interface cannot receive IRF protocol packets. | Informational | N/A | N/A | ON |

Description

This notification is generated when an IRF physical interface cannot receive IRF protocol packets.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.91.2.1.1 (hh3cStackMemberID) | IRF member ID. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.4.1.1 (hh3cStackPortIndex) | IRF port index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.91.6.1.1 (hh3cStackPhysicalIntfName) | IRF physical interface name. | No | OCTET STRING | OCTET STRING (1..255) |

Recommended action

Check the IRF physical interface for status and configuration errors and check the link for connectivity issues, and correct the errors and handle the issues accordingly.

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HH3C-IF-EXT-MIB

About this MIB

Use this MIB to manage and describe interfaces.

MIB file name

hh3c-if-ext.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3clExt(40)

Scalar objects

hh3clShutDownInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|--------------------------|------------------------------|----------------|
| hh3clShutDownInterval (1.3.6.1.4.1.25506.2.40.1.2) | read-write | Integer32 | Integer32(1..2147483647) | Port status detection timer. | 0..300 |

Tabular objects

hh3clFlowStatTable

About this table

Use this table to obtain the interface traffic information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clStatFlowInterval.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------------|--------------------------------------|-----------------------------------|
| hh3clStatFlowInterval (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.1) | read-write | Integer32 | Integer32(1..300) | Traffic statistics polling interval. | Implementation varies by product. |
| hh3clStatFlowInBits (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.2) | read-only | Unsigned32 | Unsigned32(0..4294967295) | Incoming traffic in bits. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|------------------------------|-----------------|
| hh3clFStatFlowOut Bits (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Outgoing traffic in bits. | As per the MIB. |
| hh3clFStatFlowInPkts (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.4) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Incoming traffic in packets. | As per the MIB. |
| hh3clFStatFlowOutPkts (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.5) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Outgoing traffic in packets. | As per the MIB. |
| hh3clFStatFlowInBytes (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.6) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Incoming traffic in bytes. | As per the MIB. |
| hh3clFStatFlowOutBytes (1.3.6.1.4.1.25506.2.40.2.1.2.1.1.7) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Outgoing traffic in bytes. | As per the MIB. |

hh3clFSpeedStatTable

About this table

Use this table to obtain the interface traffic speed statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clFSpeedStatInterval.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------------|--|-----------------------------------|
| hh3clFSpeedStatInterval (1.3.6.1.4.1.25506.2.40.2.1.2.2.1.1) | read-write | Integer32 | Integer32(1..300) | Interface traffic speed statistics polling interval. 0 indicates the interface traffic speed statistics collection feature is disabled. | Implementation varies by product. |
| hh3clFSpeedStatInPkts (1.3.6.1.4.1.25506.2.40.2.1.2.2.1.2) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Average incoming traffic speed (in pps) of the interface within the specified interval before the latest sampling point. The interval is specified by hh3clFSpeedStatInterval. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------------------|--|-----------------|
| hh3clfSpeedStatOutPkts (1.3.6.1.4.1.25506.2.40.2.1.2.2.1.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Average outgoing traffic speed (in pps) of the interface within the specified interval before the latest sampling point. The interval is specified by hh3clfSpeedStatInterval. | As per the MIB. |
| hh3clfSpeedStatInBytes (1.3.6.1.4.1.25506.2.40.2.1.2.2.1.4) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Average incoming traffic speed (in Bps) of the interface within the specified interval before the latest sampling point. The interval is specified by hh3clfSpeedStatInterval. | As per the MIB. |
| hh3clfSpeedStatOutBytes (1.3.6.1.4.1.25506.2.40.2.1.2.2.1.5) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Average outgoing traffic speed (in Bps) of the interface within the specified interval before the latest sampling point. The interval is specified by hh3clfSpeedStatInterval. | As per the MIB. |

hh3clfHCFlowStatTable

About this table

Use this table to obtain the 64-bit traffic information of interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfStatFlowHCInBits.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|--|--|-----------------|
| hh3clfStatFlowHCInBits (1.3.6.1.4.1.25506.2.40.2.1.2.3.1.1) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Incoming traffic in bits (64-bit version). | As per the MIB. |
| hh3clfStatFlowHCOutBits (1.3.6.1.4.1.25506.2.40.2.1.2.3.1.2) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Outgoing traffic in bits (64-bit version). | As per the MIB. |

| | | | | | |
|--|-----------|---------------------|--|---|-----------------|
| hh3clFStatFlowHC InPkts (1.3.6.1.4.1.25506 .2.40.2.1.2.3.1.3) | read-only | CounterBasedGauge64 | Counter64 (0..184467440737 09551615) | Incoming traffic in packets (64-bit version). | As per the MIB. |
| hh3clFStatFlowHC OutPkts (1.3.6.1.4.1.25506 .2.40.2.1.2.3.1.4) | read-only | CounterBasedGauge64 | Counter64 (0..184467440737 09551615) | Outgoing traffic in packets (64-bit version). | As per the MIB. |
| hh3clFStatFlowHC InBytes (1.3.6.1.4.1.25506 .2.40.2.1.2.3.1.5) | read-only | CounterBasedGauge64 | Counter64 (0..184467440737 09551615) | Incoming traffic in bytes (64-bit version). | As per the MIB. |
| hh3clFStatFlowHC OutBytes (1.3.6.1.4.1.25506 .2.40.2.1.2.3.1.6) | read-only | CounterBasedGauge64 | Counter64 (0..184467440737 09551615) | Outgoing traffic in bytes (64-bit version). | As per the MIB. |

hh3cRTParentIfTable

About this table

Use this table to obtain main interface information of subinterfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cRTParentIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|------------------------------|--|-----------------|
| hh3cRTParentIfIndex (1.3.6.1.4.1.25506 .2.40.2.2.1.1.1) | not-accessible | Integer32 | Integer32(1..2147 483647) | Main interface index. Index of the interface for which you can create subinterfaces. | As per the MIB. |
| hh3cRTMinSubIfOrdinal (1.3.6.1.4.1.25506 .2.40.2.2.1.1.2) | read-only | Integer32 | Integer32(1..2147 483647) | Minimum number of the subinterface that can be created. | As per the MIB. |
| hh3cRTMaxSubIfOrdinal (1.3.6.1.4.1.25506 .2.40.2.2.1.1.3) | read-only | Integer32 | Integer32(1..2147 483647) | Maximum number of the subinterface that can be created. | As per the MIB. |

hh3cRTSubIfTable

About this table

Use this table to obtain information about subinterface information of main interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cRTSubIfParentIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|---------------------------|---|
| hh3cRTSubIfParentIfIndex (1.3.6.1.4.1.25506.2.40.2.2.2.1.1) | not-accessible | Integer32 | Integer32(1..2147483647) | Main interface index. | As per the MIB. |
| hh3cRTSubIfOrdinal (1.3.6.1.4.1.25506.2.40.2.2.2.1.2) | not-accessible | Integer32 | Integer32(1..2147483647) | Subinterface number. | As per the MIB. |
| hh3cRTSubIfSubIfIndex (1.3.6.1.4.1.25506.2.40.2.2.2.1.3) | read-only | Integer32 | Integer32(1..2147483647) | Subinterface index. | As per the MIB. |
| hh3cRTSubIfSubIfDesc (1.3.6.1.4.1.25506.2.40.2.2.2.1.4) | read-only | DisplayString | OCTET STRING(0..255) | Subinterface description. | As per the MIB. |
| hh3cRTSubIfRowStatus (1.3.6.1.4.1.25506.2.40.2.2.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Subinterface state. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cIfLinkModeTable

About this table

Use this table to obtain the interface link mode.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cIfLinkModelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---------------|------------------|-----------------|
| hh3cIfLinkModelIndex (1.3.6.1.4.1.25506.2.40.2.2.3.1.1) | not-accessible | Integer32 | 1..2147483647 | Link mode index. | As per the MIB. |

| | | | | | |
|---|------------|------------|--------------------------------|--|-----------------|
| hh3clfLinkMode (1.3.6.1.4.1.25506 .2.40.2.2.3.1.2) | read-write | INTEGER | bridgeMode(1), routeMode(2) | Current link mode of the interface. | As per the MIB. |
| hh3clfLinkModeS witchSupport (1.3.6.1.4.1.25506 .2.40.2.2.3.1.3) | read-only | TruthValue | true(1), false(2) | Whether the link mode of the interface can be switched. | As per the MIB. |

hh3clfPortTypeTable

About this table

Use this table to obtain the port type of an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfPortTypeIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--------------------------------|--|-----------------|
| hh3clfPortTypeInd ex (1.3.6.1.4.1.25506 .2.40.2.2.4.1.1) | not-accessible | Integer32 | Integer32(1..2147 483647) | Interface index, which is the same as ifIndex in ifTable. | As per the MIB. |
| hh3clfPortType (1.3.6.1.4.1.25506 .2.40.2.2.4.1.2) | read-write | INTEGER | other(1),ethernet(2),fc(3) | Ethernet/ FC mode of an interface. | As per the MIB. |

hh3clfTable

About this table

Use this table to obtain interface-related information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfUpDownTimes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|------------------------------|---|-----------------|
| hh3clfUpDownTim es (1.3.6.1.4.1.25506 .2.40.2.3.2.1.1) | read-only | Integer32 | Integer32(1..2147 483647) | Number of interface up/down events. | As per the MIB. |
| hh3clfMtu (1.3.6.1.4.1.25506) | read-write | Integer32 | Integer32(1..2147 483647) | Interface MTU. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------------|--|---|-----------------------------------|
| .2.40.2.3.2.1.2) | | | | | |
| hh3clfBandwidthRate (1.3.6.1.4.1.25506.2.40.2.3.2.1.3) | accessible-for-notification | Integer32 | Integer32(1..2147483647) | Interface bandwidth. | Not supported |
| hh3clfDiscardPktRate (1.3.6.1.4.1.25506.2.40.2.3.2.1.4) | accessible-for-notification | Integer32 | Integer32(1..2147483647) | Packet loss rate of an interface. | Not supported |
| hh3clfStatusKeepTime (1.3.6.1.4.1.25506.2.40.2.3.2.1.5) | read-only | TimeTicks | TimeTicks(0..4294967295) | Duration of the current interface state. | As per the MIB. |
| hh3clfInNUcastPkts (1.3.6.1.4.1.25506.2.40.2.3.2.1.6) | read-only | Integer32 | Integer32(1..2147483647) | Number of incoming non-unicast packets. | Not supported |
| hh3clfOutNUcastPkts (1.3.6.1.4.1.25506.2.40.2.3.2.1.7) | read-only | Integer32 | Integer32(1..2147483647) | Number of outgoing non-unicast packets. | Not supported |
| hh3clfsPoe (1.3.6.1.4.1.25506.2.40.2.3.2.1.8) | read-only | TruthValue | true(1), false(2) | Support for PoE on an interface. | Not supported |
| hh3clfOperStatus (1.3.6.1.4.1.25506.2.40.2.3.2.1.9) | read-only | INTEGER | up(1), down(2), testing(3), adminDown(4) | Operational state of an interface. | Not supported |
| hh3clfDownTimes (1.3.6.1.4.1.25506.2.40.2.3.2.1.10) | read-only | Integer32 | Integer32(1..2147483647) | Number of link-down events. | Not supported |
| hh3clfPfcStatus (1.3.6.1.4.1.25506.2.40.2.3.2.1.11) | read-write | INTEGER | enable(1), disable(2), auto(3) | PFC mode of an interface. | Implementation varies by product. |
| hh3clfPfcDot1pNoDrop (1.3.6.1.4.1.25506.2.40.2.3.2.1.12) | read-write | BITS | pri0(0), pri1(1), pri2(2), pri3(3), pri4(4), pri5(5), pri6(6), pri7(7) | 802.1p priority list for PFC on an interface. | Implementation varies by product. |
| hh3clfDescription (1.3.6.1.4.1.25506.2.40.2.3.2.1.13) | read-write | DisplayString | OCTET STRING(0..255) | Description of an interface. | As per the MIB. |
| hh3clfFwdErrDiscards (1.3.6.1.4.1.25506.2.40.2.3.2.1.14) | read-only | Unsigned32 | Unsigned32(0..4294967295) | Number of packets dropped because of forwarding entry errors on an interface. | As per the MIB. |

hh3clfUsingTable

About this table

Use this table to obtain information about breakout interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfUsingIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---|--|-----------------|
| hh3clfUsingIndex (1.3.6.1.4.1.25506.2.40.2.3.4.1) | not-accessible | Integer32 | Integer32(1..2147483647) | Index of an interface that can be split or combined. | As per the MIB. |
| hh3clfUsingSupportType (1.3.6.1.4.1.25506.2.40.2.3.4.2) | read-only | Integer32 | Integer32(1..2147483647) | Interface type that an interface can be split or combined into. | As per the MIB. |
| hh3clfUsingType (1.3.6.1.4.1.25506.2.40.2.3.4.3) | read-write | INTEGER | noUsing(0), using10GE(1), using20GE(2), using40GE(3), using100GE(4), using25GE(5), using50GE(6) using200GE(7) using400GE(8) | Interface type that an interface will be split or combined into. | As per the MIB. |
| hh3clfUsingStatus (1.3.6.1.4.1.25506.2.40.2.3.4.4) | read-only | INTEGER | noUsing(0), needReboot(1) | State of the splitting or combining operation. | As per the MIB. |

hh3clfQueBufferTable

About this table

Use this table to obtain the interface buffer information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfQueId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|---|---|-----------------|
| hh3clfQueId (1.3.6.1.4.1.25506.2.40.2.2.6.1.1) | read-only | INTEGER | que0(1), que1(2), que2(3), que3(4), que4(5), que5(6), que6(7), que7(8) | ID of an interface buffer queue. | As per the MIB. |
| hh3clfQueOutUcastTotal (1.3.6.1.4.1.25506.2.40.2.2.6.1.2) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Total buffer of an outbound unicast queue. | As per the MIB. |
| hh3clfQueOutUcastFree (1.3.6.1.4.1.25506.2.40.2.2.6.1.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Available buffer of an outbound unicast queue. | As per the MIB. |
| hh3clfQueOutUcastUsedRatio (1.3.6.1.4.1.25506.2.40.2.2.6.1.4) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Buffer usage of an outbound unicast queue. | As per the MIB. |
| hh3clfQueOutUcastUsedPeak (1.3.6.1.4.1.25506.2.40.2.2.6.1.5) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Peak buffer usage of an outbound unicast queue. | As per the MIB. |
| hh3clfQueOutUcastThreshold (1.3.6.1.4.1.25506.2.40.2.2.6.1.6) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Buffer alarm threshold of an outbound unicast queue. | As per the MIB. |
| hh3clfQueOutUcastOverThres (1.3.6.1.4.1.25506.2.40.2.2.6.1.7) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Number of buffer usage alarms of an outbound unicast queue. | As per the MIB. |
| hh3clfQueInTotal (1.3.6.1.4.1.25506.2.40.2.2.6.1.8) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Total buffer of an inbound unicast queue. | As per the MIB. |
| hh3clfQueInFree (1.3.6.1.4.1.25506.2.40.2.2.6.1.9) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Available buffer of an inbound unicast queue. | As per the MIB. |
| hh3clfQueInUsedRatio (1.3.6.1.4.1.25506.2.40.2.2.6.1.10) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Buffer usage of an inbound unicast queue. | As per the MIB. |
| hh3clfQueInUsedPeak (1.3.6.1.4.1.25506.2.40.2.2.6.1.11) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Peak buffer usage of an inbound unicast queue. | As per the MIB. |
| hh3clfQueInThreshold (1.3.6.1.4.1.25506.2.40.2.2.6.1.12) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Buffer alarm threshold of an inbound unicast queue. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------------------|--|-----------------|
| hh3clfQueInOverThres (1.3.6.1.4.1.25506.2.40.2.2.6.1.13) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Number of buffer usage alarms of an inbound unicast queue. | As per the MIB. |
| hh3clfQueInHeadRoomTotal (1.3.6.1.4.1.25506.2.40.2.2.6.1.14) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Total headroom of an inbound queue. | As per the MIB. |
| hh3clfQueInHeadRoomFree (1.3.6.1.4.1.25506.2.40.2.2.6.1.15) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Available headroom of an inbound queue. | As per the MIB. |
| hh3clfQueInHeadRoomUsedRatio (1.3.6.1.4.1.25506.2.40.2.2.6.1.16) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Headroom usage of an inbound queue. | As per the MIB. |
| hh3clfQueInHeadRoomUsedPeak (1.3.6.1.4.1.25506.2.40.2.2.6.1.17) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Peak headroom usage of an inbound unicast queue. | As per the MIB. |

hh3clfHCSpeedStatTable

About this table

Use this table to obtain the 64-bit packet statistics of an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfSpeedStatHCInPkts.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------|--|--|-----------------|
| hh3clfSpeedStatHCInPkts (1.3.6.1.4.1.25506.2.40.2.1.2.4.1.1) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Average incoming traffic speed (in packets) of the interface within the specified interval before the latest sampling point. | As per the MIB. |
| hh3clfSpeedStatHCOutPkts (1.3.6.1.4.1.25506.2.40.2.1.2.4.1.2) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Average outgoing traffic speed (in packets) of the interface within the specified interval before the latest sampling point. | As per the MIB. |
| hh3clfSpeedStatHCInBytes (1.3.6.1.4.1.25506.2.40.2.1.2.4.1.3) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Average incoming traffic speed (in bytes) of the interface within the specified interval before the latest sampling point. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|--|--|-----------------|
| .2.40.2.1.2.4.1.3) | | | | interface within the specified interval before the latest sampling point. | |
| hh3clfSpeedStatH COutBytes (1.3.6.1.4.1.25506 .2.40.2.1.2.4.1.4) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Average outgoing traffic speed (in bytes) of the interface within the specified interval before the latest sampling point. | As per the MIB. |

hh3clfExtTrapCfgTable

About this table

Use this table to obtain information about the interface bandwidth and packet loss rate.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clfBandwidthUpperLimit.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|--------------------------|--|----------------|
| hh3clfBandwidthUpperLimit (1.3.6.1.4.1.25506 .2.40.3.1.1.1.1) | read-write | Integer32 | Integer32(1..2147483647) | Upper limit of the interface bandwidth. | Not supported |
| hh3clfDiscardPktRateUpperLimit (1.3.6.1.4.1.25506 .2.40.3.1.1.1.2) | read-write | Integer32 | Integer32(1..2147483647) | Upper limit of the interface packet loss rate. | Not supported |

Notifications

The following information describes the notifications included in the HH3C-IF-EXT-MIB module.

hh3clfPortUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|---------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506. 2.40.3.0.5 | Link-up alarm | Informational | - | - | ON |

Description

The notification is generated when physical state of the interface changes to up.

Status control

ON

CLI: `snmp-agent trap enable standard linkup`

OFF

CLI: `undo snmp-agent trap enable standard linkup`

Objects

| OID (object name) | Description | Index | Type | Value range |
|----------------------------------|------------------------|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.1 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |

Recommended action

No action is required.

hh3clfPortDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506. 2.40.3.0.6 | Link-down alarm. | Informational | Warning | - | ON |

Description

The notification is generated when physical state of the interface changes to down.

Status control

ON

CLI: `snmp-agent trap enable standard linkup`

OFF

CLI: `undo snmp-agent trap enable standard linkup`

Objects

| OID (object name) | Description | Index | Type | Value range |
|----------------------------------|------------------|-------|-----------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |

| | | | | |
|----------------------------------|------------------------|----|--------------|---------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
|----------------------------------|------------------------|----|--------------|---------------------|

Recommended action

No action is required.

hh3clfMonInputUsageRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.1 | Inbound bandwidth usage rising alarm. | Informational | Warning | - | ON |

Description

The notification is generated when the inbound bandwidth usage exceeds the upper threshold.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor input-usage`

OFF

CLI: `undo snmp-agent trap enable ifmonitor input-usage`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.1(hh3clfMonInputUsageLowThres) | Lower threshold for the inbound bandwidth usage. | No | Unsigned32 | 0-100 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.2(hh3clfMonInputUsageHighThres) | Upper threshold for the inbound bandwidth usage. | No | Unsigned32 | 0-100 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.1(hh3clfMonInputUsageStatistics) | Inbound bandwidth usage statistics. | No | Counter64 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that the upper threshold is set reasonably.

2. If the issue persists, contact H3C Support.

hh3clfMonInputUsageResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.2 | Inbound bandwidth usage recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the inbound bandwidth usage drops from above the upper threshold to below the lower threshold.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor input-usage`

OFF

CLI: `undo snmp-agent trap enable ifmonitor input-usage`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.1 (hh3clfMonInputUsageLowThres) | Lower threshold for the inbound bandwidth usage. | No | Unsigned32 | 0-100 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.2 (hh3clfMonInputUsageHighThres) | Upper threshold for the inbound bandwidth usage. | No | Unsigned32 | 0-100 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.1 (hh3clfMonInputUsageStatistics) | Inbound bandwidth usage statistics. | No | Counter64 | Standard MIB values. |

Recommended action

No action is required.

hh3clfMonOutputUsageRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.3 | Outbound bandwidth usage rising alarm | Informational | Warning | - | ON |

Description

The notification is generated when the outbound bandwidth usage exceeds the upper threshold.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor output-usage`

OFF

CLI: `undo snmp-agent trap enable ifmonitor output-usage`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.3(hh3clfMonOutputUsageLowThres) | Lower threshold for the outbound bandwidth usage. | No | Unsigned32 | 0-100 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.4(hh3clfMonOutputUsageHighThres) | Upper threshold for the outbound bandwidth usage. | No | Unsigned32 | 0-100 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.2(hh3clfMonOutputUsageStatistics) | Outbound bandwidth usage statistics. | No | Counter64 | Standard MIB values. |

Recommended action

No action is required.

hh3clfMonOutputUsageResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.4 | Outbound bandwidth usage recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the outbound bandwidth usage drops from above the upper threshold to below the lower threshold.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor output-usage`

OFF

CLI: `undo snmp-agent trap enable ifmonitor output-usage`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.3(hh3clfMonO utputUsageLowThres) | Lower threshold for the outbound bandwidth usage. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.4(hh3clfMonO utputUsageHighThres) | Upper threshold for the outbound bandwidth usage. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.1.1.1.2(hh3clfMonO utputUsageStatistics) | Outbound bandwidth usage statistics. | No | Counter64 | Standard MIB values. |

Recommended action

No action is required.

hh3clfMonInputErrorAlarmRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|---|---------------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.40.6.0.5 | Inbound error packet rising alarm | Informational | Warning | - | ON |

Description

The notification is generated when the number of inbound error packets exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor input-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor input-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.6(hh3clfMonInputErrorAlarmHighThresholds) | Upper threshold for the number of inbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.5(hh3clfMonInputErrorAlarmLowThresholds) | Lower threshold for the number of inbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.3(hh3clfMonInputErrorAlarmStatistics) | Inbound error alarm statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.7(hh3clfMonInputErrorAlarmInterval) | Inbound error alarm statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

To resolve the issue:

1. Verify that the upper threshold is set reasonably.
2. If the issue persists, contact H3C Support.

hh3clfMonInputErrorAlarmResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.6 | Inbound error packet recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of inbound error packets drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor input-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor input -error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.5(hh3clfMonInputErrorAlarmLowThresholds) | Lower threshold for the number of inbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.6(hh3clfMonInputErrorAlarmHighThresholds) | Upper threshold for the number of inbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.3(hh3clfMonInputErrorAlarmStatistics) | Inbound error alarm statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.7(hh3clfMonInputErrorAlarmInterval) | Inbound error alarm statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonOutputErrorAlarmRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.7 | Outbound error packet rising alarm | Informational | Warning | - | ON |

Description

The notification is generated when the number of outbound error packets exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor output-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor output-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---------------------|------------------|-------|-----------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 | Interface index. | Yes | Integer32 | Standard MIB values. |

| | | | | |
|---|---|----|--------------|---------------------|
| (ifIndex) | | | | |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.9(hh3clfMonO utputErrorAlarmHighT hres) | Upper threshold for the number of outbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.8(hh3clfMonO utputErrorAlarmLowTh res) | Lower threshold for the number of outbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.1.1.1.4(hh3clfMonO utputErrorAlarmStatisti cs) | Outbound error alarm statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.10(hh3clfMon OutputErrorAlarmInter val) | Outbound error alarm statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonOutputErrorAlarmResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|--|---------------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.40.6.0.8 | Outbound error packet recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of outbound error packets drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor output-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor output-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|----------------------------------|------------------------|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |

| | | | | |
|---|---|----|------------|--------------|
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.9(hh3clfMonOutputErrorAlarmHighThres) | Upper threshold for the number of outbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.8(hh3clfMonOutputErrorAlarmLowThres) | Lower threshold for the number of outbound error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.4(hh3clfMonOutputErrorAlarmStatistics) | Outbound error alarm statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.10(hh3clfMonOutputErrorAlarmInterval) | Outbound error alarm statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonSdhErrorRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.9 | SDH error packet rising alarm | Informational | - | - | ON |

Description

The notification is generated when the number of SDH error packets exceeds the upper threshold within the specified interval.

Status control

ON

Syntax: `snmp-agent trap enable ifmonitor sdh-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor sdh-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.11(hh3clfMonSdhErrorLowThres) | Lower threshold for the number of SDH error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.12(hh3clfMonSdhErrorHighThres) | Upper threshold for the number of SDH error packets. | No | Unsigned32 | 1-4294967295 |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------|--------------|
| SdhErrorHighThres) | packets. | | | |
| 1.3.6.1.4.1.25506.2.40 .5.1.1.1.5(hh3clfMonSdhErrorStatistics) | SDH error statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.13(hh3clfMonSdhErrorInterval) | SDH error statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

To resolve the issue:

1. Verify that the upper threshold is set reasonably.
2. If the issue persists, contact H3C Support.

hh3clfMonSdhErrorResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.10 | SDH error packet recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of SDH error packets drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor sdh-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor sdh-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.11(hh3clfMonSdhErrorLowThres) | Lower threshold for the number of SDH error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.2.1.1.12(hh3clfMonSdhErrorHighThres) | Upper threshold for the number of SDH error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40 .5.1.1.1.5(hh3clfMonSdhErrorStatistics) | SDH error statistics. | No | Counter64 | 1-4294967295 |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|-------------|
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.13(hh3clfMonSdhErrorInterval) | SDH error statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonSdhB1ErrorRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.11 | SDH B1 error packet rising alarm | Informational | - | - | ON |

Description

The notification is generated when the number of SDH B1 error packets exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor sdh-b1-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor sdh-b1-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.14(hh3clfMonSdhB1ErrorLowThres) | Lower threshold for the number of SDH B1 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.15(hh3clfMonSdhB1ErrorHighThres) | Upper threshold for the number of SDH B1 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.6(hh3clfMonSdhB1ErrorStatistics) | SDH B1 error packet statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.16(hh3clfMonSdhB1ErrorInterval) | SDH B1 error statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

To resolve the issue:

1. Verify that the upper threshold is set reasonably.
2. If the issue persists, contact H3C Support.

hh3clfMonSdhB1ErrorResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.12 | SDH B1 error packet recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of SDH B1 error packets drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor sdh-b1-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor sdh-b1-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.14(hh3clfMonSdhB1ErrorLowThres) | Lower threshold for the number of SDH B1 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.15(hh3clfMonSdhB1ErrorHighThres) | Upper threshold for the number of SDH B1 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.6(hh3clfMonSdhB1ErrorStatistics) | SDH B1 error packet statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.16(hh3clfMonSdhB1ErrorInterval) | SDH B1 error statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonSdhB2ErrorRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.13 | SDH B2 error packet rising alarm | Informational | - | - | ON |

Description

The notification is generated when the number of SDH B2 error packets exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor sdh-b2-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor sdh-b2-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.17(hh3clfMonSdhB2ErrorLowThres) | Lower threshold for the number of SDH B2 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.18(hh3clfMonSdhB2ErrorHighThres) | Upper threshold for the number of SDH B2 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.7(hh3clfMonSdhB2ErrorStatistics) | SDH B2 error packet statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.19(hh3clfMonSdhB2ErrorInterval) | SDH B2 error statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonSdhB2ErrorResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.14 | SDH B2 error packet rising alarm | Informational | - | - | ON |

Description

The notification is generated when the number of SDH B2 error packets drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor sdh-b2-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor sdh-b2-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.17(hh3clfMonSdhB2ErrorLowThres) | Lower threshold for the number of SDH B2 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.18(hh3clfMonSdhB2ErrorHighThres) | Upper threshold for the number of SDH B2 error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.7(hh3clfMonSdhB2ErrorStatistics) | SDH B2 error statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.19(hh3clfMonSdhB2ErrorInterval) | SDH B2 error statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonCRCErrorRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.15 | CRC error packet rising alarm | Informational | Minor | - | ON |

Description

The notification is generated when the number of CRC error packets exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor crc-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor crc-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.21(hh3clfMonCRCErrorHighThres) | Upper threshold for the number of CRC error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.20(hh3clfMonCRCErrorLowThres) | Lower threshold for the number of CRC error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.8(hh3clfMonCRCErrorStatistics) | CRC error statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.22(hh3clfMonCRCErrorInterval) | CRC error statistics collection interval. | No | Unsigned32 | 0-65535 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.23(hh3clfMonCRCErrorType) | CRC error statistics. | No | INTEGER | 1-2 |

Recommended action

To resolve the issue:

1. Verify that the upper threshold is set reasonably.
2. If the issue persists, contact H3C Support.

hh3clfMonCRCErrorResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.16 | CRC error packet recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of CRC error packets drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor crc-error`

OFF

CLI: `undo snmp-agent trap enable ifmonitor crc-error`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.21(hh3clfMonCRCErrorHighThres) | Upper threshold for the number of CRC error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.20(hh3clfMonCRCErrorLowThres) | Lower threshold for the number of CRC error packets. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.8(hh3clfMonCRCErrorStatistics) | CRC error statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.22(hh3clfMonCRCErrorInterval) | CRC error statistics collection interval. | No | Unsigned32 | 0-65535 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.23(hh3clfMonCRCErrType) | CRC error statistics. | No | INTEGER | 1-2 |

Recommended action

No action is required.

hh3clfMonRxPauseFrameRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.17 | Received pause frame rising alarm | Informational | - | - | ON |

Description

The notification is generated when the number of received pause frames exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor rx-pause`

OFF

CLI: `undo snmp-agent trap enable ifmonitor rx-pause`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.25(hh3clfMonRxPauseFrameHighThres) | Upper threshold for received pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.24(hh3clfMonRxPauseFrameLowThres) | Lower threshold for received pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.9(hh3clfMonRxPauseFrameStatistics) | Received pause frame statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.26(hh3clfMonRxPauseFrameInterval) | Received pause frame statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonRxPauseFrameResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.18 | Received pause frame recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of received pause frames drops from above the upper threshold to below the lower-threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor rx-pause`

OFF

CLI: `undo snmp-agent trap enable ifmonitor rx-pause`

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.24(hh3clfMonRxPauseFrameLowThres) | Lower threshold for received pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.25(hh3clfMonRxPauseFrameHighThres) | Upper threshold for received pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.9(hh3clfMonRxPauseFrameStatistics) | Received pause frame statistics collection interval. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.26(hh3clfMonRxPauseFrameInterval) | Upper threshold for received pause frames. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

hh3clfMonTxPauseFrameRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.19 | Transmitted pause frame rising alarm | Informational | - | - | ON |

Description

The notification is generated when the number of transmitted pause frames exceeds the upper threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor tx-pause`

OFF

CLI: `undo snmp-agent trap enable ifmonitor tx-pause`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.28(hh3clfMonTxPauseFrameHighThres) | Upper threshold for transmitted pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.27(hh3clfMonTxPauseFrameLowThres) | Lower threshold for transmitted pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.10(hh3clfMonTxPauseFrameStatistics) | Transmitted pause frame statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.29(hh3clfMonTxPauseFrameInterval) | Transmitted pause frame statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

To resolve the issue:

1. Verify that the upper threshold is set reasonably.
2. If the issue persists, contact H3C Support.

hh3clfMonTxPauseFrameResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.40.6.0.20 | Transmitted pause frame recovery alarm | Informational | - | - | ON |

Description

The notification is generated when the number of transmitted pause frames drops from above the upper threshold to below the lower threshold within the specified interval.

Status control

ON

CLI: `snmp-agent trap enable ifmonitor tx-pause`

OFF

CLI: `undo snmp-agent trap enable ifmonitor tx-pause`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | No | OCTET STRING | Unsigned32 (0..255) |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.28(hh3clfMonTxPauseFrameHighThres) | Upper threshold for transmitted pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.27(hh3clfMonTxPauseFrameLowThres) | Lower threshold for transmitted pause frames. | No | Unsigned32 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.1.1.1.10(hh3clfMonTxPauseFrameStatistics) | Transmitted pause frame statistics. | No | Counter64 | 1-4294967295 |
| 1.3.6.1.4.1.25506.2.40.5.2.1.1.29(hh3clfMonTxPauseFrameInterval) | Transmitted pause frame statistics collection interval. | No | Unsigned32 | 0-65535 |

Recommended action

No action is required.

1.

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HH3C-LswINF-MIB

About this MIB

Use this MIB to manage interfaces.

An isolation group either can have only one uplink port or does not have any uplink port. You can create an isolation group, specify an uplink port for the group, add member ports to the group, and then remove the uplink port.

Speed autonegotiation allows an interface to operate at the possible fastest speed. You can set the speed modes that an interface can automatically negotiated with the peer interface to meet various speed requirements.

MIB file name

hh3c-splat-inf.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswL2InfMib(5)

Scalar objects

hh3cSlotPortMax

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-------------|------------------------------------|-----------------|
| hh3cSlotPortMax (1.3.6.1.4.1.25506.8.35.5.1.1) | read-only | INTEGER | 1..65535 | Maximum number of ports on a slot. | As per the MIB. |

hh3cSwitchPortMax

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-------------|--|-----------------|
| hh3cSwitchPortMax (1.3.6.1.4.1.25506.8.35.5.1.2) | read-only | INTEGER | 1..65535 | Maximum number of ports on the switch. | As per the MIB. |

hh3cIsolateGroupMax

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--------------------------|---|-----------------|
| hh3cIsolateGroupMax (1.3.6.1.4.1.25506.8.35.5.1.5) | read-only | Integer32 | Integer32(1..2147483647) | Maximum number of isolation groups supported by the switch. | As per the MIB. |

hh3cMaxMacLearnRange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------|-----------|-----------|--------------------------|---------------------------------|-----------------------------------|
| hh3cMaxMacLearnRange | read-only | Integer32 | Integer32(1..2147483647) | Maximum number of MAC addresses | Implementation varies by product. |

| | | | | | |
|---------------------------------|--|--|--|----------------------------|--|
| (1.3.6.1.4.1.25506.8.35.5.1.12) | | | | supported by an interface. | |
|---------------------------------|--|--|--|----------------------------|--|

Tabular objects

hh3cifXXTable

About this table

This table contains extended information for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifUnBoundPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|--|--|---|
| hh3cifUnBoundPort (1.3.6.1.4.1.25506.8.35.1.1.1.1) | read-only | TruthValue | true(1), false(2) | Whether an interface is a member port of an aggregate interface. | Not supported |
| hh3cifISPhyPort (1.3.6.1.4.1.25506.8.35.1.1.1.2) | read-only | TruthValue | true(1), false(2) | Whether the interface is a physical interface. | Not supported |
| hh3cifAggregatePort (1.3.6.1.4.1.25506.8.35.1.1.1.3) | read-only | TruthValue | true(1), false(2) | Whether the interface is an aggregate interface. | Not supported |
| hh3cifMirrorPort (1.3.6.1.4.1.25506.8.35.1.1.1.4) | read-write | TruthValue | true(1), false(2) | Whether the interface is a mirroring interface. | Not supported. When read, this object returns false. |
| hh3cifVLANType (1.3.6.1.4.1.25506.8.35.1.1.1.5) | read-write | INTEGER | vLANTrunk(1), access(2), hybrid(3), fabric(4) | VLAN type of the interface. | Value fabric(4) is not supported. |
| hh3cifMcastControl (1.3.6.1.4.1.25506.8.35.1.1.1.6) | read-write | INTEGER | INTEGER (0..100) | Multicast suppression threshold. | Implementation varies by product. |
| hh3cifFlowControl (1.3.6.1.4.1.25506.8.35.1.1.1.7) | read-write | TruthValue | true(1), false(2) | Flow control status on the interface. | As per the MIB. |
| hh3cifSrcMacControl (1.3.6.1.4.1.25506.8.35.1.1.1.8) | read-only | TruthValue | true(1), false(2) | Whether to filter packets by source MAC address. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|--|---|-----------------------------------|
| hh3cifClearStat (1.3.6.1.4.1.25506.8.35.1.1.1.9) | read-write | INTEGER | clear(1) | Clear packet statistics on the interface. | Supports only the read operation. |
| hh3cifXXBasePort Index (1.3.6.1.4.1.25506.8.35.1.1.1.10) | read-only | INTEGER | INTEGER | Index of the interface. | As per the MIB. |
| hh3cifXXDevPortI ndex (1.3.6.1.4.1.25506.8.35.1.1.1.11) | read-only | INTEGER | INTEGER | Index of the interface. | As per the MIB. |
| hh3cifPpsMcastC ontrol (1.3.6.1.4.1.25506.8.35.1.1.1.12) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Multicast suppression threshold in pps. | As per the MIB. |
| hh3cifPpsBcastDi sValControl (1.3.6.1.4.1.25506.8.35.1.1.1.13) | read-write | INTEGER | enable(1), disable(2) | Enabling status of broadcast suppression in pps mode. | Not supported |
| hh3cifUniSuppres sionStep (1.3.6.1.4.1.25506.8.35.1.1.1.14) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Step of unicast suppression in percentage. | Not supported |
| hh3cifPpsUniSupp ressionMax (1.3.6.1.4.1.25506.8.35.1.1.1.15) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Maximum number of the unicast suppression threshold in pps. | Not supported |
| hh3cifMulSuppres sionStep (1.3.6.1.4.1.25506.8.35.1.1.1.16) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Step of multicast suppression in percentage. | Not supported |
| hh3cifPpsMulSup pressionMax (1.3.6.1.4.1.25506.8.35.1.1.1.17) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Maximum number of multicast suppression threshold in pps | Not supported |
| hh3cifUniSuppres sion (1.3.6.1.4.1.25506.8.35.1.1.1.18) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Unicast suppression threshold in percentage. | Implementation varies by product. |
| hh3cifPpsUniSupp ression (1.3.6.1.4.1.25506.8.35.1.1.1.19) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Unicast suppression threshold in pps. | As per the MIB. |
| hh3cifMulSuppres sion (1.3.6.1.4.1.25506.8.35.1.1.1.20) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Multicast suppression threshold in percentage. | Implementation varies by product. |
| hh3cifPpsMulSup pression (1.3.6.1.4.1.25506.8.35.1.1.1.21) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Multicast suppression threshold in pps. | As per the MIB. |
| hh3cifComboActiv ePort (1.3.6.1.4.1.25506 | read-write | INTEGER | fiber(1), copper(2) | Active port of a combo interface. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------------------|--|--|----------------|
| .8.35.1.1.1.22) | | | na(3) | | |
| hh3cifBMbpsMulS uppressionMax (1.3.6.1.4.1.25506 .8.35.1.1.1.23) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Maximum value of the multicast suppression threshold in Mbps. | Not supported |
| hh3cifBMbpsMulS uppression (1.3.6.1.4.1.25506 .8.35.1.1.1.24) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Multicast suppression threshold in Mbps. | Not supported |
| hh3cifBKbpsMulS uppressionMax (1.3.6.1.4.1.25506 .8.35.1.1.1.25) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Maximum value of the multicast suppression threshold in kbps. | Not supported |
| hh3cifBKbpsMulS uppressionStep (1.3.6.1.4.1.25506 .8.35.1.1.1.26) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Step of multicast suppression in kbps. | Not supported |
| hh3cifBKbpsMulS uppression (1.3.6.1.4.1.25506 .8.35.1.1.1.27) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Multicast suppression in kbps. | Not supported |
| hh3cifUnknownPa cketDropMul (1.3.6.1.4.1.25506 .8.35.1.1.1.28) | read-write | INTEGER | disable(name) | Enabling status of dropping unknown multicast packets. | Not supported |
| hh3cifUnknownPa cketDropUni (1.3.6.1.4.1.25506 .8.35.1.1.1.29) | read-write | INTEGER | disable(name) | Enabling status of dropping unknown unicast packets. | Not supported |
| hh3cifBMbpsUniS uppressionMax (1.3.6.1.4.1.25506 .8.35.1.1.1.30) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Maximum value of the unicast suppression threshold in Mbps. | Not supported |
| hh3cifBMbpsUniS uppression (1.3.6.1.4.1.25506 .8.35.1.1.1.31) | read-write | Integer32 | Integer32 (-2147483648..21 47483647) | Unicast suppression threshold in Mbps. | Not supported |
| hh3cifBKbpsUniS uppressionMax (1.3.6.1.4.1.25506 .8.35.1.1.1.32) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Maximum value of the unicast suppression threshold in kbps. | Not supported |
| hh3cifBKbpsUniS uppressionStep (1.3.6.1.4.1.25506 .8.35.1.1.1.33) | read-only | Integer32 | Integer32 (-2147483648..21 47483647) | Step of unicast suppression in kbps. | Not supported |
| hh3cifBKbpsUniS uppression (1.3.6.1.4.1.25506 .8.35.1.1.1.34) | read-write | Integer32 | Integer32 (-2147483648..21 47483647) | Unicast suppression threshold in kbps. | Not supported |
| hh3cifOutPayload Octets (1.3.6.1.4.1.25506 | read-only | CounterBasedGa uge64 | Counter64 (0..184467440737 09551615) | Number of octets transmitted by the interface. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------------|--|---|-----------------|
| .8.35.1.1.1.35) | | | | | |
| hh3cifInPayloadOctets (1.3.6.1.4.1.25506.8.35.1.1.1.36) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Number of octets received on the interface. | Not supported |
| hh3cifInErrorPktsRate (1.3.6.1.4.1.25506.8.35.1.1.1.37) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Number of error packets on the interface. | Not supported |
| hh3cifInPkts (1.3.6.1.4.1.25506.8.35.1.1.1.38) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Number of correct packets on the interface. | Not supported |
| hh3cifInNormalPackets (1.3.6.1.4.1.25506.8.35.1.1.1.39) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Number of correct packets received on the interface. | Not supported |
| hh3cifOutPkts (1.3.6.1.4.1.25506.8.35.1.1.1.40) | read-only | CounterBasedGauge64 | Counter64 (0..18446744073709551615) | Number of correct packets transmitted by the interface. | Not supported |
| hh3cifMulSuppressionFlag (1.3.6.1.4.1.25506.8.35.1.1.1.41) | read-write | INTEGER | all(1), unknown(2) | Flag of multicast suppression. | As per the MIB. |

hh3cifHybridPortTable

About this table

This table contains hybrid interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifHybridPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|--------------------------|---|-----------------|
| hh3cifHybridPortIndex (1.3.6.1.4.1.25506.8.35.1.3.1.1) | read-only | INTEGER | INTEGER | Index of a hybrid interface. | As per the MIB. |
| hh3cifHybridTaggedVlanListLow (1.3.6.1.4.1.25506.8.35.1.3.1.2) | read-write | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of tagged VLANs (in the range of VLAN 1 to VLAN 2048). Each bit in an octet represents a | As per the MIB. |

| | | | | | |
|--|------------|--------------|-----------------------|--|-----------------|
| | | | | VLAN. If a bit is set to 1, the VLAN represented by this bit is a tagged VLAN. | |
| hh3cifHybridTaggedVlanListHigh (1.3.6.1.4.1.25506.8.35.1.3.1.3) | read-write | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of tagged VLANs (in the range of VLAN 2049 to VLAN 4094). Each bit in an octet represents a VLAN. If a bit is set to 1, the VLAN represented by this bit is a tagged VLAN. | As per the MIB. |
| hh3cifHybridUntaggedVlanListLow (1.3.6.1.4.1.25506.8.35.1.3.1.4) | read-write | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of untagged VLANs (in the range of VLAN 1 to VLAN 2048). Each bit in an octet represents a VLAN. If a bit is set to 1, the VLAN represented by this bit is an untagged VLAN. | As per the MIB. |
| hh3cifHybridUntaggedVlanListHigh (1.3.6.1.4.1.25506.8.35.1.3.1.5) | read-write | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of untagged VLANs (in the range of VLAN 2049 to VLAN 4094). Each bit in an octet represents a VLAN. If a bit is set to 1, the VLAN represented by this bit is an untagged VLAN. | As per the MIB. |

hh3cifComboPortTable

About this table

This table contains combo interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifComboPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---|-----------------------------------|-----------------|
| hh3cifComboPortIndex (1.3.6.1.4.1.25506.8.35.1.4.1.1) | read-only | Integer32 | Integer32(1..2147483647) | Index of a combo interface. | As per the MIB. |
| hh3cifComboPortCurActive (1.3.6.1.4.1.25506.8.35.1.4.1.2) | read-write | INTEGER | fiber(1) copper(2) na(3) auto(4) | Type of the activated combo port. | As per the MIB. |

hh3cifPktBufTable

About this table

This table contains packet buffer information for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifPktBufFree.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cifPktBufFree (1.3.6.1.4.1.25506.8.35.1.5.1.1) | read-only | Integer32 | Integer32(1..2147483647) | Size of the available packet buffer for an interface. | As per the MIB. |
| hh3cifPktBufInit (1.3.6.1.4.1.25506.8.35.1.5.1.2) | read-only | Integer32 | Integer32(1..2147483647) | Number of packet buffers allocated to the interface when the interface was created. | As per the MIB. |
| hh3cifPktBufMin (1.3.6.1.4.1.25506.8.35.1.5.1.3) | read-only | Integer32 | Integer32(1..2147483647) | Minimum number of packet buffers allocated to the interface. | As per the MIB. |
| hh3cifPktBufMiss (1.3.6.1.4.1.25506.8.35.1.5.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of times that the interface failed to obtain a packet buffer before dropping the packet. | As per the MIB. |
| hh3cifPktBufInDrop (1.3.6.1.4.1.25506.8.35.1.5.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming packets dropped by the interface because of insufficient data buffer. | As per the MIB. |
| hh3cifPktBufEgDrop (1.3.6.1.4.1.25506.8.35.1.5.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing packets dropped by the interface because of insufficient data buffer. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------|--------|--------|-------------|------------------------------|----------------|
| .8.35.1.5.1.6) | | | | of insufficient data buffer. | |

hh3cifQueuePktBufTable

About this table

This table contains packet buffer queue information for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifQueueId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------|---|-----------------|
| hh3cifQueueId (1.3.6.1.4.1.25506.8.35.1.6.1.1) | read-only | Integer32 | Integer32(1..8) | ID of a packet buffer queue. | As per the MIB. |
| hh3cifQueuePktBufTotal (1.3.6.1.4.1.25506.8.35.1.6.1.2) | read-only | Unsigned32 | Unsigned32 | Number of packet buffers for the queue. | As per the MIB. |
| hh3cifQueueBufUsed (1.3.6.1.4.1.25506.8.35.1.6.1.3) | read-only | Unsigned32 | Unsigned32 | Number of packet buffers used by the queue. | As per the MIB. |
| hh3cifQueueBufThresholdCount (1.3.6.1.4.1.25506.8.35.1.6.1.4) | read-only | Counter32 | Counter32 | Number of times that a queue of the interface has exceeded the threshold. | As per the MIB. |
| hh3cifQueueBufUsageIn5Seconds (1.3.6.1.4.1.25506.8.35.1.6.1.5) | read-only | Integer32 | Integer32(0..100) | Buffer usage in the most recent 5 seconds for the queue. | As per the MIB. |
| hh3cifQueueBufUsageIn1Minute (1.3.6.1.4.1.25506.8.35.1.6.1.6) | read-only | Integer32 | Integer32(0..100) | Buffer usage in the most recent 1 minute for the queue. | As per the MIB. |
| hh3cifQueueBufUsageIn5Minutes (1.3.6.1.4.1.25506.8.35.1.6.1.7) | read-only | Integer32 | Integer32(0..100) | Buffer usage in the most recent 5 minutes for the queue. | As per the MIB. |

hh3cifVLANTrunkStatusTable

About this table

This table contains GVRP attributes for a trunk port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifVLANTrunkIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|-----------------------|---|--|
| hh3cifVLANTrunkIndex (1.3.6.1.4.1.25506.8.35.5.1.3.1.1) | read-only | INTEGER | INTEGER | Index of a trunk port. | As per the MIB. |
| hh3cifVLANTrunkPassListLow (1.3.6.1.4.1.25506.8.35.5.1.3.1.4) | read-only | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of permitted VLANs (in the range of VLAN 1 to VLAN 2048) on the port. Each bit in an octet represents a VLAN. If a bit is set to 1, the VLAN represented by this bit is a trunked VLAN. | As per the MIB. |
| hh3cifVLANTrunkPassListHigh (1.3.6.1.4.1.25506.8.35.5.1.3.1.5) | read-only | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of permitted VLANs (in the range of VLAN 2049 to VLAN 4094) on the port. Each bit in an octet represents a VLAN. If a bit is set to 1, the VLAN represented by this bit is a trunked VLAN. | As per the MIB. |
| hh3cifVLANTrunkAllowListLow (1.3.6.1.4.1.25506.8.35.5.1.3.1.6) | read-write | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of permitted VLANs (in the range of VLAN 1 to VLAN 2048) on the port. Each bit in an octet represents a VLAN. If a bit is set to 1, the VLAN represented by this bit is a trunked VLAN. | You must specify this object and hh3cifVLANTrunkAllowListHigh in pairs in an SNMP request. |
| hh3cifVLANTrunkAllowListHigh (1.3.6.1.4.1.25506.8.35.5.1.3.1.7) | read-write | OCTET STRING | OCTET STRING (0..256) | Per-bit representation of permitted VLANs (in the range of VLAN 2049 to VLAN 4094) on the port. Each bit in an octet represents a | You must specify this object and hh3cifVLANTrunkAllowListLow in pairs in an SNMP request. |

| | | | | | |
|--|--|--|--|---|--|
| | | | | VLAN. If a bit is set to 1, the VLAN represented by this bit is a trunked VLAN. | |
|--|--|--|--|---|--|

hh3cethernetTable of hh3cLswL2InfMibObject

About this table

This table contains Layer 2 interface settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifEthernetDuplex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|------------------------------|---|
| hh3cifEthernetDuplex (1.3.6.1.4.1.25506.8.35.5.1.4.1.3) | read-write | INTEGER | full(1), half(2), auto(3) | Duplex mode of an interface. | Values half and auto are supported only when the interface operates at a speed higher than 1000 Mbps or is connected to a fiber connector. Layer 3 interfaces do not support write operation. |
| hh3cifEthernetMTU (1.3.6.1.4.1.25506.8.35.5.1.4.1.4) | read-write | INTEGER | 1..65535 | MTU of the interface. | Only interfaces that operate in Layer 2 mode or allow jumbo frames to pass through support write operation. Implementation varies by product. When write, value 1 indicates to set the maximum value in the value range. Value 2 indicates to set the minimum value in the value range. |
| hh3cifEthernetSpeed (1.3.6.1.4.1.25506.8.35.5.1.4.1.5) | read-write | INTEGER | auto(0), s10M(10), s100M(100), s1000M(1000), s2500M(2500), s5000M(5000), | Speed of the interface. | Ethernet interfaces do not support values s1000 and higher. GE interfaces do not support values s10000 and higher. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|--|---|--|
| | | | s10000M(10000), s24000M(24000), s40000M(40000), s20000M(20000), s25000M(25000), s50000M(50000), s100000M(100000) | | |
| hh3cifEthernetMdi (1.3.6.1.4.1.25506.8.35.5.1.4.1.7) | read-write | INTEGER | mdi-ii(1), mdi-x(2), mdi-auto(3) | MDI type of the interface. | GE, XGE, 20GE, 25GE, 40GE, 50GE, and 100GE interfaces that connect to fiber connectors do not support write operation. |
| hh3cMaxMacLearn (1.3.6.1.4.1.25506.8.35.5.1.4.1.8) | read-write | INTEGER | -1..2147483647 | Maximum number of MAC addresses that the interface can learn. | The value of this object must be smaller than the maximum number of MAC addresses supported on the interface. |
| hh3cifMacAddressLearn (1.3.6.1.4.1.25506.8.35.5.1.4.1.9) | read-only | INTEGER | enabled(1), disabled(2) | Enabling status of MAC address learning on the interface. | As per the MIB. |
| hh3cifEthernetTest (1.3.6.1.4.1.25506.8.35.5.1.4.1.10) | read-write | INTEGER | test(1) | Test the interface. | Not supported |
| hh3cifMacAddrLearnMode (1.3.6.1.4.1.25506.8.35.5.1.4.1.11) | read-only | INTEGER | iVL(1), sVL(2) | MAC address learning mode of the interface. | Not supported |
| hh3cifEthernetFlowInterval (1.3.6.1.4.1.25506.8.35.5.1.4.1.12) | read-write | INTEGER | 5..300 | Flow interval of the interface. | Implementation varies by product. |
| hh3cifEthernetFlowInterval (1.3.6.1.4.1.25506.8.35.5.1.4.1.12) | read-write | INTEGER | 5..300 | Flow interval of the interface. | Implementation varies by product. |
| hh3cifEthernetIsolate (1.3.6.1.4.1.25506.8.35.5.1.4.1.13) | read-write | OCTETSTRING | OCTETSTRING | Isolation groups. | Not supported |
| hh3cifVlanVPNStatus (1.3.6.1.4.1.25506.8.35.5.1.4.1.14) | read-write | INTEGER | enabled(1), disabled(2) | Enabling status of the VLAN-VPN feature. | Not supported |
| hh3cifVlanVPNUplinkStatus (1.3.6.1.4.1.25506.8.35.5.1.4.1.15) | read-write | INTEGER | enabled(1), disabled(2) | Uplink status of the VLAN VPN for the interface. | Not supported |
| hh3cifVlanVPNTPID | read-write | Integer32 | Integer32(1..6553) | VLAN VPN TPID | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------------|--|---|--|
| ID(1.3.6.1.4.1.25506.8.35.5.1.4.1.16) | | | 5) | of the interface. | |
| hh3cifIsolateGroupID (1.3.6.1.4.1.25506.8.35.5.1.4.1.17) | read-write | Integer32 | Integer32(1..2147483647) | ID of the isolation group to which the interface belongs. | Value 0 indicates that the interface does not belong to any isolation group. |
| hh3cifisUplinkPort (1.3.6.1.4.1.25506.8.35.5.1.4.1.18) | read-only | INTEGER | yes(1), no(2) | Uplink status of the interface. | Not supported |
| hh3cifEthernetAutoSpeedMask (1.3.6.1.4.1.25506.8.35.5.1.4.1.19) | read-only | SpeedModeFlagBITS | BITS{ s10M(0), s100M(1), s1000M(2), s10000M(3), s24000M(4), s40000M(5), s100000M(6), s2500M(7), s5000M(8), s20000M(9), s25000M(10), s50000M(11) } | Speed modes that can be negotiated | As per the MIB. |
| hh3cifEthernetAutoSpeed (1.3.6.1.4.1.25506.8.35.5.1.4.1.20) | read-write | SpeedModeFlagBITS | BITS{ s10M(0), s100M(1), s1000M(2), s10000M(3), s24000M(4), s40000M(5), s100000M(6), s2500M(7), s5000M(8), s20000M(9), s25000M(10), s50000M(11) } | Speed modes that are negotiable on this port | As per the MIB. |

hh3cPortIsolateGroupTable

About this table

This table contains isolation group settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|-----------|-----------|
| Not supported | Supported | Supported | Supported |

Columns

The table index is hh3cPortIsolateGroupIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--------------------------|-------------------------------------|--|
| hh3cPortIsolateGroupIndex (1.3.6.1.4.1.25506.8.35.5.1.11.1.1) | not-accessible | Integer32 | Integer32(1..2147483647) | Index of an isolation group. | As per the MIB. |
| hh3cPortIsolateUplinkIfIndex (1.3.6.1.4.1.25506.8.35.5.1.11.1.2) | read-create | Integer32 | Integer32 | Index of the uplink interface. | Not supported |
| hh3cPortIsolateGroupRowStatus (1.3.6.1.4.1.25506.8.35.5.1.11.1.3) | read-create | INTEGER | INTEGER | Row status. | Supports only the following values: createAndGo, destroy, and active. Isolation group is available only when the row is in active status. You can set this object only when the device supports multiple isolation groups. |
| hh3cPortIsolateGroupDescription (1.3.6.1.4.1.25506.8.35.5.1.11.1.4) | read-create | DisplayString | OCTETSTRING(0..80) | Description of the isolation group. | Not supported |

hh3cifPortProtocolStatTable

About this table

This table contains IPv4 and IPv6 packet statistics for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cifIPv4InOctets.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------|-----------|-----------|--------------------------------|---|-----------------|
| hh3cifIPv4InOctets | read-only | Counter64 | Counter64 (0..184467440737) | Number of octets in IPv4 packets received on an | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| (1.3.6.1.4.1.25506.8.35.5.1.13.1.1) | | | 09551615) | interface. | |
| hh3cifIPv4InUcastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.2) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 unicast packets received on the interface. | As per the MIB. |
| hh3cifIPv4InMultiPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 multicast packets received on the interface. | As per the MIB. |
| hh3cifIPv4InBroadcastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 broadcast packets received on the interface. | As per the MIB. |
| hh3cifIPv4InDiscards (1.3.6.1.4.1.25506.8.35.5.1.13.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming IPv4 packets dropped by the interface. | As per the MIB. |
| hh3cifIPv4InErrors (1.3.6.1.4.1.25506.8.35.5.1.13.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming IPv4 error packets on the interface. | As per the MIB. |
| hh3cifIPv4OutOctets (1.3.6.1.4.1.25506.8.35.5.1.13.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv4OutUcastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.8) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 unicast packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv4OutMultiPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 multicast packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv4OutBroadcastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv4 broadcast packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv4OutDiscards (1.3.6.1.4.1.25506.8.35.5.1.13.1.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing IPv4 packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv4OutErrors (1.3.6.1.4.1.25506.8.35.5.1.13.1.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing IPv4 error packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv6InOctets (1.3.6.1.4.1.25506.8.35.5.1.13.1.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets in IPv6 packets received on an interface. | As per the MIB. |
| hh3cifIPv6InUcast | read-only | Counter64 | Counter64 | Number of IPv6 | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| Pkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.14) | | | (0..18446744073709551615) | unicast packets received on the interface. | |
| hh3cifIPv6InMultiPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.15) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv6 multicast packets received on the interface. | As per the MIB. |
| hh3cifIPv6InAnycastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.16) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv6 broadcast packets received on the interface. | As per the MIB. |
| hh3cifIPv6InDiscards (1.3.6.1.4.1.25506.8.35.5.1.13.1.17) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming packets dropped by the interface. | As per the MIB. |
| hh3cifIPv6InErrors (1.3.6.1.4.1.25506.8.35.5.1.13.1.18) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming error packets received on the interface. | As per the MIB. |
| hh3cifIPv6OutOctets (1.3.6.1.4.1.25506.8.35.5.1.13.1.19) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets in IPv6 packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv6OutUnicastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.20) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv6 unicast packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv6OutMulticastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.21) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv6 multicast packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv6OutAnycastPkts (1.3.6.1.4.1.25506.8.35.5.1.13.1.22) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of IPv6 broadcast packets transmitted by the interface. | As per the MIB. |
| hh3cifIPv6OutDiscards (1.3.6.1.4.1.25506.8.35.5.1.13.1.23) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing packets dropped by the interface. | As per the MIB. |
| hh3cifIPv6OutErrors (1.3.6.1.4.1.25506.8.35.5.1.13.1.24) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing error packets received on the interface. | As per the MIB. |

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HH3C-STORM-CONSTRAIN-MIB

About this MIB

Use this MIB to obtain the interface status, configure traffic constrain, and define corresponding alarm thresholds.

MIB file name

hh3c-storm-constrain.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cStormConstrain(66)

Scalar objects

hh3cStormTrapType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------|---|---|-----------------|
| hh3cStormTrapType (1.3.6.1.4.1.25506.2.66.1.1) | accessible-for-notify | INTEGER | { broadcast(1), multicast(2), unicast(3), knownUnicast(4) } | <p>Reason why a trap message is generated on an interface.</p> <ul style="list-style-type: none">• broadcast—Trap message generated when broadcast traffic exceeds the upper limit or drops below the lower limit on the interface.• multicast—Trap message generated when multicast traffic exceeds the upper limit or drops below the lower limit on the interface.• unicast—Trap message generated when unknown unicast traffic exceeds the upper limit or drops below the lower limit on the interface.• knownUnicast—Trap message generated when known unicast traffic exceeds the upper limit or drops below the | As per the MIB. |

| | | | | | |
|--|--|--|--|-------------------------------|--|
| | | | | lower limit on the interface. | |
|--|--|--|--|-------------------------------|--|

hh3cStormTrapThreshold

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|-------------|--|-----------------|
| hh3cStormTrapThreshold (1.3.6.1.4.1.25506.2.66.1.2) | accessible-for-notify | Integer32 | Integer32 | Threshold value for which a trap message was generated. For example, this value indicates the upper limit value for a trap generated because broadcast traffic exceeds the upper limit. | As per the MIB. |

Tabular objects

hh3cStormCtrlTable

About this table

This table contain storm control settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|---------------|-----------|
| Supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cStormCtrlPortStatus.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------------------|----------------------------------|---|---|
| hh3cStormCtrlPortStatus (1.3.6.1.4.1.25506.2.66.2.1.1.1) | read-only | IH3cStormConstrainUnit | IH3cStormConstrainUnit | Status of an interface. <ul style="list-style-type: none"> controlled—The interface is in controlled status. normal—The interface is in normal status. | As per the MIB. |
| hh3cStormCtrlBroadcastUnit (1.3.6.1.4.1.25506.2.66.2.1.1.2) | read-create | INTEGER | INTEGER{ pps(1), per(2), bps(3)} | Unit for the upper or lower broadcast traffic limit. | You must specify hh3cStormCtrlBroadcastUnit, hh3cStormCtrlBroadcastUpper, and hh3cStormCtrlBroadcastLower in an SNMP request. This object does not support value |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------------|------------------------|---|--|
| | | | | | bytePerSecond or none. |
| hh3cStormCtrlBroadcastUpper (1.3.6.1.4.1.25506.2.66.2.1.1.3) | read-create | Integer32 | Integer32 | Upper limit for broadcast traffic. The unit depends on h3cStormCtrlBroadcastUnit. | You must specify hh3cStormCtrlBroadcastUnit, hh3cStormCtrlBroadcastUpper, and hh3cStormCtrlBroadcastLower in an SNMP request. Value 0 indicates invalid configuration. |
| hh3cStormCtrlBroadcastLower (1.3.6.1.4.1.25506.2.66.2.1.1.4) | read-create | Integer32 | Integer32 | Lower limit for broadcast traffic. The unit depends on h3cStormCtrlBroadcastUnit. | You must specify hh3cStormCtrlBroadcastUnit, hh3cStormCtrlBroadcastUpper, and hh3cStormCtrlBroadcastLower in an SNMP request. Value 0 indicates invalid configuration. |
| hh3cStormCtrlMulticastUnit (1.3.6.1.4.1.25506.2.66.2.1.1.5) | read-create | H3cStormConstraintUnit | H3cStormConstraintUnit | Unit for the upper or lower multicast traffic limit. | You must specify hh3cStormCtrlMulticastUnit, hh3cStormCtrlMulticastUpper, and hh3cStormCtrlMulticastLower in an SNMP notification. This object does not support value bytePerSecond or none. |
| hh3cStormCtrlMulticastUpper (1.3.6.1.4.1.25506.2.66.2.1.1.6) | read-create | Integer32 | Integer32 | Upper limit for multicast traffic. The unit depends on h3cStormCtrlMulticastUnit. | You must specify hh3cStormCtrlMulticastUnit, hh3cStormCtrlMulticastUpper, and hh3cStormCtrlMulticastLower in an SNMP notification. Value 0 indicates invalid configuration. |
| hh3cStormCtrlMulticastLower (1.3.6.1.4.1.25506.2.66.2.1.1.7) | read-create | Integer32 | Integer32 | Lower limit for multicast traffic. The unit depends on h3cStormCtrlMulticastUnit. | You must specify hh3cStormCtrlMulticastUnit, hh3cStormCtrlMulticastUpper, and hh3cStormCtrlMulticastLower in an SNMP notification. The value of this object must be smaller than hh3cStormCtrlMulticast |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------------------|---|--|--|
| | | | | | astUpper. Value 0 indicates invalid configuration. |
| hh3cStormCtrlUnicastUnit (1.3.6.1.4.1.25506.2.66.2.1.1.8) | read-create | H3cStormConstraintUnit | H3cStormConstraintUnit | Unit for the upper or lower unicast traffic limit. | You must specify hh3cStormCtrlUnicastUnit, hh3cStormCtrlUnicastUpper, and hh3cStormCtrlUnicastLower in an SNMP notification. This object does not support value bytePerSecond or none. |
| hh3cStormCtrlUnicastUpper (1.3.6.1.4.1.25506.2.66.2.1.1.9) | read-create | Integer32 | Integer32 | Upper limit for unicast traffic. The unit depends on hh3cStormCtrlUnicastUnit. | You must specify hh3cStormCtrlUnicastUnit, hh3cStormCtrlUnicastUpper, and hh3cStormCtrlUnicastLower in an SNMP notification. Value 0 indicates invalid configuration. |
| hh3cStormCtrlUnicastLower (1.3.6.1.4.1.25506.2.66.2.1.1.10) | read-create | Integer32 | Integer32 | Lower limit for multicast traffic. The unit depends on hh3cStormCtrlUnicastUnit. | You must specify hh3cStormCtrlUnicastUnit, hh3cStormCtrlUnicastUpper, and hh3cStormCtrlUnicastLower in an SNMP notification. The value of this object must be smaller than hh3cStormCtrlUnicastUpper. Value 0 indicates invalid configuration. |
| hh3cStormCtrlRowStatus (1.3.6.1.4.1.25506.2.66.2.1.1.11) | read-create | RowStatus | RowStatus | Row status. | Supports only the following values: active, create, and destroy. |
| hh3cStormCtrlPortMode (1.3.6.1.4.1.25506.2.66.2.1.1.12) | read-create | INTEGER | INTEGER{ none(1), block(2), shutdown(3) } | Storm control mode of the interface. | As per the MIB. |

Notifications

This section contains HH3C-STORM-CONSTRAIN-MIB notifications.

hh3cStormRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.66.3.1 | Traffic of a type on an interface exceeded the upper limit. | Informational | N/A | N/A | ON |

Description

This notification is generated when traffic control is enabled and traffic of any type on an interface exceeds the upper limit of this traffic type.

Status control

ON

CLI: Use the `storm-constrain enable trap` command.

OFF

CLI: Use the `undo storm-constrain enable trap` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|----------------|--|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of an interface. | Yes | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.66.1.1 (hh3cStormTrapType) | Type of the notification. | No | INTEGER | broadcast(1) multicast(2) unicast(3) |
| 1.3.6.1.4.1.25506.2.66.1.2 (hh3cStormTrapThreshold) | Alarm threshold. | No | Integer32 | Same as the standard MIB. |
| 1.3.6.1.4.1.25506.2.66.2.1.1.1 (hh3cStormCtrlPortStatus) | Status of the interface. | No | INTEGER | controlled(1) normal(2) |

Recommended action

To resolve the issue:

1. Verify traffic of this type on the interface does not exceed the upper limit of this traffic type.
2. If the issue persists, contact H3C Support.

hh3cStormFalling

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.66.3.2 | Traffic of a type on an interface dropped below the lower limit. | Informational | N/A | N/A | ON |

Description

This notification is generated when traffic control is enabled and traffic of any type on an interface dropped below the upper limit of this traffic type.

Status control

ON

CLI: Use the `storm-constrain enable trap` command.

OFF

CLI: Use the `undo storm-constrain enable trap` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|----------------|--|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of an interface. | Yes | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.66.1.1 (hh3cStormTrapType) | Type of the notification. | No | INTEGER | broadcast(1) multicast(2) unicast(3) |
| 1.3.6.1.4.1.25506.2.66.1.2 (hh3cStormTrapThreshold) | Alarm threshold. | No | Integer32 | Same as the standard MIB. |
| 1.3.6.1.4.1.25506.2.66.2.1.1.1 (hh3cStormCtrlPortStatus) | Status of the interface. | No | INTEGER | controlled(1) normal(2) |

Recommended action

No action is required.

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IF-MIB

About this MIB

This MIB describes generic attributes for network interfaces.

MIB file name

rfc2863-if.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ifMIB(31)

Scalar objects

ifNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------|-----------|-----------|---------------------------|-----------------------|-----------------|
| ifNumber(1.3.6.1.2.1.2.1) | read-only | Integer32 | Integer32 (1..2147483647) | Number of interfaces. | As per the MIB. |

Tabular objects

ifTable

About this table

Use this table to obtain information about an interface by interface index.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|-----------|---------------|---------------------------|-------------------------------|---|
| ifIndex (1.3.6.1.2.1.2.2.1.1) | read-only | Integer32 | Integer32 (1..2147483647) | Index of an interface. | As per the MIB. |
| ifDescr (1.3.6.1.2.1.2.2.1.2) | read-only | DisplayString | OCTET STRING(0..255) | Description of the interface. | A string that contains information about the interface, null0, Vlan-interface2, |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------|-----------|------------|--|------------------------|--|
| | | | | | Gigabitethernet1/0/1, Ten-Gigabitethernet2/0/1, for example. |
| ifType (1.3.6.1.2.1.2.2.1.3) | read-only | IANAIfType | INTEGER { other(1), regular1822(2), , hdh1822(3), ddnX25(4), rfc877x25(5), ethernetCsmacd(6), iso88023Csmacd(7), iso88024TokenBus(8), iso88025TokenRing(9), iso88026Man(10), starLan(11), proteon10Mbit(12), proteon80Mbit(13), hyperchannel(14), fddi(15), lapb(16), sdllc(17), ds1(18), e1(19), basicISDN(20), primaryISDN(21), propPointToPointSerial(22), ppp(23), softwareLoopback(24), eon(25), ethernet3Mbit(26), nsip(27), slip(28), ultra(29), ds3(30), sip(31), frameRelay(32), , rs232(33), para(34), arcnet(35), arcnetPlus(36), | Type of the interface. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | atm(37), miox25(38), sonet(39), x25ple(40), iso88022llc(41) , localTalk(42), smdsDxi(43), frameRelayService(44), v35(45), hssi(46), hippi(47), modem(48), aal5(49), sonetPath(50), sonetVT(51), smdslcip(52), propVirtual(53) , propMultiplexor(54), ieee80212(55), fibreChannel(56), hippiInterface(57), frameRelayInterconnect(58), aflane8023(59) , aflane8025(60) , cctEmul(61), fastEther(62), isdh(63), v11(64), v36(65), g703at64k(66), g703at2mb(67) , qlhc(68), fastEtherFX(69), channel(70), ieee80211(71), ibm370parChannel(72), escon(73), dlsw(74), isdns(75), isdnu(76), lapd(77), ipSwitch(78), rsrb(79), atmLogical(80) , ds0(81), ds0Bundle(82), bsc(83), async(84), cnr(85), | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | iso88025Dtr(86), eplrs(87), arap(88), propCnls(89), hostPad(90), termPad(91), frameRelayMP(92), x213(93), adsl(94), radsl(95), sdsl(96), vdsl(97), iso88025CRFP(98), myrinet(99), voiceEM(100), voiceFXO(101), voiceFXS(102), voiceEncap(103), voiceOverIp(104), atmDxi(105), atmFuni(106), atmIma(107), pppMultilinkBundle(108), ipOverCdlc(109), ipOverClaw(110), stackToStack(111), virtualIpAddress(112), mpc(113), ipOverAtm(114), iso88025Fiber(115), tdlc(116), gigabitEthernet(117), hdlc(118), lapf(119), v37(120), x25mlp(121), x25huntGroup(122), transpHdlc(123), interleave(124), fast(125), ip(126), docsCableMacLayer(127), docsCableDownstream(128), docsCableUpstream(129), a12MppSwitch(130), tunnel(131), | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | coffee(132), ces(133), atmSubInterface(134), l2vlan(135), l3ipvlan(136), l3ipxvlan(137), digitalPowerline(138), mediaMailOverlap(139), dtm(140), dcn(141), ipForward(142), , msdsl(143), ieee1394(144), if-gsn(145), dvbRccMacLayer(146), dvbRccDownstream(147), dvbRccUpstream(148), atmVirtual(149), , mplsTunnel(150), srp(151), voiceOverAtm(152), voiceOverFrameRelay(153), idsl(154), compositeLink(155), ss7SigLink(156), propWirelessP2P(157), frForward(158), , rfc1483(159), usb(160), ieee8023adLag(161), bgppolicyaccounting(162), frf16MfrBundle(163), h323Gatekeeper(164), h323Proxy(165), , mpls(166), mfSigLink(167), , hdsI2(168), | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | shdsl(169), ds1FDL(170), pos(171), dvbAsiIn(172), dvbAsiOut(173), plc(174), nfas(175), tr008(176), gr303RDT(177), gr303IDT(178), isup(179), propDocsWirelessMaclayer(180), propDocsWirelessDownstream(181), propDocsWirelessUpstream(182), hiperlan2(183), propBWApm2Mp(184), sonetOverheadChannel(185), digitalWrapperOverheadChannel(186), aal2(187), radioMAC(188), atmRadio(189), imt(190), mvl(191), reachDSL(192), frDlciEndPt(193), atmVciEndPt(194), opticalChannel(195), opticalTransport(196), propAtm(197), voiceOverCable(198), infiniband(199), teLink(200), q2931(201), virtualTg(202), sipTg(203), sipSig(204), docsCableUpst | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | reamChannel(205), econet(206), pon155(207), pon622(208), bridge(209), linegroup(210), voiceEMFGD(211), voiceFGDEANA(212), voiceDID(213), mpegTransport(214), sixToFour(215), , gtp(216), pdnEtherLoop1(217), pdnEtherLoop2(218), opticalChannelGroup(219), homepna(220), gfp(221), ciscoISLvlan(222), actelisMetaLOOP(223), fcipLink(224), rpr(225), qam(226), lmp(227), cblVectaStar(228), docsCableMTSDownstream(229), adsl2(230), macSecControlledIF(231), macSecUncontrolledIF(232), aviciOpticalEther(233), atmbond(234), voiceFGDOS(235), mocaVersion1(236), ieee80216WMAN(237), adsl2plus(238), , dvbRcsMacLayer(239), dvbTdm(240), dvbRcsTdma(241), x86Laps(242), | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-------------|--------------|---|----------------------------------|--|
| | | | wwanPP(243), wwanPP2(244) , voiceEBS(245) , ifPwType(246), ilan(247), pip(248), aluELP(249), gpon(250), vdsl2(251), capwapDot11P rofile(252), capwapDot11B ss(253), capwapWtpVirt ualRadio(254), bits(255), docsCableUpst reamRfPort(25 6), cableDownstre amRfPort(257) , switchstack(65 534) } | | |
| ifMtu (1.3.6.1.2.1.2.2.1.4) | read-only | Integer32 | Integer32(1..2147483647) | MTU of the interface. | Size of the largest packet that can be received or forwarded on the interface. This object is inapplicable to aggregate interfaces. |
| ifSpeed (1.3.6.1.2.1.2.2.1.5) | read-only | Gauge32 | Gauge32(0..4294967295) | Speed of the interface. | Estimated bandwidth of the interface. |
| ifPhysAddress (1.3.6.1.2.1.2.2.1.6) | read-only | PhysAddress | OCTET STRING | MAC address of the interface. | Implementation varies by product. For a switch, only the following types of interfaces have a MAC address: <ul style="list-style-type: none"> • M-Ethernet port. • Vlan interface. • Ethernet port. • GigabitEthernet port. • XGigabitEthernet port. • Forty-GigabitEthernet port. • Hundred-GigabitEthernet port. |
| ifAdminStatus (1.3.6.1.2.1.2.2.1.7) | read- write | OCTET STRING | up(1), down(2), testing(3) | Default status of the interface. | Supports only the values up(1) and down(2). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--|---|---|
| ifOperStatus (1.3.6.1.2.1.2.2.1.8) | read-only | OCTET STRING | up(1), down(2), testing(3), unknown(4), dormant(5), notPresent(6), lowerLayerDown(7) | Operational status of the interface. | Current operational status of the interface. |
| ifLastChange (1.3.6.1.2.1.2.2.1.9) | read-only | TimeTicks | TimeTicks (0..4294967295) | Duration of the interface. | Time elapsed since the interface entered in the current status. |
| ifInOctets (1.3.6.1.2.1.2.2.1.10) | read-only | Counter32 | Counter32 (0..4294967295) | Number of octets in incoming packets. | As per the MIB. |
| ifInUcastPkts (1.3.6.1.2.1.2.2.1.11) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming unicast packets. | As per the MIB. |
| ifInNUcastPkts (1.3.6.1.2.1.2.2.1.12) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming non-unicast packets. | As per the MIB. |
| ifInDiscards (1.3.6.1.2.1.2.2.1.13) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming packets that were dropped. | Implementation varies by product. Not supported by switches. |
| ifInErrors (1.3.6.1.2.1.2.2.1.14) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming packets that contain errors. | As per the MIB. |
| ifInUnknownProtos (1.3.6.1.2.1.2.2.1.15) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming protocol-unknown packets. | As per the MIB. |
| ifOutOctets (1.3.6.1.2.1.2.2.1.16) | read-only | Counter32 | Counter32 (0..4294967295) | Number of octets in outgoing packets. | As per the MIB. |
| ifOutUcastPkts (1.3.6.1.2.1.2.2.1.17) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing unicast packets. | As per the MIB. |
| ifOutNUcastPkts (1.3.6.1.2.1.2.2.1.18) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing non-unicast packets. | As per the MIB. |
| ifOutDiscards (1.3.6.1.2.1.2.2.1.19) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing packets that were dropped. | As per the MIB. |
| ifOutErrors (1.3.6.1.2.1.2.2.1.20) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing packets that | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|------------------|-------------------------|---|-----------------------------------|
| | | | | contain errors. | |
| ifOutQLen (1.3.6.1.2.1.2.2.1.21) | read-only | Gauge32 | Gauge32 (0..4294967295) | Length of the outgoing packet queue. | Implementation varies by product. |
| ifSpecific (1.3.6.1.2.1.2.2.1.22) | read-only | OCTET IDENTIFIER | OCTET IDENTIFIER | Interface for realize specific definitions. | Not supported |

ifXTable

About this table

Use this table to obtain information about an interface by interface name.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ifName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|-------------------------------------|---------------------------------------|-----------------|
| ifName (1.3.6.1.2.1.31.1.1.1.1) | read-only | DisplayString | OCTET STRING(0..255) | Name of an interface. | Interface name. |
| ifInMulticastPkts (1.3.6.1.2.1.31.1.1.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming multicast packets. | As per the MIB. |
| ifInBroadcastPkts (1.3.6.1.2.1.31.1.1.1.3) | read-only | Counter32 | Counter32 (0..4294967295) | Number of incoming broadcast packets. | As per the MIB. |
| ifOutMulticastPkts (1.3.6.1.2.1.31.1.1.1.4) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing multicast packets. | As per the MIB. |
| ifOutBroadcastPkts (1.3.6.1.2.1.31.1.1.1.5) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing broadcast packets. | As per the MIB. |
| ifHCInOctets (1.3.6.1.2.1.31.1.1.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets in incoming packets. | As per the MIB. |
| ifHCInUcastPkts (1.3.6.1.2.1.31.1.1.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming unicast packets. | As per the MIB. |
| ifHCInMulticastPkts | read-only | Counter | Counter64 | Number of | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------------------|--|--|---|
| (1.3.6.1.2.1.31.1.1.1.8) | | 64 | (0..18446744073709551615) | incoming multicast packets. | |
| ifHCInBroadcastPkts (1.3.6.1.2.1.31.1.1.1.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming broadcast packets. | As per the MIB. |
| ifHCOctets (1.3.6.1.2.1.31.1.1.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets in outgoing multicast packets. | As per the MIB. |
| ifHCOUcastPkts (1.3.6.1.2.1.31.1.1.1.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing unicast packets. | As per the MIB. |
| ifHCOMulticastPkts (1.3.6.1.2.1.31.1.1.1.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing multicast packets. | As per the MIB. |
| ifHCOBroadcastPkts (1.3.6.1.2.1.31.1.1.1.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing broadcast packets. | As per the MIB. |
| ifLinkUpDownTrapEnable (1.3.6.1.2.1.31.1.1.1.14) | read-write | INTEGER | enabled(1), disabled(2) | Whether to enable link-up or link-down traps on the interface. | As per the MIB. |
| ifHighSpeed (1.3.6.1.2.1.31.1.1.1.15) | read-only | Gauge32 | Gauge32 (0..4294967295) | Bandwidth of the interface. | As per the MIB. |
| ifPromiscuousMode (1.3.6.1.2.1.31.1.1.1.16) | read-write | TruthValue | true(1), false(2) | Enabling status of promiscuous mode. | Implementation varies by product. Not supported by switches. |
| ifConnectorPresent (1.3.6.1.2.1.31.1.1.1.17) | read-only | TruthValue | true(1), false(2) | Whether the interface sublayer has a physical connector. | As per the MIB. |
| ifAlias (1.3.6.1.2.1.31.1.1.1.18) | read-write | DisplayString OCTET STRING | OCTET STRING(0..64) | Alias of the interface. | As per the MIB. |
| ifCounterDiscontinuityTime (1.3.6.1.2.1.31.1.1.1.19) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time when the interface's counters suffered discontinuity. | Implementation varies by product. |

ifRcvAddressTable

About this table

Use this table to configure the address of an interface to receive packets.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|-----------|-----------|
| Not supported | Supported | Supported | Supported |

Columns

The table index is ifRcvAddressAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|--|---|-----------------------------------|
| ifRcvAddressAddress (1.3.6.1.2.1.31.1.4.1.1) | not-accessible | PhysAddress | OCTET STRING (4) | Address of an interface to receive packets. | Implementation varies by product. |
| ifRcvAddressStatus (1.3.6.1.2.1.31.1.4.1.2) | read-create | INTEGER | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Status of the receiving address. | Implementation varies by product. |
| ifRcvAddressType (1.3.6.1.2.1.31.1.4.1.3) | read-create | INTEGER | other(1), volatile(2), nonVolatile(3) | Type of the receiving address. | Implementation varies by product. |

Notifications

This section contains the IF-MIB notifications.

linkDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|------------|-------|----------|---------------------------------|----------------|
| 1.3.6.1.6.3.1.1.5.3 | Link down. | Error | Major | 1.3.6.1.6.3.1.1.5.4 (linkUp) | ON |

Description

This notification is generated when the SNMPv2 entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links is about to enter the down state from some other state (but not from the notPresent state). Other states refer to the values of the ifOperStatus variable.

Status control

ON

CLI: Use the `snmp-agent trap enable standard linkdown` command.

OFF

CLI: Use the `undo snmp-agent trap enable standard linkdown` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------|--|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of an interface. | Yes | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.7 (ifAdminStatus) | Administrative status of the interface. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.2.2.1.8 (ifOperStatus) | Operational status of the interface. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

Recommended action

To resolve the issue:

1. Verify that the interface is connected and configured correctly.
2. If the issue persists, contact H3C Support.

linkUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------|----------|----------|-----------------------|----------------|
| 1.3.6.1.6.3.1.1.5.4 | Link up. | Recovery | N/A | N/A | ON |

Description

This notification is generated when that the SNMPv2 entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links left the down state and transitioned into some other state (but not into the notPresent state). Other states refer to the values of the ifOperStatus variable.

Status control

ON

CLI: Use the `snmp-agent trap enable standard linkup` command.

OFF

CLI: Use the `undo snmp-agent trap enable standard linkup` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------|--|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of an interface. | Yes | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.7 (ifAdminStatus) | Administrative status of the interface. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.2.2.1.8 (ifOperStatus) | Operational status of the interface. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

Recommended action

No action is required.

Contents

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 - About this MIB 1
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 - Scalar objects 1
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 - dot1dTpFdbTable 6

BRIDGE-MIB

About this MIB

Use this MIB to obtain basic bridge information, collect diagnosis information, and configure the system operating mode.

MIB file name

rfc1493-bridge.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dot1dBridge(17)

Scalar objects

dot1dBaseBridgeAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-------------|--|-----------------|
| dot1dBaseBridgeAddress (1.3.6.1.2.1.17.1.1) | read-only | OCTET STRING | (0..255) | MAC address used by this bridge when it must be referred to in a unique fashion. | As per the MIB. |

dot1dBaseNumPorts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|---|-----------------|
| dot1dBaseNumPorts (1.3.6.1.2.1.17.1.2) | read-only | INTEGER | Standard MIB values. | Number of ports controlled by this bridging entity. | As per the MIB. |

dot1dBaseType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|---------|--|--|-----------------|
| dot1dBaseType (1.3.6.1.2.1.17.1.3) | read-only | INTEGER | unknown(1), transparent-only(2), sourceroute-only(3), srt(4), | Indicates what type of bridging this bridge can perform. | As per the MIB. |

dot1dStpProtocolSpecification

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|---|-----------------|
| dot1dStpProtocolSpecification (1.3.6.1.2.1.17.2.1) | read-only | INTEGER | unknown(1), decLb100(2), ieee8021d(3) | Indication of what version of the Spanning Tree Protocol is being | As per the MIB. |

| | | | | | |
|--|--|--|--|------|--|
| | | | | run. | |
|--|--|--|--|------|--|

dot1dStpPriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------|---|-----------------|
| dot1dStpPriority (1.3.6.1.2.1.17.2.2) | read-write | INTEGER | (0..61440) | Value of the write-able portion of the Bridge ID. | As per the MIB. |

dot1dStpTimeSinceTopologyChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| dot1dStpTimeSinceTopologyChange (1.3.6.1.2.1.17.2.3) | read-only | TimeTicks | Standard MIB values. | Time (in hundredths of a second) since the last time a topology change was detected by the bridge entity. | As per the MIB. |

dot1dStpTopChanges

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|---|-----------------|
| dot1dStpTopChanges (1.3.6.1.2.1.17.2.4) | read-only | Counter | Standard MIB values. | Total number of topology changes detected by this bridge since the management entity was last reset or initialized. | As per the MIB. |

dot1dStpDesignatedRoot

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------|----------------------|--|-----------------|
| dot1dStpDesignatedRoot (1.3.6.1.2.1.17.2.5) | read-only | BridgeId | Standard MIB values. | Bridge identifier of the root of the spanning tree as determined by the Spanning Tree Protocol as executed by this node. | As per the MIB. |

dot1dStpRootCost

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|--|-----------------|
| dot1dStpRootCost (1.3.6.1.2.1.17.2.6) | read-only | INTEGER | Standard MIB values. | Cost of the path to the root as seen from this bridge. | As per the MIB. |

dot1dStpRootPort

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|--------------------------------------|-----------------|
| dot1dStpRootPort (1.3.6.1.2.1.17.2.7) | read-only | INTEGER | Standard MIB values. | Port number of the port which offers | As per the MIB. |

| | | | | | |
|---|--|--|--|---|--|
|) | | | | the lowest cost path from this bridge to the root bridge. | |
|---|--|--|--|---|--|

dot1dStpMaxAge

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|--|-----------------|
| dot1dStpMaxAge (1.3.6.1.2.1.17.2.8) | read-only | Timeout | Standard MIB values. | Maximum age of Spanning Tree Protocol information. | As per the MIB. |

dot1dStpHelloTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|--|-----------------|
| dot1dStpHelloTime (1.3.6.1.2.1.17.2.9) | read-only | Timeout | Standard MIB values. | Amount of time between the transmission of Configuration bridge PDUs by this node on any port when it is the root of the spanning tree or trying to become so. | As per the MIB. |

dot1dStpHoldTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|--|-----------------|
| dot1dStpHoldTime (1.3.6.1.2.1.17.2.10) | read-only | INTEGER | Standard MIB values. | Interval length during which no more than two Configuration bridge PDUs shall be transmitted by this node. | As per the MIB. |

dot1dStpForwardDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|---|-----------------|
| dot1dStpForwardDelay (1.3.6.1.2.1.17.2.11) | read-only | Timeout | Standard MIB values. | Controls how fast a port changes its spanning state when moving towards the Forwarding state. | As per the MIB. |

dot1dStpBridgeMaxAge

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-------------|--------------|-----------------|
| dot1dStpBridgeMaxAge (1.3.6.1.2.1.17.2.12) | read-write | Timeout | (600..4000) | Maximum age. | As per the MIB. |

dot1dStpBridgeHelloTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------|-------------|-----------------|
| dot1dStpBridgeHelloTime (1.3.6.1.2.1.17.2.13) | read-write | INTEGER | (100..1000) | Hello time. | As per the MIB. |

dot1dStpBridgeForwardDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-------------|---|-----------------|
| dot1dStpBridgeForwardDelay (1.3.6.1.2.1.17.2.14) | read-write | INTEGER | (400..3000) | Controls how fast a port changes its spanning state when moving towards the Forwarding state. | As per the MIB. |

dot1dTpAgingTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--------------------|---|-----------------------------------|
| dot1dTpAgingTime (1.3.6.1.2.1.17.4.2) | read-write | INTEGER | (-1 10..1000000) | Timeout period in seconds for aging out dynamically learned forwarding information. | Implementation varies by product. |

Tabular objects

dot1dBasePortTable

About this table

This table contains generic information about every port that is associated with this bridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot1dBasePort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|--|-----------------|
| dot1dBasePort (1.3.6.1.2.1.17.1.4.1.1) | read-only | INTEGER | (1..65535) | Port number of the port for which this entry contains bridge management information. | As per the MIB. |
| dot1dBasePortIfIndex (1.3.6.1.2.1.17.1.4.1.2) | read-only | INTEGER | Standard MIB values. | Value of the instance of the ifIndex object for the interface | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------------|----------------------|---|-----------------|
| | | | | corresponding to this port. | |
| dot1dBasePortCircuit (1.3.6.1.2.1.17.1.4.1.3) | read-only | OBJECT IDENTIFIER | Standard MIB values. | Name of an object instance unique to this port. | As per the MIB. |
| dot1dBasePortDelayExceededDiscards (1.3.6.1.2.1.17.1.4.1.4) | read-only | Counter | Standard MIB values. | Number of frames discarded by this port due to excessive transit delay through the bridge.□ | As per the MIB. |
| dot1dBasePortMulticastExceededDiscards (1.3.6.1.2.1.17.1.4.1.5) | read-only | Counter | Standard MIB values. | Number of frames discarded by this port due to an excessive size. | As per the MIB. |

dot1dStpPortTable

About this table

This table that contains port-specific information for the Spanning Tree Protocol.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is dot1dStpPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|--|-----------------|
| dot1dStpPort (1.3.6.1.2.1.17.2.1.5.1.1) | read-only | INTEGER | (1..65535) | Port number of the port for which this entry contains Spanning Tree Protocol management information. | As per the MIB. |
| dot1dStpPortPriority (1.3.6.1.2.1.17.2.1.5.1.2) | read-write | INTEGER | (0..240) | Value of the priority field which is contained in the first (in network byte order) octet of the (2 octet long) Port ID. | As per the MIB. |
| dot1dStpPortState (1.3.6.1.2.1.17.2.1.5.1.3) | read-only | INTEGER | disabled(1), blocking(2), listening(3), learning(4), forwarding(5), broken(6) | Port's current state as defined by application of the Spanning Tree Protocol. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|-------------------------|--|---|
| dot1dStpPortEnable (1.3.6.1.2.1.17.2.1.5.1.4) | read-write | INTEGER | enabled(1), disabled(2) | Enabled/disabled status of the port. | As per the MIB. |
| dot1dStpPortPathCost (1.3.6.1.2.1.17.2.1.5.1.5) | read-write | INTEGER | (1..65535) | Contribution of this port to the path cost of paths towards the spanning tree root which include this port. | In the current software version, this object supports only the IEEE802.1d-1990 standard, and the value range is 1 to 65535. If the actual value is greater than 65535 in another standard, the object value is 65535. |
| dot1dStpPortDesignatedRoot (1.3.6.1.2.1.17.2.1.5.1.6) | read-only | BridgeId | Standard MIB values. | Unique Bridge Identifier of the Bridge recorded as the Root in the Configuration BPDUs transmitted by the Designated Bridge for the segment to which the port is attached. | As per the MIB. |
| dot1dStpPortDesignatedCost (1.3.6.1.2.1.17.2.1.5.1.7) | read-only | INTEGER | Standard MIB values. | Path cost. | As per the MIB. |
| dot1dStpPortDesignatedBridge (1.3.6.1.2.1.17.2.1.5.1.8) | read-only | BridgeId | Standard MIB values. | Bridge identifier. | As per the MIB. |
| dot1dStpPortDesignatedPort (1.3.6.1.2.1.17.2.1.5.1.9) | read-only | OCTET STRING | (SIZE (2)) | Port identifier of the port on the Designated Bridge for this port's segment. | As per the MIB. |
| dot1dStpPortForwardTransition (1.3.6.1.2.1.17.2.1.5.1.10) | read-only | Counter | Standard MIB values. | Number of times this port has transitioned from the Learning state to the Forwarding state. | As per the MIB. |

dot1dTpFdbTable

About this table

This table contains information about unicast entries for which the bridge has forwarding and/or filtering information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot1dTpFdbAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--|---|-----------------|
| dot1dTpFdbAddress (1.3.6.1.2.1.17.4.3.1.1) | read-only | OCTET STRING | SIZE (6) | Unicast MAC address entry. | As per the MIB. |
| dot1dTpFdbPort (1.3.6.1.2.1.17.4.3.1.2) | read-only | INTEGER | Standard MIB values. | Port number of the port on which a frame having a source address equal to the value of the corresponding instance of dot1dTpFdbAddress has been seen. | As per the MIB. |
| dot1dTpFdbStatus (1.3.6.1.2.1.17.4.3.1.3) | read-only | INTEGER | other(1), invalid(2), learned(3), self(4), mgmt(5) | Status of this entry. | As per the MIB. |

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EtherLike-MIB

About this MIB

Use this MIB to obtain basic Ethernet interface information, collect diagnosis information, and configure the system operating mode.

MIB file name

rfc3635-EtherLike.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).dot3(7).dot3StatsTable(2).dot3StatsEntry(1)

Tabular objects

dot3StatsTable

About this table

This table contains statistics for a collection of Ethernet-like interfaces attached to a particular system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3StatsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| dot3StatsIndex (1.3.6.1.2.1.10.7.2.1.1) | read-only | INTEGER | Standard MIB values. | Unique index of the interface attached to an Ethernet-link medium. | As per the MIB. |
| dot3StatsAlignme ntErrors (1.3.6.1.2.1.10.7.2.1.2) | read-only | Counter32 | Standard MIB values. | Number of frames that fail to pass FCS check. | As per the MIB. |
| dot3StatsFCSErr ors (1.3.6.1.2.1.10.7.2.1.3) | read-only | Counter32 | Standard MIB values. | Number of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. | As per the MIB. |
| dot3StatsSingleC ollisionFrames | read-only | Counter32 | Standard MIB | Number of frames that are involved in | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| (1.3.6.1.2.1.10.7.2.1.4) | | | values. | a single collision and are subsequently transmitted successfully. This counter does not increment when the interface is operating in full-duplex mode. | |
| dot3StatsMultipleCollisionFrames (1.3.6.1.2.1.10.7.2.1.5) | read-only | Counter32 | Standard MIB values. | Number of frames that are involved in multiple collisions and are subsequently transmitted successfully. This counter does not increment when the interface is operating in full-duplex mode. | As per the MIB. |
| dot3StatsSQETestErrors (1.3.6.1.2.1.10.7.2.1.6) | read-only | Counter32 | Standard MIB values. | Number of times that the SQE TEST ERROR messages are received on a particular interface. | As per the MIB. |
| dot3StatsDeferredTransmissions (1.3.6.1.2.1.10.7.2.1.7) | read-only | Counter32 | Standard MIB values. | Number of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. | As per the MIB. |
| dot3StatsLateCollisions (1.3.6.1.2.1.10.7.2.1.8) | read-only | Counter32 | Standard MIB values. | Number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. This counter does not increment when the interface is operating in full-duplex mode. | As per the MIB. |
| dot3StatsExcessiveCollisions (1.3.6.1.2.1.10.7.2.1.9) | read-only | Counter32 | Standard MIB values. | Number of frames for which transmission on a particular interface fails due to excessive collisions. | As per the MIB. |
| dot3StatsInternalMacTransmitErrors (1.3.6.1.2.1.10.7.2.1.10) | read-only | Counter32 | Standard MIB values. | Number of frames for which transmission on a particular interface fails due to an | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------------|---|--|-----------------|
| | | | | internal MAC sublayer transmit error. | |
| dot3StatsCarrierSenseErrors (1.3.6.1.2.1.10.7.2.1.11) | read-only | Counter32 | Standard MIB values. | Number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. | As per the MIB. |
| dot3StatsFrameTooLongs (1.3.6.1.2.1.10.7.2.1.13) | read-only | Counter32 | Standard MIB values. | Number of frames received on a particular interface that exceed the maximum permitted frame size. | As per the MIB. |
| dot3StatsInternalMacReceiveErrors (1.3.6.1.2.1.10.7.2.1.16) | read-only | Counter32 | Standard MIB values. | Number of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. | As per the MIB. |
| dot3StatsEtherChipSet (1.3.6.1.2.1.10.7.2.1.17) | read-only | Object Identifier | Standard MIB values. | This object contains an OBJECT IDENTIFIER. | Not supported |
| dot3StatsSymbolErrors (1.3.6.1.2.1.10.7.2.1.18) | read-only | Counter | Standard MIB values. | For interfaces operating at 100 Mbps. | As per the MIB. |
| dot3StatsDuplexStatus (1.3.6.1.2.1.10.7.2.1.19) | read-only | Integer | unknown(1), halfDuplex(2), fullDuplex(3) | Current mode of operation of the MAC entity. | As per the MIB. |
| dot3StatsRateControlAbility (1.3.6.1.2.1.10.7.2.1.20) | read-only | Integer | Standard MIB values. | For interfaces operating at speeds above 1000 Mbps. | As per the MIB. |
| dot3StatsRateControlStatus (1.3.6.1.2.1.10.7.2.1.21) | read-only | OBJECT IDENTIFIER | rateControlOff(1), rateControlOn(2), unknown(3) | Current rate control mode of operation of the MAC sublayer of this interface. | As per the MIB. |

dot3CollTable

About this table

This table contains a collection of collision histograms for a particular set of interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and dot3CollCount.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|----------------------|--|-----------------|
| dot3CollCount (1.3.6.1.2.1.10.7.5.1.2) | not-accessible | Integer | Integer (1..16) | Number of per-frame media collisions for which a particular collision histogram cell represents the frequency on a particular interface. | As per the MIB. |
| dot3CollFrequencies (1.3.6.1.2.1.10.7.5.1.3) | read-only | Counter32 | Standard MIB values. | Number of individual MAC frames for which the transmission (successful or otherwise) on a particular interface occurs. | As per the MIB. |

dot3ControlTable

About this table

This table contains the descriptive and status information about the MAC Control sublayer on the Ethernet-like interfaces attached to a particular system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3StatsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| dot3ControlFunctionsSupported (1.3.6.1.2.1.10.7.9.1.1) | read-only | BITS | pause(0) | List of the possible MAC Control functions implemented for this interface. | As per the MIB. |
| dot3ControlInUnknownOpCodes (1.3.6.1.2.1.10.7.9) | read-only | Counter32 | Standard MIB values. | Number of MAC Control frames received on this | As per the MIB. |

| | | | | | |
|---|-----------|-----------|----------------------|--|-----------------|
| .1.2) | | | | interface that contain an opcode that is not supported by this device. | |
| dot3HCControlInUnknownOpCodes(1.3.6.1.2.1.10.7.9.1.3) | read-only | Counter64 | Standard MIB values. | 64-bit counter of the dot3ControlInUnknownOpCodes object. This object applies to 10-Gbps or faster interfaces. | As per the MIB. |

dot3PauseTable

About this table

This table contains the descriptive and status information about the MAC Control PAUSE function on the Ethernet-like interfaces attached to a particular system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3StatsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---|--|------------------------------|
| dot3PauseAdminMode (1.3.6.1.2.1.10.7.10.1.1) | read-write | Integer 32 | disabled(1), enabledXmit(2), enabledRcv(3), enabledXmitAndRcv(4) | Configure the default administrative PAUSE mode for this interface. | The object can only be read. |
| dot3PauseOperMode (1.3.6.1.2.1.10.7.10.1.2) | read-only | Integer32 | disabled(1), enabledXmit(2), enabledRcv(3), enabledXmitAndRcv(4) | This object reflects the PAUSE mode currently in use on this interface. | As per the MIB. |
| dot3InPauseFrames (1.3.6.1.2.1.10.7.10.1.3) | read-only | Counter32 | Standard MIB values. | Number of MAC Control frames received on this interface with an opcode indicating the PAUSE operation. This counter does not increment when the interface is operating in | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| | | | | half-duplex mode. | |
| dot3OutPauseFrames (1.3.6.1.2.1.10.7.1 0.1.4) | read-only | Counter32 | Standard MIB values. | Number of MAC Control frames transmitted on this interface with an opcode indicating the PAUSE operation. This counter does not increment when the interface is operating in half-duplex mode. | As per the MIB. |
| dot3HCInPauseFrames (1.3.6.1.2.1.10.7.1 0.1.5) | read-only | Counter64 | Standard MIB values. | Number of MAC Control frames received on this interface with an opcode indicating the PAUSE operation. | As per the MIB. |
| dot3HCOutPauseFrames (1.3.6.1.2.1.10.7.1 0.1.6) | read-only | Counter64 | Standard MIB values. | Number of MAC Control frames transmitted on this interface with an opcode indicating the PAUSE operation. | As per the MIB. |

dot3HCStatsTable

About this table

This table contains 64-bit versions of error counters for a single Ethernet-like interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3StatsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| dot3HCStatsAlignmentErrors (1.3.6.1.2.1.10.7.1 0.1.1) | read-only | Counter64 | Standard MIB values. | Number of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|---|-----------------|
| dot3HCStatsFCS Errors (1.3.6.1.2.1.10.7.1 1.1.2) | read-only | Counter64 | Standard MIB values. | Number of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. | As per the MIB. |
| dot3HCStatsIntern alMacTransmitErr ors (1.3.6.1.2.1.10.7.1 1.1.3) | read-only | Counter64 | Standard MIB values. | Number of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. | As per the MIB. |
| dot3HCStatsFram eTooLongs(1.3.6. 1.2.1.10.7.11.1.4) | read-only | Counter64 | Standard MIB values. | Number of frames received on a particular interface that exceed the maximum permitted frame size. | As per the MIB. |
| dot3HCStatsIntern alMacReceiveErro rs (1.3.6.1.2.1.10.7.1 1.1.5) | read-only | Counter64 | Standard MIB values. | Number of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. | As per the MIB. |
| dot3HCStatsSymb olErrors (1.3.6.1.2.1.10.7.1 1.1.6) | read-only | Counter64 | Standard MIB values. | Number of invalid data symbols. | As per the MIB. |

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HH3C-LAG-MIB

About this MIB

This MIB contains information in ieee8023-lag.mib and hh3c-lag.mib.

MIB file name

hh3c-lag.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3cLAG(25)

Scalar objects

hh3cAggResourceAllocationValue

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|---------------------|---|-----------------|
| hh3cAggResourceAllocationValue (1.3.6.1.4.1.25506.8.25.1.3) | read-only | Octets | OCTET STRING (1) | Whether link aggregation is implemented by Huawei or H3C. | As per the MIB. |

Tabular objects

hh3cAggLinkTable

About this table

This table contains aggregation group information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cAggLinkNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|----------------------|-----------------------|-----------------|
| hh3cAggLinkNumber (1.3.6.1.4.1.25506.8.25.1.1.1.1) | not-accessible | Integer32 | Standard MIB values. | Aggregation group ID. | As per the MIB. |

3

Columns

The table index is hh3cAggPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|----------------------|---|-----------------|
| hh3cAggPortIndex (1.3.6.1.4.1.25506.8.25.1.2.1.1) | not-accessible | Gauge32 | Standard MIB values. | Member port index. | As per the MIB. |
| hh3cAggPortNotAttachedReason (1.3.6.1.4.1.25506.8.25.1.2.1.2) | read-write | Integer32 | 0..10 | Why the port is unselected. | Read-only. |
| hh3cAggPortLacpState (1.3.6.1.4.1.25506.8.25.1.2.1.3) | read-write | TruthValue | true(1) false(2) | Status of LACP. | Read-only. |
| hh3cAggPortNotAttachedString (1.3.6.1.4.1.25506.8.25.1.2.1.4) | read-write | DisplayString | SIZE (0..255) | Detailed cause for the unselected state of the member port. | Read-only. |

Notifications

hh3cAggPortInactiveNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.2.2 | An aggregation member port becomes unselected. | Informational | Warning | - | ON |

Description

This notification is generated when an aggregation member port becomes unselected.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|-----------|-------------|
| 1.3.6.1.4.1.25506.8.25.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | Yes | Integer32 | 1..40960 |

Recommended action

1. Verify that the aggregation member port is physically up.

2. Verify that the attribute configuration of the aggregation member port is the same as that of the aggregate interface.
3. Repeat step 1 and step 2 on the peer port if the aggregate interface operates in dynamic mode.
4. If the issue persists, contact H3C Support.

hh3cAggPortInactiveNotification2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.2.2.3 | An aggregation member port becomes unselected. | Informational | Warning | - | ON |

Description

This notification is generated when an aggregation member port becomes unselected.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------|-------|-----------|-----------------|
| 1.3.6.1.4.1.25506.8.25.1.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | Yes | Integer32 | 1..40960 |
| 1.3.6.1.4.1.25506.8.25.1.2.1.1 (hh3cAggPortIndex) | Aggregation member port index. | No | Integer32 | As per the MIB. |

Recommended action

1. Verify that the aggregation member port is physically up.
2. Verify that the attribute configuration of the aggregation member port is the same as that of the aggregate interface.
3. Repeat step 1 and step 2 on the peer port if the aggregate interface operates in dynamic mode.
4. If the issue persists, contact H3C Support.

hh3cAggPortActiveNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.2.2.4 | An aggregation member port becomes selected. | Informational | - | - | ON |

Description

This notification is generated when an aggregation member port becomes selected.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|-----------|-----------------|
| 1.3.6.1.4.1.25506.8.25.1.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | Yes | Integer32 | 1..40960 |
| 1.3.6.1.4.1.25506.8.25.1.2.1.1 (hh3cAggPortIndex) | Aggregation member port index. | No | Integer32 | As per the MIB. |

Recommended action

No action is required.

hh3cAggAllMemberDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|---|---------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.25.0.7 | All member ports in an aggregation group go down. | Informational | Alarm | 1.3.6.1.4.1.25506.8.25.0.8 (hh3cAggAllMemberDownRecovery) | ON |

Description

This notification is generated when all member ports in an aggregation group go down.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

Check the link status of aggregation member ports.

hh3cAggAllMemberDownRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.8 | An aggregation group has the first up member port. | Informational | Alarm | - | ON |

Description

This notification is generated when an aggregation group has the first up member port.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

No action is required.

hh3cAggAllMemberUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.9 | All member ports in an aggregation group come up. | Informational | Alarm | - | ON |

Description

This notification is generated when all member ports in an aggregation group come up.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

No action is required.

hh3cAggMemberLinkDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.8.25.0.10 | A member port goes down in an aggregation group. | Informational | Alarm | 1.3.6.1.4.1.25506.8.25.0.11 (hh3cAggMemberLinkUp) | ON |

Description

This notification is generated when a member port goes down in an aggregation group.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

Check the link status of aggregation member ports.

hh3cAggMemberLinkUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.11 | A member port comes up in an aggregation group. | Informational | Alarm | - | ON |

Description

This notification is generated when a member port comes up in an aggregation group.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

No action is required.

hh3cAggMemberCoutExceedThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.25.0.12 | The maximum number of selected ports is exceeded in an aggregation group. | Informational | Alarm | 1.3.6.1.4.1.25506.8.25.0.13 (hh3cAggMemberCoutExceedRecovery) | ON |

Description

This notification is generated when the maximum number of selected ports is exceeded in an aggregation group.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------------------------|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.7 (hh3cAggUpThreshold) | Maximum number of selected ports. | No | Integer32 | Integer32 (1..2147483647) |

Recommended action

Check the configured maximum number of selected ports.

hh3cAggMemberCoutExceedRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.13 | The number of selected ports in an aggregation group drops below the maximum number of selected ports. | Informational | - | - | ON |

Description

This notification is generated when the number of selected ports in an aggregation group drops below the maximum number of selected ports.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------------------|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.7 (hh3cAggUpThreshold) | Maximum number of selected ports. | No | Integer32 | Integer32 (1..2147483647) |

Recommended action

No action is required.

hh3cAggMemberNumberChanged

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.14 | The number of selected ports changes in an aggregation group. | Informational | Alarm | - | ON |

Description

This notification is generated when the number of selected ports changes in an aggregation group.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.6 (hh3cAggTotalActiveNum) | Number of selected ports. | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.8.25.4.8 (hh3cAggReasonCode) | Cause of change. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

Check the link status of aggregation member ports.

hh3cAggLacpPartnerExpired

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.15 | The LACP timeout timer expires for the peer of an aggregation member port. | Informational | Alarm | - | ON |

Description

This notification is generated when the LACP timeout timer expires for the peer of an aggregation member port.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.1.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | No | Integer32 | 1..40960 |

Recommended action

Check the link status of aggregation member ports.

hh3cAggPortLacpInactive

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.16 | An aggregation member port cannot be selected after receiving an LACPDU. | Informational | Alarm | - | ON |

Description

This notification is generated when an aggregation member port receives a PDU that prevents it from being selected.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.1.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | No | Integer32 | Integer32 (1..40960) |
| 1.3.6.1.4.1.25506.8.25.4.3 (hh3cAggOldPduInfo) | Old PDU information. | No | OCTET_STRING | OCTET_STRING (0..512) |
| 1.3.6.1.4.1.25506.8.25.4.4 (hh3cAggNewPduInfo) | New PDU information. | No | OCTET_STRING | OCTET_STRING (0..512) |
| 1.3.6.1.4.1.25506.8.25.4.5 (hh3cAggPduChangeCode) | Changed PDU information. | No | OCTET_STRING | OCTET_STRING (0..255) |

Recommended action

Check the link status of aggregation member ports.

hh3cAggPortLacpNegotiateFailed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.8.25.0.17 | Negotiation fails on a member port in a dynamic aggregation group. | Informational | Alarm | 1.3.6.1.4.1.25506.8.25.0.17 (hh3cAggPortLacpNegotiateRecovery) | ON |

Description

This notification is generated when negotiation fails on a member port in a dynamic aggregation group.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.1.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | No | Integer32 | Integer32 (1..40960) |

Recommended action

Check the link status of aggregation member ports.

hh3cAggPortLacpNegotiateRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.25.0.18 | Negotiation succeeds on a member port in a dynamic aggregation group. | Informational | Alarm | - | ON |

Description

This notification is generated when negotiation succeeds on a member port in a dynamic aggregation group.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|--------------------------|
| 1.3.6.1.4.1.25506.8.25.4.1 (hh3cAggPortName) | Aggregate interface name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.4.2 (hh3cAggMemberPortName) | Aggregation member port name. | No | OCTET_STRING | OCTET_STRING (0..255) |
| 1.3.6.1.4.1.25506.8.25.1.1.1.1 (hh3cAggLinkNumber) | Aggregation group ID. | No | Integer32 | Integer32 (1..40960) |

Recommended action

Check the link status of aggregation member ports.

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HH3C-LLDP-EXT-MIB

About this MIB

The Link Layer Discovery Protocol (LLDP) is a Layer 2 industry-standard protocol (IEEE 802.1AB) that allows network devices from different vendors to discover neighbors and exchange system and configuration information.

This MIB defines private MIB objects for the following extended LLDP management features:

- Global LLDP configuration:
 - Global status of LLDP.
 - Global status of CDP compatibility.
- LLDP port configuration:
 - Port-specific packet transmission settings of CDP-compatible LLDP.
 - Protection action taken on ports whose neighbors fail validation.
 - Protection action taken on ports whose neighbors age out.
- LLDP neighbor validation criteria:
 - Chassis ID subtype.
 - Chassis ID.
 - Port ID subtype.
 - Port ID.
- Feature status on LLDP-enabled ports:
 - Neighbor validation status.
 - Neighbor aging status.
- Trapping configuration on LLDP-enabled ports:
 - Trapping for neighbor validation status changes.
 - Trapping for neighbor aging status changes.

MIB file name

hh3c-lldp-ext.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).huawei.h3c(10).h3cCommon(2).h3cLldp(100)

Scalar objects

hh3cLldpAdminStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|------------------------|-----------------|
| hh3cLldpAdminStatus (1.3.6.1.4.1.25506.2.100.1.1.1) | read-write | TruthValue | true(1) false(2) | Global status of LLDP. | As per the MIB. |

Tabular objects

hh3cLldpPortConfigTable

About this table

Use this table to configure LLDP on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cLldpPortConfigPortNum.

The table OID is 1.3.6.1.4.1.25506.2.100.1.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|---------------------------|--|-----------------|
| hh3cLldpPortConfigPortNum (1.3.6.1.4.1.25506.2.100.1.1.3.1.1) | not-accessible | LldpPortNumber | Standard MIB values. | Port index. | As per the MIB. |
| hh3cLldpPortConfigCDPComplianceStatus (1.3.6.1.4.1.25506.2.100.1.1.3.1.2) | read-write | INTEGER | txAndRx(1) disabled(2) | Packet transmission capabilities of CDP-compatible LLDP. | As per the MIB. |
| hh3cLldpPortConfigValidationAction (1.3.6.1.4.1.25506.2.100.1.1.3.1.3) | read-write | Integer32 | Standard MIB values. | Neighbor validation status. | As per the MIB. |
| h3cLldpPortConfigAgingAction (1.3.6.1.4.1.25506.2.100.1.1.3.1.4) | read-write | Integer32 | Standard MIB values. | Neighbor aging status. | As per the MIB. |

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HH3C-LPBKDT-MIB

About this MIB

The loop detection mechanism performs periodic checking for Layer 2 loops and processes the interfaces with loops as configured.

Use this MIB to perform the following tasks:

- Generate traps when the loop state of an interface changes.
- Configure and view the loop detection state, loop protection action, and loop detection interval for VLANs globally.
- Configure and view the loop detection state, loop protection action, and loop detection interval for VLANs on an interface.

MIB file name

hh3c-lpbkdt.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).h3cCommon(2).hh3cDldp2Lpbkdt(95)

Scalar objects

OID of this table is: 1.3.6.1.4.1.25506.2.95.2

hh3cLpbkdtVlanID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------|-------------|--|-----------------|
| hh3cLpbkdtVlanID (1.3.6.1.4.1.25506.2.95.2.1) | accessible-for-notify | INTEGER | 1..4094 | VLAN ID in reported trap messages when a loop is detected or eliminated on an interface. | As per the MIB. |

hh3cLpbkdtVlanEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|--------------|--|-----------------|
| hh3cLpbkdtVlanEnable (1.3.6.1.4.1.25506.2.95.2.2) | read-write | OCTETSTRING | SIZE(1..512) | Enable or disable loop detection for VLANs globally. | As per the MIB. |

hh3cLpbkdtAction

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|--|---|
| hh3cLpbkdtAction (1.3.6.1.4.1.25506.2.95.2.3) | read-write | INTEGER | none (1), block(2), nolearning(3), shutdown(4) | Configure the global loop protection action, which is to take on all ports where | In the current software version, only the log and shutdown operations are |

| | | | | | |
|--|--|--|--|---------------------|--|
| | | | | loops are detected. | supported, and the block and nolearning actions are not supported. |
|--|--|--|--|---------------------|--|

hh3cLpbkdtAction

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------|--------------------------|-----------------|
| hh3cLpbkdtIntervalTime (1.3.6.1.4.1.25506.2.95.2.4) | read-write | Integer32 | 1..300 | Loop detection interval. | As per the MIB. |

Tabular objects

hh3cLpbkdtPortTable

OID of this table is: 1.3.6.1.4.1.25506.2.95.2.5

About this table

Use this table to configure loop detection on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cLpbkdtPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|--|--|
| hh3cLpbkdtPortIndex (1.3.6.1.4.1.25506.2.95.2.5.1.1) | not-accessible | INTEGER | 1..2147483647 | Interface index. | As per the MIB. |
| hh3cLpbkdtPortVlanEnable (1.3.6.1.4.1.25506.2.95.2.5.1.2) | read-write | OCTET STRING | SIZE(1..512) | Enable or disable loop detection for VLANs on a port. | As per the MIB. |
| Not related. Please archive it. hh3cLpbkdtPortAction (1.3.6.1.4.1.25506.2.95.2.5.1.3) | read-write | INTEGER | none (1), block(2), nolearning(3), shutdown(4) | Configure the loop protection action for a port, which is to take on the port when a loop is detected. | An aggregate interface supports only the log and shutdown actions. The other interfaces support all actions. |
| hh3cLpbkdtPortLoopbacked (1.3.6.1.4.1.25506.2.95.2.5.1.4) | read-only | TruthValue | true(1), false(2) | Check for a loop on a port. | As per the MIB. |

Notifications

hh3cLpbkdtTrapLoopbacked

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.95.1.0.1 | A loop occurs on a port | Error | Warning | 1.3.6.1.4.1.25506.2.95.1.0.2 (hh3cLpbkdtTrapRecovered) | ON |

Description

This notification is generated when a port detects the loopback detection packets that the device sends to notify that a loop is generated.

Status control

This notification cannot be turned off.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|-----------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | No | OCTET STRING | OCTET STRING (0..255) |

Recommended action

Check for a loop on the network.

hh3cLpbkdtTrapRecovered

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.95.1.0.1 | A loop is removed from a port | Informational | - | - | ON |

Description

This notification is generated when a port does not receive loopback packets that the device sends within a period of time to notify that a loop is removed.

Status control

This notification cannot be turned off.

Objects

| OID (object name) | Description | Index | Type | Value range |
|----------------------------------|-----------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | No | OCTET STRING | OCTET STRING (0..255) |

Recommended action

Check for a loop on the network.

hh3cLpbkdtTrapPerVlanLoopbacked

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------|--------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.95.1.0.3 | A loop occurs on a port | Error | Warning | 1.3.6.1.4.1.25506.2.95.1.0.4 (hh3cLpbkdtTrapPerVlanRecovered) | ON |

Description

This notification is generated when a port detects the loopback detection packets that the device sends in a VLAN to notify that a loop is generated.

Status control

This notification cannot be turned off.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.95.2.1 (hh3cLpbkdtVlanID) | VLAN in which a loop occurs | No | Integer32 | Integer32 (1..4094) |

Recommended action

Check for a loop on the network.

hh3cLpbkdtTrapPerVlanRecovered

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.95.1.0.4 | A loop is removed from a port | Informational | - | - | ON |

Description

This notification is generated when a port does not receive loopback packets that the device sends in a VLAN within a period of time to notify that a loop is removed.

Status control

This notification cannot be turned off.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.95.2.1 (hh3cLpbkdtVlanID) | VLAN in which a loop is removed | No | Integer32 | Integer32 (1..4094) |

Recommended action

No action is required.

hh3cLpbkdtTrapVsiLoopbacked

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.95.1.0.5 | A loop occurred on an AC interface | Error | Warning | 1.3.6.1.4.1.25506.2.95.1.0.6 (hh3cLpbkdtTrapVsiRecovered) | ON |

Description

This notification is generated when an AC interface detects the loopback detection packets that the device sends to notify that a loop is generated.

Status control

This notification cannot be turned off.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.95.1.1.1 (hh3cLpbkdtVsiName) | VSI name | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.95.1.1.2 (hh3cLpbkdtSVlanID) | Outer VLAN ID | No | Integer32 | Integer32 (1..4094) |
| 1.3.6.1.4.1.25506.2.95.1.1.2 (hh3cLpbkdtCVlanID) | Inner VLAN ID | No | Integer32 | Integer32 (1..4094) |
| 1.3.6.1.4.1.25506.2.95.1.1.4 (hh3cLpbkdtACName) | AC name | No | OCTET STRING | OCTET STRING (0..255) |

Recommended action

Check for a loop on a VSI on the network.

hh3cLpbkdtTrapVsiRecovered

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.95.1.0.6 | A loop is removed from an AC interface | Informational | - | - | ON |

Description

This notification is generated when an AC interface does not receive the loopback detection packets that the device sends to notify that a loop is generated.

Status control

This notification cannot be turned off.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.95.1.1.1 (hh3cLpbkdtVsiName) | VSI name | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.95.1.1.4 (hh3cLpbkdtACName) | AC name | No | OCTET STRING | OCTET STRING (0..255) |

Recommended action

No action is required.

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HH3C-LswMAM-MIB

About this MIB

Use this MIB to configure unicast MAC address entries.

MIB file name

hh3c-splat-mam.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswMAM(3)

Tabular objects

hh3cdot1qTpFdbSetTable

About this table

Use this table to configure unicast MAC address entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cdot1qVlanIndex and hh3cdot1qTpFdbSetAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|--|---|
| hh3cdot1qTpFdbSetAddress (1.3.6.1.4.1.25506.8.35.3.2.1.1) | not-accessible | MacAddress | Standard MIB values. | Unicast MAC address entry. | As per the MIB. |
| hh3cdot1qTpFdbSetPort (1.3.6.1.4.1.25506.8.35.3.2.1.2) | read-write | Interface Index | Standard MIB values. | Index of the interface corresponding to the MAC address entry. | The object value is 0 when the state of the MAC address entry is blackhole. |
| hh3cdot1qTpFdbSetStatus (1.3.6.1.4.1.25506.8.35.3.2.1.3) | read-write | INTEGER | other(1), learned(3), static(6), dynamic(7), blackhole(9), security(11) | MAC address entry state. | A MAC address entry configured with the dynamic type will be added to the learned MAC address entry list. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|----------------------|--|------------------------------------|
| hh3cdot1qTpFdbSetOperate (1.3.6.1.4.1.25506.8.35.3.2.1.4) | read-write | INTEGER | add(1), delete(2) | Add or delete a MAC address entry. | The object can only be written. |

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HH3C-LswMSTP-MIB

About this MIB

Spanning tree protocols eliminate loops by selectively blocking ports to prune the loop structure into a loop-free tree structure.

This MIB defines private MIB objects for MSTP.

MIB file name

hh3c-splat-mstp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).huawei(2011).products(2).lanSw(23).lswCommon(1).hwdot1sMstp(14)

Scalar objects

hh3cdot1sStpStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|---------------------------|--------------|-----------------|
| hh3cdot1sStpStatus (1.3.6.1.4.1.25506.8.35.14.1) | read-write | EnabledStatus | enabled(1) disabled(2) | MSTP status. | As per the MIB. |

hh3cdot1sStpForceVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|------------------------------|---------------------|--|
| hh3cdot1sStpForceVersion (1.3.6.1.4.1.25506.8.35.14.2) | read-write | INTEGER | stp(0) rstp(2) mstp(3) | Spanning tree mode. | Same as MIB definition. The value for PVST is 2. |

hh3cdot1sStpDiameter

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-------------|-------------------|---|
| hh3cdot1sStpDiameter (1.3.6.1.4.1.25506.8.35.14.3) | read-write | INTEGER | 2..7 | Network diameter. | This object is related to the dot1dStpHelloTime, dot1dStpMaxAge, and dot1dStpForward Delay objects defined in IEEE 802.1d. Modification to the hh3cdot1sStpDiameter object will change the values |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|--|
| | | | | | of those objects. Modification to any of the dot1dStpHelloTime, dot1dStpMaxAge, and dot1dStpForward Delay objects will invalidate the value of the hh3cdot1sStpDiameter object. |

hh3cdot1sMstBridgeMaxHops

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------|--------------------------------|-----------------|
| hh3cdot1sMstBridgeMaxHops (1.3.6.1.4.1.25506.8.35.14.4) | read-write | INTEGER | 1..40 | Maximum hops of an MST region. | As per the MIB. |

hh3cdot1sMstMasterBridgeID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------|------------------|--------------------------------|-----------------|
| hh3cdot1sMstMasterBridgeID (1.3.6.1.4.1.25506.8.35.14.5) | read-only | BridgeId | OCTET STRING (8) | Root bridge in an MSTP region. | As per the MIB. |

hh3cdot1sMstMasterPathCost

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|--------------------------------------|-----------------|
| hh3cdot1sMstMasterPathCost (1.3.6.1.4.1.25506.8.35.14.6) | read-only | INTEGER | Standard MIB values. | Cost of the path to the root bridge. | As per the MIB. |

hh3cdot1sMstBpduGuard

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|---------------------------|-------------|-----------------|
| hh3cdot1sMstBpduGuard (1.3.6.1.4.1.25506.8.35.14.7) | read-write | EnabledStatus | enabled(1) disabled(2) | BPDU guard. | As per the MIB. |

hh3cdot1sMstAdminFormatSelector

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------|--------------------------|--|
| hh3cdot1sMstAdminFormatSelector (1.3.6.1.4.1.25506.8.35.14.8) | read-write | INTEGER | 0. | Bridge selection factor. | This object is configurable, and you can set it only to 0. |

hh3cdot1sMstAdminRegionName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|--------------|------------------|-----------------|
| hh3cdot1sMstAdminRegionName (1.3.6.1.4.1.25506.8.35.14.9) | read-write | OCTET STRING | SIZE (1..32) | MST region name. | As per the MIB. |

hh3cdot1sMstAdminRevisionLevel

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------|----------------------|-----------------|
| hh3cdot1sMstAdminRevisionLevel (1.3.6.1.4.1.25506.8.35.14.10) | read-write | INTEGER | 0..65535 | MSTP revision level. | As per the MIB. |

hh3cdot1sMstOperFormatSelector

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|---|-----------------|
| hh3cdot1sMstOperFormatSelector (1.3.6.1.4.1.25506.8.35.14.11) | read-only | INTEGER | Standard MIB values. | Effective selection factor of an MSTP region. | As per the MIB. |

hh3cdot1sMstOperRegionName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--------------|----------------------------|-----------------|
| hh3cdot1sMstOperRegionName (1.3.6.1.4.1.25506.8.35.14.12) | read-only | OCTET STRING | SIZE (0..32) | Effective MST region name. | As per the MIB. |

hh3cdot1sMstOperRevisionLevel

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-------------|--------------------------------|-----------------|
| hh3cdot1sMstOperRevisionLevel (1.3.6.1.4.1.25506.8.35.14.13) | read-only | INTEGER | 0..65535 | Effective MSTP revision level. | As per the MIB. |

hh3cdot1sMstOperConfigDigest

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--------------|--|-----------------|
| hh3cdot1sMstOperConfigDigest (1.3.6.1.4.1.25506.8.35.14.14) | read-only | OCTET STRING | SIZE (0..16) | Effective configuration digest of an MST region. | As per the MIB. |

hh3cdot1sMstRegionConfActive

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------------------|------------------------------------|---|
| hh3cdot1sMstRegionConfActive (1.3.6.1.4.1.25506.8.35.14.15) | read-write | INTEGER | enable(1) disable(2) | Activate MST region configuration. | Default: Enabled. If you set the value to disable, MST region configuration is read-only and does not take effect. |

hh3cdot1sMstDefaultVlanAllo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|----------------------------|---|-----------------|
| hh3cdot1sMstDefaultVlanAllo (1.3.6.1.4.1.25506.8.35.14.16) | read-write | INTEGER | enable(1) unused(65535) | Default VLAN-to-instance mappings in an MST region. | As per the MIB. |

hh3cdot1sMstDefaultRegionName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|----------------------------|--------------------------|-----------------|
| hh3cdot1sMstDefaultRegionName (1.3.6.1.4.1.25506.8.35.14.17) | read-write | INTEGER | enable(1) unused(65535) | Default MST region name. | As per the MIB. |

hh3cdot1sStpPathCostStandard

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|--|---|
| hh3cdot1sStpPathCostStandard (1.3.6.1.4.1.25506.8.35.14.21) | read-write | INTEGER | legacy(0) dot1d-1998(1) dot1t(2) | Standard for calculating the default path costs. | <ul style="list-style-type: none"> legacy—Private standard. dot1d-1998—IEEE 802.1d-1998. dot1t—IEEE 802.1t. |

Tabular objects

hh3cdot1sVIDAllocationTable

About this table

Use this table to configure MSTP VLAN settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cdot1sMstVID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-------------|-----------------------------------|-----------------|
| hh3cdot1sMstVID (1.3.6.1.4.1.25506 .8.35.14.18.1.1) | read-only | INTEGER | 1..4094 | VLAN ID | As per the MIB. |
| hh3cdot1sAdmin MstID (1.3.6.1.4.1.25506 .8.35.14.18.1.2) | read-write | INTEGER | 0..4094 | Configured MST region mapping. | As per the MIB. |
| hh3cdot1sOperMs tID (1.3.6.1.4.1.25506 .8.35.14.18.1.3) | read-only | INTEGER | 0..4094 | Effective MST region mapping. | As per the MIB. |

hh3cdot1sInstanceTable

About this table

Use this table to configure MST region settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cdot1sInstanceID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------|---------------------|--------------|-----------------|
| hh3cdot1sInstanc eID (1.3.6.1.4.1.25506 .8.35.14.19.1.1) | read-only | INTEGER | 0..4094 | Instance ID. | As per the MIB. |
| hh3cdot1sMstiBrid geID (1.3.6.1.4.1.25506 | read-only | BridgeID | OCTET STRING (8) | Bridge ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|---|---|-----------------|
| .8.35.14.19.1.2) | | | | | |
| hh3cdot1sMstiBridgePriority (1.3.6.1.4.1.25506.8.35.14.19.1.3) | read-write | INTEGER | 0..61440 | Bridge priority. | As per the MIB. |
| hh3cdot1sMstiDesignedRoot (1.3.6.1.4.1.25506.8.35.14.19.1.4) | read-only | BridgeId | OCTET STRING (8) | Root bridge. | As per the MIB. |
| hh3cdot1sMstiRootPathCost (1.3.6.1.4.1.25506.8.35.14.19.1.5) | read-only | INTEGER | Standard MIB values. | Path cost from the MSTI to the root bridge. | As per the MIB. |
| hh3cdot1sMstiRootPort (1.3.6.1.4.1.25506.8.35.14.19.1.6) | read-only | INTEGER | Standard MIB values. | Root port. | As per the MIB. |
| hh3cdot1sMstiRootType (1.3.6.1.4.1.25506.8.35.14.19.1.7) | read-write | INTEGER | normal(0) secondary(1) primary(2) | Root bridge type. | As per the MIB. |
| hh3cdot1sMstiRemainingHops (1.3.6.1.4.1.25506.8.35.14.19.1.8) | read-only | INTEGER | Standard MIB values. | Remaining hops. | As per the MIB. |
| hh3cdot1sMstiAdminMappedVlanListLow (1.3.6.1.4.1.25506.8.35.14.19.1.9) | read-only | OCTET STRING | SIZE (0..256) | Lower part of the VLAN ID list mapped to the instance. | As per the MIB. |
| hh3cdot1sMstiAdminMappedVlanListHigh (1.3.6.1.4.1.25506.8.35.14.19.1.10) | read-only | OCTET STRING | SIZE (0..256) | Higher part of the VLAN ID list mapped to the instance. | As per the MIB. |
| hh3cdot1sMstiOperMappedVlanListLow (1.3.6.1.4.1.25506.8.35.14.19.1.11) | read-only | OCTET STRING | SIZE (0..256) | Lower part of the effective VLAN ID list. | As per the MIB. |
| hh3cdot1sMstiOperMappedVlanListHigh (1.3.6.1.4.1.25506.8.35.14.19.1.12) | read-only | OCTET STRING | SIZE (0..256) | Higher part of the effective VLAN ID list. | As per the MIB. |

hh3cdot1sPortTable

About this table

Use this table to configure MSTP on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cdot1sInstanceID and hh3cdot1sMstiPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|--|-----------------------------------|----------------------------|
| hh3cdot1sMstiPortIndex (1.3.6.1.4.1.25506.8.35.14.20.1.1) | read-only | INTEGER | (0..65535) | Port index. | As per the MIB. |
| hh3cdot1sMstiState (1.3.6.1.4.1.25506.8.35.14.20.1.2) | read-only | INTEGER | disabled(1) discarding(2) learning(4) forwarding(5) | Port status. | Does not support disabled. |
| hh3cdot1sMstiPortPriority (1.3.6.1.4.1.25506.8.35.14.20.1.3) | read-write | INTEGER | 0..240 | Port priority. | As per the MIB. |
| hh3cdot1sMstiPathCost (1.3.6.1.4.1.25506.8.35.14.20.1.4) | read-write | INTEGER | 1..200000000 | Port path cost. | As per the MIB. |
| hh3cdot1sMstiDesignatedRoot (1.3.6.1.4.1.25506.8.35.14.20.1.5) | read-only | Bridgeld | OCTET STRING (8) | Root bridge. | As per the MIB. |
| hh3cdot1sMstiDesignatedCost (1.3.6.1.4.1.25506.8.35.14.20.1.6) | read-only | INTEGER | Standard MIB values. | Path cost of the designated port. | As per the MIB. |
| hh3cdot1sMstiDesignatedBridge (1.3.6.1.4.1.25506.8.35.14.20.1.7) | read-only | Bridgeld | OCTET STRING (8) | Designated bridge. | As per the MIB. |
| hh3cdot1sMstiDesignatedPort (1.3.6.1.4.1.25506.8.35.14.20.1.8) | read-only | OCTET STRING | SIZE (2) | Designated port. | As per the MIB. |
| hh3cdot1sMstiMasterBridgeID (1.3.6.1.4.1.25506.8.35.14.20.1.9) | read-only | Bridgeld | OCTET STRING (8) | Master bridge. | As per the MIB. |
| hh3cdot1sMstiMasterPortCost (1.3.6.1.4.1.25506.8.35.14.20.1.10) | read-only | INTEGER | Standard MIB values. | Path cost to the master bridge. | As per the MIB. |
| hh3cdot1sMstiStpPortEdgeport (1.3.6.1.4.1.25506.8.35.14.20.1.11) | read-write | EnabledStatus | enabled(1) disabled(2) | Whether the port is an edge port. | As per the MIB. |
| hh3cdot1sMstiStp | read-write | INTEGER | forceTrue(1) | Whether to set | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|----------------------------|---|-----------------|
| PortPointToPoint (1.3.6.1.4.1.25506 .8.35.14.20.1.12) | | | forceFalse(2) auto(3) | the port link type to point-to-point. | |
| hh3cdot1sMstiStp Mcheck (1.3.6.1.4.1.25506 .8.35.14.20.1.13) | read-write | INTEGER | enable(1) unused(65535) | Perform mCheck. | As per the MIB. |
| hh3cdot1sMstiStp TransLimit (1.3.6.1.4.1.25506 .8.35.14.20.1.14) | read-write | INTEGER | 1..255 | BPDU transmission rate. | Default: 10. |
| hh3cdot1sMstiStp RXStpBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.15) | read-only | Counter32 | Standard MIB values. | Incoming BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp TXStpBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.16) | read-only | Counter32 | Standard MIB values. | Outgoing BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp RXTCNBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.17) | read-only | Counter32 | Standard MIB values. | Incoming TCN BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp TXTCNBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.18) | read-only | Counter32 | Standard MIB values. | Outgoing TCN BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp RXRSTPBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.19) | read-only | Counter32 | Standard MIB values. | Incoming RSTP BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp TXRSTPBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.20) | read-only | Counter32 | Standard MIB values. | Outgoing RSTP BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp RXMSTPBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.21) | read-only | Counter32 | Standard MIB values. | Incoming MSTP BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp TXMSTPBPDU (1.3.6.1.4.1.25506 .8.35.14.20.1.22) | read-only | Counter32 | Standard MIB values. | Outgoing MSTP BPDU count. | As per the MIB. |
| hh3cdot1sMstiStp ClearStatistics (1.3.6.1.4.1.25506 .8.35.14.20.1.23) | read-write | INTEGER | clear(1) unused(65535) | Clear packet statistics. | As per the MIB. |
| hh3cdot1sMstiStp DefaultPortCost (1.3.6.1.4.1.25506 .8.35.14.20.1.24) | read-write | INTEGER | enable(1) unused(65535) | Default port path cost. | As per the MIB. |
| hh3cdot1sMstiStp Status (1.3.6.1.4.1.25506 .8.35.14.20.1.25) | read-write | EnabledStatus | enabled(1) disabled(2) | Spanning tree feature status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------------|----------------------------------|---|---|
| hh3cdot1sMstiPortRootGuard (1.3.6.1.4.1.25506.8.35.14.20.1.26) | read-write | EnabledStatus | enabled(1) disabled(2) | Root guard status. | As per the MIB. |
| hh3cdot1sMstiPortLoopGuard (1.3.6.1.4.1.25506.8.35.14.20.1.27) | read-write | EnabledStatus | enabled(1) disabled(2) | Loop guard status. | As per the MIB. |
| hh3cdot1sMstiStpPortSendingBPDUType (1.3.6.1.4.1.25506.8.35.14.20.1.28) | read-only | INTEGER | stp(1) rstp(2) mstp(3) | BPDU type. | As per the MIB. |
| hh3cdot1sMstiStpOperPortPointToPoint (1.3.6.1.4.1.25506.8.35.14.20.1.29) | read-only | TruthValue | true(1) false(2) | Whether the port link type is point-to-point. | As per the MIB. |
| hh3cdot1sMstiStpPortAdminBPDUFormat (1.3.6.1.4.1.25506.8.35.14.20.1.30) | read-write | Hh3cdot1sFormatStatus | legacy(1) dot1s(2) auto(3) | Set the mode used by the port to recognize and send MSTP BPDUs. | <ul style="list-style-type: none"> • legacy—The port receives and sends only compatible-format MSTP BPDUs. • dot1s—The port receives and sends only standard-format (802.1s-compliant) MSTP BPDUs. • auto—The port recognizes the MSTP BPDU format automatically and determines the format of MSTP BPDUs to send accordingly. <p>This mode takes effect only on the CIST.</p> |
| hh3cdot1sMstiStpPortOperBPDUFormat (1.3.6.1.4.1.25506.8.35.14.20.1.31) | read-only | Hh3cdot1sFormatStatus | legacy(1) dot1s(2) auto(3) | Read the mode used by the port to send MSTP BPDUs. | <ul style="list-style-type: none"> • legacy—The port sends only compatible-format MSTP BPDUs. • dot1s—The port sends only standard-format (802.1s-compliant) MSTP BPDUs. • auto—The port recognizes the MSTP BPDU format automatically and determines the format of MSTP BPDUs to send accordingly. <p>This mode takes effect only on the CIST.</p> |
| hh3cdot1sMstiStp | read-write | EnabledStatus | enabled(1) | Port role | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|---------------------------|--|-----------------|
| PortRoleRestriction(1.3.6.1.4.1.25506.8.35.14.20.1.32) | | | disabled(2) | restriction status. | |
| hh3cdot1sMstiStpPortTcRestriction(1.3.6.1.4.1.25506.8.35.14.20.1.33) | read-write | EnabledStatus | enabled(1) disabled(2) | TC-BPDU transmission restriction status. | As per the MIB. |
| hh3cdot1sMstiStpPortDisputed(1.3.6.1.4.1.25506.8.35.14.20.1.34) | read-only | TruthValue | true(1) false(2) | Dispute guard status. | As per the MIB. |

Notifications

hh3cPortMstiStateForwarding

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.1 | A port transits to the forwarding state. | Informational | - | - | OFF |

Description

This notification is generated when a port transits to the forwarding state.

Status control

ON

CLI: Use the `stp port-log` command.

OFF

CLI: Use the `undo stp port-log` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceId) | Instance ID. | Yes | INTEGER | 0..4094 |
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cdot1sMstiPortIndex) | Port index. | Yes | INTEGER | 1..65535 |

Recommended action

Check for link failures after the network topology becomes stable.

hh3cPortMstiStateDiscarding

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.2 | A port transits to the discarding state. | Informational | - | - | OFF |

Description

This notification is generated when a port transits to the discarding state.

Status control

ON

CLI: Use the `stp port-log` command.

OFF

CLI: Use the `undo stp port-log` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceId) | Instance ID. | Yes | INTEGER | 0..4094 |
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cdot1sMstiPortIndex) | Port index. | Yes | INTEGER | 1..65535 |

Recommended action

Check for link failures after the network topology becomes stable.

hh3cBridgeLostRootPrimary

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.3 | The device loses its root bridge role after another device is elected as root bridge. | Informational | - | - | ON |

This table does not contain indexes. For information about the index or indexes of a MIB object instance, see the section for that MIB object.

Description

This notification is generated when the device loses its root bridge role after another device is elected as root bridge.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceID) | Instance ID. | No | INTEGER | 0..4094 |

Recommended action

- Verify the bridge priorities of the devices.
- Check for possible attacks from other devices.

hh3cPortMstiRootGuarded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.4 | A root guard-enabled port receives a configuration BPDU with a higher priority. | Informational | - | - | OFF |

Description

This notification is generated when a root guard-enabled port receives a configuration BPDU with a higher priority.

Status control

ON

CLI: Use the `stp root-protection` command.

MIB: Set hh3cdot1sMstiPortRootGuard to true(1).

OFF

MIB: Set hh3cdot1sMstiPortRootGuard to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceID) | Instance ID. | Yes | INTEGER | 0..4094 |
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cdot1sMstiPortIndex) | Port index. | Yes | INTEGER | 1..65535 |

Recommended action

- Verify the bridge priorities of the devices.
- Check for possible attacks from other devices.

hh3cPortMstiBpduGuarded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.5 | A BPDU guard-enabled edge port receives configuration BPDUs. | Informational | - | - | OFF |

Description

This notification is generated when a BPDU guard-enabled edge port receives configuration BPDUs.

Status control

ON

CLI: Use the `stp bpdu-protection` command.

MIB: Set hh3cdot1sMstBpduGuard to true(1).

OFF

MIB: Set hh3cdot1sMstBpduGuard to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|---------|-------------|
| 1.3.6.1.2.1.17.2.15.1.1 (dot1dStpPort) | Port index. | Yes | INTEGER | 1..65535 |

Recommended action

- Verify that the downstream device is an endpoint device.
- Check for possible attacks from other devices.

hh3cPortMstiLoopGuarded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.6 | An alternate port or root port does not receive a BPDU | Informational | - | - | OFF |

| | | | | | |
|--|------------------------------|--|--|--|--|
| | upon BPDU reception timeout. | | | | |
|--|------------------------------|--|--|--|--|

Description

This notification is generated when an alternate port or root port does not receive a BPDU upon BPDU reception timeout.

Status control

ON

CLI: Use the `stp loop-protection` command.

MIB: Set hh3cdot1sMstiPortLoopGuard to true(1).

OFF

MIB: Set hh3cdot1sMstiPortLoopGuard to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceId) | Instance ID. | Yes | INTEGER | 0..4094 |
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cdot1sMstiPortIndex) | Port index. | Yes | INTEGER | 1..65535 |

Recommended action

- Verify that the spanning tree status of the upstream device is correct.
- Check for possible attacks from other devices.

hh3cMstiNewRoot

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.7 | A new root bridge is elected. | Informational | - | - | OFF |

Description

This notification is generated when a new root bridge is elected in the network.

Status control

ON

CLI: Use the `snmp trap enable stp new-root` command.

OFF

CLI: Use the `undo snmp trap enable stp new-root` command.

Objects

| OID | Description | Index | Type | Value range |
|---|--------------------------|-------|----------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceID) | Instance ID. | Yes | INTEGER | 0..4094 |
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cdot1sMstiDesignedRoot) | Root bridge information. | No | Bridgeld | |
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cdot1sMstiDesignedRoot) | Root bridge information. | No | Bridgeld | |

Recommended action

- Verify the bridge priorities of the devices.
- Check for possible attacks from other devices.

hh3cMstiTopologyChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.9 | The network topology changes after the spanning tree state of ports changes. | Informational | - | - | ON |

This table does not contain indexes. For information about the index or indexes of a MIB object instance, see the section for that MIB object.

Description

This notification is generated when the spanning tree state changes of ports cause network topology changes.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceID) | Instance ID. | No | INTEGER | 0..4094 |

Recommended action

Check the spanning tree state of ports.

hh3cPortMstiLostEdge

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.10 | An edge port receives BPDUs. | Informational | Warning | - | ON |

This table does not contain indexes. For information about the index or indexes of a MIB object instance, see the section for that MIB object.

Description

This notification is generated when an edge port receives BPDUs and becomes a non-edge port.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|-----------------|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.8.35.14.20.1.1 (hh3cPortMstiPortIndex) | Port number. | Yes | INTEGER | 1..65535 |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name. | Yes | OCTET STRING | OCTET STRING(0..255) |

Recommended action

Verify that the peer network attached to the edge port has changed.

hh3cMstiTcGuarded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.11 | The number of TC-BPDUs received by the device exceeds the upper threshold. | Informational | Warning | - | ON |

Description

This notification is generated when the number of TC-BPDUs received by the device exceeds the upper threshold.

Status control

ON

CLI: Use the `stp tc-protection` command.

OFF

CLI: Use the **undo stp tc-protection** command.

Objects

| OID | Description | Index | Type | Value range |
|---|--------------|-------|---------|-------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceID) | Instance ID. | Yes | INTEGER | 0..4094 |

hh3cMstiProTcGuarded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.35.14.0.12 | The number of TC-BPDUs received by the device exceeds the upper threshold. | Informational | Warning | - | ON |

Description

This notification is generated when the number of TC-BPDUs received by the device exceeds the upper threshold.

Status control

ON

CLI: Use the **stp tc-protection** command.

OFF

CLI: Use the **undo stp tc-protection** command.

Objects

| OID | Description | Index | Type | Value range |
|---|-----------------|-------|-----------|--------------------|
| 1.3.6.1.4.1.25506.8.35.14.19.1.1 (hh3cdot1sInstanceID) | Instance ID. | No | INTEGER | 0..4094 |
| 1.3.6.1.4.1.25506.8.35.14.22.1 (hh3cMstiTcGuardVal) | Upper threshold | No | Integer32 | Integer32 (1..255) |

Recommended action

Check the STP function of upstream devices and identify whether attacks occur on other devices in the network.

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HH3C-LswVLAN-MIB

About this MIB

Use this MIB to configure basic VLAN settings and obtain basic VLAN information.

MIB file name

hh3c-splat-vlan.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswVlan(2)

Scalar objects

hh3cVLANMibGarpLeaveAllTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|----------------------|------------------------------|----------------|
| hh3cVLANMibGarpLeaveAllTime (1.3.6.1.4.1.25506.8.35.2.2.14) | read-write | Time-Interval | Standard MIB values. | GARP timer, in centiseconds. | Not supported |

hh3cVLANMibSwitchGMRPRXPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|-----------------|----------------|
| hh3cVLANMibSwitchGMRPRXPkt (1.3.6.1.4.1.25506.8.35.2.2.15.1.1) | read-only | COUNTER32 | Standard MIB values. | Traffic switch. | Not supported |

hh3cVLANMibSwitchGVRPRXPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|-----------------|----------------|
| hh3cVLANMibSwitchGVRPRXPkt (1.3.6.1.4.1.25506.8.35.2.2.15.1.2) | read-only | COUNTER32 | Standard MIB values. | Traffic switch. | Not supported |

hh3cVLANMibSwitchGMRPTXPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|-----------------|----------------|
| hh3cVLANMibSwitchGMRPTXPkt (1.3.6.1.4.1.25506.8.35.2.2.15.1.3) | read-only | COUNTER32 | Standard MIB values. | Traffic switch. | Not supported |

hh3cVLANMibSwitchGVRPTXPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|-----------------|----------------|
| hh3cVLANMibSwitchGVRPTXPkt (1.3.6.1.4.1.25506.8.35.2.2.15.1.4) | read-only | COUNTER32 | Standard MIB values. | Traffic switch. | Not supported |

hh3cVLANMibSwitchDiscardedPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|-----------------|----------------|
| hh3cVLANMibSwitchDiscardedPkt (1.3.6.1.4.1.25506.8.35.2.2.15.1.5) | read-only | COUNTER32 | Standard MIB values. | Traffic switch. | Not supported |

hh3cVLANMibSwitchGarpStatClear

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|----------------------|-----------------|----------------|
| hh3cVLANMibSwitchGarpStatClear (1.3.6.1.4.1.25506.8.35.2.2.15.1.6) | read-write | INTEGER | Standard MIB values. | Traffic switch. | Not supported |

hh3cVLANMibHoldTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---------------------|---------------------|----------------|
| hh3cVLANMibHoldTime (1.3.6.1.4.1.25506.8.35.2.2.16.1.1) | read-write | INTEGER | INTEGER (10..32765) | Interface holdtime. | Not supported |

Tabular objects

hh3cdot1qVlanMIBTable

About this table

Use this table to manage and monitor VLANs, create and delete VLANs, and configure and obtain the proprietary VLAN data.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cdot1qVlanIndex, which specifies a VLAN ID. Use this table to create and delete VLANs, configure VLAN attributes, and obtain VLAN data.

The leaf objects in the table include configuration objects and query objects. The configuration objects can be written and read, and the query objects can only be read.

The following objects are configuration objects, and the other objects are query objects:

- hh3cdot1qVlanName
- hh3cdot1qVlanPorts
- hh3cdot1qVlanType
- hh3cdot1qVlanPriority
- hh3cdot1qVlanRowStatus
- hh3cdot1qVlanBroadcastSuppression
- hh3cdot1qVlanBcastSuppressionPPS
- hh3cdot1qVlanMulticast (not supported)
- hh3cdot1qVlanStatisticStatus
- hh3cdot1qVlanStatisticClear

hh3cdot1qVlanMIBTable configuration guidelines:

This table supports creating a row, namely, creating a VLAN. When creating a row, as a best practice, first traverse through the table, and use a VLAN ID that does not exist in the table. Available values are active(1), createAndGo(4), and destroy(6). This table involves the following two types of operation:

- hh3cdot1qVlanRowStatus (createAndGo(4)): Create a VLAN and configure the following attribute objects:
 - hh3cdot1qVlanName
 - hh3cdot1qVlanPorts
 - hh3cdot1qVlanType
 - hh3cdot1qVlanPriority
 - hh3cdot1qVlanBroadcastSuppression
 - hh3cdot1qVlanBcastSuppressionPPS
 - hh3cdot1qVlanMulticast (Not support)

First check the input string for hh3cdot1qVlanName. Continue to create the VLAN after the check passes. After the VLAN is successfully created, configure the leaf objects listed above. The operation will fail if the configuration of any leaf object has errors. For example:

- hh3cdot1qVlanPorts: This object can only add an access port to or remove an access port from a VLAN. If a configured port is not an access port, the configuration for this object fails.
- hh3cdot1qVlanType: The MIB does not support sub-vlan(3). When the hh3cdot1qVlanRowStatus(createAndGo(4)) and hh3cdot1qVlanType(sub-vlan(3)) are executed in pairs, the operation fails.

As a best practice to avoid such errors, use the hh3cdot1qVlanRowStatus(createAndGo(4)) to create a VLAN and configure the other attribute objects separately.

- When a VLAN already exists, configure the following attribute objects:
 - hh3cdot1qVlanName Enter a string of up to 32 bytes.
 - hh3cdot1qVlanPorts First obtain the local object data, and then modify the bit corresponding to the interface in the data. Use the modified value as the configured value.
 - hh3cdot1qVlanType This MIB does not support the sub-vlan(3) or secondary-vlan(5) type.
 - hh3cdot1qVlanPriority
 - hh3cdot1qVlanBroadcastSuppression
 - hh3cdot1qVlanBcastSuppressionPPS
 - hh3cdot1qVlanMulticast (not supported)

Configuration examples

- Configuration success: Use a VLAN ID that does not exist as an index, input **vlantest** for the hh3cdot1qVlanName object, and operate the row state object hh3cdot1qVlanRowStatus(createAndGo(4)) to create a VLAN. This operation successfully creates a VLAN and specifies a name for the VLAN.
- Configuration failure: A trunk interface cannot be assigned to a VLAN. Use the hh3cdot1qVlanPorts object to specify the trunk ports, and operate the row state object hh3cdot1qVlanRowStatus(createAndGo(4)) to create a VLAN. This operation fails.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|--|--|--|
| hh3cdot1qVlanIndex (1.3.6.1.4.1.25506.8.35.2.1.1.1.1) | read-only | Hh3cVlanIndex | Integer32 (0..2147483647) | VLAN index. | As per the MIB. |
| hh3cdot1qVlanName (1.3.6.1.4.1.25506.8.35.2.1.1.1.2) | read-write | SnmpAdminString | OCTET STRING (0..80) | VLAN name. | If the VLAN name input starts or ends with spaces, the spaces will be automatically trimmed. The string cannot contain only spaces. If you enter an empty string, the default VLAN description is used. |
| hh3cdot1qVlanPorts (1.3.6.1.4.1.25506.8.35.2.1.1.1.3) | read-write | PortList | OCTET STRING (0..65535) | List of ports in a VLAN. | This object can only assign access ports to and remove access ports from VLANs. |
| hh3cdot1qVlanType (1.3.6.1.4.1.25506.8.35.2.1.1.1.4) | read-write | Integer | superVlan(1) common-vlan(2) sub-vlan(3) isolate-user-vlan(4) secondary-vlan(5) primaryVlan(6) | VLAN type. | Not supported |
| hh3cdot1qVlanMacFilter (1.3.6.1.4.1.25506.8.35.2.1.1.1.5) | read-only | TruthValue | true(1), false(2) | MAC VLAN filtering | Not supported. The default false(2) is displayed. |
| hh3cdot1qVlanMacastUnknownProtocols (1.3.6.1.4.1.25506.8.35.2.1.1.1.6) | read-only | TruthValue | true(1), false(2) | Whether to broadcast packets. | Not supported. The default false(2) is displayed. |
| hh3cExistInterface (1.3.6.1.4.1.25506.8.35.2.1.1.1.7) | read-only | TruthValue | true(1), false(2) | Whether the VLAN has a VLAN interface. | As per the MIB. |
| hh3cVlanInterfaceIndex (1.3.6.1.4.1.25506.8.35.2.1.1.1.8) | read-only | Integer | Integer (1..4094) | Index of the VLAN interface. | As per the MIB. |
| hh3cdot1qVlanMacLearn (1.3.6.1.4.1.25506.8.35.2.1.1.1.9) | read-only | TruthValue | true(1), false(2) | Whether MAC address learning is supported. | Not supported. The default false(2) is displayed. |
| hh3cdot1qVlanStatus (1.3.6.1.4.1.25506.8.35.2.1.1.1.10) | read-only | Integer | other(1), static(2), dynamic(3) | VLAN state. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|--|--|---|
| hh3cdot1qVlanCr eationTime (1.3.6.1.4.1.25506 .8.35.2.1.1.1.11) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time when the VLAN was created. | As per the MIB. |
| hh3cdot1qVlanPri ority (1.3.6.1.4.1.25506 .8.35.2.1.1.1.12) | read-write | Integer | Integer□ (0..7) | VLAN priority. | Implementation varies by product. |
| hh3cdot1qVlanRo wStatus (1.3.6.1.4.1.25506 .8.35.2.1.1.1.13) | read-create | Row-Status | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | VLAN row state. | Only the following operations are supported: □ active(1), createAndGo(4), and destroy(6) |
| hh3cdot1qVlanBro adcastSuppressio n (1.3.6.1.4.1.25506 .8.35.2.1.1.1.14) | read-write | Integer | Integer□ (0..100) | VLAN broadcast suppression. | The object can only be read. |
| hh3cdot1qVlanBc astSuppressionPP S (1.3.6.1.4.1.25506 .8.35.2.1.1.1.15) | read-write | Integer | Integer□ (0..148800) | VLAN broadcast suppression in pps. | Not supported |
| hh3cdot1qVlanMu lticast (1.3.6.1.4.1.25506 .8.35.2.1.1.1.16) | read-write | Integer | disable(0),□ enable(1) | Multicast VLAN. | Not supported |
| hh3cdot1qVlanTa ggedPorts (1.3.6.1.4.1.25506 .8.35.2.1.1.1.17) | read-only | PortList | OCTET STRING (0..65535) | Tagged ports of a VLAN. | As per the MIB. |
| hh3cdot1qVlanUnt aggedPorts (1.3.6.1.4.1.25506 .8.35.2.1.1.1.18) | read-only | PortList | OCTET STRING (0..65535) | Untagged ports of a VLAN. | As per the MIB. |
| hh3cdot1qVlanPor tIndexs (1.3.6.1.4.1.25506 .8.35.2.1.1.1.19) | read-write | OCTET STRING | OCTET STRING (0..65535) | Port index list. | As per the MIB. |
| hh3cdot1qVlanSta tisticStatus (1.3.6.1.4.1.25506 .8.35.2.1.1.1.20) | read-write | TruthValue | true(1), false(2) | VLAN traffic statistics switch. | Implementation varies by product. |
| hh3cdot1qVlanSta tisticClear (1.3.6.1.4.1.25506 .8.35.2.1.1.1.21) | read-write | Integer | clear(1) | Clear VLAN traffic statistics. | The object can only be written. Implementation varies by product. |
| hh3cdot1qVlanSta tisticInTotalPkts (1.3.6.1.4.1.25506 .8.35.2.1.1.1.22) | read-only | Counter64 | Counter64 (0..184467440737 09551615) | Total number of incoming packets. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|-----------------------------------|-----------------------------------|
| hh3cdot1qVlanStatisticInTotalBytes (1.3.6.1.4.1.25506.8.35.2.1.1.1.23) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total bytes of incoming packets. | Implementation varies by product. |
| hh3cdot1qVlanStatisticInPPS (1.3.6.1.4.1.25506.8.35.2.1.1.1.24) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Incoming packet rate in pps. | Implementation varies by product. |
| hh3cdot1qVlanStatisticInBPS (1.3.6.1.4.1.25506.8.35.2.1.1.1.25) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Incoming packet rate in Bps. | Implementation varies by product. |
| hh3cdot1qVlanStatisticOutTotalPkts (1.3.6.1.4.1.25506.8.35.2.1.1.1.26) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outgoing packets. | Implementation varies by product. |
| hh3cdot1qVlanStatisticOutTotalBytes (1.3.6.1.4.1.25506.8.35.2.1.1.1.27) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total bytes of outgoing packets. | Implementation varies by product. |
| hh3cdot1qVlanStatisticOutPPS (1.3.6.1.4.1.25506.8.35.2.1.1.1.28) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Outgoing packet rate in pps. | Implementation varies by product. |
| hh3cdot1qVlanStatisticOutBPS (1.3.6.1.4.1.25506.8.35.2.1.1.1.29) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Outgoing packet rate in Bps. | Implementation varies by product. |

hh3cVlanInterfaceTable

About this table

Use this table to configure and obtain VLAN interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cdot1qVlanID.

You must specify the hh3cdot1qVlanIpAddress and hh3cdot1qVlanIpAddressMask objects in pairs.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|-------------|-----------------|
| hh3cVlanInterfaceID (1.3.6.1.4.1.25506.8.35.2.1.2.1.1) | read-only | Integer | Standard MIB values. | Index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|--|--|---|
| hh3cdot1qVlanID (1.3.6.1.4.1.25506.8.35.2.1.2.1.2) | read-only | Hh3cVlanIndex | Integer32 (0..2147483647) | VLAN ID | As per the MIB. |
| hh3cdot1qVlanIpAddress (1.3.6.1.4.1.25506.8.35.2.1.2.1.3) | read-write | IpAddress | OCTET STRING (0..65535) | IP address. | As per the MIB. |
| hh3cdot1qVlanIpAddressMask (1.3.6.1.4.1.25506.8.35.2.1.2.1.4) | read-write | IpAddress | OCTET STRING (0..65535) | IP address and its mask. | As per the MIB. |
| hh3cVlanInterfaceAdminStatus (1.3.6.1.4.1.25506.8.35.2.1.2.1.5) | read-write | Integer | up(1), down(2) | VLAN interface state. | As per the MIB. |
| hh3cVlanInterfaceFrameType (1.3.6.1.4.1.25506.8.35.2.1.2.1.6) | read-only | Integer | ethernet-ii(1), ethernet-snap(2), ethernet-8022(3), ethernet-8023(4) | Frame type. | As per the MIB. |
| hh3cInterfaceRowStatus (1.3.6.1.4.1.25506.8.35.2.1.2.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Interface row state. | Available values are active(1), createAndGo(4), and destroy(6). When the row is created together with configuring other attribute objects, the VLAN interface is first created, and then other attribute objects are configured. <input type="checkbox"/> If an object fails to be configured, this operation fails. <input type="checkbox"/> As a best practice, use the hh3cInterfaceRowStatus (createAndGo(4)) to create a VLAN interface and configure other attribute objects separately. <input type="checkbox"/> When the row state is active, the createAndGo operation succeeds. |
| hh3cVlanInterfaceIpMethod (1.3.6.1.4.1.25506.8.35.2.1.2.1.8) | read-write | Integer | assigned-ip(1), dhcp-ip(2), bootp-ip(3) | VLAN interface IP address assignment method. | The object can only be read. |
| hh3cVlanInterfaceIfIndex (1.3.6.1.4.1.25506.8.35.2.1.2.1.9) | read-only | Integer | Standard MIB values. | Index of the VLAN interface. | As per the MIB. |

hh3cifIsolateMappingTable

About this table

Use this table to configure the isolate VLAN feature and configure and obtain the isolate VLAN-to-secondary VLAN mappings. Implementation varies by product.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cifIsolatePrimaryVlanID.

You must specify the hh3cifIsolateSecondaryVlanlistLow and hh3cifIsolateSecondaryVlanlistHigh objects in pairs.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|------------------------------|--|-----------------------------------|
| hh3cifIsolatePrimaryVlanID (1.3.6.1.4.1.25506.8.35.2.1.4.1.1) | read-only | Hh3cVlanIndex | Integer32 (0..2147483647) | Primary VLAN | Implementation varies by product. |
| hh3cifIsolateSecondaryVlanlistLow (1.3.6.1.4.1.25506.8.35.2.1.4.1.2) | read-write | OCTET STRING | OCTET STRING (0..256) | Low bit in the secondary VLAN bitmap. | Implementation varies by product. |
| hh3cifIsolateSecondaryVlanlistHigh (1.3.6.1.4.1.25506.8.35.2.1.4.1.3) | read-write | OCTET STRING | OCTET STRING (0..256) | High bit in the secondary VLAN bitmap. | Implementation varies by product. |

hh3cVlanInterfaceAddrTable

About this table

Use this table to configure and obtain VLAN interface IP addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cVlanInterfaceIpIndex and hh3cVlanInterfaceIpAddr.

When the hh3cVlanInterfaceIpRowStatus (createAndGo(4)) operation is executed, you must specify the hh3cVlanInterfaceIpAddr and hh3cVlanInterfaceIpMask objects in pairs. When the hh3cVlanInterfaceIpRowStatus (destroy(6)) operation is executed, you must specify the hh3cVlanInterfaceIpAddr and hh3cVlanInterfaceIpType objects in pairs.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|------------------------------------|--|
| hh3cVlanInterface IpIfIndex (1.3.6.1.4.1.25506 .8.35.2.1.5.1.1) | read-only | Integer | Standard MIB values. | Index of the VLAN interface. | As per the MIB. |
| hh3cVlanInterface IpAddr (1.3.6.1.4.1.25506 .8.35.2.1.5.1.2) | read-only | IpAddress | OCTET STRING (4) | VLAN interface IP address. | As per the MIB. |
| hh3cVlanInterface IpMask (1.3.6.1.4.1.25506 .8.35.2.1.5.1.3) | read-create | IpAddress | OCTET STRING (4) | VLAN Interface IP address mask. | As per the MIB. |
| hh3cVlanInterface IpType (1.3.6.1.4.1.25506 .8.35.2.1.5.1.4) | read-create | Integer | primary(1), sub(2), cluster(3), vrrp(4) | VLAN interface IP type. | As per the MIB. Available values are primary(1) and sub(2). |
| hh3cVlanInterface IpRowStatus (1.3.6.1.4.1.25506 .8.35.2.1.5.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Interface IP address row state. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cDot1qVlanBatchMIBTable

About this table

Use this table to bulk configure VLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cdot1qVlanBatchStartIndex, hh3cdot1qVlanBatchEndIndex, and hh3cdot1qVlanBatchSetOperate.

To bulk create VLANs, set the hh3cdot1qVlanBatchSetOperate object to 1.

For example, to create VLANs 2 through 4, enter the following values for objects:

hh3cdot1qVlanBatchStartIndex 2,

hh3cdot1qVlanBatchEndIndex 4,

hh3cdot1qVlanBatchSetOperate create(1),

hh3cdot1qVlanBatchRowStatus createAndGo(4).

To bulk delete VLANs, set the hh3cdot1qVlanBatchSetOperate object to 2.

For example, to delete VLANs 10 through 20, enter the following values for objects:

hh3cdot1qVlanBatchStartIndex 10,

hh3cdot1qVlanBatchEndIndex 20,

hh3cdot1qVlanBatchSetOperate delete(2),

hh3cdot1qVlanBatchRowStatus createAndGo(4).

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|------------------------------|-------------------------|----------------|
| hh3cdot1qVlanBatchOperIndex (1.3.6.1.4.1.25506.8.35.2.1.6.1.1) | read-only | Integer32 | Standard MIB values. | Operation index. | Not supported |
| hh3cdot1qVlanBatchStartIndex (1.3.6.1.4.1.25506.8.35.2.1.6.1.2) | read-write | Hh3cVlanIndex | Integer32 (0..2147483647) | Start VLAN ID. | Not supported |
| hh3cdot1qVlanBatchEndIndex (1.3.6.1.4.1.25506.8.35.2.1.6.1.3) | read-write | Hh3cVlanIndex | Integer32 (0..2147483647) | End VLAN ID. | Not supported |
| hh3cdot1qVlanBatchOperStatus (1.3.6.1.4.1.25506.8.35.2.1.6.1.4) | read-only | Integer | Standard MIB values. | Operation state. | Not supported |
| hh3cdot1qVlanBatchRowStatus (1.3.6.1.4.1.25506.8.35.2.1.6.1.5) | read-create | Row-Status | Standard MIB values. | Row status. | Not supported |
| hh3cdot1qVlanBatchSetOperate (1.3.6.1.4.1.25506.8.35.2.1.6.1.6) | read-create | Integer | Standard MIB values. | Set the operation type. | Not supported |

hh3cifSuperVlanMappingTable

About this table

Use this table to configure the super VLAN feature and configure and obtain the super VLAN-to-sub VLAN mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cifSuperVlanID.

When setting super VLAN, you must specify the hh3cifSubVlanlistLow and hh3cifSubVlanlistHigh objects in pairs.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|------------------------------|---------------------------------|----------------|
| hh3cifSuperVlanID (1.3.6.1.4.1.25506.8.35.2.1.7.1.1) | read-only | Hh3cVlanIndex | Integer32 (0..2147483647) | Super VLAN index. | Not supported |
| hh3cifSubVlanlistLow (1.3.6.1.4.1.25506.8.35.2.1.7.1.2) | read-write | OCTET STRING | OCTET STRING (0..256) | Low bit in the sub VLAN bitmap. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|--------------------------|-------------------------------------|----------------|
| .8.35.2.1.7.1.2) | | | | | |
| hh3cifSubVlanlist High (1.3.6.1.4.1.25506 .8.35.2.1.7.1.3) | read-write | OCTET STRING | OCTET STRING (0..256) | High bit in the sub VLAN bitmap. | Not supported |

hh3cPrivateVlanMappingTable

About this table

Use this table to configure the private VLAN feature and configure and obtain the primary VLAN-to-secondary VLAN mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cPrimaryVlanID.

When setting private VLAN, you must specify the hh3cSecondaryVlanlistLow and hh3cSecondaryVlanlistHigh objects in pairs.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|------------------------------|--|-----------------|
| hh3cPrimaryVlanID (1.3.6.1.4.1.25506 .8.35.2.1.8.1.1) | read-only | Hh3cVlanIndex | Integer32 (0..2147483647) | Primary VLAN index. | As per the MIB. |
| hh3cSecondaryVlanlistLow (1.3.6.1.4.1.25506 .8.35.2.1.8.1.2) | read-write | OCTET STRING | OCTET STRING (0..256) | Low bit in the secondary VLAN bitmap. | As per the MIB. |
| hh3cSecondaryVlanlistHigh (1.3.6.1.4.1.25506 .8.35.2.1.8.1.3) | read-write | OCTET STRING | OCTET STRING (0..256) | High bit in the secondary VLAN bitmap. | As per the MIB. |

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HH3C-MAC-INFORMATION-MIB

About this MIB

Use this MIB to configure MAC Information.

MIB file name

hh3c-mac-information.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMACInformation(87)

Scalar objects

hh3cMACInformationEnabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---------------------------|--|-----------------|
| hh3cMACInformationEnabled (1.3.6.1.4.1.25506.2.87.1.1.1) | read-write | INTEGER | enabled(1) disabled(2) | Status of the MAC Information feature. | As per the MIB. |

hh3cMACInformationcSendInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------------|-----------------------------------|-----------------|
| hh3cMACInformationcSendInterval (1.3.6.1.4.1.25506.2.87.1.1.2) | read-write | Integer32 | Integer32 (1..20000) | MAC change notification interval. | As per the MIB. |

hh3cMACInformationLearntMACNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| hh3cMACInformationLearntMACNum (1.3.6.1.4.1.25506.2.87.1.1.3) | read-only | Counter32 | Standard MIB values. | Total number of the MAC addresses learned since MAC information is enabled. | As per the MIB. |

hh3cMACInformationRemovedMACNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3cMACInformationRemovedMACNum (1.3.6.1.4.1.25506.2.87.1.1.4) | read-only | Counter32 | Standard MIB values. | Total number of the MAC addresses deleted or aged since MAC information is enabled. | As per the MIB. |

hh3cMACInformationTrapSendNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|------------------------------------|-----------------|
| hh3cMACInformationTrapSendNum (1.3.6.1.4.1.25506.2.87.1.1.5) | read-only | Counter32 | Standard MIB values. | Number of sent SNMP notifications. | As per the MIB. |

hh3cMACInformationSyslogSendNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|---------------------------------|-----------------|
| hh3cMACInformationSyslogSendNum (1.3.6.1.4.1.25506.2.87.1.1.6) | read-write | Counter32 | Standard MIB values. | Number of sent syslog messages. | As per the MIB. |

hh3cMACInformationCacheLen

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---------------------|-------------------------------|-----------------|
| hh3cMACInformationCacheLen (1.3.6.1.4.1.25506.2.87.1.1.7) | read-write | Integer32 | Integer32 (0..1000) | MAC Information queue length. | As per the MIB. |

hh3cMACInformationWorkMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------------|----------------------|----------------------|-----------------|
| hh3cMACInformationWorkMode (1.3.6.1.4.1.25506.2.87.1.1.8) | read-write | Hh3cMACInfoWorkMode | trap(1) syslog(2) | MAC Information mode | As per the MIB. |

hh3cMACInfoTrapVerExt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|----------------------|---------------|-----------------|
| hh3cMACInfoTrapVerExt (1.3.6.1.4.1.25506.2.87.1.4.2.1) | accessible-for-notify | Integer32 | Standard MIB values. | SNMP version. | As per the MIB. |

hh3cMACInfoTrapIndexExt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|-----------|------------------------------|---------------------|-----------------|
| hh3cMACInfoTrapIndexExt (1.3.6.1.4.1.25506.2.87.1.4.2.2) | accessible-for -notify | Integer32 | Integer32 (0..4294967295) | Notification index. | As per the MIB. |

hh3cMACInfoTrapCountExt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|-----------|-------------------------|---------------------|-----------------|
| hh3cMACInfoTrapCountExt (1.3.6.1.4.1.25506.2.87.1.4.2.3) | accessible-for -notify | Integer32 | Standard MIB values. | Notification count. | As per the MIB. |

hh3cMACInfoTrapMsgExt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|-----------------|-----------------------------|---------------------------|-----------------|
| hh3cMACInfoTrapMsgExt (1.3.6.1.4.1.25506.2.87.1.4.2.4) | accessible-for -notify | OCTET STRING | OCTET STRING (0..255) | Notification contents. | As per the MIB. |

Tabular objects

hh3cMACInfomationIfTable

About this table

Use this table to configure MAC Information on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---------------------------|--|-----------------|
| hh3cMACLearntEnable (1.3.6.1.4.1.25506.2.87.1.2.1.1.1) | read-write | INTEGER | enabled(1) disabled(2) | MAC learning event reporting. | As per the MIB. |
| hh3cMACRemovedEnable (1.3.6.1.4.1.25506.2.87.1.2.1.1.2) | read-write | INTEGER | enabled(1) disabled(2) | MAC aging or deletion event reporting. | As per the MIB. |

Notifications

This table contains notifications output by HH3C-MAC-INFORMATION-MIB.

hh3cMACInformationChangedTrapExt

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.87.1.4.0.1 | MAC changes. | Informational | - | - | ON |

Description

This notification is generated when MAC addresses change.

If the number of cached MAC notifications reaches the limit set with hh3cMACInformationCacheLen while the amount of time that has elapsed since last notification transmission is shorter than the interval set with hh3cMACInformationcSendInterval, the device uses a new MAC notification to overwrite the oldest one. If the elapsed time is longer than the interval and at least one cached MAC address has been learned or deleted, the device sends notifications.

Status control

This notification cannot be disabled.

Objects

| OID (Object name) | Description | Index | Type | Value range |
|---|------------------------|-------|--------------|----------------------------|
| 1.3.6.1.4.1.25506.2.87.1.4.2.1 (hh3cMACInfoTrapVerExt) | SNMP version. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.87.1.4.2.2 (hh3cMACInfoTrapIndexExt) | Notification index. | N | Unsigned32 | Unsigned32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.87.1.4.2.3 (hh3cMACInfoTrapCountExt) | Notification count. | N | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.87.1.4.2.4 (hh3cMACInfoTrapMsgExt) | Notification contents. | N | OCTET STRING | OCTET STRING (1..254) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cMACInformationMovedTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.87.1.4.0.2 | A MAC address moves. | Informational | - | - | OFF |

Description

This notification is generated when a MAC address moves.

After you enable notifications for the MAC address table, the MAC address table module generates notifications for important events and sends the notifications to the SNMP module. You can configure SNMP to output those notifications. When notifications are disabled for the MAC address table, the device sends the generated logs to the information center. To display the logs, configure the log destination and output rules in the information center.

Status control

This notification can be disabled.

Objects

| OID (Object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.87.1.4.2.5.0 (hh3cMACInfoTrapMsgMovedAddress) | MAC address. | N | OCTET STRING | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.87.1.4.2.6.0 (hh3cMACInfoTrapMsgMovedVlan) | VLAN ID. | N | Unsigned32 | Unsigned32 (1..4094) |
| 1.3.6.1.4.1.25506.2.87.1.4.2.7.0 (hh3cMACInfoTrapMsgMovedFromIf) | Source port for the MAC address move. | N | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.87.1.4.2.8.0 (hh3cMACInfoTrapMsgMovedToIf) | Destination port for the MAC address move. | N | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.87.1.4.2.9.0 (hh3cMACInfoTrapMsgMovedCount) | MAC address move count. | N | Counter32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-MLAG-MIB

About this MIB

Multichassis Link Aggregation Group (M-LAG) virtualizes two physical devices into one system through multichassis link aggregation to provide node redundancy in addition to link redundancy.

HH3C-MLAG-MIB is a private MIB for managing M-LAG from an NMS. This MIB offers following functions: 1. Obtain and modify M-LAG system settings such as the M-LAG system MAC address, priority, and number. 2. Obtain and modify M-LAG keepalive settings. 3. Obtain information about and configure peer-link interfaces and M-LAG interfaces.

MIB file name

hh3c-mlag.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).h3cCommon(2).hh3cMLag(176)

Scalar objects

hh3cMLagSystemMac

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|--------------------|------------------------------|--------------------------------|
| hh3cMLagSystemMac (1.3.6.1.4.1.25506.2.176.1.1.1) | read-write | MacAddress | OCTET STRING(6) | M-LAG system MAC address. | Default value: 0-0-0-0-0-0. |

hh3cMLagSystemPriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------------|---------------------------|---|
| hh3cMLagSystemPriority (1.3.6.1.4.1.25506.2.176.1.1.2) | read-write | Integer32 | Integer32 (0..65535) | M-LAG system priority. | You must configure the same M-LAG system priority for the M-LAG member devices in an M-LAG system. |

hh3cMLagSystemNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|------------------|-------------------------|----------------------|
| hh3cMLagSystemNumber (1.3.6.1.4.1.25506.2.176.1.1.3) | read-write | Integer32 | Integer32 (0..2) | M-LAG system number. | Default value: 0. |

hh3cMLagRestoreDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|------------------------|----------------------------|-----------------|
| hh3cMLagRestoreDelay (1.3.6.1.4.1.25506.2.176.1.1.4) | read-write | Integer32 | Integer32 (1..3600) | Data restoration interval. | As per the MIB. |

hh3cMLagAutoRecoveryReloadDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------------|--|---|
| hh3cMLagAutoRecoveryReloadDelay (1.3.6.1.4.1.25506.2.176.1.1.5) | read-write | Integer32 | Integer32 (0 240..3600) | Reload delay for M-LAG system auto-recovery. | A value of 0 indicates that M-LAG system auto-recovery is disabled. |

hh3cMLagRoleLocalRolePriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------------|---|--|
| hh3cMLagRoleLocalRolePriority (1.3.6.1.4.1.25506.2.176.1.2.1) | read-write | Integer32 | Integer32 (0..65535) | The role priority of the local M-LAG member device. | The smaller the priority value, the higher the priority. |

hh3cMLagRolePeerRolePriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|--|--|
| hh3cMLagRolePeerRolePriority (1.3.6.1.4.1.25506.2.176.1.2.2) | read-only | Integer32 | Integer32 (0..65535) | Role priority of the peer M-LAG member device. | The smaller the priority value, the higher the priority. |

hh3cMLagRoleLocalBridgeMac

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-----------------|--|----------------------------|
| hh3cMLagRoleLocalBridgeMac (1.3.6.1.4.1.25506.2.176.1.2.3) | read-only | MacAddress | OCTET STRING(6) | Bridge MAC address of the local M-LAG member device. | Default value: 0-0-0-0-0-0 |

hh3cMLagRolePeerBridgeMac

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|--------------------|--|-------------------------------|
| hh3cMLagRolePeerBridgeMac (1.3.6.1.4.1.25506.2.176.1.2.4) | read-only | MacAddress | OCTET STRING(6) | Bridge MAC address of the peer M-LAG member device. | Default value: 0-0-0-0-0-0 |

hh3cMLagRoleLocalConfiguredRole

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|---|-----------------|
| hh3cMLagRoleLocalConfiguredRole (1.3.6.1.4.1.25506.2.176.1.2.5) | read-only | INTEGER | none(0), primary(1), secondary(2) | Specified role for the local M-LAG member device. | As per the MIB. |

hh3cMLagRolePeerConfiguredRole

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|--|-----------------|
| hh3cMLagRolePeerConfiguredRole (1.3.6.1.4.1.25506.2.176.1.2.6) | read-only | INTEGER | none(0), primary(1), secondary(2) | Specified role for the peer M-LAG member device. | As per the MIB. |

hh3cMLagRoleLocalEffectiveRole

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|---|-----------------|
| hh3cMLagRoleLocalEffectiveRole (1.3.6.1.4.1.25506.2.176.1.2.7) | read-only | INTEGER | none(0), primary(1), secondary(2) | Effective role for the local M-LAG member device. | As per the MIB. |

hh3cMLagRolePeerEffectiveRole

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|--|-----------------|
| hh3cMLagRolePeerEffectiveRole (1.3.6.1.4.1.25506.2.176.1.2.8) | read-only | INTEGER | none(0), primary(1), secondary(2) | Effective role for the peer M-LAG member device. | As per the MIB. |

hh3cMLagKeepaliveDestIpv4

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|--------------------|--|----------------------------|
| hh3cMLagKeepaliveDestIpv4 (1.3.6.1.4.1.25506.2.176.1.3.1) | read-write | InetAddressIPv4 | OCTET STRING(4) | Destination IP address of keepalive packets. | Default value: 0.0.0.0. |

hh3cMLagKeepaliveSourceIpv4

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|--------------------|---|--|
| hh3cMLagKeepaliveSourceIpv4 (1.3.6.1.4.1.25506.2.176.1.3.2) | read-write | InetAddressIPv4 | OCTET STRING(4) | Source IP address of keepalive packets. | Default value: 0.0.0.0. Configured with the destination IP address of keepalive packets. |

hh3cMLagKeepaliveDestIpv6

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|---------------------|--|---------------------------------|
| hh3cMLagKeepaliveDestIpv6 (1.3.6.1.4.1.25506.2.176.1.3.3) | read-write | InetAddressIPv6 | OCTET STRING(16) | Destination IPv6 address of keepalive packets. | Default value: 0: 0: : 0: 0. |

hh3cMLagKeepaliveSourceIpv6

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|---------------------|---|---|
| hh3cMLagKeepaliveSourceIpv6 (1.3.6.1.4.1.25506.2.176.1.3.4) | read-write | InetAddressIPv6 | OCTET STRING(16) | Source IPv6 address of keepalive packets. | Default value: 0.0: : 0.0. Configured with the destination IPv6 address of keepalive packets. |

hh3cMLagKeepaliveUdpPort

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------------|--|--|
| hh3cMLagKeepaliveUdpPort (1.3.6.1.4.1.25506.2.176.1.3.5) | read-write | Integer32 | Integer32 (1..65535) | Destination UDP port of keepalive packets. | The destination UDP port is also deleted when the keepalive source and destination IP addresses are deleted. |

hh3cMLagKeepaliveInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---------------------------|---------------------------|-----------------|
| hh3cMLagKeepaliveInterval (1.3.6.1.4.1.25506.2.176.1.3.6) | read-write | Integer32 | Integer32 (100..10000) | M-LAG keepalive interval. | As per the MIB. |

hh3cMLagKeepaliveTimeout

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------|--------------------------------|--|
| hh3cMLagKeepaliveTimeout (1.3.6.1.4.1.25506.2.176.1.3.7) | read-write | Integer32 | Integer32 (3..20) | M-LAG keepalive timeout timer. | The local M-LAG keepalive timeout timer must be at least two times the M-LAG keepalive interval of the peer. |

hh3cMLagKeepaliveHoldTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------|-----------------------|-----------------|
| hh3cMLagKeepaliveHoldTime (1.3.6.1.4.1.25506.2.176.1.3.8) | read-write | Integer32 | Integer32 (3..10) | Keepalive hold timer. | As per the MIB. |

hh3cMLagKeepaliveLinkStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------------------|------------------------|-----------------|
| hh3cMLagKeepaliveLinkStatus (1.3.6.1.4.1.25506.2.176.1.3.9) | read-only | INTEGER | unknown(1), up(2), down(3) | Keepalive link status. | As per the MIB. |

hh3cMLagConsistencyType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|----------------------|----------------------------------|-----------------|
| 1.3.6.1.4.1.25506.2.176.2.1.1 (hh3cMLagConsistencyType) | accessible-for-notify | Integer32 | type1(1) type2(2) | Configuration consistency check. | As per the MIB. |

hh3cMLagGroupIdForNotify

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|---------------------|-----------------|-----------------|
| hh3cMLagGroupIdForNotify(1.3.6.1.4.1.25506.2.176.2.1.2) | accessible-for-notify | Integer32 | Integer32 (1..1024) | M-LAG group ID. | As per the MIB. |

hh3cMLagKeepAliveDownReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|--------------|----------------------|--|-----------------|
| hh3cMLagKeepAliveDownReason(1.3.6.1.4.1.25506.2.176.2.1.4) | accessible-for-notify | OCTET STRING | OCTET STRING(0..255) | Reason why the keepalive link goes down. | As per the MIB. |

hh3cMLagMadDownReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|--------------|----------------------|--|-----------------|
| hh3cMLagMadDownReason(1.3.6.1.4.1.25506.2.176.2.1.5) | accessible-for-notify | OCTET STRING | OCTET STRING(0..255) | Reason why the device is placed in M-LAG MAD DOWN state. | As per the MIB. |

hh3cMLagOldRole

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------|-----------------------------------|-------------------------------|-----------------|
| hh3cMLagOldRole(1.3.6.1.4.1.25506.2.176.2.1.6) | accessible-for-notify | INTEGER | none(0), primary(1), secondary(2) | Previous role for the device. | As per the MIB. |

hh3cMLagNewRole

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------|-----------------------------------|--------------------------|-----------------|
| hh3cMLagNewRole(1.3.6.1.4.1.25506.2.176.2.1.7) | accessible-for-notify | INTEGER | none(0), primary(1), secondary(2) | New role for the device. | As per the MIB. |

hh3cMLagRoleChangeReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|--------------|----------------------|---------------------------------------|-----------------|
| hh3cMLagRoleChangeReason(1.3.6.1.4.1.25506.2.176.2.1.8) | accessible-for-notify | OCTET STRING | OCTET STRING(0..255) | Reason for the device role switching. | As per the MIB. |

Tabular objects

hh3cMLagPeerLinkTable

About this table

Use this table to obtain and configure parameters for peer-link interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

Columns

The table index is hh3cMLagPeerLinkNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|---|---|---|
| hh3cMLagPeerLinkNumber(1.3.6.1.4.1.25506.2.176.1.4.1.1.1) | not-accessible | Integer32 | Integer32 (1..2) | Peer-link interface number. | The peer-link interface number can only be 1. |
| hh3cMLagPeerLinkIfIndex(1.3.6.1.4.1.25506.2.176.1.4.1.1.2) | read-write | InterfaceIndex | Integer32 (1..2147483647) | Index of the aggregate interface acting as the peer-link interface. | As per the MIB. |
| hh3cMLagPeerLinkRowStatus(1.3.6.1.4.1.25506.2.176.1.4.1.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only destroy(6). |

hh3cMLagPortTable

About this table

Use this table to configure and obtain parameters for M-LAG interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

Columns

The table index is hh3cMLagGroupId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--|---|---------------------------|
| hh3cMLagGroupId (1.3.6.1.4.1.25506.2.176.1.4.2.1.1) | not-accessible | Integer32 | Integer32 (1..1024) | M-LAG group ID. | As per the MIB. |
| hh3cMLagPortIfIndex (1.3.6.1.4.1.25506.2.176.1.4.2.1.2) | read-write | InterfaceIndex | Integer32 (1..2147483647) | Index of the aggregate interface acting as the M-LAG interface. | As per the MIB. |
| hh3cMLagPortRowStatus (1.3.6.1.4.1.25506.2.176.1.4.2.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only destroy(6). |

hh3cMLagAllPortTable

About this table

Use this table to obtain and configure selected member port information, DRCP state, and the short DRCP timeout timer for peer-link interfaces and M-LAG interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cMLagAllPortIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|------------------------------|--|-----------------|
| hh3cMLagAllPortIfIndex (1.3.6.1.4.1.25506.2.176.1.4.3.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | Interface index | As per the MIB. |
| hh3cMLagPortDrpShortPeriod (1.3.6.1.4.1.25506.2.176.1.4.3.1.2) | read-write | TruthValue | true(1), false(2) | Whether the short DRCP timeout timer is enabled. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|----------------------|---|-----------------|
| .2.176.1.4.3.1.2) | | | | | |
| hh3cMLagPortPortStatus (1.3.6.1.4.1.25506.2.176.1.4.3.1.3) | read-only | INTEGER | up(1), down(2) | Interface status | As per the MIB. |
| hh3cMLagPortLocalDRCPState (1.3.6.1.4.1.25506.2.176.1.4.3.1.4) | read-only | OCTET STRING | OCTET STRING(1) | DRCP status on the local end. | As per the MIB. |
| hh3cMLagPortPeerDRCPState (1.3.6.1.4.1.25506.2.176.1.4.3.1.5) | read-only | OCTET STRING | OCTET STRING(1) | DRCP status on the peer end. | As per the MIB. |
| hh3cMLagPortLocalMemberList (1.3.6.1.4.1.25506.2.176.1.4.3.1.6) | read-only | PortList | OCTET STRING(0..255) | Member list of the local aggregate interface. | As per the MIB. |
| hh3cMLagPortPeerMemberList (1.3.6.1.4.1.25506.2.176.1.4.3.1.7) | read-only | PortList | OCTET STRING(0..255) | Member list of the peer aggregate interface. | As per the MIB. |

Notifications

hh3cMLagGlobalCheckConsistency

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.1 | No inconsistency is detected during the global consistency check. | Informational | - | - | OFF |

Description

This notification is generated if the consistency check result for global M-LAG settings is consistent.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|-------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.1 (hh3cMLagConsistencyType) | Consistency check type. | No | Integer32 | type1(1) type2(2) |

Recommended action

No action is required.

hh3cMLagGlobalCheckInConsistency

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.2 | Inconsistency is detected during the global consistency check. | Informational | - | - | OFF |

Description

This notification is generated if the consistency check result for global M-LAG settings is inconsistent.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|-------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.1 (hh3cMLagConsistencyType) | Consistency check type. | No | Integer32 | type1(1) type2(2) |

Recommended action

To resolve the issue: 1. If the global consistency check for the type 1 configuration is inconsistent, use the display m-lag consistency command to view configuration information on the M-LAG member devices, and modify their configuration to ensure consistency.

2. If the global consistency check for the type 2 configuration is inconsistent, modify the configuration on the M-LAG member devices to ensure consistency.

hh3cMLagIfCheckConsistency

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.3 | Consistency is detected during the consistency check on M-LAG interfaces. | Informational | - | - | OFF |

Description

This notification is generated if the consistency check result for M-LAG interfaces is consistent.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|-------------------------|-------|--------------|------------------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.1 hh3cMLagConsistencyType | Consistency check type. | No | Integer32 | type1(1) type2(2) |
| 6.1.4.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 6.1.4.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING(0..255) |

Recommended action

No action is required.

hh3cMLagIfCheckInConsistency

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.2550 6.2.176.2.0.4 | Inconsistency is detected during the consistency check on M-LAG interfaces. | Informational | - | - | OFF |

Description

This notification is generated if the consistency check result for M-LAG interfaces is inconsistent.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|-------------------------|-------|-----------|------------------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.1 hh3cMLagConsistencyType | Consistency check type. | No | Integer32 | type1(1) type2(2) |
| 6.1.4.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |

| | | | | |
|----------------------------------|----------------|-----|--------------|-------------------------|
| 6.1.4.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING(0..255) |
|----------------------------------|----------------|-----|--------------|-------------------------|

Recommended action

To resolve the issue: 1. If the consistency check on M-LAG interfaces for the type 1 configuration is inconsistent, use the display m-lag consistency command to view configuration information on the M-LAG member devices, and modify their configuration to ensure consistency.

2. If the consistency check on M-LAG interfaces for the type 2 configuration is inconsistent, modify the configuration on the M-LAG member devices to ensure consistency.

hh3cMLagPortGlobalDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.5 | M-LAG group goes down. | Informational | - | - | OFF |

Description

This notification is generated when all member ports of the M-LAG interfaces in the same M-LAG group become unselected.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|-----------------|-------|-----------|---------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.2 hh3cMLagGroupIdForNotify | M-LAG group ID. | No | Integer32 | Integer32 (1..1024) |

Recommended action

To resolve the issue, verify that the M-LAG system settings are configured and consistent, such as the M-LAG system MAC address, priority, and number.

hh3cMLagPortGlobalUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.6 | M-LAG group comes up. | Informational | - | - | OFF |

Description

This notification is generated when member ports of the M-LAG interfaces in the same M-LAG group become selected.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|-----------------|-------|-----------|---------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.2 hh3cMLagGroupIdForNotify | M-LAG group ID. | No | Integer32 | Integer32 (1..1024) |

Recommended action

No action is required.

hh3cMLagPortSelected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.7 | A local M-LAG interface has selected member ports. | Informational | - | - | OFF |

Description

This notification is generated when member ports of a local M-LAG interface become selected.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|-----------------|-------|--------------|------------------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.2 hh3cMLagGroupIdxForNotify | M-LAG group ID. | No | Integer32 | Integer32 (1..1024) |
| 6.1.4.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 6.1.4.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING(0..255) |

Recommended action

No action is required.

hh3cMLagPortNoSelected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.8 | All member ports of a local M-LAG interface become unselected. | Informational | - | - | OFF |

Description

This notification is generated when all member ports of a local M-LAG interface become unselected.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|--|-------|--------------|------------------------------|
| 6.1.4.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 6.1.4.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.2.176.2.1.2 hh3cMLagGroupIdxForNotify | M-LAG group ID. | No | Integer32 | Integer32 (1..1024) |
| 1.3.6.1.4.1.25506.2.176.2.1.3 (hh3cMLagPortNotSelectedReason) | Reason why no selected member port exists for the M-LAG interface. | No | OCTET STRING | OCTET STRING(0..255) |

Recommended action

To resolve the issue, check settings on member ports of the aggregation group and the cable connection status.

hh3cMLagPortPeerNoSelected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.9 | All member ports of a peer M-LAG interface become unselected. | Informational | - | - | OFF |

Description

This notification is generated when all member ports of a peer M-LAG interface become unselected.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|-----------------|-------|-----------|---------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.9 hh3cMLagGroupIdForNotify | M-LAG group ID. | No | Integer32 | Integer32 (1..1024) |

Recommended action

To resolve the issue, check settings on member ports of the peer aggregation group and the cable connection status.

hh3cMLagPortPeerSelected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.10 | A peer M-LAG interface has selected member ports. | Informational | - | - | OFF |

Description

This notification is generated when member ports of a peer M-LAG interface become selected.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|-----------------|-------|-----------|---------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.9 hh3cMLagGroupIdxForNotify | M-LAG group ID. | No | Integer32 | Integer32 (1..1024) |

Recommended action

To resolve the issue, check settings on member ports of the peer aggregation group and the cable connection status.

hh3cMLagPeerLinkUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.11 | The peer-link interface comes up. | Informational | - | - | OFF |

Description

This notification is generated if DRCPDUs can be sent and received correctly between the M-LAG member devices.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|----------------------------------|-----------------|-------|--------------|---------------------------|
| 6.1.4.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 6.1.4.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING(0..255) |

Recommended action

No action is required.

hh3cMLagPeerLinkDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.12 | The peer-link interface goes down. | Informational | - | - | OFF |

Description

This notification is generated when the peer-link interface goes down.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|----------------------------------|-----------------|-------|--------------|------------------------------|
| 6.1.4.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 6.1.4.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING(0..255) |

Recommended action

- To resolve the issue: 1. Verify that the M-LAG system settings are configured and consistent, such as the M-LAG system MAC address, priority, number, authentication password, and sequence number check.
2. Check the state of Layer 2 aggregate interface configured as the peer-link interface.

hh3cMLagKeepaliveDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.13 | The keepalive link goes down. | Informational | - | - | OFF |

Description

This notification is generated when the keepalive link goes down.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.4 hh3cMLagKeepAliveDownReason | Reason why the keepalive link goes down. | No | OCTET STRING | OCTET STRING(0..255) |

Recommended action

To resolve the issue: 1. Check the device role.

2. Verify that the source and destination IP addresses of keepalive packets are consistent between the M-LAG member devices.

3. Check the state of the Layer 3 link used for keepalive detection.

hh3cMLagKeepaliveUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.14 | The keepalive link comes up. | Informational | - | - | OFF |

Description

This notification is generated if keepalive packets can be sent and received correctly between the M-LAG member devices.

Status control

This notification cannot be disabled.

Objects

No action is required.

Recommended action

No action is required.

hh3cMLagDeviceMadDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.15 | The device is placed in M-LAG MAD DOWN | Informational | - | - | OFF |

| | | | | | |
|--|--------|--|--|--|--|
| | state. | | | | |
|--|--------|--|--|--|--|

Description

This notification is generated when service interfaces are shut down by M-LAG MAD.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.176.2.1.5 hh3cMLagMadDownReason | Reason why the device is placed in M-LAG MAD DOWN state. | No | OCTET STRING | OCTET STRING(0..255) |

Recommended action

To resolve the issue, check settings on both ends of the peer link.

hh3cMLagDeviceMadRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.16 | The device brings up service interfaces that are placed in M-LAG MAD DOWN state. | Informational | - | - | OFF |

Description

This notification is generated when the device brings up service interfaces that are placed in M-LAG MAD DOWN state.

Status control

This notification cannot be disabled.

Objects

No action is required.

Recommended action

No action is required.

hh3cMLagDeviceRoleChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.176.2.0.17 | The M-LAG member device role is changed. | Informational | - | - | OFF |

Description

This notification is generated when the M-LAG member device role is changed.

Status control

This notification cannot be disabled.

Objects

| OID | Description | Index | Type | Value range |
|---|------------------------------------|-------|--------------|---|
| 1.3.6.1.4.1.25506.2.176.2.1.6 hh3cMLagOldRole | Previous role for the device. | No | INTEGER | none(0), primary(1), secondary(2) |
| 1.3.6.1.4.1.25506.2.176.2.1.7 hh3cMLagNewRole | New role for the device. | No | INTEGER | none(0), primary(1), secondary(2) |
| 1.3.6.1.4.1.25506.2.176.2.1.8 hh3cMLagRoleChangeReason | Reason for the device role change. | No | OCTET STRING | OCTET STRING(0..255) |

Recommended action

No action is required.

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HH3C-PROTOCOL-VLAN-MIB

About this MIB

Use this MIB to configure protocol-based VLANs, for example, assign packets from a protocol to a VLAN, bind ports to protocol templates, and query protocol-based VLAN data. This MIB is available only on devices that support the protocol-based VLAN feature.

MIB file name

hh3c-protocol-vlan.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cProtocolVlan(16)

Scalar objects

hh3cProtocolNumAllVlan

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cProtocolNumAllVlan (1.3.6.1.4.1.25506.2.16.1.1) | read-only | Integer32 | Standard MIB values. | Maximum number of protocols that can be configured for all VLANs. | Implementation varies by product. |

hh3cProtocolNumPerVlan

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cProtocolNumPerVlan (1.3.6.1.4.1.25506.2.16.1.2) | read-only | Integer32 | Standard MIB values. | Maximum number of protocols that can be configured for a single VLAN. | Implementation varies by product. |

Tabular objects

hh3cProtocolVlanTable

About this table

Use this table to configure the protocol-based VLAN feature, associate a VLAN with a protocol, and isolate packets from different protocols at Layer 2 through assigning them to different VLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cProtocolVlanVlanId and hh3cProtocolVlanProtocolIndex.

When creating a protocol-based VLAN, the index objects hh3cProtocolVlanVlanId and hh3cProtocolVlanProtocolIndex must be specified together with the following objects: hh3cProtocolVlanProtocolType, hh3cProtocolVlanProtocolSubType, hh3cProtocolVlanProtocolTypeValue, and hh3cProtocolVlanRowStatus. The relationship among them is as follows:

| hh3cProtocolVlanProtocolType | hh3cProtocolVlanProtocolSubType | hh3cProtocolVlanProtocolTypeValue |
|------------------------------|---------------------------------|---|
| ip | notused | notused (creation) |
| ipv6 | notused | notused (creation) |
| at | notused | notused (creation) |
| ipx | ethernetii | notused (creation) |
| | llc | |
| | raw | |
| | snap | |
| mode-snap | etype | Hexadecimal string, for example, 600 (0x0600). Value range: [0x600..0xffff]. |
| mode-ethernetii | etype | Hexadecimal string, for example, 600 (0x0600). Value range: [0x600..0xffff]. |
| mode-llc | notused | Different parts are in the following order: [dsap value][:ssap value][dsap value;ssap value] The value ranges are both [0x00..0xff]. For example, the dsap is 0x09, and the ssap is 0x0a. If neither dsap nor ssap is specified, the string length is 0. If the dsap is specified, the string is 09; or 09. If the ssap is specified, the string is ;0a. If both dsap and ssap are specified and, the string is 09;0a. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------------------|---|--|---|
| hh3cProtocolVlanVlanId (1.3.6.1.4.1.25506.2.16.1.5.1.1) | not-accessible | Integer32 | Standard MIB values. | ID of a protocol-based VLAN. | As per the MIB. |
| hh3cProtocolVlanProtocolIndex (1.3.6.1.4.1.25506.2.16.1.5.1.2) | not-accessible | Integer32 | Integer32 (0..hh3cProtocolNumPerVlan-1) | Protocol template of a protocol-based VLAN. | As per the MIB. |
| hh3cProtocolVlanProtocolType (1.3.6.1.4.1.25506.2.16.1.5.1.3) | read-create | Hh3cvProtocolVlanProtocolType | Layer 3 protocols: ip(1), ipx(2), at(3), ipv6(4), □ Layer 2 protocols: mode-llc(101), mode-snap(102), | Protocol types specified in the protocol template. | This object cannot be separately modified after the VLAN-to-protocol mapping is configured. |

| | | | | | |
|---|-------------|----------------------------------|--|--|---|
| | | | mode-ethernetii(103), □ □ Protocol no configure: notConfigure(201) | | |
| hh3cProtocolVlanProtocolSubType (1.3.6.1.4.1.25506.2.16.1.5.1.4) | read-create | Hh3cvProtocolVlanProtocolSubType | notused(1), ethernetii(2), llc(3), raw(4), snap(5), etype(6) | Protocol subtypes specified in the protocol template. | This object cannot be separately modified after the VLAN-to-protocol mapping is configured. |
| hh3cProtocolVlanProtocolTypeValue (1.3.6.1.4.1.25506.2.16.1.5.1.5) | read-create | OCTET STRING | OCTET STRING (0..255) | Protocol type values specified in the protocol template. | This object cannot be separately modified after the VLAN-to-protocol mapping is configured. |
| hh3cProtocolVlanRowStatus (1.3.6.1.4.1.25506.2.16.1.5.1.6) | read-create | RowStatus | Standard MIB values. | Whether a protocol-based VLAN takes effect on a port. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cProtocolVlanPortTable

About this table

Use this table to bind a port to a protocol-based VLAN template.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cProtocolVlanPortIndex, hh3cProtocolVlanPortVlanId, and hh3cProtocolVlanPortProtocolId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------------|---|--|-----------------|
| hh3cProtocolVlanPortIndex (1.3.6.1.4.1.25506.2.16.1.6.1.1) | not-accessible | Integer32 | Standard MIB values. | Index of a port configured with a protocol-based VLAN. | As per the MIB. |
| hh3cProtocolVlanPortVlanId (1.3.6.1.4.1.25506.2.16.1.6.1.2) | not-accessible | Integer32 | Standard MIB values. | ID of a protocol-based VLAN configured on a port. | As per the MIB. |
| hh3cProtocolVlanPortProtocolId (1.3.6.1.4.1.25506.2.16.1.6.1.3) | not-accessible | Integer32 | Standard MIB values. | Index of a protocol template on a port. | As per the MIB. |
| hh3cProtocolVlanPortProtocolType (1.3.6.1.4.1.25506) | read-only | Hh3cvProtocolVlanProtocolType | Layer 3 protocols: ip(1), ipx(2), at(3), ipv6(4), □ □ | Protocol types specified on a port. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------------------|---|---|--|
| .2.16.1.6.1.4) | | | Layer 2 protocols: mode-llc(101), mode-snap(102), mode-ethernetii(103), <input type="checkbox"/> Protocol no configure: notConfigure(201) | | |
| hh3cProtocolVlan PortProtocolSubType (1.3.6.1.4.1.25506 .2.16.1.6.1.5) | read-only | Hh3cvProtocolVlanProtocolSubType | notused(1), <input type="checkbox"/> ethernetii(2), <input type="checkbox"/> llc(3), <input type="checkbox"/> raw(4), <input type="checkbox"/> snap(5), <input type="checkbox"/> etype(6) | Protocol subtypes specified on a port. | As per the MIB. |
| hh3cProtocolVlan PortTypeValue (1.3.6.1.4.1.25506 .2.16.1.6.1.6) | read-only | OCTET STRING | Standard MIB values. | Protocol type values specified on a port. | As per the MIB. |
| hh3cProtocolVlan PortRowStatus (1.3.6.1.4.1.25506 .2.16.1.6.1.7) | read-create | RowStatus | Standard MIB values. | Operating state of a protocol-based VLAN associated with a port. | Available values are active(1), createAndGo(4), and destroy(6). |
| hh3cProtocolVlan PortStatus (1.3.6.1.4.1.25506 .2.16.1.6.1.8) | read-only | Integer | active (1), <input type="checkbox"/> inactive (2) | State of a protocol-based VLAN configured on a port. | active(1): The protocol template on the port is associated with a protocol-based VLAN (the hh3cProtocolVlan PortProtocolId object has the corresponding data in the hh3cProtocolVlan Table table), and the port is configured as hybrid port and assigned to the protocol-based VLAN. |

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HH3C-QINQV2-MIB

About this MIB

Use this MIB to manage, configure, and obtain 802.1Q in 802.1Q (QinQ) information.

MIB file name

hh3c-qinqv2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cQinQv2(137)

Scalar objects

hh3cQinQv2ServiceTPID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------------|-------------|----------------------------------|
| hh3cQinQv2ServiceTPID (1.3.6.1.4.1.25506.2.137.1.1.1) | read-write | Integer32 | Integer32 (1..65535) | SVLAN TPID | Implementation varies by product |

hh3cQinQv2CustomerTPID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------------|-------------|----------------------------------|
| hh3cQinQv2CustomerTPID (1.3.6.1.4.1.25506.2.137.1.1.2) | read-write | Integer32 | Integer32 (1..65535) | CVLAN TPID | Implementation varies by product |

Tabular objects

hh3cQinQv2IfConfigTable

About this table

Use this table to enable QinQ, set the CVLAN TPID and SVLAN TPID, and configure VLAN transparent transmission on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|-------------------------|--|----------------------------------|
| hh3cQinQv2IfState (1.3.6.1.4.1.25506.2.137.1.2.1.1) | read-write | TruthValue | true(1), false(2) | This variable is used to enable or disable QinQ on the port. | Implementation varies by product |
| hh3cQinQv2IfServiceTPID (1.3.6.1.4.1.25506.2.137.1.2.1.2) | read-write | Integer32 | Integer32 (1..65535) | SVLAN TPID on the port. | Implementation varies by product |
| hh3cQinQv2IfCustomerTPID (1.3.6.1.4.1.25506.2.137.1.2.1.3) | read-write | Integer32 | Integer32 (1..65535) | CVLAN TPID on the port. | Implementation varies by product |
| hh3cQinQv2IfTransparentVlanList (1.3.6.1.4.1.25506.2.137.1.2.1.4) | read-write | OCTET STRING | OCTET STRING (512) | List of transparent VLANs the port. | Implementation varies by product |

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HH3C-SUBNET-VLAN-MIB

About this MIB

Use this MIB to manage and obtain information about IP subnet-based VLANs on a device that supports the subnet-based VLAN feature.

MIB file name

hh3c-subnet-vlan.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSubnetVlan(61)

Scalar objects

hh3cSubnetNumAllVlan

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cSubnetNumAllVlan (1.3.6.1.4.1.25506.2.61.1.1.1) | read-only | Integer32 | Standard MIB values. | Maximum number of subnets that can be configured for all VLANs. | Implementation varies by product. |

hh3cSubnetNumPerVlan

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cSubnetNumPerVlan (1.3.6.1.4.1.25506.2.61.1.1.2) | read-only | Integer32 | Standard MIB values. | Maximum number of subnets that can be configured for a single VLAN. | Implementation varies by product. |

hh3cSubnetNumAllPort

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cSubnetNumAllPort (1.3.6.1.4.1.25506.2.61.1.1.3) | read-only | Integer32 | Standard MIB values. | Maximum number of subnets that can be configured for all ports. | Implementation varies by product. |

hh3cSubnetNumPerPort

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cSubnetNumPerPort (1.3.6.1.4.1.25506.2.61.1.1.4) | read-only | Integer32 | Standard MIB values. | Maximum number of subnets that can be configured for a single port. | Implementation varies by product. |

Tabular objects

hh3cSubnetVlanTable

About this table

Use this table to configure and obtain information about VLAN-to-IP subnet or address mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cSubnetVlanVlanId and hh3cSubnetVlanSubnetIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-----------------------|------------------------------|--|
| hh3cSubnetVlanVlanId (1.3.6.1.4.1.25506.2.61.1.2.1.1) | not-accessible | Integer32 | Standard MIB values. | Subnet-based VLAN ID. | As per the MIB. |
| hh3cSubnetVlanSubnetIndex (1.3.6.1.4.1.25506.2.61.1.2.1.2) | not-accessible | Integer32 | Standard MIB values. | IP subnet index. | As per the MIB. |
| hh3cSubnetVlanVlanIpAddressType (1.3.6.1.4.1.25506.2.61.1.2.1.3) | read-create | InetAddressType | Standard MIB values. | IP subnet address type. | This object cannot be separately modified after the VLAN-to-IP subnet mapping is configured. |
| hh3cSubnetVlanIpAddressValue (1.3.6.1.4.1.25506.2.61.1.2.1.4) | read-create | InetAddress | OCTET STRING (0..255) | IP subnet address. | This object cannot be separately modified after the VLAN-to-IP subnet mapping is configured. |
| hh3cSubnetVlanNetMaskValue (1.3.6.1.4.1.25506.2.61.1.2.1.5) | read-create | InetAddress | OCTET STRING (0..255) | IP subnet mask. | This object cannot be separately modified after the VLAN-to-IP subnet mapping is configured. When no value is specified, the default is 255.255.255.0. |
| hh3cSubnetVlanRowStatus (1.3.6.1.4.1.25506.2.61.1.2.1.6) | read-create | RowStatus | Standard MIB values. | Subnet-based VLAN row state. | Only the following operations are supported: <input type="checkbox"/> active(1), createAndGo(4), and destroy(6) |

hh3cSubnetVlanPortCreateTable

About this table

Use this table to configure and obtain information about port-to-IP subnet-based VLAN mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cSubnetVlanPortCreateIndex and hh3cSubnetVlanPortCreateVlanId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-----------------------------|--|--|
| hh3cSubnetVlanPortCreateIndex (1.3.6.1.4.1.25506.2.61.1.3.1.1) | not-accessible | Integer32 | Standard MIB values. | Port index. | As per the MIB. |
| hh3cSubnetVlanPortCreateVlanId (1.3.6.1.4.1.25506.2.61.1.3.1.2) | not-accessible | Integer32 | Standard MIB values. | ID of an IP subnet-based VLAN created on a port. | As per the MIB. |
| hh3cSubnetVlanPortInfoVlanId (1.3.6.1.4.1.25506.2.61.1.3.1.3) | read-only | Integer32 | Standard MIB values. | ID of an IP subnet-based VLAN on a port. | As per the MIB. |
| hh3cSubnetVlanPortRowStatus (1.3.6.1.4.1.25506.2.61.1.3.1.4) | read-create | RowStatus | Standard MIB values. | Port's subnet-based VLAN row state. | As per the MIB. |
| hh3cSubnetVlanPortStatus (1.3.6.1.4.1.25506.2.61.1.3.1.5) | read-only | INTEGER | active (1), inactive (2) | Subnet-based VLAN state on a port. | Active: <input type="checkbox"/> The subnet-based VLAN has been associated with the specified IP address. The hh3cSubnetVlanPortCreateVlanId object has the corresponding data in the hh3cSubnetVlanTable table, the link type of the port is hybrid, and the port is assigned to the VLAN. |

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HH3C-VMAP-MIB

About this MIB

Use this MIB to configure VLAN mapping features, for example, one-to-one VLAN mapping, many-to-one VLAN mapping, one-to-two VLAN mapping, two-to-two VLAN mapping, and two-to-one VLAN mapping. VLAN mapping re-marks VLAN traffic with new VLAN IDs. Implementation varies by product.

MIB file name

hh3c-vmap.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cVmap(138)

Tabular objects

hh3cVMAPNNITable

About this table

Use this table to configure many-to-one VLAN mapping on the network side.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|----------------------------|--------------------------------------|
| hh3cVMAPNNISta te (1.3.6.1.4.1.25506 .2.138.1.1.1) | read-write | TruthValue | true(1), false(2) | Configure VLAN mapping. | Implementation varies by product. |

hh3cVMAP1to1Table

About this table

Use this table to configure one-to-one VLAN mapping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVMAP1to1Vlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|-------------------------|--|---|
| hh3cVMAP1to1Vlan (1.3.6.1.4.1.25506.2.138.2.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Configure one-to-one VLAN mapping. | As per the MIB. |
| hh3cVMAP1to1TranslatedVlan (1.3.6.1.4.1.25506.2.138.2.1.2) | read-create | Integer32 | Integer32 (1..65535) | Translated VLAN for one-to-one VLAN mapping. | Implementation varies by product. |
| hh3cVMAP1to1RowStatus (1.3.6.1.4.1.25506.2.138.2.1.3) | read-create | RowStatus | Standard MIB values. | One-to-one VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cVMAPNto1RangeTable

About this table

Use this table to configure many-to-one VLAN mapping on the user side. The original VLANs are specified in a list, for example, VLANs 20 through 30.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVMAPNto1StartVlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------------------|--|---|
| hh3cVMAPNto1StartVlan (1.3.6.1.4.1.25506.2.138.3.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Start VLAN of the original VLAN list for many-to-one VLAN mapping. | As per the MIB. |
| hh3cVMAPNto1EndVlan (1.3.6.1.4.1.25506.2.138.3.1.2) | read-create | Integer32 | Integer32 (1..65535) | End VLAN of the original VLAN list for many-to-one VLAN mapping. | Implementation varies by product. |
| hh3cVMAPNto1RangeTranslatedVlan (1.3.6.1.4.1.25506.2.138.3.1.3) | read-create | Integer32 | Integer32 (1..65535) | Translated VLAN for many-to-one VLAN mapping. | Implementation varies by product. |
| hh3cVMAPNto1RangeRowStatus (1.3.6.1.4.1.25506.2.138.3.1.4) | read-create | RowStatus | Standard MIB values. | Many-to-one VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cVMAPNto1SingleTable

About this table

Use this table to configure many-to-one VLAN mapping on the user side. The original VLANs are single VLANs, for example, VLAN 20 and VLAN 30.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVMAPNto1Vlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|-------------------------|---|---|
| hh3cVMAPNto1Vlan (1.3.6.1.4.1.25506.2.138.4.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Many-to-one VLAN mapping. | As per the MIB. |
| hh3cVMAPNto1SingleTranslatedVlan (1.3.6.1.4.1.25506.2.138.4.1.2) | read-create | Integer32 | Integer32 (1..65535) | Translated VLAN for many-to-one VLAN mapping. | Implementation varies by product. |
| hh3cVMAPNto1SingleRowStatus (1.3.6.1.4.1.25506.2.138.4.1.3) | read-create | RowStatus | Standard MIB values. | Many-to-one VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cVMAP1to2RangeTable

About this table

Use this table to configure two-to-one VLAN mapping. The original VLANs are specified in a list, for example, VLANs 20 through 30.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVMAP1to2StartVlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------------------|---|-----------------|
| hh3cVMAP1to2StartVlan (1.3.6.1.4.1.25506.2.138.5.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Start VLAN of the original VLAN list for one-to-two VLAN mapping. | As per the MIB. |
| hh3cVMAP1to2EndVlan | read-create | Integer32 | Integer32 | End VLAN of the original VLAN list | Implementation |

| | | | | | |
|--|-------------|-----------|-------------------------|--|--|
| (1.3.6.1.4.1.25506.2.138.5.1.2) | | | (1..65535) | for one-to-two VLAN mapping. | varies by product. |
| hh3cVMAP1to2RangeNestedVlan (1.3.6.1.4.1.25506.2.138.5.1.3) | read-create | Integer32 | Integer32 (1..65535) | Outer VLAN for one-to-two VLAN mapping. | Implementation varies by product. |
| hh3cVMAP1to2RangeRowStatus (1.3.6.1.4.1.25506.2.138.5.1.4) | read-create | RowStatus | Standard MIB values. | One-to-two VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |
| hh3cVMAP1to2RangeNestedPrio (1.3.6.1.4.1.25506.2.138.5.1.5) | read-create | Integer32 | Standard MIB values. | Outer VLAN priority for one-to-two VLAN mapping. | The value range is 0 to 7. If no priority is configured, the default is 65535. |

hh3cVMAP1to2SingleTable

About this table

Use this table to configure one-to-two VLAN mapping. The original VLANs are single VLANs, for example, VLAN 20 and VLAN 30.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVMAP1to2StartVlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|-------------------------|---|--|
| hh3cVMAP1to2Vlan (1.3.6.1.4.1.25506.2.138.6.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Configure one-to-two VLAN mapping. | As per the MIB. |
| hh3cVMAP1to2SingleNestedVlan (1.3.6.1.4.1.25506.2.138.6.1.2) | read-create | Integer32 | Integer32 (1..65535) | Single outer VLAN for one-to-two VLAN mapping. | Implementation varies by product. |
| hh3cVMAP1to2SingleRowStatus (1.3.6.1.4.1.25506.2.138.6.1.3) | read-create | RowStatus | Standard MIB values. | One-to-two VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |
| hh3cVMAP1to2SingleNestedPrio (1.3.6.1.4.1.25506.2.138.6.1.4) | read-create | Integer32 | Standard MIB values. | Single outer VLAN priority for one-to-two VLAN mapping. | The value range is 0 to 7. If no priority is configured, the default is 65535. |

hh3cVMAP2to2Table

About this table

Use this table to configure two-to-two VLAN mapping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3cVMAP2to2OuterVlan, and hh3cVMAP2to2InnerVlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------------------|--|---|
| hh3cVMAP2to2OuterVlan (1.3.6.1.4.1.25506.2.138.7.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Original outer VLAN for two-to-two VLAN mapping. | As per the MIB. |
| hh3cVMAP2to2InnerVlan (1.3.6.1.4.1.25506.2.138.7.1.2) | not-accessible | Integer32 | Integer32 (1..65535) | Original inner VLAN for two-to-two VLAN mapping. | As per the MIB. |
| hh3cVMAP2to2TranslatedOuterVlan (1.3.6.1.4.1.25506.2.138.7.1.3) | read-create | Integer32 | Integer32 (1..65535) | Translated outer VLAN for two-to-two VLAN mapping. | Implementation varies by product. |
| hh3cVMAP2to2TranslatedInnerVlan (1.3.6.1.4.1.25506.2.138.7.1.4) | read-create | Integer32 | Integer32 (1..65535) | Translated inner VLAN for two-to-two VLAN mapping. | Implementation varies by product. |
| hh3cVMAP2to2RowStatus (1.3.6.1.4.1.25506.2.138.7.1.5) | read-create | RowStatus | Standard MIB values. | Two-to-two VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |

hh3cVMAP2to1Table

About this table

Use this table to configure two-to-one VLAN mapping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3cVMAP2to1OuterVlan, and hh3cVMAP2to1InnerVlan.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------------------|--|---|
| hh3cVMAP2to1OuterVlan (1.3.6.1.4.1.25506.2.138.8.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Original outer VLAN for two-to-one VLAN mapping. | As per the MIB. |
| hh3cVMAP2to1InnerVlan (1.3.6.1.4.1.25506.2.138.8.1.2) | not-accessible | Integer32 | Integer32 (1..65535) | Original inner VLAN for two-to-one VLAN mapping. | As per the MIB. |
| hh3cVMAP2to1TranslatedOuterVlan (1.3.6.1.4.1.25506.2.138.8.1.3) | read-create | Integer32 | Integer32 (1..65535) | Translated outer VLAN for two-to-one VLAN mapping. | Implementation varies by product. |
| hh3cVMAP2to1RowStatus (1.3.6.1.4.1.25506.2.138.8.1.4) | read-create | RowStatus | Standard MIB values. | Two-to-one VLAN mapping row state. | Available values are active(1), createAndGo(4), and destroy(6). |

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HH3C-VOICE-VLAN-MIB

About this MIB

Use this MIB to configure voice VLAN. You can assign interfaces connecting to voice devices to a voice VLAN. Then, the system automatically modifies the QoS parameters for the voice packets to improve the priority of voice packets and ensure voice quality. Implementation varies by product.

MIB file name

hh3c-voice-vlan.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cVoiceVlan(9)

Scalar objects

hh3cVoiceVlanAgingTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|---------------------------|------------------------|-----------------|
| hh3cVoiceVlanAgingTime (1.3.6.1.4.1.25506.2.9.4) | read-write | Integer32 | Integer32 (0 5..43200) | Voice VLAN aging time. | As per the MIB. |

hh3cVoiceVlanSecurityState

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-----------------------------|---------------------------------|-----------------|
| hh3cVoiceVlanSecurityState (1.3.6.1.4.1.25506.2.9.6) | read-write | INTEGER | security (1), normal (2) | Voice VLAN security mode state. | As per the MIB. |

Tabular objects

hh3cvoiceVlanOuiTable

About this table

Use this table to configure the OUI addresses that can be recognized by the voice VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cVoiceVlanOuiAddress. When you use the hh3cVoiceVlanOuiRowStatus to create a row, you must specify the hh3cVoiceVlanOuiMask object and can leave the hh3cVoiceVlanOuiDescription object empty.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|-------------------------|---|--|
| hh3cVoiceVlanOuiAddress (1.3.6.1.4.1.25506.2.9.1.1.1) | read-only | MacAddress | OCTET STRING (6) | OUI address of the voice VLAN. | As per the MIB. |
| hh3cVoiceVlanOuiMask (1.3.6.1.4.1.25506.2.9.1.1.2) | read-write | MacAddress | OCTET STRING (6) | Mask for the OUI address of the voice VLAN. | This object cannot be specified separately. |
| hh3cVoiceVlanOuiDescription (1.3.6.1.4.1.25506.2.9.1.1.3) | read-write | OCTET STRING | OCTET STRING (0..30) | Description on the OUI address of the voice VLAN. | The first letter of the description cannot be a space. |
| hh3cVoiceVlanOuiRowStatus (1.3.6.1.4.1.25506.2.9.1.1.4) | read-create | RowStatus | Standard MIB values. | Row state of the OUI address of the voice VLAN. | As per the MIB. |

hh3cvoiceVlanPortTable

About this table

Use this table to configure the voice VLAN features, for example, configure the voice VLAN operating mode, configure an interface to trust the priority of packets in a voice VLAN, and modify the CoS and DSCP values for packets in a voice VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVoiceVlanPortifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--------------------------|---|-----------------|
| hh3cVoiceVlanPortifIndex (1.3.6.1.4.1.25506.2.9.7.1.1) | not-accessible | Integer32 | Integer32(1..2147483647) | Index of a port in a voice VLAN. | As per the MIB. |
| hh3cVoiceVlanPortMode (1.3.6.1.4.1.25506.2.9.7.1.2) | read-write | INTEGER | auto (1), manual (2) | Voice VLAN assignment mode of a port. | As per the MIB. |
| hh3cVoiceVlanPortLegacy (1.3.6.1.4.1.25506.2.9.7.1.3) | read-write | TruthValue | Standard MIB values. | Voice VLAN configuration legacy status on a port. | Not supported |
| hh3cVoiceVlanPort | read-write | TruthValue | Standard MIB | QoS settings on a port in a voice | Not supported |

| | | | | | |
|--|--|--|---------|-------|--|
| tQosTrust (1.3.6.1.4.1.25506 .2.9.7.1.4) | | | values. | VLAN. | |
|--|--|--|---------|-------|--|

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IEEE8021-CFM-MIB

About this MIB

Connectivity Fault Management (CFM) is the name of the feature defined in IEEE 802.1ag for end-to-end Operations, Administration and Maintenance (OAM) for Ethernet. In the Comware platform, the feature is called Connectivity Fault Detection (CFD).

CFD is an end-to-end per-VLAN link layer OAM mechanism. CFD is used for link connectivity detection, fault verification, and fault location.

This MIB defines how to implement CFD. Use this MIB to configure CFD on managed devices.

MIB file name

ieee8021-cfm.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbered-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021CfmMib(8)

Scalar objects

dot1agCfmMdTableNextIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------------------------|----------------------------|--|-----------------|
| dot1agCfmMdTableNextIndex (1.3.111.2.802.1.1.8.1.5.1) | read-only | Dot1afCfmIndexIntegerNextFree | Unsigned32 (1..4294967295) | Value to be used as a new index in the MD table. | As per the MIB. |

Tabular objects

dot1agCfmMdTable

About this table

Use this table to obtain the MD information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|-----------|-----------|
| <ul style="list-style-type: none">The dot1agCfmMdIndex index must be configured. The index is provided by the dot1agCfmMdTableNextIndex object.The dot1agCfmMdMdLevel object must be configured.The dot1agCfmMdFormat object is optional. If it is not configured, the default value is charString(4).The dot1agCfmMdName object is optional. When the dot1agCfmMdFormat object is set to none(1), the MIB will automatically ignore the input value no | Not supported | Supported | Supported |

| Create | Edit/Modify | Delete | Read |
|---|-------------|--------|------|
| <p>matter whether the dot1agCfmMdName object is configured. When the dot1agCfmMdFormat object is set to any other value, you must configure the dot1agCfmMdName object, and the MIB will read the input value.</p> <ul style="list-style-type: none"> The dot1agCfmMdMhfCreation object is optional. If it is not configured, the default value is defMHFnone(1), and only the value is available. The dot1agCfmMdMhfIdPermission object is optional. If it is not configured, the default value is sendIdNone(1), and only the value is available. | | | |

Columns

The table index is dot1agCfmMdIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------------|---|--|--|
| dot1agCfmMdIndex (1.3.111.2.802.1.1.8.1.5.2.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | MD table index. | As per the MIB. |
| dot1agCfmMdFormat (1.3.111.2.802.1.1.8.1.5.2.1.2) | read-create | Dot1agCfmMaintDomainNameType | INTEGER { none (1) dnsLikeName(2) macAddressAndUint (3) charString (4) } | MD name type. | As per the MIB. |
| dot1agCfmMdName (1.3.111.2.802.1.1.8.1.5.2.1.3) | read-create | Dot1agCfmMaintDomainName | OCTET STRING(1..43) | MD name. | The MD name must be unique. After an MD is created, its name cannot be modified. When the format is set to macAddressAndUint(3), you must enter eight bytes, where the first fix bytes specify the MAC address and the last two bytes specify the subnumber. |
| dot1agCfmMdMdLevel (1.3.111.2.802.1.1.8.1.5.2.1.4) | read-create | Dot1agCfmMDLevel | Integer32 (0..7) | MD level. | Eight MD levels are available, 0 to 7. The MD level cannot be modified after an MD is created. |
| dot1agCfmMdMhfCreation (1.3.111.2.802.1.1.8.1.5.2.1.5) | read-create | Dot1agCfmMhfCreation | INTEGER { defMHFnone(1), defMHFdefault(2), defMHFexplicit(3) } | Enumerated value indicating whether the management entity can create | This object is insignificant. This object cannot be modified after an MD is created. The |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--|---|---|--|
| | | | | MHFs (MIP Half Function) for this MD. | default is defMHFnone(1), and only the value is supported. |
| dot1agCfmMdMhIdPermissi on (1.3.111.2.802.1.1.8.1.5.2.1. 6) | read-create | Dot1agCfmIdP ermission | INTEGER { sendIdNone(1), sendIdChassis(2), sendIdManage(3), sendIdChassisManage(4) } | Enumerated value indicating what, if anything, is to be included in the Sender ID TLV (21.5.3) transmitted by MPs configured in this MD. | The default value is sendIdNone(1) , and only the value is available. |
| dot1agCfmMdMaNextIndex (1.3.111.2.802.1.1.8.1.5.2.1. 7) | read-only | Dot1afCfmInd exIntegerNext Free, | Unsigned32 (1..4294967295) | Index of the next MA to be created. | As per the MIB. |
| dot1agCfmMdRowStatus (1.3.111.2.802.1.1.8.1.5.2.1. 8) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Available values are active(1), createAndGo(4), and destroy(6). |

dot1agCfmMaNetTable

About this table

Use this table to obtain the MA network information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|--|-----------|-----------|
| <ul style="list-style-type: none"> The dot1agCfmMdIndex must be configured. The index is provided by dot1agCfmMdIndex in the dot1agCfmMdTable object. The dot1agCfmMaIndex and dot1agCfmMaNetName indexes are required. When configuring the dot1agCfmMaIndex index, the index is provided by the dot1agCfmMdMaNextIndex in the dot1agCfmMdTable table. When you use the dot1agCfmMaNetName object to configure a name, the name can contain only digits, letters, and underscores (_). The dot1agCfmMaNetFormat object must be configured. The dot1agCfmMaNetCcmInterval object is optional. If it is not configured, the default value is interval1s (4). | <p>Only the dot1agCfmMaNetCcmInterval object value can be modified.</p> <p>The values of the other objects cannot be modified. To modify them, first delete this row, and then create a new one.</p> | Supported | Supported |

Columns

The table indexes are dot1agCfmMdIndex and dot1agCfmMaIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------------------|--|----------------------------|---|
| dot1agCfmMaIndex (1.3.111.2.802.1.1.8.1.6.1.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | MA index. | This object cannot be modified after being created. |
| dot1agCfmMaNetFormat (1.3.111.2.802.1.1.8.1.6.1.1.2) | read-create | Dot1agCfmMaintAssocName Type | INTEGER { primaryVid (1), charString (2), unsignedInt16 (3), iccFormat (32) } | MA name format. | This object cannot be modified after being created. |
| dot1agCfmMaNetName (1.3.111.2.802.1.1.8.1.6.1.1.3) | read-create | Dot1agCfmMaintAssocName | OCTET STRING (1..45) | MA name. | This object cannot be modified after being created. The total length of the MA name and its MD name cannot exceed 44 bytes. |
| dot1agCfmMaNetCcmInterval (1.3.111.2.802.1.1.8.1.6.1.1.4) | read-create | Dot1agCfmCcmInterval | INTEGER { intervalInvalid (0), interval300Hz (1), interval10ms (2), interval100ms (3), interval1s (4), interval10s (5), interval1min (6), interval10min (7) } | CCM transmission interval. | As per the MIB. |
| dot1agCfmMaNetRowStatus (1.3.111.2.802.1.1.8.1.6.1.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Available values are active(1), createAndGo(4), and destroy(6). |

dot1agCfmMaMepListTable

About this table

Use this table to obtain the MA network information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| <ul style="list-style-type: none"> The dot1agCfmMdIndex must be configured. The index is provided by the dot1agCfmMdIndex in the dot1agCfmMdTable object. The dot1agCfmMaIndex must be configured. The index is provided by the | Not supported | Supported | Supported |

| | | | |
|---|--|--|--|
| dot1agCfmMaIndex in the dot1agCfmMaNetTable object. | | | |
| <ul style="list-style-type: none"> The dot1agCfmMaMepListIdentifier object must be configured. | | | |

Columns

The table indexes are dot1agCfmMdIndex, dot1agCfmMaIndex, and dot1agCfmMaMepListIdentifier.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--|-------------|---|
| dot1agCfmMaMepListIdentifier (1.3.111.2.802.1.1.8.1.6.3.1.1) | not-accessible | Dot1agCfmMepId | Unsigned32 (1..8191) | MEP ID. | This object cannot be modified after being created. |
| dot1agCfmMaMepListRowStatus (1.3.111.2.802.1.1.8.1.6.3.1.2) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Available values are active(1), createAndGo(4), and destroy(6). |

dot1agCfmMepTable

About this table

Use this table to obtain the MEP information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|--|-----------|-----------|
| <ul style="list-style-type: none"> The dot1agCfmMdIndex must be configured. The index is provided by the dot1agCfmMdIndex in the dot1agCfmMdTable object. The dot1agCfmMaIndex must be configured. The index is provided by the dot1dot1agCfmMaIndex in the dot1agCfmMaNetTable object. Indexes dot1agCfmMepIdentifier and dot1agCfmMepIfIndex and non-index dot1agCfmMepDirection must be configured. | <p>The dot1agCfmMepActive and dot1agCfmMepCciEnabled object values can be modified.</p> <p>The values of the other objects cannot be modified. To modify them, first delete this row, and then create a new one.</p> | Supported | Supported |

Columns

The table indexes are dot1agCfmMdIndex, dot1agCfmMaIndex, and dot1agCfmMepIdentifier.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------|---------------------------|----------------------------|---|
| dot1agCfmMepIdentifier (1.3.111.2.802.1.1.8.1.7.1.1.1) | not-accessible | Dot1agCfmMepId | Unsigned32 (1..8191) | MEP ID. | This object cannot be modified after being created. |
| dot1agCfmMepIfIndex (1.3.111.2.802.1.1.8.1.7.1.1.2) | read-create | InterfaceIndexOrZero | Integer32 (0..2147483647) | Interface index of an MEP. | As per the MIB. |
| dot1agCfmMepDirection (1.3.111.2.802.1.1.8.1.7.1.1.3) | read-create | Dot1agCfmMepDirection | INTEGER { down (1), | MEP direction. | This object cannot be |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------------------|--|--|--|
| | | | up (2) } | | modified after being created. |
| dot1agCfmMepPrimaryVid (1.3.111.2.802.1.1.8.1.7.1.1.4) | read-create | Unsigned32 | Unsigned32(0..16777215) | VLAN of the MEP. | The value 0 indicates that either the primary VID is that of the MEP's MA, or that the MEP's MA is associated with no VID. |
| dot1agCfmMepActive (1.3.111.2.802.1.1.8.1.7.1.1.5) | read-create | TruthValue | true(1), false(2) | Enabling state of the MEP. | The value must be true (1), and cannot be modified once the MEP is created. |
| dot1agCfmMepFngState (1.3.111.2.802.1.1.8.1.7.1.1.6) | read-only | Dot1agCfmFngState | INTEGER { fngReset (1), fngDefect (2), fngReportDefect (3), fngDefectReported(4), fngDefectClearing(5) } | FNG state machine state of the MEP. | As per the MIB. |
| dot1agCfmMepCciEnabled (1.3.111.2.802.1.1.8.1.7.1.1.7) | read-create | TruthValue | true(1), false(2) | Whether to enable the MEP to send CCM packets. | As per the MIB. |
| dot1agCfmMepCcmLtmPriority (1.3.111.2.802.1.1.8.1.7.1.1.8) | read-create | Unsigned32 | Unsigned32(0..7) | Priority of CCM packets sent by the MEP. | Not supported |
| dot1agCfmMepMacAddress (1.3.111.2.802.1.1.8.1.7.1.1.9) | read-only | MacAddress | OCTET STRING(6) | MEP MAC address. | Not supported |
| dot1agCfmMepLowPrDef (1.3.111.2.802.1.1.8.1.7.1.1.10) | read-create | Dot1agCfmLowestAlarmPri | INTEGER { allDef (1), macRemErrXcon(2), remErrXcon (3), errXcon (4), xcon (5), noXcon (6) } | Lowest priority defect that is allowed to generate fault alarms. | Not supported |
| dot1agCfmMepFngAlarmTime (1.3.111.2.802.1.1.8.1.7.1.1.11) | read-create | TimeInterval | 250..1000 | The time that defects must be | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|---------------------------|---|--|---|
| | | | | present before a fault alarm is issued. | |
| dot1agCfmMepFngResetTime (1.3.111.2.802.1.1.8.1.7.1.1.12) | read-create | TimeInterval | 250..1000 | The time that defects must be absent before resetting a fault alarm. | Not supported |
| dot1agCfmMepHighestPrDefect (1.3.111.2.802.1.1.8.1.7.1.1.13) | read-only | Dot1agCfmHighestDefectPri | INTEGER { none (0), defRDICCM (1), defMACstatus (2), defRemoteCCM (3), defErrorCCM (4), defXconCCM (5) } | Highest-priority fault of the MEP. | In the current software version, only fault types defRemoteCCM(3), defErrorCCM(4), and defXconCCM(5) are supported. |
| dot1agCfmMepDefects (1.3.111.2.802.1.1.8.1.7.1.1.14) | read-only | Dot1agCfmMepDefects | BITS { bDefRDICCM(0), bDefMACstatus(1), bDefRemoteCCM(2), bDefErrorCCM(3), bDefXconCCM(4) } | MEP fault state. | Not supported |
| dot1agCfmMepErrorCcmLastFailure (1.3.111.2.802.1.1.8.1.7.1.1.15) | read-only | OCTET STRING | OCTET STRING (1..1522) | Last-received CCM packet that triggered a DefErrorCCM fault. | Not supported |
| dot1agCfmMepXconCcmLastFailure (1.3.111.2.802.1.1.8.1.7.1.1.16) | read-only | OCTET STRING | OCTET STRING (1..1522) | Last-received CCM packet that triggered a DefXconCCM fault. | Not supported |
| dot1agCfmMepCcmSequenceErrors (1.3.111.2.802.1.1.8.1.7.1.1.17) | read-only | Counter32 | Standard MIB values. | Total number of out-of-sequence CCM packets received. | Not supported |
| dot1agCfmMepCciSentCcms (1.3.111.2.802.1.1.8.1.7.1.1.18) | read-only | Counter32 | Standard MIB values. | Total number of CCM packets sent. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------|------------------------------|---|----------------|
| dot1agCfmMepNextLbmTransId (1.3.111.2.802.1.1.8.1.7.1.1.19) | read-only | Unsigned32 | Standard MIB values. | Next sequence number. | Not supported |
| dot1agCfmMepLbrIn (1.3.111.2.802.1.1.8.1.7.1.1.20) | read-only | Counter32 | Standard MIB values. | Total number of LBR packets received. | Not supported |
| dot1agCfmMepLbrInOutOfOrder (1.3.111.2.802.1.1.8.1.7.1.1.21) | read-only | Counter32 | Standard MIB values. | Total number of out-of-sequence LBR packets received. | Not supported |
| dot1agCfmMepLbrBadMsdu (1.3.111.2.802.1.1.8.1.7.1.1.22) | read-only | Counter32 | Standard MIB values. | Total number of bad LBR packets. | Not supported |
| dot1agCfmMepLtmNextSeqNumber (1.3.111.2.802.1.1.8.1.7.1.1.23) | read-only | Unsigned32 | Standard MIB values. | Next sequence number of the LT packet. | Not supported |
| dot1agCfmMepUnexpLtrIn (1.3.111.2.802.1.1.8.1.7.1.1.24) | read-only | Counter32 | Standard MIB values. | Total number of LTR packets | Not supported |
| dot1agCfmMepLbrOut (1.3.111.2.802.1.1.8.1.7.1.1.25) | read-only | Counter32 | Standard MIB values. | Total number of LBR packets sent. | Not supported |
| dot1agCfmMepTransmitLbmStatus (1.3.111.2.802.1.1.8.1.7.1.1.26) | read-create | TruthValue | true(1), false(2) | Whether to forward LBM packets. | Not supported |
| dot1agCfmMepTransmitLbmDestMacAddress (1.3.111.2.802.1.1.8.1.7.1.1.27) | read-create | MacAddress | OCTET STRING(6) | Destination MAC address of LBM packets. | Not supported |
| dot1agCfmMepTransmitLbmDestMepld (1.3.111.2.802.1.1.8.1.7.1.1.28) | read-create | Dot1agCfmMepldOrZero | Integer32 (0..2147483647) | MEP ID. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------|---------------------------|---|----------------|
| dot1agCfmMepTransmitLbmDestinationMepId (1.3.111.2.802.1.1.8.1.7.1.1.29) | read-create | TruthValue | true(1), false(2) | Whether the LBM packets are transmitted by using the MEP ID or destination MAC address. | Not supported |
| dot1agCfmMepTransmitLbmMessages (1.3.111.2.802.1.1.8.1.7.1.1.30) | read-create | Integer32 | Integer32(1..1024) | Total number of LBM packets sent. | Not supported |
| dot1agCfmMepTransmitLbmDataTlv (1.3.111.2.802.1.1.8.1.7.1.1.31) | read-create | OCTET STRING | OCTET STRING (0..1500) | Data in TLVs. | Not supported |
| dot1agCfmMepTransmitLbmVlanPriority (1.3.111.2.802.1.1.8.1.7.1.1.32) | read-create | Integer32 | OCTET STRING (0..7) | Priority. | Not supported |
| dot1agCfmMepTransmitLbmVlanDropEnable (1.3.111.2.802.1.1.8.1.7.1.1.33) | read-create | TruthValue | true(1), false(2) | Whether to enable dropping packets. | Not supported |
| dot1agCfmMepTransmitLbmResultOK (1.3.111.2.802.1.1.8.1.7.1.1.34) | read-only | TruthValue | true(1), false(2) | Whether to send LBM packets. | Not supported |
| dot1agCfmMepTransmitLbmSequenceNumber (1.3.111.2.802.1.1.8.1.7.1.1.35) | read-only | Unsigned32 | Standard MIB values. | ID of the first LBM packet sent. | Not supported |
| dot1agCfmMepTransmitLtmStatus (1.3.111.2.802.1.1.8.1.7.1.1.36) | read-create | TruthValue | true(1), false(2) | Whether to send the next LTM packet. | Not supported |
| dot1agCfmMepTransmitLtmFlags (1.3.111.2.802.1.1.8.1.7.1.1.37) | read-create | BITS | useFDBOnly (0) | Flag field in LTM packets. | Not supported |
| dot1agCfmMepTransmitLtmTargetMacAddress (1.3.111.2.802.1.1.8.1.7.1.1.38) | read-create | MacAddress | OCTET STRING(6) | Destination MAC address. | Not supported |
| dot1agCfmMepTransmitLtmTargetMepId (1.3.111.2.802.1.1.8.1.7.1.1.39) | read-create | Dot1agCfmMepIdOrZero | Integer32 (0..2147483647) | Whether the sent packets carry the destination MAC address. | Not supported |
| dot1agCfmMepTransmitLtmTargetMepId (1.3.111.2.802.1.1.8.1.7.1.1.40) | read-create | TruthValue | true(1), false(2) | Whether the LTM packets use the | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------------|--|---|---|
| | | | | MEP ID. | |
| dot1agCfmMepTransmitLtmTtl (1.3.111.2.802.1.1.8.1.7.1.1.41) | read-create | Unsigned32 | Unsigned32(0..255) | TTL | Not supported |
| dot1agCfmMepTransmitLtmResult (1.3.111.2.802.1.1.8.1.7.1.1.42) | read-only | TruthValue | true(1), false(2) | Whether to send LTM packets. | Not supported |
| dot1agCfmMepTransmitLtmSeqNumber (1.3.111.2.802.1.1.8.1.7.1.1.43) | read-only | Unsigned32 | Standard MIB values. | LTM transaction identifier of the LTM sent. | Not supported |
| dot1agCfmMepTransmitLtmEgressIdentifier (1.3.111.2.802.1.1.8.1.7.1.1.44) | read-create | OCTET STRING | OCTET STRING(8) | ID of the egress of the LTM packets. | Not supported |
| dot1agCfmMepRowStatus (1.3.111.2.802.1.1.8.1.7.1.1.45) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Available values are active(1), createAndGo(4), and destroy(6). |
| dot1agCfmMepPbbTeCanReportPbbTePresence (1.3.111.2.802.1.1.8.1.7.1.1.46) | read-create | TruthValue | true(1), false(2) | Whether the PBB-TE reporting capability is supported. | Not supported |
| dot1agCfmMepPbbTeTrafficMismatchDefect (1.3.111.2.802.1.1.8.1.7.1.1.47) | read-only | TruthValue | true(1), false(2) | Whether traffic mismatch errors have been detected. | Not supported |
| dot1agCfmMepPbbTransmitLbmLtmReverseVid (1.3.111.2.802.1.1.8.1.7.1.1.48) | read-create | IEEE8021VlanIndex | Unsigned32 (1..4094 4096..4294967295) | PBB VID carried in LTM packets. | Not supported |
| dot1agCfmMepPbbTeMismatchAlarm (1.3.111.2.802.1.1.8.1.7.1.1.49) | read-create | TruthValue | true(1), false(2) | Whether PBB-TE errors or PBB-TE alarms are detected. | Not supported |
| dot1agCfmMepPbbTeLocalMismatchDefect (1.3.111.2.802.1.1.8.1.7.1.1.50) | read-only | TruthValue | true(1), false(2) | Whether local PBB-TE errors have been detected. | Not supported |
| dot1agCfmMepPbbTeLocalMismatchSinceReset (1.3.111.2.802.1.1.8.1.7.1.1.51) | read-only | TruthValue | true(1), false(2) | Whether the local PBB-TE | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|------------------------------------|----------------|
| | | | | errors start from the reset state. | |

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IEEE8021-CFM-V2-MIB

About this MIB

This document describes the IEEE8021-CFM-V2-MIB. This document includes the MIB tree structure description, non-table child object description, tabular object description, leaf object description, and trap definitions. This document is for the use of network administrators, device developers, testers, documentation staff, and maintenance staff.

MIB file name

ieee8021-cfm-v2.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbered-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021CfmV2Mib(7)

Tabular objects

ieee8021CfmMaCompTable

About this table

Use this table to configure the MA component table.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ieee8021CfmMaComponentId, dot1CfmMdIndex, and dot1CfmMalIndex.

OID of this table is: 1.3.111.2.802.1.1.8.1.6.4

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------------------|--|--|---|
| ieee8021CfmMaComponentId (1.3.111.2.802.1.1.8.1.6.4.1.1) | not-accessible | IEEE8021PbbComponentIdentifier | Standard MIB values. | MA component ID. | The value is fixed at 1. |
| ieee8021CfmMaCompPrimarySelectorType (1.3.111.2.802.1.1.8.1.6.4.1.2) | read-create | IEEE8021ServiceSelectorValueOrNone | vlanId(1), isid(2), tesid(3), segid(4) | Service selector type. | In the current software version, only the value vlanId(1) is supported. |
| ieee8021CfmMaCompPrimarySelectorOrNone (1.3.111.2.802.1.1.8.1.6.4.1.3) | read-create | SelectorOrNone | | Service Selector identifier to which the MP is attached. | This object cannot be modified after being created. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------------|--|--|--|
| ieee8021CfmMaCompMhfCreation (1.3.111.2.802.1.1.8.1.6.4.1.4) | read-create | INTEGER | defMHFnone (1), defMHFdefault (2), defMHFexplicit (3), defMHFdefer (4) | Indicates whether the management entity can create MHFs (MIP Half Function) for this MA. | As per the MIB. |
| ieee8021CfmMaCompIdPermission (1.3.111.2.802.1.1.8.1.6.4.1.5) | read-create | Dot1agCfmIdPermission | sendIdNone (1), sendIdChassis (2), sendIdManagement (3), sendIdChassisManagement (4), sendIdDeferred (5) | Enumerated value indicating what, if anything, is to be included in the Sender ID TLV. | In the current software version, only sendIdNone (1) and sendIdDeferred (5) are supported. |
| ieee8021CfmMaCompNumberOfVids (1.3.111.2.802.1.1.8.1.6.4.1.6) | read-only | Unsigned32 | Standard MIB values. | Number of VIDs associated with the MA. | The object can only be read and the value is fixed at 1. |
| ieee8021CfmMaCompRowStatus (1.3.111.2.802.1.1.8.1.6.4.1.7) | read-create | RowStatus | active(1),notInService(2),notReady(3),createAndGo(4),createAndWait(5),destroy(6) | Row status. | Available values are active(1), createAndGo(4), and destroy(6). |

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IEEE8023-LAG-MIB

About this MIB

This MIB defines MIB objects for the following information:

- Aggregate interface configuration.
- Aggregation member port list.
- Aggregation member port configuration.
- Traffic statistics.
- State machine information about aggregation member ports.

MIB file name

ieee8023-lag.mib

Root object

iso(1).member-body(2).us(840).802dot3(10006).snmpmibs(300).lagMIB(43)

Scalar objects

dot3adTablesLastChanged

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|----------------|
| dot3adTablesLastChanged (1.2.840.10006.300.43.1.3) | Read-only | TimeTicks | Standard MIB values. | The time of the most recent change to the dot3adAggTable, dot3adAggPortListTable, or dot3adAggPortTable. | Not supported |

Tabular objects

dot3adAggTable

About this table

Use this table to configure aggregate interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is dot3adAggIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|------------------------------|---|---|
| dot3adAggIndex (1.2.840.10006.300.43.1.1.1.1.1) | not-accessible | Interface Index | Integer32 (1..2147483647) | Unique identifier allocated to an aggregate interface by the local system, table index. | N/A |
| dot3adAggMACAddress (1.2.840.10006.300.43.1.1.1.1.2) | read-only | MacAddress | OCTET STRING (6) | MAC address of the aggregate interface. | Default: 0. |
| dot3adAggActorSystemPriority (1.2.840.10006.300.43.1.1.1.1.3) | read-write | INTEGER | INTEGER (0..65535) | Local system priority. | N/A |
| dot3adAggActorSystemID (1.2.840.10006.300.43.1.1.1.1.4) | read-only | MacAddress | OCTET STRING (6) | Local system ID. | Default: 0. |
| dot3adAggAggregateOrIndividual (1.2.840.10006.300.43.1.1.1.1.5) | read-only | TruthValue | true(1) false(2) | Aggregation flag. | The value is fixed at true. |
| dot3adAggActorAdminKey (1.2.840.10006.300.43.1.1.1.1.6) | read-write | LacpKey | INTEGER (0..65535) | Administrative key. | Only the read operation is supported. |
| dot3adAggActorOperKey (1.2.840.10006.300.43.1.1.1.1.7) | read-only | LacpKey | INTEGER (0..65535) | Operational key. | N/A |
| dot3adAggPartnerSystemID (1.2.840.10006.300.43.1.1.1.1.8) | read-only | MacAddress | OCTET STRING (6) | Peer system ID. | Default: 0. |
| dot3adAggPartnerSystemPriority (1.2.840.10006.300.43.1.1.1.1.9) | read-only | INTEGER | INTEGER (0..65535) | Peer system priority. | N/A |
| dot3adAggPartnerOperKey (1.2.840.10006.300.43.1.1.1.1.10) | read-only | LacpKey | INTEGER (0..65535) | Peer operational key. | N/A |
| dot3adAggCollectorMaxDelay (1.2.840.10006.300.43.1.1.1.1.11) | read-write | INTEGER | INTEGER (0..65535) | Maximum delay. | A value of 0 is returned for read operations. Only the read operation is supported. |

dot3adAggPortListTable

About this table

Use this table to obtain the member port list for an aggregate interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3adAggIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------|--------------------------|-------------------|---|
| dot3adAggPortListPorts (1.2.840.10006.300.43.1.1.2.1.1) | read-only | PortList | OCTET STRING (0..255) | Member port list. | Each bit set in this list represents a member port. |

dot3adAggPortTable

About this table

Use this table to configure an aggregation member port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is dot3adAggPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|------------------------------|---|---------------------------------------|
| dot3adAggPortIndex (1.2.840.10006.300.43.1.2.1.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | Member port index. | As per the MIB. |
| dot3adAggPortActorSystemPriority (1.2.840.10006.300.43.1.2.1.1.2) | read-write | INTEGER | INTEGER (0..65535) | Local system priority. | As per the MIB. |
| dot3adAggPortActorSystemID (1.2.840.10006.300.43.1.2.1.1.3) | read-only | MacAddress | OCTET STRING (6) | Local system ID. | As per the MIB. |
| dot3adAggPortActorAdminKey (1.2.840.10006.300.43.1.2.1.1.4) | read-write | LacpKey | INTEGER (0..65535) | Administrative key. | As per the MIB. |
| dot3adAggPortActorOperKey (1.2.840.10006.300.43.1.2.1.1.5) | read-write | LacpKey | INTEGER (0..65535) | Operational key. | Only the read operation is supported. |
| dot3adAggPortPartnerAdminSystemPriority (1.2.840.10006.300.43.1.2.1.1.6) | read-write | INTEGER | INTEGER (0..65535) | Administrative priority of the peer port. | Only the read operation is supported. |
| dot3adAggPortPartnerOperSystemPriority (1.2.840.10006.300.43.1.2.1.1.7) | read-only | INTEGER | INTEGER (0..65535) | Peer operational priority. | As per the MIB. |
| dot3adAggPortPartnerAdminSystemID (1.2.840.10006.300.43.1.2.1.1.8) | read-write | MacAddress | OCTET STRING (6) | Peer administrative system ID. | Only the read operation is supported. |
| dot3adAggPortPartnerOperSystemID | read-only | MacAddress | OCTET STRING (6) | Peer operational | Default: 0. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------------|--|-------------------------------------|---|
| (1.2.840.10006.300.43.1.2.1.1.9) | | ss | | system ID. | |
| dot3adAggPortPartnerAdminKey (1.2.840.10006.300.43.1.2.1.1.10) | read-write | LacpKey | INTEGER (0..65535) | Peer administrative key. | Only the read operation is supported. |
| dot3adAggPortPartnerOperKey (1.2.840.10006.300.43.1.2.1.1.11) | read-only | LacpKey | INTEGER (0..65535) | Peer operational key. | As per the MIB. |
| dot3adAggPortSelectedAggID (1.2.840.10006.300.43.1.2.1.1.12) | read-only | InterfaceIndexOrZero | Integer32 (0..2147483647) | Selected aggregate interface index. | As per the MIB. |
| dot3adAggPortAttachedAggID (1.2.840.10006.300.43.1.2.1.1.13) | read-only | InterfaceIndexOrZero | Integer32 (0..2147483647) | Joined aggregate interface index. | As per the MIB. |
| dot3adAggPortActorPort (1.2.840.10006.300.43.1.2.1.1.14) | read-only | INTEGER | INTEGER (0..65535) | Local port index. | As per the MIB. |
| dot3adAggPortActorPortPriority (1.2.840.10006.300.43.1.2.1.1.15) | read-write | INTEGER | INTEGER (0..65535) | Local port priority. | As per the MIB. |
| dot3adAggPortPartnerAdminPort (1.2.840.10006.300.43.1.2.1.1.16) | read-write | INTEGER | INTEGER (0..65535) | Peer administrative port number. | Only the read operation is supported. |
| dot3adAggPortPartnerOperPort (1.2.840.10006.300.43.1.2.1.1.17) | read-only | INTEGER | INTEGER (0..65535) | Peer operational port number. | As per the MIB. |
| dot3adAggPortPartnerAdminPortPriority (1.2.840.10006.300.43.1.2.1.1.18) | read-write | INTEGER | INTEGER (0..65535) | Peer administrative port priority. | Only the read operation is supported. |
| dot3adAggPortPartnerOperPortPriority (1.2.840.10006.300.43.1.2.1.1.19) | read-only | INTEGER | INTEGER (0..65535) | Peer operational port priority. | As per the MIB. |
| dot3adAggPortActorAdminState (1.2.840.10006.300.43.1.2.1.1.20) | read-write | LacpState | BITS { lacpActivity(0) lacpTimeout(1) aggregation(2) synchronization(3) collecting(4) distributing(5) defaulted(6) expired(7) } | Local administrative status. | The write operation processes only bit 1. |
| dot3adAggPortActorOperState (1.2.840.10006.300.43.1.2.1.1.21) | read-only | LacpState | BITS { lacpActivity(0) lacpTimeout(1) aggregation(2) synchronization(3) collecting(4) distributing(5) | Local operational status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|--|-----------------------------|---------------------------------------|
| | | | defaulted(6) expired(7) } | | |
| dot3adAggPortPartnerAdminState (1.2.840.10006.300.43.1.2.1.1.22) | read-write | LacpState | BITS { lacpActivity(0) lacpTimeout(1) aggregation(2) synchronization(3) collecting(4) distributing(5) defaulted(6) expired(7) } | Peer administrative status. | Only the read operation is supported. |
| dot3adAggPortPartnerOperState (1.2.840.10006.300.43.1.2.1.1.23) | read-only | LacpState | BITS { lacpActivity(0) lacpTimeout(1) aggregation(2) synchronization(3) collecting(4) distributing(5) defaulted(6) expired(7) } | Peer operational status. | As per the MIB. |
| dot3adAggPortAggregateOrIndividual (1.2.840.10006.300.43.1.2.1.1.24) | read-only | TruthValue | true(1) false(2) | Aggregation status. | The return value is fixed at true. |

dot3adAggPortStatsTable

About this table

Use this table to obtain traffic statistics about aggregate interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3adAggPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|------------------------------|-----------------|
| dot3adAggPortStatsLACPDU sRx (1.2.840.10006.300.43.1.2.2.1.1) | read-only | Counter 32 | Standard MIB values. | Valid incoming LACPDU count. | As per the MIB. |
| dot3adAggPortStatsMarkerPDUsRx | read-only | Counter | Standard | Valid incoming | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| (1.2.840.10006.300.43.1.2.2.1.2) | | 32 | MIB values. | Maker PDU count. | |
| dot3adAggPortStatsMarkerResponsePDUsRx (1.2.840.10006.300.43.1.2.2.1.3) | read-only | Counter 32 | Standard MIB values. | Valid incoming Maker response PDU count. | As per the MIB. |
| dot3adAggPortStatsUnknownRx (1.2.840.10006.300.43.1.2.2.1.4) | read-only | Counter 32 | Standard MIB values. | Unknown incoming packet count. | As per the MIB. |
| dot3adAggPortStatsIllegalRx (1.2.840.10006.300.43.1.2.2.1.5) | read-only | Counter 32 | Standard MIB values. | Invalid incoming packet count. | As per the MIB. |
| dot3adAggPortStatsLACPDUStx (1.2.840.10006.300.43.1.2.2.1.6) | read-only | Counter 32 | Standard MIB values. | Outgoing LACPDU count. | As per the MIB. |
| dot3adAggPortStatsMarkerPDUsTx (1.2.840.10006.300.43.1.2.2.1.7) | read-only | Counter 32 | Standard MIB values. | Outgoing Maker PDU count. | As per the MIB. |
| dot3adAggPortStatsMarkerResponsePDUsTx (1.2.840.10006.300.43.1.2.2.1.8) | read-only | Counter 32 | Standard MIB values. | Outgoing Maker response PDU count. | As per the MIB. |

dot3adAggPortDebugTable

About this table

Use this table to obtain state machine information about aggregation member ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot3adAggPortDebugRxState.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---|---|-----------------|
| dot3adAggPortDebugRxState (1.2.840.10006.300.43.1.2.3.1.1) | read-only | INTEGER | currentRx(1) expired(2) defaulted(3) initialize(4) lACPDisabled(5) portDisabled(6) | Receive state machine. | As per the MIB. |
| dot3adAggPortDebugLastRxTime (1.2.840.10006.300.43.1.2.3.1.2) | read-only | TimeTicks | Standard MIB values. | Time when the last LACPDU was received. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|---|--|-----------------|
| dot3adAggPortDebugMuxState (1.2.840.10006.300.43.1.2.3.1.3) | read-only | INTEGER | detached(1) waiting(2) attached(3) collecting(4) distributing(5) collectingDistributing(6) | Mux state machine. | As per the MIB. |
| dot3adAggPortDebugMuxReason (1.2.840.10006.300.43.1.2.3.1.4) | read-only | DisplayString | OCTET STRING (0..255) | Cause for the last Mux state machine change. | As per the MIB. |
| dot3adAggPortDebugActorChurnState (1.2.840.10006.300.43.1.2.3.1.5) | read-only | ChurnState | INTEGER { noChurn(1) churn(2) churnMonitor(3) } | Actor Churn state machine. | As per the MIB. |
| dot3adAggPortDebugPartnerChurnState (1.2.840.10006.300.43.1.2.3.1.6) | read-only | ChurnState | INTEGER { noChurn(1) churn(2) churnMonitor(3) } | Partner Churn state machine. | As per the MIB. |
| dot3adAggPortDebugActorChurnCount (1.2.840.10006.300.43.1.2.3.1.7) | read-only | Counter32 | Standard MIB values. | Number of times the Actor Churn state machine has entered the ACTOR_CHURN state. | As per the MIB. |
| dot3adAggPortDebugPartnerChurnCount (1.2.840.10006.300.43.1.2.3.1.8) | read-only | Counter32 | Standard MIB values. | Number of times the Partner Churn state machine has entered the PARTNER_CHURN state. | As per the MIB. |
| dot3adAggPortDebugActorSyncTransitionCount (1.2.840.10006.300.43.1.2.3.1.9) | read-only | Counter32 | Standard MIB values. | Number of times the Mux state machine has entered the IN_SYNC state on the local port. | Not supported |
| dot3adAggPortDebugPartnerSyncTransitionCount (1.2.840.10006.300.43.1.2.3.1.10) | read-only | Counter32 | Standard MIB values. | Number of times the Mux state machine has entered the IN_SYNC state on the peer port. | Not supported |
| dot3adAggPortDebugActorChangeCount (1.2.840.10006.300.43.1.2.3.1.11) | read-only | Counter32 | Standard MIB values. | Number of times the Actor Churn state machine has changed status. | As per the MIB. |
| dot3adAggPortDebugPartnerChangeCount (1.2.840.10006.300.43.1.2.3.1.12) | read-only | Counter32 | Standard MIB values. | Number of times the Partner Churn state machine has changed status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-----------------------------|----------------|
| 2) | | | | machine has changed status. | |

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LLDP-EXT-DOT1-EVB-EXTENSIONS-MIB

About this MIB

Use this MIB to obtain information about EVB TLV configuration.

MIB file name

lldp-ext-dot1-evb-extensions.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbers-series-standards(2).lan-man-stds(802).ieee802dot1mibs(1).lldpV2MIB(13).lldpV2Objects(1).lldpV2Extensions(5).lldpV2Xdot1MIB(32962).lldpXdot1StandAloneExtensions(7).lldpXdot1EvbExtensions(1)

This MIB is LLDP Management Information Base extension module for IEEE 802.1 organizationally defined discovery information for the EVB extension objects.

Tabular objects

lldpXdot1EvbConfigEvbTable

About this table

This table configures the transmission of EVB TLVs on a set of ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are lldpV2PortConfigIfIndex and lldpV2PortConfigDestAddressIndex.

The OID of the table is 1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| lldpXdot1EvbConfigEvbTxEnable(1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.1.1) | read-write | TruthValue | true(1), false(2) | Selects whether to enable EVB TLV transmission. | As per the MIB. |

lldpXdot1EvbConfigCdcPTable

About this table

This table configures the transmission of CDCP TLVs on a set of ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2PortConfigIfIndex and IldpV2PortConfigDestAddressIndex.

The OID of the table is 1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|-----------------|
| IldpXdot1EvbConfigCdcpxEnable(1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.2.1.1) | read-write | TruthValue | true(1), false(2) | Selects whether to enable CDCP TLV transmission. | As per the MIB. |

IldpV2Xdot1LocEvbtlvTable

About this table

This table contains information about local EVB TLVs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The OID of the table is 1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-----------------------|----------------------------|-----------------|
| IldpV2Xdot1LocEvbtlvString(1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.2.1.1) | read-only | OCTET STRING | OCTET STRING (0..514) | Local EVB TLV information. | As per the MIB. |

IldpV2Xdot1LocCdcpxtlvTable

About this table

This table contains information about local CDCP TLVs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is lldpV2LocPortIfIndex.

The OID of the table is 1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--------------------------|--------------------------------|-----------------|
| lldpV2Xdot1LocC dcpTlvString (1.3.111.2.802.1.1 .13.1.5.32962.7.1. 1.1.2.2.1.1) | read-only | OCTET STRING | OCTET STRING (0..514) | Local CDCP TLV information. | As per the MIB. |

lldpV2Xdot1RemEvbTlvTable

About this table

This table contains information about EVB TLVs received from the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are lldpV2RemTimeMark, lldpV2RemLocalIfIndex, lldpV2RemLocalDestMACAddress, and lldpV2RemIndex.

The OID of the table is 1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--------------------------|---|-----------------|
| lldpV2Xdot1RemE vbTlvString (1.3.111.2.802.1.1 .13.1.5.32962.7.1. 1.1.3.1.1.1) | read-only | OCTET STRING | OCTET STRING (0..514) | Information about EVB TLVs from neighboring devices. | As per the MIB. |

lldpV2Xdot1RemCdcPtlvTable

About this table

This table contains information about CDCP TLVs received from the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are lldpV2RemTimeMark, lldpV2RemLocalIfIndex, lldpV2RemLocalDestMACAddress, and lldpV2RemIndex.

The OID of the table is 1.3.111.2.802.1.1.13.1.5.32962.7.1.1.1.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--------------------------|--|-----------------|
| IldpV2Xdot1RemC dcpTlvString (1.3.111.2.802.1.1 .13.1.5.32962.7.1. 1.1.3.2.1.1) | read-only | OCTET STRING | OCTET STRING (0..514) | Information about CDCP TLVs from neighboring devices. | As per the MIB. |

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LLDP-EXT-DOT1-MIB

About this MIB

For network managers to discover inconsistent or incorrect VLAN configurations and different supported protocols on interconnected ports, LLDP must implement the IEEE 802.1 organizationally specific extended features.

LLDP-EXT-DOT1-MIB is one of the four MIBs available for LLDP, which also include LLDP-MIB, LLDP-EXT-DOT3-MIB, and LLDP-MED-MIB. This MIB is a standard public MIB, which contains LLDP configuration, local and neighboring LLDP information.

MIB file name

lldp-ext-dot1.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).lldpMIB(2).lldpObjects(1).lldpExtnsions(5).lldpXdot1MIB(32962)

This MIB is the LLDP Management Information Base extension module for IEEE 802.1 organizationally defined discovery information.

Tabular objects

lldpXdot1ConfigPortVlanTable

About this table

This table controls selection of LLDP Port VLAN-ID TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is lldpPortConfigPortNum.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|----------------|
| lldpXdot1ConfigPortVlanTxEnable (1.0.8802.1.1.2.1.5.32962.1.1.1.1) | read-write | TruthValue | true(1), false(2) | Selects whether to enable port VLAN TLV transmission on a given LLDP transmission capable port. | Default: true. |

IldpXdot1ConfigVlanNameTable

About this table

This table controls selection of LLDP VLAN name TLV instances to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|---------------|
| Not supported | Supported | Not supported | Not supported |

Columns

The table indexes are IldpLocPortNum and IldpXdot1LocVlanId.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|--|
| IldpXdot1ConfigVlanNameTxEnable (1.0.8802.1.1.2.1.5.32962.1.1.2.1.1) | read-write | TruthValue | true(1), false(2) | Selects whether to enable VLAN name TLV transmission on a given LLDP transmission capable port. | Default: false. As a best practice, do not perform the walk operation from the MIB browser, because it takes a long time to walk through all ports and VLANs. |

IldpXdot1ConfigProtoVlanTable

About this table

This table controls selection of LLDP port and protocol VLAN ID TLV instances to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpLocPortNum and IldpXdot1LocProtoVlanId.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|--|
| IldpXdot1ConfigProtoVlanTxEnable (1.0.8802.1.1.2.1.5.32962.1.1.3.1.1) | read-write | TruthValue | true(1), false(2) | Selects whether to enable Port and Protocol VLAN ID TLV transmission on a given LLDP transmission capable port. | Default: false. As a best practice, do not perform the walk operation from the MIB browser, because it takes a long time to walk through all ports and VLANs. |

IldpXdot1ConfigProtocolTable

About this table

This table controls selection of LLDP Protocol TLV instances to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are IldpLocPortNum and IldpXdot1LocProtocolIndex.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|---|
| IldpXdot1ConfigProtocolTxEnable (1.0.8802.1.1.2.1.5.32962.1.1.4.1.1) | read-write | TruthValue | true(1), false(2) | Selects whether to enable Protocol Identity TLV transmission on a given LLDP transmission capable port. | Not supported. The default is false if the port is operating in bridge mode. |

IldpXdot1LocTable

About this table

This table contains one row per port for IEEE 802.1 organizationally defined LLDP extension on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|-------------|-----------------|
| IldpXdot1LocPortVlanId (1.0.8802.1.1.2.1.5.32962.1.2.1.1.1) | read-only | Integer32 | Integer32(0 1..4094) | PPVID. | As per the MIB. |

IldpXdot1LocProtoVlanTable

About this table

This table contains one or more rows per Port and Protocol VLAN information about the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpLocPortNum and IldpXdot1LocProtoVlanId.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|---|-----------------|
| IldpXdot1LocProtoVlanId (1.0.8802.1.1.2.1.5.32962.1.2.2.1.1) | not-accessible | Integer32 | Integer32(0 1..4094) | Port and protocol VLAN ID. | As per the MIB. |
| IldpXdot1LocProtoVlanSupported (1.0.8802.1.1.2.1.5.32962.1.2.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the given port (associated with the local system) supports port and protocol VLANs. | As per the MIB. |
| IldpXdot1LocProtoVlanEnabled (1.0.8802.1.1.2.1.5.32962.1.2.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the port and protocol VLANs are enabled on the given port associated with the local system. | As per the MIB. |

IldpXdot1LocVlanNameTable

About this table

This table contains one or more rows of VLAN name information on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpLocPortNum and IldpXdot1LocVlanId.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.2.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------|----------------|--------|--------------|----------------------------------|-----------------|
| IldpXdot1LocVlanId | not-accessible | VlanId | Standard MIB | ID of the VLAN to which the port | As per the MIB. |

| | | | | | |
|--|-----------|-----------------|-------------------------|---|-----------------|
| (1.0.8802.1.1.2.1.5.32962.1.2.3.1.1) | | | values. | belongs. | |
| IldpXdot1LocVlanName (1.0.8802.1.1.2.1.5.32962.1.2.3.1.2) | read-only | SnmpAdminString | OCTET STRING (1..32) | VLAN name identified by the VLAN ID associated with the given port on the local system. | As per the MIB. |

IldpXdot1LocProtocolTable

About this table

This table contains one or more rows per protocol identity information on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are IldpLocPortNum and IldpXdot1LocProtocolIndex.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.2.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--------------------------|-----------------|---|
| IldpXdot1LocProtocolIndex (1.0.8802.1.1.2.1.5.32962.1.2.4.1.1) | not-accessible | Integer32 | Integer32(1..2147483647) | Protocol index. | Not supported. The value is 1 if the port is operating in bridge mode. |

IldpXdot1RemTable

About this table

This table contains one or more rows per physical network connection.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| IldpXdot1RemPortVlanId (1.0.8802.1.1.2.1.5.32962.1.3.1.1) | read-only | Integer32 | Integer32(0 1..4094) | PVID of the given port on a neighboring | As per the MIB. |

| | | | | | |
|--------------------|--|--|--|---------|--|
| 5.32962.1.3.1.1.1) | | | | device. | |
|--------------------|--|--|--|---------|--|

IldpXdot1RemProtoVlanTable

About this table

This table contains one or more rows per port and protocol VLAN information about the neighboring devices received on the given port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, and IldpXdot1RemProtoVlanId.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|---|-----------------|
| IldpXdot1RemProtoVlanId (1.0.8802.1.1.2.1.5.32962.1.3.2.1.1) | not-accessible | Integer32 | Integer32(0 1..4094) | Port and protocol VLAN ID of the given port on a neighboring device. | As per the MIB. |
| IldpXdot1RemProtoVlanSupported (1.0.8802.1.1.2.1.5.32962.1.3.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the given port on the neighboring device supports port and protocol VLANs. | As per the MIB. |
| IldpXdot1RemProtoVlanEnabled (1.0.8802.1.1.2.1.5.32962.1.3.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the port and protocol VLANs are enabled for the given port on the neighboring device. | As per the MIB. |

IldpXdot1RemVlanNameTable

About this table

This table contains one or more rows per IEEE 802.1Q VLAN name information about the neighboring devices, received on the given port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, IldpXdot1RemVlanId.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.3.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-----------------|
| IldpXdot1RemVlanId (1.0.8802.1.1.2.1.5.32962.1.3.3.1.1) | not-accessible | VlanId | Standard MIB values. | ID of the VLAN to which the given port on a neighboring device belongs. | As per the MIB. |
| IldpXdot1RemVlanName (1.0.8802.1.1.2.1.5.32962.1.3.3.1.2) | read-only | SnmpAdminString | OCTET STRING (1..32) | VLAN name identified by the VLAN ID on the neighboring device. | As per the MIB. |

IldpXdot1RemProtocolTable

About this table

This table contains one or more rows per protocol information about the neighbor, received on the given port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, IldpXdot1RemProtocolIndex.

The table OID is 1.0.8802.1.1.2.1.5.32962.1.3.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--------------------------|--|-----------------|
| IldpXdot1RemProtocolIndex (1.0.8802.1.1.2.1.5.32962.1.3.4.1.1) | not-accessible | Integer32 | Integer32(1..2147483647) | Protocol index. | As per the MIB. |
| IldpXdot1RemProtocolId (1.0.8802.1.1.2.1.5.32962.1.3.4.1.2) | read-only | OCTET STRING | OCTET STRING (1..255) | ID of the protocol associated with the given port of a neighboring device. | As per the MIB. |

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| | |
|---|----|
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LLDP-EXT-DOT1-V2-MIB

About this MIB

LLDP facilitates network management to discover and use network physical topology in a standard way, and enables network management to discover configuration inconsistencies or errors that affect the upper-layer applications. Although H3C products already support the LLDP 2009 version, they still use the MIBs of the LLDP 2005 version.

The MIB of the LLDP 2009 version is also referred to as LLDP-V2-MIB. This MIB is a standard public MIB, which contains LLDP configuration, LLDP statistics, local LLDP information, neighboring LLDP information, and IEEE 802.1 extended configuration, DCBX extended configuration, IEEE 802.3 extended configuration. The CNP extended configuration is not supported in Comware V700R001.

MIB file name

lldp-ext-dot1-v2.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbers-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).lldpV2MIB(13).lldpV2Objects(1).lldpV2Extensions(5).lldpV2Xdot1MIB(32962)

This MIB is the LLDP Management Information Base extension module for IEEE 802.1 organizationally defined discovery information.

Tabular objects

lldpV2Xdot1ConfigPortVlanTable

About this table

This table controls selection of LLDP port VLAN TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are lldpV2PortConfigIfIndex and lldpV2PortConfigDestAddressIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|--|
| lldpV2Xdot1ConfigPortVlanTxEnable (1.3.111.2.802.1.1.13.1.5.32962.1.1.1.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the port VLAN TLV transmission is enabled on a given LLDP transmission capable port. | The default is true for the following agents: Nearest bridge agents and nearest customer bridge agents on the Layer 2 Ethernet interfaces. Nearest customer bridge agents on |

| | | | | | |
|--|--|--|--|--|-------------------------------|
| | | | | | Layer 2 aggregate interfaces. |
|--|--|--|--|--|-------------------------------|

IldpV2Xdot1ConfigVlanNameTable

About this table

This table controls selection of LLDP VLAN name TLV instances to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpV2Xdot1LocVlanId.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|---|
| IldpV2Xdot1ConfigVlanNameTxEnable (1.3.111.2.802.1.1.13.1.5.32962.1.1.2.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the agents on the ports of the device can send VLAN name TLVs. | By default, the value is 0 and the status is FALSE. If this object is set to TRUE, the VLAN with the minimum VLAN ID is enabled. To delete an enabled VLAN, set the VLAN status to FALSE. Only one VLAN name TLV is supported in an LLDP packet. As a best practice, do not perform the walk operation from the MIB browser, because it takes a long time to walk through all ports and VLANs. |

IldpV2Xdot1ConfigProtoVlanTable

About this table

This table controls selection of LLDP port and protocol VLAN ID TLV instances to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpV2Xdot1LocProtoVlanId.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|---|
| IldpV2Xdot1ConfigProtoVlanTxEnable (1.3.111.2.802.1.1.13.1.5.32962.1.1.3.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the transmission of port and protocol VLAN ID TLVs is enabled on a given LLDP transmission capable port. | By default, the value is 0 and the status is FALSE. If this object is set to TRUE, the VLAN with the minimum VLAN ID is enabled. To delete an enabled VLAN, set the VLAN status to FALSE. Only one protocol VLAN TLV is supported in an LLDP packet. As a best practice, do not perform the walk operation from the MIB browser, because it takes a long time to scan all ports and VLANs. |

IldpV2Xdot1ConfigProtocolTable

About this table

This table controls selection of LLDP protocol identity TLV instances to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpV2Xdot1LocProtocolIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|----------------|
| IldpV2Xdot1ConfigProtocolTxEnable (1.3.111.2.802.1.1.13.1.5.32962.1.1.4.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the agents on the ports of the device can send protocol identity TLVs. | Not supported. |

IldpV2Xdot1ConfigVidUsageDigestTable

About this table

This table controls selection of LLDP VID usage digest TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.1.5.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|----------------|
| IldpV2Xdot1ConfigVidUsageDigestTxEnable (1.3.111.2.802.1.1.13.1.5.32962.1.1.5.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the agents on the ports of the device can send VID usage digest TLVs. | Not supported. |

IldpV2Xdot1ConfigManVidTable

About this table

This table controls selection of management VID TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.1.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| IldpV2Xdot1ConfigManVidTxEnable (1.3.111.2.802.1.1.13.1.5.32962.1.1.6.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the management VID TLV transmission is enabled on a given LLDP transmission capable port. | As per the MIB. |

IldpV2Xdot1LocTable

About this table

This table contains local VLAN ID information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-----------------------|----------------|-----------------|
| IldpV2Xdot1LocPortVlanId (1.3.111.2.802.1.1.13.1.5.32962.1.2.1.1.1) | read-only | Unsigned32 | Unsigned32(0 1..4094) | Local VLAN ID. | As per the MIB. |

IldpV2Xdot1LocProtoVlanTable

About this table

This table contains information about local port and protocol VLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpV2Xdot1LocProtoVlanId.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|-----------------------|--|-----------------|
| IldpV2Xdot1LocProtoVlanId (1.3.111.2.802.1.1.13.1.5.32962.1.2.2.1.1) | not-accessible | Unsigned32 | Unsigned32(0 1..4094) | Port and protocol VLAN ID. | As per the MIB. |
| IldpV2Xdot1LocProtoVlanSupported (1.3.111.2.802.1.1.13.1.5.32962.1.2.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the given local port supports port and protocol VLANs. | As per the MIB. |
| IldpV2Xdot1LocProtoVlanEnabled (1.3.111.2.802.1.1.13.1.5.32962.1.2.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the port and protocol VLANs are enabled on the given local port. | As per the MIB. |

IldpV2Xdot1LocVlanNameTable

About this table

This table contains information about VLAN names on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpV2Xdot1LocVlanId.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.2.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-----------------|
| IldpV2Xdot1LocVlanId (1.3.111.2.802.1.1.13.1.5.32962.1.2.3.1.1) | not-accessible | VlanId | Standard MIB values. | ID of the VLAN to which the port belongs. | As per the MIB. |
| IldpV2Xdot1LocVlanName (1.3.111.2.802.1.1.13.1.5.32962.1.2.3.1.2) | read-only | SnmpAdminString | OCTET STRING (1..32) | VLAN name identified by the VLAN ID associated with the given local port. | As per the MIB. |

IldpV2Xdot1LocProtocolTable

About this table

This table contains protocol identity information on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpV2Xdot1LocProtocolIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.2.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---------------------------|--------------------------------------|----------------|
| IldpV2Xdot1LocProtocolIndex (1.3.111.2.802.1.1.13.1.5.32962.1.2.4.1.1) | not-accessible | Unsigned32 | Unsigned32(1..2147483647) | Protocol index. | Not supported. |
| IldpV2Xdot1LocProtocolId (1.3.111.2.802.1.1.13.1.5.32962.1.2.4.1.2) | read-only | OCTET STRING | OCTET STRING (1..255) | IDs of the protocols associated with | Not supported. |

| | | | | | |
|--------------------------|--|--|--|-----------------|--|
| .13.1.5.32962.1.2.4.1.2) | | | | the given port. | |
|--------------------------|--|--|--|-----------------|--|

IldpV2Xdot1LocManVidTable

About this table

This table contains management TLV information on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.2.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-----------------------|-----------------------------------|-----------------|
| IldpV2Xdot1LocManVid (1.3.111.2.802.1.1.13.1.5.32962.1.2.6.1.1) | read-only | Unsigned32 | Unsigned32(0 1..4094) | Local management TLV information. | As per the MIB. |

IldpV2Xdot1LocLinkAggTable

About this table

This table contains link aggregation information on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.2.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------------------|-----------------------------|---|-----------------|
| IldpV2Xdot1LocLinkAggStatus (1.3.111.2.802.1.1.13.1.5.32962.1.2.7.1.1) | read-only | IldpV2LinkAggStatusMap | Standard MIB values. | The link aggregation capabilities and the current aggregation status of the system. | As per the MIB. |
| IldpV2Xdot1LocLinkAggPortId (1.3.111.2.802.1.1.13.1.5.32962.1.2.7.1.2) | read-only | Unsigned32 | Unsigned32(0 1..2147483647) | Aggregate interface ID. | As per the MIB. |

| | | | | | |
|--------------------------|--|--|--|--|--|
| .13.1.5.32962.1.2.7.1.2) | | | | | |
|--------------------------|--|--|--|--|--|

IldpV2Xdot1RemTable

About this table

This table contains information about physical network connections.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-----------------------|---|-----------------|
| IldpV2Xdot1RemPortVlanId (1.3.111.2.802.1.1.13.1.5.32962.1.3.1.1.1) | read-only | Unsigned32 | Unsigned32(0 1..4094) | PVID of the given port on a neighboring device. | As per the MIB. |

IldpV2Xdot1RemProtoVlanTable

About this table

This table contains port and protocol VLAN information about the neighboring devices, received on the given port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpV2Xdot1RemProtoVlanId.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|-----------------------|--|-----------------|
| IldpV2Xdot1RemProtoVlanId (1.3.111.2.802.1.1.13.1.5.32962.1.3.2.1.1) | not-accessible | Unsigned32 | Unsigned32(0 1..4094) | Port and protocol VLAN ID of a neighboring device. | As per the MIB. |
| IldpV2Xdot1RemProtoVlanSupport | read-only | TruthValue | true(1), | Indicates whether the given port of | As per the MIB. |

| | | | | | |
|--|-----------|------------|----------------------|--|-----------------|
| d (1.3.111.2.802.1.1 .13.1.5.32962.1.3. 2.1.2) | | | false(2) | the neighboring device supports port and protocol VLANs. | |
| IldpV2Xdot1RemP rotoVlanEnabled (1.3.111.2.802.1.1 .13.1.5.32962.1.3. 2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether port and protocol VLANs are enabled on the given port of the neighboring device. | As per the MIB. |

IldpV2Xdot1RemVlanNameTable

About this table

This table contains information about VLAN names on the ports of the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpV2Xdot1RemVlanId.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-------------------------|--|-----------------|
| IldpV2Xdot1RemV lanId (1.3.111.2.802.1.1 .13.1.5.32962.1.3. 3.1.1) | not-accessible | VlanId | Standard MIB values. | ID of the VLAN to which a port on a neighboring device belongs. | As per the MIB. |
| IldpV2Xdot1RemV lanName (1.3.111.2.802.1.1 .13.1.5.32962.1.3. 3.1.2) | read-only | SnmpAdminString | OCTET STRING (1..32) | VLAN name identified by the VLAN ID associated with the neighboring device. | As per the MIB. |

IldpV2Xdot1RemProtocolTable

About this table

This table contains neighboring protocol information received on the given port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpV2Xdot1RemProtocolIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---------------------------|--|-----------------|
| IldpV2Xdot1RemProtocolIndex (1.3.111.2.802.1.1.13.1.5.32962.1.3.4.1.1) | not-accessible | Unsigned32 | Unsigned32(1..2147483647) | Protocol index. | As per the MIB. |
| IldpV2Xdot1RemProtocolId (1.3.111.2.802.1.1.13.1.5.32962.1.3.4.1.2) | read-only | OCTET STRING | OCTET STRING (1..255) | IDs of the protocols associated with the ports of the neighboring devices. | As per the MIB. |

IldpV2Xdot1RemVidUsageDigestTable

About this table

This table contains VID usage information of the agents on the ports of the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, and IldpV2RemLocalDestMACAddress.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.5.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| IldpV2Xdot1RemVidUsageDigest (1.3.111.2.802.1.1.13.1.5.32962.1.3.5.1.1) | read-only | Unsigned32 | Standard MIB values. | VID usage information on the given port of a neighboring device. | As per the MIB. |

IldpV2Xdot1RemManVidTable

About this table

This table contains management VLAN information received from the neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, and IldpV2RemLocalDestMACAddress.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-----------------------|--|-----------------|
| IldpV2Xdot1RemManVid (1.3.111.2.802.1.1.13.1.5.32962.1.3.6.1.1) | read-only | Unsigned32 | Unsigned32(0 1..4094) | Management VLAN information on the given port of a neighboring device. | As per the MIB. |

IldpV2Xdot1RemLinkAggTable

About this table

This table contains port link aggregation information of the agents on the ports of the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.1.3.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------------------|-----------------------------|---|-----------------|
| IldpV2Xdot1RemLinkAggStatus (1.3.111.2.802.1.1.13.1.5.32962.1.3.7.1.1) | read-only | IldpV2LinkAggStatusMap | Standard MIB values. | Link aggregation capabilities and current aggregation status of a neighboring device. | As per the MIB. |
| IldpV2Xdot1RemLinkAggPortId (1.3.111.2.802.1.1.13.1.5.32962.1.3.7.1.2) | read-only | Unsigned32 | Unsigned32(0 1..2147483647) | Aggregate interface ID. | As per the MIB. |

IldpXdot1dcbxConfigETSTConfigurationTable

About this table

The table controls selection of ETS configuration TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2PortConfigIfIndex and IldpV2PortConfigDestAddressIndex .

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|--|
| IldpXdot1dcbxConfigETSTransmissionTxEnable (1.3.111.2.802.1.1.13.1.5.32962.5.1.1.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the ETS Configuration TLV transmission is enabled on the agents of a given LLDP transmission capable port. | The configuration for this object also applies to the following objects: IldpXdot1dcbxConfigETSTransmissionTxEnable, IldpXdot1dcbxConfigPFCTxEnable, and IldpXdot1dcbxConfigApplicationPriorityTxEnable. |

IldpXdot1dcbxConfigETSTransmissionTable

About this table

The table controls selection of ETS recommendation TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2PortConfigIfIndex and IldpV2PortConfigDestAddressIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|--|
| IldpXdot1dcbxConfigETSTransmissionTxEnable (1.3.111.2.802.1.1.13.1.5.32962.5.1.1.2.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the ETS recommendation TLV transmission is enabled on the agents of a given LLDP transmission capable port. | The configuration for this object also applies to the following objects: IldpXdot1dcbxConfigETSTransmissionTxEnable, IldpXdot1dcbxConfigPFCTxEnable, and IldpXdot1dcbxConfigApplicationPriorityTxEnable. |

IldpXdot1dcbxConfigPFCTable

About this table

The table controls selection of priority-based Flow Control TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2PortConfigIfIndex and IldpV2PortConfigDestAddressIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|--|
| IldpXdot1dcbxConfigPFCTxEnable (1.3.111.2.802.1.1.13.1.5.32962.5.1.1.3.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the Flow Control TLV transmission is enabled on the agents of a given LLDP transmission capable port. | The configuration for this object also applies to the following objects: IldpXdot1dcbxConfigETSTransmissionTxEnable, IldpXdot1dcbxConfigETSTransmissionTxEnable, IldpXdot1dcbxConfigApplicationPriorityTxEnable, and IldpXdot1dcbxConfigApplicationPriorityTxEnable. |

IldpXdot1dcbxConfigApplicationPriorityTable

About this table

The table configures the transmission of the Application Priority TLV on a set of ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2PortConfigIfIndex and IldpV2PortConfigDestAddressIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|---|
| IldpXdot1dcbxCon figApplicationPrior ityTxEnable (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 1.4.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the Application Priority TLV transmission is enabled on the agents of a given LLDP transmission capable port. | The configuration for this object also applies to the following objects: IldpXdot1dcbxCon figETSTransmission TxEnable, IldpXdot1dcbxCon figETSTransmission TxEnable, and IldpXdot1dcbxCon figPFCTxEnable. |

IldpXdot1dcbxLocETSTBasicConfigurationTable

About this table

This table contains information about ETS configuration TLVs on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------------------------------|-------------------------|--|-----------------|
| IldpXdot1dcbxLoc ETSTConCreditBas edShaperSupport (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 2.1.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates if the credit-based shaper traffic selection algorithm is supported on the local system. | As per the MIB. |
| IldpXdot1dcbxLoc ETSTConTrafficCla ssesSupported (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 2.1.1.1.2) | read-only | IldpXdot1dcbxSu pportedCapacity | Standard MIB values. | Indicates the supported capacity of a given feature. | As per the MIB. |
| IldpXdot1dcbxLoc ETSTConWilling (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 2.1.1.1.3) | read-only | TruthValue | true(1), false(2) | Indicates if the local system is willing to accept the ETS configuration recommended by a neighboring device. | As per the MIB. |

IldpXdot1dcbxLocETSConPriorityAssignmentTable

About this table

This table contains one row per priority. The entry in each row indicates the traffic class to which the priority is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxLocETSConPriority.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------------|----------------------|---|-----------------|
| IldpXdot1dcbxLocETSConPriority (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.2.1.1) | not-accessible | IEEE8021PriorityValue | Standard MIB values. | Indicates the priority that is assigned to a traffic class. | As per the MIB. |
| IldpXdot1dcbxLocETSConPriTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.2.1.2) | read-only | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this priority is to be assigned. | As per the MIB. |

IldpXdot1dcbxLocETSConTrafficClassBandwidthTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic class to which the bandwidth is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxLocETSConTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------------|----------------------|--|-----------------|
| IldpXdot1dcbxLocETSConTrafficClasses (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.3.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---|----------------------|---|-----------------|
| IldpXdot1dcbxLocETSTrafficClassBandwidth (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.3.1.2) | read-only | IldpXdot1dcbxTrafficClassBandwidthValue | Standard MIB values. | Indicates the bandwidth assigned to this traffic class. | As per the MIB. |

IldpXdot1dcbxLocETSTrafficSelectionAlgorithmTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic selection algorithm to be used by the traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxLocETSTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--|----------------------|--|-----------------|
| IldpXdot1dcbxLocETSTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.4.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |
| IldpXdot1dcbxLocETSTrafficSelectionAlgorithm (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.1.4.1.2) | read-only | IldpXdot1dcbxTrafficSelectionAlgorithm | Standard MIB values. | Indicates the traffic selection algorithm to which this traffic class is to be assigned. | As per the MIB. |

IldpXdot1dcbxLocETSTrafficClassBandwidthTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic class to which the bandwidth is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxLocETSRecoTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---|----------------------|--|-----------------|
| IldpXdot1dcbxLocETSRecoTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.2.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |
| IldpXdot1dcbxLocETSRecoTrafficClassBandwidth (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.2.1.1.2) | read-only | IldpXdot1dcbxTrafficClassBandwidthValue | Standard MIB values. | Indicates the bandwidth assigned to this traffic class. | As per the MIB. |

IldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmTable

About this table

This table contains one row per priority. The entry in each row indicates the traffic selection algorithm to be used by the traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxLocETSRecoTSATrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--|----------------------|--|-----------------|
| IldpXdot1dcbxLocETSRecoTSATrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.2.2.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |
| IldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithm (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.2.2.1.2) | read-only | IldpXdot1dcbxTrafficSelectionAlgorithm | Standard MIB values. | Indicates the traffic selection algorithm to which this traffic class is to be assigned. | As per the MIB. |

IldpXdot1dcbxLocPFCBasicTable

About this table

This table contains information about local PFC TLVs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------------|----------------------|---|-----------------|
| IldpXdot1dcbxLocPFCWilling (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.1.1) | read-only | TruthValue | true(1), false(2) | Indicates if the local system is willing to accept the PFC configuration of a neighboring device. | As per the MIB. |
| IldpXdot1dcbxLocPFCMBC (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.1.2) | read-only | TruthValue | true(1), false(2) | Indicates if the local system is capable of bypassing MACsec processing when MACsec is disabled. | As per the MIB. |
| IldpXdot1dcbxLocPFCCap (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.1.3) | read-only | IldpXdot1dcbxSupportedCapacity | Standard MIB values. | Indicates the number of traffic classes on the local device that might simultaneously have PFC enabled. | As per the MIB. |

IldpXdot1dcbxLocPFCEnableTable

About this table

This table indicates if PFC is enabled on the corresponding priority on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxLocPFCEnablePriority.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------------|----------------------|--|-----------------|
| IldpXdot1dcbxLocPFCEnablePriority (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.2.1.1) | not-accessible | IEEE8021Priority Value | Standard MIB values. | Priority for which PFC is enabled or disabled. | As per the MIB. |
| IldpXdot1dcbxLocPFCEnableEnabled (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.3.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates if PFC is enabled on the corresponding priority. | As per the MIB. |

IldpXdot1dcbxLocApplicationPriorityAppTable

About this table

This table contains entries that indicate the priority to be used for a given application.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex, IldpXdot1dcbxLocApplicationPriorityAESelector, and IldpXdot1dcbxLocApplicationPriorityAEProtocol.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.2.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|----------------------|--|---|
| IldpXdot1dcbxLocApplicationPriorityAESelector (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.4.1.1) | not-accessible | IldpXdot1dcbxAppSelector | Standard MIB values. | Protocol object index. | As per the MIB. |
| IldpXdot1dcbxLocApplicationPriorityAEProtocol (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.4.1.2) | not-accessible | IldpXdot1dcbxAppProtocol | Standard MIB values. | Protocol ID index. | If the DCBX protocol version is the pre-standard version 1.0, the value of this object is fixed at 35078. |
| IldpXdot1dcbxLocApplicationPriorityAEPriority (1.3.111.2.802.1.1.13.1.5.32962.5.1.2.4.1.3) | read-only | IEEE8021Priority Value | Standard MIB values. | The priority code point that should be used in frames transporting the specified protocol. | As per the MIB. |

IldpXdot1dcbxRemETSTBasicConfigurationTable

About this table

This table contains information about ETS configuration TLVs on the neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------------------|----------------------|--|-----------------|
| IldpXdot1dcbxRemETSTConCreditBasedShaperSupport (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates if the credit-based shaper traffic selection algorithm is supported on a neighboring device. | As per the MIB. |
| IldpXdot1dcbxRemETSTConTrafficClassesSupported (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.1.2) | read-only | IldpXdot1dcbxSupportedCapacity | Standard MIB values. | Indicates the number of traffic classes supported. | As per the MIB. |
| IldpXdot1dcbxRemETSTConWilling (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.1.3) | read-only | TruthValue | true(1), false(2) | Indicates if the remote system is willing to accept the ETS configuration recommended by the neighboring device. | As per the MIB. |

IldpXdot1dcbxRemETSTConPriorityAssignmentTable

About this table

This table contains one row per priority. The entry in each row indicates the traffic class to which the priority is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpXdot1dcbxRemETSConPriority.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------------------|-------------------------|--|-----------------|
| IldpXdot1dcbxRemETSConPriority (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.2.1.1) | not-accessible | IEEE8021Priority Value | Standard MIB values. | Indicates the priority that is assigned to a traffic class. | As per the MIB. |
| IldpXdot1dcbxRemETSConPriTraffi cClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.2.1.2) | read-only | IldpXdot1dcbxTra fficClassValue | Standard MIB values. | Indicates the traffic class to which this priority is to be assigned. | As per the MIB. |

IldpXdot1dcbxRemETSConTrafficClassBandwidthTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic class to which the bandwidth is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpXdot1dcbxRemETSConTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---|-------------------------|---|-----------------|
| IldpXdot1dcbxRemETSConTrafficC lass (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.3.1.1) | not-accessible | IldpXdot1dcbxTra fficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |
| IldpXdot1dcbxRemETSConTrafficC lassBandwidth (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.3.1.2) | read-only | IldpXdot1dcbxTra fficClassBandwid thValue | Standard MIB values. | Indicates the bandwidth assigned to this traffic class. | As per the MIB. |

IldpXdot1dcbxRemETSTrafficSelectionAlgorithmTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic selection algorithm to be used by the traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpXdot1dcbxRemETSTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--|----------------------|--|-----------------|
| IldpXdot1dcbxRemETSTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.4.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class that is assigned to a traffic selection algorithm. | As per the MIB. |
| IldpXdot1dcbxRemETSTrafficSelectionAlgorithm (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.1.4.1.2) | read-only | IldpXdot1dcbxTrafficSelectionAlgorithm | Standard MIB values. | Indicates the traffic selection algorithm to which this traffic class is to be assigned. | As per the MIB. |

IldpXdot1dcbxRemETSRecoTrafficClassBandwidthTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic class to which the bandwidth is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpXdot1dcbxRemETSRecoTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|----------------|--------------------------------|----------------------|---|-----------------|
| IldpXdot1dcbxRemETSRecoTrafficClass | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---|----------------------|---|-----------------|
| (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.2.1.1.1) | | | | bandwidth applies. | |
| lldpXdot1dcbxRemETSRcoTrafficClassBandwidth (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.2.1.1.2) | read-only | LldpXdot1dcbxTrafficClassBandwidthValue | Standard MIB values. | Indicates the bandwidth assigned to this traffic class. | As per the MIB. |

lldpXdot1dcbxRemETSRcoTrafficSelectionAlgorithmTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic selection algorithm to be used by the priority.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are lldpV2RemTimeMark, lldpV2RemLocalIfIndex, lldpV2RemLocalDestMACAddress, lldpV2RemIndex, and lldpXdot1dcbxRemETSRcoTSATrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--|----------------------|--|-----------------|
| lldpXdot1dcbxRemETSRcoTSATrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.2.2.1.1) | not-accessible | LldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class that is assigned to a traffic selection algorithm. | As per the MIB. |
| lldpXdot1dcbxRemETSRcoTrafficSelectionAlgorithm (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.2.2.1.2) | read-only | LldpXdot1dcbxTrafficSelectionAlgorithm | Standard MIB values. | Indicates the traffic selection algorithm to which this traffic class is to be assigned. | As per the MIB. |

lldpXdot1dcbxRemPFCBasicTable

About this table

This table contains information about PFC TLVs on the neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are lldpV2RemTimeMark, lldpV2RemLocalIfIndex, lldpV2RemLocalDestMACAddress, and lldpV2RemIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------------|----------------------|---|-----------------|
| lldpXdot1dcbxRemPFCWilling (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.3.1.1) | read-only | TruthValue | true(1), false(2) | Indicates if a neighboring device is willing to accept the PFC configuration of the local system. | As per the MIB. |
| lldpXdot1dcbxRemPFCMBC (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.3.1.2) | read-only | TruthValue | true(1), false(2) | Indicates if a neighboring device is capable of bypassing MACsec processing when MACsec is disabled. | As per the MIB. |
| lldpXdot1dcbxRemPFCCap (1.3.111.2.802.1.1.13.1.5.32962.5.1.3.3.1.3) | read-only | lldpXdot1dcbxSupportedCapacity | Standard MIB values. | Indicates the number of traffic classes on the neighboring device that might simultaneously have PFC enabled. | As per the MIB. |

lldpXdot1dcbxRemPFCEnableTable

About this table

This table indicates if PFC is enabled on the corresponding priority on the neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are lldpV2RemTimeMark, lldpV2RemLocalIfIndex, lldpV2RemLocalDestMACAddress, lldpV2RemIndex, and lldpXdot1dcbxRemPFCEnablePriority.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|----------------|------------------------|----------------------|--------------------------------------|-----------------|
| lldpXdot1dcbxRemPFCEnablePriority | not-accessible | IEEE8021Priority Value | Standard MIB values. | Priority for which PFC is enabled or | As per the MIB. |

| | | | | | |
|--|-----------|------------|----------------------|--|-----------------|
| ity (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 3.3.2.1.1) | | | | disabled. | |
| IldpXdot1dcbxRemPFCEnableEnabled (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 3.3.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates if PFC is enabled on the corresponding priority. | As per the MIB. |

IldpXdot1dcbxRemApplicationPriorityAppTable

About this table

This table contains entries that indicate the priority to be used for a given application.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, IldpXdot1dcbxRemApplicationPriorityAEESelector, and IldpXdot1dcbxRemApplicationPriorityAEPProtocol.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.3.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|----------------------|--|-----------------|
| IldpXdot1dcbxRemApplicationPriorityAEESelector (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 3.4.1.1) | not-accessible | IldpXdot1dcbxAppSelector | Standard MIB values. | Protocol object index. | As per the MIB. |
| IldpXdot1dcbxRemApplicationPriorityAEPProtocol (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 3.4.1.2) | not-accessible | IldpXdot1dcbxAppProtocol | Standard MIB values. | Protocol ID index. | As per the MIB. |
| IldpXdot1dcbxRemApplicationPriorityAEPriority (1.3.111.2.802.1.1 .13.1.5.32962.5.1. 3.4.1.3) | read-only | IEEE8021PriorityValue | Standard MIB values. | The priority code point that should be used in frames transporting the specified protocol. | As per the MIB. |

IldpXdot1dcbxAdminETSTBasicConfigurationTable

About this table

This table contains information about ETS configuration TLV configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is lldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------------------------|----------------------|--|-----------------------------------|
| lldpXdot1dcbxAdminETSConCreditBasedShaperSupport (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates if the credit-based shaper traffic selection algorithm is supported. | As per the MIB. |
| lldpXdot1dcbxAdminETSConTrafficClassesSupported (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.1.1.2) | read-only | lldpXdot1dcbxSupportedCapacity | Standard MIB values. | Indicates the number of traffic classes supported. | As per the MIB. |
| lldpXdot1dcbxAdminETSConWilling (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.1.1.3) | read-write | TruthValue | true(1), false(2) | Indicates if the local system is willing to accept the ETS configuration recommended by the remote system. | Supports only the read operation. |

lldpXdot1dcbxAdminETSConPriorityAssignmentTable

About this table

This table contains one row per priority. The entry in each row indicates the traffic class to which the priority is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are lldpV2LocPortIfIndex and lldpXdot1dcbxAdminETSConPriority.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------|----------------------|---|-----------------|
| lldpXdot1dcbxAdminETSConPriority (1.3.111.2.802.1.1 | not-accessible | IEEE8021Priority Value | Standard MIB values. | Indicates the priority that is assigned to a traffic class. | As per the MIB. |

| | | | | | |
|--|------------|--------------------------------|----------------------|---|-----------------------------------|
| .13.1.5.32962.5.1.4.1.2.1.1) | | | | | |
| LldpXdot1dcbxAdminETSTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.2.1.2) | read-write | LldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this priority is to be assigned. | Supports only the read operation. |

LldpXdot1dcbxAdminETSTrafficClassBandwidthTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic class to which the bandwidth is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are LldpV2LocPortIfIndex and LldpXdot1dcbxAdminETSTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---|----------------------|--|-----------------------------------|
| LldpXdot1dcbxAdminETSTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.3.1.1) | not-accessible | LldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |
| LldpXdot1dcbxAdminETSTrafficClassBandwidth (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.3.1.2) | read-write | LldpXdot1dcbxTrafficClassBandwidthValue | Standard MIB values. | Indicates the bandwidth assigned to this traffic class. | Supports only the read operation. |

LldpXdot1dcbxAdminETSTrafficSelectionAlgorithmTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic selection algorithm to be used by the priority.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxAdminETSTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--|----------------------|--|-----------------------------------|
| IldpXdot1dcbxAdminETSTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.4.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class that is assigned to a traffic selection algorithm. | As per the MIB. |
| IldpXdot1dcbxAdminETSTrafficSelectionAlgorithm (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.1.4.1.2) | read-write | IldpXdot1dcbxTrafficSelectionAlgorithm | Standard MIB values. | Indicates the traffic selection algorithm to which this traffic class is to be assigned. | Supports only the read operation. |

IldpXdot1dcbxAdminETSRecoTrafficClassBandwidthTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic class to which the bandwidth is assigned.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxAdminETSRecoTrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---|----------------------|--|-----------------------------------|
| IldpXdot1dcbxAdminETSRecoTrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.2.1.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class to which this bandwidth applies. | As per the MIB. |
| IldpXdot1dcbxAdminETSRecoTrafficClassBandwidth (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.2.1.1.2) | read-write | IldpXdot1dcbxTrafficClassBandwidthValue | Standard MIB values. | Indicates the bandwidth assigned to this traffic class. | Supports only the read operation. |

IldpXdot1dcbxAdminETSRcoTrafficSelectionAlgorithmTable

About this table

This table contains one row per traffic class. The entry in each row indicates the traffic selection algorithm to be used by the traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxAdminETSRcoTSATrafficClass.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--|----------------------|--|-----------------------------------|
| IldpXdot1dcbxAdminETSRcoTSATrafficClass (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.2.2.1.1) | not-accessible | IldpXdot1dcbxTrafficClassValue | Standard MIB values. | Indicates the traffic class that is assigned to a traffic selection algorithm. | As per the MIB. |
| IldpXdot1dcbxAdminETSRcoTrafficSelectionAlgorithm (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.2.2.1.2) | read-write | IldpXdot1dcbxTrafficSelectionAlgorithm | Standard MIB values. | Indicates the traffic selection algorithm to which this traffic class is to be assigned. | Supports only the read operation. |

IldpXdot1dcbxAdminPFCBasicTable

About this table

This table contains information about local PFC TLV configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------------------------|
| IldpXdot1dcbxAdminPFCWilling (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.1.1.1) | read-write | TruthValue | true(1), false(2) | Indicates if the local system is willing to accept the PFC configuration of a | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------------|----------------------|---|-----------------|
| | | | | neighboring device. | |
| IldpXdot1dcbxAdminPFCMBC (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.1.1.2) | read-only | TruthValue | true(1), false(2) | Indicates if the local system is capable of bypassing MACsec processing when MACsec is disabled. | As per the MIB. |
| IldpXdot1dcbxAdminPFCap (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.1.1.3) | read-only | IldpXdot1dcbxSupportedCapacity | Standard MIB values. | Indicates the number of traffic classes on the local device that might simultaneously have PFC enabled. | As per the MIB. |

IldpXdot1dcbxAdminPFCEnableTable

About this table

This table lists the configuration about whether PFC is enabled on the corresponding priority on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex and IldpXdot1dcbxAdminPFCEnablePriority.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------|----------------------|--|-----------------------------------|
| IldpXdot1dcbxAdminPFCEnablePriority (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.2.1.1) | not-accessible | IEEE8021PriorityValue | Standard MIB values. | Priority for which PFC is enabled or disabled. | As per the MIB. |
| IldpXdot1dcbxAdminPFCEnableEnabled (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.3.2.1.2) | read-write | TruthValue | true(1), false(2) | Indicates if PFC is enabled on the corresponding priority. | Supports only the read operation. |

IldpXdot1dcbxAdminApplicationPriorityAppTable

About this table

This table contains entries indicating the priority to be used for a given application.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocPortIfIndex, IldpXdot1dcbxAdminApplicationPriorityAESelector, and IldpXdot1dcbxAdminApplicationPriorityAEProtocol.

The table OID is 1.3.111.2.802.1.1.13.1.5.32962.5.1.4.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|----------------------|--|-----------------------------------|
| IldpXdot1dcbxAdminApplicationPriorityAESelector (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.4.1.1) | not-accessible | IldpXdot1dcbxAppSelector | Standard MIB values. | Protocol object index. | As per the MIB. |
| IldpXdot1dcbxAdminApplicationPriorityAEProtocol (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.4.1.2) | not-accessible | IldpXdot1dcbxAppProtocol | Standard MIB values. | Protocol ID index. | As per the MIB. |
| IldpXdot1dcbxAdminApplicationPriorityAEPriority (1.3.111.2.802.1.1.13.1.5.32962.5.1.4.4.1.3) | read-create | IEEE8021Priority Value | Standard MIB values. | The priority code point that should be used in frames transporting the specified protocol. | Supports only the read operation. |

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LLDP-EXT-DOT3-MIB

About this MIB

LLDP facilitates network management to discover and use network physical topology in a standard way, and enables network management to discover configuration inconsistencies or errors that affect the upper-layer applications. H3C products support LLDP.

LLDP-EXT-DOT3-MIB is a standard public MIB, one of the four MIBs available for LLDP, which also include LLDP-MIB, LLDP-EXT-DOT1-MIB, and LLDP-MED-MIB. This MIB is the IEEE 802.3 organizationally defined neighbor discovery MIB, an extension for LLDP-MIB. This MIB contains IEEE 802.3 organizationally specific LLDP configuration, IEEE 802.3 organizationally specific local LLDP information, and IEEE 802.3 organizationally specific LLDP information received from the neighboring devices.

MIB file name

lldp-ext-dot3.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).lldpMIB(2).lldpObjects(1).lldpExtnsions(5).lldpXdot3MIB(4623)

The root object is the LLDP management information base extension module for discovery information defined by the IEEE 802.3 organization.

Tabular objects

lldpXdot3PortConfigTable

About this table

This table controls selection of LLDP TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is lldpPortConfigPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------|--|--|--|
| lldpXdot3PortConfigTLVSTxEnable (1.0.8802.1.1.2.1.5.4623.1.1.1.1) | read-write | BITS | BITS {macPhyConfigStatus(0), powerViaMDI(1), linkAggregation(2), maxFrameSize(3)} } | IEEE 802.3 organizationally specific optional TLVs whose transmission is enabled on the ports. | By default, each bit is set to 1, which indicates that all IEEE 802.3 organizationally specific TLVs can be transmitted on a given port. Link aggregation |

| | | | | | |
|--|--|--|--|--|---|
| | | | | | TLVs are defined as 802.1 organizationally specific TLVs. |
|--|--|--|--|--|---|

IldpXdot3LocPortTable

About this table

This table contains information about 802.3 organizationally specific TLVs on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--------------------------|---|-----------------|
| IldpXdot3LocPortAutoNegSupported (1.0.8802.1.1.2.1.5.4623.1.2.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates whether the given local port supports autonegotiation. | As per the MIB. |
| IldpXdot3LocPortAutoNegEnabled (1.0.8802.1.1.2.1.5.4623.1.2.1.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether autonegotiation is enabled on the given local port. | As per the MIB. |
| IldpXdot3LocPortAutoNegAdvertiseCap (1.0.8802.1.1.2.1.5.4623.1.2.1.1.3) | read-only | OCTET STRING | OCTET STRING (2) | Autonegotiation capability on the given local port. | As per the MIB. |
| IldpXdot3LocPortOperMauType (1.0.8802.1.1.2.1.5.4623.1.2.1.1.4) | read-only | Integer32 | Integer32(0..2147483647) | Operational MAU type of the given local port. | As per the MIB. |

IldpXdot3LocPowerTable

About this table

This table contains information about power supply capabilities of the local ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.2.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|---|-----------------|
| IldpXdot3LocPowerPortClass (1.0.8802.1.1.2.1.5.4623.1.2.2.1.1) | read-only | IldpPowerPortClass | Standard MIB values. | Port class (PSE or PD) of the local port. | As per the MIB. |
| IldpXdot3LocPowerMDISupported (1.0.8802.1.1.2.1.5.4623.1.2.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the MDI power is supported on the given local port. | As per the MIB. |
| IldpXdot3LocPowerMDIEnabled (1.0.8802.1.1.2.1.5.4623.1.2.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the MDI power is enabled on the given local port. | As per the MIB. |
| IldpXdot3LocPowerPairControlable (1.0.8802.1.1.2.1.5.4623.1.2.2.1.4) | read-only | TruthValue | true(1), false(2) | Indicates whether the pair selection can be controlled on the given local port. | As per the MIB. |
| IldpXdot3LocPowerPairs (1.0.8802.1.1.2.1.5.4623.1.2.2.1.5) | read-only | Integer32 | Integer32(1 2) | Current pair on the given local port. | As per the MIB. |
| IldpXdot3LocPowerClass (1.0.8802.1.1.2.1.5.4623.1.2.2.1.6) | read-only | Integer32 | Integer32(1 2 3 4 5) | Power supply capability or power consumption on the given local port. | As per the MIB. |

IldpXdot3LocLinkAggTable

About this table

This table contains information about link aggregation information on the local ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.2.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------------|----------------------|---|-----------------|
| IldpXdot3LocLinkAggStatus (1.0.8802.1.1.2.1.5.4623.1.2.3.1.1) | read-only | IldpLinkAggStatusMap | Standard MIB values. | Link aggregation capabilities and current aggregation status of the link. | As per the MIB. |

| | | | | | |
|--|-----------|-----------|--------------------------------|----------------------------|-----------------|
| IldpXdot3LocLink AggPortId (1.0.8802.1.1.2.1. 5.4623.1.2.3.1.2) | read-only | Integer32 | Integer32(0 1..214 7483647) | Aggregate interface ID. | As per the MIB. |
|--|-----------|-----------|--------------------------------|----------------------------|-----------------|

IldpXdot3LocMaxFrameSizeTable

About this table

This table contains one row per port of maximum frame size information on the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.2.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|--|-----------------|
| IldpXdot3LocMax FrameSize (1.0.8802.1.1.2.1. 5.4623.1.2.4.1.1) | read-only | Integer32 | Integer32(0..6553 5) | The maximum supported frame size on the given local port. | As per the MIB. |

IldpXdot3RemPortTable

About this table

This table contains port information of the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|-----------------|
| IldpXdot3RemPort AutoNegSupporte d (1.0.8802.1.1.2.1. 5.4623.1.3.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates whether the given port of a neighboring device supports autonegotiation. | As per the MIB. |
| IldpXdot3RemPort AutoNegEnabled (1.0.8802.1.1.2.1. | read-only | TruthValue | true(1), false(2) | Indicates whether autonegotiation is enabled on the | As per the MIB. |

| | | | | | |
|--|-----------|--------------|--------------------------|---|-----------------|
| 5.4623.1.3.1.1.2) | | | | given port of the neighboring device. | |
| IldpXdot3RemPortAutoNegAdvertiseCap (1.0.8802.1.1.2.1.5.4623.1.3.1.1.3) | read-only | OCTET STRING | SIZE(2) | Autonegotiation capability on the given port of the neighboring device. | As per the MIB. |
| IldpXdot3RemPortOperMauType (1.0.8802.1.1.2.1.5.4623.1.3.1.1.4) | read-only | Integer32 | Integer32(0..2147483647) | Operational MAU type of the given port of the neighboring device. | As per the MIB. |

IldpXdot3RemPowerTable

About this table

This table contains power supply information of the ports on the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|---|-----------------|
| IldpXdot3RemPowerPortClass (1.0.8802.1.1.2.1.5.4623.1.3.2.1.1) | read-only | IldpPowerPortClass | Standard MIB values. | Port class (PSE or PD) of the given port on a neighboring device. | As per the MIB. |
| IldpXdot3RemPowerMDISupported (1.0.8802.1.1.2.1.5.4623.1.3.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the given port on the neighboring device supports the MDI power. | As per the MIB. |
| IldpXdot3RemPowerMDIEnabled (1.0.8802.1.1.2.1.5.4623.1.3.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the MDI power is enabled on the given port of the neighboring device. | As per the MIB. |
| IldpXdot3RemPowerPairControlable (1.0.8802.1.1.2.1.5.4623.1.3.2.1.4) | read-only | TruthValue | true(1), false(2) | Indicates whether the pair selection can be controlled on the given port of the neighboring device. | As per the MIB. |

| | | | | | |
|---|-----------|-----------|----------------------|---|-----------------|
| IldpXdot3RemPowerPairs (1.0.8802.1.1.2.1.5.4623.1.3.2.1.5) | read-only | Integer32 | Integer32(1 2) | Current pair on the given port of the neighboring device. | As per the MIB. |
| IldpXdot3RemPowerClass (1.0.8802.1.1.2.1.5.4623.1.3.2.1.6) | read-only | Integer32 | Integer32(1 2 3 4 5) | Power supply capability or power consumption on the given port of the neighboring device. | As per the MIB. |

IldpXdot3RemLinkAggTable

About this table

This table contains information about link aggregation information on the ports of the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.3.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------------|----------------------------|---|-----------------|
| IldpXdot3RemLinkAggStatus (1.0.8802.1.1.2.1.5.4623.1.3.3.1.1) | read-only | IldpLinkAggStatusMap | Standard MIB values. | Link aggregation capabilities and current aggregation status of the link. | As per the MIB. |
| IldpXdot3RemLinkAggPortId (1.0.8802.1.1.2.1.5.4623.1.3.3.1.2) | read-only | Integer32 | Integer32(0 1..2147483647) | Aggregate interface ID on the neighboring devices. | As per the MIB. |

IldpXdot3RemMaxFrameSizeTable

About this table

This table contains one row per port of maximum frame size information on the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4623.1.3.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|--|-----------------|
| IldpXdot3RemMax FrameSize (1.0.8802.1.1.2.1. 5.4623.1.3.4.1.1) | read-only | Integer32 | Integer32(0..6553 5) | The maximum supported frame size on the given port of the neighboring device. | As per the MIB. |

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LLDP-EXT-DOT3-V2-MIB

About this MIB

This MIB is the LLDP management information base extension module for discovery information defined by the IEEE 802.3 organization.

LLDP facilitates network management to discover and use network physical topology in a standard way, and enables network management to discover configuration inconsistencies or errors that affect the upper-layer applications. Although H3C products support the LLDP 2009 version, they still use the MIBs of the LLDP 2005 version.

The MIB of the LLDP 2009 version is also referred to as LLDP-V2-MIB. This MIB is a standard public MIB, which contains LLDP configuration, LLDP statistics, local LLDP information, neighboring LLDP information, and IEEE 802.1 extended configuration, DCBX extended configuration, and IEEE 802.3 extended configuration. The CNP extended configuration is not supported in Comware V700R001.

MIB file name

lldp-ext-dot3-v2.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbers-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).lldpV2MIB(13).lldpV2Objects(1).lldpV2Extensions(5).lldpV2Xdot3MIB(4623)

Tabular objects

lldpV2Xdot3PortConfigTable

About this table

This table controls selection of LLDP TLVs to be transmitted on individual ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are lldpV2PortConfigIfIndex and lldpV2PortConfigDestAddressIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------|---|--|--|
| lldpV2Xdot3PortConfigTLVsTxEnable (1.3.111.2.802.1.1.13.1.5.4623.1.1.1.1.1) | read-write | BITS | BITS{macPhyConfigStatus(0), powerViaMDI(1), unused(2), maxFrameSize(3)} | IEEE 802.3 organizationally specific optional TLVs whose transmission is enabled on the ports. | By default, each bit is set to 1 on the nearest bridge agents of Layer 2 and Layer 3 Ethernet ports. It indicates that all IEEE 802.3 organizationally specific TLVs can be transmitted on a given port. |

| | | | | | |
|--|--|--|--|--|--|
| | | | | | Link aggregation TLVs no longer belong to the 802.3 organizationally specific TLV set, and the bit for unused(2) will not be set for these TLVs. |
|--|--|--|--|--|--|

IldpV2Xdot3LocPortTable

About this table

This table contains 802.3 extended information on the local ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|------------------------------|---|-----------------|
| IldpV2Xdot3LocPortAutoNegSupported (1.3.111.2.802.1.1.13.1.5.4623.1.2.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates whether the given local port supports autonegotiation. | As per the MIB. |
| IldpV2Xdot3LocPortAutoNegEnabled (1.3.111.2.802.1.1.13.1.5.4623.1.2.1.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether autonegotiation is enabled on the given local port. | As per the MIB. |
| IldpV2Xdot3LocPortAutoNegAdvertisedCap (1.3.111.2.802.1.1.13.1.5.4623.1.2.1.1.3) | read-only | OCTET STRING | OCTET STRING (2) | Autonegotiation capability on the given local port. | As per the MIB. |
| IldpV2Xdot3LocPortOperMauType (1.3.111.2.802.1.1.13.1.5.4623.1.2.1.1.4) | read-only | Unsigned32 | Unsigned32(0~21 47483647) | Operational MAU type of the given local port. | As per the MIB. |

IldpV2Xdot3LocPowerTable

About this table

This table contains information about power supply capabilities of the local ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------------------|-----------------------|---|-----------------|
| IldpV2Xdot3LocPowerPortClass (1.3.111.2.802.1.1.13.1.5.4623.1.2.2.1.1) | read-only | IldpV2PowerPortClass | Standard MIB values. | Port class (PSE or PD) of the given local port. | As per the MIB. |
| IldpV2Xdot3LocPowerMDISupported (1.3.111.2.802.1.1.13.1.5.4623.1.2.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the MDI power is supported on the given local port. | As per the MIB. |
| IldpV2Xdot3LocPowerMDIEnabled(1.3.111.2.802.1.1.13.1.5.4623.1.2.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the MDI power is enabled on the given local port. | As per the MIB. |
| IldpV2Xdot3LocPowerPairControlable (1.3.111.2.802.1.1.13.1.5.4623.1.2.2.1.4) | read-only | TruthValue | true(1), false(2) | Indicates whether the pair selection can be controlled on the given local port. | As per the MIB. |
| IldpV2Xdot3LocPowerPairs (1.3.111.2.802.1.1.13.1.5.4623.1.2.2.1.5) | read-only | Unsigned32 | Unsigned32(1 2) | Current pair on the given local port. | As per the MIB. |
| IldpV2Xdot3LocPowerClass (1.3.111.2.802.1.1.13.1.5.4623.1.2.2.1.6) | read-only | Unsigned32 | Unsigned32(1 2 3 4 5) | Power supply capability or power consumption on the given local port. | As per the MIB. |

IldpV2Xdot3LocMaxFrameSizeTable

About this table

This table contains one row per port of maximum frame size information on the local device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| IldpV2Xdot3LocMaxFrameSize (1.3.111.2.802.1.1.13.1.5.4623.1.2.3.1.1) | read-only | Unsigned32 | Unsigned32(0..65535) | The maximum supported frame size on the given local port. | As per the MIB. |

IldpV2Xdot3RemPortTable

About this table

This table contains port information on the given port of a neighboring device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|---------------------------|---|-----------------|
| IldpV2Xdot3RemPortAutoNegSupported (1.3.111.2.802.1.1.13.1.5.4623.1.3.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates whether the given port on the neighboring device supports autonegotiation. | As per the MIB. |
| IldpV2Xdot3RemPortAutoNegEnabled (1.3.111.2.802.1.1.13.1.5.4623.1.3.1.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether autonegotiation is enabled on the given port of the neighboring device. | As per the MIB. |
| IldpV2Xdot3RemPortAutoNegAdvertisedCap (1.3.111.2.802.1.1.13.1.5.4623.1.3.1.1.3) | read-only | OCTET STRING | OCTET STRING (2) | Autonegotiation capability on the given port of the neighboring device. | As per the MIB. |
| IldpV2Xdot3RemPortOperMauType (1.3.111.2.802.1.1.13.1.5.4623.1.3.1.1.4) | read-only | Unsigned32 | Unsigned32(0..2147483647) | Operational MAU type of the given port of the neighboring device. | As per the MIB. |

IldpV2Xdot3RemPowerTable

About this table

This table contains information about power supply capabilities of the ports on the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------|-----------------------|---|-----------------|
| IldpV2Xdot3RemPowerPortClass (1.3.111.2.802.1.1.13.1.5.4623.1.3.2.1.1) | read-only | IldpV2PowerPort Class | Standard MIB values. | Port class (PSE or PD) of the given port of a neighboring device. | As per the MIB. |
| IldpV2Xdot3RemPowerMDISupported (1.3.111.2.802.1.1.13.1.5.4623.1.3.2.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the given port on the neighboring device supports the MDI power. | As per the MIB. |
| IldpV2Xdot3RemPowerMDIEnabled (1.3.111.2.802.1.1.13.1.5.4623.1.3.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the MDI power is enabled on the given port of the neighboring device. | As per the MIB. |
| IldpV2Xdot3RemPowerPairControllable (1.3.111.2.802.1.1.13.1.5.4623.1.3.2.1.4) | read-only | TruthValue | true(1), false(2) | Indicates whether the pair selection can be controlled on the given port of the neighboring device. | As per the MIB. |
| IldpV2Xdot3RemPowerPairs (1.3.111.2.802.1.1.13.1.5.4623.1.3.2.1.5) | read-only | Unsigned32 | Unsigned32(1 2) | Current pair on the given port of the neighboring device. | As per the MIB. |
| IldpV2Xdot3RemPowerClass (1.3.111.2.802.1.1.13.1.5.4623.1.3.2.1.6) | read-only | Unsigned32 | Unsigned32(1 2 3 4 5) | Power supply capability or power consumption on the given port of the neighboring device. | As per the MIB. |

IldpV2Xdot3RemMaxFrameSizeTable

About this table

This table contains one row per port of maximum frame size information on the neighboring devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|--------------------------|--|-----------------|
| IldpV2Xdot3Rem MaxFrameSize (1.3.111.2.802.1.1 .13.1.5.4623.1.3.3 .1.1) | read-only | Unsigned32 | Unsigned32(0..65 535) | The maximum supported frame size on the given port of a neighboring device. | As per the MIB. |

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| lldpXMedLocAssetID | 2 |
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LLDP-EXT-MED-MIB

About this MIB

Use this MIB to obtain TIA-TR41.4 Media Endpoint Discovery (MED) information.

MIB file name

lldp-ext-med.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).lldpMIB(2).lldpObjects(1).lldpExtnesions(5).lldpXM
edMIB(4795)

Scalar objects

lldpXMedLocDeviceClass

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------------------|-------------------------|-------------------|-----------------|
| lldpXMedLocDevi ceClass (1.0.8802.1.1.2.1. 5.4795.1.1.1) | read-only | LldpXMedDevice Class | Standard MIB values. | MED device class. | As per the MIB. |

lldpXMedFastStartRepeatCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------|--|-----------------|
| lldpXMedFastStart RepeatCount (1.0.8802.1.1.2.1. 5.4795.1.1.3) | read-write | Unsigned32 | Unsigned32 (1..8) | Number of times the fast start LLDPDU are being sent. | As per the MIB. |

lldpXMedLocHardwareRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------|-----------------------------|-----------------|
| lldpXMedLocHard wareRev (1.0.8802.1.1.2.1. 5.4795.1.2.2) | read-only | SnmpAdminString | OCTET STRING (0..32) | Local hardware revision. | As per the MIB. |

lldpXMedLocFirmwareRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------|-----------|-----------------|--------------|----------------|-----------------|
| lldpXMedLocFirm | read-only | SnmpAdminString | OCTET STRING | Local firmware | As per the MIB. |

| | | | | | |
|--|--|--|---------|-----------|--|
| wareRev (1.0.8802.1.1.2.1. 5.4795.1.2.3) | | | (0..32) | revision. | |
|--|--|--|---------|-----------|--|

IldpXMedLocSoftwareRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------|--------------------------|-----------------|
| IldpXMedLocSoftwareRev (1.0.8802.1.1.2.1. 5.4795.1.2.4) | read-only | SnmpAdminString | OCTET STRING (0..32) | Local software revision. | As per the MIB. |

IldpXMedLocSerialNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------|----------------------|-----------------|
| IldpXMedLocSerialNum (1.0.8802.1.1.2.1. 5.4795.1.2.5) | read-only | SnmpAdminString | OCTET STRING (0..32) | Local serial number. | As per the MIB. |

IldpXMedLocMfgName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------|--------------------------|-----------------|
| IldpXMedLocMfgName (1.0.8802.1.1.2.1. 5.4795.1.2.6) | read-only | SnmpAdminString | OCTET STRING (0..32) | Local manufacturer name. | As per the MIB. |

IldpXMedLocModelName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------|-------------------|-----------------|
| IldpXMedLocModelName (1.0.8802.1.1.2.1. 5.4795.1.2.7) | read-only | SnmpAdminString | OCTET STRING (0..32) | Local model name. | As per the MIB. |

IldpXMedLocAssetID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------|----------------------------------|-----------------|
| IldpXMedLocAssetID (1.0.8802.1.1.2.1. 5.4795.1.2.8) | read-only | SnmpAdminString | OCTET STRING (0..32) | Local asset tracking identifier. | As per the MIB. |

IldpXMedLocXPoEDeviceType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|-----------------|-----------------|
| IldpxMedLocXPoE DeviceType (1.0.8802.1.1.2.1. 5.4795.1.2.10) | read-only | INTEGER | unknown(1) pseDevice(2) pdDevice(3) none(4) | Local PoE type. | As per the MIB. |

IldpXMedLocXPoEPSEPowerSource

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---------------------------------------|---------------------------------|-----------------|
| IldpXMedLocXPo EPSEPowerSource (1.0.8802.1.1.2.1. 5.4795.1.2.12) | read-only | INTEGER | unknown(1) primary(2) backup(3) | Local PSE power supply type. | As per the MIB. |

IldpXMedLocXPoEPDPowerReq

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-------------------------|----------------------------|-----------------|
| IldpXMedLocXPo EPDPowerReq (1.0.8802.1.1.2.1. 5.4795.1.2.13) | read-only | Gauge32 | Standard MIB values. | Power required by a PD. | As per the MIB. |

IldpXMedLocXPoEPDPowerSource

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|--------------------------------|-----------------|
| IldpXMedLocXPo EPDPowerSource (1.0.8802.1.1.2.1. 5.4795.1.2.14) | read-only | INTEGER | unknown(1) fromPSE(2) local(3) localAndPSE(4) | Local PD power supply type. | As per the MIB. |

IldpXMedLocXPoEPDPowerPriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|-----------------------------|-----------------|
| IldpXMedLocXPo EPDPowerPriority (1.0.8802.1.1.2.1. 5.4795.1.2.15) | read-only | INTEGER | unknown(1) critical(2) high(3) low(4) | Local PD power priority. | As per the MIB. |

Tabular objects

IldpXMedPortConfigEntry

About this table

Use this table to configure MED on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is IldpPortConfigPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.1.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------------|----------------------|---------------------------|--|
| IldpXMedPortCapSupported (1.0.8802.1.1.2.1.5.4795.1.1.2.1.1) | read-only | IldpXMedCapabilities | Standard MIB values. | Supported MED TLVs. | As per the MIB. |
| IldpXMedPortConfigTLVsTxEnable (1.0.8802.1.1.2.1.5.4795.1.1.2.1.2) | read-write | IldpXMedCapabilities | Standard MIB values. | Enabled MED TLVs. | By default, the networkPolicy bit is set to 0. On a port operating in bridging mode, the networkPolicy bit is set to 1. By default, the location and extendedPD bits are set to 0, and the other bits are set to 1. If the extendedPSE bit is set to 1 but a port does not support a capability, the bridge agents on the port does not send the related TLVs, and this bit is read-only. |
| IldpXMedPortConfigNotifEnable (1.0.8802.1.1.2.1.5.4795.1.1.2.1.3) | read-write | TruthValue | true(1) false(2) | LLDP-MED trapping status. | As per the MIB. |

IldpXMedLocMediaPolicyTable

About this table

Use this table to obtain local media policy configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpLocPortNum and IldpXMedLocMediaPolicyAppType.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.2.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|----------------------------|---|-----------------|
| IldpXMedLocMediaPolicyAppType (1.0.8802.1.1.2.1.5.4795.1.2.1.1.1) | not-accessible | PolicyAppType | Standard MIB values. | Media policy type. | As per the MIB. |
| IldpXMedLocMediaPolicyVlanID (1.0.8802.1.1.2.1.5.4795.1.2.1.1.2) | read-only | Integer32 | Integer32 (0 1..4094 4095) | Media VLAN ID. | As per the MIB. |
| IldpXMedLocMediaPolicyPriority (1.0.8802.1.1.2.1.5.4795.1.2.1.1.3) | read-only | Integer32 | Integer32 (0..7) | Media policy priority. | As per the MIB. |
| IldpXMedLocMediaPolicyDscp (1.0.8802.1.1.2.1.5.4795.1.2.1.1.4) | read-only | Dscp | Standard MIB values. | DSCP value. | As per the MIB. |
| IldpXMedLocMediaPolicyUnknown (1.0.8802.1.1.2.1.5.4795.1.2.1.1.5) | read-only | TruthValue | true(1) false(2) | Whether the media policy type is unknown. | As per the MIB. |
| IldpXMedLocMediaPolicyTagged (1.0.8802.1.1.2.1.5.4795.1.2.1.1.6) | read-only | TruthValue | true(1) false(2) | Whether packets of the media VLAN are tagged. | As per the MIB. |

IldpXMedLocLocationTable

About this table

Use this table to configure the local location information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpLocPortNum and IldpXMedLocLocationSubtype.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.2.9.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-----------------------|---------------------------------|--|
| IldpXMedLocLocationSubtype (1.0.8802.1.1.2.1.5.4795.1.2.9.1.1) | not-accessible | LocationSubtype | Standard MIB values. | Local MED location type. | Supports only civicAddress(3) and elin(4). |
| IldpXMedLocLocationInfo (1.0.8802.1.1.2.1.5.4795.1.2.9.1.2) | read-write | OCTET STRING | OCTET STRING (0..256) | Local MED location information. | As per the MIB. |

IldpXMedLocXPoEPSEPortTable

About this table

Use this table to obtain PSE information on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.2.11.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|-----------------------------------|-----------------|
| IldpXMedLocXPoEPSEPortPowerAv (1.0.8802.1.1.2.1.5.4795.1.2.11.1.1) | read-only | Gauge32 | Standard MIB values. | Available PoE power on PSE ports. | As per the MIB. |
| IldpXMedLocXPoEPSEPortPDPriority (1.0.8802.1.1.2.1.5.4795.1.2.11.1.2) | read-only | INTEGER | Unknown(1) Critical(2) High(3) Low(4) | PSE port power priority. | As per the MIB. |

IldpXMedRemCapabilitiesTable

About this table

Use this table to obtain the LLDP-MED capabilities of a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------------|----------------------|---------------------|-----------------|
| IldpXMedRemCapSupported (1.0.8802.1.1.2.1.5.4795.1.3.1.1.1) | read-only | LldpXMedCapabilities | Standard MIB values. | Supported MED TLVs. | As per the MIB. |
| IldpXMedRemCapCurrent (1.0.8802.1.1.2.1.5.4795.1.3.1.1.2) | read-only | LldpXMedCapabilities | Standard MIB values. | Sent MED TLVs. | As per the MIB. |
| IldpXMedRemDeviceClass (1.0.8802.1.1.2.1.5.4795.1.3.1.1.3) | read-only | LldpXMedDeviceClass | Standard MIB values. | MED device type. | As per the MIB. |

IldpXMedRemMediaPolicyTable

About this table

Use this table to obtain the media policy configuration of a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, and IldpXMedRemMediaPolicyAppType.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|----------------------------|------------------------|-----------------|
| IldpXMedRemMediaPolicyAppType (1.0.8802.1.1.2.1.5.4795.1.3.2.1.1) | not-accessible | PolicyAppType | Standard MIB values. | Media policy type. | As per the MIB. |
| IldpXMedRemMediaPolicyVlanID (1.0.8802.1.1.2.1.5.4795.1.3.2.1.2) | read-only | Integer32 | Integer32 (0 1..4094 4095) | Media VLAN ID. | As per the MIB. |
| IldpXMedRemMediaPolicyPriority (1.0.8802.1.1.2.1.5.4795.1.3.2.1.3) | read-only | Integer32 | Integer32 (0..7) | Media policy priority. | As per the MIB. |
| IldpXMedRemMediaPolicyDscp (1.0.8802.1.1.2.1.5.4795.1.3.2.1.4) | read-only | Dscp | Standard MIB values. | DSCP value. | As per the MIB. |
| IldpXMedRemMediaPolicyTruthValue (1.0.8802.1.1.2.1.5.4795.1.3.2.1.5) | read-only | TruthValue | true(1) | Whether the | As per the MIB. |

| | | | | | |
|---|-----------|------------|---------------------|---|-----------------|
| iaPolicyUnknown (1.0.8802.1.1.2.1.5.4795.1.3.2.1.5) | | | false(2) | media policy type is unknown. | |
| IldpXMedRemMediaPolicyTagged (1.0.8802.1.1.2.1.5.4795.1.3.2.1.6) | read-only | TruthValue | true(1) false(2) | Whether packets of the media VLAN are tagged. | As per the MIB. |

IldpXMedRemInventoryTable

About this table

Use this table to obtain the inventory information about a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|----------------------|----------------------------|-----------------|
| IldpXMedRemHardwareRev (1.0.8802.1.1.2.1.5.4795.1.3.3.1.1) | read-only | SnmpAdminString | OCTET STRING (0..32) | Hardware revision. | As per the MIB. |
| IldpXMedRemFirmwareRev (1.0.8802.1.1.2.1.5.4795.1.3.3.1.2) | read-only | SnmpAdminString | OCTET STRING (0..32) | Firmware revision. | As per the MIB. |
| IldpXMedRemSoftwareRev (1.0.8802.1.1.2.1.5.4795.1.3.3.1.3) | read-only | SnmpAdminString | OCTET STRING (0..32) | Software revision. | As per the MIB. |
| IldpXMedRemSerialNum (1.0.8802.1.1.2.1.5.4795.1.3.3.1.4) | read-only | SnmpAdminString | OCTET STRING (0..32) | Serial number. | As per the MIB. |
| IldpXMedRemMfgName (1.0.8802.1.1.2.1.5.4795.1.3.3.1.5) | read-only | SnmpAdminString | OCTET STRING (0..32) | Manufacturer name. | As per the MIB. |
| IldpXMedRemModelName (1.0.8802.1.1.2.1.5.4795.1.3.3.1.6) | read-only | SnmpAdminString | OCTET STRING (0..32) | Model name. | As per the MIB. |
| IldpXMedRemAssetID (1.0.8802.1.1.2.1.5.4795.1.3.3.1.7) | read-only | SnmpAdminString | OCTET STRING (0..32) | Asset tracking identifier. | As per the MIB. |

IldpXMedRemLocationTable

About this table

Use this table to obtain the location information about a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, and IldpXMedRemLocationSubtype.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-----------------------|---------------------------|-----------------|
| IldpXMedRemLocationSubtype(1.0.8802.1.1.2.1.5.4795.1.3.4.1.1) | not-accessible | LocationSubtype | Standard MIB values. | MED location type. | As per the MIB. |
| IldpXMedRemLocationInfo(1.0.8802.1.1.2.1.5.4795.1.3.4.1.2) | read-only | OCTET STRING | OCTET STRING (0..256) | MED location information. | As per the MIB. |

IldpXMedRemXPoETable

About this table

Use this table to obtain the PoE type of a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.5.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|-------------|-----------------|
| IldpXMedRemXPoEDeviceType(1.0.8802.1.1.2.1.5.4795.1.3.5.1.1) | read-only | INTEGER | unknown(1) pseDevice(2) pdDevice(3) none(4) | PoE type. | As per the MIB. |

IldpXMedRemXPoEPSETable

About this table

Use this table to obtain the PSE information about a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|-----------------------------------|-----------------|
| IldpXMedRemXPoEPSEPowerAv (1.0.8802.1.1.2.1.5.4795.1.3.6.1.1) | read-only | Gauge32 | Standard MIB values. | Available PoE power on PSE ports. | As per the MIB. |
| IldpXMedRemXPoEPSEPowerSource (1.0.8802.1.1.2.1.5.4795.1.3.6.1.2) | read-only | INTEGER | unknown(1) primary(2) backup(3) | PSE power supply type. | As per the MIB. |
| IldpXMedRemXPoEPSEPowerPriority (1.0.8802.1.1.2.1.5.4795.1.3.6.1.3) | read-only | INTEGER | unknown(1) critical(2) high(3) low(4) | PSE port power priority. | As per the MIB. |

IldpXMedRemXPoEPDTable

About this table

Use this table to obtain the PD information about a neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, and IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.5.4795.1.3.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|-------------------------|-----------------|
| IldpXMedRemXPoEPDPowerReq (1.0.8802.1.1.2.1.5.4795.1.3.7.1.1) | read-only | Gauge32 | Standard MIB values. | Power required by a PD. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|-----------------------|-----------------|
| lldpXMedRemXPoEPDPowerSource (1.0.8802.1.1.2.1.5.4795.1.3.7.1.2) | read-only | INTEGER | unknown(1) fromPSE(2) local(3) localAndPSE(4) | PD power supply type. | As per the MIB. |
| lldpXMedRemXPoEPDPowerPriority (1.0.8802.1.1.2.1.5.4795.1.3.7.1.3) | read-only | INTEGER | unknown(1) critical(2) high(3) low(4) | PD power priority. | As per the MIB. |

Notifications

lldpXMedTopologyChangeDetected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--------------------------------|---------------|----------|-----------------------|----------------|
| 1.0.8802.1.1.2.1.5.4795.0.1 | MED neighbor topology changes. | Informational | - | - | OFF |

Description

This notification is set when the device detects topology changes, such as attaching a peer device to the local device, disconnecting a peer device, or moving a peer device from one port to another port.

Status control

ON

CLI: Use the `lldp notification med-topology-change enable` command.

MIB: Set the `lldpXMedPortConfigNotifEnable` object to true (1).

OFF

CLI: Use the `undo lldp notification med-topology-change enable` command.

MIB: Set the `lldpXMedPortConfigNotifEnable` object to false (2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|----------------------|----------------------|
| 1.0.8802.1.1.2.1.4.1.1.4 (lldpRemChassisIdSubtype) | Neighbor chassis ID type. | No | LldpChassisIdSubtype | Standard MIB values. |
| 1.0.8802.1.1.2.1.4.1.1.5 (lldpRemChassisId) | Neighbor chassis ID. | No | LldpChassisId | Standard MIB values. |
| 1.0.8802.1.1.2.1.5.4795.1.3.1.1.3 (lldpXMedRemDeviceClass) | Neighbor MED device class. | No | LldpXMedDeviceClass | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the topology changes are as expected.

If you cannot resolve the issue, contact H3C Support.

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LLDP-MIB

About this MIB

Use this MIB to configure the following LLDP information:

- LLDP configuration.
- LLDP statistics.
- LLDP local system information.
- LLDP neighbor system information.

MIB file name

lldp.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).lldpMIB(2)

Scalar objects

lldpMessageTxInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------------|-----------------------------------|-----------------|
| lldpMessageTxInterval (1.0.8802.1.1.2.1.1.1) | read-write | Integer32 | Integer32 (5..32768) | LLDP frame transmission interval. | As per the MIB. |

lldpMessageTxHoldMultiplier

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------|-----------------|-----------------|
| lldpMessageTxHoldMultiplier (1.0.8802.1.1.2.1.1.2) | read-write | Integer32 | Integer32 (2..10) | TTL multiplier. | As per the MIB. |

lldpReinitDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-------------------|------------------------------|-----------------|
| lldpReinitDelay (1.0.8802.1.1.2.1.1.3) | read-write | Integer32 | Integer32 (1..10) | LLDP reinitialization delay. | As per the MIB. |

IldpTxDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|------------|-----------|------------------------|--------------------------------|--|
| IldpTxDelay (1.0.8802.1.1.2.1.1.4) | read-write | Integer32 | Integer32 (1..8192) | LLDP frame transmission delay. | The value is fixed at 2, which indicates that this delay is not supported. |

IldpNotificationInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|------------------------|-----------------------------|-----------------|
| IldpNotificationInterval (1.0.8802.1.1.2.1.1.5) | read-write | Integer32 | Integer32 (5..3600) | Trap transmission interval. | As per the MIB. |

IldpStatsRemTablesLastChangeTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| IldpStatsRemTablesLastChangeTime (1.0.8802.1.1.2.1.2.1) | read-only | TimeStamp | Standard MIB values. | Time when LLDP information about a neighboring device was last updated. | As per the MIB. |

IldpStatsRemTablesInserts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|------------------------------------|-----------------|
| IldpStatsRemTablesInserts (1.0.8802.1.1.2.1.2.2) | read-only | ZeroBasedCounter32 | Standard MIB values. | Number of neighbors added by LLDP. | As per the MIB. |

IldpStatsRemTablesDeletes

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|--------------------------------------|-----------------|
| IldpStatsRemTablesDeletes (1.0.8802.1.1.2.1.2.3) | read-only | ZeroBasedCounter32 | Standard MIB values. | Number of neighbors deleted by LLDP. | As per the MIB. |

IldpStatsRemTablesDrops

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|--|-----------------|
| IldpStatsRemTablesDrops (1.0.8802.1.1.2.1.2.4) | read-only | ZeroBasedCounter32 | Standard MIB values. | Number of neighbors discarded by LLDP. | As per the MIB. |

IldpStatsRemTablesAgeouts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|------------------------|-----------------|
| IldpStatsRemTablesAgeouts (1.0.8802.1.1.2.1.2.5) | read-only | ZeroBasedCounter32 | Standard MIB values. | Neighbor ageout count. | As per the MIB. |

IldpLocChassisIdSubtype

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------------------|----------------------|---------------------------|-----------------|
| IldpLocChassisIdSubtype (1.0.8802.1.1.2.1.3.1) | read-only | LldpChassisIdSubtype | Standard MIB values. | Local chassis ID subtype. | As per the MIB. |

IldpLocChassisId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|----------------------|-------------------|-----------------|
| IldpLocChassisId (1.0.8802.1.1.2.1.3.2) | read-only | LldpChassisId | Standard MIB values. | Local chassis ID. | As per the MIB. |

IldpLocSysName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-----------------------|--------------------|-----------------|
| IldpLocSysName (1.0.8802.1.1.2.1.3.3) | read-only | SnmpAdminString | OCTET STRING (0..255) | Local system name. | As per the MIB. |

IldpLocSysDesc

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-----------------------|---------------------------|-----------------|
| IldpLocSysDesc (1.0.8802.1.1.2.1.3.4) | read-only | SnmpAdminString | OCTET STRING (0..255) | Local system description. | As per the MIB. |

IldpLocSysCapSupported

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------|----------------------|---|-----------------|
| IldpLocSysCapSupported (1.0.8802.1.1.2.1.3.5) | read-only | LdpSystemCapabilitiesMap | Standard MIB values. | Capabilities supported by the local system. | As per the MIB. |

IldpLocSysCapEnabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------|----------------------|---|-----------------|
| IldpLocSysCapEnabled (1.0.8802.1.1.2.1.3.6) | read-only | LdpSystemCapabilitiesMap | Standard MIB values. | Capabilities enabled on the local system. | As per the MIB. |

Tabular objects

IldpPortConfigTable

About this table

Use this table to configure LLDP on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is IldpPortConfigPortNum.

The table OID is 1.0.8802.1.1.2.1.1.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---|---------------------------------------|--|
| IldpPortConfigPortNum (1.0.8802.1.1.2.1.1.6.1.1) | not-accessible | LdpPortNumber | Standard MIB values. | Port number. | As per the MIB. |
| IldpPortConfigAdminStatus (1.0.8802.1.1.2.1.1.6.1.2) | read-write | INTEGER | txOnly(1) rxOnly(2) txAndRx(3) disabled(4) | LLDP operating mode. | As per the MIB. |
| IldpPortConfigNotificationEnable (1.0.8802.1.1.2.1.1.6.1.3) | read-write | TruthValue | Standard MIB values. | Trapping status. | As per the MIB. |
| IldpPortConfigTLVsTxEnable (1.0.8802.1.1.2.1.1.6.1.4) | read-write | BITS | BITS { portDesc(0) | Optional TLVs that the port can send. | Default: All bits are set to 1, which indicates that all |

| | | | | | |
|----------|--|--|--|--|-------------------------------------|
| 1.6.1.4) | | | sysName(1) sysDesc(2) sysCap(3) } | | basic optional TLVs are enabled. |
|----------|--|--|--|--|-------------------------------------|

IldpConfigManAddrTable

About this table

Use this table to configure management addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpLocManAddrSubtype and IldpLocManAddr.

The table OID is 1.0.8802.1.1.2.1.1.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|----------------------|---|---|
| IldpConfigManAddrPortsTxEnable (1.0.8802.1.1.2.1.1.7.1.1) | read-write | LldpPortList | Standard MIB values. | Ports that can send management addresses. | Each bit set in this list represents a port. By default, all bits are set to 1, which indicates that all ports can send management addresses. |

IldpStatsTxPortTable

About this table

Use this table to obtain outgoing LLDP packet statistics about ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpStatsTxPortNum.

The table OID is 1.0.8802.1.1.2.1.2.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|----------------------|--------------|-----------------|
| IldpStatsTxPortNum (1.0.8802.1.1.2.1.2.6.1) | not-accessible | LldpPortNumber | Standard MIB values. | Port number. | As per the MIB. |

| | | | | | |
|--|-----------|-----------|----------------------|-----------------------------|-----------------|
| 2.6.1.1) | | | | | |
| IldpStatsTxPortFramesTotal (1.0.8802.1.1.2.1.2.6.1.2) | read-only | Counter32 | Standard MIB values. | Total outgoing frame count. | As per the MIB. |

IldpStatsRxPortTable

About this table

Use this table to obtain incoming LLDP packet statistics about ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpStatsRxPortNum.

The table OID is 1.0.8802.1.1.2.1.2.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------|----------------------|----------------------------------|-----------------|
| IldpStatsRxPortNum (1.0.8802.1.1.2.1.2.7.1.1) | not-accessible | LldpPortNumber | Standard MIB values. | Port number. | As per the MIB. |
| IldpStatsRxPortFramesDiscardedTotal (1.0.8802.1.1.2.1.2.7.1.2) | read-only | Counter32 | Standard MIB values. | Discarded incoming frame count. | As per the MIB. |
| IldpStatsRxPortFramesErrors (1.0.8802.1.1.2.1.2.7.1.3) | read-only | Counter32 | Standard MIB values. | Error incoming frame count. | As per the MIB. |
| IldpStatsRxPortFramesTotal (1.0.8802.1.1.2.1.2.7.1.4) | read-only | Counter32 | Standard MIB values. | Total incoming frame count. | As per the MIB. |
| IldpStatsRxPortTLVsDiscardedTotal (1.0.8802.1.1.2.1.2.7.1.5) | read-only | Counter32 | Standard MIB values. | Discarded incoming TLV count. | As per the MIB. |
| IldpStatsRxPortTLVsUnrecognizedTotal (1.0.8802.1.1.2.1.2.7.1.6) | read-only | Counter32 | Standard MIB values. | Unrecognized incoming TLV count. | As per the MIB. |
| IldpStatsRxPortAgeoutsTotal (1.0.8802.1.1.2.1.2.7.1.7) | read-only | ZeroBasedCounter32 | Standard MIB values. | Neighbor ageout count. | As per the MIB. |

IldpLocPortTable

About this table

Use this table to obtain LLDP information about local ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpLocPortNum.

The table OID is 1.0.8802.1.1.2.1.3.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|-----------------------|-------------------|--|
| IldpLocPortNum (1.0.8802.1.1.2.1.3.7.1.1) | not-accessible | LdpPortNumber | Standard MIB values. | Port number. | As per the MIB. |
| IldpLocPortIdSubtype (1.0.8802.1.1.2.1.3.7.1.2) | read-only | LdpPortIdSubtype | Standard MIB values. | Port ID subtype. | As per the MIB. |
| IldpLocPortId (1.0.8802.1.1.2.1.3.7.1.3) | read-only | LdpPortId | Standard MIB values. | Port ID. | If the port has a MED neighbor, the port ID is the MAC address of the port. If the port does not have a MED neighbor, the port ID is the name of the port. |
| IldpLocPortDesc (1.0.8802.1.1.2.1.3.7.1.4) | read-only | SnmpAdminString | OCTET STRING (0..255) | Port description. | As per the MIB. |

IldpLocManAddrTable

About this table

Use this table to obtain local management address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpLocManAddrSubtype, IldpLocManAddr.

The table OID is 1.0.8802.1.1.2.1.3.8.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------------|----------------------|---|--|
| IldpLocManAddrSubtype (1.0.8802.1.1.2.1.3.8.1.1) | not-accessible | AddressFamilyNumbers | Standard MIB values. | Management address subtype. | As per the MIB. |
| IldpLocManAddr (1.0.8802.1.1.2.1.3.8.1.2) | not-accessible | LldpManAddress | Standard MIB values. | Management address. | As per the MIB. |
| IldpLocManAddrLength (1.0.8802.1.1.2.1.3.8.1.3) | read-only | Integer32 | Standard MIB values. | Management address length. | As per the MIB. |
| IldpLocManAddrIfSubtype (1.0.8802.1.1.2.1.3.8.1.4) | read-only | LldpManAddrIfSubtype | Standard MIB values. | The enumeration value that identifies the port numbering method used for defining the port number associated with the local system. | The subtype is IfIndex. |
| IldpLocManAddrIfId (1.0.8802.1.1.2.1.3.8.1.5) | read-only | Integer32 | Standard MIB values. | Index of the port associated with the management address. | If no port is associated with the management address, the value of this object is 0. |
| IldpLocManAddrOID (1.0.8802.1.1.2.1.3.8.1.6) | read-only | OBJECT IDENTIFIER | Standard MIB values. | The OID value used to identify the type of hardware component or protocol entity associated with the management address advertised by the local system agent. | Not supported. |

IldpRemTable

About this table

Use this table to obtain neighbor configuration and related local indexes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex.

The table OID is 1.0.8802.1.1.2.1.4.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------------|------------------------------|--|---|
| IldpRemTimeMark (1.0.8802.1.1.2.1.4.1.1.1) | not-accessible | TimeFilter | Standard MIB values. | Time mark for a neighbor. | The time mark is the time when this object is created or the remote system is updated. You can use the time mark to search for remote system records. |
| IldpRemLocalPortNum (1.0.8802.1.1.2.1.4.1.1.2) | not-accessible | LldpPortNumber | Standard MIB values. | Local port receiving the neighbor information. | As per the MIB. |
| IldpRemIndex (1.0.8802.1.1.2.1.4.1.1.3) | not-accessible | Integer32 | Integer32 (1..2147483647) | Neighbor index. | As per the MIB. |
| IldpRemChassisIdSubtype (1.0.8802.1.1.2.1.4.1.1.4) | read-only | LldpChassisIdSubtype | Standard MIB values. | Neighbor chassis ID subtype. | As per the MIB. |
| IldpRemChassisId (1.0.8802.1.1.2.1.4.1.1.5) | read-only | LldpChassisId | Standard MIB values. | Neighbor chassis ID. | As per the MIB. |
| IldpRemPortIdSubtype (1.0.8802.1.1.2.1.4.1.1.6) | read-only | LldpPortIdSubtype | Standard MIB values. | Neighbor port ID subtype. | As per the MIB. |
| IldpRemPortId (1.0.8802.1.1.2.1.4.1.1.7) | read-only | LldpPortId | Standard MIB values. | Neighbor port ID. | As per the MIB. |
| IldpRemPortDesc (1.0.8802.1.1.2.1.4.1.1.8) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor port description. | As per the MIB. |
| IldpRemSysName (1.0.8802.1.1.2.1.4.1.1.9) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor system name. | As per the MIB. |
| IldpRemSysDesc (1.0.8802.1.1.2.1.4.1.1.10) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor system description. | As per the MIB. |
| IldpRemSysCapSupported (1.0.8802.1.1.2.1.4.1.1.11) | read-only | LldpSystemCapabilitiesMap | Standard MIB values. | Capabilities supported by the neighbor system. | As per the MIB. |
| IldpRemSysCapEnabled (1.0.8802.1.1.2.1.4.1.1.12) | read-only | LldpSystemCapabilitiesMap | Standard MIB values. | Capabilities enabled on the neighbor system. | As per the MIB. |

IldpRemManAddrTable

About this table

Use this table to obtain neighbor management address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, IldpRemManAddrSubtype, and IldpRemManAddr.

The table OID is 1.0.8802.1.1.2.1.4.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------|----------------------|--|-----------------|
| IldpRemManAddrSubtype (1.0.8802.1.1.2.1.4.2.1.1) | not-accessible | AddressFamilyNumbers | Standard MIB values. | Management address subtype. | As per the MIB. |
| IldpRemManAddr (1.0.8802.1.1.2.1.4.2.1.2) | not-accessible | IldpManAddress | Standard MIB values. | Management address. | As per the MIB. |
| IldpRemManAddrIrfSubtype (1.0.8802.1.1.2.1.4.2.1.3) | read-only | IldpManAddrIrfSubtype | Standard MIB values. | The enumeration value that identifies the port numbering method used for defining the port number associated with the remote system. | As per the MIB. |
| IldpRemManAddrIrfId (1.0.8802.1.1.2.1.4.2.1.4) | read-only | Integer32 | Standard MIB values. | Index of the port associated with the management address. | As per the MIB. |
| IldpRemManAddrOID (1.0.8802.1.1.2.1.4.2.1.5) | read-only | OBJECT IDENTIFIER | Standard MIB values. | The OID value used to identify the type of hardware component or protocol entity associated with the management address advertised by the remote system agent. | Not supported |

IldpRemUnknownTLVTable

About this table

Use this table to display the unrecognized TLVs received from neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, and IldpRemunknownTLVType. The table OID is 1.0.8802.1.1.2.1.4.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|-----------------------|-------------|-----------------|
| IldpRemUnknownTLVType (1.0.8802.1.1.2.1.4.3.1.1) | not-accessible | Integer32 | Integer32 (9..126) | TLV type. | As per the MIB. |
| IldpRemUnknownTLVInfo (1.0.8802.1.1.2.1.4.3.1.2) | read-only | OCTET STRING | OCTET STRING (0..511) | TLV string. | As per the MIB. |

IldpRemOrgDefInfoTable

About this table

Use this table to display the neighbor organizationally defined information not recognized by the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpRemTimeMark, IldpRemLocalPortNum, IldpRemIndex, IldpRemOrgDefInfoOUI, IldpRemOrgDefInfoSubtype, and IldpRemOrgDefInfoIndex.

The table OID is 1.0.8802.1.1.2.1.4.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---------------------------|--|-----------------|
| IldpRemOrgDefInfoOUI (1.0.8802.1.1.2.1.4.4.1.1) | not-accessible | OCTET STRING | OCTET STRING (3) | Organizationally Unique Identifier (OUI). | As per the MIB. |
| IldpRemOrgDefInfoSubtype (1.0.8802.1.1.2.1.4.4.1.2) | not-accessible | Integer32 | Integer32 (1..255) | Subtype of the organizationally defined information. | As per the MIB. |
| IldpRemOrgDefInfoIndex (1.0.8802.1.1.2.1.4.4.1.3) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of the organizationally defined information. | As per the MIB. |
| IldpRemOrgDefInfoO (1.0.8802.1.1.2.1.4.4.1.4) | read-only | OCTET STRING | OCTET STRING (0..507) | Organizationally defined information. | As per the MIB. |

Notifications

IldpRemTablesChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|------------------|---------------|----------|-----------------------|----------------|
| 1.0.8802.1.1.2.0.0.1 | Neighbor events. | Informational | - | - | OFF |

Description

This notification is generated when the value of the `IldpStatsRemTableLastChangeTime` object changes. You can set the notification transmission interval by configuring the `IldpNotificationInterval` object.

Status control

ON

CLI: Use the `lldp notification remote-change enable` command.

MIB: Set the `IldpPortConfigNotificationEnable` object to `true(1)`.

OFF

CLI: Use the `undo lldp notification remote-change enable` command.

MIB: Set the `IldpPortConfigNotificationEnable` object to `false(2)`.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------|-------|--------------------|----------------------|
| 1.0.8802.1.1.2.1.2.2 (IldpStatsRemTablesInserts) | Neighbor creation. | No | ZeroBasedCounter32 | Standard MIB values. |
| 1.0.8802.1.1.2.1.2.3 (IldpStatsRemTablesDeletes) | Neighbor deletion. | No | ZeroBasedCounter32 | Standard MIB values. |
| 1.0.8802.1.1.2.1.2.4 (IldpStatsRemTablesDrops) | Neighbor discard. | No | ZeroBasedCounter32 | Standard MIB values. |
| 1.0.8802.1.1.2.1.2.5 (IldpStatsRemTablesAgeouts) | Neighbor ageout. | No | ZeroBasedCounter32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the topology changes are as expected.

If you cannot resolve the issue, contact H3C Support.

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LLDP-V2-MIB

About this MIB

This MIB is compliant with IEEE 802.1AB-2009. It defines MIB objects for the following LLDP information:

- LLDP configuration.
- LLDP statistics.
- LLDP local system information.
- LLDP neighbor system information.
- 802.1 extension.
- DCBX extension.
- 802.3 extension.

MIB file name

lldp-v2.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbers-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).lldpV2MIB(13)

Scalar objects

lldpV2MessageTxInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|--------------------------|-----------------------------------|-----------------|
| lldpV2MessageTxInterval (1.3.111.2.802.1.1.13.1.1.1) | read-write | Unsigned32 | Unsigned32 (5..32768) | LLDP frame transmission interval. | As per the MIB. |

lldpV2MessageTxHoldMultiplier

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------------|-----------------|-----------------|
| lldpV2MessageTxHoldMultiplier (1.3.111.2.802.1.1.13.1.1.2) | read-write | Unsigned32 | Unsigned32 (2..10) | TTL multiplier. | As per the MIB. |

lldpV2ReinitDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------------|-----------------------|-----------------|
| lldpV2ReinitDelay (1.3.111.2.802.1.1) | read-write | Unsigned32 | Unsigned32 (1..10) | LLDP reinitialization | As per the MIB. |

| | | | | | |
|------------|--|--|--|--------|--|
| .13.1.1.3) | | | | delay. | |
|------------|--|--|--|--------|--|

IldpV2NotificationInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|-----------------------------|-----------------|
| IldpV2NotificationInterval (1.3.111.2.802.1.1.13.1.1.4) | read-write | Unsigned32 | Unsigned32 (5..3600) | Trap transmission interval. | As per the MIB. |

IldpV2TxCreditMax

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------|--|-----------------|
| IldpV2TxCreditMax (1.3.111.2.802.1.1.13.1.1.5) | read-write | Unsigned32 | Unsigned32 (1..100) | Token bucket size for sending LLDP frames. | As per the MIB. |

IldpV2MessageFastTx

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|-----------------|
| IldpV2MessageFastTx (1.3.111.2.802.1.1.13.1.1.6) | read-write | Unsigned32 | Unsigned32 (1..3600) | Fast LLDP frame transmission interval. | As per the MIB. |

IldpV2TxFastInit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|---|-----------------|
| IldpV2TxFastInit (1.3.111.2.802.1.1.13.1.1.7) | read-write | Unsigned32 | Unsigned32 (1..8) | Number of LLDP frames sent each time fast LLDP frame transmission is triggered. | As per the MIB. |

IldpV2StatsRemTablesLastChangeTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| IldpV2StatsRemTablesLastChangeTime (1.3.111.2.802.1.1.13.1.2.1) | read-only | TimeStamp | Standard MIB values. | Time when LLDP information about a neighboring device was last updated. | As per the MIB. |

IldpV2StatsRemTablesInserts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|------------------------------------|-----------------|
| IldpV2StatsRemTablesInserts (1.3.111.2.802.1.1.13.1.2.2) | read-only | ZeroBasedCounter32 | Standard MIB values. | Number of neighbors added by LLDP. | As per the MIB. |

IldpV2StatsRemTablesDeletes

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|--------------------------------------|-----------------|
| IldpV2StatsRemTablesDeletes (1.3.111.2.802.1.1.13.1.2.3) | read-only | ZeroBasedCounter32 | Standard MIB values. | Number of neighbors deleted by LLDP. | As per the MIB. |

IldpV2StatsRemTablesDrops

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|--|-----------------|
| IldpV2StatsRemTablesDrops (1.3.111.2.802.1.1.13.1.2.4) | read-only | ZeroBasedCounter32 | Standard MIB values. | Number of neighbors discarded by LLDP. | As per the MIB. |

IldpV2StatsRemTablesAgeouts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------|----------------------|------------------------|-----------------|
| IldpV2StatsRemTablesAgeouts (1.3.111.2.802.1.1.13.1.2.5) | read-only | ZeroBasedCounter32 | Standard MIB values. | Neighbor ageout count. | As per the MIB. |

IldpV2LocChassisIdSubtype

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------------------|----------------------|---------------------------|-----------------|
| IldpV2LocChassisIdSubtype (1.3.111.2.802.1.1.13.1.3.1) | read-only | IldpV2ChassisIdSubtype | Standard MIB values. | Local chassis ID subtype. | As per the MIB. |

IldpV2LocChassisId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------|-----------|-----------------|--------------|-------------------|-----------------|
| IldpV2LocChassisId | read-only | IldpV2ChassisId | Standard MIB | Local chassis ID. | As per the MIB. |

| | | | | | |
|----------------------------------|--|--|---------|--|--|
| (1.3.111.2.802.1.1 .13.1.3.2) | | | values. | | |
|----------------------------------|--|--|---------|--|--|

lldpV2LocSysName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|--------------------------|--------------------|-----------------|
| lldpV2LocSysName (1.3.111.2.802.1.1 .13.1.3.3) | read-only | SnmpAdminString | OCTET STRING (0..255) | Local system name. | As per the MIB. |

lldpV2LocSysDesc

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|--------------------------|---------------------------|-----------------|
| lldpV2LocSysDesc (1.3.111.2.802.1.1 .13.1.3.4) | read-only | SnmpAdminString | OCTET STRING (0..255) | Local system description. | As per the MIB. |

lldpV2LocSysCapSupported

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------------|----------------------|---|-----------------|
| lldpV2LocSysCapSupported (1.3.111.2.802.1.1 .13.1.3.5) | read-only | LldpV2SystemCapabilitiesMap | Standard MIB values. | Capabilities supported by the local system. | As per the MIB. |

lldpV2LocSysCapEnabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------------|----------------------|---|-----------------|
| lldpV2LocSysCapEnabled (1.3.111.2.802.1.1 .13.1.3.6) | read-only | LldpV2SystemCapabilitiesMap | Standard MIB values. | Capabilities enabled on the local system. | As per the MIB. |

Tabular objects

lldpV2PortConfigTable

About this table

Use this table to configure LLDP on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are IldpV2PortConfigIfIndex and IldpV2PortConfigDestAddressIndex.

The table OID is 1.3.111.2.802.1.1.13.1.1.8.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------------|--|---------------------------------------|--|
| IldpV2PortConfigIfIndex (1.3.111.2.802.1.1.13.1.1.8.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Port number. | As per the MIB. |
| IldpV2PortConfigDestAddressIndex (1.3.111.2.802.1.1.13.1.1.8.1.2) | not-accessible | IldpV2DestAddressTableIndex | Standard MIB values. | Agent index. | As per the MIB. |
| IldpV2PortConfigAdminStatus (1.3.111.2.802.1.1.13.1.1.8.1.3) | read-write | INTEGER | txOnly(1) rxOnly(2) txAndRx(3) disabled(4) | LLDP operating mode. | Default: Disabled for the following agents: <ul style="list-style-type: none"> The nearest customer bridge agent and nearest non-TPMR bridge agent on a Layer 2 Ethernet interface. The nearest customer bridge agent and nearest non-TPMR bridge agent on a Layer 2 or Layer 3 aggregate interface. The nearest non-TPMR bridge agent on a Layer 3 Ethernet interface. |
| IldpV2PortConfigNotificationEnable (1.3.111.2.802.1.1.13.1.1.8.1.4) | read-write | TruthValue | Standard MIB values. | Trapping status. | As per the MIB. |
| IldpV2PortConfigTLVsTxEnable (1.3.111.2.802.1.1.13.1.1.8.1.5) | read-write | BITS | BITS { portDesc(0), sysName(1), sysDesc(2), sysCap(3) } | Optional TLVs that the port can send. | Default: 0xf0 for the following agents: <ul style="list-style-type: none"> The nearest bridge agent and nearest customer bridge agent |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|--|
| | | | | | <p>on a Layer 2 or Layer 3 Ethernet interface.</p> <ul style="list-style-type: none"> The nearest customer bridge agent on a Layer 2 aggregate interface. <p>The default is 0x40 for the nearest customer bridge agent on a Layer 3 aggregate interface or S-channel interface.</p> |

lldpV2DestAddressTable

About this table

Use this table to obtain the destination MAC address of LLDP frames.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is lldpV2AddressTableIndex.

The table OID is 1.3.111.2.802.1.1.13.1.1.9.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|----------------------|--|-----------------|
| lldpV2AddressTableIndex (1.3.111.2.802.1.1.13.1.1.9.1.1) | not-accessible | lldpV2DestAddressTableIndex | Standard MIB values. | Index used to identify the destination MAC address associated with this entry. | As per the MIB. |
| lldpV2DestMacAddress (1.3.111.2.802.1.1.13.1.1.9.1.2) | read-only | MacAddress | Standard MIB values. | Destination MAC address. | As per the MIB. |

lldpV2ManAddrConfigTxPortsTable

About this table

Use this table to configure a management address for agents on interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are IldpV2ManAddrConfigIfIndex, IldpV2ManAddrConfigDestAddressIndex, IldpV2ManAddrConfigLocManAddrSubtype, IldpV2ManAddrConfigLocManAddr.

The table OID is 1.3.111.2.802.1.1.13.1.1.10.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|----------------------|--|--|
| IldpV2ManAddrConfigIfIndex (1.3.111.2.802.1.1.13.1.1.10.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| IldpV2ManAddrConfigDestAddressIndex (1.3.111.2.802.1.1.13.1.1.10.1.2) | not-accessible | IldpV2DestAddressTableIndex | Standard MIB values. | Agent ID. | As per the MIB. |
| IldpV2ManAddrConfigLocManAddrSubtype (1.3.111.2.802.1.1.13.1.1.10.1.3) | not-accessible | AddressFamilyNumbers | Standard MIB values. | Management address subtype. | As per the MIB. |
| IldpV2ManAddrConfigLocManAddr (1.3.111.2.802.1.1.13.1.1.10.1.4) | not-accessible | IldpV2ManAddresses | Standard MIB values. | Management address string. | The subtypes of the management address TLV are IPv4 and IPv6. |
| IldpV2ManAddrConfigTxEnable (1.3.111.2.802.1.1.13.1.1.10.1.5) | read-create | TruthValue | Standard MIB values. | Whether the management address TLV is enabled. | Default: Disabled for the following agents: <ul style="list-style-type: none"> The nearest bridge agent and nearest customer bridge agent on a Layer 2 or Layer 3 Ethernet interface. The nearest customer bridge agent on a Layer 2 or Layer 3 aggregate interface. |
| IldpV2ManAddrConfigRowStatus (1.3.111.2.802.1.1.13.1.1.10.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

IldpV2StatsTxPortTable

About this table

Use this table to obtain outgoing LLDP packet statistics about agents.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2StatsTxIfIndex and IldpV2StatsTxDestMACAddress.

The table OID is 1.3.111.2.802.1.1.13.1.2.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|----------------------|-----------------------------|-----------------|
| IldpV2StatsTxIfIndex (1.3.111.2.802.1.1.13.1.2.6.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| IldpV2StatsTxDestMACAddress (1.3.111.2.802.1.1.13.1.2.6.1.2) | not-accessible | IldpV2DestAddressTableIndex | Standard MIB values. | Agent ID. | As per the MIB. |
| IldpV2StatsTxPortFramesTotal (1.3.111.2.802.1.1.13.1.2.6.1.3) | read-only | Counter32 | Standard MIB values. | Total outgoing frame count. | As per the MIB. |
| IldpV2StatsTxLLDPDULengthErrors (1.3.111.2.802.1.1.13.1.2.6.1.4) | read-only | Counter32 | Standard MIB values. | Frame length error count. | As per the MIB. |

IldpV2StatsRxPortTable

About this table

Use this table to obtain incoming LLDP packet statistics about agents.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2StatsRxDestIfIndex and IldpV2StatsRxDestMACAddress.

The table OID is 1.3.111.2.802.1.1.13.1.2.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------------------|-------------------------|--|-----------------|
| IldpV2StatsRxDes tIfIndex (1.3.111.2.802.1.1 .13.1.2.7.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| IldpV2StatsRxDes tMACAddress(1.3. 111.2.802.1.1.13. 1.2.7.1.2) | not-accessible | LldpV2DestAddre ssTableIndex | Standard MIB values. | Agent ID. | As per the MIB. |
| IldpV2StatsRxPort FramesDiscarded Total (1.3.111.2.802.1.1 .13.1.2.7.1.3) | read-only | Counter32 | Standard MIB values. | Discarded incoming frame count. | As per the MIB. |
| IldpV2StatsRxPort FramesErrors(1.3. 111.2.802.1.1.13. 1.2.7.1.4) | read-only | Counter32 | Standard MIB values. | Error incoming frame count. | As per the MIB. |
| IldpV2StatsRxPort FramesTotal (1.3.111.2.802.1.1 .13.1.2.7.1.5) | read-only | Counter32 | Standard MIB values. | Total incoming frame count. | As per the MIB. |
| IldpV2StatsRxPort TLVsDiscardedTo tal (1.3.111.2.802.1.1 .13.1.2.7.1.6) | read-only | Counter32 | Standard MIB values. | Discarded incoming TLV count. | As per the MIB. |
| IldpV2StatsRxPort TLVsUnrecognize dTotal (1.3.111.2.802.1.1 .13.1.2.7.1.7) | read-only | Counter32 | Standard MIB values. | Unrecognized incoming TLV count. | As per the MIB. |
| IldpV2StatsRxPort AgeoutsTotal (1.3.111.2.802.1.1 .13.1.2.7.1.8) | read-only | ZeroBasedCounte r32 | Standard MIB values. | Neighbor ageout count. | As per the MIB. |

IldpV2LocPortTable

About this table

Use this table to obtain LLDP information about local ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is IldpV2LocPortIfIndex.

The table OID is 1.3.111.2.802.1.1.13.1.3.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------|-----------------------|-------------------|-----------------|
| IldpV2LocPortIfIndex (1.3.111.2.802.1.1.13.1.3.7.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| IldpV2LocPortIdSubtype (1.3.111.2.802.1.1.13.1.3.7.1.2) | read-only | LldpV2PortIdSubtype | Standard MIB values. | Port ID subtype. | As per the MIB. |
| IldpV2LocPortId (1.3.111.2.802.1.1.13.1.3.7.1.3) | read-only | LldpV2PortId | Standard MIB values. | Port ID. | As per the MIB. |
| IldpV2LocPortDesc (1.3.111.2.802.1.1.13.1.3.7.1.4) | read-only | SnmpAdminString | OCTET STRING (0..255) | Port description. | As per the MIB. |

IldpV2LocManAddrTable

About this table

Use this table to obtain local management address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2LocManAddrSubtype and IldpV2LocManAddr.

The table OID is 1.3.111.2.802.1.1.13.1.3.8.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------|----------------------|---|---|
| IldpV2LocManAddrSubtype (1.3.111.2.802.1.1.13.1.3.8.1.1) | not-accessible | AddressFamilyNumbers | Standard MIB values. | Management address subtype. | As per the MIB. |
| IldpV2LocManAddr (1.3.111.2.802.1.1.13.1.3.8.1.2) | not-accessible | LldpV2ManAddresses | Standard MIB values. | Management address. | The subtypes of the management address TLV are IPv4 and IPv6. |
| IldpV2LocManAddrLen (1.3.111.2.802.1.1.13.1.3.8.1.3) | read-only | Unsigned32 | Standard MIB values. | Management address length. | As per the MIB. |
| IldpV2LocManAddrIfSubtype (1.3.111.2.802.1.1.13.1.3.8.1.4) | read-only | LldpV2ManAddrIfSubtype | Standard MIB values. | The enumeration value that identifies the port numbering method used for defining the port number associated with | As per the MIB. |

| | | | | | |
|--|-----------|----------------------|-------------------------|---|-----------------|
| | | | | the local system. | |
| IldpV2LocManAdd rIfid (1.3.111.2.802.1.1 .13.1.3.8.1.5) | read-only | Unsigned32 | Standard MIB values. | Interface index. | As per the MIB. |
| IldpV2LocManAdd rOID (1.3.111.2.802.1.1 .13.1.3.8.1.6) | read-only | OBJECT IDENTIFIER | Standard MIB values. | The OID value used to identify the type of hardware component or protocol entity associated with the management address advertised by the local system agent. | Not supported |

IldpV2RemTable

About this table

Use this table to obtain neighbor configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, and IldpV2RemIndex.

The table OID is 1.3.111.2.802.1.1.13.1.4.1

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------------------|-------------------------------|--|---|
| IldpV2RemTimeM ark (1.3.111.2.802.1.1 .13.1.4.1.1.1) | not-accessible | TimeFilter | Standard MIB values. | Time mark for a neighbor. | The time mark is the time when this object is created or the remote system is updated. You can use the time mark to search for remote system records. |
| IldpV2RemLocalIfI ndex (1.3.111.2.802.1.1 .13.1.4.1.1.2) | not-accessible | InterfaceIndex | Standard MIB values. | Local interface receiving the neighbor information. | As per the MIB. |
| IldpV2RemLocalD estMACAddress (1.3.111.2.802.1.1 .13.1.4.1.1.3) | not-accessible | IldpV2DestAddre ssTableIndex | Standard MIB values. | Neighbor agent ID. | As per the MIB. |
| IldpV2RemIndex (1.3.111.2.802.1.1 .13.1.4.1.1.4) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Neighbor index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------------------|-----------------------|---|-----------------|
| IldpV2RemChassisIdSubtype (1.3.111.2.802.1.1.13.1.4.1.1.5) | read-only | LldpV2ChassisIdSubtype | Standard MIB values. | Neighbor chassis ID subtype. | As per the MIB. |
| IldpV2RemChassisId (1.3.111.2.802.1.1.13.1.4.1.1.6) | read-only | LldpV2ChassisId | Standard MIB values. | Neighbor chassis ID. | As per the MIB. |
| IldpV2RemPortIdSubtype (1.3.111.2.802.1.1.13.1.4.1.1.7) | read-only | LldpV2PortIdSubtype | Standard MIB values. | Neighbor port ID subtype. | As per the MIB. |
| IldpV2RemPortId (1.3.111.2.802.1.1.13.1.4.1.1.8) | read-only | LldpV2PortId | Standard MIB values. | Neighbor port ID. | As per the MIB. |
| IldpV2RemPortDescription (1.3.111.2.802.1.1.13.1.4.1.1.9) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor port description. | As per the MIB. |
| IldpV2RemSystemName (1.3.111.2.802.1.1.13.1.4.1.1.10) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor system name. | As per the MIB. |
| IldpV2RemSystemDescription (1.3.111.2.802.1.1.13.1.4.1.1.11) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor system description. | As per the MIB. |
| IldpV2RemSystemCapabilitiesSupported (1.3.111.2.802.1.1.13.1.4.1.1.12) | read-only | LldpV2SystemCapabilitiesMap | Standard MIB values. | Capabilities supported by the neighbor system. | As per the MIB. |
| IldpV2RemSystemCapabilitiesEnabled (1.3.111.2.802.1.1.13.1.4.1.1.13) | read-only | LldpV2SystemCapabilitiesMap | Standard MIB values. | Capabilities enabled on the neighbor system. | As per the MIB. |
| IldpV2RemRemoteChanges (1.3.111.2.802.1.1.13.1.4.1.1.14) | read-only | TruthValue | Standard MIB values. | Whether there are changes in the remote system's MIB. | As per the MIB. |
| IldpV2RemTooManyNeighbors (1.3.111.2.802.1.1.13.1.4.1.1.15) | read-only | TruthValue | Standard MIB values. | Whether there are too many neighbors. | As per the MIB. |

IldpV2RemManAddrTable

About this table

Use this table to obtain neighbor management address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, IldpV2RemManAddrSubtype, and IldpV2RemManAddr.

The table OID is 1.3.111.2.802.1.1.13.1.4.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------|----------------------|--|-----------------|
| IldpV2RemManAddrSubtype (1.3.111.2.802.1.1.13.1.4.2.1.1) | not-accessible | AddressFamilyNumbers | Standard MIB values. | Management address subtype. | As per the MIB. |
| IldpV2RemManAddr (1.3.111.2.802.1.1.13.1.4.2.1.2) | not-accessible | IldpV2ManAddresses | OCTET STRING (1..31) | Management address. | As per the MIB. |
| IldpV2RemManAddrIfSubtype (1.3.111.2.802.1.1.13.1.4.2.1.3) | read-only | IldpV2ManAddrIfSubtype | Standard MIB values. | The enumeration value that identifies the interface numbering method used for defining the interface number associated with the remote system. | As per the MIB. |
| IldpV2RemManAddrIfId (1.3.111.2.802.1.1.13.1.4.2.1.4) | read-only | Unsigned32 | Standard MIB values. | Index of the interface associated with the management address. | As per the MIB. |
| IldpV2RemManAddrOID (1.3.111.2.802.1.1.13.1.4.2.1.5) | read-only | OBJECT IDENTIFIER | Standard MIB values. | The OID value used to identify the type of hardware component or protocol entity associated with the management address advertised by the remote system agent. | Not supported |

IldpV2RemUnknownTLVTable

About this table

Use this table to display the unrecognized TLVs received from neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, and IldpV2RemUnknownTLVType.

The table OID is 1.3.111.2.802.1.1.13.1.4.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--------------------------|-------------|-----------------|
| IldpV2RemUnknownTLVType (1.3.111.2.802.1.1.13.1.4.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (9..126) | TLV type. | As per the MIB. |
| IldpV2RemUnknownTLVInfo (1.3.111.2.802.1.1.13.1.4.3.1.2) | read-only | OCTET STRING | OCTET STRING (0..511) | TLV string. | As per the MIB. |

IldpV2RemOrgDefInfoTable

About this table

Use this table to display the neighbor organizationally defined information not recognized by the local system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are IldpV2RemTimeMark, IldpV2RemLocalIfIndex, IldpV2RemLocalDestMACAddress, IldpV2RemIndex, IldpV2RemOrgDefInfoOUI, IldpV2RemOrgDefInfoSubtype, and IldpV2RemOrgDefInfoIndex.

The table OID is 1.3.111.2.802.1.1.13.1.4.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------------------------|--|-----------------|
| IldpV2RemOrgDefInfoOUI (1.3.111.2.802.1.1.13.1.4.4.1.1) | not-accessible | OCTET STRING | OCTET STRING (3) | Organizationally Unique Identifier (OUI). | As per the MIB. |
| IldpV2RemOrgDefInfoSubtype (1.3.111.2.802.1.1.13.1.4.4.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..255) | Subtype of the organizationally defined information. | As per the MIB. |
| IldpV2RemOrgDefInfoIndex (1.3.111.2.802.1.1.13.1.4.4.1.3) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Index of the organizationally defined information. | As per the MIB. |

| | | | | | |
|--|-----------|--------------|-----------------------|---------------------------------------|-----------------|
| IldpV2RemOrgDef Info (1.3.111.2.802.1.1.13.1.4.4.1.4) | read-only | OCTET STRING | OCTET STRING (0..507) | Organizationally defined information. | As per the MIB. |
|--|-----------|--------------|-----------------------|---------------------------------------|-----------------|

Notifications

IldpV2RemTablesChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|------------------|---------------|----------|-----------------------|----------------|
| 1.3.111.2.802.1.1.13.0.0.1 | Neighbor events. | Informational | - | - | OFF |

Description

This notification is generated when the value of the IldpV2StatsRemTableLastChangeTime object changes. You can set the notification transmission interval by configuring the IldpV2NotificationInterval object.

Status control

ON

CLI: Use the `lldp notification remote-change enable` command.

MIB: Set the IldpV2PortConfigNotificationEnable object to true(1).

OFF

CLI: Use the `undo lldp notification remote-change enable` command.

MIB: Set the IldpV2PortConfigNotificationEnable object to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------|-------|--------------------|----------------------|
| IldpV2StatsRemTablesInserts (1.3.111.2.802.1.1.13.1.2.2) | Neighbor creation. | No | ZeroBasedCounter32 | Standard MIB values. |
| IldpV2StatsRemTablesDeletes (1.3.111.2.802.1.1.13.1.2.3) | Neighbor deletion. | No | ZeroBasedCounter32 | Standard MIB values. |
| IldpV2StatsRemTablesDrops (1.3.111.2.802.1.1.13.1.2.4) | Neighbor discard. | No | ZeroBasedCounter32 | Standard MIB values. |
| IldpV2StatsRemTablesAgeouts (1.3.111.2.802.1.1.13.1.2.5) | Neighbor ageout. | No | ZeroBasedCounter32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the topology changes are as expected.

If you cannot resolve the issue, contact H3C Support.

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MAU-MIB

About this MIB

This MIB is defined in RFC 3636 and contains interface media attachment unit (MAU) information.

The document might not be updated in time. For the latest detailed information, see the official document at <https://www.iana.org/assignments/ianamau-mib/ianamau-mib>.

MIB file name

rfc3636-mau.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).snmpDot3MauMgt(26)

Tabular objects

ifMauTable

About this table

Use this table to obtain the interface MAU state.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifMauIfIndex and ifMauIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------|---------------------------|---|-----------------|
| ifMauIfIndex (1.3.6.1.2.1.26.2.1.1) | read-only | InterfaceIndex | Standard MIB values. | Index of the interface in this entry. | As per the MIB. |
| ifMauIndex (1.3.6.1.2.1.26.2.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Interface MAU index. | As per the MIB. |
| ifMauType (1.3.6.1.2.1.26.2.1.3) | read-only | AutonomousType | Standard MIB values. | Interface MAU operation type. The value (1) indicates autonegotiation. The value (2) indicates autonegotiation is not enabled or applied on an interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|--|---|------------------------------|
| ifMauStatus (1.3.6.1.2.1.26.2.1.1.4) | read-write | INTEGER | other(1), unknown(2), operational(3), standby(4), shutdown(5), reset(6) | Current state of the interface MAU. | The object can only be read. |
| ifMauMediaAvailable (1.3.6.1.2.1.26.2.1.1.5) | read-only | INTEGER | other(1), unknown(2), available(3), notAvailable(4), remoteFault(5), invalidSignal(6), remoteJabber(7), remoteLinkLoss(8), remoteTest(9), offline(10), autoNegError(11), pmdLinkFault(12), wisFrameLoss(13), , wisSignalLoss(14), , pcsLinkFault(15), excessiveBER(16), , dxsLinkFault(17), pxsLinkFault(18) | Current availability state of the interface MAU. | As per the MIB. |
| ifMauMediaAvailableStateExits (1.3.6.1.2.1.26.2.1.1.6) | read-only | Counter32 | Standard MIB values. | Number of switchovers from state available(3) to another state on an interface MAU. | As per the MIB. |
| ifMauJabberState (1.3.6.1.2.1.26.2.1.1.7) | read-only | INTEGER | other(1), unknown(2), noJabber(3), jabbering(4) | Jabber state of an interface MAU. | As per the MIB. |
| ifMauJabberingStateEnters (1.3.6.1.2.1.26.2.1.1.8) | read-only | Counter32 | Standard MIB values. | Number of the jabber state switchovers to the jabbering(4) state on an interface MAU. | As per the MIB. |
| ifMauFalseCarriers (1.3.6.1.2.1.26.2.1.1.9) | read-only | Counter32 | Standard MIB values. | Number of false carrier events on an interface MAU. | As per the MIB. |
| ifMauTypeList (1.3.6.1.2.1.26.2.1.1.10) | read-only | Integer32 | Standard MIB values. | Interface MAU type list (as a best practice, do not use this object). | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|--|---|------------------------------|
| ifMauDefaultType (1.3.6.1.2.1.26.2.1.11) | read-write | AutonomousType | Standard MIB values. | Default interface MAU type. | The object can only be read. |
| ifMauAutoNegSupported (1.3.6.1.2.1.26.2.1.12) | read-only | TruthValue | true(1), false(2) | Whether an interface MAU supports autonegotiation. | As per the MIB. |
| ifMauTypeListBits (1.3.6.1.2.1.26.2.1.13) | read-only | BITS | bOther(0), bAU(1), b10base5(2), bFoir(3), b10base2(4), b10baseT(5), b10baseFP(6), b10baseFB(7), b10baseFL(8), b10broad36(9), b10baseTHD(10), b10baseTFD(11), b10baseFLHD(12), , b10baseFLFD(13), , b100baseT4(14), b100baseTXHD(15), b100baseTXFD(16), b100baseFXHD(17), b100baseFXFD(18), b100baseT2HD(19), b100baseT2FD(20), b1000baseXHD(21), b1000baseXFD(22), b1000baseLXHD(23), b1000baseLXFD(24), b1000baseSXHD(25), b1000baseSXFD(26), b1000baseCXHD(27), b1000baseCXFD(28), b1000baseTHD(29) | Set of possible IEEE 802.3 types that the MAU could be. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|---|-------------|----------------|
| | | | 9), b1000baseTFD(30), b10GbaseX(31), b10GbaseLX4(32), , b10GbaseR(33), b10GbaseER(34), b10GbaseLR(35), b10GbaseSR(36), b10GbaseW(37), b10GbaseEW(38), , b10GbaseLW(39), b10GbaseSW(40), , -- new since RFC 3636 b10GbaseCX4(41), b2BaseTL(42), b10PassTS(43), b100BaseBX10D(44), b100BaseBX10U(45), b100BaseLX10(46), b1000BaseBX10D(47), b1000BaseBX10U(48), b1000BaseLX10(49), b1000BasePX10D(50), b1000BasePX10U(51), b1000BasePX20D(52), b1000BasePX20U(53), b10GbaseT(54), b10GbaseLRM(55), b1000baseKX(56), , b10GbaseKX4(57), , b10GbaseKR(58), b10G1GbasePRXD1(59), b10G1GbasePRXD2(60), | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|---|-------------|----------------|
| | | | b10G1GbasePRX D3(61), b10G1GbasePRX U1(62), b10G1GbasePRX U2(63), b10G1GbasePRX U3(64), b10GbasePRD1(6 5), b10GbasePRD2(6 6), b10GbasePRD3(6 7), b10GbasePRU1(6 8), b10GbasePRU3(6 9), b40GbaseKR4(70), b40GbaseCR4(71), b40GbaseSR4(72), b40GbaseFR(73), b40GbaseLR4(74) , b100GbaseCR10(75), b100GbaseSR10(76), b100GbaseLR4(7 7), b100GbaseER4(7 8), b1000baseT1(79), b1000basePX30D (80), b1000basePX30U (81), b1000basePX40D (82), b1000basePX40U (83), b10G1GbasePRX D4(84), b10G1GbasePRX U4(85), b10GbasePRD4(8 6), b10GbasePRU4(8 7), b25GbaseCR(88), b25GbaseCRS(89) , | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | b25GbaseKR(90), b25GbaseKRS(91), b25GbaseR(92), b25GbaseSR(93), b25GbaseT(94), b40GbaseER4(95), b40GbaseR(96), b40GbaseT(97), b100GbaseCR4(98), b100GbaseKR4(99), b100GbaseKP4(100), b100GbaseR(101), ', b100GbaseSR4(102), b2p5GbaseT(103), ', b5GbaseT(104), b100baseT1(105), b1000baseRHA(106), b1000baseRHB(107), b1000baseRHC(108), b2p5GbaseKX(109), b2p5GbaseX(110), ', b5GbaseKR(111), b5GbaseR(112), b10GpassXR(113), b25GbaseLR(114), ', b25GbaseER(115), b50GbaseR(116), b50GbaseCR(117), b50GbaseKR(118), b50GbaseSR(119), b50GbaseFR(120), b50GbaseLR(121), ', b50GbaseER(122) | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| | | |), b100GbaseCR2(123), b100GbaseKR2(124), b100GbaseSR2(125), b100GbaseDR(126), b200GbaseR(127), , b200GbaseDR4(128), b200GbaseFR4(129), b200GbaseLR4(130), b200GbaseCR4(131), b200GbaseKR4(132), b200GbaseSR4(133), b200GbaseER4(134), b400GbaseR(135), , b400GbaseSR16(136), b400GbaseDR4(137), b400GbaseFR8(138), b400GbaseLR8(139), b400GbaseER8(140), b10baseT1L(141), b10baseT1SHD(142), b10baseT1SMD(143), b10baseT1SFD(144), | | |
| ifMauHCFALSECarriers (1.3.6.1.2.1.26.2.1.1.14) | read-only | Counter64 | Standard MIB values. | Number of false carrier events on an interface MAU. A 64-bit counter is used to avoid counter rollover. | As per the MIB. |

ifJackTable

About this table

Use this table to obtain the external jack information of an interface MAU.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifMauIfIndex, ifMauIndex, and ifJackIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|------------------------------|---|-----------------|
| ifJackIndex (1.3.6.1.2.1.26.2.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of the external jack of an interface MAU. | As per the MIB. |
| ifJackType (1.3.6.1.2.1.26.2.2.1.2) | read-only | JackType | Standard MIB values. | Type of the external jack of an interface MAU. | As per the MIB. |

ifMauAutoNegTable

About this table

Use this table to obtain the autonegotiation information of an interface MAU.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifMauIfIndex and ifMauIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|---|--|------------------------------|
| ifMauAutoNegAd minStatus (1.3.6.1.2.1.26.5.1.1.1) | read-write | INTEGER | enabled(1), disabled(2) | Autonegotiation enabling state of an interface MAU. | The object can only be read. |
| ifMauAutoNegRe moteSignaling (1.3.6.1.2.1.26.5.1.1.2) | read-only | INTEGER | detected(1), notdetected(2) | Whether the remote end of the link is using autonegotiation signaling. | As per the MIB. |
| ifMauAutoNegCon fig (1.3.6.1.2.1.26.5.1.1.4) | read-only | INTEGER | other(1), configuring(2), complete(3), disabled(4), parallelDetectFail(5) | Current autonegotiation state of an interface MAU. | As per the MIB. |
| ifMauAutoNegCap ability (1.3.6.1.2.1.26.5.1.1.5) | read-only | Integer32 | Standard MIB values. | Autonegotiation type list of an interface MAU. | As per the MIB. |
| ifMauAutoNegCap Advertised | read-write | Integer32 | Standard MIB values. | Autonegotiation type list advertised | The object can only be read. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|--|--|------------------------------|
| (1.3.6.1.2.1.26.5.1.1.6) | | | | by an interface MAU. | |
| ifMauAutoNegCapReceived (1.3.6.1.2.1.26.5.1.1.7) | read-only | Integer32 | Standard MIB values. | Received autonegotiation type list from a remote autonegotiation entity. | As per the MIB. |
| ifMauAutoNegRestart (1.3.6.1.2.1.26.5.1.1.8) | read-write | INTEGER | restart(1), norestart(2) | Whether autonegotiation will be restarted on an interface MAU. | The object can only be read. |
| ifMauAutoNegCapabilityBits (1.3.6.1.2.1.26.5.1.1.9) | read-only | BITS | bOther(0), b10baseT(1), b10baseTFD(2), b100baseT4(3), b100baseTX(4), b100baseTXFD(5), , b100baseT2(6), b100baseT2FD(7), , bfxPause(8), bfxAPause(9), bfxSPause(10), bfxBPAuse(11), b1000baseX(12), b1000baseXFD(13), b1000baseT(14), b1000baseTFD(15), b10GbaseT(16), b1000baseKX(17), , b10GbaseKX4(18), , b10GbaseKR(19), b40GbaseKR4(20), b40GbaseCR4(21), , b100GbaseCR10(22), b1000baseT1(23), b25GbaseRS(24), b25GbaseR(25), bRSFEC25Greq(26), bBaseFEC25Greq(27), b25GbaseT(28), b40GbaseT(29), | Set of capabilities of the local autonegotiation entity. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------|--|---|------------------------------|
| | | | b100GbaseCR4(30), b100GbaseKR4(31), b100GbaseKP4(32), bForceMS(33), b2p5GbaseT(34), b5GBaseT(35), b2p5GbaseKX(36), b5GbaseKR(37), b50GbaseR(38), b100GbaseR2(39), ', b200GbaseR4(40), ', b10baseT1L(41), b10baseT1S(42), | | |
| ifMauAutoNegCap AdvertisedBits (1.3.6.1.2.1.26.5.1.1.10) | read-write | BITS | bOther(0), b10baseT(1), b10baseTFD(2), b100baseT4(3), b100baseTX(4), b100baseTXFD(5), ', b100baseT2(6), b100baseT2FD(7), ', bFdxPause(8), bFdxAPause(9), bFdxSPause(10), bFdxBPAuse(11), b1000baseX(12), b1000baseXFD(13), b1000baseT(14), b1000baseTFD(15), b10GbaseT(16), b1000baseKX(17), ', b10GbaseKX4(18), b10GbaseKR(19), b40GbaseKR4(20), ', b40GbaseCR4(21), ', b100GbaseCR10(22), b1000baseT1(23), | Set of capabilities advertised by the local autonegotiation entity. | The object can only be read. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|---|--|-----------------|
| | | | b25GbaseRS(24), b25GbaseR(25), bRSFEC25Greq(26), bBaseFEC25Greq(27), b25GbaseT(28), b40GbaseT(29), b100GbaseCR4(30), b100GbaseKR4(31), b100GbaseKP4(32), bForceMS(33), b2p5GbaseT(34), b5GBaseT(35), b2p5GbaseKX(36), b5GbaseKR(37), b50GbaseR(38), b100GbaseR2(39), b200GbaseR4(40), b10baseT1L(41), b10baseT1S(42), | | |
| ifMauAutoNegCap ReceivedBits (1.3.6.1.2.1.26.5.1.1.11) | read-only | BITS | bOther(0), b10baseT(1), b10baseTFD(2), b100baseT4(3), b100baseTX(4), b100baseTXFD(5), b100baseT2(6), b100baseT2FD(7), bFdxPause(8), bFdxAPause(9), bFdxSPause(10), bFdxBPause(11), b1000baseX(12), b1000baseXFD(13), b1000baseT(14), b1000baseTFD(15), b10GbaseT(16), b1000baseKX(17), b10GbaseKX4(18), | Set of capabilities received from the remote autonegotiation entity. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|--|------------------------------|
| | | | b10GbaseKR(19), b40GbaseKR4(20), b40GbaseCR4(21), b100GbaseCR10(22), b1000baseT1(23), b25GbaseRS(24), b25GbaseR(25), bRSFEC25Greq(26), bBaseFEC25Greq(27), b25GbaseT(28), b40GbaseT(29), b100GbaseCR4(30), b100GbaseKR4(31), b100GbaseKP4(32), bForceMS(33), b2p5GbaseT(34), b5GBaseT(35), b2p5GbaseKX(36), b5GbaseKR(37), b50GbaseR(38), b100GbaseR2(39), b200GbaseR4(40), b10baseT1L(41), b10baseT1S(42), | | |
| ifMauAutoNegRemoteFaultAdvertised (1.3.6.1.2.1.26.5.1.1.12) | read-write | INTEGER | noError(1), offline(2), linkFailure(3), autoNegError(4) | Local fault indications that this MAU has detected and will advertise at the next autonegotiation interaction. | The object can only be read. |
| ifMauAutoNegRemoteFaultReceived (1.3.6.1.2.1.26.5.1.1.13) | read-only | INTEGER | noError(1), offline(2), linkFailure(3), autoNegError(4) | Fault indications received by the local end from the far end. | As per the MIB. |

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P-BRIDGE-MIB

About this MIB

Use this table to manage the priorities and multicast filtering defined in IEEE 802.1D-1998.

MIB file name

Rfc4363-pbridge.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2().dod1dBridge(17).pBridgeMIB(6)

Scalar objects

OID of this table is: 1.3.6.1.2.1.17.6.1.1

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|--|--|-----------------|
| dot1dDeviceCapabilities (1.3.6.1.2.1.17.6.1.1) | read-only | BITS | dot1dExtendedFilteringServices(0), dot1dTrafficClasses(1), dot1qStaticEntryIndividualPort(2), dot1qVLCapable(3), dot1qSVLCapable(4), dot1qHybridCapable(5), dot1qConfigurablePvidTagging(6), dot1dLocalVlanCapable(7) | Device capabilities. | As per the MIB. |
| dot1dTrafficClassesEnabled (1.3.6.1.2.1.17.6.1.1.2) | read-write | TruthValue | true(1), false(2) | Whether traffic classification is supported. | Read-only. |
| dot1dGmrpStatus (1.3.6.1.2.1.17.6.1.1.3) | read-write | EnabledStatus | enabled(1), disabled(2) | GMRP enabling state. | Not supported |

Tabular objects

dot1dPortCapabilitiesTable

OID of this table is: 1.3.6.1.2.1.17.6.1.1.4

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------|--|--------------------|-----------------|
| dot1dPortCapabilities (1.3.6.1.2.1.17.6.1.1.4.1.1) | read-only | BITS | dot1qDot1qTagging(0) , dot1qConfigurableAcceptableFrameTypes(1) , dot1qIngressFiltering(2) | Port capabilities. | As per the MIB. |

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Q-BRIDGE-MIB

About this MIB

Use this MIB to manage Virtual Bridged Local Area Networks, as defined by IEEE 802.1Q-2003.

MIB file name

rfc4363-qbridge.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dot1dBridge(17).qBridgeMIB(7)

Scalar objects

dot1qVlanNumDeletes

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|----------------|
| dot1qVlanNumDeletes (1.3.6.1.2.1.17.7.1.4.1) | read-only | Counter32 | Standard MIB values. | The number of times a VLAN entry has been deleted from the dot1qVlanCurrentTable (for any reason). | Not supported |

dot1qNextFreeLocalVlanIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--------------------------------|--|----------------|
| dot1qNextFreeLocalVlanIndex (1.3.6.1.2.1.17.7.1.4.4) | read-only | Integer32 | Integer32 (0 4096..2147483647) | The next available value for dot1qVlanIndex of a local VLAN entry in dot1qVlanStaticTable. | Not supported |

dot1qConstraintSetDefault

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|---|----------------|
| dot1qConstraintSetDefault (1.3.6.1.2.1.17.7.1.4.9) | read-write | Integer32 | Integer32 (0..65535) | The identity of the constraint set to which a VLAN belongs, if there is not an explicit entry for that VLAN in dot1qLearningConstraintsTable. | Not supported |

dot1qConstraintTypeDefault

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-----------------------------|---|-----------------------------------|
| dot1qConstraintTypeDefault (1.3.6.1.2.1.17.7.1.4.10) | read-write | INTEGER | independent(1) shared(2) | The type of constraint set to which a VLAN belongs. | Supports only the read operation. |

dot1qVlanVersionNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|-------------|--|-----------------|
| dot1qVlanVersionNumber (1.3.6.1.2.1.17.7.1.1.1) | read-only | INTEGER | version1(1) | The version number of IEEE 802.1Q that this device supports. | As per the MIB. |

dot1qMaxVlanId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|----------------------|--|-----------------|
| dot1qMaxVlanId (1.3.6.1.2.1.17.7.1.1.2) | read-only | VlanId | Standard MIB values. | The maximum IEEE 802.1Q VLAN ID that this device supports. | As per the MIB. |

dot1qMaxSupportedVlans

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| dot1qMaxSupportedVlans (1.3.6.1.2.1.17.7.1.1.3) | read-only | Unsigned32 | Standard MIB values. | The maximum number of IEEE 802.1Q VLANs that this device supports. | As per the MIB. |

dot1qNumVlans

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| dot1qNumVlans (1.3.6.1.2.1.17.7.1.1.4) | read-only | Unsigned32 | Standard MIB values. | The current number of IEEE 802.1Q VLANs that are configured in this device. | As per the MIB. |

dot1qGvrpStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|---------------------------|--|----------------|
| dot1qGvrpStatus (1.3.6.1.2.1.17.7.1.1.5) | read-write | EnabledStatus | enabled(1) disabled(2) | The administrative status requested by management for GVRP: <ul style="list-style-type: none">enable(1)—GVRP should be enabled on this device, on all ports for which it has not been specifically disabled.disable(2)—GVRP is disabled on all ports. | Not supported |

Tabular objects

dot1qFdbTable

About this table

Use this table to display configuration and control information for each filtering database currently operating on this device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot1qFdbId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|---|-----------------|
| dot1qFdbId (1.3.6.1.2.1.17.7.1.2.1.1.1) | not-accessible | Unsigned32 | Standard MIB values. | The identity of this filtering database. | As per the MIB. |
| dot1qFdbDynamicCount (1.3.6.1.2.1.17.7.1.2.1.1.2) | read-only | Counter32 | Standard MIB values. | The current number of dynamic entries in this filtering database. | As per the MIB. |

dot1qTpFdbTable

About this table

Use this table to display information about unicast entries for which the device has forwarding and/or filtering information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are dot1qFdbId and dot1qTpFdbAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|---|--|
| dot1qTpFdbAddress (1.3.6.1.2.1.17.7.1.2.2.1.1) | not-accessible | MacAddress | Standard MIB values. | A unicast MAC address for which the device has forwarding and/or filtering information. | As per the MIB. |
| dot1qTpFdbPort (1.3.6.1.2.1.17.7.1.2.2.1.2) | read-only | Integer32 | Integer32 (0..65535) | The port number of the port on which a frame having a source address equal to the value of the corresponding instance of dot1qTpFdbAddress has been seen. A value of 0 indicates that the port number has not been learned but that the device does have some forwarding/filtering information about this address. | As per the MIB. |
| dot1qTpFdbStatus (1.3.6.1.2.1.17.7.1.2.2.1.3) | read-only | INTEGER | other(1) invalid(2) learned(3) self(4) mgmt(5) | The status of this entry. | Manually added dynamic MAC address entries are counted as learned MAC address entries. |

dot1qTpGroupTable

About this table

Use this table to obtain filtering information for VLANs configured into the bridge by (local or network) management, or learned dynamically.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are dot1qVlanIndex and dot1qTpGroupAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|--|-----------------|
| dot1qTpGroupAddresses (1.3.6.1.2.1.17.7.1.2.3.1.1) | not-accessible | MacAddress | Standard MIB values. | The destination group MAC address in a frame to which this entry's filtering information applies. | As per the MIB. |
| dot1qTpGroupEgressPorts (1.3.6.1.2.1.17.7.1.2.3.1.2) | read-only | PortList | Standard MIB values. | The complete set of ports, in this VLAN, to which frames destined for this Group MAC address are currently being explicitly forwarded. | As per the MIB. |
| dot1qTpGroupLearnt (1.3.6.1.2.1.17.7.1.2.3.1.3) | read-only | PortList | Standard MIB values. | The subset of ports in dot1qTpGroupEgressPorts that were learned by GMRP or some other dynamic mechanism, in this filtering database. | As per the MIB. |

dot1qForwardAllTable

About this table

Use this table to obtain forwarding information for each VLAN, specifying the set of ports to which forwarding of all multicasts applies.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is dot1qVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------|----------------------|--|----------------|
| dot1qForwardAllPorts (1.3.6.1.2.1.17.7.1.2.4.1.1) | read-only | PortList | Standard MIB values. | The complete set of ports in this VLAN to which all multicast group-addressed frames are to be forwarded. This includes ports for which this need has been determined dynamically by GMRP, or configured statically by management. | Not supported |
| dot1qForwardAllStaticPorts (1.3.6.1.2.1.17.7.1.2.4.1.2) | read-write | PortList | Standard MIB values. | The set of ports configured by management in this VLAN to which all multicast group-addressed frames are to be forwarded. | Not supported |
| dot1qForwardAllForbiddenPorts | read-write | PortList | Standard MIB | The set of ports configured by management in this VLAN for which the Service | Not supported |

| | | | | | |
|------------------------------|--|--|---------|---|--|
| (1.3.6.1.2.1.17.7.1.2.4.1.3) | | | values. | Requirement attribute Forward All Multicast Groups may not be dynamically registered by GMRP. | |
|------------------------------|--|--|---------|---|--|

dot1qForwardUnregisteredTable

About this table

Use this table to obtain forwarding information for each VLAN, specifying the set of ports to which forwarding of multicast group-addressed frames for which no more specific forwarding information applies.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is dot1qVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------|----------------------|--|----------------|
| dot1qForwardUnregistered Ports (1.3.6.1.2.1.17.7.1.2.5.1.1) | read-only | PortList | Standard MIB values. | The complete set of ports in this VLAN to which multicast group-addressed frames for which there is no more specific forwarding information will be forwarded. This includes ports for which this need has been determined dynamically by GMRP, or configured statically by management. | Not supported |
| dot1qForwardUnregistered StaticPorts (1.3.6.1.2.1.17.7.1.2.5.1.2) | read-write | PortList | Standard MIB values. | The set of ports configured by management, in this VLAN, to which multicast group-addressed frames for which there is no more specific forwarding information. | Not supported |
| dot1qForwardUnregistered ForbiddenPorts (1.3.6.1.2.1.17.7.1.2.5.1.3) | read-write | PortList | Standard MIB values. | The set of ports configured by management in this VLAN for which the Service Requirement attribute Forward Unregistered Multicast Groups may not be dynamically registered by GMRP. | Not supported |

dot1qStaticUnicastTable

About this table

Use this table to obtain filtering information for unicast MAC addresses for each filtering database.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1qFdbId, dot1qStaticUnicastAddress, and dot1qStaticUnicastReceivePort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|--|----------------|
| dot1qStaticUnicastAddress (1.3.6.1.2.1.17.7.1.3.1.1.1) | not-accessible | MacAddress | Standard MIB values. | The destination MAC address in a frame to which this entry's filtering information applies. | Not supported |
| dot1qStaticUnicastReceivePort (1.3.6.1.2.1.17.7.1.3.1.1.2) | not-accessible | Integer32 | Integer32 (0..65535) | The port number of the port from which a frame must be received in order for this entry's filtering information to apply. A value of 0 indicates that this entry applies on all ports of the device for which there is no other applicable entry. | Not supported |
| dot1qStaticUnicastAllowedToGoTo (1.3.6.1.2.1.17.7.1.3.1.1.3) | read-write | PortList | Standard MIB values. | The set of ports for which a frame with a specific unicast address will be flooded in the event that it has not been learned. | Not supported |
| dot1qStaticUnicastStatus (1.3.6.1.2.1.17.7.1.3.1.1.4) | read-write | INTEGER | other(1) invalid(2) permanent(3) deleteOnReset(4) deleteOnTimeout(5) | Status of this entry. | Not supported |

dot1qStaticMulticastTable

About this table

Use this table to obtain filtering information for multicast and broadcast MAC addresses for each VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1qVlanIndex, dot1qStaticMulticastAddress, and dot1qStaticMulticastReceivePort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--|--|----------------|
| dot1qStaticMulticastAddress (1.3.6.1.2.1.17.7.1.3.2.1.1) | not-accessible | MacAddress | Standard MIB values. | The destination MAC address in a frame to which this entry's filtering information applies. | Not supported |
| dot1qStaticMulticastReceivePort (1.3.6.1.2.1.17.7.1.3.2.1.2) | not-accessible | Integer32 | Integer32 (0..65535) | The port number of the port from which a frame must be received in order for this entry's filtering information to apply. A value of 0 indicates that this entry applies on all ports of the device for which there is no other applicable entry. | Not supported |
| dot1qStaticMulticastStaticEgressPorts (1.3.6.1.2.1.17.7.1.3.2.1.3) | read-write | PortList | Standard MIB values. | The set of ports to which frames received from a specific port and destined for a specific multicast or broadcast MAC address must be forwarded. | Not supported |
| dot1qStaticMulticastForbiddenEgressPorts (1.3.6.1.2.1.17.7.1.3.2.1.4) | read-write | PortList | Standard MIB values. | The set of ports to which frames received from a specific port and destined for a specific multicast or broadcast MAC address must not be forwarded. | Not supported |
| dot1qStaticMulticastStatus (1.3.6.1.2.1.17.7.1.3.2.1.5) | read-write | INTEGER | other(1) invalid(2) permanent(3) deleteOnReset(4) deleteOnTimeout(5) | Status of this entry. | Not supported |

dot1qVlanCurrentTable

About this table

Use this table to obtain current configuration information for each VLAN currently configured into the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are dot1qVlanTimeMark and dot1qVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|---|-----------------|
| dot1qVlanTimeMark (1.3.6.1.2.1.17.7.1.4.2.1.1) | not-accessible | TimeFilter | Standard MIB values. | A time filter for this entry. | As per the MIB. |
| dot1qVlanIndex (1.3.6.1.2.1.17.7.1.4.2.1.2) | not-accessible | VlanIndex | Standard MIB values. | The VLAN-ID or other identifier referring to this VLAN. | As per the MIB. |
| dot1qVlanFdbld (1.3.6.1.2.1.17.7.1.4.2.1.3) | read-only | Unsigned32 | Standard MIB values. | The filtering database used by this VLAN. | As per the MIB. |
| dot1qVlanCurrentEgressPorts (1.3.6.1.2.1.17.7.1.4.2.1.4) | read-only | PortList | Standard MIB values. | The set of ports that are transmitting traffic for this VLAN as either tagged or untagged frames. | As per the MIB. |
| dot1qVlanCurrentUntaggedPorts (1.3.6.1.2.1.17.7.1.4.2.1.5) | read-only | PortList | Standard MIB values. | The set of ports that are transmitting traffic for this VLAN as untagged frames. | As per the MIB. |
| dot1qVlanStatus (1.3.6.1.2.1.17.7.1.4.2.1.6) | read-only | INTEGER | other(1) permanent (2) dynamicGvrp(3) | Status of this VLAN. | As per the MIB. |
| dot1qVlanCreationTime (1.3.6.1.2.1.17.7.1.4.2.1.7) | read-only | TimeTicks | Standard MIB values. | Time when this VLAN was created. | As per the MIB. |

dot1qVlanStaticTable

About this table

Use this table to obtain static configuration information for each VLAN configured into the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|---------------|-----------|
| Supported | Not supported | Not supported | Supported |

Columns

The table index is dot1qVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|-------------------------|--|---|
| dot1qVlanStaticName (1.3.6.1.2.1.17.7.1.4.3.1.1) | read-create | SnmpAdminString | OCTET STRING (0..32) | VLAN name. | If the name string is too long or empty, a default name in the vlan <i>VLAN ID</i> format applies. |
| dot1qVlanStaticEgressPorts (1.3.6.1.2.1.17.7.1.4.3.1.2) | read-create | PortList | Standard MIB values. | The set of ports that are permanently assigned to the egress list for this VLAN by management. | As per the MIB. |
| dot1qVlanForbiddenEgressPorts (1.3.6.1.2.1.17.7.1.4.3.1.3) | read-create | PortList | Standard MIB values. | The set of ports that are prohibited by management from being included in the egress list for this VLAN. | Not supported |
| dot1qVlanStaticUntaggedPorts (1.3.6.1.2.1.17.7.1.4.3.1.4) | read-create | PortList | Standard MIB values. | The set of ports that should transmit egress packets for this VLAN as untagged. | As per the MIB. |
| dot1qVlanStaticRowStatus (1.3.6.1.2.1.17.7.1.4.3.1.5) | read-create | RowStatus | Standard MIB values. | Status of this VLAN. | Supports only active(1), createAndGo(4) and destroy(6). You cannot delete the default VLAN. |

dot1qPortVlanTable

About this table

Use this table to obtain per-port control and status information for VLAN configuration in the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|--|---|
| dot1qPvid (1.3.6.1.2.1.17.7.1.4.5.1.1) | read-write | VlanIndex | Standard MIB values. | The PVID, the VLAN ID assigned to untagged frames received on this port. | Does not support the write operation on an access port. |

| | | | | | |
|---|------------|---------------|---------------------------------------|--|-----------------------------------|
| dot1qPortAcceptableFrameTypes (1.3.6.1.2.1.17.7.1.4.5.1.2) | read-write | INTEGER | admitAll(1) admitOnlyVlanTagged(2) | Packet types that this port can receive: <ul style="list-style-type: none"> admitOnlyVlanTagged(2)—Drop untagged packets. admitAll(1)—Accept untagged packets and assign them the PVID. | Supports only the read operation. |
| dot1qPortIngressFiltering (1.3.6.1.2.1.17.7.1.4.5.1.3) | read-write | TruthValue | true(1), false(2) | When this is true(1), the device will discard incoming frames for VLANs that do not include this port in its member set. When false(2), the port will accept all incoming frames. | Supports only the read operation. |
| dot1qPortGvrpStatus (1.3.6.1.2.1.17.7.1.4.5.1.4) | read-write | EnabledStatus | enabled(1), disabled(2) | The state of GVRP operation on this port: <ul style="list-style-type: none"> enabled(1)—GVRP is enabled. disabled(2)—GVRP is disabled. This port drops any incoming GVRP frames. | Not supported |
| dot1qPortGvrpFailedRegistrations (1.3.6.1.2.1.17.7.1.4.5.1.5) | read-only | Counter32 | Standard MIB values. | The total number of failed GVRP registrations, for any reason, on this port. | Not supported |
| dot1qPortGvrpLastPduOrigin (1.3.6.1.2.1.17.7.1.4.5.1.6) | read-only | MacAddresses | Standard MIB values. | The source MAC address of the last GVRP message received on this port. | Not supported |
| dot1qPortRestrictedVlanRegistration (1.3.6.1.2.1.17.7.1.4.5.1.7) | read-write | TruthValue | true(1), false(2) | The state of restricted vlan registration on this port. If the value of this object is true(1), then creation of a new dynamic VLAN entry is permitted only if there is a static vlan registration entry for the VLAN concerned, in which the registrar administrative control value for this port is normal registration. | Not supported |

dot1qPortVlanStatisticsTable

About this table

Use this table to obtain per-port, per-VLAN statistics for traffic received. Separate objects are provided for both the most-significant and least-significant bits of statistics counters for ports that are associated with this transparent bridge. The most-significant bit objects are only required on high-capacity interfaces, as defined in the conformance clauses for these objects. This mechanism is provided as a way to read 64-bit counters for agents that support only SNMPv1.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1dBasePort and dot1qVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|----------------|
| dot1qTpVlanPortInFrames (1.3.6.1.2.1.17.7.1.4.6.1.1) | read-only | Counter32 | Standard MIB values. | The number of valid frames received by this port from its segment that were classified as belonging to this VLAN. | Not supported |
| dot1qTpVlanPortOutFrames (1.3.6.1.2.1.17.7.1.4.6.1.2) | read-only | Counter32 | Standard MIB values. | The number of valid frames transmitted by this port to its segment from the local forwarding process for this VLAN. | Not supported |
| dot1qTpVlanPortInDiscards (1.3.6.1.2.1.17.7.1.4.6.1.3) | read-only | Counter32 | Standard MIB values. | The number of valid frames received by this port from its segment that were classified as belonging to this VLAN and that were discarded due to VLAN-related reasons. | Not supported |
| dot1qTpVlanPortInOverflowFrames (1.3.6.1.2.1.17.7.1.4.6.1.4) | read-only | Counter32 | Standard MIB values. | The number of times the associated dot1qTpVlanPortInFrames counter has overflowed. | Not supported |
| dot1qTpVlanPortOutOverflowFrames (1.3.6.1.2.1.17.7.1.4.6.1.5) | read-only | Counter32 | Standard MIB values. | The number of times the associated dot1qTpVlanPortOutFrames counter has overflowed. | Not supported |
| dot1qTpVlanPortInOverflowDiscards (1.3.6.1.2.1.17.7.1.4.6.1.6) | read-only | Counter32 | Standard MIB values. | The number of times the associated dot1qTpVlanPortInDiscards counter has overflowed. | Not supported |

dot1qPortVlanHCStatisticsTable

About this table

Use this table to obtain per-port, per-VLAN statistics for traffic on high-capacity interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1dBasePort and dot1qVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|----------------|
| dot1qTpVlanPortHCInFrames (1.3.6.1.2.1.17.7.1.4.7.1.1) | read-only | Counter64 | Standard MIB values. | The number of valid frames received by this port from its segment that were classified as belonging to this VLAN. | Not supported |
| dot1qTpVlanPortHCOutFrames (1.3.6.1.2.1.17.7.1.4.7.1.2) | read-only | Counter64 | Standard MIB values. | The number of valid frames transmitted by this port to its segment from the local forwarding process for this VLAN. | Not supported |
| dot1qTpVlanPortHCInDiscards (1.3.6.1.2.1.17.7.1.4.7.1.3) | read-only | Counter64 | Standard MIB values. | The number of valid frames received by this port from its segment that were classified as belonging to this VLAN and that were discarded due to VLAN-related reasons. | Not supported |

dot1qLearningConstraintsTable

About this table

Use this table to obtain learning constraints for sets of shared and independent VLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1qConstraintVlan and dot1qConstraintSet.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|----------------------|--|----------------|
| dot1qConstraintVlan (1.3.6.1.2.1.17.7.1.4.8.1.1) | not-accessible | VlanIndex | Standard MIB values. | The index of the row in this table for the VLAN constrained by this entry. | Not supported |
| dot1qConstraintSet | not-accessible | Integer32 | Integer32 | The identity of the | Not supported |

| | | | | | |
|---|-------------|-----------|------------------------------|--|---------------|
| (1.3.6.1.2.1.17.7.1.4.8.1.2) | | | (0..65535) | constraint set to which dot1qConstraintVlan belongs. | |
| dot1qConstraintType (1.3.6.1.2.1.17.7.1.4.8.1.3) | read-create | INTEGER | independent(1), shared(2) | <p>The type of constraint this entry defines:</p> <ul style="list-style-type: none"> independent(1)—The VLAN uses a filtering database independent from all other VLANs in the same set. shared(2)—The VLAN shares the same filtering database as all other VLANs in the same set. | Not supported |
| dot1qConstraintStatus (1.3.6.1.2.1.17.7.1.4.8.1.4) | read-create | RowStatus | Standard MIB values. | Status of this row. | Not supported |

dot1vProtocolGroupTable

About this table

Use this table to obtain mappings from protocol templates to protocol group identifiers used for port-and-protocol-based VLAN classification.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1vProtocolTemplateFrameType and dot1vProtocolTemplateProtocolValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|--|----------------|
| dot1vProtocolTemplateFrameType (1.3.6.1.2.1.17.7.1.5.1.1.1) | not-accessible | INTEGER | ethernet(1) rfc1042(2) snap8021H(3) snapOther(4) llcOther(5) | Data-link encapsulation format. | Not supported |
| dot1vProtocolTemplateProtocolValue (1.3.6.1.2.1.17.7.1.5.1.1.2) | not-accessible | OCTET STRING | OCTET STRING SIZE (2 5) | The identification of the protocol above the data-link layer in a protocol template. | Not supported |
| dot1vProtocolGroupId (1.3.6.1.2.1.17.7.1.5.1.1.3) | read-create | Integer32 | Integer32 (0..2147483647) | A group of protocols that are associated together when assigning a VID to a frame. | Not supported |
| dot1vProtocolGroupRowStatus | read-create | RowStatus | Standard MIB | Status of this row. | Not supported |

| | | | | | |
|------------------------------|--|--|---------|--|--|
| (1.3.6.1.2.1.17.7.1.5.1.1.4) | | | values. | | |
|------------------------------|--|--|---------|--|--|

dot1vProtocolPortTable

About this table

Use this table to obtain VID sets used for port-and-protocol-based VLAN classification.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are dot1dBasePort and dot1vProtocolPortGroupId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|------------------------------|---|----------------|
| dot1vProtocolPortGroupId (1.3.6.1.2.1.17.7.1.5.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | A group of protocols in the protocol group database. | Not supported |
| dot1vProtocolPortGroupVid (1.3.6.1.2.1.17.7.1.5.2.1.2) | read-create | Integer32 | Integer32 (1..4094) | The VID associated with a group of protocols for each port. | Not supported |
| dot1vProtocolPortRowStatus (1.3.6.1.2.1.17.7.1.5.2.1.3) | read-create | RowStatus | Standard MIB values. | Status of this row. | Not supported |

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RBRIDGE-MIB

About this MIB

Use this MIB to manage TRILL-capable RBridges.

MIB file name

rfc6850-rbridge.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).rbridgeMIB(214)

Scalar objects

rbridgeBaseTrillVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| rbridgeBaseTrillVersion (1.3.6.1.2.1.214.1.1.1) | read-only | Unsigned32 | Standard MIB values. | Maximum TRILL version number that this RBridge supports. | As per the MIB. |

rbridgeBaseNumPorts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---|-----------------|
| rbridgeBaseNumPorts (1.3.6.1.2.1.214.1.1.2) | read-only | Unsigned32 | Standard MIB values. | Number of ports controlled by an RBridge. | As per the MIB. |

rbridgeBaseForwardDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|--------------------|--|----------------|
| rbridgeBaseForwardDelay (1.3.6.1.2.1.214.1.1.3) | read-write | Unsigned32 | Unsigned32 (4..30) | Address entry aging time after an appointed forwarder changes. | Not supported |

rbridgeBaseUniMultipathEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|-----------------|
| rbridgeBaseUniMultipathEnable (1.3.6.1.2.1.214.1.1.4) | read-write | TruthValue | true(1), false(2) | Enabling state of unicast TRILL multipathing. true(1) means enabled. | As per the MIB. |

rbridgeBaseMultiMultipathEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|------------------------------|
| rbridgeBaseMultiMultipathEnable (1.3.6.1.2.1.214.1.1.5) | read-write | TruthValue | true(1), false(2) | Enabling state of multdestination TRILL multipathing. true(1) means enabled. | The object can only be read. |

rbridgeBaseAcceptEncapNonadj

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|--|
| rbridgeBaseAcceptEncapNonadj (1.3.6.1.2.1.214.1.1.6) | read-write | TruthValue | true(1), false(2) | Accept TRILL-encapsulated frames from a neighbor with which this RBridge does not have an IS-IS adjacency when the value of this object is true (1). | The object can only be read. The value is fixed at False(2). |

rbridgeBaseNicknameNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|--|---|
| rbridgeBaseNicknameNumber (1.3.6.1.2.1.214.1.1.7) | read-write | Unsigned32 | Unsigned32 (1..256) | Number of nicknames this RBridge should acquire. | The object can only be read. The value is fixed at 1. |

rbridgeDtreePriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------------|---|-----------------|
| rbridgeDtreePriority (1.3.6.1.2.1.214.1.7.1) | Read-write | Unsigned32 | Unsigned32 (1..65535) | Distribution tree root priority for this RBridge. | As per the MIB. |

rbridgeDtreeActiveTrees

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---|-----------------|
| rbridgeDtreeActiveTrees (1.3.6.1.2.1.214.1.7.2) | read-only | Unsigned32 | Standard MIB values. | Total number of trees being computed by all R Bridges in the network. | As per the MIB. |

rbridgeDtreeMaxTrees

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|---------------------------|
| rbridgeDtreeMaxTrees (1.3.6.1.2.1.214.1.7.3) | read-only | Unsigned32 | Standard MIB values. | Maximum number of trees this R Bridge can compute. | The value is fixed at 15. |

rbridgeDtreeDesiredUseTrees

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---|-----------------|
| rbridgeDtreeDesiredUseTrees (1.3.6.1.2.1.214.1.7.4) | read-only | Unsigned32 | Standard MIB values. | Maximum number of trees this R Bridge would like to use for transmission of ingress multi-destination frames. | As per the MIB. |

rbridgeTrillMinMtuDesired

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|----------------------------------|
| rbridgeTrillMinMtuDesired (1.3.6.1.2.1.214.1.8.1) | read-write | Unsigned32 | Standard MIB values. | Desired minimum acceptable inter-RBridge link MTU for the network. | The value range is 512 to 16384. |

rbridgeTrillSz

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|------------|----------------------|---|-----------------|
| rbridgeTrillSz(1.3.6.1.2.1.214.1.8.2) | read-only | Unsigned32 | Standard MIB values. | Minimum acceptable inter-RBridge link size for the network for the proper operation of TRILL IS-IS. | As per the MIB. |

rbridgeTrillMaxMtuProbes

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------|--|----------------|
| rbridgeTrillMaxMtuProbes(1.3.6.1.2.1.214.1.8.3) | read-write | Unsigned32 | Unsigned32 (1..255) | Number of failed MTU-probes before the RBridge concludes that a particular MTU is not supported by a neighbor. | Not supported |

Tabular objects

rbridgeBaseNicknameTable

About this table

Use this table to obtain information about nicknames configured by an operator or learned dynamically by this RBridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is rbridgeBaseNicknameName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-----------------------|--|---|
| rbridgeBaseNicknameName(1.3.6.1.2.1.214.1.1.8.1.1) | not-accessible | RbridgeNickname | Standard MIB values. | 16-bit abbreviation for an RBridge's 48-bit IS-IS system ID. | As per the MIB. |
| rbridgeBaseNicknamePriority(1.3.6.1.2.1.214.1.1.8.1.2) | read-create | Unsigned32 | Unsigned32 (0..255) | RBridge's priority to hold this nickname. | In an automatically generated entry, this object cannot be modified. |
| rbridgeBaseNicknameDtrPriority(1.3.6.1.2.1.214.1.1.8.1.3) | read-create | Unsigned32 | Unsigned32 (1..65535) | Distribution tree root priority for this nickname. | In an automatically generated entry, this object cannot be modified. |
| rbridgeBaseNicknameType(1.3.6.1.2.1.214.1.1.8.1.4) | read-only | INTEGER | static(1), dynamic(2) | Nickname type. The default is static(1). | As per the MIB. |
| rbridgeBaseNicknameRowStatus(1.3.6.1.2.1.214.1.1.8.1.5) | read-create | RowStatus | Standard MIB values. | State of the current entry. | Available values are active(1), createAndGo(4), and destroy(6). An RBridge can have only one such an entry. When a |

| | | | | | |
|--|--|--|--|--|---|
| | | | | | <p>new entry is added, the old entry is overwritten. When an entry is deleted, a new entry is automatically generated.</p> <p>In an automatically generated entry, this object cannot be deleted.</p> |
|--|--|--|--|--|---|

rbridgeBasePortTable

About this table

Use this to obtain basic information about ports associated with an RBridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is rbridgeBasePort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|----------------------|--|--|
| rbridgeBasePort (1.3.6.1.2.1.214.1.1.9.1.1) | not-accessible | Unsigned 32 | Standard MIB values. | Port number of the port for which this entry contains RBridge management information. | As per the MIB. |
| rbridgeBasePortIfIndex (1.3.6.1.2.1.214.1.1.9.1.2) | read-only | Interface index | Standard MIB values. | Index of the interface corresponding to this port in the IF-MIB. | As per the MIB. |
| rbridgeBasePortDisable (1.3.6.1.2.1.214.1.1.9.1.3) | read-write | TruthValue | true(1), false(2) | <p>Bit for disabling a port.</p> <p>When this bit is set (true), all frames received or to be transmitted are discarded, except local frames.</p> <p>The default is false (2).</p> | Not supported. The value is fixed at false(2). |
| rbridgeBasePortTrunkPort (1.3.6.1.2.1.214.1.1.9.1.4) | read-write | TruthValue | true(1), false(2) | <p>Bit for disabling the endpoint service.</p> <p>When this bit is set (true), all native frames received on the port and all native frames that would have been sent on the port are discarded.</p> | The rbridgeBasePortTrunkPort and rbridgeBasePortAccessPort objects cannot be both set to false(2). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|--|---|--|
| | | | | The default is false (2). | |
| rbridgeBasePortAccessPort (1.3.6.1.2.1.214.1.1.9.1.5) | read-write | TruthValue | true(1), false(2) | Bit for disabling TRILL traffic. If this bit is set to true(1), the port does not send any TRILL frames except TRILL-Hello frames. The default is false (2). | The default is true (1). The rbridgeBasePortTrunkPort and rbridgeBasePortAccessPort objects cannot be both set to false(2). |
| rbridgeBasePortP2pHellos (1.3.6.1.2.1.214.1.1.9.1.6) | read-write | TruthValue | true(1), false(2) | Point-to-point (P2P) Hellos bit. If this bit is set to true(1), the port sends IS-IS Hello frames rather than TRILL HELLO frames (default). The default is false (2). | Not supported. The value is fixed at false(2). |
| rbridgeBasePortState (1.3.6.1.2.1.214.1.1.9.1.7) | read-only | INTEGER | uninhibited(1), portInhibited(2), vlanInhibited(3), disabled(4), broken(5) | Current state of a port. | As per the MIB. |
| rbridgeBasePortInhibitionTime (1.3.6.1.2.1.214.1.1.9.1.8) | read-write | Unsigned 32 | Standard MIB values. | Time in seconds that this RBridge will inhibit forwarding on this port after it observes a spanning tree root bridge change on a link or receives conflicting VLAN forwarder information. The default is 30. | The value range is 0 to 30. |
| rbridgeBasePortDisableLearning (1.3.6.1.2.1.214.1.1.9.1.9) | read-write | TruthValue | true(1), false(2) | Set this object to true(1) to disable learning of MAC addresses seen on this port. | Not supported. The value is fixed at false(2). |
| rbridgeBasePortDesiredDesignVlan (1.3.6.1.2.1.214.1.1.9.1.10) | read-write | VlanId | Standard MIB values. | VLAN that a Designated RBridge (DRB) will specify in its TRILL-Hellos as the VLAN to be used by all RBridges on the link for TRILL frames. | The default is that of rbridgeBasePortDesignVlan. |
| rbridgeBasePortDesignVlan (1.3.6.1.2.1.214.1.1.9.1.11) | read-only | VlanId | Standard MIB values. | VLAN being used on this link for TRILL frames. | The object does not return any value when the port state is down or no VLAN is enabled. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|--|---|
| rbridgeBasePortStpRoot (1.3.6.1.2.1.214.1.1.9.1.12) | read-only | BridgeId | Standard MIB values. | Bridge identifier of the root of the spanning tree learned from a Bridge PDU (BPDU) received on this port. | As per the MIB. |
| rbridgeBasePortStpRootChanges (1.3.6.1.2.1.214.1.1.9.1.13) | read-only | Counter32 | Standard MIB values. | Number of times a change in the root bridge is seen from spanning tree BPDUs received on this port, indicating a change in bridged LAN topology. | As per the MIB. |
| rbridgeBasePortStpWiringCloset (1.3.6.1.2.1.214.1.1.9.1.14) | read-write | BridgeId | Standard MIB values. | Bridge ID to be used as the spanning tree root in BPDUs. | Not supported. The value is fixed at 0. |

rbridgeUniFdbTable

About this table

Use this table to obtain the information about unicast entries for which the device has forwarding and/or filtering information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are rbridgeFdbId and rbridgeUniFdbAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------------|---|---|
| rbridgeFdbId (1.3.6.1.2.1.214.1.2.4.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | ID of this filtering database. | As per the MIB. |
| rbridgeUniFdbAddr (1.3.6.1.2.1.214.1.2.4.1.2) | not-accessible | MacAddress | Standard MIB values. | MAC address for which the device has forwarding information. | As per the MIB. |
| rbridgeUniFdbPort (1.3.6.1.2.1.214.1.2.4.1.3) | read-only | Unsigned32 | Unsigned32 (0..65535) | Port number corresponding the address of rbridgeUniFdbAddr. The value 0 indicates no port number is learned. | Not supported. The value is fixed at 0. |

| | | | | | |
|--|-----------|-------------------------|---|---|--|
| rbridgeUniFdbNickname (1.3.6.1.2.1.214.1.2.4.1.4) | read-only | Rbridge Nicknam e | Standard MIB values. | RBridge nickname that is placed in the egress nickname field of a TRILL frame sent to the current address. | As per the MIB. |
| rbridgeUniFdbConfidence (1.3.6.1.2.1.214.1.2.4.1.5) | read-only | Unsigne d32 | Unsigned32 (0..255) | Confidence level associated with this entry. | Not supported. The value is fixed at 0. |
| rbridgeUniFdbStatus (1.3.6.1.2.1.214.1.2.4.1.6) | read-only | INTEGE R | other(1), invalid(2), learned(3), self(4), mgmt(5), esadi(6) | State of the current entry. | As per the MIB. |

rbridgeUniFibTable

About this table

Use this table to obtain the known nicknames of an RBridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are rbridgeUniFibNickname, rbridgeUniFibPort, and rbridgeUniFibNextHop.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------|------------------------------|---|-----------------|
| rbridgeUniFibNickname (1.3.6.1.2.1.214.1.2.5.1.1) | not-accessible | RbridgeNic kname | Standard MIB values. | RBridge nickname for which this RBridge has forwarding information. | As per the MIB. |
| rbridgeUniFibPort (1.3.6.1.2.1.214.1.2.5.1.2) | not-accessible | Unsigned3 2 | Unsigned3 2 (0..65535) | RBridge port number of the corresponding RBridge. | As per the MIB. |
| rbridgeUniFibNextHop (1.3.6.1.2.1.214.1.2.5.1.3) | not-accessible | RbridgeNic kname | Standard MIB values. | Nickname of the next-hop RBridge for the path towards the RBridge whose nickname is specified in this entry. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| rbridgeUniFibHopCount (1.3.6.1.2.1.214.1.2.5.1.4) | read-only | Unsigned32 | Standard MIB values. | Hop count from this ingress RBridge to the egress RBridge. | As per the MIB. |

rbridgeMultiFibTable

About this table

Use this table to obtain information about egress nicknames used for multi-destination frame forwarding by this RBridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is rbridgeMultiFibNickname.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-----------------|
| rbridgeMultiFibNickname (1.3.6.1.2.1.214.1.2.6.1.1) | not-accessible | RbridgeNickname | Standard MIB values. | Nickname of the multicast distribution tree. | As per the MIB. |
| rbridgeMultiFibPorts (1.3.6.1.2.1.214.1.2.6.1.2) | read-only | PortList | Standard MIB values. | List of ports to which a frame destined to this multicast distribution tree is flooded. | As per the MIB. |

rbridgeVlanTable

About this table

Use this to obtain VLAN information of RBridges.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is rbridgeVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|---|---|--|
| rbridgeVlanIndex (1.3.6.1.2.1.214.1.3.1.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4094 4096..4294967295) | ID of a VLAN. | As per the MIB. |
| rbridgeVlanForwarderLosses (1.3.6.1.2.1.214.1.3.1.1.2) | read-only | Counter32 | Standard MIB values. | Number of times this RBridge has lost appointed forwarder status for this VLAN on any of its ports. | Not supported. The value is fixed at 0. |
| rbridgeVlanDisableLearning (1.3.6.1.2.1.214.1.3.1.1.3) | read-write | TruthValue | true(1), false(2) | Set this object to true(1) to disable learning of MAC addresses in this VLAN. | Not supported. The value is fixed at false(2). |
| rbridgeVlanSnooping (1.3.6.1.2.1.214.1.3.1.1.4) | read-only | INTEGER | notSupported(1), ipv4(2), ipv6(3), ipv4v6(4) | IP multicast snooping on this VLAN. | As per the MIB. |

rbridgeVlanPortTable

About this table

Use this table to obtain VLAN information of RBridge ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are rbridgeBasePort and rbridgeVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|-----------------|
| rbridgeVlanPortInhibited (1.3.6.1.2.1.214.1.3.2.1.1) | read-only | TruthValue | true(1), false(2) | Setting this object to true(1) means this VLAN has been inhibited by the RBridge due to conflicting forwarder information received from another RBridge. | As per the MIB. |
| rbridgeVlanPortForwarder (1.3.6.1.2.1.214.1.3.2.1.2) | read-only | TruthValue | true(1), false(2) | Setting this object to true(1) means this RBridge is an appointed forwarder for this VLAN on this port. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|--|
| rbridgeVlanPortAnnouncing (1.3.6.1.2.1.214.1.3.2.1.3) | read-write | TruthValue | true(1), false(2) | Setting this object to true(1) means TRILL Hellos tagged with this VLAN can be sent by this RBridge on this port. | As per the MIB. |
| rbridgeVlanPortDetectedVlanMapping (1.3.6.1.2.1.214.1.3.2.1.4) | read-only | TruthValue | true(1), false(2) | Setting this object to true(1) means VLAN mapping has been detected on the link attached to this port. | Not supported. The value is fixed at false(2). |

rbridgeSnoopingPortTable

About this table

Use this table to obtain information about ports on which the presence of IPv4 or IPv6 multicast routers has been detected for RBridges implementing IP multicast snooping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are rbridgeBasePort and rbridgeVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|-----------------------------------|---|-----------------|
| rbridgeSnoopingPortAddrType (1.3.6.1.2.1.214.1.6.1.1.1) | read-only | INTEGER | ipv4(1), ipv6(2), ipv4v6(3) | IP address type of an IP multicast router detected on this port and VLAN. | As per the MIB. |

rbridgeDtreeTable

About this table

Use this to obtain information about distribution trees being computed by this RBridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is rbridgeDtreeNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------|--------------------------|--|--------------------------------|
| rbridgeDtreeNumber (1.3.6.1.2.1.214.1.7.5.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..65535) | Number of trees in a distribution tree computed by this RBridge. | As per the MIB. |
| rbridgeDtreeNickname (1.3.6.1.2.1.214.1.7.5.1.2) | read-only | Rbridge Nickname | Standard MIB values. | Nickname of the distribution tree. | As per the MIB. |
| rbridgeDtreeIngress(1.3.6.1.2.1.214.1.7.5.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether this RBridge might choose this distribution tree to receive a multi-destination frame. | The value is fixed at true(1). |

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HH3C-ARP-RATELIMIT-MIB

About this MIB

This MIB contains ARP rate limiting notifications.

MIB file name

hh3c-arp-ratelimit.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cARPRatelimit(110)

Notifications

hh3cARPRatelimitOverspeedTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.110.1.1.0.1 | Rate of ARP packets delivered to the CPU on a device exceeded the threshold. | Informational | Warning | N/A | OFF |

Description

This notification is generated when the rate of ARP packets delivered to the CPU on a device exceeds the threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable arp rate-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp rate-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.110.1.1.1.1 (hh3cARPRatelimitTrapVer) | Version of the trap. | No | Unsigned32 | 1 |
| 1.3.6.1.4.1.25506.2.110.1.1.1.2 (hh3cARPRatelimitTrapCount) | Alarm threshold that the ARP packet rate exceeded. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.110.1.1.1.3 (hh3cARPRatelimitTrapMsg) | Trap messages. | No | OCTET STRING | SIZE (1..254) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-ARP-SUPPRESSION-MIB

About this MIB

Use this MIB to realize the ARP suppression feature.

MIB file name

hh3c-arp-suppression.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cARPSuppression(220)

Tabular objects

hh3cARPSuppressionVsiTable

About this table

This table obtains ARP suppression entries based on VSIs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cARPSuppressionChassis, hh3cARPSuppressionSlot, hh3cARPSuppressionVsiName, and hh3cARPSuppressionIpAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|----------------------|--------------------|-----------------|
| hh3cARPSuppressionChassis (1.3.6.1.4.1.25506.2.220.1.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Chassis number. | As per the MIB. |
| hh3cARPSuppressionSlot (1.3.6.1.4.1.25506.2.220.1.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Slot number. | As per the MIB. |
| hh3cARPSuppressionVsiName (1.3.6.1.4.1.25506.2.220.1.1.3) | not-accessible | DisplayString | OCTET STRING(31) | VSI instance name. | As per the MIB. |
| hh3cARPSuppressionIpAddr (1.3.6.1.4.1.25506.2.220.1.1.4) | not-accessible | IpAddress | Standard MIB values. | IP address. | As per the MIB. |
| hh3cARPSuppressionMacAddr (1.3.6.1.4.1.25506.2.220.1.1.5) | read-only | MacAddress | OCTET STRING (6) | MAC address. | As per the MIB. |
| hh3cARPSuppressionLinkID (1.3.6.1.4.1.25506.2.220.1.1.6) | read-only | Unsigned32 | Standard MIB values. | Link ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementati on |
|--|-----------|------------|-------------------------|--------------|--------------------|
| hh3cARPSuppressionAging (1.3.6.1.4.1.25506.2.220.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Aging timer. | As per the MIB. |

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HH3C-ARP-TRAP-MIB

About this MIB

Use this MIB to output notifications for the ARP module.

MIB file name

hh3c-arp-trap.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cARPTrap(217)

Notifications

hh3cARPTrapThresholdAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.1 | Number of global ARP entries exceeded the alarm threshold. | Informational | Major | 1.3.6.1.4.1.25506.2.217.1.0.2 (hh3cARPTrapThresholdResume) | OFF |

Description

This notification is generated when the number of ARP entries on the device exceeds the alarm threshold, which means that the number of ARP entries on the device has approached the specification limit. Please check the ARP entries.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of global ARP entries. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.5 (hh3cARPTrapDynamicEntryNum) | Number of dynamic ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|---------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.2.6 (hh3cARPTrapStaticEntryNum) | Number of static ARP entries. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.7 (hh3cARPTrapOtherEntryNum) | Number of other ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

Delete the useless dynamic ARP entries on the device. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cARPTrapThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.2 | The number of ARP entries dropped below the alarm threshold. | Informational | Major | N/A | OFF |

Description

This notification is generated when the number of ARP entries on the device drops below the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of global ARP entries. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.5 (hh3cARPTrapDynamicEntryNum) | Number of dynamic ARP entries. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.6 (hh3cARPTrapStaticEntryNum) | Number of static ARP entries. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.7 (hh3cARPTrapOtherEntryNum) | Number of other ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

No action is required.

hh3cARPTrapSlotThresholdAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.3 | The number of ARP entries on the card exceeded the alarm threshold. | Informational | Major | 1.3.6.1.4.1.25506.2.217.1.0.4(hh3cARPTrapSlotThresholdResume) | OFF |

Description

This notification is generated when the number of the ARP entries on a card exceeds the threshold, which means that the number of ARP entries on the card has approached the specification limit. Please check the ARP entries.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.1 (hh3cARPTrapEntryChassis) | Chassis number. | No | No | INTEGER |
| 1.3.6.1.4.1.25506.2.217.1.1.2 (hh3cARPTrapEntrySlot) | Slot number. | No | No | INTEGER |
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of ARP entries on the card. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.5 (hh3cARPTrapDynamicEntryNum) | Number of dynamic ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

Delete the useless dynamic ARP entries on the card. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cARPTrapSlotThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.4 | The number of ARP entries on the card dropped below the alarm threshold. | Informational | Major | N/A | OFF |

Description

This notification is generated when the number of ARP entries on the card drops below the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.1 (hh3cARPTrapEntryChassis) | Chassis number. | No | No | INTEGER |
| 1.3.6.1.4.1.25506.2.217.1.1.2 (hh3cARPTrapEntrySlot) | Slot number. | No | No | INTEGER |
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of ARP entries on the card. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.5 (hh3cARPTrapDynamicEntryNum) | Number of dynamic ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

No action is required.

hh3cARPTrapIfThresholdAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.5 | The number of ARP entries on the interface exceeded the | Informational | Major | 1.3.6.1.4.1.25506.2.217.1.0.6(hh3cARPTrapIfThresholdResume) | OFF |

| | | | | | |
|--|------------------|--|--|--|--|
| | alarm threshold. | | | | |
|--|------------------|--|--|--|--|

Description

This notification is generated when the number of ARP entries on an interface exceeds the alarm threshold, which means that the number of ARP entries on the interface has approached the specification limit. Please check the ARP entries.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.3 (hh3cARPTrapEntryIfName) | Interface name. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of ARP entries on the interface. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.5 (hh3cARPTrapDynamicEntryNum) | Number of dynamic ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

Delete the useless dynamic ARP entries on the interface. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cARPTrapIfThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.6 | The number of ARP entries on the interface dropped below the alarm threshold. | Informational | Major | N/A | OFF |

Description

This notification is generated when the number of ARP entries on an interface drops below the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.3 (hh3cARPTrapEntryIfName) | Interface name | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of ARP entries on the interface. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.5 (hh3cARPTrapDynamicEntryNum) | Number of dynamic ARP entries. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

No action is required.

hh3cARPTrapSuppThresholdAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.217.1.0.7 | The number of ARP suppression entries on the device exceeded the alarm threshold. | Informational | Major | 1.3.6.1.4.1.25506.2.217.1.0.8(hh3cARPTrapSuppThresholdResume) | OFF |

Description

This notification is generated when the number of ARP suppression entries on the device exceeds the alarm threshold, which means that the number of ARP suppression entries has approached the specification limit. Please check the ARP suppression entries.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of ARP suppression entries on the device. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.8 (hh3cARPTrapSuppEntryNum) | Number of ARP suppression entries on the device. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

Delete the useless ARP suppression entries on the device. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cARPTrapSuppThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.1.1.8 | The number of ARP suppression entries on the device dropped below the alarm threshold. | Informational | Major | N/A | OFF |

Description

This notification is generated when the number of ARP suppression entries on the device drops below the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable arp entry-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp entry-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|------------------------------|
| 1.3.6.1.4.1.25506.2.217.1.1.4 (hh3cARPTrapEntryThreshold) | Alarm threshold for the number of ARP suppression entries on the device. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.1.1.8 (hh3cARPTrapSuppEntryNum) | Number of ARP suppression entries on the device. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

No action is required.

hh3cARPTrapMACConflictAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------------------------|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.217.2.1.0.1 | Local MAC address conflicted. | Informational | Major | 1.3.6.1.4.1.25506.2.217.2.1.0.2(hh3cARPTrapMACConflictResume) | OFF |

Description

This notification is generated when the sender MAC address in the received ARP packet is the same as the MAC address of the local device.

Status control

ON

CLI: Use the `snmp-agent trap enable arp local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.2.1.1.1 (hh3cARPTrapLocalConflictIf) | Interface that received the ARP packet with a duplicate MAC address. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.2 (hh3cARPTrapLocalConflictMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.5 (hh3cARPTrapLocalSrcIp) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.8 (hh3cARPTrapLocalPeVlan) | Outer VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.9 (hh3cARPTrapLocalCeVlan) | Inner VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.10 (hh3cARPTrapLocalInboundIf) | Physical interface corresponding to the VLAN interface that received the ARP packet. | No | OCTET STRING | OCTET STRING (1..47) |

Recommended action

No action is required.

hh3cARPTrapMACConflictResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.1.0.2 | The local MAC address conflict was removed. | Informational | Major | N/A | OFF |

Description

This notification is generated when the local MAC address conflict is removed.

Status control

ON

CLI: Use the `snmp-agent trap enable arp local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.2.1.1.1 (hh3cARPTrapLocalConflictIf) | Interface that received the ARP packet with a duplicate MAC address. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.2 (hh3cARPTrapLocalConflictMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.5 (hh3cARPTrapLocalSrcIp) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.8 (hh3cARPTrapLocalPeVlan) | Outer VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.9 (hh3cARPTrapLocalCeVlan) | Inner VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.10 (hh3cARPTrapLocalInboundIf) | Physical interface corresponding to the VLAN interface that received the ARP packet. | No | OCTET STRING | OCTET STRING (1..47) |

Recommended action

Check whether an ARP packet attack or a loop exists on the network.

hh3cARPTrapMACIPConflictAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--------------------------------------|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.217.2.1.0.3 | Local MAC and IP address conflicted. | Informational | Major | 1.3.6.1.4.1.25506.2.217.2.1.0.4(hh3cARPTrapMACIPConflictResume) | OFF |

Description

This notification is generated when the sender MAC and IP addresses in the ARP packet are the same as the MAC and IP addresses of the local device.

Status control

ON

CLI: Use the `snmp-agent trap enable arp local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.2.1.1.1 (hh3cARPTrapLocalConflictIf) | Interface that received the ARP packet with duplicate MAC and IP addresses. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.2 (hh3cARPTrapLocalConflictMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.3 (hh3cARPLocalTrapConflictIP) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.6 (hh3cARPTrapLocalDstMac) | Target MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.7 (hh3cARPTrapLocalDstIP) | Target IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.8 (hh3cARPTrapLocalPeVlan) | Outer VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.9 (hh3cARPTrapLocalCeVlan) | Inner VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.10 (hh3cARPTrapLocalInboundIf) | Physical interface corresponding to the VLAN interface that received the ARP packet. | No | OCTET STRING | OCTET STRING (1..47) |

Recommended action

Check whether an ARP packet attack or a loop exists on the network.

hh3cARPTrapMACIPConflictResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.1.0.4 | The local MAC and IP address conflict was removed. | Informational | Major | N/A | OFF |

Description

This notification is generated when the local MAC and IP address conflict is removed.

Status control

ON

CLI: Use the `snmp-agent trap enable arp local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.2.1.1.1 (hh3cARPTrapLocalConflictIf) | Interface that received the ARP packet with duplicate MAC and IP addresses. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.2 (hh3cARPTrapLocalConflictMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.3 (hh3cARPLocalTrapConflictIP) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.6 (hh3cARPTrapLocalDstMac) | Target MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.7 (hh3cARPTrapLocalDstIP) | Target IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.8 (hh3cARPTrapLocalPeVlan) | Outer VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.9 (hh3cARPTrapLocalCeVlan) | Inner VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.10 (hh3cARPTrapLocalInboundIf) | Physical interface corresponding to the VLAN interface that received the ARP | No | OCTET STRING | OCTET STRING (1..47) |

| OID (object name) | Description | Index | Type | Value range |
|-------------------|-------------|-------|------|-------------|
| | packet. | | | |

hh3cARPTrapIPConflictAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|------------------------------|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.217.2.1.0.5 | Local IP address conflicted. | Informational | Major | 1.3.6.1.4.1.25506.2.217.2.1.0.6(hh3cARPTrapMACIPConflictResume) | OFF |

Description

This notification is generated when the sender IP address in the ARP packet is the same as the IP address of the local device.

Status control

ON

CLI: Use the `snmp-agent trap enable arp local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.2.1.1.1 (hh3cARPTrapLocalConflictIf) | Interface that received the ARP packet with a duplicate IP address. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.3 (hh3cARPTrapLocalConflictIP) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.5 (hh3cARPTrapLocalSrcMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.8 (hh3cARPTrapLocalPeVlan) | Outer VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.9 (hh3cARPTrapLocalCeVlan) | Inner VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

Check whether an ARP packet attack or a loop exists on the network.

hh3cARPTripIPConflictResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.1.0.6 | The local IP address conflict was removed. | Informational | Major | N/A | OFF |

Description

This notification is generated when the local IP address conflict is removed.

Status control

ON

CLI: Use the `snmp-agent trap enable arp local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.217.2.1.1.1 (hh3cARPTripLocalConflictIf) | Interface that received the ARP packet with a duplicate IP address. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.3 (hh3cARPTripLocalConflictIP) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.1.1.5 (hh3cARPTripLocalSrcMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.8 (hh3cARPTripLocalPeVlan) | Outer VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.1.1.9 (hh3cARPTripLocalCeVlan) | Inner VLAN of the ARP packet. | No | INTEGER | Integer32 (1..2147483647) |

Recommended action

No action is required.

hh3cARPTripHostMoveAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.2.0.1 | The access ports changed | Error | Warning | N/A | OFF |

| | | | | | |
|--|-------------|--|--|--|--|
| | frequently. | | | | |
|--|-------------|--|--|--|--|

Description

This notification is generated when the user port migrates frequently.

Status control

ON

CLI: Use the `snmp-agent trap enable arp user-move` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp user-move` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|--------------------------|
| 1.3.6.1.4.1.25506.2.217.2.2.1.1 (hh3cARPTrapMoveUserIP) | Sender IP address in the ARP packet with a different ingress port. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.2.1.2 (hh3cARPTrapMoveUserMAC) | Sender MAC address in the ARP packet with a different ingress port. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.3 (hh3cARPTrapMoveLocalIf) | Port name before migration. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.4 (hh3cARPTrapMoveLocalPeVlan) | Outer VLAN of the ARP packet before port migration. | No | INTEGER | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.5 (hh3cARPTrapMoveLocalCeVlan) | Inner VLAN of the ARP packet before port migration. | No | INTEGER | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.6 (hh3cARPTrapMoveRemoteIf) | Port name after migration. | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.7 (hh3cARPTrapMoveRemotePeVlan) | Outer VLAN of the ARP packet after port migration. | No | INTEGER | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.8 (hh3cARPTrapMoveRemoteCeVlan) | Inner VLAN of the ARP packet after port migration. | No | INTEGER | Integer32(1..2147483647) |

Recommended action

Check whether an ARP packet attack or a loop exists on the network.

hh3cARPTrapHostMoveResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.2.0.2 | The host recovered from a frequent access port change alarm. | Informational | N/A | N/A | OFF |

Description

This notification is generated when the host recovers from a frequent access port change alarm.

Status control

ON

CLI: Use the `snmp-agent trap enable arp user-move` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp user-move` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|--------------------------|
| 1.3.6.1.4.1.25506.2.217.2.2.1.1 (hh3cARPTrapMoveUserIP) | Sender IP address in the ARP packet with a different ingress port. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.2.1.2 (hh3cARPTrapMoveUserMAC) | Sender MAC address in the ARP packet with a different ingress port. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.3 (hh3cARPTrapMoveLocalIf) | Port name before migration. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.4 (hh3cARPTrapMoveLocalPeVlan) | Outer VLAN of the ARP packet before port migration. | No | INTEGER | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.5 (hh3cARPTrapMoveLocalCeVlan) | Inner VLAN of the ARP packet before port migration. | No | INTEGER | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.6 (hh3cARPTrapMoveRemoteIf) | Port name after migration. | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.7 (hh3cARPTrapMoveRemotePeVlan) | Outer VLAN of the ARP packet after port migration. | No | INTEGER | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.217.2.2.1.8 (hh3cARPTrapMoveRemoteCeVlan) | Inner VLAN of the ARP packet after port migration. | No | INTEGER | Integer32(1..2147483647) |

Recommended action

No action is required.

hh3cARPTrapUserIpConflictAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.3.0.1 | User IP address conflicted. | Error | Warning | N/A | OFF |

Description

This notification is generated when a user IP address conflict occurs. A conflict occurs if an incoming ARP packet has the same sender IP address as an existing ARP entry but a different sender MAC address.

Status control

ON

CLI: Use the `snmp-agent trap enable arp user-ip-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp user-ip-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.3.1.1 (hh3cARPTrapUIPCPRcvMac) | Sender MAC address in the incoming ARP entry. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.3.1.2 (hh3cARPTrapUIPCPRcvPVid) | Outer VLAN of the local interface on which the conflict occurred. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.3.1.3 (hh3cARPTrapUIPCPRcvCVid) | Inner VLAN of the local interface on which the conflict occurred. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.3.1.4 (hh3cARPTrapUIPCPRcvIf) | Local interface on which the conflict occurred. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.3.1.5 (hh3cARPTrapUIPCPLocalMac) | Sender MAC address in the local existing ARP entry. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.3.1.6 (hh3cARPTrapUIPCPLocalPVid) | Outer VLAN of the incoming ARP packet. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.3.1.7 (hh3cARPTrapUIPCPLocalCVid) | Inner VLAN of the incoming ARP | No | Unsigned32 | Standard MIB values. |

| | | | | |
|--|--|----|--------------|----------------------|
| | packet. | | | |
| 1.3.6.1.4.1.25506.2.217.2.3.1.8 (hh3cARPTrapUIPCPLocalIf) | Interface name that received the ARP packet. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.3.1.9 (hh3cARPTrapUIPCPIpAddr) | IP address in the local existing ARP entry. | No | IpAddress | Standard MIB values. |

Recommended action

Check whether an ARP packet attack or a loop exists on the network.

hh3cARPTrapAckStrictCheckAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.4.0.1 | The ARP packet received on the device was not the ARP reply to the ARP request sent by the device. | Error | Warning | N/A | OFF |

Description

This notification is generated when the device does not send an ARP request to the source IP address in the received ARP reply within the probe interval after ARP active acknowledgement in strict mode is configured.

Status control

ON

CLI: Use the `snmp-agent trap enable arp active-ack` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp active-ack` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.4.1.1 (217) | Interface that received the ARP packet. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.4.1.2 (hh3cARPTrapAckSourceIP) | Sender IP address in the received ARP packet. | No | IpAddress | Standard MIB values. |

Recommended action

Check whether an ARP packet attack exists on the network.

hh3cARPTrapSpeedLimitAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.217.2.5.0.1 | The ARP packets or ARP Miss packets sending rate exceeded the alarm threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.217.2.5.1.2(hh3cARPTrapSpeedLimitResume) | OFF |

Description

This notification is generated when the ARP packets or ARP Miss packets sending rate exceeds the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable arp rate-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp rate-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.5.1.1 (hh3cARPTrapSpeedLimitChassis) | Chassis number | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.2 (hh3cARPTrapSpeedLimitSlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.3 (hh3cARPTrapSpeedLimitSupValue) | Alarm threshold of packet sending rate (pps). | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.4 (hh3cARPTrapSpeedLimitCurValue) | Current packet sending rate (pps). | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.5 (hh3cARPTrapSpeedLimitSupType) | Packet type. | No | INTEGER | packet(1) miss(2) |

Recommended action

Check whether an ARP packet attack or a loop exists on the network.

hh3cARPTrapSpeedLimitResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|-----------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506. | The ARP packets | Informational | Event | N/A | OFF |

| | | | | | |
|---------------|--|--|--|--|--|
| 2.217.2.5.0.2 | or ARP Miss packets recovered from a sending rate alarm. | | | | |
|---------------|--|--|--|--|--|

Description

This notification is generated when the ARP packets or ARP Miss packets recover from a sending rate alarm.

Status control

ON

CLI: Use the `snmp-agent trap enable arp rate-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp rate-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.5.1.1 (hh3cARPTrapSpeedLimitChassis) | Chassis number | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.2 (hh3cARPTrapSpeedLimitSlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.3 (hh3cARPTrapSpeedLimitSupValue) | Alarm threshold of packet sending rate (pps). | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.4 (hh3cARPTrapSpeedLimitCurValue) | Current packet sending rate (pps). | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.5.1.5 (hh3cARPTrapSpeedLimitSupType) | Packet type. | No | INTEGER | packet(1) miss(2) |

Recommended action

No action is required.

hh3cARPTrapPacketValidCheckAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.6.0.1 | The device received an invalid ARP packet. | Error | Warning | N/A | OFF |

Description

This notification is generated when the device receives an invalid ARP packet.

Status control

ON

CLI: Use the `snmp-agent trap enable arp packet-check` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp packet-check` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.6.1.1 (hh3cARPTrapPktValidCheckIf) | Interface that received the ARP packet. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.6.1.2 (hh3cARPTrapPktValidCheckMac) | Sender MAC address in the ARP packet. | No | OCTET STRING | OCTET STRING (1..15) |
| 1.3.6.1.4.1.25506.2.217.2.6.1.3 (hh3cARPTrapPktValidCheckIp) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.6.1.4 (hh3cARPTrapPktValidCheckVlan) | VLAN ID of the ARP packet. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.6.1.5 (hh3cARPTrapPktValidCheckSvlan) | Service VLAN ID of the ARP packet. | No | Unsigned32 | Standard MIB values. |

Recommended action

No action is required.

hh3cARPTrapGatewayCheckAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.7.0.1 | The device intercepted an ARP packet with a forged gateway MAC address. | Error | Warning | N/A | OFF |

Description

This notification is generated when the device intercepts an ARP packet with a forged gateway MAC address.

Status control

ON

CLI: Use the `snmp-agent trap enable arp gateway-check` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp gateway-check` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.7.1.1 (hh3cARPTrapGateWayCheckIf) | Interface that received the ARP attack packet. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.7.1.2 (hh3cARPTrapGateWayCheckSlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.7.1.3 (hh3cARPTrapGateWayCheckIp) | Sender IP address in the ARP attack packet. | No | IpAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cARPTrapGatewayCheckResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.217.2.7.0.2 | The device recovered from a gateway spoofing attack. | Informational | N/A | N/A | OFF |

Description

This notification is generated when the device recovers from a gateway spoofing attack.

Status control

ON

CLI: Use the `snmp-agent trap enable arp gateway-check` command.

OFF

CLI: Use the `undo snmp-agent trap enable arp gateway-check` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.217.2.7.1.1 (hh3cARPTrapGateWayCheckIf) | Interface that received the ARP attack packet. | No | OCTET STRING | OCTET STRING (1..47) |
| 1.3.6.1.4.1.25506.2.217.2.7.1.2 (hh3cARPTrapGateWayCheckSlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.217.2.7.1.3 (hh3cARPTrapGateWayCheckIp) | Sender IP address in the ARP packet. | No | IpAddress | Standard MIB values. |

Recommended action

No action is required.

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HH3C-DHCP4-MIB

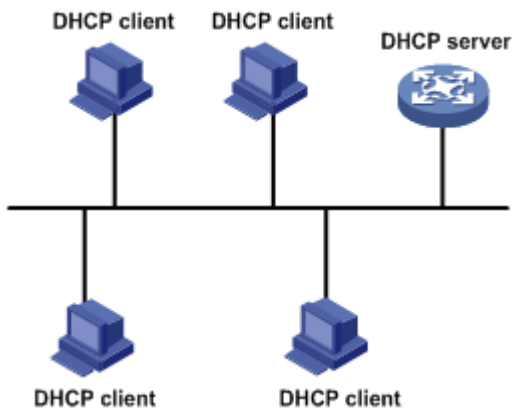
About this MIB

The Dynamic Host Configuration Protocol (DHCP) provides a framework to assign configuration information to network devices.

DHCP adopts a client/server model. A DHCP client initiates a request for configuration parameters such as IP address, subnet mask, and the gateway address, and the DHCP server replies with the requested parameters.

Both BOOTP and DHCP use UDP protocols for packet encapsulation and use the same packet format. The major difference between BOOTP and DHCP is that BOOTP supports static configuration of the IP addresses while DHCP supports dynamic configuration.

The following figure shows a typical DHCP application scenario where the DHCP clients and the DHCP server reside on the same subnet.



The DHCP relay agent enables clients to get IP addresses and configuration parameters from a DHCP server on another subnet.

Typically, a DHCP relay agent can be a host or a router enabled with the DHCP relay agent feature.

MIB file name

hh3c-dhcp4.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cDhcp4(122)

Scalar objects

hh3cDhcpServer2Enabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|-------------------------------------|-----------------|
| hh3cDhcpServer2Enabled (1.3.6.1.4.1.25506.2.122.1.1.1) | read-write | TruthValue | true(1), false(2) | Enabling status of the DHCP server. | As per the MIB. |

hh3cDhcpServer2AlwaysBroadcast

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|-----------------|
| hh3cDhcpServer2AlwaysBroadcast (1.3.6.1.4.1.25506.2.122.1.1.2) | read-write | TruthValue | true(1), false(2) | Whether to enable the DHCP server to always broadcast responses. | As per the MIB. |

hh3cDhcpServer2IgnoreBootp

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|-----------------------------------|-----------------|
| hh3cDhcpServer2IgnoreBootp (1.3.6.1.4.1.25506.2.122.1.1.3) | read-write | TruthValue | true(1), false(2) | Whether to ignore BOOTP requests. | As per the MIB. |

hh3cDhcpServer2BootpReplyRfc1048

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|-----------------|
| hh3cDhcpServer2BootpReplyRfc1048 (1.3.6.1.4.1.25506.2.122.1.1.4) | read-write | TruthValue | true(1), false(2) | Whether to enable the sending of BOOTP responses in RFC 1048 format. | As per the MIB. |

hh3cDhcpServer2Opt82Enabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|-----------------|
| hh3cDhcpServer2Opt82Enabled (1.3.6.1.4.1.25506.2.122.1.1.5) | read-write | TruthValue | true(1), false(2) | Whether to enable the DHCP server to handle Option 82. | As per the MIB. |

hh3cDhcpServer2PingNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|---|-----------------|
| hh3cDhcpServer2PingNumber (1.3.6.1.4.1.25506.2.122.1.1.6) | read-write | Unsigned32 | Unsigned32(0..10) | Maximum number of attempts that the DHCP server pings an IP address before assigning the IP address to a DHCP client. | As per the MIB. |

hh3cDhcpServer2PingTimeout

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| hh3cDhcpServer2PingTimeout (1.3.6.1.4.1.25506.2.122.1.1.7) | read-write | Unsigned32 | Unsigned32(0..10000) | Ping response timeout time for the DHCP server to ping an IP address. | As per the MIB. |

hh3cDhcpServer2InformNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpServer2InformNum (1.3.6.1.4.1.25506.2.122.1.2.7) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-INFORM messages that the DHCP server receives. | As per the MIB. |

hh3cDhcpServer2BootpReplyNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|--|-----------------|
| hh3cDhcpServer2BootpReplyNum (1.3.6.1.4.1.25506.2.122.1.2.8) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of BOOTP-REPLY messages that the DHCP server sends. | As per the MIB. |

hh3cDhcpServer2OfferNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpServer2OfferNum (1.3.6.1.4.1.25506.2.122.1.2.9) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-OFFER messages that the DHCP server sends. | As per the MIB. |

hh3cDhcpServer2AckNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpServer2AckNum (1.3.6.1.4.1.25506.2.122.1.2.10) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-ACK messages that the DHCP server sends. | As per the MIB. |

hh3cDhcpServer2NakNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpServer2NakNum (1.3.6.1.4.1.25506.2.122.1.2.11) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-NAK messages that the DHCP server sends. | As per the MIB. |

hh3cDhcpServer2TotalPoolUsage

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|--------------------|--------------------------|-----------------|
| hh3cDhcpServer2TotalPoolUsage (1.3.6.1.4.1.25506.2.122.1.2.12) | read-only | Unsigned32 | Unsigned32(0..100) | DHCP address pool usage. | As per the MIB. |

hh3cDhcpServer2PoolNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|-------------------------------------|-----------------|
| hh3cDhcpServer2PoolNumber (1.3.6.1.4.1.25506.2.122.1.2.13) | read-only | Unsigned32 | Standard MIB values. | Total number of DHCP address pools. | As per the MIB. |

h3cDhcpServer2ConflictNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|-----------------|
| h3cDhcpServer2ConflictNum (1.3.6.1.4.1.25506.2.122.1.2.14) | read-only | Unsigned32 | Standard MIB values. | Total number of conflicting IP addresses on the DHCP server. | As per the MIB. |

hh3cDhcpServer2AutoBindNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|----------------------------------|-----------------|
| hh3cDhcpServer2AutoBindNum (1.3.6.1.4.1.25506.2.122.1.2.15) | read-only | Unsigned32 | Standard MIB values. | Number of dynamic DHCP bindings. | As per the MIB. |

hh3cDhcpServer2ManualBindNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---------------------------------|-----------------|
| hh3cDhcpServer2ManualBindNum (1.3.6.1.4.1.25506.2.122.1.2.16) | read-only | Unsigned32 | Standard MIB values. | Number of static DHCP bindings. | As per the MIB. |

hh3cDhcpServer2ExpiredBindNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|----------------------------------|-----------------|
| hh3cDhcpServer2ExpiredBindNum (1.3.6.1.4.1.25506.2.122.1.2.17) | read-only | Unsigned32 | Standard MIB values. | Number of expired DHCP bindings. | As per the MIB. |

hh3cDhcpServer2OnlineFailReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|--------------|----------------------|--|----------------|
| hh3cDhcpServer2OnlineFailReason (1.3.6.1.4.1.25506.2.122.1.2.24) | accessible-for-notify | OCTET STRING | Standard MIB values. | Reason for the DHCP server online failure. | not support |

Tabular objects

hh3cDhcpServer2PoolTable

About this table

This table records the address pool configuration on a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|-------------|-----------|-----------|
| Supported. When you create a new address pool, this table automatically creates an instance for the pool. | Supported | Supported | Supported |

Columns

The table index is h3cDhcpServer2PoolIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------|----------------|------------|-------------|-------------------|-----------------------|
| hh3cDhcpServer2PoolInd | not-accessible | Unsigned32 | Standard | DHCP address pool | Implementation varies |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|----------------------|---|-----------------|
| ex (1.3.6.1.4.1.25506.2.122.2.1.1.1) | | | MIB values. | index. | by product. |
| hh3cDhcpServer2PoolName (1.3.6.1.4.1.25506.2.122.2.1.1.2) | read-create | OCTET STRING | OCTET STRING (1..63) | DHCP address pool name. | As per the MIB. |
| hh3cDhcpServer2PoolVpnName (1.3.6.1.4.1.25506.2.122.2.1.1.3) | read-create | OCTET STRING | OCTET STRING (0..31) | VPN to which the DHCP address pool is bound. | As per the MIB. |
| hh3cDhcpServer2PoolNetwork (1.3.6.1.4.1.25506.2.122.2.1.1.4) | read-create | InetAddressIPv4 | OCTET STRING (4) | Primary network address of the DHCP address pool. | As per the MIB. |
| hh3cDhcpServer2PoolNetworkMask (1.3.6.1.4.1.25506.2.122.2.1.1.5) | read-create | InetAddressIPv4 | OCTET STRING (4) | Mask for the primary network address. | As per the MIB. |
| hh3cDhcpServer2PoolStartAddr (1.3.6.1.4.1.25506.2.122.2.1.1.6) | read-create | InetAddressIPv4 | OCTET STRING (4) | Start IP address of an IP address range in the DHCP address pool. | As per the MIB. |
| hh3cDhcpServer2PoolEndAddr (1.3.6.1.4.1.25506.2.122.2.1.1.7) | read-create | InetAddressIPv4 | OCTET STRING (4) | End IP address of an IP address range in the DHCP address pool. | As per the MIB. |
| hh3cDhcpServer2PoolLeaseDay (1.3.6.1.4.1.25506.2.122.2.1.1.8) | read-create | Integer32 | Integer32(0..365) | Lease duration in days. | As per the MIB. |
| hh3cDhcpServer2PoolLeaseHour (1.3.6.1.4.1.25506.2.122.2.1.1.9) | read-create | Integer32 | Integer32(0..23) | Lease duration in hours. | As per the MIB. |
| hh3cDhcpServer2PoolLeaseMinute (1.3.6.1.4.1.25506.2.122.2.1.1.10) | read-create | Integer32 | Integer32(0..59) | Lease duration in minutes. | As per the MIB. |
| hh3cDhcpServer2PoolLeaseSecond (1.3.6.1.4.1.25506.2.122.2.1.1.11) | read-create | Integer32 | Integer32(0..59) | Lease duration in seconds. | As per the MIB. |
| hh3cDhcpServer2PoolLeaseUnlimit (1.3.6.1.4.1.25506.2.122.2.1.1.12) | read-create | TruthValue | true(1), false(2) | Whether the lease duration is unlimited. | As per the MIB. |
| hh3cDhcpServer2PoolLeaseTime (1.3.6.1.4.1.25506.2.122.2.1.1.13) | read-create | TimeTicks | Standard MIB values. | DHCP lease time in TimeTicks | As per the MIB. |
| hh3cDhcpServer2PoolDomainName (1.3.6.1.4.1.25506.2.122.2.1.1.14) | read-create | OCTET STRING | Standard MIB values. | Domain name suffix assigned to DHCP clients. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|--|---|-----------------------|
| hh3cDhcpServer2PoolGatewayIP (1.3.6.1.4.1.25506.2.122.2.1.1.15) | read-create | OCTET STRING | OCTET STRING (0..127) | Gateway IP address. | As per the MIB. |
| hh3cDhcpServer2PoolDNSIP (1.3.6.1.4.1.25506.2.122.2.1.1.16) | read-create | OCTET STRING | OCTET STRING (0..127) | DNS server IP address. | As per the MIB. |
| hh3cDhcpServer2PoolPrimaryDNSIP (1.3.6.1.4.1.25506.2.122.2.1.1.17) | read-create | InetAddressIPv4 | OCTET STRING (4) | Primary DNS server IP address. | As per the MIB. |
| hh3cDhcpServer2PoolSecondaryDNSIP (1.3.6.1.4.1.25506.2.122.2.1.1.18) | read-create | InetAddressIPv4 | OCTET STRING (4) | Secondary DNS server IP address. | As per the MIB. |
| hh3cDhcpServer2PoolNetbiosType (1.3.6.1.4.1.25506.2.122.2.1.1.19) | read-create | INTEGER | null(0), bnode(1) pnode(2), mnode(4), hnode(8) | NETBIOS node type. | As per the MIB. |
| hh3cDhcpServer2PoolNetbiosIP (1.3.6.1.4.1.25506.2.122.2.1.1.20) | read-create | OCTET STRING | SIZE(0..127) | NETBIOS server IP address. | As per the MIB. |
| hh3cDhcpServer2PoolBootFileName (1.3.6.1.4.1.25506.2.122.2.1.1.21) | read-create | OCTET STRING | SIZE(0..63) | Name of a configuration file to be assigned to DHCP clients. | As per the MIB. |
| hh3cDhcpServer2PoolBIMServerIP (1.3.6.1.4.1.25506.2.122.2.1.1.22) | read-create | InetAddressIPv4 | OCTET STRING (4) | BIMS server IP address. | As per the MIB. |
| hh3cDhcpServer2PoolBIMServerPort (1.3.6.1.4.1.25506.2.122.2.1.1.23) | read-create | Unsigned32 | Unsigned32(0..65534) | BIMS server port number. | As per the MIB. |
| hh3cDhcpServer2PoolBIMServerKeyStr (1.3.6.1.4.1.25506.2.122.2.1.1.24) | read-create | OCTET STRING | OCTET STRING (0..16) | Shared key for the DHCP clients to encrypt packets sent to the BIMS server. | Does not support GET. |
| hh3cDhcpServer2PoolNextServer (1.3.6.1.4.1.25506.2.122.2.1.1.25) | read-create | InetAddressIPv4 | OCTET STRING (4) | IP address of the next DHCP server. | As per the MIB. |
| hh3cDhcpServer2PoolTFTPDomainName (1.3.6.1.4.1.25506.2.122.2.1.1.26) | read-create | OCTET STRING | OCTET STRING (0..63) | TFTP server domain name. | As per the MIB. |
| hh3cDhcpServer2PoolTFTPIP (1.3.6.1.4.1.25506.2.122.2.1.1.27) | read-create | InetAddressIPv4 | OCTET STRING (4) | TFTP server IP address. | As per the MIB. |
| hh3cDhcpServer2PoolVoiceAsIP (1.3.6.1.4.1.25506.2.122.2.1.1.28) | read-create | InetAddressIPv4 | OCTET STRING (4) | IP address of the backup network calling processor. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|---|--|-----------------|
| hh3cDhcpServer2PoolVoiceFailIP (1.3.6.1.4.1.25506.2.122.2.1.1.29) | read-create | InetAddressIPv4 | OCTET STRING (4) | Failover IP address. | As per the MIB. |
| hh3cDhcpServer2PoolVoiceFailStr (1.3.6.1.4.1.25506.2.122.2.1.1.30) | read-create | OCTET STRING | OCTET STRING (0..39) | Failover dialer string. | As per the MIB. |
| hh3cDhcpServer2PoolVoiceNCPIP (1.3.6.1.4.1.25506.2.122.2.1.1.31) | read-create | InetAddressIPv4 | OCTET STRING (4) | IP address of the primary network calling processor. | As per the MIB. |
| hh3cDhcpServer2PoolVoiceVlanId (1.3.6.1.4.1.25506.2.122.2.1.1.32) | read-create | Unsigned32 | Unsigned32(2..4094 65535) | Voice VLAN ID. | As per the MIB. |
| hh3cDhcpServer2PoolVoiceVlanEnbl (1.3.6.1.4.1.25506.2.122.2.1.1.33) | read-create | TruthValue | true(1), false(2) | Enabling status of the voice VLAN. | As per the MIB. |
| hh3cDhcpServer2PoolRowStatus (1.3.6.1.4.1.25506.2.122.2.1.1.34) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |
| hh3cDhcpServer2PoolVerifyClass (1.3.6.1.4.1.25506.2.122.2.1.1.35) | read-create | TruthValue | true(1), false(2) | Enabling status of the user class whitelist. | As per the MIB. |

hh3cDhcpServer2IfApplyPoolTable

About this table

This table records the address pool bound to an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|-------------------------|---|-----------------|
| hh3cDhcpServer2IfApplyPoolName (1.3.6.1.4.1.25506.2.122.2.2.1.1) | read-write | OCTET STRING | OCTET STRING (0..63) | Name of the address pool bound to an interface. | As per the MIB. |

hh3cDhcpServer2PoolSecNwTable

About this table

This table records the secondary network configuration in the DHCP address pool.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex, h3cDhcpServer2PoolSecNw, and h3cDhcpServer2PoolSecNwMask.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|---|-----------------|
| hh3cDhcpServer2PoolSecNw(1.3.6.1.4.1.25506.2.122.2.3.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | Secondary network IP address. | As per the MIB. |
| hh3cDhcpServer2PoolSecNwMask(1.3.6.1.4.1.25506.2.122.2.3.1.2) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | Mask of the secondary network IP address. | As per the MIB. |
| hh3cDhcpServer2PoolSecNwGwIP(1.3.6.1.4.1.25506.2.122.2.3.1.3) | read-create | OCTET STRING | OCTET STRING (0..127) | Gateway IP address for the secondary network. | As per the MIB. |
| hh3cDhcpServer2PoolSecNwStatus(1.3.6.1.4.1.25506.2.122.2.3.1.4) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2PoolClassTable

About this table

This table records address ranges for DHCP user classes in a DHCP address pool on a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2PoolClassName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|----------------------|------------------|-----------------|
| hh3cDhcpServer2PoolClassName(1.3.6.1.4.1.25506.2.122.2.4.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..63) | User class name. | As per the MIB. |

| | | | | | |
|---|-------------|-----------------|---|---|-----------------|
| hh3cDhcpServer2PoolClassStart (1.3.6.1.4.1.25506.2.122.2.4.1.2) | read-create | InetAddressIPv4 | OCTET STRING (4) | Start IP address of an address range for a DHCP user class. | As per the MIB. |
| hh3cDhcpServer2PoolClassEnd (1.3.6.1.4.1.25506.2.122.2.4.1.3) | read-create | InetAddressIPv4 | OCTET STRING (4) | End IP address of an address range for a DHCP user class. | As per the MIB. |
| hh3cDhcpServer2PoolClassStatus (1.3.6.1.4.1.25506.2.122.2.4.1.4) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2PoolStaticTable

About this table

This table records static bindings in a DHCP address pool.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2PoolStaticIP.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|-----------------|
| hh3cDhcpServer2PoolStaticIP (1.3.6.1.4.1.25506.2.122.2.5.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | IP address in a static binding. | As per the MIB. |
| hh3cDhcpServer2PoolStaticMask (1.3.6.1.4.1.25506.2.122.2.5.1.2) | read-create | InetAddressIPv4 | OCTET STRING (4) | IP address mask in the static binding. | As per the MIB. |
| hh3cDhcpServer2PoolStaticCID (1.3.6.1.4.1.25506.2.122.2.5.1.3) | read-create | OCTET STRING | OCTET STRING (0 4..254) | Client identifier in the static binding. | As per the MIB. |
| hh3cDhcpServer2PoolStaticHAddr (1.3.6.1.4.1.25506.2.122.2.5.1.4) | read-create | OCTET STRING | OCTET STRING (0 4..39) | Hardware address in the static binding. | As per the MIB. |
| hh3cDhcpServer2PoolStaticHType (1.3.6.1.4.1.25506.2.122.2.5.1.5) | read-create | INTEGER | default(1), ethernet(2), tokenRing(3) | Hardware address type. | As per the MIB. |
| hh3cDhcpServer2PoolStaticStatus (1.3.6.1.4.1.25506.2.122.2.5.1.6) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2PoolOptionTable

About this table

This table records user-defined options in the DHCP address pool.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cDhcpServer2PoolIndex and hh3cDhcpServer2PoolOptCode.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|---|--|
| hh3cDhcpServer2PoolOptCode (1.3.6.1.4.1.25506.2.122.2.6.1.1) | not-accessible | Integer32 | Integer32(2..254), excluding 50..54, 56, 58, 59, 61, 82. | Option code. | As per the MIB. |
| hh3cDhcpServer2PoolOptType (1.3.6.1.4.1.25506.2.122.2.6.1.2) | read-create | INTEGER | ascii(1), hex(2), ip(3) | Option type. | As per the MIB. |
| hh3cDhcpServer2PoolOptAscii (1.3.6.1.4.1.25506.2.122.2.6.1.3) | read-create | OCTET STRING | OCTET STRING (0..255) | ASCII string as the option content. | As per the MIB. |
| hh3cDhcpServer2PoolOptHexStr (1.3.6.1.4.1.25506.2.122.2.6.1.4) | read-create | OCTET STRING | OCTET STRING (0..510) | Hexadecimal number as the option content. | The string length cannot exceed 256. |
| hh3cDhcpServer2PoolOptIPStr (1.3.6.1.4.1.25506.2.122.2.6.1.5) | read-create | OCTET STRING | OCTET STRING (0..127) | IP address as the option content. | As per the MIB. |
| hh3cDhcpServer2PoolOptRowStatus (1.3.6.1.4.1.25506.2.122.2.6.1.6) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2PoolForbidTable

About this table

This table records excluded IP addresses in a DHCP address pool.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cDhcpServer2PoolIndex and hh3cDhcpServer2PoolForbidIP.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|-----------------|
| hh3cDhcpServer2PoolForbidIP (1.3.6.1.4.1.25506.2.122.2.7.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (0..255) | IP address excluded from dynamic allocation. | As per the MIB. |
| hh3cDhcpServer2PoolForbidStatus (1.3.6.1.4.1.25506.2.122.2.7.1.2) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2ClassTable

About this table

This table records DHCP user class information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cDhcpServer2ClassName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|------------------|-----------------|
| hh3cDhcpServer2ClassName (1.3.6.1.4.1.25506.2.122.2.8.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..63) | User class name. | As per the MIB. |
| hh3cDhcpServer2ClassRowStatus (1.3.6.1.4.1.25506.2.122.2.8.1.2) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2RuleTable

About this table

This table records DHCP user class match rules.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cDhcpServer2ClassName and hh3cDhcpServer2RuleNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|--|--|
| hh3cDhcpServer2RuleNumber (1.3.6.1.4.1.25506.2.122.2.9.1.1) | not-accessible | Integer32 | Integer32(1..16) | Rule ID. | As per the MIB. |
| hh3cDhcpServer2RuleOptCode (1.3.6.1.4.1.25506.2.122.2.9.1.2) | read-create | Integer32 | Integer32(1..254) | Option code. | As per the MIB. |
| hh3cDhcpServer2RuleOptHexStr (1.3.6.1.4.1.25506.2.122.2.9.1.3) | read-create | OCTET STRING | OCTET STRING (0..510) | Content to match specific options in packets. | The length of the content cannot exceed 256. |
| hh3cDhcpServer2RuleOptMask (1.3.6.1.4.1.25506.2.122.2.9.1.4) | read-create | OCTET STRING | OCTET STRING (0..510) | Hexadecimal mask for the match operation. | If it is bound to hh3cDhcpServer2RuleOptHexStr, the entire command length cannot exceed 512. |
| hh3cDhcpServer2RuleOptOffset (1.3.6.1.4.1.25506.2.122.2.9.1.5) | read-create | Integer32 | Integer32(0..254) | Offset in bytes after which the match operation starts | As per the MIB. |
| hh3cDhcpServer2RuleOptLength (1.3.6.1.4.1.25506.2.122.2.9.1.6) | read-create | Integer32 | Integer32(0..128) | Length of the option content to be matched. | As per the MIB. |
| hh3cDhcpServer2RuleRowStatus (1.3.6.1.4.1.25506.2.122.2.9.1.7) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2ForbidTable

About this table

This table records excluded IP address ranges.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cDhcpServer2ForbidVpnName, hh3cDhcpServer2ForbidStart, and hh3cDhcpServer2ForbidEnd.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-----------------|
| hh3cDhcpServer2ForbidVpnName (1.3.6.1.4.1.25506.2.122.2.10.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..31) | Name of the VPN to which the excluded IP address belongs. | As per the MIB. |
| hh3cDhcpServer2ForbidStart | not-accessible | InetAddressIPv4 | OCTET STRING | Start IP address of the excluded IP | As per the MIB. |

| | | | | | |
|--|----------------|-----------------|---|--|-----------------|
| (1.3.6.1.4.1.25506.2.122.2.10.1.2) | | | (4) | address range. | |
| hh3cDhcpServer2ForbidEnd (1.3.6.1.4.1.25506.2.122.2.10.1.3) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | End IP address of the excluded IP address range. | As per the MIB. |
| hh3cDhcpServer2ForbidRowStatus (1.3.6.1.4.1.25506.2.122.2.10.1.4) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2FreeTable

About this table

This table records free IP address ranges on a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2FreeStart.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--------------------------|--|-----------------|
| hh3cDhcpServer2FreeStart (1.3.6.1.4.1.25506.2.122.2.11.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (0..255) | Start IP address of a free IP address range. | As per the MIB. |
| hh3cDhcpServer2FreeEnd (1.3.6.1.4.1.25506.2.122.2.11.1.2) | read-only | InetAddressIPv4 | OCTET STRING (0..255) | End IP address of a free IP address range. | As per the MIB. |

hh3cDhcpServer2ConflictTable

About this table

This table records conflicting IP addresses on a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2ConflictIP.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--------------------------|-------------------------|-----------------|
| hh3cDhcpServer2ConflictIP (1.3.6.1.4.1.25506 | not-accessible | InetAddressIPv4 | OCTET STRING (0..255) | Conflicting IP address. | As per the MIB. |

| | | | | | |
|--|-------------|--------------|--|--|-----------------|
| .2.122.2.12.1.1) | | | | | |
| hh3cDhcpServer2 ConflictType (1.3.6.1.4.1.25506 .2.122.2.12.1.2) | read-only | INTEGER | detectByServer(1) , detectByClient(2) | Conflict type. | As per the MIB. |
| hh3cDhcpServer2 ConflictTime (1.3.6.1.4.1.25506 .2.122.2.12.1.3) | read-only | OCTET STRING | OCTET STRING (1..19) | Time when the conflict was detected. | As per the MIB. |
| hh3cDhcpServer2 ConflictRowStatus (1.3.6.1.4.1.25506 .2.122.2.12.1.4) | read-create | RowStatus | destroy | Row status. | As per the MIB. |

hh3cDhcpServer2ExpiredTable

About this table

This table records lease expiration information on a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2ExpiredIP.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|---|-----------------|
| hh3cDhcpServer2 ExpiredIP (1.3.6.1.4.1.25506 .2.122.2.13.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (0..255) | Expired IP address. | As per the MIB. |
| hh3cDhcpServer2 ExpiredClientId (1.3.6.1.4.1.25506 .2.122.2.13.1.2) | read-only | OCTET STRING | OCTET STRING (4..254) | ID of the DHCP client of the expired IP address. | As per the MIB. |
| hh3cDhcpServer2 ExpiredTime (1.3.6.1.4.1.25506 .2.122.2.13.1.3) | read-only | OCTET STRING | OCTET STRING (1..19), a time string in the format of MM/DD/YYYY hh:mm:ss. | Time when the lease expired. | As per the MIB. |
| hh3cDhcpServer2 ExpiredRowStatus (1.3.6.1.4.1.25506 .2.122.2.13.1.4) | read-create | RowStatus | destroy | Row status. | As per the MIB. |

hh3cDhcpServer2IPInUseTable

About this table

This table records binding information about IP addresses in use on a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cDhcpServer2PoolIndex and hh3cDhcpServer2IPInUseIP.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------------|--|--|-----------------|
| hh3cDhcpServer2IPInUseIP (1.3.6.1.4.1.25506.2.122.2.14.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | IP address in use. | As per the MIB. |
| hh3cDhcpServer2IPInUseClientId (1.3.6.1.4.1.25506.2.122.2.14.1.2) | read-only | OCTET STRING | OCTET STRING (0 4..254) | Client ID of the IP address. | As per the MIB. |
| hh3cDhcpServer2IPInUseHardAddr (1.3.6.1.4.1.25506.2.122.2.14.1.3) | read-only | OCTET STRING | OCTET STRING (0 4..39) | Hardware address of the DHCP client. | As per the MIB. |
| hh3cDhcpServer2IPInUseHardType (1.3.6.1.4.1.25506.2.122.2.14.1.4) | read-only | INTEGER | default(1), ethernet(2), tokenRing(3) | Hardware address type. | As per the MIB. |
| hh3cDhcpServer2IPInUseVlanId (1.3.6.1.4.1.25506.2.122.2.14.1.5) | read-only | Unsigned32 | Unsigned32(1..4094 65535) | VLAN where the DHCP client resides. | As per the MIB. |
| hh3cDhcpServer2IPInUseEndLease (1.3.6.1.4.1.25506.2.122.2.14.1.6) | read-only | OCTET STRING | OCTET STRING (1..19) | Lease expiration time. | As per the MIB. |
| hh3cDhcpServer2IPInUseType (1.3.6.1.4.1.25506.2.122.2.14.1.7) | read-only | INTEGER | staticUnallocated(1), staticOffered(2), staticCommitted(3), autoOffered(4), autoCommitted(5) | Binding type. | As per the MIB. |
| hh3cDhcpServer2IPInUseIfIndex (1.3.6.1.4.1.25506.2.122.2.14.1.8) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the interface that connects to the DHCP client. | As per the MIB. |
| hh3cDhcpServer2IPInUseRowStatus (1.3.6.1.4.1.25506.2.122.2.14.1.9) | read-create | RowStatus | destroy | Row status. | As per the MIB. |

hh3cDhcpServer2DefOptGrpTable

About this table

This table defines option information associated with the DHCP user class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2DefOptGrpClass.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|------------------|-----------------|
| hh3cDhcpServer2DefOptGrpClass (1.3.6.1.4.1.25506.2.122.2.15.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..63) | User class name. | As per the MIB. |
| hh3cDhcpServer2DefOptGrpId (1.3.6.1.4.1.25506.2.122.2.15.1.2) | read-create | Integer32 | Integer32(1..32768) | Option group ID. | As per the MIB. |
| hh3cDhcpServer2DefOptGrpStatus (1.3.6.1.4.1.25506.2.122.2.15.1.3) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2ValidClassTable

About this table

This table defines user class whitelist.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2PoolIndex and h3cDhcpServer2ValidClassName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|------------------|-----------------|
| hh3cDhcpServer2ValidClassName (1.3.6.1.4.1.25506.2.122.2.16.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..63) | User class name. | As per the MIB. |
| hh3cDhcpServer2ValidClassStatus (1.3.6.1.4.1.25506.2.122.2.16.1.2) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2RuleHwAddrTable

About this table

This table defines the user class hardware address match rule.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2ClassName and h3cDhcpServer2RuleHwAddrNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|------------------------|-----------------|
| hh3cDhcpServer2RuleHwAddrNumber (1.3.6.1.4.1.25506.2.122.2.17.1.1) | not-accessible | Integer32 | Integer32 (1..16) | Rule ID. | As per the MIB. |
| hh3cDhcpServer2RuleHwAddress (1.3.6.1.4.1.25506.2.122.2.17.1.2) | read-create | OCTET STRING | OCTET STRING (4..39) | Hardware address. | As per the MIB. |
| hh3cDhcpServer2RuleHwAddrMask (1.3.6.1.4.1.25506.2.122.2.17.1.3) | read-create | OCTET STRING | OCTET STRING (4..39) | Hardware address mask. | As per the MIB. |
| hh3cDhcpServer2RuleHwAddrType (1.3.6.1.4.1.25506.2.122.2.17.1.4) | read-create | Integer32 | 1, representing the Ethernet | Hardware address type. | As per the MIB. |
| hh3cDhcpServer2RuleHwAddrStatus (1.3.6.1.4.1.25506.2.122.2.17.1.5) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpServer2OptionGroupTable

About this table

This table defines a DHCP option group for a DHCP user class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is h3cDhcpServer2OptionGroupId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-----------------------------|------------------|-----------------|
| hh3cDhcpServer2OptionGroupId (1.3.6.1.4.1.25506.2.122.2.18.1.1) | not-accessible | Integer32 | Integer32(1..32768) | Option group ID. | As per the MIB. |
| hh3cDhcpServer2OptionGroupStatus | read-create | RowStatus | Active(1) createAndGo(4) | Row status. | As per the MIB. |

| | | | | | |
|------------------------------------|--|--|------------|--|--|
| (1.3.6.1.4.1.25506.2.122.2.18.1.2) | | | destroy(6) | | |
|------------------------------------|--|--|------------|--|--|

hh3cDhcpServer2OptionTable

About this table

This table defines user option information in a DHCP option group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cDhcpServer2OptionGroupId and h3cDhcpServer2OptionCode.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|---|--|
| hh3cDhcpServer2OptionCode (1.3.6.1.4.1.25506.2.122.2.19.1.1) | not-accessible | Integer32 | Integer32(2..254), excluding 50..54, 56, 58, 59, 61, 82 | Option code. | As per the MIB. |
| hh3cDhcpServer2OptionType (1.3.6.1.4.1.25506.2.122.2.19.1.2) | read-create | INTEGER | ascii(1), hex(2), ip(3) | Option type. | As per the MIB. |
| hh3cDhcpServer2OptionAscii (1.3.6.1.4.1.25506.2.122.2.19.1.3) | read-create | OCTET STRING | OCTET STRING(0 2..256) | ASCII string as the option content. | The value read from this object is 0 if ascii(1) is specified as the option type but no ASCII string is specified. |
| hh3cDhcpServer2OptionHexStr (1.3.6.1.4.1.25506.2.122.2.19.1.4) | read-create | OCTET STRING | OCTET STRING(0..510) | Hexadecimal number as the option content. | The value read from this object is 0 if hex(2) is specified as the option type but no hexadecimal string is specified. |
| hh3cDhcpServer2OptionIPStr (1.3.6.1.4.1.25506.2.122.2.19.1.5) | read-create | OCTET STRING | OCTET STRING(0..127) | IP address as the option content. | As per the MIB. |
| hh3cDhcpServer2OptionRowStatus (1.3.6.1.4.1.25506.2.122.2.19.1.6) | read-create | RowStatus | Active(1) createAndGo(4) destroy(6) | Row status. | As per the MIB. |

hh3cDhcpRelay2ConfigGroup

About this table

This table configures global DHCP relay agent settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|-------------------------|--|---|
| hh3cDhcpRelay2 UserInfoRecord (1.3.6.1.4.1.25506 .2.122.3.1.1) | read-write | TruthValue | true(1), false(2) | Enabling status of recording client information in relay entries. | As per the MIB. |
| hh3cDhcpRelay2 UserInfoRefresh (1.3.6.1.4.1.25506 .2.122.3.1.2) | read-write | TruthValue | true(1), false(2) | Enabling status of refreshing relay entries. | As per the MIB. |
| hh3cDhcpRelay2 UserInfoFlushTim e (1.3.6.1.4.1.25506 .2.122.3.1.3) | read-write | Unsigned32 | Unsigned32(0..12 0) | Interval at which the DHCP relay agent refreshes relay entries. | As per the MIB. |
| hh3cDhcpRelay2 ReleaseAddr (1.3.6.1.4.1.25506 .2.122.3.1.4) | read-write | OCTET STRING | OCTET STRING (0..47) | IP address release request sent to the server. | The set operation enables the relay agent to send a release request for the specified IP address to the DHCP server. When you perform a get operation on this object, a value of 0 is returned. |

hh3cDhcpRelay2StatisticsGroup

About this table

This table records the global statistics on a DHCP relay agent.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| hh3cDhcpRelay2 RxClientNum (1.3.6.1.4.1.25506 .2.122.3.2.1) | read-only | Counter64 | INTEGER(0..1844 67440737095516 15) | Number of received packets that are sent by the DHCP clients. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpRelay2TxClientNum (1.3.6.1.4.1.25506.2.122.3.2.2) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets sent to the DHCP clients. | As per the MIB. |
| hh3cDhcpRelay2RxServerNum (1.3.6.1.4.1.25506.2.122.3.2.3) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of received packets sent by DHCP servers. | As per the MIB. |
| hh3cDhcpRelay2TxServerNum (1.3.6.1.4.1.25506.2.122.3.2.4) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets sent to the DHCP servers. | As per the MIB. |
| hh3cDhcpRelay2BadNum (1.3.6.1.4.1.25506.2.122.3.2.5) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of error packets processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2BootpRequestNum (1.3.6.1.4.1.25506.2.122.3.2.6) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of BOOTP requests processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2DiscoverNum (1.3.6.1.4.1.25506.2.122.3.2.7) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-DISCOVER messages processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2RequestNum (1.3.6.1.4.1.25506.2.122.3.2.8) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-REQUEST messages processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2DeclineNum (1.3.6.1.4.1.25506.2.122.3.2.9) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-DECLINE messages processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2ReleaseNum (1.3.6.1.4.1.25506.2.122.3.2.10) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-RELEASE messages processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2InformNum (1.3.6.1.4.1.25506.2.122.3.2.11) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-INFORM messages processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2BootpReplyNum (1.3.6.1.4.1.25506.2.122.3.2.12) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of BOOTP replies processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2OfferNum (1.3.6.1.4.1.25506.2.122.3.2.13) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-OFFER messages processed by the DHCP relay agent. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------------|--|-----------------|
| hh3cDhcpRelay2AckNum (1.3.6.1.4.1.25506.2.122.3.2.14) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-ACK messages processed by the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2NakNum (1.3.6.1.4.1.25506.2.122.3.2.15) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of DHCP-NAK messages processed by the DHCP relay agent. | As per the MIB. |

hh3cDhcpRelay2IfConfigTable

About this table

This table records the DHCP relay agent configuration on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---|---|---|
| hh3cDhcpRelay2IfSelectRelay (1.3.6.1.4.1.25506.2.122.4.1.1.1) | read-write | TruthValue | true(1), false(2) | Enabling status of the DHCP relay agent. | As per the MIB. |
| hh3cDhcpRelay2IfCheckMac (1.3.6.1.4.1.25506.2.122.4.1.1.2) | read-write | TruthValue | true(1), false(2) | Enabling status of MAC address check. | As per the MIB. |
| hh3cDhcpRelay2IfOpt82Enable (1.3.6.1.4.1.25506.2.122.4.1.1.3) | read-write | TruthValue | true(1), false(2) | Enabling status of support for option 82. | As per the MIB. |
| hh3cDhcpRelay2IfOpt82Strategy (1.3.6.1.4.1.25506.2.122.4.1.1.4) | read-write | INTEGER | drop(1), keep(2), replace(3) | Strategy for handling DHCP requests that contain Option 82. | As per the MIB. |
| hh3cDhcpRelay2IfOpt82CIDMode (1.3.6.1.4.1.25506.2.122.4.1.1.5) | read-write | INTEGER | normal(1), verbose(2), userDefine(3) | Mode of the circuit ID sub-option in option 82. | The return value is normal(1) if the system reads an unsupported mode. |
| hh3cDhcpRelay2IfOpt82CIDNodeType (1.3.6.1.4.1.25506.2.122.4.1.1.6) | read-write | INTEGER | invalid(1), mac(2), sysname(3), userDefine(4) | Access node identifier for the circuit ID sub-option in verbose mode. | If no access node identifier is specified, the value read from this object is invalid(1). |

| | | | | | |
|--|------------|--------------|--|---|---|
| hh3cDhcpRelay2If Opt82CIDNodeStr (1.3.6.1.4.1.25506 .2.122.4.1.1.7) | read-write | OCTET STRING | OCTET STRING (0..50) | User-defined string as the access node identifier for the circuit ID sub-option in verbose mode. | As per the MIB. |
| hh3cDhcpRelay2If Opt82CIDStr (1.3.6.1.4.1.25506 .2.122.4.1.1.8) | read-write | OCTET STRING | OCTET STRING (0 3..63) | User-defined string as the access node identifier for the circuit ID sub-option in userDefine mode. | As per the MIB. |
| hh3cDhcpRelay2If Opt82CIDFormat (1.3.6.1.4.1.25506 .2.122.4.1.1.9) | read-write | INTEGER | hex(1), ascii(2), undefine(3) | Padding format of the circuit ID sub-option in option 82. | As per the MIB. |
| hh3cDhcpRelay2If Opt82RIDMode (1.3.6.1.4.1.25506 .2.122.4.1.1.10) | read-write | INTEGER | normal(1), sysname(2), userDefine(3) | Mode of the remote ID sub-option in option 82. | As per the MIB. |
| hh3cDhcpRelay2If Opt82RIDStr (1.3.6.1.4.1.25506 .2.122.4.1.1.11) | read-write | OCTET STRING | OCTET STRING (0..63) | User-defined string as the access node identifier for the remote ID sub-option in userDefine mode. | If the mode of the remote ID sub-option is sysname(2), the value read from this object is 0. |
| hh3cDhcpRelay2If Opt82RIDFormat (1.3.6.1.4.1.25506 .2.122.4.1.1.12) | read-write | INTEGER | hex(1), ascii(2) | Padding format of the remote ID sub-option in normal mode. | As per the MIB. |

hh3cDhcpRelay2SrvAddrTable

About this table

This table describes the IP address of a DHCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and h3cDhcpRelay2SrvAddrIP.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-----------------------|----------------------------|-----------------|
| hh3cDhcpRelay2 SrvAddrIP (1.3.6.1.4.1.25506 .2.122.4.2.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | DHCP server IP address. | As per the MIB. |
| hh3cDhcpRelay2 SrvAddrRowStatu | read-create | RowStatus | Active createAndGo | Row status. | As per the MIB. |

| | | | | | |
|--|--|--|---------|--|--|
| s (1.3.6.1.4.1.25506 .2.122.4.2.1.2) | | | destroy | | |
|--|--|--|---------|--|--|

hh3cDhcpRelay2UserInfoTable

About this table

Use this table to delete DHCP relay entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cDhcpRelay2UserInfoVpnIndex and h3cDhcpRelay2UserInfoIpAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------|---|---|-----------------|
| hh3cDhcpRelay2 UserInfoVpnIndex (1.3.6.1.4.1.25506 .2.122.4.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (0 . 65534), 0 represents the public network. | VPN to which the IP address of the relay entry belongs. | As per the MIB. |
| hh3cDhcpRelay2 UserInfoIpAddr (1.3.6.1.4.1.25506 .2.122.4.3.1.2) | not-accessible | InetAddressIPv4 | OCTET STRING (0.255) | Client IP address in the relay entry. | As per the MIB. |
| hh3cDhcpRelay2 UserInfoMacAddr (1.3.6.1.4.1.25506 .2.122.4.3.1.3) | read-only | MacAddress | OCTET STRING (6) | Client MAC address in the relay entry. | As per the MIB. |
| hh3cDhcpRelay2 UserInfoIndex (1.3.6.1.4.1.25506 .2.122.4.3.1.4) | read-only | InterfaceIndexOrZero | Integer32(0..2147 483647) | Index of the Layer 3 interface that connects to the DHCP client. | As per the MIB. |
| hh3cDhcpRelay2 UserInfoRowStatus (1.3.6.1.4.1.25506 .2.122.4.3.1.5) | read-create | RowStatus | destroy | Row status. | As per the MIB. |

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HH3C-DHCP-SNOOP2-MIB

About this MIB

DHCP snooping is a security feature for DHCP.

DHCP snooping provides the following security features:

- Guarantees that DHCP clients obtain IP addresses from authorized DHCP servers.
- Records IP-to-MAC bindings of DHCP clients (called DHCP snooping entries) for security purposes.

MIB file name

hh3c-dhcp-snoop2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cDhcpSnoop2(124)

Scalar objects

hh3cDhcpSnoop2Enabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|-----------------------------------|-----------------|
| hh3cDhcpSnoop2Enabled (1.3.6.1.4.1.25506.2.124.1.1.1) | read-write | TruthValue | true(1), false(2) | Enabling status of DHCP snooping. | As per the MIB. |

hh3cDhcpSnoop2BindDbName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|---------------------------|--|---|
| hh3cDhcpSnoop2BindDbName (1.3.6.1.4.1.25506.2.124.1.1.2) | read-write | OCTET STRING | OCTET STRING (0.. 255) | Name of the file for saving DHCP snooping entries. | The name string cannot exceed the product-specific upper limit. |

hh3cDhcpSnoop2BindRefreshIntvl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|------------------------|--|-----------------|
| hh3cDhcpSnoop2BindRefreshIntvl (1.3.6.1.4.1.25506.2.124.1.1.3) | read-write | Unsigned32 | Unsigned32(60..864000) | DHCPv6 snooping entry refreshing interval. | As per the MIB. |

hh3cDhcpSnoop2BindRefresh

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------|--|-----------------|
| hh3cDhcpSnoop2BindRefresh (1.3.6.1.4.1.25506.2.124.1.1.4) | read-write | INTEGER | on(1) | Immediate saving of DHCP snooping entries. | As per the MIB. |

hh3cDhcpSnoop2PktSentNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpSnoop2PktSentNum (1.3.6.1.4.1.25506.2.124.1.2.1) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets forwarded by DHCP snooping. | As per the MIB. |

hh3cDhcpSnoop2PktRcvNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------------|--|-----------------|
| hh3cDhcpSnoop2PktRcvNum (1.3.6.1.4.1.25506.2.124.1.2.2) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets received by DHCP snooping. | As per the MIB. |

hh3cDhcpSnoop2PktDropNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| hh3cDhcpSnoop2PktDropNum (1.3.6.1.4.1.25506.2.124.1.2.3) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets dropped by DHCP snooping. | As per the MIB. |

Tabular objects

hh3cDhcpSnoop2BindTable

About this table

This table describes a DHCP snooping entry.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cDhcpSnoop2BindIpAddr, h3cDhcpSnoop2BindVlanId, and h3cDhcpSnoop2BindSecVlanId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------|------------------------------------|--|-----------------|
| hh3cDhcpSnoop2BindIpAddr (1.3.6.1.4.1.25506.2.124.2.1.1.1) | not-accessible | InetAddressIPv4 | OCTET STRING (4) | IP address assigned to a DHCP client. | As per the MIB. |
| hh3cDhcpSnoop2BindVlanId (1.3.6.1.4.1.25506.2.124.2.1.1.2) | not-accessible | Unsigned32 | Unsigned32(1..4094) | Outer VLAN tag of the DHCP packet. | As per the MIB. |
| hh3cDhcpSnoop2BindSecVlanId (1.3.6.1.4.1.25506.2.124.2.1.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4094 65535) | Inner VLAN tag of the DHCP packet. | As per the MIB. |
| hh3cDhcpSnoop2BindMacAddr (1.3.6.1.4.1.25506.2.124.2.1.1.4) | read-only | MacAddress | OCTET STRING (6) | MAC address of the DHCP client. | As per the MIB. |
| hh3cDhcpSnoop2BindLease (1.3.6.1.4.1.25506.2.124.2.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Remaining time of the lease for the DHCP client. | As per the MIB. |
| hh3cDhcpSnoop2BindPortIndex (1.3.6.1.4.1.25506.2.124.2.1.1.6) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Interface that connects to the DHCP client. | As per the MIB. |
| hh3cDhcpSnoop2BindRowStatus (1.3.6.1.4.1.25506.2.124.2.1.1.7) | read-create | RowStatus | Support only the destroy operation | Row status. | As per the MIB. |

hh3cDhcpSnoop2IfConfigTable

About this table

This table describes the DHCP snooping configuration on interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifindex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-----------------------------|---|-----------------|
| hh3cDhcpSnoop2IfTrustStatus (1.3.6.1.4.1.25506.2.124.2.2.1.1) | read-write | INTEGER | untrusted(0), trusted(1) | Enabling status of the DHCP snooping trusted interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|--|---|-----------------|
| hh3cDhcpSnoop2IfCheckMac (1.3.6.1.4.1.25506.2.124.2.2.1.2) | read-write | TruthValue | true(1), false(2) | Enabling status of the MAC address check. | As per the MIB. |
| hh3cDhcpSnoop2IfCheckRequest (1.3.6.1.4.1.25506.2.124.2.2.1.3) | read-write | TruthValue | true(1), false(2) | Enabling status of the DHCP-REQUEST check. | As per the MIB. |
| hh3cDhcpSnoop2IfRateLimit (1.3.6.1.4.1.25506.2.124.2.2.1.4) | read-write | Unsigned32 | Standard MIB values. | DHCP snooping packet rate limit on the interface. | As per the MIB. |
| hh3cDhcpSnoop2IfRecordBind (1.3.6.1.4.1.25506.2.124.2.2.1.5) | read-write | TruthValue | true(1), false(2) | Recording DHCP snooping entries. | As per the MIB. |
| hh3cDhcpSnoop2IfMaxLearnNum (1.3.6.1.4.1.25506.2.124.2.2.1.6) | read-write | Unsigned32 | Unsigned32(0..4294967295) | Maximum number of DHCP snooping entries that the interface can learn. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82Enable (1.3.6.1.4.1.25506.2.124.2.2.1.7) | read-write | TruthValue | true(1), false(2) | Enabling status of Option 82 support | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82Strategy (1.3.6.1.4.1.25506.2.124.2.2.1.8) | read-write | INTEGER | drop(1), keep(2), replace(3) | Option 82 strategy | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82CIDMode (1.3.6.1.4.1.25506.2.124.2.2.1.9) | read-write | INTEGER | normal(1), verbose(2), userDefine(3) | Mode of the Circuit ID sub-option in Option 82. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82CIDNodeType (1.3.6.1.4.1.25506.2.124.2.2.1.10) | read-write | INTEGER | invalid(1), mac(2), sysname(3), userDefine(4) | Format of the Circuit ID sub-option in verbose mode. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82CIDNodeStr (1.3.6.1.4.1.25506.2.124.2.2.1.11) | read-write | OCTET STRING | OCTET STRING (0..50) | User-defined string for the Circuit ID sub-option in verbose mode. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82CIDStr (1.3.6.1.4.1.25506.2.124.2.2.1.12) | read-write | OCTET STRING | OCTET STRING (0 3..63) | User-defined string for the Circuit ID sub-option in user-defined mode. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82CIDFormat (1.3.6.1.4.1.25506.2.124.2.2.1.13) | read-write | INTEGER | hex(1), ascii(2), undefine(3) | Padding format of the Circuit ID sub-option. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82RIDMode (1.3.6.1.4.1.25506.2.124.2.2.1.14) | read-write | INTEGER | normal(1), sysname(2), userDefine(3) | Mode of the Remote ID sub-option in | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|-------------------------|--|-----------------|
| .2.124.2.2.1.14) | | | userDefine(3) | Option 82. | |
| hh3cDhcpSnoop2IfOpt82RIDStr (1.3.6.1.4.1.25506.2.124.2.2.1.15) | read-write | OCTET STRING | OCTET STRING (0..63) | User-defined string for the Remote ID sub-option in user-defined mode. | As per the MIB. |
| hh3cDhcpSnoop2IfOpt82RIDFormat (1.3.6.1.4.1.25506.2.124.2.2.1.16) | read-write | INTEGER | hex(1), ascii(2) | Padding format of the Remote ID sub-option. | As per the MIB. |

hh3cDhcpSnoop2IfVlanCIDTable

About this table

This table describes Option 82 Circuit ID sub-option configuration in VLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and hh3cDhcpSnoop2IfVlanCIDVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--|--|-----------------|
| hh3cDhcpSnoop2IfVlanCIDVlanIndex (1.3.6.1.4.1.25506.2.124.2.3.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4094) | VLAN ID. | As per the MIB. |
| hh3cDhcpSnoop2IfVlanCIDStr (1.3.6.1.4.1.25506.2.124.2.3.1.2) | read-create | OCTET STRING | OCTET STRING (3..63) | User-defined string for padding the Circuit ID sub-option. | As per the MIB. |
| hh3cDhcpSnoop2IfVlanCIDRowStatus (1.3.6.1.4.1.25506.2.124.2.3.1.3) | read-create | RowStatus | Active(1), createAndGo(4), destroy(6). | Row status. | As per the MIB. |

hh3cDhcpSnoop2IfVlanRIDTable

About this table

This table describes Option 82 Remote ID sub-option configuration in VLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|--|-----------|-----------|
| Supported. It must be bound to h3cDhcpSnoop2IfVlanRIDMode when you create an entry. | Supported. It must be bound to h3cDhcpSnoop2IfVlanRIDMode when you modify an entry. | Supported | Supported |

Columns

The table indexes are ifIndex and h3cDhcpSnoop2IfVlanRIDVlanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--|---|---|
| hh3cDhcpSnoop2IfVlanRIDVlanIndex (1.3.6.1.4.1.25506.2.124.2.4.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4094) | VLAN ID. | As per the MIB. |
| hh3cDhcpSnoop2IfVlanRIDMode (1.3.6.1.4.1.25506.2.124.2.4.1.2) | read-create | INTEGER | sysname(1), userDefine(2) | Padding mode of the Remote ID sub-option. | As per the MIB. |
| hh3cDhcpSnoop2IfVlanRIDStr (1.3.6.1.4.1.25506.2.124.2.4.1.3) | read-create | OCTET STRING | OCTET STRING (0..63) | User-defined string for padding the Remote ID sub-option. | If the padding mode for the Remote ID sub-option is sysname(1), the value read from this object is 0. |
| hh3cDhcpSnoop2IfVlanRIDRowStatus (1.3.6.1.4.1.25506.2.124.2.4.1.4) | read-create | RowStatus | Active(1), createAndGo(4), destroy(6). | Row status. | As per the MIB. |

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HH3C-DNS-MIB

About this MIB

Use this MIB to obtain and configure DNS server settings.

MIB file name

hh3c-dns.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cDns (97)

Tabular objects

hh3cDnsStaticSrvIpTable

About this table

This table allows manual configuration of static DNS servers for the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cDnsStaticSrvIpType and hh3cDnsStaticSrvIpAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---------------------------------------|---|--------------------|
| hh3cDnsStaticSrvIpType (1.3.6.1.4.1.25506.2.97.1.1.1.1) | not-accessible | InetAddressType | Standard MIB values. | IP address type of the static DNS server. | Only support IPv4. |
| hh3cDnsStaticSrvIpAddr (1.3.6.1.4.1.25506.2.97.1.1.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the static DNS server. | As per the MIB. |
| hh3cDnsStaticSrvIpPriority (1.3.6.1.4.1.25506.2.97.1.1.1.3) | read-only | Integer32 | Integer32(0..2147483647) | Priority of the static DNS server. | As per the MIB. |
| hh3cDnsStaticSrvIpRowStatus (1.3.6.1.4.1.25506.2.97.1.1.1.4) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status of the static DNS server. | As per the MIB. |

hh3cDnsDynamicSrvIpTable

About this table

This table queries dynamic DNS servers in the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cDnsDynamicSrvIpType and hh3cDnsDynamicSrvIpAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-------------------------|--|-----------------|
| hh3cDnsDynamicSrvIpType (1.3.6.1.4.1.25506.2.97.1.2.1.1) | not-accessible | InetAddressType | Standard MIB values. | IP address type of the dynamic DNS server. | As per the MIB. |
| hh3cDnsDynamicSrvIpAddr (1.3.6.1.4.1.25506.2.97.1.2.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the dynamic DNS server. | As per the MIB. |
| hh3cDnsDynamicSrvIpPriority (1.3.6.1.4.1.25506.2.97.1.2.1.3) | read-only | Integer32 | Integer32(0.2147483647) | Priority of the dynamic DNS server. | As per the MIB. |

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HH3C-FIB-MIB

About this MIB

Use this MIB to detect whether the number of FIB entries reaches the threshold and whether the messages to be forwarded on the module are congested.

MIB file name

hh3c-fib.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cFibTrap(216)

Notifications

hh3cFibBoardMsgCongestResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.216.1.0.2 | The module recovered from a message congestion alarm. | Informational | Event | N/A | On |

Description

This notification is generated when the module recovers from a message congestion alarm.

Status control

ON

CLI: Use the `snmp-agent trap enable fib` command.

OFF

CLI: Use the `undo snmp-agent trap enable fib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.216.1.1.1 (hh3cFibChassisID) | Chassis number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.216.1.1.2 (hh3cFibSlotID) | Slot number. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cFibOverloadForward

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.216.2.0.1 | The number of FIB entries on the device exceeded the threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.216.2.0.2 (hh3cFibOverloadForwardResume) | On |

Description

This notification is generated when the number of FIB entries on the device exceeds the threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable fib` command.

OFF

CLI: Use the `undo snmp-agent trap enable fib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.216.2.1.1 (hh3cFibOverloadModule) | Module name (FIB4/FIB6) | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check whether the network is attacked.

hh3cFibOverloadForwardResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.216.2.0.2 | The device recovered from a FIB entry capacity usage alarm. | Informational | Event | N/A | On |

Description

This notification is generated when the device recovers from a FIB entry capacity usage alarm.

Status control

ON

CLI: Use the `snmp-agent trap enable fib` command.

OFF

CLI: Use the `undo snmp-agent trap enable fib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.216.2.1.1 (hh3cFibOverloadModule) | Module name (FIB4/FIB6). | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-IP-ADDRESS-MIB

About this MIB

Use this MIB to obtain and configure IPv4 addresses.

MIB file name

hh3c-ip-address.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3clpAddrMIB(67)

Scalar objects

hh3clpAddrNotifyIfIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|-----------|------------------------------|------------------|-----------------|
| hh3clpAddrNotifyIfIndex (1.3.6.1.4.1.25506.2.67.2.1.1) | accessible-for-notification | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |

hh3clpAddrOldIpAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-------------|--------------------------|-----------------|-----------------|
| hh3clpAddrOldIpAddress (1.3.6.1.4.1.25506.2.67.2.1.2) | accessible-for-notification | InetAddress | OCTET STRING (0..255) | Old IP address. | As per the MIB. |

hh3clpAddrNewIpAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-------------|--------------------------|-----------------|-----------------|
| hh3clpAddrNewIpAddress (1.3.6.1.4.1.25506.2.67.2.1.3) | accessible-for-notification | InetAddress | OCTET STRING (0..255) | New IP address. | As per the MIB. |

hh3clpAddrFirstTrapTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|-----------|--------------------------|---|-----------------|
| hh3clpAddrFirstTrapTime (1.3.6.1.4.1.25506.2.67.2.1.4) | accessible-for-notification | TimeTicks | TimeTicks (0~4294967295) | Time when the first SNMP notification was sent. | As per the MIB. |

Tabular objects

hh3clpAddrSetTable

About this table

Use this table to configure IPv4 addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3clpAddrSetIfIndex, hh3clpAddrSetAddrType, and hh3clpAddrSetAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|----------------------------------|--|
| hh3clpAddrSetIfIndex (1.3.6.1.4.1.25506.2.67.1.1.1.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3clpAddrSetAddrType (1.3.6.1.4.1.25506.2.67.1.1.1.1.2) | not-accessible | InetAddressType | ipv4(1) | IP address version. | Only support ipv4(1) |
| hh3clpAddrSetAddr (1.3.6.1.4.1.25506.2.67.1.1.1.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address. | As per the MIB. |
| hh3clpAddrSetMask (1.3.6.1.4.1.25506.2.67.1.1.1.1.4) | read-create | IpAddress | OCTET STRING (4) | Address mask. | As per the MIB. |
| hh3clpAddrSetSourceType (1.3.6.1.4.1.25506.2.67.1.1.1.1.5) | read-create | INTEGER | assignedIp(1) | Source type of the IPv4 address. | As per the MIB. |
| hh3clpAddrSetCatalog (1.3.6.1.4.1.25506.2.67.1.1.1.1.6) | read-create | INTEGER | primary(1), sub(2) | Type of the IPv4 address. | As per the MIB. |
| hh3clpAddrSetRowStatus (1.3.6.1.4.1.25506.2.67.1.1.1.1.7) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status of the IPv4 address. | Support active(1), createAndGo(4), and destroy(6) The value active(1) is read only. |

hh3clpAddrReadTable

About this table

Use this table to obtain IPv4 addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3clpAddrReadIfIndex, hh3clpAddrReadAddrType, hh3clpAddrReadAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|----------------------------------|-----------------------|
| hh3clpAddrReadIfIndex (1.3.6.1.4.1.25506.2.67.1.1.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3clpAddrReadAddrType (1.3.6.1.4.1.25506.2.67.1.1.2.1.2) | not-accessible | InetAddressType | ipv4(1) | IP address version. | Only support ipv4(1). |
| hh3clpAddrReadAddr (1.3.6.1.4.1.25506.2.67.1.1.2.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address. | As per the MIB. |
| hh3clpAddrReadMask (1.3.6.1.4.1.25506.2.67.1.1.2.1.4) | read-only | IpAddress | OCTET STRING (4) | Address mask. | As per the MIB. |
| hh3clpAddrReadSourceType (1.3.6.1.4.1.25506.2.67.1.1.2.1.5) | read-only | INTEGER | assignedIp(1), cluster(2), dhcp(3), bootp(4), negotiate(5), unnumbered(6), vrrp(7) | Source type of the IPv4 address. | As per the MIB. |
| hh3clpAddrReadCatalog (1.3.6.1.4.1.25506.2.67.1.1.2.1.6) | read-only | INTEGER | primary(1), sub(2), cluster(3), vrrp(4) | Type of the IPv4 address. | As per the MIB. |

hh3clpv4AddrTable

About this table

Use this table to configure the primary IPv4 address of an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------|-------------|-----------|--------------|-------------|----------------------|
| hh3clpv4AddrAdd | read-create | IpAddress | OCTET STRING | IP address. | If the interface has |

| | | | | | |
|---|-------------|-----------|--|--|--|
| r (1.3.6.1.4.1.25506.2.67.1.1.3.1.1) | | | (4) | | no primary or secondary IP address, the value is 0.0.0.0. |
| hh3clpv4AddrMask (1.3.6.1.4.1.25506.2.67.1.1.3.1.2) | read-create | IpAddress | OCTET STRING (4) | Address mask. | As per the MIB. |
| hh3clpv4AddrRowStatus (1.3.6.1.4.1.25506.2.67.1.1.3.1.3) | read-create | RowStatus | active(1) , notInService(2) , createAndGo(4) , destroy(6) | Row status of the address configuration. | Support active(1), notInService(2), createAndGo(4), and destroy(6). If the interface has primary or secondary IP address, the value is active(1). If the interface has no primary or secondary IP address, the value is notInService(2). |

Notifications

hh3clpAddressChangeNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-----------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.67.2.2.0.1 | Address change. | Informational | - | - | ON |

Description

A notification sent when the interface address had changed.

Status control

The SNMP notification for IP address change cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------|-------|-------------|---------------------------|
| hh3clpAddrNotifyIfIndex (1.3.6.1.4.1.25506.2.67.2.1.1) | Interface index. | No | Integer32 | Integer32 (1..2147483647) |
| hh3clpAddrOldIpAddress (1.3.6.1.4.1.25506.2.67.2.1.2) | Previous IP address. | No | InetAddress | OCTET STRING (0..255) |
| hh3clpAddrNewIpAddress (1.3.6.1.4.1.25506.2.67.2.1.3) | New IP address. | No | InetAddress | OCTET STRING (0..255) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|--------------------------|
| hh3clpAddrFirstTrapTime (1.3.6.1.4.1.25506.2.67.2.1.4) | Time when the first SNMP notification was sent. | No | TimeTicks | TimeTicks (0~4294967295) |

Recommended action

No action is required.

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HH3C-IPV6-ADDRESS-MIB

About this MIB

Use this MIB to obtain and configure IPv6 addresses.

MIB file name

hh3c-ipv6-address.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cIpv6AddrMIB(71)

Tabular objects

hh3cIpv6AddrSetTable

About this table

This table configures an IPv6 addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cIpv6AddrSetIfIndex, hh3cIpv6AddrSetAddrType, and hh3cIpv6AddrSetAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-------------------------------------|------------------------------------|-----------------|
| hh3cIpv6AddrSetIfIndex (1.3.6.1.4.1.25506.2.71.1.1.1.1.1) | not-accessible | Integer32 | Integer32 (1..2147483) | Interface index. | As per the MIB. |
| hh3cIpv6AddrSetAddrType (1.3.6.1.4.1.25506.2.71.1.1.1.1.2) | not-accessible | InetAddressType | ipv6(2) | IP address version. | As per the MIB. |
| hh3cIpv6AddrSetAddr (1.3.6.1.4.1.25506.2.71.1.1.1.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address. | As per the MIB. |
| hh3cIpv6AddrSetPfxLength (1.3.6.1.4.1.25506.2.71.1.1.1.1.4) | read-create | Integer32 | Integer32 (1..128) | IPv6 address subnet prefix length. | As per the MIB. |
| hh3cIpv6AddrSetSourceType (1.3.6.1.4.1.25506.2.71.1.1.1.1.5) | read-create | INTEGER | assignedIp(1) assignedEUI64Ip(2) | Source type of the IPv6 address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|---|---|-----------------|
| .2.71.1.1.1.1.5) | | | 2) assignedLinklocal p(3) | | |
| hh3clpv6AddrSet RowStatus (1.3.6.1.4.1.25506 .2.71.1.1.1.1.6) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Create a new row or delete an existing row. | As per the MIB. |

hh3clpv6AddrReadTable

About this table

This table displays IPv6 addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3clpv6AddrReadIfIndex, hh3clpv6AddrReadAddrType, and hh3clpv6AddrReadAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|-------------------------------------|-----------------|
| hh3clpv6AddrReadIfIndex (1.3.6.1.4.1.25506 .2.71.1.1.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3clpv6AddrReadAddrType (1.3.6.1.4.1.25506 .2.71.1.1.2.1.2) | not-accessible | InetAddressType | ipv6(2) | IP address version. | As per the MIB. |
| hh3clpv6AddrReadAddr (1.3.6.1.4.1.25506 .2.71.1.1.2.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | IPv6 address. | As per the MIB. |
| hh3clpv6AddrReadPfxLength (1.3.6.1.4.1.25506 .2.71.1.1.2.1.4) | read-only | Integer32 | Integer32 (1..128) | IPv6 address prefix length. | As per the MIB. |
| hh3clpv6AddrReadSourceType (1.3.6.1.4.1.25506 .2.71.1.1.2.1.5) | read-only | INTEGER | assignedIp(1) assignedEUI64Ip(2), assignedAutoIp(3) autoIp(4) dhcpv6(5) negotiate(6) cluster(7) | Source type of the IPv6 address. | As per the MIB. |
| hh3clpv6AddrReadCatalog | read-only | INTEGER | nodelocal(1) | Type of the IPv6 address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|--------|--------|--|-------------|----------------|
| (1.3.6.1.4.1.25506 .2.71.1.1.2.1.6) | | | linklocal(2) sitelocal(3) orglocal(4) global(5) | | |

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HH3C-ND-TRAP-MIB

About this MIB

Use this MIB to obtain information about ND entry learning threshold and packet conflict related alarms.

MIB file name

hh3c-nd-trap.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2). hh3cNDTrap(218)

Notifications

This section contains HH3C-ND-TRAP-MIB notifications.

hh3cNDTrapAllThresholdExceed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.1 | Number of global ND entries exceeded the alarm threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.218.1.0.2 (hh3cNDTrapThresholdResume) | OFF |

Description

This notification is generated when the number of ND entries on the device exceeds the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of global ND entries. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.5 (hh3cNDTrapEntryDynamicNum) | Number of dynamic ND entries. | No | Unsigned32 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.6 (hh3cNDTrapEntryStaticNum) | Number of static ND entries. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.7 (hh3cNDTrapEntryOtherNum) | Number of other ND entries. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Delete the useless dynamic ND entries on the device. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cNDTrapAllThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.6 | The number of ND entries dropped below the threshold. | Informational | N/A | N/A | OFF |

Description

This notification is generated when the number of ND entries on the device drops below the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of global ND entries. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.5 (hh3cNDTrapEntryDynamicNum) | Number of dynamic ND entries. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.6 (hh3cNDTrapEntryStaticNum) | Number of static ND | No | Unsigned32 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------------------|-------|------------|----------------------|
| | entries. | | | |
| 1.3.6.1.4.1.25506.2.218.1.1.7 (hh3cNDTrapEntryOtherNum) | Number of other ND entries. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNDTrapSlotThresholdExceed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.3 | The number of ND entries on the current card exceeded the alarm threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.218.1.0.4 (hh3cNDTrapSlotThresholdResumeAlarm) | OFF |

Description

This notification is generated when the number of the dynamic ND entries on a card reaches or exceeds the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Status control

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.1 (hh3cNDTrapEntryChassis) | Chassis number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.2 (hh3cNDTrapEntrySlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of ND entries on the card. | No | Unsigned32 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.5 (hh3cNDTrapEntryDynamicNum) | Number of dynamic ND entries. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Delete the useless dynamic ND entries on the card. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cNDTrapSlotThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.4 | The number of ND entries on the current card dropped below the alarm threshold. | Informational | N/A | N/A | ON |

Description

This notification is generated when the number of dynamic ND entries on the card drops below the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.1 (hh3cNDTrapEntryChassis) | Chassis number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.2 (hh3cNDTrapEntrySlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of ND entries on the card. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.5 (hh3cNDTrapEntryDynamicNum) | Number of dynamic ND entries. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNDTrapIfThresholdExceed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.5 | The number of ND entries on the interface exceeded the alarm threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.218.1.0.6 (hh3cNDTrapIfThresholdResumeAlarm) | OFF |

Description

This notification is generated when the number of dynamic ND entries on an interface exceeds the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------------|-------------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.3 (hh3cNDTrapEntryIfName) | Interface name | No | DisplayString | OCTET STRING (1:0..255) |
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of ND entries on the interface. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.5 (hh3cNDTrapEntryDynamicNum) | Number of dynamic ND entries. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Delete the useless dynamic ND entries on the interface. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cNDTrapIfThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.6 | The number of ND entries on the interface dropped below the alarm threshold. | Informational | N/A | N/A | ON |

Description

This notification is generated when the number of dynamic ND entries on an interface drops below the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------------|-------------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.3 (hh3cNDTrapEntryIfName) | Interface name | No | DisplayString | OCTET STRING (1:0..255) |
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of ND entries on the interface. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.5 (hh3cNDTrapEntryDynamicNum) | Number of dynamic ND entries. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNDTrapSuppThresholdExceed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.7 | The number of ND suppression entries on the device exceeded the alarm threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.218.1.0.8 (hh3cNDTrapSuppThresholdResume Alarm) | ON |

Description

This notification is generated when the number of ND suppression entries on the device exceeds the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of ND suppression entries on the device | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.8 (hh3cNDTrapEntrySuppNum) | Number of ND suppression entries on the device | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Delete the useless ND suppression entries on the device. If the current alarm threshold value is too small, increase the threshold value as appropriate.

hh3cNDTrapSuppThresholdResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.1.0.8 | The number of ND suppression entries on the | Informational | N/A | N/A | ON |

| | | | | | |
|--|---|--|--|--|--|
| | device dropped below the alarm threshold. | | | | |
|--|---|--|--|--|--|

Description

This notification is generated when the number of ND suppression entries on the device drops below the alarm threshold.

Status control

ON

CLI: Use the `ipv6 nd entry-limit record enable` command.

OFF

CLI: Use the `undo ipv6 nd entry-limit record enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.1.1.4 (hh3cNDTrapEntryThreshold) | Alarm threshold for the number of ND suppression entries on the device | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.1.1.8 (hh3cNDTrapEntrySuppNum) | Number of ND suppression entries on the device | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNDTrapPktSpeedAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.218.2.0.1 | The sending rate for ND packets or ND Miss packets exceeded the alarm threshold. | Error | Warning | 1.3.6.1.4.1.25506.2.218.2.0.2 (hh3cNDTrapPktSpeedAlarmResume) | OFF |

Description

This notification is generated when the ND packets or ND Miss packets sending rate exceeds the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable nd nd-miss` command.

OFF

CLI: Use the `undo snmp-agent trap enable nd nd-miss` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|------------------------|
| 1.3.6.1.4.1.25506.2.218.2.1.1 (hh3cNDTrapPktSpeedChassis) | Chassis number | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.2 (hh3cNDTrapPktSpeedSlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.3 (hh3cNDTrapPktSpeedSupValue) | Alarm threshold of packet sending rate. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.4 (hh3cNDTrapPktSpeedCurValue) | Current packet sending rate. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.5 (hh3cNDTrapPktSpeedSupType) | Packet type: ND, or ND-Miss. | No | OCTET STRING | OCTET STRING (1:1..48) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check whether an attack or a loop exists on the network.

hh3cNDTrapPktSpeedAlarmResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.2.0.2 | The sending rate for ND packets or ND Miss packets dropped below the alarm threshold. | Informational | N/A | N/A | OFF |

Description

This notification is generated when the ND packets or ND Miss packets sending rate on an interface drops below the alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable nd nd-miss` command.

OFF

CLI: Use the `undo snmp-agent trap enable nd nd-miss` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|------------------------|
| 1.3.6.1.4.1.25506.2.218.2.1.1 (hh3cNDTrapPktSpeedChassis) | Chassis number | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.2 (hh3cNDTrapPktSpeedSlot) | Slot number. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.3 (hh3cNDTrapPktSpeedSupValue) | Alarm threshold of packet sending rate. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.4 (hh3cNDTrapPktSpeedCurValue) | Current packet sending rate. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.1.5 (hh3cNDTrapPktSpeedSupType) | Packet type: ND, or ND-Miss. | No | OCTET STRING | OCTET STRING (1:1..48) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNDTrapHostIPConflict

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--------------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.218.2.0.3 | Local IPv6 address conflicted. | Error | Warning | 1.3.6.1.4.1.25506.2.218.2.0.4 (hh3cNDTrapHostIPConflictResume) | ON |

Description

This notification is generated when an interface receives a packet whose source IPv6 address is the same as the local interface IPv6 address.

Status control

ON

CLI: Use the `snmp-agent trap enable nd local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable nd local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------------|------------------------|
| 1.3.6.1.4.1.25506.2.218.2.2.1 (hh3cNDTrapHostIPCftLocalIPv6) | IPv6 address of the interface. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.2 (hh3cNDTrapHostIPCftLocalMAC) | MAC address of the interface. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.3 (hh3cNDTrapHostIPCftLocalIf) | Name of the interface. | No | DisplayString | OCTETSTRING (1:0..255) |
| 1.3.6.1.4.1.25506.2.218.2.2.4 (hh3cNDTrapHostIPCftLocalPevId) | Outer VLAN ID of the interface. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.2.5 (hh3cNDTrapHostIPCftLocalCevid) | Inner VLAN ID of the interface. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.2.6 (hh3cNDTrapHostIPCftRemoteIPv6) | Remote IPv6 address. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.7 (hh3cNDTrapHostIPCftRemoteMAC) | Remote MAC address. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.8 (hh3cNDTrapHostIPCftRemotePevId) | Remote outer VLAN ID. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.2.9 (hh3cNDTrapHostIPCftRemoteCevid) | Remote inner VLAN ID. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check whether an ND attack exists on the network.

hh3cNDTrapHostIPConflictResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.2.0.4 | The local IPv6 address conflict was removed. | Informational | N/A | N/A | OFF |

Description

This notification is generated when the local IPv6 address conflict on an interface is removed. A conflict on an interface is removed if the interface does not receive the same conflict within three minutes.

Status control

ON

CLI: Use the `snmp-agent trap enable nd local-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable nd local-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------|-------------------------|
| 1.3.6.1.4.1.25506.2.218.2.2.1 (hh3cNDTrapHostIPCftLocalIPv6) | IPv6 address of the interface. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.2 (hh3cNDTrapHostIPCftLocalMAC) | MAC address of the interface. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.3 (hh3cNDTrapHostIPCftLocalIf) | Name of the interface. | No | DisplayString | OCTETSTRING (1: 0..255) |
| 1.3.6.1.4.1.25506.2.218.2.2.4 (hh3cNDTrapHostIPCftLocalPevId) | Outer VLAN ID of the interface. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.2.5 (hh3cNDTrapHostIPCftLocalCevId) | Inner VLAN ID of the interface. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.2.6 (hh3cNDTrapHostIPCftRemoteIPv6) | Remote IPv6 address. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.7 (hh3cNDTrapHostIPCftRemoteMAC) | Remote MAC address. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.2.9 (hh3cNDTrapHostIPCftRemotePevId) | Remote outer VLAN ID. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.2.10 (hh3cNDTrapHostIPCftRemoteCevId) | Remote inner VLAN ID. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cNDTrapDuplicateIPv6

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|-------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.2.0.5 | User IPv6 address conflicted. | Error | Warning | N/A | OFF |

Description

This notification is generated when a user IPv6 address conflict occurs. A conflict occurs if an incoming NA packet has the same source IPv6 address as an existing ND entry but a different source MAC address.

Status control

ON

CLI: Use the `snmp-agent trap enable nd user-ip-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable user-ip-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------------|-------------------------|
| 1.3.6.1.4.1.25506.2.218.2.3.1 (hh3cNDTrapDupIPv6NewMac) | MAC address of the new user. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.3.2 (hh3cNDTrapDupIPv6NewSevid) | Outer VLAN ID of the new user. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.3.3 (hh3cNDTrapDupIPv6NewCevId) | Inner VLAN ID of the new user. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.3.4 (hh3cNDTrapDupIPv6NewIFName) | Interface name of the new user. | No | DisplayString | OCTET STRING (1:0..255) |
| 1.3.6.1.4.1.25506.2.218.2.3.5 (hh3cNDTrapDupIPv6OldMac) | MAC address of the old user. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.3.6 (hh3cNDTrapDupIPv6OldSevid) | Outer VLAN ID of the old user. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.3.7 (hh3cNDTrapDupIPv6OldCevId) | Inner VLAN ID of the old user. | No | OCTET STRING | OCTET STRING (1:1..48) |
| 1.3.6.1.4.1.25506.2.218.2.3.8 (hh3cNDTrapDupIPv6OldIFName) | Interface name of the old user. | No | DisplayString | OCTET STRING (1:0..255) |
| 1.3.6.1.4.1.25506.2.218.2.3.9 (hh3cNDTrapDupIPv6DupAddr) | Conflicted IPv6 address. | No | OCTET STRING | OCTET STRING (1:1..48) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check whether an ND packet attack or a loop exists on the network.

hh3cNDTrapRatelimitOverspeed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.218.2.0.6 | The sending rate for ND packets exceeded the rate limit. | Informational | N/A | N/A | OFF |

Description

This notification is generated when the sending rate for ND packets exceeds the rate limit.

Status control

ON

CLI: Use the `snmp-agent trap enable nd rate-limit` command.

OFF

CLI: Use the `undo snmp-agent trap enable nd rate-limit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|--------------|----------------------|
| 1.3.6.1.4.1.25506.2.218.2.4.1 (hh3cNDTrapRatelimitVer) | Notification version. | No | Unsigned32 | 1 |
| 1.3.6.1.4.1.25506.2.218.2.4.2 (hh3cNDTrapRatelimitCount) | Rate limit. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.218.2.4.3 (hh3cNDTrapRatelimitMsg) | Rate limit message. | No | OCTET STRING | SIZE (1..254) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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 - MIB file name 1
 - Root object 1
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 - hh3cTcpMD5AuthenFail..... 1

HH3C-TCP-MIB

About this MIB

Use this MIB to test whether the MD5 authentication for the current TCP connection is successful.

MIB file name

hh3c-tcp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cTcp(215)

Notifications

This section contains HH3C-TCP-MIB notifications.

hh3cTcpMD5AuthenFail

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.215.1.0.1 | TCP connection MD5 authentication failed. | Error | Warning | N/A | ON |

Description

This notification is generated when MD5 authentication of the current TCP connection fails.

Status control

ON

CLI: Use the `snmp-agent trap enable tcp` command.

OFF

CLI: Use the `undo snmp-agent trap enable tcp` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.215.1.1.1 (hh3cTcpConnLocalAddressTCP) | Local IP address of the TCP connection | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.215.1.1.2 (hh3cTcpConnLocalPortTCP) | Local port number of the TCP connection | No | Integer32 | Integer32(0..65535) |
| 1.3.6.1.4.1.25506.2.215.1.1.3 (hh3cTcpConnRemAddressTCP) | Remote IP address of the TCP connection | No | OCTET STRING | OCTET STRING (0..255) |

| | | | | |
|--|--|----|--------------|-----------------------|
| 1.3.6.1.4.1.25506.2.215.1.1.4 (hh3cTcpConnRemPortTCP) | Remote port number of the TCP connection | No | Integer32 | Integer32(0..65535) |
| 1.3.6.1.4.1.25506.2.215.1.1.5 (hh3cTcpProtocol) | Name of the upper layer protocol of TCP | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.215.1.1.6 (hh3cTcpVrfNameVRF) | Name of the VRF of the TCP connection | No | OCTET STRING | OCTET STRING (0..255) |

Recommended action

Check whether the network is under a packet attack.

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- HH3C-TUNNEL-TRAP-MIB 1
 - About this MIB 1
 - MIB file name 1
 - Root object 1
 - Notifications..... 1
 - hh3cTunnelTrapVxlanStatusUp 1
 - hh3cTunnelTrapVxlanStatusDown 2

HH3C-TUNNEL-TRAP-MIB

About this MIB

Use this MIB to output notifications for the tunnel module.

MIB file name

hh3c-tunnel-trap.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cTunnelTrap(226)

Notifications

hh3cTunnelTrapVxlanStatusUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.226.1.1.0.1 | A VXLAN tunnel came up. | Error | Warning | N/A | OFF |

Description

This notification is generated when a VXLAN tunnel comes up at the link layer.

Status control

ON

CLI: Use the `snmp-agent trap enable tunnel vxlan-tunnel-status` command.

OFF

CLI: Use the `undo snmp-agent trap enable tunnel vxlan-tunnel-status` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------------|-------|-------------|------------------------------------|
| 1.3.6.1.4.1.25506.2.226.1.1.1.1 (hh3cTunnelTrapVxlanStatusSType) | Tunnel source address type. | No | INTEGER | unknown(0), ipv4(1), ipv6(2) |
| 1.3.6.1.4.1.25506.2.226.1.1.1.2 (hh3cTunnelTrapVxlanStatusSrcIP) | Tunnel source address. | No | InetAddress | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.226.1.1.1.3 (hh3cTunnelTrapVxlanStatusDType) | Tunnel destination address type. | No | INTEGER | unknown(0), ipv4(1), ipv6(2) |

| | | | | |
|---|-----------------------------|----|-------------|-----------------------|
| 1.3.6.1.4.1.25506.2.226.1.1.1.4 (hh3cTunnelTrapVxlanStatusDstIP) | Tunnel destination address. | No | InetAddress | OCTET STRING (0..255) |
|---|-----------------------------|----|-------------|-----------------------|

Recommended action

No action is required.

hh3cTunnelTrapVxlanStatusDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.226.1.1.0.2 | A VXLAN tunnel went down. | Error | Warning | N/A | OFF |

Description

This notification is generated when a VXLAN tunnel goes down at the link layer.

Status control

ON

CLI: Use the `snmp-agent trap enable tunnel vxlan-tunnel-status` command.

OFF

CLI: Use the `undo snmp-agent trap enable tunnel vxlan-tunnel-status` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------------|-------|-------------|------------------------------------|
| 1.3.6.1.4.1.25506.2.226.1.1.1.1 (hh3cTunnelTrapVxlanStatusSType) | Tunnel source address type. | No | INTEGER | unknown(0), ipv4(1), ipv6(2) |
| 1.3.6.1.4.1.25506.2.226.1.1.1.2 (hh3cTunnelTrapVxlanStatusSrcIP) | Tunnel source address. | No | InetAddress | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.226.1.1.1.3 (hh3cTunnelTrapVxlanStatusDType) | Tunnel destination address type. | No | INTEGER | unknown(0), ipv4(1), ipv6(2) |
| 1.3.6.1.4.1.25506.2.226.1.1.1.4 (hh3cTunnelTrapVxlanStatusDstIP) | Tunnel destination address. | No | InetAddress | OCTET STRING (0..255) |

Recommended action

No action is required.

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IP-FORWARD-MIB

About this MIB

Use this MIB to configure IP routes for Classless Inter-Domain Routing (CIDR).

MIB file name

rfc4292-ip-forward.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ip(4).ipForward(24)

Scalar objects

ipCidrRouteNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|---------|----------------------|---|-----------------|
| ipCidrRouteNumber(1.3.6.1.2.1.4.24.3) | read-only | Gauge32 | Standard MIB values. | Number of current valid ipCidrRouteTable entries. | As per the MIB. |

inetCidrRouteNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|---|-----------------|
| inetCidrRouteNumber(1.3.6.1.2.1.4.24.6) | read-only | Gauge32 | Standard MIB values. | Number of current valid inetCidrRouteTable entries. | As per the MIB. |

inetCidrRouteDiscards

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| inetCidrRouteDiscards(1.3.6.1.2.1.4.24.8) | read-only | Counter32 | Standard MIB values. | Number of invalid entries dropped by inetCidrRouteTable. | As per the MIB. |

Tabular objects

ipCidrRouteTable

About this table

Use this table to implement routing table function on an entity. This table has been replaced by the inetCidrRouteTable and is no longer in use.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ipCidrRouteDest, ipCidrRouteMask, ipCidrRouteTos, and ipCidrRouteNextHop.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------------|----------------------|--|------------------------------------|
| ipCidrRouteDest(1.3.6.1.2.1.4.24.4.1.1) | read-only | IpAddress | (0..255) | Destination IP address of the route. | As per the MIB. |
| ipCidrRouteMask(1.3.6.1.2.1.4.24.4.1.2) | read-only | IpAddress | (0..255) | Address mask. | As per the MIB. |
| ipCidrRouteTos(1.3.6.1.2.1.4.24.4.1.3) | read-only | Integer32 | Standard MIB values. | ToS field value. | The value is always 0. |
| ipCidrRouteNextHop(1.3.6.1.2.1.4.24.4.1.4) | read-only | IpAddress | (0..255) | Address of the next hop. | As per the MIB. |
| ipCidrRouteIfIndex(1.3.6.1.2.1.4.24.4.1.5) | read-create | Integer32 | Standard MIB values. | Interface index. | Read only. |
| ipCidrRouteType(1.3.6.1.2.1.4.24.4.1.6) | read-create | INTEGER | Standard MIB values. | Type of the route. | Read only. |
| ipCidrRouteProto(1.3.6.1.2.1.4.24.4.1.7) | read-only | INTEGER | Standard MIB values. | Protocol type. | As per the MIB. |
| ipCidrRouteAge(1.3.6.1.2.1.4.24.4.1.8) | read-only | Integer32 | Standard MIB values. | Time since the route was last updated. | As per the MIB. |
| ipCidrRouteInfo(1.3.6.1.2.1.4.24.4.1.9) | read-create | OBJECT IDENTIFIER | Standard MIB values. | Route information. | The value is always 0. Read only. |
| ipCidrRouteNextHopAS(1.3.6.1.2.1.4.24.4.1.10) | read-create | Integer32 | Standard MIB values. | AS number of the next hop. | The value is always 0. Read only. |
| ipCidrRouteMetric1(1.3.6.1.2.1.4.24.4.1.11) | read-create | Integer32 | Standard MIB values. | Primary routing metric of the route. | Read only. |
| ipCidrRouteMetric2(1.3.6.1.2.1.4.24.4.1.12) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| ipCidrRouteMetric3(1.3.6.1.2.1.4.24.4.1.13) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| ipCidrRouteMetric4(1.3.6.1.2.1.4.24.4.1.14) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|----------------------|---|---------------------------------------|
| ipCidrRouteMetric 5(1.3.6.1.2.1.4.24.4.1.15) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| ipCidrRouteStatus (1.3.6.1.2.1.4.24.4.1.16) | read-create | INTEGER | Standard MIB values. | Row status variable, used according to row installation and deletion conventions. | Read only. |

inetCidrRouteTable

About this table

Use this table to obtain IP version-independent multipath CIDR routes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are inetCidrRouteDestType, inetCidrRouteDest, inetCidrRoutePfxLen, inetCidrRoutePolicy, and inetCidrRouteNextHop.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|----------------------|---|-----------------|
| inetCidrRouteDestType (1.3.6.1.2.1.4.24.7.1.1) | not-accessible | Integer32 | Standard MIB values. | Destination address family. | As per the MIB. |
| inetCidrRouteDest (1.3.6.1.2.1.4.24.7.1.2) | not-accessible | Octets | (0..255) | Destination address. | As per the MIB. |
| inetCidrRoutePfxLen (1.3.6.1.2.1.4.24.7.1.3) | not-accessible | Gauge32 | Standard MIB values. | Prefix length of the destination address. | As per the MIB. |
| inetCidrRoutePolicy (1.3.6.1.2.1.4.24.7.1.4) | not-accessible | Object Identifier | Standard MIB values. | General set of route information. | As per the MIB. |
| inetCidrRouteNextHopType (1.3.6.1.2.1.4.24.7.1.5) | not-accessible | Integer32 | Standard MIB values. | Next hop address family. | As per the MIB. |
| inetCidrRouteNextHop (1.3.6.1.2.1.4.24.7.1.6) | not-accessible | Octets | (0..255) | Address of the next hop. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|----------------------|--|--|
| inetCidrRouteIfIndex (1.3.6.1.2.1.4.24.7.1.7) | read-create | Integer32 | Standard MIB values. | Output interface. | Read only. |
| inetCidrRouteType (1.3.6.1.2.1.4.24.7.1.8) | read-create | Integer32 | Standard MIB values. | Type of the route. | Only supports remote, local, and blackhole. Read only. |
| inetCidrRouteProtocol (1.3.6.1.2.1.4.24.7.1.9) | read-only | Integer32 | Standard MIB values. | Routing protocol type. | Supports local, netmgmt, rip, ospf, is-is, bgp, and other (unspecified). |
| inetCidrRouteAge (1.3.6.1.2.1.4.24.7.1.10) | read-only | Gauge32 | Standard MIB values. | Lifetime of the route. | As per the MIB. |
| inetCidrRouteNextHopAS (1.3.6.1.2.1.4.24.7.1.11) | read-create | Gauge32 | Standard MIB values. | AS number of the next hop. | The value is always 0. Read only. |
| inetCidrRouteMetric1 (1.3.6.1.2.1.4.24.7.1.12) | read-create | Integer32 | Standard MIB values. | Routing metric in the protocol. | Read only. |
| inetCidrRouteMetric2 (1.3.6.1.2.1.4.24.7.1.13) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| inetCidrRouteMetric3 (1.3.6.1.2.1.4.24.7.1.14) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| inetCidrRouteMetric4 (1.3.6.1.2.1.4.24.7.1.15) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| inetCidrRouteMetric5 (1.3.6.1.2.1.4.24.7.1.16) | read-create | Integer32 | Standard MIB values. | Alternate routing metric of the route. | The value is always -1. Read only. |
| inetCidrRouteStatus (1.3.6.1.2.1.4.24.7.1.17) | read-create | Integer32 | Standard MIB values. | Row status. | Read only. |

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IP-MIB

About this MIB

Use this MIB to obtain device IP and ICMP basic information and packet statistics.

MIB file name

rfc4293-ip.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ipMIB(48)

Scalar objects

ipForwarding

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|------------|---------|-------------------------------------|--|-----------------------------------|
| ipForwarding (1.3.6.1.2.1.4.1) | read-write | INTEGER | forwarding(1), not-forwarding(2) | Whether the object is an IP gateway that can forward data packets destined to any other devices. Only IP gateways can forward data packets. IP hosts cannot forward data packets. | Supports only the read operation. |

ipDefaultTTL

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|------------|---------|----------------------|---|-----------------------|
| ipDefaultTTL (1.3.6.1.2.1.4.2) | read-write | INTEGER | Standard MIB values. | Default TTL carried in an IP data packet header if the transmission layer protocol does not have a TTL value defined. | Value range: 1 to 255 |

ipInReceives

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipInReceives (1.3.6.1.2.1.4.3) | read-only | Counter32 | Standard MIB values. | Number of received data packets, including error data packets. | As per the MIB. |

ipInHdrErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipInHdrErrors (1.3.6.1.2.1.4.4) | read-only | Counter32 | Standard MIB values. | Number of data packets dropped because of reasons such as checksum error, mismatched version, incorrect format, TTL timeout, and IP option processing error. | As per the MIB. |

ipInAddrErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipInAddrErrors (1.3.6.1.2.1.4.5) | read-only | Counter32 | Standard MIB values. | <p>Number of received data packets dropped because of invalid destination addresses (for example, 0.0.0.0) or unsupported destination address class (for example, class E).</p> <p>For a non-IP gateway entity, it drops packets destined to any other devices because such entities cannot forward traffic.</p> | As per the MIB. |

ipForwDatagrams

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|---|-----------------|
| ipForwDatagrams (1.3.6.1.2.1.4.6) | read-only | Counter32 | Standard MIB values. | <p>Number of forwarded packets.</p> <p>Forwarded packets are those that are not locally-addressed and require the system to find a route to forward them.</p> | As per the MIB. |

ipInUnknownProtos

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|----------------------------|-----------------|
| ipInUnknownProtos (1.3.6.1.2.1.4.7) | read-only | Counter32 | Standard MIB values. | Number of received packets | As per the MIB. |

| | | | | | |
|--|--|--|--|--|--|
| | | | | destined to the local IP address but dropped because of unsupported protocol or unknown reasons. | |
|--|--|--|--|--|--|

ipInDiscards

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipInDiscards (1.3.6.1.2.1.4.8) | read-only | Counter32 | Standard MIB values. | Number of received packets that should be processed, but were dropped because of reasons such as insufficient buffer space. This value does not include packet fragments dropped because of reassembly timeout. | As per the MIB. |

ipInDelivers

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|---|-----------------|
| ipInDelivers (1.3.6.1.2.1.4.9) | read-only | Counter32 | Standard MIB values. | Number of received packets successfully delivered to IP user-protocols. | As per the MIB. |

ipOutRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipOutRequests (1.3.6.1.2.1.4.10) | read-only | Counter32 | Standard MIB values. | Number of packets that local IP user-protocols (including ICMP) supplied to IP in requests for transmission. Forwarded IP packets are excluded. You can obtain the number of forwarded IP packets by using ipForwDatagrams. | As per the MIB. |

ipOutDiscards

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|----------------------------|-----------------|
| ipOutDiscards (1.3.6.1.2.1.4.11) | read-only | Counter32 | Standard MIB values. | Number of outgoing packets | As per the MIB. |

| | | | | | |
|--|--|--|--|--|--|
| | | | | that should be processed, but were dropped because of reasons such as insufficient buffer space. | |
|--|--|--|--|--|--|

ipOutNoRoutes

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipOutNoRoutes (1.3.6.1.2.1.4.12) | read-only | Counter32 | Standard MIB values. | Number of IP packets dropped because no route to the destination can be found. | As per the MIB. |

ipReasmTimeout

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|------------------------------|-----------------|
| ipReasmTimeout (1.3.6.1.2.1.4.13) | read-only | Integer32 | Standard MIB values. | Fragment reassembly timeout. | As per the MIB. |

ipReasmReqds

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipReasmReqds (1.3.6.1.2.1.4.14) | read-only | Counter32 | Standard MIB values. | Number of received IP packet fragments waiting for reassembly. | As per the MIB. |

ipReasmOKs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|---|-----------------|
| ipReasmOKs (1.3.6.1.2.1.4.15) | read-only | Counter32 | Standard MIB values. | Number of IP packets that have been reassembled successfully. | As per the MIB. |

ipReasmFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipReasmFails (1.3.6.1.2.1.4.16) | read-only | Counter32 | Standard MIB values. | Number of packet reassembly failures detected by the IP reassembly algorithm because of reasons such as timeout and errors. The system does not calculate the number of dropped fragments | As per the MIB. |

| | | | | | |
|--|--|--|--|--|--|
| | | | | because some algorithms do not record fragment quantity information. | |
|--|--|--|--|--|--|

ipFragOKs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipFragOKs (1.3.6.1.2.1.4.17) | read-only | Counter32 | Standard MIB values. | Number of IP packets that have been fragmented successfully. | As per the MIB. |

ipFragFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|--|-----------------|
| ipFragFails (1.3.6.1.2.1.4.18) | read-only | Counter32 | Standard MIB values. | Number of IP packets failed to be fragmented because of reasons such as a set DF flag. | As per the MIB. |

ipFragCreates

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|---|-----------------|
| ipFragCreates (1.3.6.1.2.1.4.19) | read-only | Counter32 | Standard MIB values. | Number of IP packets created because of packet fragmentation. | As per the MIB. |

ipRoutingDiscards

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| ipRoutingDiscards (1.3.6.1.2.1.4.23) | read-only | Counter32 | Standard MIB values. | Number of deleted routing table entries. Routing table entries can be deleted to release buffer space. | As per the MIB. |

ipv6IpForwarding

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------------------------------|---|-----------------------------------|
| ipv6IpForwarding (1.3.6.1.2.1.4.25) | read-write | INTEGER | forwarding(1), not-forwarding(2) | Whether the object is an IPv6 router that can forward data packets destined to any other devices. | Supports only the read operation. |

ipv6IpDefaultHopLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|--------------------|--|-----------------------------------|
| ipv6IpDefaultHopLimit (1.3.6.1.2.1.4.26) | read-write | Integer32 | Integer32 (0..255) | Default hops carried in an IPv6 data packet header if the transmission layer protocol does not have a hop value defined. | Supports only the read operation. |

ipv4InterfaceTableLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|----------------|
| ipv4InterfaceTableLastChange (1.3.6.1.2.1.4.27) | read-only | TimeStamp | Standard MIB values. | Time elapsed from system startup to ipv4InterfaceTable entry adding or deletion, or an ipv4InterfaceReasmMaxSize or ipv4InterfaceEnableStatus change. | Not supported |

ipv6InterfaceTableLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|----------------|
| ipv6InterfaceTableLastChange (1.3.6.1.2.1.4.29) | read-only | TimeStamp | Standard MIB values. | Time elapsed from system startup to ipv6InterfaceTable entry adding or deletion, or an ipv6InterfaceReasmMaxSize, ipv6InterfaceIdentifier, ipv6InterfaceEnableStatus, ipv6InterfaceReachableTime, ipv6InterfaceRetransmitTime, or ipv6InterfaceForwarding change. | Not supported |

ipLlStatsTableLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|----------------|
| ipLlStatsTableLastChange (1.3.6.1.2.1.4.31.2) | read-only | TimeStamp | Standard MIB values. | Time elapsed from system startup to ipLlStatsTable entry adding or deletion. | Not supported |

ipAddressSpinLock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|----------------------|--|----------------|
| ipAddressSpinLock (1.3.6.1.2.1.4.33) | read-write | TestAndIncr | Standard MIB values. | An advisory lock used to allow multiple users to add entries to or modify entries of the IP address table. | Not supported |

ipv6RouterAdvertSpinLock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|----------------------|--|----------------|
| ipv6RouterAdvertSpinLock (1.3.6.1.2.1.4.38) | read-write | TestAndIncr | Standard MIB values. | An advisory lock used to allow multiple users to add entries to or modify entries of the IPv6 routing table. | Not supported |

icmpInMsgs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------|-----------|-----------|----------------------|-----------------------------------|-----------------|
| icmpInMsgs (1.3.6.1.2.1.5.1) | read-only | Counter32 | Standard MIB values. | Number of received ICMP messages. | As per the MIB. |

icmpInErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpInErrors (1.3.6.1.2.1.5.2) | read-only | Counter32 | Standard MIB values. | Number of received ICMP error messages, including messages with ICMP checksum error or length error. | As per the MIB. |

icmpInDestUnreachs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| icmpInDestUnreachs (1.3.6.1.2.1.5.3) | read-only | Counter32 | Standard MIB values. | Number of received ICMP ICMP Destination Unreachable messages. | As per the MIB. |

icmpInTimeExcds

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpInTimeExcds (1.3.6.1.2.1.5.4) | read-only | Counter32 | Standard MIB values. | Number of ICMP Time Exceeded messages. | As per the MIB. |

icmpInParmProbs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|---|-----------------|
| icmpInParmProbs (1.3.6.1.2.1.5.5) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Parameter Problem messages. | As per the MIB. |

icmpInSrcQuenchs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|-----------------|
| icmpInSrcQuenchs (1.3.6.1.2.1.5.6) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Source Quench messages. | As per the MIB. |

icmpInRedirects

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpInRedirects (1.3.6.1.2.1.5.7) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Redirect messages. | As per the MIB. |

icmpInEchos

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpInEchos (1.3.6.1.2.1.5.8) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Echo Request messages. | As per the MIB. |

icmpInEchoReps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|---|-----------------|
| icmpInEchoReps (1.3.6.1.2.1.5.9) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Echo Response messages. | As per the MIB. |

icmpInTimestamps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| icmpInTimestamps (1.3.6.1.2.1.5.10) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Timestamp Request messages. | As per the MIB. |

icmpInTimestampReps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| icmpInTimestampReps (1.3.6.1.2.1.5.11) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Timestamp Response messages. | As per the MIB. |

icmpInAddrMasks

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpInAddrMasks (1.3.6.1.2.1.5.12) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Address Mask Request messages. | As per the MIB. |

icmpInAddrMaskReps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| icmpInAddrMaskReps (1.3.6.1.2.1.5.13) | read-only | Counter32 | Standard MIB values. | Number of received ICMP Address Mask Response messages. | As per the MIB. |

icmpOutMsgs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpOutMsgs (1.3.6.1.2.1.5.14) | read-only | Counter32 | Standard MIB values. | Number of ICMP messages that this entry attempted to send, including messages calculated by icmpOutErrors. | As per the MIB. |

icmpOutErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpOutErrors (1.3.6.1.2.1.5.15) | read-only | Counter32 | Standard MIB values. | Number of ICMP messages failed to be sent because of reasons such as insufficient buffer space. Errors occurred outside the ICMP layer are not included. In some implementations, there may be no types of error which contribute to this counter's value. | As per the MIB. |

icmpOutDestUnreachs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| icmpOutDestUnreachs (1.3.6.1.2.1.5.16) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Destination Unreachable messages. | As per the MIB. |

icmpOutTimeExcds

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| icmpOutTimeExcds (1.3.6.1.2.1.5.17) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Time Exceeded messages. | As per the MIB. |

icmpOutParmProbs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| icmpOutParmProbs (1.3.6.1.2.1.5.18) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Parameter Problem messages. | As per the MIB. |

icmpOutSrcQuenchs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|----------------|
| icmpOutSrcQuenchs (1.3.6.1.2.1.5.19) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Source Quench messages. | Not supported |

icmpOutRedirects

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| icmpOutRedirects (1.3.6.1.2.1.5.20) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Redirect messages. For a host, this object will always be zero because hosts do not send redirects. | As per the MIB. |

icmpOutEchos

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|-----------|-----------|----------------------|--|-----------------|
| icmpOutEchos (1.3.6.1.2.1.5.21) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Echo Request messages. | As per the MIB. |

icmpOutEchoReps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|-----------------|
| icmpOutEchoReps (1.3.6.1.2.1.5.22) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Echo Response messages. | As per the MIB. |

icmpOutTimestamps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|----------------|
| icmpOutTimestamps (1.3.6.1.2.1.5.23) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Timestamp Request messages. | Not supported |

icmpOutTimestampReps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| icmpOutTimestampReps (1.3.6.1.2.1.5.24) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Timestamp Response messages. | As per the MIB. |

icmpOutAddrMasks

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|----------------|
| icmpOutAddrMasks (1.3.6.1.2.1.5.25) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Address Mask Request messages. | Not supported |

icmpOutAddrMaskReps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| icmpOutAddrMaskReps (1.3.6.1.2.1.5.26) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP Address Mask Response messages. | As per the MIB. |

Tabular objects

ipAddrTable

About this table

This table contains IPv4 address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ipAdEntAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|---|-----------------|
| ipAdEntAddr (1.3.6.1.2.1.4.20.1.1) | read-only | IpAddress | Standard MIB values. | IP address. | As per the MIB. |
| ipAdEntIfIndex (1.3.6.1.2.1.4.20.1.2) | read-only | INTEGER | INTEGER (1..2147483647) | Index of the interface corresponding to the entry. | As per the MIB. |
| ipAdEntNetMask (1.3.6.1.2.1.4.20.1.3) | read-only | IpAddress | Standard MIB values. | Subnet mask of the IP address. | As per the MIB. |
| ipAdEntBcastAddr (1.3.6.1.2.1.4.20.1.4) | read-only | INTEGER | INTEGER (0..1) | Value of the least-significant bit in the IP broadcast address used for sending packets on the (logical) interface associated with the IP address of this entry. For example, when the Internet standard all-ones broadcast address is used, the value is 1. | As per the MIB. |
| ipAdEntReasmMaxSize (1.3.6.1.2.1.4.20.1.5) | read-only | INTEGER | INTEGER (0..65535) | Maximum size of an IP packet which the entry can reassemble from | As per the MIB. |

| | | | | | |
|--|--|--|--|------------|--|
| | | | | fragments. | |
|--|--|--|--|------------|--|

ipNetToMediaTable

About this table

This table contains IPv4 address-to-physical address mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipNetToMediaIfIndex and ipNetToMediaNetAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|--|---|-----------------------------------|
| ipNetToMediaIfIndex (1.3.6.1.2.1.4.22.1.1) | read-write | INTEGER | INTEGER (1..2147483647) | Index of the interface corresponding to the entry. | Supports only the read operation. |
| ipNetToMediaPhysAddress (1.3.6.1.2.1.4.22.1.2) | read-write | PhysAddress | SIZE(0..65535) | Physical address of the media. | Supports only the read operation. |
| ipNetToMediaNetAddress (1.3.6.1.2.1.4.22.1.3) | read-write | IpAddress | Standard MIB values. | IP address corresponding to the media's physical address. | Supports only the read operation. |
| ipNetToMediaType (1.3.6.1.2.1.4.22.1.4) | read-write | INTEGER | other(1), invalid(2), dynamic(3), static(4) | Mapping type. Setting this object to the value invalid(2) invalidates the corresponding entry in the ipNetToMediaTable. You can use this object to disassociate the interface from the mapping. | Supports only the read operation. |

ipv6InterfaceTable

About this table

This table contains detailed IPv6 information about each interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ipv6InterfaceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|--------------------------|--|-----------------------------------|
| ipv6InterfaceIndex (1.3.6.1.2.1.4.30.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Index of the interface corresponding to the entry. | As per the MIB. |
| ipv6InterfaceReassemblyMaxSize (1.3.6.1.2.1.4.30.1.2) | read-only | Unsigned32 | Unsigned32 (1500..65535) | Maximum size of an IPv6 packet that the entry can reassemble from fragments received on the interface. | As per the MIB. |
| ipv6InterfaceIdentifier (1.3.6.1.2.1.4.30.1.3) | read-only | Ipv6AddressIdentifierTC | Standard MIB values. | Interface identifier. An IPv6 interface address is an interface identifier attached with an address prefix. By default, the Interface Identifier is auto-configured according to the rules of the interface link type. The length of an interface identifier might be zero for specific interfaces, such as a loopback interface. | As per the MIB. |
| ipv6InterfaceEnableStatus (1.3.6.1.2.1.4.30.1.5) | read-write | INTEGER | up(1), down(2) | IPv6 enablement status on the interface. | Supports only the read operation. |
| ipv6InterfaceReachableTime (1.3.6.1.2.1.4.30.1.6) | read-only | Unsigned32 | Standard MIB values. | Time used to reach a neighbor based on the received reachability confirmation. | As per the MIB. |
| ipv6InterfaceRetransmitTime (1.3.6.1.2.1.4.30.1.7) | read-only | Unsigned32 | Standard MIB values. | Interval at which Neighbor Solicitation messages are retransmitted during address resolving or neighbor reachability probing. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|------------------------------------|---|-----------------------------------|
| ipv6InterfaceForwarding (1.3.6.1.2.1.4.30.1.8) | read-write | INTEGER | forwarding(1), notForwarding(2) | Whether the object is an IPv6 router that can forward data packets destined to any other devices. | Supports only the read operation. |

ipSystemStatsTable

About this table

This table contains IP traffic statistics in the current system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ipSystemStatsIPVersion.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|-------------------------|---|------------------------------------|
| ipSystemStatsIPVersion (1.3.6.1.2.1.4.31.1.1.1) | not-accessible | InetVersion | Standard values. MIB | IP version of the current entry. | Supports only ipv4(1) and ipv6(2). |
| ipSystemStatsInReceives (1.3.6.1.2.1.4.31.1.1.3) | read-only | Counter32 | Standard values. MIB | Number of received IP packets in the system, including error packets. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsHCInReceives (1.3.6.1.2.1.4.31.1.1.4) | read-only | Counter64 | Standard values. MIB | Number of received IP packets in the system, including error packets. This object counts the same packets as ipSystemStatsInReceives, but allows for larger values. The statistics collection starts at system startup or at the time | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|---|-----------------|
| | | | | indicated by the ipSystemStatsDiscontinuityTime object. | |
| ipSystemStatsInOctets (1.3.6.1.2.1.4.31.1.1.5) | read-only | Counter32 | Standard values. | MIB Total octets of received IP packets in the system, including error packets. Octets of packets counted in ipSystemStatsInReceives must be counted here. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsHCInOctets (1.3.6.1.2.1.4.31.1.1.6) | read-only | Counter64 | Standard values. | MIB Total octets of received IP packets in the system, including error packets. This object counts the same octets as ipSystemStatsInOctets, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsInHdrErrors (1.3.6.1.2.1.4.31.1.1.7) | read-only | Counter32 | Standard values. | MIB Number of received IP packets that were dropped because of IP header errors, including version number mismatch, other format errors, hop count exceeded, and IP option processing errors. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| ipSystemStatsInNoRoutes (1.3.6.1.2.1.4.31.1.1.8) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because of no route to the destination can be found. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsInAddrErrors (1.3.6.1.2.1.4.31.1.1.9) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because of an invalid destination address in the IP header, for example, address 0.0.0.0. For a non-IP gateway entity, it drops packets destined to any other devices because such entities cannot forward traffic. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsInUnknownProtos (1.3.6.1.2.1.4.31.1.1.10) | read-only | Counter32 | Standard values. MIB | Number of received locally-addressed packets that were dropped because of an unknown or unsupported protocol. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsInTruncatedPkts (1.3.6.1.2.1.4.31.1.1.11) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|---|-----------------|
| | | | | <p>of an invalid data length.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | |
| ipSystemStatsInForwardDatagrams (1.3.6.1.2.1.4.31.1.12) | read-only | Counter32 | Standard values. | MIB Number of forwarded packets. Forwarded packets are those that are not locally-addressed and require the system to find a route to forward them. For non-router devices, this counter counts only source-routed packets. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsHCInForwardDatagrams (1.3.6.1.2.1.4.31.1.13) | read-only | Counter64 | Standard values. | MIB Number of forwarded packets. Forwarded packets are those that are not locally-addressed and require the system to find a route to forward them. This object counts the same packets as ipSystemStatsInForwardDatagrams, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsReasmReqds | read-only | Counter32 | Standard | MIB Number of received | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| (1.3.6.1.2.1.4.31.1.14) | | | values. | fragments that need to be reassembled. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | |
| ipSystemStatsReasmOKs (1.3.6.1.2.1.4.31.1.15) | read-only | Counter32 | Standard values. MIB | Number of packets successfully reassembled. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsReasmFails (1.3.6.1.2.1.4.31.1.16) | read-only | Counter32 | Standard values. MIB | Number of packet reassembly failures detected by the IP reassembly algorithm because of reasons such as timeout or errors. The system does not calculate the number of dropped fragments because some algorithms do not record fragment quantity information. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|--|-----------|-----------|------------------|-----|--|-----------------|
| ipSystemStatsInDiscards (1.3.6.1.2.1.4.31.1.17) | read-only | Counter32 | Standard values. | MIB | <p>Number of received packets that should be processed, but were dropped because of reasons such as insufficient buffer space.</p> <p>This value does not include packet fragments dropped because of reassembly timeout.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipSystemStatsInDelivers (1.3.6.1.2.1.4.31.1.18) | read-only | Counter32 | Standard values. | MIB | <p>Number of received packets successfully delivered to IP user-protocols.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipSystemStatsHCInDelivers (1.3.6.1.2.1.4.31.1.19) | read-only | Counter64 | Standard values. | MIB | <p>Number of received packets successfully delivered to IP user-protocols.</p> <p>This object counts the same packets as ipSystemStatsInDelivers, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | Not supported |
| ipSystemStatsOutRequests (1.3.6.1.2.1.4.31.1.20) | read-only | Counter32 | Standard values. | MIB | <p>Number of packets that local IP user-protocols (including ICMP) supplied to IP in requests for transmission.</p> | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|--|-----------------|
| | | | | <p>This counter does not include any packets counted in ipSystemStatsOutForwDatagrams.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | |
| ipSystemStatsHCOutRequests (1.3.6.1.2.1.4.31.1.1.21) | read-only | Counter64 | Standard values. | MIB <p>Number of packets that local IP user-protocols (including ICMP) supplied to IP in requests for transmission.</p> <p>This object counts the same packets as ipSystemStatsOutRequests, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | Not supported |
| ipSystemStatsOutNoRoutes (1.3.6.1.2.1.4.31.1.1.22) | read-only | Counter32 | Standard values. | MIB <p>Number of IP packets dropped because no route to the destination can be found.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipSystemStatsOutForwDatagrams (1.3.6.1.2.1.4.31.1.1.23) | read-only | Counter32 | Standard values. | MIB <p>Number of packets forwarded successfully.</p> <p>For non-router devices, this counter counts only source-routed packets.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDis</p> | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| | | | | continuityTime object. | |
| ipSystemStatsHCOutForwDatagrams (1.3.6.1.2.1.4.31.1.1.24) | read-only | Counter64 | Standard values. MIB | Number of packets forwarded successfully. This object counts the same packets as ipSystemStatsOutForwDatagrams, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsOutDiscards (1.3.6.1.2.1.4.31.1.1.25) | read-only | Counter32 | Standard values. MIB | Number of outgoing packets that should be processed, but were dropped because of reasons such as insufficient buffer space. This value might be included in the counting of ipSystemStatsOutForwDatagrams. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsOutFragReqds (1.3.6.1.2.1.4.31.1.1.26) | read-only | Counter32 | Standard values. MIB | Number of IP packets that require fragmentation for forwarding. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsOutFragOKs (1.3.6.1.2.1.4.31.1.1.27) | read-only | Counter32 | Standard values. MIB | Number of IP packets that were fragmented successfully. The statistics collection starts at | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|--|-----------------|
| | | | | system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | |
| ipSystemStatsOutFragFails (1.3.6.1.2.1.4.31.1.1.28) | read-only | Counter32 | Standard values. | MIB Number of IP packets that need fragmentation but were dropped because of fragmentation failures, including IPv4 packets with the DF flag set and IPv6 packets whose length exceeds the MTU size. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsOutFragCreates (1.3.6.1.2.1.4.31.1.1.29) | read-only | Counter32 | Standard values. | MIB Number of packets created because of IP packet fragmentation. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsOutTransmits (1.3.6.1.2.1.4.31.1.1.30) | read-only | Counter32 | Standard values. | MIB Number of IP packets supplied to the lower layers for transmission, including both locally generated packets and forwarded packets. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | As per the MIB. |
| ipSystemStatsHCOutTransmits (1.3.6.1.2.1.4.31.1.1.31) | read-only | Counter64 | Standard values. | MIB Number of IP packets supplied to the lower layers | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| .1.31) | | | | <p>for transmission, including both locally generated packets and forwarded packets.</p> <p>This object counts the same packets as ipSystemStatsOutTransmits, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | |
| ipSystemStatsOutOctets (1.3.6.1.2.1.4.31.1.1.32) | read-only | Counter32 | Standard values. MIB | <p>Total octets of IP packets supplied to the lower layers for transmission, including packets counted in ipSystemStatsOutTransmits.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipSystemStatsHCOutOctets (1.3.6.1.2.1.4.31.1.1.33) | read-only | Counter64 | Standard values. MIB | <p>Total octets of IP packets supplied to the lower layers for transmission.</p> <p>This object counts the same octets as ipSystemStatsOutOctets, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipSystemStatsInMcastPkts (1.3.6.1.2.1.4.31.1.1.34) | read-only | Counter32 | Standard values. MIB | <p>Number of received IP multicast packets.</p> <p>The statistics collection starts at system startup or at the time</p> | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------|---|----------------|
| | | | | indicated by the ipSystemStatsDiscontinuityTime object. | |
| ipSystemStatsHCInMcastPkts (1.3.6.1.2.1.4.31.1.1.35) | read-only | Counter64 | Standard values. | MIB Number of received IP multicast packets. This object counts the same packets as ipSystemStatsInMcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsInMcastOctets (1.3.6.1.2.1.4.31.1.1.36) | read-only | Counter32 | Standard values. | MIB Total octets of received IP multicast packets, including packets counted in ipSystemStatsInMcastPkts. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsHCInMcastOctets (1.3.6.1.2.1.4.31.1.1.37) | read-only | Counter64 | Standard values. | MIB Total octets of received IP multicast packets. This object counts the same octets as ipSystemStatsInMcastOctets, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsOutMcastPkts (1.3.6.1.2.1.4.31.1.1.38) | read-only | Counter32 | Standard values. | MIB Number of sent IP multicast packets. The statistics collection starts at system startup or at the time | Not supported |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|--|-----------|-----------|------------------|-----|---|----------------|
| | | | | | indicated by the ipSystemStatsDiscontinuityTime object. | |
| ipSystemStatsHCOutMcastPkts (1.3.6.1.2.1.4.31.1.1.39) | read-only | Counter64 | Standard values. | MIB | Number of sent IP multicast packets. This object counts the same packets as ipSystemStatsOutMcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsOutMcastOctets (1.3.6.1.2.1.4.31.1.1.40) | read-only | Counter32 | Standard values. | MIB | Total octets of sent IP multicast packets, including packets counted in ipSystemStatsOutMcastPkts. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsHCOutMcastOctets (1.3.6.1.2.1.4.31.1.1.41) | read-only | Counter64 | Standard values. | MIB | Total octets of sent IP multicast packets. This object counts the same octets as ipSystemStatsOutMcastOctets, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsInBroadcastPkts (1.3.6.1.2.1.4.31.1.1.42) | read-only | Counter32 | Standard values. | MIB | Number of received IP broadcast packets. The statistics collection starts at system startup or at the time | Not supported |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|---|-----------|-----------|------------------|-----|---|----------------|
| | | | | | indicated by the ipSystemStatsDiscontinuityTime object. | |
| ipSystemStatsHCInBcastPkts (1.3.6.1.2.1.4.31.1.1.43) | read-only | Counter64 | Standard values. | MIB | Number of received IP broadcast packets. This object counts the same packets as ipSystemStatsInBcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsOutBcastPkts (1.3.6.1.2.1.4.31.1.1.44) | read-only | Counter32 | Standard values. | MIB | Number of sent IP broadcast packets. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsHCOutBcastPkts (1.3.6.1.2.1.4.31.1.1.45) | read-only | Counter64 | Standard values. | MIB | Number of sent IP broadcast packets. This object counts the same packets as ipSystemStatsOutBcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipSystemStatsDiscontinuityTime object. | Not supported |
| ipSystemStatsDiscontinuityTime (1.3.6.1.2.1.4.31.1.1.46) | read-only | TimeStamp | Standard values. | MIB | The most recent time at which any count in the table was interrupted (sysUpTime). If no count interrupt has occurred since the last system | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|----------------|
| | | | | restart, the value of this object is 0. | |
| ipSystemStatsRefreshRate (1.3.6.1.2.1.4.31.1.1.47) | read-only | Unsigned32 | Standard values. MIB | Minimum reasonable polling interval for this table. This object provides an indication of the minimum amount of time required to update the counters in this table. | Not supported |

ipIfStatsTable

About this table

This table contains IP traffic statistics about each interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipIfStatsIPVersion and ipIfStatsIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|----------------------|--|------------------------------------|
| ipIfStatsIPVersion (1.3.6.1.2.1.4.31.3.1.1) | not-accessible | InetVersion | Standard values. MIB | IP version of the current entry. | Supports only ipv4(1) and ipv6(2). |
| ipIfStatsIfIndex (1.3.6.1.2.1.4.31.3.1.2) | not-accessible | InterfaceIndex | Standard values. MIB | Index of the interface corresponding to the entry. | As per the MIB. |
| ipIfStatsInReceives (1.3.6.1.2.1.4.31.3.1.3) | read-only | Counter32 | Standard values. MIB | Number of received IP packets, including error packets. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. |
| ipIfStatsHCInReceives (1.3.6.1.2.1.4.31.3.1.4) | read-only | Counter64 | Standard values. MIB | Number of received IP packets, including error packets. This object counts the same packets | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------|---|-----------------|
| | | | | as ipIfStatsInReceives, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | |
| ipIfStatsInOctets (1.3.6.1.2.1.4.31.3.1.5) | read-only | Counter32 | Standard values. | MIB Total octets of received IP packets, including error packets. Octets of packets counted in ipIfStatsInReceives must be counted here. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. |
| ipIfStatsHCInOctets (1.3.6.1.2.1.4.31.3.1.6) | read-only | Counter64 | Standard values. | MIB Total octets of received IP packets, including error packets. This object counts the same octets as ipIfStatsInOctets, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|--|
| ipIfStatsInHdrErrors (1.3.6.1.2.1.4.31.3.1.7) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because of IP header errors, including version number mismatch, other format errors, hop count exceeded, and IP option processing errors. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsInNoRoutes (1.3.6.1.2.1.4.31.3.1.8) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because of no route to the destination can be found. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsInAddrErrors (1.3.6.1.2.1.4.31.3.1.9) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because of an invalid destination address in the IP header, for example, address 0.0.0.0. For a non-IP gateway entity, it drops packets destined to any other devices because such entities cannot forward traffic. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsInUnknownProtos | read-only | Counter32 | Standard MIB | Number of received packets | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|---|
| (1.3.6.1.2.1.4.31.3.1.10) | | | values. | destined to the local IP address but dropped because of unsupported protocol or unknown reasons. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Supports only ipv6(2). |
| ipIfStatsInTruncatedPkts (1.3.6.1.2.1.4.31.3.1.11) | read-only | Counter32 | Standard values. MIB | Number of received IP packets that were dropped because of an invalid data length. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsInForwardDatagrams (1.3.6.1.2.1.4.31.3.1.12) | read-only | Counter32 | Standard values. MIB | Number of forwarded packets. Forwarded packets are those that are not locally-addressed and require the system to find a route to forward them. For non-router devices, this counter counts only source-routed packets. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsHCInForwardDatagrams (1.3.6.1.2.1.4.31.3.1.13) | read-only | Counter64 | Standard values. MIB | Number of forwarded packets. Forwarded packets are those that are not locally-addressed and require the system to find a route to forward them. This object counts | As per the MIB. Supports only ipv6(2). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|---|---|
| | | | | the same packets as ipLfStatsInForwDatagrams, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object. | |
| ipLfStatsReasmReqds (1.3.6.1.2.1.4.31.3.1.14) | read-only | Counter32 | Standard values. | MIB Number of received fragments that need to be reassembled. The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipLfStatsReasmOKs (1.3.6.1.2.1.4.31.3.1.15) | read-only | Counter32 | Standard values. | MIB Number of packets successfully reassembled. The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipLfStatsReasmFails (1.3.6.1.2.1.4.31.3.1.16) | read-only | Counter32 | Standard values. | MIB Number of packet reassembly failures detected by the IP reassembly algorithm because of reasons such as timeout and errors. The system does not calculate the number of dropped fragments because some algorithms do not record fragment quantity information. The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|--|--|
| ipIfStatsInDiscards (1.3.6.1.2.1.4.31.3.1.17) | read-only | Counter32 | Standard values. | MIB Number of received packets that should be processed, but were dropped because of reasons such as insufficient buffer space. This value does not include packet fragments dropped because of reassembly timeout. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsInDelivers (1.3.6.1.2.1.4.31.3.1.18) | read-only | Counter32 | Standard values. | MIB Number of received packets successfully delivered to IP user-protocols. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsHCInDelivers (1.3.6.1.2.1.4.31.3.1.19) | read-only | Counter64 | Standard values. | MIB Number of received packets successfully delivered to IP user-protocols. This object counts the same packets as ipIfStatsInDelivers, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsOutRequests (1.3.6.1.2.1.4.31.3.1.20) | read-only | Counter32 | Standard values. | MIB Number of packets that local IP user-protocols (including ICMP) supplied to IP in requests for transmission. This counter does not include any packets counted in | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------|---|-----------------|
| | | | | <p>ipLflStatsOutForwDatagrams.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLflStatsDiscontinuityTime object.</p> | |
| <p>ipLflStatsHCOutRequests (1.3.6.1.2.1.4.31.3.1.21)</p> | read-only | Counter64 | Standard values. | <p>MIB</p> <p>Number of packets that local IP user-protocols (including ICMP) supplied to IP in requests for transmission.</p> <p>This object counts the same packets as ipLflStatsOutRequests, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLflStatsDiscontinuityTime object.</p> | As per the MIB. |
| <p>ipLflStatsOutForwDatagrams (1.3.6.1.2.1.4.31.3.1.23)</p> | read-only | Counter32 | Standard values. | <p>MIB</p> <p>Number of packets forwarded successfully.</p> <p>For non-router devices, this counter counts only source-routed packets.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLflStatsDiscontinuityTime object.</p> | As per the MIB. |
| <p>ipLflStatsHCOutForwDatagrams (1.3.6.1.2.1.4.31.3.1.24)</p> | read-only | Counter64 | Standard values. | <p>MIB</p> <p>Number of packets forwarded successfully.</p> <p>This object counts the same packets as ipLflStatsOutForwDatagrams, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLflStatsDiscontinuityTime object.</p> | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|--|
| ipLfStatsOutDiscards (1.3.6.1.2.1.4.31.3.1.25) | read-only | Counter32 | Standard values. MIB | <p>Number of outgoing packets that should be processed, but were dropped because of reasons such as insufficient buffer space.</p> <p>This value might be included in the counting of ipLfStatsOutForwDatagrams.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object.</p> | As per the MIB. Supports only ipv6(2). |
| ipLfStatsOutFragReqds (1.3.6.1.2.1.4.31.3.1.26) | read-only | Counter32 | Standard values. MIB | <p>Number of IP packets that require fragmentation for forwarding.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object.</p> | As per the MIB. Supports only ipv6(2). |
| ipLfStatsOutFragOKs (1.3.6.1.2.1.4.31.3.1.27) | read-only | Counter32 | Standard values. MIB | <p>Number of IP packets that were fragmented successfully.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipLfStatsDiscontinuityTime object.</p> | As per the MIB. Supports only ipv6(2). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|--|---|
| ipLlStatsOutFragFails (1.3.6.1.2.1.4.31.3.1.28) | read-only | Counter32 | Standard values. | MIB Number of IP packets that need fragmentation but were dropped because of fragmentation failures, including IPv4 packets with the DF flag set and IPv6 packets whose length exceeds the MTU size. The statistics collection starts at system startup or at the time indicated by the ipLlStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipLlStatsOutFragCreates (1.3.6.1.2.1.4.31.3.1.29) | read-only | Counter32 | Standard values. | MIB Number of packets created because of IP packet fragmentation. The statistics collection starts at system startup or at the time indicated by the ipLlStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipLlStatsOutTransmits (1.3.6.1.2.1.4.31.3.1.30) | read-only | Counter32 | Standard values. | MIB Number of IP packets supplied to the lower layers for transmission, including both locally generated packets and forwarded packets. The statistics collection starts at system startup or at the time indicated by the ipLlStatsDiscontinuityTime object. | As per the MIB. |
| ipLlStatsHCOutTransmits (1.3.6.1.2.1.4.31.3.1.31) | read-only | Counter64 | Standard values. | MIB Number of IP packets supplied to the lower layers for transmission, including both locally generated packets and forwarded packets. This object counts the same packets as | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------|---|--|
| | | | | <p>ipIfStatsOutTransmits, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object.</p> | |
| ipIfStatsOutOctets (1.3.6.1.2.1.4.31.3.1.32) | read-only | Counter32 | Standard values. | <p>MIB</p> <p>Total octets of IP packets supplied to the lower layers for transmission, including packets counted in ipIfStatsOutTransmits.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipIfStatsHCOctets (1.3.6.1.2.1.4.31.3.1.33) | read-only | Counter64 | Standard values. | <p>MIB</p> <p>Total octets of IP packets supplied to the lower layers for transmission, including packets counted in ipIfStatsOutTransmits.</p> <p>This object counts the same octets as ipIfStatsOutOctets, but allows for larger values.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object.</p> | As per the MIB. |
| ipIfStatsInMcastPkts (1.3.6.1.2.1.4.31.3.1.34) | read-only | Counter32 | Standard values. | <p>MIB</p> <p>Number of received IP multicast packets.</p> <p>The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object.</p> | As per the MIB. Supports only ipv6(2). |
| ipIfStatsHCInMcastPkts (1.3.6.1.2.1.4.31.3.1.35) | read-only | Counter64 | Standard values. | <p>MIB</p> <p>Number of received IP multicast packets.</p> <p>This object counts the same packets</p> | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------|--|--|
| | | | | as ipIfStatsInMcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | |
| ipIfStatsInMcastOctets (1.3.6.1.2.1.4.31.3.1.36) | read-only | Counter32 | Standard values. | MIB Total octets of received IP multicast packets, including packets counted in ipIfStatsInMcastPkts. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsHCInMcastOctets (1.3.6.1.2.1.4.31.3.1.37) | read-only | Counter64 | Standard values. | MIB Total octets of received IP multicast packets, including packets counted in ipIfStatsInMcastPkts. This object counts the same octets as ipIfStatsInMcastOctets, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsOutMcastPkts (1.3.6.1.2.1.4.31.3.1.38) | read-only | Counter32 | Standard values. | MIB Number of sent IP multicast packets. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | As per the MIB. Supports only ipv6(2). |
| ipIfStatsHCOutMcastPkts (1.3.6.1.2.1.4.31.3.1.39) | read-only | Counter64 | Standard values. | MIB Number of sent IP multicast packets. This object counts the same packets as ipIfStatsOutMcastPkts, but allows for | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|----------------|
| | | | | larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | |
| ipIfStatsOutMcastOctets (1.3.6.1.2.1.4.31.3.1.40) | read-only | Counter32 | Standard values. MIB | Total octets of sent IP multicast packets, including packets counted in ipIfStatsOutMcastPkts. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsHCOutMcastOctets (1.3.6.1.2.1.4.31.3.1.41) | read-only | Counter64 | Standard values. MIB | Total octets of received IP multicast packets. This object counts the same octets as ipIfStatsOutMcastOctets, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsInBcastPkts (1.3.6.1.2.1.4.31.3.1.42) | read-only | Counter32 | Standard values. MIB | Number of received IP multicast packets. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsHCInBcastPkts (1.3.6.1.2.1.4.31.3.1.43) | read-only | Counter64 | Standard values. MIB | Number of received IP multicast packets. This object counts the same packets as ipIfStatsInBcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time | Not supported |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|---|-----------|------------|------------------|-----|--|----------------|
| | | | | | indicated by the ipIfStatsDiscontinuityTime object. | |
| ipIfStatsOutBcastPkts (1.3.6.1.2.1.4.31.3.1.44) | read-only | Counter32 | Standard values. | MIB | Number of sent IP multicast packets. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsHCOutBcastPkts (1.3.6.1.2.1.4.31.3.1.45) | read-only | Counter64 | Standard values. | MIB | Number of sent IP multicast packets. This object counts the same packets as ipIfStatsOutBcastPkts, but allows for larger values. The statistics collection starts at system startup or at the time indicated by the ipIfStatsDiscontinuityTime object. | Not supported |
| ipIfStatsDiscontinuityTime (1.3.6.1.2.1.4.31.3.1.46) | read-only | TimeStamp | Standard values. | MIB | The most recent time at which any count in the table was interrupted (sysUpTime). If no count interrupt has occurred since the last system restart, the value of this object is 0. | Not supported |
| ipIfStatsRefreshRate (1.3.6.1.2.1.4.31.3.1.47) | read-only | Unsigned32 | Standard values. | MIB | Minimum reasonable polling interval for this table. This object provides an indication of the minimum amount of time required to update the counters in this table. | Not supported |

ipAddressPrefixTable

About this table

This table contains information about IP address prefixes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipAddressPrefixIfIndex, ipAddressPrefixType, ipAddressPrefixPrefix, and ipAddressPrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------------|--|--|-------------------------------------|
| ipAddressPrefixIfIndex (1.3.6.1.2.1.4.32.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Index of the interface corresponding to the entry. | As per the MIB. |
| ipAddressPrefixType (1.3.6.1.2.1.4.32.1.2) | not-accessible | InetAddressType | Standard MIB values. | Address type of ipAddressPrefix. | Supports only ipv6(2) and ipv6z(4). |
| ipAddressPrefixPrefix (1.3.6.1.2.1.4.32.1.3) | not-accessible | InetAddress | Standard MIB values. | Address prefix. The address type is specified in ipAddressPrefixType. The address length is the standard length for objects of that type (4 or 16 bytes). If the prefix length exceeds 114 octets, then OIDs of the instances will have more than 128 sub-identifiers and cannot be accessed by using SNMPv1, SNMPv2c, or SNMPv3. | As per the MIB. |
| ipAddressPrefixLength (1.3.6.1.2.1.4.32.1.4) | not-accessible | InetAddressPrefixLength | Standard MIB values. | Prefix length. The value 0 refers to address ::/0. | As per the MIB. |
| ipAddressPrefixOrigin (1.3.6.1.2.1.4.32.1.5) | read-only | IpAddressPrefixOriginType | Other(1) Manual(2) Wellknown(3) Dhcp(4) Routerready(5) | Prefix origin. | As per the MIB. |
| ipAddressPrefixOnLinkFlag (1.3.6.1.2.1.4.32.1.6) | read-only | TruthValue | true(1), false(2) | Whether this prefix can be used for on-link determination. The value true(1) indicates yes and the value false(2) indicates no. For IPv4 prefixes, the default value is true(1). | As per the MIB. |
| ipAddressPrefixAutonomousFlag (1.3.6.1.2.1.4.32.1.7) | read-only | TruthValue | true(1), false(2) | Whether this prefix can be used for autonomous address configuration. The value true(1) | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| | | | | indicates yes and the value false(2) indicates no. For IPv4 prefixes, the default value is false(2). | |
| ipAddressPrefixAdvPreferredLifetime (1.3.6.1.2.1.4.32.1.8) | read-only | Unsigned32 | Standard MIB values. | Remaining lifetime of the prefix in seconds. A value of 4,294,967,295 represents infinity. After the lifetime expires, the prefix will be deprecated. Addresses generated by using a deprecated prefix cannot be used as the source addresses in new communications, but packets received on such an interface are processed as expected. For IPv4 prefixes, the default lifetime is 4,294,967,295 (infinity). | As per the MIB. |
| ipAddressPrefixAdvValidLifetime (1.3.6.1.2.1.4.32.1.9) | read-only | Unsigned32 | Standard MIB values. | Remaining validity period of the prefix in seconds. A value of 4,294,967,295 represents infinity. Addresses generated by using an invalid prefix cannot be used as source or destination addresses of packets. For IPv4 prefixes, the default validity period is 4,294,967,295 (infinity). | As per the MIB. |

ipAddressTable

About this table

This table contains IP address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipAddressAddrType and ipAddressAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|----------------------|--------------------------------|-------------------------------------|
| ipAddressAddrType (1.3.6.1.2.1.4.34.1) | not-accessible | InetAddressType | Standard MIB values. | Address type of ipAddressAddr. | Supports only ipv6(2) and ipv6z(4). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|--|--|-----------------------------------|
| .1) | | | | | |
| ipAddressAddr (1.3.6.1.2.1.4.34.1 .2) | not-accessible | InetAddress | Standard values. MIB | IP address. The address type is specified in ipAddressAddrType. If the address length exceeds 116 octets, then OIDs of the instances will have more than 128 sub-identifiers and cannot be accessed by using SNMPv1, SNMPv2c, or SNMPv3. | As per the MIB. |
| ipAddressIfIndex (1.3.6.1.2.1.4.34.1 .3) | read-create | InterfaceIndex | Standard values. MIB | Index of the interface corresponding to the address. | Supports only the read operation. |
| ipAddressType (1.3.6.1.2.1.4.34.1 .4) | read-create | INTEGER | unicast(1), anycast(2), broadcast(3) | Address type. For IPv6 addresses, broadcast(3) is not a valid value. | Supports only the read operation. |
| ipAddressPrefix (1.3.6.1.2.1.4.34.1 .5) | read-only | RowPointer | Standard values. MIB | A pointer to the row in the prefix table to which this address belongs. If the row does not exist, this object is { 0 0 }. | As per the MIB. |
| ipAddressOrigin (1.3.6.1.2.1.4.34.1 .6) | read-only | IpAddressOriginTC | Standard values. MIB | IP address origin. | As per the MIB. |
| ipAddressStatus (1.3.6.1.2.1.4.34.1 .7) | read-create | IpAddressStatusTC | Standard values. MIB | Address status, indicating whether the address can be used for communication. In the absence of other information, an IPv4 address is always preferred(1). | Supports only the read operation. |
| ipAddressCreated (1.3.6.1.2.1.4.34.1 .8) | read-only | TimeStamp | Standard values. MIB | Time at which the entry was created (sysUpTime). If the entry was created before the most recent system startup, this value is 0. | As per the MIB. |
| ipAddressLastChanged (1.3.6.1.2.1.4.34.1 .9) | read-only | TimeStamp | Standard values. MIB | Time at which the entry was last updated | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|----------------------|---|---|
| .9) | | | | (sysUpTime). If the last update occurred before the most recent system startup, this value is 0. | |
| ipAddressRowStatus (1.3.6.1.2.1.4.34.1.10) | read-create | RowStatus | Standard values. MIB | Status of the entry. | Supports only the read operation. Supports only active(1). |
| ipAddressStorageType (1.3.6.1.2.1.4.34.1.11) | read-only | StorageType | Standard values. MIB | Storage type of the entry. | The value is fixed to volatile(2). |

ipNetToPhysicalTable

About this table

This table contains IP address-to-physical address mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipNetToPhysicalIfIndex, ipNetToPhysicalNetAddressType, and ipNetToPhysicalNetAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-------------------------------------|
| ipNetToPhysicalIfIndex (1.3.6.1.2.1.4.35.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Index of the interface corresponding to the entry. | As per the MIB. |
| ipNetToPhysicalNetAddressType (1.3.6.1.2.1.4.35.1.2) | not-accessible | InetAddressType | Standard MIB values. | Address type of ipNetToPhysicalNetAddress. | Supports only ipv6(2) and ipv6z(4). |
| ipNetToPhysicalNetAddress (1.3.6.1.2.1.4.35.1.3) | not-accessible | InetAddress | Standard MIB values. | IP address. The address type is specified in ipNetToPhysicalAddressType. | As per the MIB. |
| ipNetToPhysicalPhysicalAddress (1.3.6.1.2.1.4.35.1.4) | read-create | PhysAddress | SIZE(0..65535) | Physical address. | Supports only the read operation. |
| ipNetToPhysicalLastUpdated (1.3.6.1.2.1.4.35.1.5) | read-only | TimeStamp | Standard MIB values. | Time at which the entry was last updated (sysUpTime). If the last update | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|---|---|-----------------------------------|
| | | | | occurred before the most recent system startup, this value is 0. | |
| ipNetToPhysicalType (1.3.6.1.2.1.4.35.1.6) | read-create | INTEGER | other(1), invalid(2), dynamic(3), static(4), local(5) | Address mapping type. | Supports only the read operation. |
| ipNetToPhysicalState (1.3.6.1.2.1.4.35.1.7) | read-only | INTEGER | reachable(1), stale(2), delay(3), probe(4), invalid(5), unknown(6), incomplete(7) | Neighbor unreachability detection state. If neighbor unreachability detection is not performed, the value is unknown(6). | As per the MIB. |
| ipNetToPhysicalRowStatus (1.3.6.1.2.1.4.35.1.8) | read-create | RowStatus | Standard MIB values. | Status of the entry. | Supports only the read operation. |

ipDefaultRouterTable

About this table

This table contains information about the default routers.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipDefaultRouterAddressType, ipDefaultRouterAddress, and ipDefaultRouterIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-------------------------------------|
| ipDefaultRouterAddressType (1.3.6.1.2.1.4.37.1.1) | not-accessible | InetAddressType | Standard MIB values. | Address type of the entry. | Supports only ipv6(2) and ipv6z(4). |
| ipDefaultRouterAddress (1.3.6.1.2.1.4.37.1.2) | not-accessible | InetAddress | Standard MIB values. | IP address. The address type is specified in ipDefaultRouterAddressType. If the address length exceeds 115 octets, then OIDs of the instances will have more than 128 | As per the MIB. |

| | | | | | |
|---|----------------|----------------|--|--|-----------------|
| | | | | sub-identifiers and cannot be accessed by using SNMPv1, SNMPv2c, or SNMPv3. | |
| ipDefaultRouterIfIndex (1.3.6.1.2.1.4.37.1.3) | not-accessible | InterfaceIndex | Standard MIB values. | Index of the interface corresponding to the entry. | As per the MIB. |
| ipDefaultRouterLifetime (1.3.6.1.2.1.4.37.1.4) | read-only | Unsigned32 | Unsigned32 (0..65535) | Remaining time that the router can be used as a default router, in seconds. A value of 0 indicates that the router is no longer used as a default router. | As per the MIB. |
| ipDefaultRouterPreference (1.3.6.1.2.1.4.37.1.5) | read-only | INTEGER | reserved (-2), low (-1), medium (0), high (1) | Priority of the default router. The priority value is a 2-bit signed integer that allows for simple arithmetic comparisons. | As per the MIB. |

ipv6RouterAdvertTable

About this table

This table contains information used to construct router advertisements.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ipv6RouterAdvertIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|----------------------|---|-----------------------------------|
| ipv6RouterAdvertIfIndex (1.3.6.1.2.1.4.39.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Index of the interface corresponding to the entry. | As per the MIB. |
| ipv6RouterAdvertSendAdverts (1.3.6.1.2.1.4.39.1.2) | read-create | TruthValue | Standard MIB values. | A flag indicating whether the router sends periodic router advertisements and responds to router solicitations. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|----------------------------|--|-----------------------------------|
| ipv6RouterAdvert MaxInterval (1.3.6.1.2.1.4.39.1.3) | read-create | Unsigned32 | Unsigned32 (4..1800) | Maximum interval at which unsolicited router advertisements are sent, in seconds. | Supports only the read operation. |
| ipv6RouterAdvert MinInterval (1.3.6.1.2.1.4.39.1.4) | read-create | Unsigned32 | Unsigned32 (3..1350) | Minimum interval at which unsolicited router advertisements are sent, in seconds. | Supports only the read operation. |
| ipv6RouterAdvert ManagedFlag (1.3.6.1.2.1.4.39.1.5) | read-create | TruthValue | Standard values. MIB | Value to be placed into the 'managed address configuration' flag field in router advertisements to send. | Supports only the read operation. |
| ipv6RouterAdvert OtherConfigFlag (1.3.6.1.2.1.4.39.1.6) | read-create | TruthValue | Standard values. MIB | Value to be placed into the 'other stateful configuration' flag field in router advertisements to send. | Supports only the read operation. |
| ipv6RouterAdvert LinkMTU (1.3.6.1.2.1.4.39.1.7) | read-create | Unsigned32 | Standard values. MIB | Value to be placed in MTU options to send. A value of zero indicates that no MTU options are sent. | Supports only the read operation. |
| ipv6RouterAdvert ReachableTime (1.3.6.1.2.1.4.39.1.8) | read-create | Unsigned32 | Unsigned32 (0..3600000) | Value to be placed in the reachable time field in router advertisement messages to send. A value of zero indicates that no reachable time is specified. | Supports only the read operation. |
| ipv6RouterAdvert RetransmitTime (1.3.6.1.2.1.4.39.1.9) | read-create | Unsigned32 | Standard MIB values. | Value to be placed in the retransmit time field in router advertisements to send. A value of zero indicates that no retransmit time is specified. | Supports only the read operation. |
| ipv6RouterAdvert CurHopLimit (1.3.6.1.2.1.4.39.1.10) | read-create | Unsigned32 | Unsigned32 (0..255) | Value to be placed in the current hop limit field in router advertisements to send. A value of zero indicates that the | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|---------------------------|--|-----------------------------------|
| | | | | hops are not limited. | |
| ipv6RouterAdvertDefaultLifetime (1.3.6.1.2.1.4.39.1.11) | read-create | Unsigned32 | Unsigned32 (0 4..9000) | Value to be placed in the router lifetime field of router advertisements to send. A value of zero indicates that the router is no longer used as a default router. The default value is the ipv6RouterAdvertMaxInterval value multiplied by three. | Supports only the read operation. |
| ipv6RouterAdvertRowStatus (1.3.6.1.2.1.4.39.1.12) | read-create | RowStatus | Standard MIB values. | Status of the entry. | Supports only the read operation. |

icmpStatsTable

About this table

This table contains system-level ICMP statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is icmpStatsIPVersion.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|----------------------|--|------------------------|
| icmpStatsIPVersion (1.3.6.1.2.1.5.29.1.1) | not-accessible | InetVersion | Standard values. MIB | IP version of the statistics. | Supports only ipv6(2). |
| icmpStatsInMsgs (1.3.6.1.2.1.5.29.1.2) | read-only | Counter32 | Standard values. MIB | Number of received ICMP messages, including messages counted by icmpStatsInErrors. | As per the MIB. |
| icmpStatsInErrors (1.3.6.1.2.1.5.29.1.3) | read-only | Counter32 | Standard values. MIB | Number of received ICMP error messages. Possible errors | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|--------------------------|
| | | | | include ICMP checksum error and length error. | |
| icmpStatsOutMsgs (1.3.6.1.2.1.5.29.1.4) | read-only | Counter32 | Standard values. MIB | Number of sent ICMP messages, including messages counted by icmpStatsOutErrors. | As per the MIB. |
| icmpStatsOutErrors (1.3.6.1.2.1.5.29.1.5) | read-only | Counter32 | Standard values. MIB | Number of ICMP messages failed to be sent because of reasons such as insufficient buffer space. Errors occurred outside the ICMP layer are not included. In some implementations, there may be no types of error which contribute to this counter's value. | The value is fixed to 0. |

icmpMsgStatsTable

About this table

This table contains statistics about each IP version and each ICMP message type.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are icmpMsgStatsIPVersion and icmpMsgStatsType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|----------------------|---|------------------------|
| icmpMsgStatsIPVersion (1.3.6.1.2.1.5.30.1.1) | not-accessible | InetVersion | Standard MIB values. | IP version of the statistics. | Supports only ipv6(2). |
| icmpMsgStatsType (1.3.6.1.2.1.5.30.1.2) | not-accessible | Integer32 | Integer32 (0..255) | ICMP message type. | As per the MIB. |
| icmpMsgStatsInPkts (1.3.6.1.2.1.5.30.1.3) | read-only | Counter32 | Standard MIB values. | Number of received ICMP messages of the | As per the MIB. |

| | | | | | |
|---|-----------|-----------|-------------------------|---|-----------------|
| .3) | | | | type. | |
| icmpMsgStatsOut Pkts (1.3.6.1.2.1.5.30.1 .4) | read-only | Counter32 | Standard MIB values. | Number of sent ICMP messages of the type. | As per the MIB. |

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IPV6-ICMP-MIB

About this MIB

Use this MIB to manage ICMPv6.

MIB file name

rfc2466-ipv6-icmp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ipv6IcmpMIB(56)

Tabular objects

ipv6IcmpTable

About this table

Use this table to obtain IPv6 ICMP statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|--------------------|
| ipv6IcmpInMsgs (1.3.6.1.2.1.56.1.1.1.1) | read-only | Counter32 | Standard MIB values. | Total number of ICMP messages received by the interface, including those counted by ipv6IcmpInErrors. | As per the MIB. |
| ipv6IcmpInErrors (1.3.6.1.2.1.56.1.1.1.2) | read-only | Counter32 | Standard MIB values. | Number of ICMP messages that the interface received and determined as having ICMP-specific errors. | As per the MIB. |
| ipv6IcmpInDestUnreaches (1.3.6.1.2.1.56.1.1.1.3) | read-only | Counter32 | Standard MIB values. | Number of ICMP Destination Unreachable messages received by the interface. | As per the MIB. |
| ipv6IcmpInAdminProhibs | read-only | Counter32 | Standard MIB | Number of ICMP destination | The value is fixed |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| (1.3.6.1.2.1.56.1.1.1.4) | | | values. | unreachable/communication administratively prohibited messages received by the interface. | at 0. |
| ipv6IflcmplnTimeExcds (1.3.6.1.2.1.56.1.1.1.5) | read-only | Counter32 | Standard MIB values. | Number of ICMP Time Exceeded messages received by the interface. | As per the MIB. |
| ipv6IflcmplnParmProblems (1.3.6.1.2.1.56.1.1.1.6) | read-only | Counter32 | Standard MIB values. | Number of ICMP Parameter Problem messages received by the interface. | As per the MIB. |
| ipv6IflcmplnPktTooBigs (1.3.6.1.2.1.56.1.1.1.7) | read-only | Counter32 | Standard MIB values. | Number of ICMP Packet Too Big messages received by the interface. | As per the MIB. |
| ipv6IflcmplnEchos (1.3.6.1.2.1.56.1.1.1.8) | read-only | Counter32 | Standard MIB values. | Number of ICMP Echo (request) messages received by the interface. | As per the MIB. |
| ipv6IflcmplnEchoReplies (1.3.6.1.2.1.56.1.1.1.9) | read-only | Counter32 | Standard MIB values. | Number of ICMP Echo Reply messages received by the interface. | As per the MIB. |
| ipv6IflcmplnRouterSolicits (1.3.6.1.2.1.56.1.1.1.10) | read-only | Counter32 | Standard MIB values. | Number of ICMP Router Solicit messages received by the interface. | As per the MIB. |
| ipv6IflcmplnRouterAdvertisements (1.3.6.1.2.1.56.1.1.1.11) | read-only | Counter32 | Standard MIB values. | Number of ICMP Router Advertisement messages received by the interface. | As per the MIB. |
| ipv6IflcmplnNeighborSolicits (1.3.6.1.2.1.56.1.1.1.12) | read-only | Counter32 | Standard MIB values. | Number of ICMP Neighbor Solicit messages received by the interface. | As per the MIB. |
| ipv6IflcmplnNeighborAdvertisements (1.3.6.1.2.1.56.1.1.1.13) | read-only | Counter32 | Standard MIB values. | Number of ICMP Neighbor Advertisement messages received by the interface. | As per the MIB. |
| ipv6IflcmplnRedirects (1.3.6.1.2.1.56.1.1.1.14) | read-only | Counter32 | Standard MIB values. | Number of Redirect messages received by the interface. | As per the MIB. |
| ipv6IflcmplnGroupMembershipQueries (1.3.6.1.2.1.56.1.1.1.15) | read-only | Counter32 | Standard MIB values. | Number of ICMPv6 Group Membership Query messages received by the interface. | As per the MIB. |
| ipv6IflcmplnGroupMembershipResponses (1.3.6.1.2.1.56.1.1.1.16) | read-only | Counter32 | Standard MIB values. | Number of ICMPv6 Group Membership Response messages received | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|--------------------------|
| | | | | by the interface. | |
| ipv6IflcmpInGroupMembReductions (1.3.6.1.2.1.56.1.1.1.17) | read-only | Counter32 | Standard MIB values. | Number of ICMPv6 Group Membership Reduction messages received by the interface. | As per the MIB. |
| ipv6IflcmpOutMsgs (1.3.6.1.2.1.56.1.1.1.18) | read-only | Counter32 | Standard MIB values. | Total number of ICMP messages that interface attempted to send. | As per the MIB. |
| ipv6IflcmpOutErrors (1.3.6.1.2.1.56.1.1.1.19) | read-only | Counter32 | Standard MIB values. | Number of ICMP messages the interface did not send due to problems discovered within ICMP. | The value is fixed at 0. |
| ipv6IflcmpOutDestUnreachs (1.3.6.1.2.1.56.1.1.1.20) | read-only | Counter32 | Standard MIB values. | Number of ICMP Destination Unreachable messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutAdminProhibs (1.3.6.1.2.1.56.1.1.1.21) | read-only | Counter32 | Standard MIB values. | Number of ICMP destination unreachable/communication administratively prohibited messages sent by the interface. | The value is fixed at 0. |
| ipv6IflcmpOutTimeExcds (1.3.6.1.2.1.56.1.1.1.22) | read-only | Counter32 | Standard MIB values. | Number of ICMP Time Exceeded messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutParmProblems (1.3.6.1.2.1.56.1.1.1.23) | read-only | Counter32 | Standard MIB values. | Number of ICMP Parameter Problem messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutPktTooBigs (1.3.6.1.2.1.56.1.1.1.24) | read-only | Counter32 | Standard MIB values. | Number of ICMP Packet Too Big messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutEchoes (1.3.6.1.2.1.56.1.1.1.25) | read-only | Counter32 | Standard MIB values. | Number of ICMP Echo (request) messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutEchoReplies (1.3.6.1.2.1.56.1.1.1.26) | read-only | Counter32 | Standard MIB values. | Number of ICMP Echo Reply messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutRouterSolicits (1.3.6.1.2.1.56.1.1.1.27) | read-only | Counter32 | Standard MIB values. | Number of ICMP Router Solicitation messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutRouterAdvertisements (1.3.6.1.2.1.56.1.1.1.28) | read-only | Counter32 | Standard MIB values. | Number of ICMP Router Advertisement messages sent by the interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| .1.28) | | | | messages sent by the interface. | |
| ipv6IflcmpOutNeighborSolicits (1.3.6.1.2.1.56.1.1.1.29) | read-only | Counter32 | Standard MIB values. | Number of ICMP Neighbor Solicitation messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutNeighborAdvertisements (1.3.6.1.2.1.56.1.1.1.30) | read-only | Counter32 | Standard MIB values. | Number of ICMP Neighbor Advertisement messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutRedirects (1.3.6.1.2.1.56.1.1.1.31) | read-only | Counter32 | Standard MIB values. | Number of Redirect messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutGroupMembershipQueries (1.3.6.1.2.1.56.1.1.1.32) | read-only | Counter32 | Standard MIB values. | Number of ICMPv6 Group Membership Query messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutGroupMembershipResponses (1.3.6.1.2.1.56.1.1.1.33) | read-only | Counter32 | Standard MIB values. | Number of ICMPv6 Group Membership Response messages sent by the interface. | As per the MIB. |
| ipv6IflcmpOutGroupMembershipReductions (1.3.6.1.2.1.56.1.1.1.34) | read-only | Counter32 | Standard MIB values. | Number of ICMPv6 Group Membership Reduction messages sent by the interface. | As per the MIB. |

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IPV6-MIB

About this MIB

Use this MIB to implement IPv6.

MIB file name

rfc2465-ipv6.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ipv6MIB(55)

Scalar objects

ipv6Forwarding

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-----------------------------------|---|----------------|
| ipv6Forwarding (1.3.6.1.2.1.55.1.1) | read-write | INTEGER | forwarding(1) notForwarding(2) | Whether this entity is acting as an IPv6 router for the forwarding of datagrams received by, but not addressed to, this entity. | Read only. |

ipv6DefaultHopLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|------------------|--|----------------|
| ipv6DefaultHopLimit (1.3.6.1.2.1.55.1.2) | read-write | INTEGER | INTEGER (0..255) | Default value inserted into the Hop Limit field of the IPv6 header of datagrams originated at this entity. | Read only. |

ipv6Interfaces

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|----------------------------|-----------------|
| ipv6Interfaces (1.3.6.1.2.1.55.1.3) | read-only | Unsigned32 | Standard MIB values. | Number of IPv6 interfaces. | As per the MIB. |

ipv6IfTableLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| ipv6IfTableLastChange (1.3.6.1.2.1.55.1.4) | read-only | TimeStamp | Standard MIB values. | Time when the last modification of the ipv6IfTable was made. | As per the MIB. |

ipv6RouteNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|---|-----------------|
| ipv6RouteNumber (1.3.6.1.2.1.55.1.9) | read-only | Gauge32 | Standard MIB values. | Total number of IPv6 unicast routing entries used for packet forwarding to public network destinations. | As per the MIB. |

ipv6DiscardedRoutes

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|----------------------------------|-----------------|
| ipv6DiscardedRoutes (1.3.6.1.2.1.55.1.10) | read-only | Counter32 | Standard MIB values. | Number of discarded IPv6 routes. | As per the MIB. |

Tabular objects

ipv6IfTable

About this table

Use this table to obtain IPv6 interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ipv6IfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|--|---|--|
| ipv6IfIndex (1.3.6.1.2.1.55.1.5.1.1) | not-accessible | Ipv6IfIndex | (1..2147483647) | Interface index. | As per the MIB. |
| ipv6IfDescr (1.3.6.1.2.1.55.1.5.1.2) | read-write | DisplayString | (0..255) | Interface description. | Cannot exceed 255 characters. |
| ipv6IfLowerLayer (1.3.6.1.2.1.55.1.5.1.3) | read-only | VariablePointer | Standard MIB values. | Protocol layer over which the network interface operates. | Not supported |
| ipv6IfEffectiveMtu (1.3.6.1.2.1.55.1.5.1.4) | read-only | Unsigned32 | Standard MIB values. | Interface MTU. | As per the MIB. |
| ipv6IfReasmMaxSize (1.3.6.1.2.1.55.1.5.1.5) | read-only | Unsigned32 | Standard MIB values. | Size of the largest IPv6 datagram that this entity can re-assemble from incoming IPv6 fragmented datagrams received on the interface. | Not supported. The value is fixed at 65535. |
| ipv6IfIdentifier (1.3.6.1.2.1.55.1.5.1.6) | read-write | Ipv6AddressIfIdentifier | Standard MIB values. | Interface identifier. | Read only. |
| ipv6IfIdentifierLength (1.3.6.1.2.1.55.1.5.1.7) | read-write | INTEGER | INTEGER(0..64) | Length of the interface identifier. | Read only. |
| ipv6IfPhysicalAddress (1.3.6.1.2.1.55.1.5.1.8) | read-only | PhysAddress | Standard MIB values. | Physical address of the interface. | As per the MIB. |
| ipv6IfAdminStatus (1.3.6.1.2.1.55.1.5.1.9) | read-write | INTEGER | up(1) down(2) | Desired state of the interface. | Read only. |
| ipv6IfOperStatus (1.3.6.1.2.1.55.1.5.1.10) | read-only | INTEGER | up(1) down(2) noIdentifier(3) unknown(4) notPresent(5) | Operating state of the interface. | As per the MIB. |
| ipv6IfLastChange (1.3.6.1.2.1.55.1.5.1.11) | read-only | TimeStamp | Standard MIB values. | During since the interface has entered its current operating state. | As per the MIB. |

ipv6IfStatsTable

About this table

Use this table to obtain the IPv6 interface forwarding statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ipv6IfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| ipv6IfStatsInReceives (1.3.6.1.2.1.55.1.6.1.1) | read-only | Counter32 | Standard MIB values. | Total number of input datagrams received by the interface. | As per the MIB. |
| ipv6IfStatsInHdrErrors (1.3.6.1.2.1.55.1.6.1.2) | read-only | Counter32 | Standard MIB values. | Number of input datagrams discarded due to errors in their IPv6 headers. | As per the MIB. |
| ipv6IfStatsInTooBigErrors (1.3.6.1.2.1.55.1.6.1.3) | read-only | Counter32 | Standard MIB values. | Number of input datagrams that cannot be forwarded because their size exceeds the link MTU of the outgoing interface. | As per the MIB. |
| ipv6IfStatsInNoRoutes (1.3.6.1.2.1.55.1.6.1.4) | read-only | Counter32 | Standard MIB values. | Number of input datagrams discarded because no route can be found to transmit them to their destinations. | As per the MIB. |
| ipv6IfStatsInAddrErrors (1.3.6.1.2.1.55.1.6.1.5) | read-only | Counter32 | Standard MIB values. | Number of input datagrams discarded because the IPv6 address in their IPv6 header's destination field was not a valid address. | As per the MIB. |
| ipv6IfStatsInUnknownProts (1.3.6.1.2.1.55.1.6.1.6) | read-only | Counter32 | Standard MIB values. | Number of locally-addressed datagrams received successfully but discarded because of an unknown or unsupported | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| | | | | protocol. | |
| ipv6IfStatsInTruncatedPkts (1.3.6.1.2.1.55.1.6.1.7) | read-only | Counter32 | Standard MIB values. | Number of input datagrams discarded because datagram frame did not carry enough data. | As per the MIB. |
| ipv6IfStatsInDiscards (1.3.6.1.2.1.55.1.6.1.8) | read-only | Counter32 | Standard MIB values. | Number of input IPv6 datagrams discarded due to unknown errors. | As per the MIB. |
| ipv6IfStatsInDelivers (1.3.6.1.2.1.55.1.6.1.9) | read-only | Counter32 | Standard MIB values. | Total number of datagrams successfully delivered. | As per the MIB. |
| ipv6IfStatsOutForwardDatagrams (1.3.6.1.2.1.55.1.6.1.10) | read-only | Counter32 | Standard MIB values. | Number of output datagrams this entity received and forwarded to their final destinations. | As per the MIB. |
| ipv6IfStatsOutRequests (1.3.6.1.2.1.55.1.6.1.11) | read-only | Counter32 | Standard MIB values. | Total number of IPv6 datagrams that local protocols supplied to IPv6 in requests for transmission. | As per the MIB. |
| ipv6IfStatsOutDiscards (1.3.6.1.2.1.55.1.6.1.12) | read-only | Counter32 | Standard MIB values. | Number of output IPv6 datagrams discarded due to unknown errors. | As per the MIB. |
| ipv6IfStatsOutFragmentOKs (1.3.6.1.2.1.55.1.6.1.13) | read-only | Counter32 | Standard MIB values. | Number of IPv6 datagrams that have been successfully fragmented at the interface. | As per the MIB. |
| ipv6IfStatsOutFragmentFails (1.3.6.1.2.1.55.1.6.1.14) | read-only | Counter32 | Standard MIB values. | Number of IPv6 datagrams that have been discarded because they failed to be fragmented as required at the interface. | As per the MIB. |
| ipv6IfStatsOutFragmentCreates (1.3.6.1.2.1.55.1.6.1.15) | read-only | Counter32 | Standard MIB values. | Number of output datagram fragments that have been generated as a result of fragmentation at the interface. | As per the MIB. |
| ipv6IfStatsReasmReqds (1.3.6.1.2.1.55.1.6.1.16) | read-only | Counter32 | Standard MIB values. | Number of received IPv6 fragments which that needed to be reassembled at | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| | | | | the interface. | |
| ipv6IfStatsReasmOKs (1.3.6.1.2.1.55.1.6.1.17) | read-only | Counter32 | Standard MIB values. | Number of IPv6 datagrams successfully reassembled. | As per the MIB. |
| ipv6IfStatsReasmFails (1.3.6.1.2.1.55.1.6.1.18) | read-only | Counter32 | Standard MIB values. | Number of failures detected by IPv6 re-assembly. | As per the MIB. |
| ipv6IfStatsInMcastPkts (1.3.6.1.2.1.55.1.6.1.19) | read-only | Counter32 | Standard MIB values. | Number of multicast packets received by the interface. | As per the MIB. |
| ipv6IfStatsOutMcastPkts (1.3.6.1.2.1.55.1.6.1.20) | read-only | Counter32 | Standard MIB values. | Number of multicast packets transmitted by the interface. | As per the MIB. |

ipv6AddrPrefixTable

About this table

Use this table to obtain the IPv6 address prefix information for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipv6IfIndex, ipv6AddrPrefix, and ipv6AddrPrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|---------------------|---|-----------------|
| ipv6AddrPrefix (1.3.6.1.2.1.55.1.7.1.1) | not-accessible | Ipv6AddressPrefix | (0..255) | IPv6 address prefix associated with the interface. | As per the MIB. |
| ipv6AddrPrefixLength (1.3.6.1.2.1.55.1.7.1.2) | not-accessible | INTEGER | INTEGER (0..128) | Length of the prefix. | As per the MIB. |
| ipv6AddrPrefixOnLinkFlag (1.3.6.1.2.1.55.1.7.1.3) | read-only | TruthValue | true(1) false(2) | Whether the prefix can be used for on-link determination. | As per the MIB. |
| ipv6AddrPrefixAutonomousFlag (1.3.6.1.2.1.55.1.7.1.4) | read-only | TruthValue | true(1) false(2) | Autonomous address configuration flag to determine if the prefix can be used to form a local interface address. | As per the MIB. |

| | | | | | |
|--|-----------|------------|----------------------|---|-----------------|
| ipv6AddrPrefixAdvPreferredLifetime (1.3.6.1.2.1.55.1.7.1.5) | read-only | Unsigned32 | Standard MIB values. | Length of time in seconds that this prefix will remain preferred. | As per the MIB. |
| ipv6AddrPrefixAdvValidLifetime (1.3.6.1.2.1.55.1.7.1.6) | read-only | Unsigned32 | Standard MIB values. | Length of time in seconds that this prefix will remain valid. | As per the MIB. |

ipv6AddrTable

About this table

Use this table to obtain the node's IPv6 address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipv6IfIndex and ipv6AddrAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|--|---|-------------------------|
| ipv6AddrAddress (1.3.6.1.2.1.55.1.8.1.1) | not-accessible | Ipv6Address | Standard MIB values. | IPv6 address to which the entry's addressing information belongs. | As per the MIB. |
| ipv6AddrPfxLength (1.3.6.1.2.1.55.1.8.1.2) | read-only | Ipv6Address | (0..128) | Length of the prefix associated with the IPv6 address of the entry. | As per the MIB. |
| ipv6AddrType (1.3.6.1.2.1.55.1.8.1.3) | read-only | INTEGER | stateless(1) stateful(2) unknown(3) | Address type. | Do not support unknown. |
| ipv6AddrAnycastFlag (1.3.6.1.2.1.55.1.8.1.4) | read-only | TruthValue | true(1) false(2) | Anycast address flag. | As per the MIB. |
| ipv6AddrStatus (1.3.6.1.2.1.55.1.8.1.5) | read-only | INTEGER | preferred(1) deprecated(2) invalid(3) inaccessible(4) unknown(5) | Address status. | As per the MIB. |

ipv6RouteTable

About this table

Use this table to obtain IPv6 routing table.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipv6RouteDest, ipv6RoutePfxLength, and ipv6RouteIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|---|--|-----------------|
| ipv6RouteDest (1.3.6.1.2.1.55.1.1 1.1.1) | not-accessible | Ipv6Address | Standard MIB values. | Destination IPv6 address of a route. | As per the MIB. |
| ipv6RoutePfxLength (1.3.6.1.2.1.55.1.1 1.1.2) | not-accessible | INTEGER | INTEGER (0..128) | Prefix length of the destination address. | As per the MIB. |
| ipv6RouteIndex (1.3.6.1.2.1.55.1.1 1.1.3) | not-accessible | Unsigned32 | Standard MIB values. | Route index, which uniquely identifies the route among the routes to the same network layer destination. | As per the MIB. |
| ipv6RouteIfIndex (1.3.6.1.2.1.55.1.1 1.1.4) | read-only | Ipv6IfIndexOrZero | Standard MIB values. | Output interface index. | As per the MIB. |
| ipv6RouteNextHop (1.3.6.1.2.1.55.1.1 1.1.5) | read-only | Ipv6Address | Standard MIB values. | Nexthop address. | As per the MIB. |
| ipv6RouteType (1.3.6.1.2.1.55.1.1 1.1.6) | read-only | INTEGER | other(1), discard(2), local(3), remote(4) | Type of the route. | As per the MIB. |
| ipv6RouteProtocol (1.3.6.1.2.1.55.1.1 1.1.7) | read-only | INTEGER | other(1), local(2), netmgmt(3), ndisc(4), rip(5), ospf(6), bgp(7), idrp(8), igrp(9) | Routing protocol type. | As per the MIB. |
| ipv6RoutePolicy (1.3.6.1.2.1.55.1.1 1.1.8) | read-only | Integer32 | Standard MIB values. | General set of route information. | As per the MIB. |
| ipv6RouteAge (1.3.6.1.2.1.55.1.1 1.1.9) | read-only | Unsigned32 | Standard MIB values. | Lifetime of the route. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|------------------------------------|-----------------|
| 1.1.9) | | | | | |
| ipv6RouteNextHopRDI (1.3.6.1.2.1.55.1.1 1.1.10) | read-only | Unsigned32 | Standard MIB values. | Routing domain ID of the next hop. | As per the MIB. |
| ipv6RouteMetric (1.3.6.1.2.1.55.1.1 1.1.11) | read-only | Unsigned32 | Standard MIB values. | Metric of the route. | As per the MIB. |
| ipv6RouteWeight (1.3.6.1.2.1.55.1.1 1.1.12) | read-only | Unsigned32 | Standard MIB values. | Weight of the route. | As per the MIB. |
| ipv6RouteInfo (1.3.6.1.2.1.55.1.1 1.1.13) | read-only | RowPointer | Standard MIB values. | Route information. | As per the MIB. |
| ipv6RouteValid (1.3.6.1.2.1.55.1.1 1.1.14) | read-write | TruthValue | true(1), false(2) | Whether the route is valid. | Read only. |

ipv6NetToMediaTable

About this table

Use this table to configure the mapping between an IPv6 address and the physical address for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ipv6IfIndex and ipv6NetToMediaNetAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|---|-----------------------------|-----------------|
| ipv6NetToMediaNetAddress (1.3.6.1.2.1.55.1.1 2.1.1) | not-accessible | Ipv6Address | Standard MIB values. | Interface IPv6 address. | As per the MIB. |
| ipv6NetToMediaPhysAddress (1.3.6.1.2.1.55.1.1 2.1.2) | read-only | PhysAddress | Standard MIB values. | Interface physical address. | As per the MIB. |
| ipv6NetToMediaType (1.3.6.1.2.1.55.1.1 2.1.3) | read-only | INTEGER | other(1) dynamic(2) static(3) local(4) | Mapping type. | As per the MIB. |
| ipv6IfNetToMediaState | read-only | INTEGER | reachable(1) stale(2) | Neighbor Unreachability | As per the MIB. |

| | | | | | |
|--|------------|------------|--|---|-----------------|
| (1.3.6.1.2.1.55.1.1 2.1.4) | | | delay(3) probe(4) invalid(5) unknown(6) | Detection state for the interface when the address mapping in this entry is used. | |
| ipv6IfNetToMediaLastUpdated (1.3.6.1.2.1.55.1.1 2.1.5) | read-only | TimeStamp | Standard MIB values. | Time since the entry was last updated. | As per the MIB. |
| ipv6NetToMediaValid (1.3.6.1.2.1.55.1.1 2.1.6) | read-write | TruthValue | true(1) false(2) | Whether the entry is invalid. | Read only. |

Notifications

ipv6IfStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.55.2.0.1 | IPv6 interface state change | Informational | - | - | ON |

Description

This notification is generated when the state of an IPv6 interface has changed.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------|-------|---------------|--|
| ipv6IfDescr (1.3.6.1.2.1.55.1.5.1.2) | Interface information. | No | DisplayString | DisplayString (0..255) |
| ipv6IfOperStatus (1.3.6.1.2.1.55.1.5.1.10) | Interface state. | No | INTEGER | up(1) down(2) noIfIdentifier(3) unknown(4) notPresent(5) |

Recommended action

Check the interface connection and the interface address.

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IPv6-TCP-MIB

About this MIB

This MIB is defined by RFC 2452. Use this MIB to obtain IPv6 TCP connection information.

MIB file name

rfc2452-ipv6-tcp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).tcp(6)

Tabular objects

ipv6TcpConnTable

About this table

Use this table to obtain IPv6 TCP connection information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipv6TcpConnLocalAddress, ipv6TcpConnLocalPort, ipv6TcpConnRemAddress, ipv6TcpConnRemPort, and ipv6TcpConnIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|----------------------|--|-----------------|
| ipv6TcpConnLocalAddress (1.3.6.1.2.1.6.16.1.1) | Not-accessible | Ipv6Address | Standard MIB values. | Local IPv6 address for a TCP connection. The value of ::0 indicates that the process is ready to accept a connection request from any port. | As per the MIB. |
| ipv6TcpConnLocalPort (1.3.6.1.2.1.6.16.1.2) | not-accessible | INTEGER | INTEGER (0..65535) | Local port number for the TCP connection. | As per the MIB. |
| ipv6TcpConnRemAddress (1.3.6.1.2.1.6.16.1.3) | not-accessible | Ipv6Address | Standard MIB values. | Remote IPv6 address for the TCP connection. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|--|---|-----------------|
| ipv6TcpConnRemPort (1.3.6.1.2.1.6.16.1.4) | not-accessible | INTEGER | INTEGER (0..65535) | Remote port number for the TCP connection. | As per the MIB. |
| ipv6TcpConnIfIndex (1.3.6.1.2.1.6.16.1.5) | not-accessible | Ipv6IfIndexOrZero | Standard MIB values. | Index of the interface associated with the local IPv6 address for the TCP connection. | As per the MIB. |
| ipv6TcpConnState (1.3.6.1.2.1.6.16.1.6) | read-write | INTEGER | closed(1) listen(2) synSent(3) synReceived(4) established(5) finWait1(6) finWait2(7) closeWait(8) lastAck(9) closing(10) timeWait(11) deleteTCB(12) | TCP connection state. The only value that a management station can set is deleteTCB(12). If a management station tries to set the object to a value other than deleteTCB(12), the agent will return an error response. If the object value is set to deleteTCB(12), TCB will be deleted and the corresponding TCP connection will be terminated. | Read only. |

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IPV6-UDP-MIB

About this MIB

This MIB is defined by RFC 2454. Use this MIB to obtain IPv6 UDP endpoint information.

MIB file name

rfc2454-ipv6-udp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).udp(7)

Tabular objects

ipv6UdpTable

About this table

Use this table to obtain IPv6 UDP endpoint information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipv6UdpLocalAddress, ipv6UdpLocalPort, and ipv6UdpIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|----------------------|---|-----------------|
| ipv6UdpLocalAddress (1.3.6.1.2.1.7.6.1.1) | Not-accessible | Ipv6Address | Standard MIB values. | Local IPv6 address for the UDP listener. The value of ::0 indicates that the UDP listener is ready to accept datagrams from any interface. | As per the MIB. |
| ipv6UdpLocalPort (1.3.6.1.2.1.7.6.1.2) | not-accessible | INTEGER | INTEGER (0..65535) | Local port number for the UDP listener. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------------|----------------------|---|-----------------|
| ipv6UdpIfIndex (1.3.6.1.2.1.7.6.1.3) | read-only | Ipv6IfIndexOrZero | Standard MIB values. | <p>Index object to identify a row (ipv6UdpLocalAddress and ipv6UdpLocalPort are not unique)</p> <p>This object identifies the local interface associated with ipv6UdpLocalAddress for this UDP listener. If such a local interface cannot be determined (for example, the value of object ipv6UdpLocalAddress is 0), the object takes the value 0.</p> <p>The value of this object remains unchanged during the life of the UDP endpoint.</p> | As per the MIB. |

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TCP-MIB

About this MIB

This MIB is defined by RFC 4022. Use this MIB to obtain the TCP protocol parameters, TCP connection information, and TCP packet statistics.

MIB file name

rfc4022-tcp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).tcp(6)

Scalar objects

tcpRtoAlgorithm

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|---------|--|---|-----------------|
| tcpRtoAlgorithm (1.3.6.1.2.1.6.1) | read-only | INTEGER | other(1), constant(2), rsre(3), vanj(4) | Algorithm used to determine the timeout value for retransmitting unacknowledged octets. | As per the MIB. |

tcpRtoMin

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------|-----------|-----------|------------------------------|---|-----------------|
| tcpRtoMin (1.3.6.1.2.1.6.2) | read-only | Integer32 | Integer32 (0..2147483647) | Minimum value, in milliseconds, for the TCP retransmission timeout. | As per the MIB. |

tcpRtoMax

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------|-----------|-----------|------------------------------|---|-----------------|
| tcpRtoMax (1.3.6.1.2.1.6.3) | read-only | Integer32 | Integer32 (0..2147483647) | Maximum value, in milliseconds, for the TCP retransmission timeout. | As per the MIB. |

tcpMaxConn

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------|-----------|-----------|--------------------------------|-----------------------|-----------------|
| tcpMaxConn (1.3.6.1.2.1.6.4) | read-only | Integer32 | Integer32 (-1 0..2147483647) | Maximum number of TCP | As per the MIB. |

| | | | | | |
|--|--|--|--|--|--|
| | | | | connections that are supported. In the maximum number is a dynamic value, this object take the "value-1". | |
|--|--|--|--|--|--|

tcpActiveOpens

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|---|-----------------|
| tcpActiveOpens (1.3.6.1.2.1.6.5) | read-only | Counter32 | Standard MIB values. | Number of times that TCP connections have made a direct transition to the SYN-SENT state from the CLOSED state. | As per the MIB. |

tcpPassiveOpens

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|---|-----------------|
| tcpPassiveOpens (1.3.6.1.2.1.6.6) | read-only | Counter32 | Standard MIB values. | Number of times that TCP connections have made a direct transition to the SYN-RCVD state from the LISTEN state. | As per the MIB. |

tcpAttemptFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|--|-----------------|
| tcpAttemptFails (1.3.6.1.2.1.6.7) | read-only | Counter32 | Standard MIB values. | Sum of the following number of times that TCP connections have made a direct transition: <ul style="list-style-type: none"> Number of transitions to the CLOSED state from either the SYN-SENT state or the SYN-RCVD state. Number of transitions to the LISTEN state from the SYN-RCVD state. | As per the MIB. |

tcpEstabResets

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|---|-----------------|
| tcpEstabResets (1.3.6.1.2.1.6.8) | read-only | Counter32 | Standard MIB values. | Number of times that TCP connections have made a direct transition to the CLOSED state from either the ESTABLISHED state or the CLOSE-WAIT state. | As per the MIB. |

tcpCurrEstab

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|---------|----------------------|--|-----------------|
| tcpCurrEstab (1.3.6.1.2.1.6.9) | read-only | Gauge32 | Standard MIB values. | Number of TCP connections for which the current state is either ESTABLISHED or CLOSE-WAIT. | As per the MIB. |

tcpInSegs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------|-----------|-----------|----------------------|---|-----------------|
| tcpInSegs (1.3.6.1.2.1.6.10) | read-only | Counter32 | Standard MIB values. | Total number of segments received, including those received in error, and the segments received on established connections. | As per the MIB. |

tcpOutSegs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|--|-----------------|
| tcpOutSegs (1.3.6.1.2.1.6.11) | read-only | Counter32 | Standard MIB values. | Total number of sent segments, including those on current connections. The segments containing only retransmitted octets are not included. | As per the MIB. |

tcpRetransSegs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------|-----------|-----------|--------------|-----------------|-----------------|
| tcpRetransSegs | read-only | Counter32 | Standard MIB | Total number of | As per the MIB. |

| | | | | | |
|--------------------|--|--|---------|---|--|
| (1.3.6.1.2.1.6.12) | | | values. | segments retransmitted, that is, the number of transmitted TCP segments containing one or more previously transmitted octets. | |
|--------------------|--|--|---------|---|--|

tcpInErrs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------|-----------|-----------|----------------------|--|-----------------|
| tcpInErrs (1.3.6.1.2.1.6.14) | read-only | Counter32 | Standard MIB values. | Total number of segments received in error (for example, bad TCP checksums). | As per the MIB. |

tcpOutRsts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|--|-----------------|
| tcpOutRsts (1.3.6.1.2.1.6.15) | read-only | Counter32 | Standard MIB values. | Number of sent TCP segments containing the RST flag. | As per the MIB. |

tcpHCInSegs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-----------|-----------|----------------------|---------------------------------|----------------|
| tcpHCInSegs (1.3.6.1.2.1.6.17) | read-only | Counter64 | Standard MIB values. | 64-bit equivalent of tcpInSegs. | Not supported |

tcpHCOutSegs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|-----------|-----------|----------------------|----------------------------------|----------------|
| tcpHCOutSegs (1.3.6.1.2.1.6.18) | read-only | Counter64 | Standard MIB values. | 64-bit equivalent of tcpOutSegs. | Not supported |

Tabular objects

tcpConnTable

About this table

Use this table to obtain detailed IPv4 TCP connection information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are tcpConnLocalAddress, tcpConnLocalPort, tcpConnRemAddress, and tcpConnRemPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|---|---|-----------------|
| tcpConnState (1.3.6.1.2.1.6.13.1.1) | read-write | INTEGER | closed(1), listen(2), synSent(3), synReceived(4), established(5), finWait1(6), finWait2(7), closeWait(8), lastAck(9), closing(10), timeWait(11), deleteTCB(12) | TCP connection state. The only value that a management station can set is deleteTCB(12). If a management station tries to set the object to a value other than deleteTCB(12), the agent will return an error response. If the object value is set to deleteTCB(12), TCB will be deleted and the corresponding TCP connection will be terminated. | Read only. |
| tcpConnLocalAddress (1.3.6.1.2.1.6.13.1.2) | read-only | IpAddress | Standard MIB values. | Local IP address for the TCP connection. The value 0.0.0.0 indicates that the connection in the listen state can accept connections for any interface. | As per the MIB. |
| tcpConnLocalPort (1.3.6.1.2.1.6.13.1.3) | read-only | Integer32 | Integer32 (0..65535) | Local port number of the TCP connection. | As per the MIB. |
| tcpConnRemAddress (1.3.6.1.2.1.6.13.1.4) | read-only | IpAddress | Standard MIB values. | Remote IP address of the TCP connection. | As per the MIB. |
| tcpConnRemPort (1.3.6.1.2.1.6.13.1.5) | read-only | Integer32 | Integer32 (0..65535) | Remote port number of the TCP connection. | As per the MIB. |

tcpConnectionTable

About this table

Use this table to obtain TCP connection information. Different from tcpConnTable, information about the connections in the LISTEN state is stored in tcpListenTable.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are tcpConnectionLocalAddressType, tcpConnectionLocalAddress, tcpConnectionLocalPort, tcpConnectionRemAddressType, tcpConnectionRemAddress, and tcpConnectionRemPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|---|-------------------------------------|
| tcpConnectionLocalAddressType (1.3.6.1.2.1.6.19.1.1) | not-accessible | InetAddressType | Standard MIB values. | Address type of tcpConnectionLocalAddress. | Only supports ipv4(1) and ipv6 (2). |
| tcpConnectionLocalAddress (1.3.6.1.2.1.6.19.1.2) | not-accessible | InetAddress | Standard MIB values. | Local IP address of the TCP connection. | As per the MIB. |
| tcpConnectionLocalPort (1.3.6.1.2.1.6.19.1.3) | not-accessible | InetPortNumber | Standard MIB values. | Local port number of the TCP connection. | As per the MIB. |
| tcpConnectionRemAddressType (1.3.6.1.2.1.6.19.1.4) | not-accessible | InetAddressType | Standard MIB values. | Address type of tcpConnectionRemAddress. | Supports only ipv4(1) and ipv6 (2). |
| tcpConnectionRemAddress (1.3.6.1.2.1.6.19.1.5) | not-accessible | InetAddress | Standard MIB values. | Remote IP address of the TCP connection. | As per the MIB. |
| tcpConnectionRemPort (1.3.6.1.2.1.6.19.1.6) | not-accessible | InetPortNumber | Standard MIB values. | Remote port number of the TCP connection. | As per the MIB. |
| tcpConnectionState (1.3.6.1.2.1.6.19.1.7) | read-write | INTEGER | closed(1), listen(2), synSent(3), synReceived(4), established(5), finWait1(6), finWait2(7), closeWait(8), lastAck(9), closing(10), timeWait(11), deleteTCB(12) | TCP connection state. The only value that a management station can set is deleteTCB(12). If a management station tries to set the object to a value other than deleteTCB(12), the agent will return an error response. If the object value is set to deleteTCB(12), TCB will be deleted and the corresponding TCP connection will be terminated. | Read only. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| tcpConnectionProcess (1.3.6.1.2.1.6.19.1.8) | read-only | Unsigned32 | Standard MIB values. | System's process ID for the process associated with this connection. The value is 0 if no such process exists. | As per the MIB. |

tcpListenerTable

About this table

Use this table to obtain the TCP listener information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are tcpListenerLocalAddressType, tcpListenerLocalAddress, and tcpListenerLocalPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|----------------------|--|-------------------------------------|
| tcpListenerLocalAddressType (1.3.6.1.2.1.6.20.1.1) | not-accessible | InetAddressType | Standard MIB values. | Address type of tcpListenerLocalAddress. The value unknown(0) indicates that the listener accepts connection initiations to all local IP addresses. | Only supports ipv4(1) and ipv6 (2). |
| tcpListenerLocalAddress (1.3.6.1.2.1.6.20.1.2) | not-accessible | InetAddress | Standard MIB values. | Local IP address of the TCP connection. | As per the MIB. |
| tcpListenerLocalPort (1.3.6.1.2.1.6.20.1.3) | not-accessible | InetPortNumber | Standard MIB values. | Local port number of the TCP connection. | As per the MIB. |
| tcpListenerProcesses (1.3.6.1.2.1.6.20.1.4) | read-only | Unsigned32 | Standard MIB values. | System's process ID for the process associated with this connection. The value is 0 if no such process exists. | As per the MIB. |

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UDP-MIB

About this MIB

This MIB is defined by RFC 4113. Use this MIB to obtain the UDP endpoint information and UDP packet statistics.

MIB file name

rfc4113-udp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).udp(7)

Scalar objects

udpInDatagrams

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|------------|-----------|----------------------|--|-----------------|
| udpInDatagrams (1.3.6.1.2.1.7.1) | read- only | Counter32 | Standard MIB values. | Total number of UDP datagrams delivered to applications. | As per the MIB. |

udpNoPorts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------|-----------|-----------|----------------------|--|-----------------|
| udpNoPorts (1.3.6.1.2.1.7.2) | read-only | Counter32 | Standard MIB values. | Total number of received UDP datagrams for which no application exist at the destination port. | As per the MIB. |

udpInErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|--|-----------------|
| udpInErrors (1.3.6.1.2.1.7.3) | read-only | Counter32 | Standard MIB values. | Number of received UDP datagrams that cannot be delivered for reasons other than the lack of an application at the destination port. | As per the MIB. |

udpOutDatagrams

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|---|-----------------|
| udpOutDatagrams (1.3.6.1.2.1.7.4) | read-only | Counter32 | Standard MIB values. | Total number of UDP datagrams sent from this end. | As per the MIB. |

udpHCInDatagrams

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|----------------|
| udpHCInDatagrams (1.3.6.1.2.1.7.8) | read-only | Counter64 | Standard MIB values. | Total number of UDP datagrams delivered to applications, for devices that can receive more than 1 million UDP datagrams per second. | Not supported |

udpHCOutDatagrams

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|----------------|
| udpHCOutDatagrams (1.3.6.1.2.1.7.9) | read-only | Counter64 | Standard MIB values. | Total number of UDP datagrams sent from this end entity, for devices that can transmit more than 1 million UDP datagrams per second. | Not supported |

Tabular objects

udpTable

About this table

Use this table to obtain IPv4 UDP listener information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are udpLocalAddress and udpLocalPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| udpLocalAddress (1.3.6.1.2.1.7.5.1.1) | read-only | IpAddress | Standard MIB values. | Local IP address for the UDP listener. The value 0.0.0.0 indicates | As per the MIB. |

| | | | | | |
|---------------------------------------|-----------|-----------|-------------------------|---|-----------------|
| | | | | that the UDP listener can accept datagrams for any interface. | |
| udpLocalPort (1.3.6.1.2.1.7.5.1.2) | read-only | Integer32 | Integer32 (0..65535) | Local port number for the UDP listener. | As per the MIB. |

udpEndpointTable

About this table

Use this table to obtain information about UDP endpoints on which a local application is receiving or sending datagrams.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are udpEndpointLocalAddressType, udpEndpointLocalAddress, udpEndpointLocalPort, udpEndpointRemoteAddressType, udpEndpointRemoteAddress, udpEndpointRemotePort, and udpEndpointInstance.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|----------------------|---|-----------------------------------|
| udpEndpointLocalAddressType (1.3.6.1.2.1.7.7.1.1) | not-accessible | InetAddressType | Standard MIB values. | Address type of udpEndpointLocalAddress. Only IPv4, IPv4z, IPv6, and IPv6z addresses are expected. The value unknown(0) indicates that the datagrams for all local IP addresses are received. | Only support ipv4(1) and ipv6(2). |
| udpEndpointLocalAddress (1.3.6.1.2.1.7.7.1.2) | not-accessible | InetAddress | Standard MIB values. | Local IP address of the UDP endpoint. | As per the MIB. |
| udpEndpointLocalPort (1.3.6.1.2.1.7.7.1.3) | not-accessible | InetPortNumber | Standard MIB values. | Local port number of the UDP endpoint. | As per the MIB. |
| udpEndpointRemoteAddressType (1.3.6.1.2.1.7.7.1.4) | not-accessible | InetAddressType | Standard MIB values. | Address type of udpEndpointRemoteAddress. Only IPv4, IPv4z, IPv6, and IPv6z addresses are expected. The value unknown(0) indicates that the datagrams for all remote IP addresses are | Only support ipv4(1) and ipv6(2). |

| | | | | | |
|---|----------------|----------------|-------------------------------|---|-----------------|
| | | | | received. | |
| udpEndpointRemoteAddress (1.3.6.1.2.1.7.7.1.5) | not-accessible | InetAddress | Standard MIB values. | Remote IP address of the UDP endpoint. | As per the MIB. |
| udpEndpointRemotePort (1.3.6.1.2.1.7.7.1.6) | not-accessible | InetPortNumber | Standard MIB values. | Remote port number of the UDP endpoint. | As per the MIB. |
| udpEndpointInstance (1.3.6.1.2.1.7.7.1.7) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Instance ID of the UDP connection, used for distinguishing multiple processes connected to the same UDP endpoint. | As per the MIB. |
| udpEndpointProcess (1.3.6.1.2.1.7.7.1.8) | read-only | Unsigned32 | Standard MIB values. | System's process ID for the process associated with the endpoint. The value is 0 if no such process exists. | As per the MIB. |

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BGP4-MIB

About this MIB

This document contains MIB and Trap features compliant with RFC 4273.

MIB file name

rfc4273-bgp4.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).bgp(15)

Scalar objects

bgpVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|-----------|--------------|-----------------------|--------------------------------|-----------------|
| bgpVersion (1.3.6.1.2.1.15.1) | read-only | OCTET STRING | OCTET STRING (1..255) | Supported BGP version numbers. | As per the MIB. |

bgpLocalAs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------|-----------|-----------|------------------------------------|------------------|---|
| bgpLocalAs (1.3.6.1.2.1.15.2) | read-only | Integer32 | Integer32(-2147483648..2147483647) | Local AS number. | The value range for a 4-octet AS number is 1 to 4294967295. If the AS number is greater than 2147483647, MIB displays a negative value. |

bgpIdentifier

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|------------------|-------------------------------------|-----------------|
| bgpIdentifier (1.3.6.1.2.1.15.4) | read-only | IpAddress | OCTET STRING (4) | BGP identifier of the local device. | As per the MIB. |

Tabular objects

bgpPeerTable

About this table

This table contains BGP peer configuration and statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is bgpPeerRemoteAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|--|---|---|
| bgpPeerIdentifier (1.3.6.1.2.1.15.3.1.1) | read-only | IpAddress | OCTET STRING (4) | BGP identifier of the peer. | As per the MIB. |
| bgpPeerState (1.3.6.1.2.1.15.3.1.2) | read-only | INTEGER | idle(1), connect(2), active(3), opensent(4), openconfirm(5), established(6) | Peer connection state. | As per the MIB. |
| bgpPeerAdminStatus (1.3.6.1.2.1.15.3.1.3) | read-write | INTEGER | stop(1), start(2) | Expected peer connection state. | As per the MIB. |
| bgpPeerNegotiatedVersion (1.3.6.1.2.1.15.3.1.4) | read-only | Integer32 | Integer32(0..255) | Negotiated BGP version number. | As per the MIB. |
| bgpPeerLocalAddr (1.3.6.1.2.1.15.3.1.5) | read-only | IpAddress | OCTET STRING (4) | Local IP address of the peer connection. | As per the MIB. |
| bgpPeerLocalPort (1.3.6.1.2.1.15.3.1.6) | read-only | Integer32 | Integer32(0..65535) | Local port number of the peer connection. | As per the MIB. |
| bgpPeerRemoteAddr (1.3.6.1.2.1.15.3.1.7) | read-only | IpAddress | OCTET STRING (4) | Remote IP address of the peer connection. | As per the MIB. |
| bgpPeerRemotePort (1.3.6.1.2.1.15.3.1.8) | read-only | Integer32 | Integer32(0..65535) | Remote port number of the peer connection. | As per the MIB. |
| bgpPeerRemoteAs (1.3.6.1.2.1.15.3.1.9) | read-only | Integer32 | Integer32(-2147483648..2147483647) | AS number of the peer. | The value range for a 4-octet AS number is 1 to 4294967295. If the AS number is greater than 2147483647, MIB displays a negative value. |
| bgpPeerInUpdates (1.3.6.1.2.1.15.3.1.10) | read-only | Counter32 | INTEGER(0..4294967295) | Number of update messages received from the peer. | As per the MIB. |
| bgpPeerOutUpdates (1.3.6.1.2.1.15.3.1.11) | read-only | Counter32 | INTEGER(0..4294967295) | Number of update messages sent to the peer. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|--------------------------|---|--|
| bgpPeerInTotalMessages (1.3.6.1.2.1.15.3.1.12) | read-only | Counter32 | INTEGER(0..4294967295) | Number of packets received from the peer. | As per the MIB. |
| bgpPeerOutTotalMessages (1.3.6.1.2.1.15.3.1.13) | read-only | Counter32 | INTEGER(0..4294967295) | Number of packets sent to the peer. | As per the MIB. |
| bgpPeerLastError (1.3.6.1.2.1.15.3.1.14) | read-only | OCTET STRING | OCTET STRING(2) | Error code and subcode for the most recent peer connection error. | As per the MIB. |
| bgpPeerFsmEstablishedTransitions (1.3.6.1.2.1.15.3.1.15) | read-only | Counter32 | INTEGER(0..4294967295) | Number of times that the peer entered established state. | As per the MIB. |
| bgpPeerFsmEstablishedTime (1.3.6.1.2.1.15.3.1.16) | read-only | Gauge32 | INTEGER(0..4294967295) | Time elapsed since the peer entered established state most recently. | As per the MIB. |
| bgpPeerConnectRetryInterval (1.3.6.1.2.1.15.3.1.17) | read-write | Integer32 | Integer32(1..65535) | Peer connection retry timer. | As per the MIB. |
| bgpPeerHoldTime (1.3.6.1.2.1.15.3.1.18) | read-only | Integer32 | Integer32 (0 3..65535) | Hold timer negotiated with the peer. | As per the MIB. |
| bgpPeerKeepAlive (1.3.6.1.2.1.15.3.1.19) | read-only | Integer32 | Integer32 (0 1..21845) | Keepalive timer negotiated with the peer. | As per the MIB. |
| bgpPeerHoldTimeConfigured (1.3.6.1.2.1.15.3.1.20) | read-write | Integer32 | Integer32 (0 3..65535) | Hold timer configured for the peer. | The value of this object cannot be 0. |
| bgpPeerKeepAliveConfigured (1.3.6.1.2.1.15.3.1.21) | read-write | Integer32 | Integer32 (0 1..21845) | Keepalive timer configured for the peer. | The value of this object cannot be 0. |
| bgpPeerMinASOriginationInterval (1.3.6.1.2.1.15.3.1.22) | read-write | Integer32 | Integer32(1..65535) | Interval for sending the same route to the peer. | Value range: 0 to 600. This object displays 0 if the value is set to 0. |
| bgpPeerMinRouteAdvertisementInterval (1.3.6.1.2.1.15.3.1.23) | read-write | Integer32 | Integer32(1..65535) | Interval for sending the same route to the peer. | Value range: 0 to 600. This object displays 0 if the value is set to 0. |
| bgpPeerInUpdateElapsedTime (1.3.6.1.2.1.15.3.1.24) | read-only | Gauge32 | INTEGER(0..4294967295) | Time elapsed since the most recent update message was received from the peer. | As per the MIB. |

bgpPathAttrTable

About this table

This table is obsolete. It contains BGP route path information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are bgpPathAttrDestNetwork and bgpPathAttrPeer.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-------------------------------------|---|-----------------|
| bgpPathAttrPeer (1.3.6.1.2.1.15.5.1.1) | read-only | IpAddresses | OCTET STRING (4) | IP address of the peer from which the route was learned. | As per the MIB. |
| bgpPathAttrDestNetwork (1.3.6.1.2.1.15.5.1.2) | read-only | IpAddresses | OCTET STRING (4) | Destination network address. | As per the MIB. |
| bgpPathAttrOrigin (1.3.6.1.2.1.15.5.1.3) | read-only | INTEGER | igp(1), egp(2), incomplete(3) | Ultimate origin of the path information. | As per the MIB. |
| bgpPathAttrASPath (1.3.6.1.2.1.15.5.1.4) | read-only | OCTET STRING | OCTET STRING (2..255) | The set of ASs that must be traversed to reach the network. | As per the MIB. |
| bgpPathAttrNextHop (1.3.6.1.2.1.15.5.1.5) | read-only | IpAddresses | OCTET STRING (4) | Address of the border router for the destination network. | As per the MIB. |
| bgpPathAttrInterASMetric (1.3.6.1.2.1.15.5.1.6) | read-only | Integer32 | Standard MIB values. | Optional inter-AS metric. | As per the MIB. |

bgp4PathAttrTable

About this table

This table contains BGP route attribute information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are bgp4PathAttrIpAddrPrefix, bgp4PathAttrIpAddrPrefixLen, and bgp4PathAttrPeer.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|-------------------|--|-----------------|
| bgp4PathAttrPeer (1.3.6.1.2.1.15.6.1.1) | read-only | IpAddresses | OCTET STRING (4) | IP address of the peer from which the route was learned. | As per the MIB. |
| bgp4PathAttrIpAddrPrefixLen (1.3.6.1.2.1.15.6.1.2) | read-only | Integer32 | Integer32 (0..32) | Route prefix mask. | As per the MIB. |
| bgp4PathAttrIpAddrPrefix (1.3.6.1.2.1.15.6.1.3) | read-only | IpAddresses | OCTET STRING (4) | Route prefix. | As per the MIB. |
| bgp4PathAttrOrigin | read-only | INTEGER | igp(1), | Ultimate origin of the | As per the MIB. |

| | | | | | |
|---|-----------|-----------------|--|---|---|
| (1.3.6.1.2.1.15.6.1.4) | | R | egp(2), incomplete(3) | path information. | |
| bgp4PathAttrASPathSegment (1.3.6.1.2.1.15.6.1.5) | read-only | OCTET STRING | OCTET STRING (2..255) | Sequence of AS path segments. | As per the MIB. |
| bgp4PathAttrNextHop (1.3.6.1.2.1.15.6.1.6) | read-only | IpAddresses | OCTET STRING (4) | Next hop of the route. | As per the MIB. |
| bgp4PathAttrMultiExitDisc (1.3.6.1.2.1.15.6.1.7) | read-only | Integer32 | Integer32(-1..2 147483647) | MED value. | The object returns 2147483647 when the actual value is in the range of 2147483647 to 4294967295. |
| bgp4PathAttrLocalPref (1.3.6.1.2.1.15.6.1.8) | read-only | Integer32 | Integer32(-1..2 147483647) | Local preference. | The object returns 2147483647 when the actual value is in the range of 2147483647 to 4294967295. |
| bgp4PathAttrAtomicAggregate (1.3.6.1.2.1.15.6.1.9) | read-only | INTEGER | lessSpecificRouteNotSelected(1), lessSpecificRouteSelected(2) | Atomic aggregate attribute. | As per the MIB. |
| bgp4PathAttrAggregatorAS (1.3.6.1.2.1.15.6.1.10) | read-only | Integer32 | Integer32(-214 7483648..2147 483647) | AS number of the last device that performed route aggregation. | The value range for a 4-octet AS number is 1 to 4294967295. If the AS number is greater than 2147483647, MIB displays a negative value. |
| bgp4PathAttrAggregatorAddress (1.3.6.1.2.1.15.6.1.11) | read-only | IpAddresses | OCTET STRING (4) | IP address of the last device that performed route aggregation. | As per the MIB. |
| bgp4PathAttrCalcLocalPref (1.3.6.1.2.1.15.6.1.12) | read-only | Integer32 | Integer32(-1..2 147483647) | Local preference calculated by the receiving device for an advertised route. | The object returns 2147483647 when the actual value is in the range of 2147483647 to 4294967295. |
| bgp4PathAttrBest (1.3.6.1.2.1.15.6.1.13) | read-only | INTEGER | false(1), true(2) | Whether the route is the optimal route. | As per the MIB. |
| bgp4PathAttrUnknown (1.3.6.1.2.1.15.6.1.14) | read-only | OCTET STRING | OCTET STRING (0..255) | Route attributes that cannot be identified. | As per the MIB. |

Notifications

bgpEstablishedNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|-------------------------------------|----------|----------|--------------------------|----------------|
| 1.3.6.1.2.1.15.0.1 | A peer enters established state. | Recovery | - | - | ON |

Description

A notification sent when BGP FSM enters established state.

Status control

ON

CLI: Use the `snmp-agent trap enable bgp` command or the `snmp-agent trap enable bgp peer-established` command.

OFF

CLI: Use the `undo snmp-agent trap enable bgp` command or the `undo snmp-agent trap enable bgp peer-established` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|---|
| 1.3.6.1.2.1.15.3.1.7 (bgpPeerRemoteAddr) | Remote IP address of the peer connection. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.15.3.1.14 (bgpPeerLastError) | Error code and subcode for the most recent peer connection error. | No | DisplayString | OCTET STRING (2) |
| 1.3.6.1.2.1.15.3.1.2 (bgpPeerState) | Peer connection state. | No | INTEGER | idle(1) connect(2) active(3) opensent(4) openconfirm(5) established(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

bgpBackwardTransNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|---------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.15.0.2 | A peer enters a lower numbered state. | Recovery | Warning | - | ON |

Description

A notification sent when BGP FSM enters a lower numbered state.

Status control

ON

CLI: Use the `snmp-agent trap enable bgp` command or the `snmp-agent trap enable bgp peer-backward-transition` command.

OFF

CLI: Use the `undo snmp-agent trap enable bgp` command or the `undo snmp-agent trap enable bgp peer-backward-transition` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|---|
| 1.3.6.1.2.1.15.3.1.7 (bgpPeerRemoteAddr) | Remote IP address of the peer connection. | No | IpAddress | OCTET STRING (4) |
| 1.3.6.1.2.1.15.3.1.14 (bgpPeerLastError) | Error code and subcode for the most recent peer connection error. | No | DisplayString | OCTET STRING (2) |
| 1.3.6.1.2.1.15.3.1.2 (bgpPeerState) | Peer connection state. | No | INTEGER | idle(1) connect(2) active(3) opensent(4) openconfirm(5) established(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that the notification is triggered by link state changes.
2. If the issue persists, contact H3C Support.

bgpEstablished

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|----------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.15.7.1 | A peer enters established state. | Recovery | - | - | ON |

Description

A notification sent when BGP FSM enters established state.

Status control

ON

CLI: Use the `snmp-agent trap enable bgp` command or the `snmp-agent trap enable bgp peer-established` command.

OFF

CLI: Use the `undo snmp-agent trap enable bgp` command or the `undo snmp-agent trap enable bgp peer-established` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|---|
| 1.3.6.1.2.1.15.3.1.14 (bgpPeerLastError) | Error code and subcode for the most recent peer connection error. | No | DisplayString | OCTET STRING (2) |
| 1.3.6.1.2.1.15.3.1.2 (bgpPeerState) | Peer connection state. | No | INTEGER | idle(1) connect(2) active(3) opensent(4) openconfirm(5) established(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

bgpBackwardTransition

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|---------------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.15.7.2 | A peer enters a lower numbered state. | Error | Warning | - | ON |

Description

A notification sent when BGP FSM enters a lower numbered state.

Status control

ON

CLI: Use the `snmp-agent trap enable bgp` command or the `snmp-agent trap enable bgp peer-backward-transition` command.

OFF

CLI: Use the `undo snmp-agent trap enable bgp` command or the `undo snmp-agent trap enable bgp peer-backward-transition` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|------------------|
| 1.3.6.1.2.1.15.3.1.14 (bgpPeerLastError) | Error code and subcode for the most recent peer connection error. | No | DisplayString | OCTET STRING (2) |

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|---------|---|
| 1.3.6.1.2.1.15.3.1.2 (bgpPeerState) | Peer connection state. | No | INTEGER | idle(1) connect(2) active(3) opensent(4) openconfirm(5) established(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the notification is triggered by link state changes.
2. If the issue persists, contact H3C Support.

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HH3C-IPRAN-DCN-MIB (IPRAN)

About this MIB

This MIB describes how OSPF supports IPRAN DCN so that the gateway can manage and control remote devices, monitor running states of the devices, and obtain notifications when the devices come online or go offline.

MIB file name

hh3c-ipran-dcn.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3clpRanDcn(152)

Tabular objects

hh3clpRanDcnInfoObject

About this table

This table contains network element information about the current device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description |
|---|-----------|-----------------|-----------------------|---|
| hh3clpRanDcnNeld (1.3.6.1.4.1.25506.2.152.1.1.1) | read-only | Hh3clpRanNeld | OCTET STRING (4) | ID that uniquely identifies the local network element. |
| hh3clpRanDcnNelpType (1.3.6.1.4.1.25506.2.152.1.1.2) | read-only | InetAddressType | ipv4(1) | IP address type of the local network element. |
| hh3clpRanDcnNelp (1.3.6.1.4.1.25506.2.152.1.1.3) | read-only | InetAddress | OCTET STRING (0..255) | IP address of the local network element. |
| hh3clpRanDcnMask (1.3.6.1.4.1.25506.2.152.1.1.4) | read-only | InetAddress | OCTET STRING (0..255) | Subnet mask of the IP address of the local network element. |
| hh3clpRanDcnMAC (1.3.6.1.4.1.25506.2.152.1.1.5) | read-only | MacAddress | OCTET STRING (6) | Bridge MAC of the local network element. |
| hh3clpRanDcnVendor (1.3.6.1.4.1.25506.2.152.1.1.6) | read-only | DisplayString | SIZE (0..255) | Vendor of the local network element. |

hh3clpRanDcnNeInfoTable

About this table

This table contains information about all network elements in the network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description |
|---|-----------|-----------------|--------------------------|---|
| hh3clpRanDcnNeInfoNeId (1.3.6.1.4.1.25506.2.152.1.1.2.1.1) | read-only | Hh3clpRanNeId | OCTET STRING (4) | ID that uniquely identifies the network element. |
| hh3clpRanDcnNeInfoNeIpType (1.3.6.1.4.1.25506.2.152.1.1.2.1.2) | read-only | InetAddressType | ipv4(1) | IP address type of the network element. |
| hh3clpRanDcnNeInfoNeIp (1.3.6.1.4.1.25506.2.152.1.1.2.1.3) | read-only | InetAddress | OCTET STRING (0..255) | IP address of the network element. |
| hh3clpRanDcnNeInfoMetric (1.3.6.1.4.1.25506.2.152.1.1.2.1.4) | read-only | Integer32 | Standard MIB values. | Distance from the local network element to the remote node. |
| hh3clpRanDcnNeInfoDeviceType (1.3.6.1.4.1.25506.2.152.1.1.2.1.5) | read-only | DisplayString | OCTET STRING (0..255) | Device type of the network element. |
| hh3clpRanDcnNeInfoMAC (1.3.6.1.4.1.25506.2.152.1.1.2.1.6) | read-only | MacAddress | OCTET STRING (6) | Bridge MAC of the network element. |
| hh3clpRanDcnNeInfoVendor (1.3.6.1.4.1.25506.2.152.1.1.2.1.7) | read-only | DisplayString | OCTET STRING (0..255) | Vendor of the network element. |

hh3clpRanDcnTrapObjects

About this table

This table contains network element information about the current device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description |
|----------------------|-----------|-----------|----------------------|--------------------------------|
| hh3clpRanDcnNeNumber | read-only | Integer32 | Standard MIB values. | Total number of online network |

| | | | | |
|---|-----------|---------------|-------------------------|--|
| (1.3.6.1.4.1.25506.2.152.1.2.1) | | | | elements. |
| hh3clpRanDcnNeChangeMode (1.3.6.1.4.1.25506.2.152.1.2.2) | read-only | INTEGER | online (1), offline (2) | Network element state in the most recent notification. |
| hh3clpRanDcnCompanyName (1.3.6.1.4.1.25506.2.152.1.2.3) | read-only | DisplayString | OCTET STRING (0..255) | Device vendor name. |
| hh3clpRanDcnDeviceType (1.3.6.1.4.1.25506.2.152.1.2.4) | read-only | DisplayString | OCTET STRING (0..255) | Device type. |
| hh3clpRanDcnDeviceMac (1.3.6.1.4.1.25506.2.152.1.2.5) | read-only | MacAddress | OCTET STRING(6) | Bridge MAC of the device. |

Notifications

hh3clpRanDcnNeOnline

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.152.1.3.0.1 | A network element comes online. | Informational | - | - | OFF |

Description

A notification sent when a network element comes online.

Status control

ON

CLI: Use the **auto-report** command.

OFF

CLI: Use the **undo auto-report** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|-----------------------|
| 1.3.6.1.4.1.25506.2.152.1.1.2.1.1 (hh3clpRanDcnNeInfoNeld) | Network element ID. | No | Hh3clpRanNeId | OCTET STRING (4) |
| 1.3.6.1.4.1.25506.2.152.1.1.2.1.2 (hh3clpRanDcnNeInfoNelpType) | IP address type of the network element. | No | InetAddressType | ipv4(1) |
| 1.3.6.1.4.1.25506.2.152.1.1.2.1.3 (hh3clpRanDcnNeInfoNelp) | IP address of the network element. | No | InetAddress | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.152.1.2.3 (hh3clpRanDcnCompanyName) | Device vendor name. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.152.1.2.4 (hh3clpRanDcnDeviceType) | Device type. | No | DisplayString | OCTET STRING (0..255) |

| | | | | |
|--|---------------------------|----|------------|------------------|
| 1.3.6.1.4.1.25506.2.152.1.2.5 (hh3clpRanDcnDeviceMac) | Bridge MAC of the device. | No | MacAddress | OCTET STRING (6) |
|--|---------------------------|----|------------|------------------|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3clpRanDcnNeOffline

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.152.1.3.0.2 | A network element goes offline. | Informational | - | - | OFF |

Description

A notification sent when a network element goes offline.

Status control

ON

CLI: Use the **auto-report** command.

OFF

CLI: Use the **undo auto-report** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|-----------------------|
| 1.3.6.1.4.1.25506.2.152.1.1.2.1.1 (hh3clpRanDcnNeInfoNeld) | Network element ID. | No | Hh3clpRanNeId | OCTET STRING (4) |
| 1.3.6.1.4.1.25506.2.152.1.1.2.1.2 (hh3clpRanDcnNeInfoNelpType) | IP address type of the network element. | No | InetAddressType | ipv4(1) |
| 1.3.6.1.4.1.25506.2.152.1.1.2.1.3 (hh3clpRanDcnNeInfoNelp) | IP address of the network element. | No | InetAddress | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-ISIS-MIB

About this MIB

Use this MIB to obtain all IS-IS process IDs by using the hh3clsisSysInstance node.

MIB file name

hh3c-isis.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3clsis(59)

Global objects

isisNotificationSysLevelIndex

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------|-------|-----------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | System level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |

isisNotificationCircIfIndex

| OID (object name) | Description | Index | Type | Value range |
|---|------------------|-------|------------|---------------------------|
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |

isisPduLspId

| OID (object name) | Description | Index | Type | Value range |
|---|-------------|-------|--------------------|------------------|
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | LSP ID. | No | IsisLinkStatePDUID | OCTET STRING (8) |

hh3clsisAdjProtoType

| OID (object name) | Description | Index | Type | Value range |
|--|----------------|-------|---------|--------------------|
| 1.3.6.1.4.1.25506.2.59.1.2.1.1 (hh3clsisAdjProtoType) | Protocol type. | No | INTEGER | ipv4(1) ipv6(1) |

hh3clsisAdjProtoState

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------|-------|---------|--|
| 1.3.6.1.4.1.25506.2.59.1.2.1.2 (hh3clsisAdjProtoState) | Neighbor state. | No | INTEGER | down (1) initializing (2) up (3) |

ifName

| OID (object name) | Description | Index | Type | Value range |
|---------------------------------|-----------------|-------|---------------|----------------------|
| 1.3.6.1.2.1.31.1.1.1.1 (ifName) | Interface name. | No | DisplayString | OCTET STRING(0..255) |

Tabular objects

hh3clsisSysTable

About this table

This table contains information about all IS-IS process IDs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clsisSysInstance.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|---------------|-----------------|
| hh3clsisSysInstance (1.3.6.1.4.1.25506.2.59.1.1.1.1.1) | read-only | Integer32 | Integer32 (1..65535) | Process node. | As per the MIB. |

Notifications

hh3clsisAdjacencyProtocolChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|----------------|---------------|---------------|-----------------------|----------------|
| 1.3.6.1.4.1.25506. | Address family | Informational | Informational | - | ON |

| | | | | | |
|----------|--------------|--|--|--|--|
| 2.59.0.1 | state change | | | | |
|----------|--------------|--|--|--|--|

Description

This notification is generated when a change in address family has occurred.

Status control

ON

CLI: Use the `snmp-agent trap enable isis adjacency-protocol-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis adjacency-protocol-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | System level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCirclflIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspld) | LSP ID. | No | IsisLinkStatePDUID | OCTET STRING (8) |
| 1.3.6.1.2.1.138.1.6.3.1.2 (hh3clsisProtoState) | IP protocol state. | No | INTEGER | ipv4up (1) ipv4down (2) ipv6up (3) ipv6down(4) |
| 1.3.6.1.2.1.31.1.1.1.1 (ifName) | Interface name. | No | DisplayString | OCTET STRING(0..255) |

Recommended action

Check whether the address family change is normal. If the issue persists, please contact the H3C technical support.

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HH3C-OSPF-MIB

About this MIB

Use this MIB to display OSPF information.

MIB file name

hh3c-ospf.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cOspf(161)

Tabular objects

hh3cOspfNetworkTable

About this table

This table displays OSPF network configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cOspfProcessId, hh3cOspfAreaId, and hh3cOspfNetworkIpAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---------------------|--|-----------------|
| hh3cOspfProcessId (1.3.6.1.4.1.25506.2.161.1.1) | not-accessible | Integer32 | Integer32(1..65535) | OSPF process ID. | As per the MIB. |
| hh3cOspfAreaId (1.3.6.1.4.1.25506.2.161.1.2) | not-accessible | IpAddress | OCTET STRING (4) | Area ID, uniquely identifying an area. | As per the MIB. |
| hh3cOspfNetworkIpAddr (1.3.6.1.4.1.25506.2.161.1.3) | not-accessible | IpAddress | OCTET STRING (4) | Network address. | As per the MIB. |
| hh3cOspfNetworkIpMask (1.3.6.1.4.1.25506.2.161.1.4) | read-only | IpAddress | OCTET STRING (4) | Wildcard mask of the network address. | As per the MIB. |

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ISIS-MIB

About this MIB

ISIS-MIB is a standard MIB implemented based on RFC4444. Use this MIB to define MIB variables on managed devices according to associated IS-IS configuration at the CLI.

MIB file name

rfc4444-isis.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).isisMIB(138)

Scalar objects

isisSysVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---------------------------|-----------------------------|-------------------------------|
| isisSysVersion (1.3.6.1.2.1.138.1.1.1.1) | read-only | INTEGER | unknown (0), one(1) | IS-IS version number. | The value is fixed at one(1). |

isisSysLevelType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|---|-------------|-----------------------------------|
| isisSysLevelType (1.3.6.1.2.1.138.1.1.1.2) | read-write | IsisLevel | level1(1), level2(2), level1and 2(3) | IS level. | Supports only the read operation. |

isisSysID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|------------|--------------|------------------------|--------------|-----------------------------------|
| isisSysID (1.3.6.1.2.1.138.1.1.1.3) | read-write | IsisSystemID | OCTET STRING (6) | System ID | Supports only the read operation. |

isisSysMaxPathSplits

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|--------------------|---|---|
| isisSysMaxPathSplits (1.3.6.1.2.1.138.1.1.1.4) | read-write | Unsigned 32 | Unsigned 32(1..32) | Maximum number of ECMP routes supported by IS-IS. | The value range and default value vary by device model. The object can be modified whether the value of isisSysAdminState is on(1). |

isisSysMaxLSPGenInt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|-----------------------|---|--|
| isisSysMaxLSPGenInt (1.3.6.1.2.1.138.1.1.1.5) | read-write | Unsigned 32 | Unsigned 32(1..65535) | Maximum LSP generation interval supported by IS-IS. | This value must be smaller than isisSysMaxAge. This value must be greater than any isisSysLevelMinLSPGenInt value (not implemented yet). This value must be at least 300 seconds shorter than isisSysMaxAge (not implemented yet). |

isisSysPollESHelloRate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|-----------------------|---|--|
| isisSysPollESHelloRate (1.3.6.1.2.1.138.1.1.1.6) | read-write | IsisUnsigned16TC | Unsigned 32(1..65535) | Maximum ES solicitation interval in ISH PDUs. | Supports only the read operation. The value is fixed at 50. |

isisSysWaitTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------------|-----------------------|---|--|
| isisSysWaitTime (1.3.6.1.2.1.138.1.1.1.7) | read-write | IsisUnsigned16TC | Unsigned 32(1..65535) | Maximum time to wait for the IS to come up. | Supports only the read operation. The value is fixed at 60. |

isisSysAdminState

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|------------------------------------|---------------------------------|-----------------------------------|
| isisSysAdminState (1.3.6.1.2.1.138.1.1.1.8) | read-write | IsisAdminState | INTEGER { on(1), off(2) } | Administrative state of the IS. | Supports only the read operation. |

isisSysL2toL1Leaking

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| isisSysL2toL1Leaking (1.3.6.1.2.1.138.1.1.1.9) | read-write | TruthValue | true(1), false(2) | Whether route leaking from Level-2 to Level-1 is allowed. | As per the MIB. |

isisSysMaxAge

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|-------------------------|---|--|
| isisSysMaxAge (1.3.6.1.2.1.138.1.1.1.10) | read-write | IsisUnsigned16TC | Unsigned 32(350..65535) | LSP maximum age. The value must be 300 seconds longer than the maximum LSP generation interval. | The value must be larger than isisSysMaxLSPGenInt, and at least 300 seconds longer than isisSysMaxLSPGenInt. |

isisSysReceiveLSPBufferSize

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|--------------------------|----------------------------|----------------|
| isisSysReceiveLSPBufferSize(1.3.6.1.2.1.138.1.1.1.11) | read-write | IsisUnsigned16TC | Unsigned 32(1492..16000) | LSP receiving buffer size. | Default: 1497. |

isisSysProtSupported

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|------------------------------------|--------------------------|---|
| isisSysProtSupported (1.3.6.1.2.1.138.1.1.1.12) | read-only | BITS | iso8473(0), ipv4(1), ipv6(2) | Supported protocol type. | Supports only ipv4(1) and ipv6(2). The return value is ipv6(2) when both IPv4 and IPv6 |

| | | | | | |
|--|--|--|--|--|----------------|
| | | | | | are supported. |
|--|--|--|--|--|----------------|

isisSysNotificationEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| isisSysNotificationEnable (1.3.6.1.2.1.138.1.1.1.13) | read-write | TruthValue | true(1), false(2) | Whether IS-IS SNMP notifications is enabled. | As per the MIB. |

Tabular objects

isisManAreaAddrTable

About this table

This table contains information about manually configured area addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is isisManAreaAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------------|----------------------------|--|--|
| isisManAreaAddr (1.3.6.1.2.1.138.1.1.2.1.1) | not-accessible | IsisOSIN SAddresses | OCTET STRING (0..20) | Manually configured area address. | As per the MIB. |
| isisManAreaAddrExistState (1.3.6.1.2.1.138.1.1.2.1.2) | read-create | RowStatus | active(1) | State of the manually configured area address. | Supports only the read operation. Supports only active(1). |

isisAreaAddrTable

About this table

This table contains information about reachable Level-1 area addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is isisAreaAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------------|----------------------------|--------------------------------------|--|
| isisAreaAddr (1.3.6.1.2.1.138.1.1.3.1.1) | read-only | IsisOSIN SAddres s | OCTET STRING (0..20) | Reachable Level-1 area address | A value is returned only when the value of isisSysLevelType is level1and2(3). |

isisSummAddrTable

About this table

This table contains information about summarized addresses.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisSummAddressType, isisSummAddress, and isisSummAddrPrefixLen.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|---|---|---|
| isisSummAddressType (1.3.6.1.2.1.138.1.1.4.1.1) | not-accessible | InetAddressType | INTEGER{ unknown (0), ipv4(1), ipv6(2), dns(16) } | Summary address type. | As per the MIB. |
| isisSummAddress (1.3.6.1.2.1.138.1.1.4.1.2) | not-accessible | InetAddress | OCTET STRING(0..255) | Summary address. | As per the MIB. |
| isisSummAddrPrefixLen (1.3.6.1.2.1.138.1.1.4.1.3) | not-accessible | InetAddressPrefix Length | Unsigned 32(0..204 0) | Prefix length of the summary address. | As per the MIB. |
| isisSummAddrExistState (1.3.6.1.2.1.138.1.1.4.1.4) | read-create | RowStatus | active(1) | State of the summary address. | Supports only the read operation. Support only active(1). |

| | | | | | |
|---|-------------|-------------------|-----------------------|--|--|
| isisSummAddrMetric (1.3.6.1.2.1.138.1.1.4.1.5) | read-create | IsisDefaultMetric | Unsigned 32(0..63) | Metric of the summary address. | Supports only the read operation. Default: 20. |
| isisSummAddrFullMetric (1.3.6.1.2.1.138.1.1.4.1.6) | read-create | IsisFullMetric | Unsigned 32 | Total metric (internal metric plus external metric) of the summary address. | Supports only the read operation. Default: 20. |

isisRedistributeAddrTable

About this table

This table contains information about route leaking from Level-2 to Level-1.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisRedistributeAddrType, isisRedistributeAddrAddress, and isisRedistributeAddrPrefixLen.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|---|--|---|
| isisRedistributeAddrType (1.3.6.1.2.1.138.1.1.5.1.1) | not-accessible | InetAddressType | INTEGER{ unknown (0), ipv4(1), ipv6(2), dns(16) } | Redistributed address type. | As per the MIB. |
| isisRedistributeAddrAddress (1.3.6.1.2.1.138.1.1.5.1.2) | not-accessible | InetAddress | OCTET STRING(0..255) | Redistributed address. | As per the MIB. |
| isisRedistributeAddrPrefixLen (1.3.6.1.2.1.138.1.1.5.1.3) | not-accessible | InetAddressPrefix Length | Unsigned 32(0..204 0) | Prefix length of the redistributed address. | As per the MIB. |
| isisRedistributeAddrExistState (1.3.6.1.2.1.138.1.1.5.1.4) | read-create | RowStatus | active(1) | State of the redistributed address. | Supports only the read operation. Supports only active(1). |

isisRouterTable

About this table

This table contains information about mappings between host names and system IDs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisRouterSysID and isisRouterLevel.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|----------------------|-----------------|
| isisRouterSysID (1.3.6.1.2.1.138.1.1.6.1.1) | not-accessible | IsisSystemID | OCTET STRING (6) | System ID. | As per the MIB. |
| isisRouterLevel (1.3.6.1.2.1.138.1.1.6.1.2) | not-accessible | IsisISLevel | level1(1), level2(2), level1and2(3) | IS level. | As per the MIB. |
| isisRouterHostName (1.3.6.1.2.1.138.1.1.6.1.3) | read-only | SnmpAdminString | OCTET STRING (0..255) | Host name of the IS. | As per the MIB. |
| isisRouterID (1.3.6.1.2.1.138.1.1.6.1.4) | read-only | Unsigned 32 | Standard MIB values. | Router ID of the IS. | As per the MIB. |

isisSysLevelTable

About this table

This table contains information about the specified IS level.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is isisSysLevelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|-------------|-------------|-----------------|
| isisSysLevelIndex (1.3.6.1.2.1.138.1.2.1.1.1) | not-accessible | IsisISLevel | INTEGER{ | IS level. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|--|---|---|
| | | | area(1), domain(2) } | | |
| isisSysLevelOrigLSPBuffSize (1.3.6.1.2.1.138.1.2.1.1.2) | read-write | IsisLSPBuffSize | Unsigned 32(512..16000) | Maximum LSP size that can be generated by the specified IS level. | Default: 1497. The value must be smaller than isisSysReceiveLSPBufferSize. The object is modifiable whether the value of isisSysAdminState is on(1). |
| isisSysLevelMinLSPGenInt (1.3.6.1.2.1.138.1.2.1.1.3) | read-write | IsisUnsigned16TC | Unsigned 32(1..65535) | Minimum LSP generation interval of the specified IS level. | Value range: 1 to 120. Default: 1. The return value is an integer. When the intelligent timer is configured, if the value is smaller than 1, the return value is 1. |
| isisSysLevelState (1.3.6.1.2.1.138.1.2.1.1.4) | read-only | IsisLevelState | off (1) on (2) waiting (3) overloaded(4) | Overload status of the specified IS level. | Supports only off(1), on(2), and overloaded(4). |
| isisSysLevelSetOverload (1.3.6.1.2.1.138.1.2.1.1.5) | read-write | TruthValue | true(1), false(2) | Whether the overload status is set for the specified IS level. | As per the MIB. |
| isisSysLevelSetOverloadUntil (1.3.6.1.2.1.138.1.2.1.1.6) | read-write | Unsigned 32 | Standard MIB values. | Most recent time when the specified IS level exits the overload status. | If the object is a non-zero value, the overload bit is set for this level when the isisSysAdminState variable enters "on" state (when the IS is not implemented yet). |
| isisSysLevelMetricStyle (1.3.6.1.2.1.138.1.2.1.1.7) | read-write | IsisMetricStyle | INTEGER{ narrow(1), wide(2), both(3) } | Cost style of the specified IS level. | As per the MIB. |
| isisSysLevelSPFConsiders (1.3.6.1.2.1.138.1.2.1.1.8) | read-write | IsisMetricStyle | INTEGER{ narrow(1), wide(2), both(3) } | Cost style used by the specified IS level during SPF calculation. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------|
| isisSysLevelTEEnabled (1.3.6.1.2.1.138.1.2.1.1.9) | read-write | TruthValue | true(1), false(2) | Whether TE is enabled for the specified IS level. | As per the MIB. |

isisCirc

About this table

This table contains interface index information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table has no indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-----------------------------|--|-----------------|
| isisNextCircIndex (1.3.6.1.2.1.138.1.3.1) | read-only | IntegerNextFree | Unsigned 32(0..429 4967295) | Available interface index of the system. | As per the MIB. |

isisCircTable

About this table

This table contains IS-IS interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is isisCircIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|-----------------------------|------------------|------------------------|
| isisCircIndex (1.3.6.1.2.1.138.1.3.2.1.1) | not-accessible | Integer | Unsigned 32(1..429 4967295) | Interface index. | As per the MIB. |
| isisCircIfIndex | read-create | InterfaceId | Integer32 | Ifnet index of | Supports only the read |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------|---|--|--|
| (1.3.6.1.2.1.138.1.3.2.1.2) | | index | (1..2147483647) | the interface. | operation. |
| isisCircAdminState (1.3.6.1.2.1.138.1.3.2.1.3) | read-create | IsisAdminState | INTEGER { on(1), off(2) } | Administrative state of the interface. | Supports only the read operation. |
| isisCircExistState (1.3.6.1.2.1.138.1.3.2.1.4) | read-create | RowStatus | active(1) | State of the interface. | Supports only the read operation. Supports only active(1). |
| isisCircType (1.3.6.1.2.1.138.1.3.2.1.5) | read-create | INTEGER | broadcast(1), ptToPt(2) , staticIn(3), staticOut(4), dA(5) | Type of the interface. | Supports only the read operation. Supports only broadcast(1) and ptToPt(2). This value is broadcast(1) on a broadcast link, and is ptToPt (2) on other types of links. |
| isisCircExtDomain (1.3.6.1.2.1.138.1.3.2.1.6) | read-create | TruthValue | true(1), false(2) | Domain attribute of the interface. | Supports only the read operation. The value is fixed at false(2). |
| isisCircLevelType (1.3.6.1.2.1.138.1.3.2.1.7) | read-create | IsisLevel | level1(1), level2(2), level1and2(3) | Level of the interface. | Supports only the read and write operations. |
| isisCircPassiveCircuit (1.3.6.1.2.1.138.1.3.2.1.8) | read-create | TruthValue | true(1), false(2) | Whether the interface is disabled from advertising routes. | Supports only the read and write operations. |
| isisCircMeshGroupEnabled (1.3.6.1.2.1.138.1.3.2.1.9) | read-create | INTEGER | inactive(1), blocked(2), set(3) | Mesh group setting for the interface. | Supports only the read operation. |
| isisCircMeshGroup (1.3.6.1.2.1.138.1.3.2.1.10) | read-create | Unsigned 32 | Standard MIB values. | Mesh group number. | Supports only the read operation. |
| isisCircSmallHellos (1.3.6.1.2.1.138.1.3.2.1.11) | read-create | TruthValue | true(1), false(2) | Whether sending small hello packets is enabled. | Supports only the read and write operations. |
| isisCircLastUpTime (1.3.6.1.2.1.138.1.3.2.1.12) | read-only | TimeStamp | TimeTicks | Most recent up time of the interface. | As per the MIB. |
| isisCirc3WayEnabled (1.3.6.1.2.1.138.1.3.2.1.13) | read-create | TruthValue | true(1), false(2) | Whether three-way handshake is enabled. | Supports only the read operation. |
| isisCircExtendedCircID (1.3.6.1.2.1.138.1.3.2.1.14) | read-create | Unsigned 32 | Standard MIB | Unique interface ID | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|---|----------------|
| | | | values. | during the three-way handshake process. | |

isisCircLevelTable

About this table

This table contains information about an interface of the specified circuit level.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are isisCircIndex and isisCircLevelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------|--|--|--|
| isisCircLevelIndex (1.3.6.1.2.1.138.1.4.1.1.1) | not-accessible | IsisSLevel | INTEGER{ area(1), domain(2) } | Circuit level of the interface. | As per the MIB. |
| isisCircLevelMetric (1.3.6.1.2.1.138.1.4.1.1.2) | read-write | IsisDefault Metric | Unsigned32(0..63) | Internal cost of the interface of the specified circuit level. | Value range: 1 to 63. |
| isisCircLevelWideMetric (1.3.6.1.2.1.138.1.4.1.1.3) | read-write | IsisWideMetric | Unsigned32(0..16777215) | Total cost of the interface of the specified circuit level. | Value range: 1 to 16777215. |
| isisCircLevelSPriority (1.3.6.1.2.1.138.1.4.1.1.4) | read-write | IsisSPriority | Unsigned32(0..127) | DIS priority for the interface of the specified circuit level. | As per the MIB. |
| isisCircLevelIDOctet (1.3.6.1.2.1.138.1.4.1.1.5) | read-only | Unsigned32 | Unsigned32(0..255) | Circuit ID of the interface (DIS). | As per the MIB. |
| isisCircLevelID (1.3.6.1.2.1.138.1.4.1.1.6) | read-only | IsisCircuitID | OCTET STRING(0 7) | Unique circuit ID assigned to the interface. | The value is the isisSysID. For a P2P circuit, the value is isisCircLevelIDOctet that is one byte long. For a broadcast circuit, the value is a zero-length eight-byte string. |
| isisCircLevelDesIS (1.3.6.1.2.1.138.1.4.1.1.7) | read-only | IsisCircuitID | OCTET STRING(0 7) | LAN ID for the DIS on the interface of the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|-----------------------|---|--|
| | | | | specified circuit level. | |
| isisCircLevelHelloMultiplier (1.3.6.1.2.1.138.1.4.1.1.8) | read-write | Unsigned32 | Unsigned32(2..100) | IS-IS hello multiplier. | Value range: 3 to 100. Default: 3. |
| isisCircLevelHelloTimer (1.3.6.1.2.1.138.1.4.1.1.9) | read-write | Unsigned32 | Unsigned32(10..60000) | Hello packet sending interval. | Value range: 1000 to 255000. Default: 10000. When the value is divided by 1000, the decimal number will be ignored. |
| isisCircLevelDRHelloTimer (1.3.6.1.2.1.138.1.4.1.1.10) | read-write | Unsigned32 | Unsigned32(10..12000) | Hello packet sending interval on the DIS. | Supports only the read operation. Value range: 1000 to 85000. Default: 3000. When the value is divided by 1000, the decimal number will be ignored. |
| isisCircLevelLSPThrottle (1.3.6.1.2.1.138.1.4.1.1.11) | read-write | IsisUnsigned16TC | Unsigned32(1..65535) | Minimum LSP sending interval. | Value range: 1 to 1000. Default: 33. |
| isisCircLevelMinLSPRetransmit (1.3.6.1.2.1.138.1.4.1.1.12) | read-write | Unsigned32 | Unsigned32(1..300) | Minimum LSP retransmission interval | As per the MIB. |
| isisCircLevelCSNPInterval (1.3.6.1.2.1.138.1.4.1.1.13) | read-write | Unsigned32 | Unsigned32(1..600) | Minimum CSNP sending interval | As per the MIB. |
| isisCircLevelPartSNPInterval (1.3.6.1.2.1.138.1.4.1.1.14) | read-write | Unsigned32 | Unsigned32(1..120) | Minimum PSNP sending interval | Supports only the read operation. The value is fixed at 2. |

isisSystemCounterTable

About this table

This table contains statistics information about the specified IS level.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is isisSysStatLevel.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|------------------|-------------|-----------------|
| isisSysStatLevel (1.3.6.1.2.1.138.1.5.1.1.1) | not-accessible | IsisISLevel | INTEGER{area(1), | IS level. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------|--|--------------------------|
| | | | domain(2) } | | |
| isisSysStatCorrLSPs (1.3.6.1.2.1.138.1.5.1.1.2) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of error LSPs. | The value is fixed at 0. |
| isisSysStatAuthTypeFails (1.3.6.1.2.1.138.1.5.1.1.3) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of authentication type errors. | As per the MIB. |
| isisSysStatAuthFails (1.3.6.1.2.1.138.1.5.1.1.4) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of authentication failures. | As per the MIB. |
| isisSysStatLSPDbaseOloads (1.3.6.1.2.1.138.1.5.1.1.5) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of LSDB overload times. | As per the MIB. |
| isisSysStatManAddrDropFromAreas (1.3.6.1.2.1.138.1.5.1.1.6) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of times the manually configured area address is deleted from the local area. | As per the MIB. |
| isisSysStatAtmptToExMaxSeqNums (1.3.6.1.2.1.138.1.5.1.1.7) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of times the LSP sequence number exceeds the maximum sequence number. | As per the MIB. |
| isisSysStatSeqNumSkips (1.3.6.1.2.1.138.1.5.1.1.8) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of times the LSP sequence number is not continuous. | As per the MIB. |
| isisSysStatOwnLSPPurges (1.3.6.1.2.1.138.1.5.1.1.9) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of times the system generates LSPs with a lifetime of 0. | As per the MIB. |
| isisSysStatIDFieldLenMatches (1.3.6.1.2.1.138.1.5.1.1.10) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of times the system receives LSPs with ID length changes. | As per the MIB. |
| isisSysStatPartChanges (1.3.6.1.2.1.138.1.5.1.1.11) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of area address mismatches. | As per the MIB. |
| isisSysStatSPFRuns (1.3.6.1.2.1.138.1.5.1.1.12) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of area split events. | As per the MIB. |
| isisSysStatLSPErrors (1.3.6.1.2.1.138.1.5.1.1.13) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of SPF calculation events. | As per the MIB. |

isisCircuitCounterTable

About this table

This table contains statistics information about interfaces of the specified circuit level.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisCircIndex and isisCircuitType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|---|--|--------------------------|
| isisCircuitType (1.3.6.1.2.1.138.1.5.2.1.1) | not-accessible | INTEGER | lanlevel1(1), lanlevel2(2), p2pcircuit(3) | Interface type. | As per the MIB. |
| isisCircAdjChanges (1.3.6.1.2.1.138.1.5.2.1.2) | read-only | Counter32 | INTEGER(0..4294967295) | Neighbor change information. | As per the MIB. |
| isisCircNumAdj (1.3.6.1.2.1.138.1.5.2.1.3) | read-only | Unsigned32 | Standard MIB values. | Number of neighbor changes. | As per the MIB. |
| isisCircInitFails (1.3.6.1.2.1.138.1.5.2.1.4) | read-only | Counter32 | INTEGER(0..4294967295) | Number of interface initialization failures. | The value is fixed at 0. |
| isisCircRejAdjs (1.3.6.1.2.1.138.1.5.2.1.5) | read-only | Counter32 | INTEGER(0..4294967295) | Number of adjacency creation failures. | As per the MIB. |
| isisCircIDFieldLenMismatches (1.3.6.1.2.1.138.1.5.2.1.6) | read-only | Counter32 | INTEGER(0..4294967295) | Number of ID length changes in received IS-IS packets. | As per the MIB. |
| isisCircMaxAreaAddrMismatches (1.3.6.1.2.1.138.1.5.2.1.7) | read-only | Counter32 | INTEGER(0..4294967295) | Number of area address mismatches. | As per the MIB. |
| isisCircAuthTypeFails (1.3.6.1.2.1.138.1.5.2.1.8) | read-only | Counter32 | INTEGER(0..4294967295) | Number of authentication type errors. | As per the MIB. |
| isisCircAuthFails (1.3.6.1.2.1.138.1.5.2.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Number of authentication errors of the same authentication type. | As per the MIB. |
| isisCircLANDesISChanges (1.3.6.1.2.1.138.1.5.2.1.10) | read-only | Counter32 | INTEGER(0..4294967295) | Number of DIS changes. | As per the MIB. |

isisPacketCounterTable

About this table

This table contains statistics information about received and sent IS-IS packets for the specified IS level.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisCircIndex, isisPacketCountLevel, and isisPacketCountDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|--|---|--------------------------|
| isisPacketCountLevel (1.3.6.1.2.1.138.1.5.3.1.1) | not-accessible | IsisISLevel | INTEGER{ area(1), domain(2) } | IS level. | As per the MIB. |
| isisPacketCountDirection (1.3.6.1.2.1.138.1.5.3.1.2) | not-accessible | INTEGER | sending(1), receiving(2) | Packet direction (sending or receiving). | As per the MIB. |
| isisPacketCountIIHello (1.3.6.1.2.1.138.1.5.3.1.3) | read-only | Counter32 | INTEGER(0..4294967295) | Number of IS-IS packets received or sent. | As per the MIB. |
| isisPacketCountISHello (1.3.6.1.2.1.138.1.5.3.1.4) | read-only | Counter32 | INTEGER(0..4294967295) | Number of hello packets received or sent. | The value is fixed at 0. |
| isisPacketCountESHello (1.3.6.1.2.1.138.1.5.3.1.5) | read-only | Counter32 | INTEGER(0..4294967295) | Number of ES packets received or sent. | The value is fixed at 0. |
| isisPacketCountLSP (1.3.6.1.2.1.138.1.5.3.1.6) | read-only | Counter32 | INTEGER(0..4294967295) | Number of LSPs received or sent. | As per the MIB. |
| isisPacketCountCSNP (1.3.6.1.2.1.138.1.5.3.1.7) | read-only | Counter32 | INTEGER(0..4294967295) | Number of CSNPs received or sent. | As per the MIB. |
| isisPacketCountPSNP (1.3.6.1.2.1.138.1.5.3.1.8) | read-only | Counter32 | INTEGER(0..4294967295) | Number of PSNPs received or sent. | As per the MIB. |
| isisPacketCountUnknown (1.3.6.1.2.1.138.1.5.3.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Number of unknown IS-IS packets. | As per the MIB. |

isisISAdjTable

About this table

This table contains neighbor information about the specified interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisCircIndex and isisISAdjIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------|--|---|--|
| isisISAdjIndex (1.3.6.1.2.1.138.1.6.1.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Neighbor index. | As per the MIB. |
| isisISAdjState (1.3.6.1.2.1.138.1.6.1.1.2) | read-only | INTEGER | down (1), initializing (2), up (3), failed(4) | Neighbor state. | Supports only down(1), initializing(2), and up(3). |
| isisISAdj3WayState (1.3.6.1.2.1.138.1.6.1.1.3) | read-only | INTEGER | up (0), initializing (1), down (2), failed (3) | Neighbor state. | As per the MIB. |
| isisISAdjNeighSNPAAddress (1.3.6.1.2.1.138.1.6.1.1.4) | read-only | IsisOSINSAAddresses | OCTET STRING (0..20) | SNPA address of the neighbor. | As per the MIB. |
| isisISAdjNeighSysType (1.3.6.1.2.1.138.1.6.1.1.5) | read-only | INTEGER | I1IntermediateSystem(1), I2IntermediateSystem(2), I1L2IntermediateSystem(3), unknown(4) | System type of the neighbor. | Supports only I1IntermediateSystem(1), I2IntermediateSystem(2), and I1L2IntermediateSystem(3). |
| isisISAdjNeighSysID (1.3.6.1.2.1.138.1.6.1.1.6) | read-only | IsisSystemID | OCTET STRING (6) | System ID of the neighbor. | As per the MIB. |
| isisISAdjNbrExtendedCircID (1.3.6.1.2.1.138.1.6.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Circuit ID of the neighbor learned through three-way handshake. | As per the MIB. |
| isisISAdjUsage (1.3.6.1.2.1.138.1.6.1.1.8) | read-only | IsisLevel | level1(1), level2(2), level1and2(3) | IS level. | As per the MIB. |
| isisISAdjHoldTimer (1.3.6.1.2.1.138.1.6.1.1.9) | read-only | IsisUnsigned16TC | Unsigned32(1..65535) | Neighbor hold timer. | As per the MIB. |
| isisISAdjNeighPriority (1.3.6.1.2.1.138.1.6.1.1.10) | read-only | IsisISPriority | Unsigned32(0..127) | Neighbor priority. | As per the MIB. |
| isisISAdjLastUpTime (1.3.6.1.2.1.138.1.6.1.1.11) | read-only | TimeStamp | TimeTicks | Most recent neighbor up time. | As per the MIB. |

isisISAdjAreaAddrTable

About this table

This table contains neighbor area information about the specified interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisCirclIndex, isisISAdjIndex, and isisISAdjAreaAddrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------|---------------------------|------------------------------|-----------------|
| isisISAdjAreaAddrIndex (1.3.6.1.2.1.138.1.6.2.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Neighbor area address index. | As per the MIB. |
| isisISAdjAreaAddress (1.3.6.1.2.1.138.1.6.2.1.2) | read-only | IsisOSINSAAddresses | OCTET STRING (0..20) | Neighbor area address. | As per the MIB. |

isisISAdjIPAddrTable

About this table

This table contains IP address information in the hello packets from the specified neighbor of an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisCirclIndex, isisISAdjIndex, and isisISAdjIPAddrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---------------------------|---|---|
| isisISAdjIPAddrIndex (1.3.6.1.2.1.138.1.6.3.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Reachable IP address index of the neighbor. | As per the MIB. |
| isisISAdjIPAddrType (1.3.6.1.2.1.138.1.6.3.1.2) | read-only | InetAddressType | ipv4(1), ipv6(2) | Reachable IP address type of the neighbor. | Supports only ipv4(1) and ipv6(2). The local IS supports ipv6(2) only when it supports IPv6 functions. |
| isisISAdjIPAddrAddress (1.3.6.1.2.1.138.1.6.3.1.3) | read-only | InetAddress | OCTET STRING (0..255) | Reachable IP address of the neighbor. | As per the MIB. |

isisISAdjProtSuppTable

About this table

This table contains protocol information supported by the specified neighbor of an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisCirclIndex, isisISAdjIndex, and isisISAdjProtSuppProtocol.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------|---|--|-----------------|
| isisISAdjProtSuppProtocol (1.3.6.1.2.1.138.1.6.4.1.1) | read-only | IsisSupportedProtocol | INTEGER{ iso8473(129), ipV6(142), ip(204) } | Protocol type supported by the neighbor. | As per the MIB. |

isisRATable

About this table

This table contains reachable NSAP address or address prefix information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are isisCirclIndex and isisRAIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|---------------------------|---------------------------------------|----------------------------------|
| isisRAIndex (1.3.6.1.2.1.138.1.7.1.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Reachable address index. | As per the MIB. |
| isisRAExistState (1.3.6.1.2.1.138.1.7.1.1.2) | read-create | RowStatus | active(1) | Reachable address state. | The value is fixed at active(1). |
| isisRAAdminState (1.3.6.1.2.1.138.1.7.1.1.3) | read-create | IsisAdminState | INTEGER { | Administrative state of the reachable | Default: on(1). |

| | | | | | |
|---|-------------|---------------------------|--|--|-------------------|
| | | | on(1), off(2) } | address. | |
| isisRAAddrPrefix (1.3.6.1.2.1.138.1.7.1.1.4) | read-create | IsisOSIN SAddress s | OCTET STRING (0..20) | Address prefix. | As per the MIB. |
| isisRAMapType (1.3.6.1.2.1.138.1.7.1.1.5) | read-create | INTEGE R | none (1), explicit (2), extractID I (3), extractD SP (4) | Address mapping type. | Default: none(1). |
| isisRAMetric (1.3.6.1.2.1.138.1.7.1.1.6) | read-create | IsisDefau ltMetric | Unsigne d32(0..6 3) | Metric value of the reachable address. | As per the MIB. |
| isisRAMetricType (1.3.6.1.2.1.138.1.7.1.1.7) | read-create | IsisMetri cType | INTEGE R{ internal(1) , external(2) } | Metric type of the reachable address. | As per the MIB. |
| isisRASNPAAAddress (1.3.6.1.2.1.138.1.7.1.1.8) | read-create | IsisOSIN SAddress s | OCTET STRING (0..20) | Reachable SNPA address. | As per the MIB. |
| isisRASNPAMask (1.3.6.1.2.1.138.1.7.1.1.9) | read-create | IsisOSIN SAddress s | OCTET STRING (0..20) | Subnet mask of the reachable SNPA address. | As per the MIB. |
| isisRASNPAPrefix (1.3.6.1.2.1.138.1.7.1.1.10) | read-create | IsisOSIN SAddress s | OCTET STRING (0..20) | Prefix of the reachable SNPA address. | As per the MIB. |
| isisRAType (1.3.6.1.2.1.138.1.7.1.1.11) | read-create | INTEGE R | manual (1), automati c (2) | Reachable address type. | As per the MIB. |

isisIPRATable

About this table

This table contains reachable IP address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisSysLevelIndex, isisIPRADestType, isisIPRADest, isisIPRADestPrefixLen, and isisIPRANextHopIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|---|--|--|
| isisIPRADestType (1.3.6.1.2.1.138.1.8.1.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Reachable IP address type (manual/automatic). | As per the MIB. |
| isisIPRADest (1.3.6.1.2.1.138.1.8.1.1.2) | not-accessible | InetAddress | OCTET STRING(0..255) | Reachable IP address. | As per the MIB. |
| isisIPRADestPrefixLen (1.3.6.1.2.1.138.1.8.1.1.3) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Prefix length of the reachable IP address. | As per the MIB. |
| isisIPRANextHopIndex (1.3.6.1.2.1.138.1.8.1.1.4) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Next hop index of the reachable IP address. | As per the MIB. |
| isisIPRANextHopType (1.3.6.1.2.1.138.1.8.1.1.5) | read-create | InetAddressType | ipv4(1), ipv6(2) | Reachable next hop IP address type. | Supports only the read operation. Supports only ipv4(1) and ipv6(2). |
| isisIPRANextHop (1.3.6.1.2.1.138.1.8.1.1.6) | read-create | InetAddress | OCTET STRING(0..255) | Reachable next hop IP address. | Supports only the read operation. |
| isisIPRAType (1.3.6.1.2.1.138.1.8.1.1.7) | read-create | INTEGER | manual (1), automatic (2) | Reachable IP address type. | Supports only the read operation. The value is fixed at automatic(2). |
| isisIPRAExistState (1.3.6.1.2.1.138.1.8.1.1.8) | read-create | RowStatus | active(1) | Reachable IP address state. | Supports only the read operation. The value is fixed at active(1). |
| isisIPRAAdminState (1.3.6.1.2.1.138.1.8.1.1.9) | read-create | IsisAdminState | INTEGER { on(1), off(2) } | Administrative state of the reachable IP address. | Supports only the read operation. The value is fixed at on(1). |
| isisIPRAMetric (1.3.6.1.2.1.138.1.8.1.1.10) | read-create | IsisDefaultMetric | Unsigned32(0..63) | Internal metric value of the reachable IP address. | Supports only the read operation. Default: 0. |
| isisIPRAMetricType (1.3.6.1.2.1.138.1.8.1.1.11) | read-create | IsisMetricType | INTEGER{ internal(1), external(2) } | Metric type of the reachable IP address. | Supports only the read operation. |
| isisIPRAFullMetric (1.3.6.1.2.1.138.1.8.1.1.12) | read-create | IsisFullMetric | Unsigned32 | Total metric value of the reachable IP address. | Supports only the read operation. Default: 0. |
| isisIPRASNPAAAddress (1.3.6.1.2.1.138.1.8.1.1.13) | read-create | IsisOSINSAAddresses | OCTET STRING (0..20) | Reachable SNPA address. | Supports only the read operation. The value is always a zero-length string of eight |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|---|---|
| | | | | | bytes. |
| isisIPRASourceType (1.3.6.1.2.1.138.1.8.1.1.14) | read-only | INTEGER | static (1), direct (2), ospfv2 (3), ospfv3 (4), isis(5), rip(6), igrp(7), eigrp(8), bgp(9), other(10) | Route source (protocol that discovered the route). | Supports only static(1), direct(2), ospfv2(3), ospfv3(4), isis(5), rip(6), and bgp(9). |

isisLSPSummaryTable

About this table

This table contains LSP summary information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisLSPLevel and isisLSPID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------------|--|--|-----------------|
| isisLSPLevel (1.3.6.1.2.1.138.1.9.1.1.1) | not-accessible | IsisISLevel | INTEGER{ area(1), domain(2) } | LSP level. | As per the MIB. |
| isisLSPID (1.3.6.1.2.1.138.1.9.1.1.2) | not-accessible | IsisLinkStat ePDUID | OCTET STRING (8) | LSP ID. | As per the MIB. |
| isisLSPSeq (1.3.6.1.2.1.138.1.9.1.1.3) | read-only | Unsigned32 | Standard MIB values. | LSP sequence number. | As per the MIB. |
| isisLSPZeroLife (1.3.6.1.2.1.138.1.9.1.1.4) | read-only | TruthValue | true(1), false(2) | Whether the LSP is to be cleared (whether the remaining lifetime is 0). | As per the MIB. |
| isisLSPChecksum (1.3.6.1.2.1.138.1.9.1.1.5) | read-only | IsisUnsigned16TC | Unsigned32 (1..65535) | LSP checksum. | As per the MIB. |
| isisLSPLifetimeRemain (1.3.6.1.2.1.138.1.9.1.1.6) | read-only | IsisUnsigned16TC | Unsigned32 (1..65535) | Remaining lifetime of the LSP. | As per the MIB. |
| isisLSPPDULength (1.3.6.1.2.1.138.1.9.1.1.7) | read-only | IsisUnsigned16TC | Unsigned32 (1..65535) | LSP packet length. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|------------------------|---------------------|-----------------|
| isisLSPAttributes (1.3.6.1.2.1.138.1.9.1.1.8) | read-only | IsisUnsigned8TC | Unsigned32 (0..255) | ATT bit of the LSP. | As per the MIB. |

isisLSPTLVTable

About this table

This table contains LSP TLV information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are isisLSPLevel, isisLSPID, and isisLSPTLVIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------|-------------------------------|-----------------------|-----------------|
| isisLSPTLVIndex (1.3.6.1.2.1.138.1.9.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | TLV index in the LSP. | As per the MIB. |
| isisLSPTLVSeq (1.3.6.1.2.1.138.1.9.2.1.2) | read-only | Unsigned32 | Standard MIB values. | LSP sequence number. | As per the MIB. |
| isisLSPTLVChecksum (1.3.6.1.2.1.138.1.9.2.1.3) | read-only | IsisUnsigned16TC | Unsigned32 (1..65535) | LSP TLV checksum. | As per the MIB. |
| isisLSPTLVType (1.3.6.1.2.1.138.1.9.2.1.4) | read-only | IsisUnsigned8TC | Unsigned32 (0..255) | LSP TLV type. | As per the MIB. |
| isisLSPTLVLen (1.3.6.1.2.1.138.1.9.2.1.5) | read-only | IsisUnsigned8TC | Unsigned32 (0..255) | LSP TLV length. | As per the MIB. |
| isisLSPTLVValue (1.3.6.1.2.1.138.1.9.2.1.6) | read-only | OCTET STRING | OCTET STRING (0..255) | LSP TLV value. | As per the MIB. |

isisNotificationEntry

About this table

This table contains SNMP notifications information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are isisLSPLLevel, isisLSPID, and isisLSPTLVIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|--------------------|---|---|-----------------|
| isisNotificationSysLevelIndex (1.3.6.1.2.1.138.1.10.1.1) | accessible-for-notify | IsisLevel | level1(1), level2(2), level1and2 (3) | IS level. | As per the MIB. |
| isisNotificationCircIfIndex (1.3.6.1.2.1.138.1.10.1.2) | accessible-for-notify | Unsigned32 | Unsigned32(1..2147483647) | Interface index. | As per the MIB. |
| isisPduLspId (1.3.6.1.2.1.138.1.10.1.3) | accessible-for-notify | IsisLinkStatePDUID | OCTET STRING (8) | String that uniquely identifies a link state PDU. | As per the MIB. |
| isisPduFragment (1.3.6.1.2.1.138.1.10.1.4) | accessible-for-notify | IsisPDU Header | OCTET STRING(0..64) | First 64 bytes in the PDU that triggers the notification. | As per the MIB. |
| isisPduFieldLen (1.3.6.1.2.1.138.1.10.1.5) | accessible-for-notify | IsisUnsigned8TC | Unsigned32(0..255) | System ID length in the received PDU. | As per the MIB. |
| isisPduMaxAreaAddress (1.3.6.1.2.1.138.1.10.1.6) | accessible-for-notify | IsisUnsigned8TC | Unsigned32(0..255) | Maximum address in the received PDU. | As per the MIB. |
| isisPduProtocolVersion (1.3.6.1.2.1.138.1.10.1.7) | accessible-for-notify | IsisUnsigned8TC | Unsigned32(0..255) | Protocol version in the received PDU. | As per the MIB. |
| isisPduLspSize (1.3.6.1.2.1.138.1.10.1.8) | accessible-for-notify | Unsigned32 | Unsigned32(0..2147483647) | Size of the LSP that is too large to be forwarded. | As per the MIB. |
| isisPduOriginatingBufferSize (1.3.6.1.2.1.138.1.10.1.9) | accessible-for-notify | IsisUnsigned16TC | Unsigned32(0..16000) | Peer isisSysOrigLSPBufferSize value in the TLV. | As per the MIB. |
| isisPduBufferSize (1.3.6.1.2.1.138.1.10.1.10) | accessible-for-notify | IsisUnsigned16TC | Unsigned32(0..16000) | Maximum received LSP size. | As per the MIB. |
| isisPduProtocolsSupported (1.3.6.1.2.1.138.1.10.1.11) | accessible-for-notify | OCTET STRING | OCTET STRING (0..255) | Protocol list supported by the neighbor. | As per the MIB. |
| isisAdjState (1.3.6.1.2.1.138.1.10.1.12) | accessible-for-notify | INTEGER | down (1), initializing (2), up (3), failed(4) | Adjacency state. | As per the MIB. |
| isisErrorOffset (1.3.6.1.2.1.138.1.10.1.13) | accessible-for-notify | Unsigned32 | Standard MIB values. | Offset of the error TLV. | As per the MIB. |
| isisErrorTLVType (1.3.6.1.2.1.138.1.10.1.14) | accessible-for-notify | Unsigned32 | Unsigned32(0..255) | Type of the error TLV. | As per the MIB. |
| isisNotificationAreaAddress (1.3.6.1.2.1.138.1.10.1.15) | accessible-for-notify | IsisOSINSAAddres | OCTET STRING | Area address of the notification. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
| | | s | (0..20) | | |

Notifications

isisDatabaseOverload

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.1 | LSDB overload state changes. | Informational | - | - | ON |

Description

A notification sent when the system enters or exits the overload status. The number of times for generating and clearing the notifications is recorded in isisSysStatLSPDbaseOloads.

Status control

ON

CLI: Use the `snmp-agent trap enable isis lsdboverload-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis lsdboverload-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|----------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.2.1.1.4 (isisSysLevelState) | Overload state of the IS level. | No | IsisLevelState | off (1) on (2) waiting (3) overloaded(4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

isisManualAddressDrops

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.2 | This notification is generated for invalid area addresses. | Error | Warning | - | ON |

Description

A notification sent when an assigned address is ignored during route calculation. The value of the `isisNotificationAreaAddress` variable represents the ignored area address.

The number of times for generating the notifications is recorded in `isisSysStatManAddrDropFromAreas`.

The agent must throttle the generation of consecutive `isisManualAddressDrops` notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis manual-address-drop` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis manual-address-drop` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|------------------|----------------------|
| 1.3.6.1.2.1.138.1.10.1.15 (<code>isisNotificationAreaAddress</code>) | Manually configured area addresses that have been dropped. | No | IsisOSINSAddress | OCTET STRING (0..20) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Reduce the number of invalid or unused area addresses.
2. If the issue persists, contact H3C Support.

isisCorruptedLSPDetected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.3 | LSP errors. | Informational | - | - | ON |

Description

A notification sent when an LSP stored in the memory is damaged. The number of times for generating the notifications is recorded in isisSysCorrLSPs.

The system forwards the LSP ID. Although the ID is defined by the system, an error might error on the ID.

Status control

ON

CLI: Use the `snmp-agent trap enable isis lsp-corrupt` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis lsp-corrupt` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

isisAttemptToExceedMaxSequence

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.4 | Attempts to exceed the maximum LSP sequence number | Informational | - | - | ON |

Description

When an LSP sequence number flip occurs, the system clears and then waits for regeneration of this notification. This notification provides a description on the event. The event does not frequently occur, and the system sends a notification every time the event occurs.

The first six bytes of the LSP ID contain the system ID, and the remaining two bytes contain valid information.

Status control

ON

CLI: Use the `snmp-agent trap enable isis max-seq-exceeded` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis max-seq-exceeded` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspld) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

isisIDLenMismatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.5 | System ID length mismatches. | Error | Warning | - | ON |

Description

A notification sent when we receive a PDU with a different value for the system ID length. This notification includes the index of the link that received the PDU and the header of the packet, which may help a network manager identify the source of the confusion.

The agent must throttle the generation of consecutive isisIDLenMismatch notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis id-length-mismatch` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis id-length-mismatch` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.5 (isisPduFieldLen) | System ID length in the received PDU. | No | IsisUnsigned8TC | Unsigned32 (0..255) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

If the issue persists, contact H3C Support.

isisMaxAreaAddressesMismatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.6 | Maximum area address mismatches. | Error | Warning | - | ON |

Description

A notification sent when we receive a PDU with a different value for the `isisMaxAreaAddressesMismatch`. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

The agent must throttle the generation of consecutive `isisMaxAreaAddressesMismatch` notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis maxarea-mismatch` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis maxarea-mismatch` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.6 (isisPduMaxAreaAddress) | Maximum address in the received PDU. | No | IsisUnsigned8TC | Unsigned32 (0..255) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

If the issue persists, contact H3C Support.

isisOwnLSPPurge

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.7 | Attempts to remove the local LSP. | Informational | - | - | ON |

Description

A notification sent when we receive a PDU with the local system ID and a lifetime value of 0. This notification includes the link index and router ID, which may help a network manager identify the source of the confusion.

Status control

ON

CLI: Use the `snmp-agent trap enable isis own-lsp-purge` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis own-lsp-purge` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCirclfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

isisSequenceNumberSkip

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.8 | LSP sequence number duplications. | Informational | - | - | ON |

Description

When we receive a PDU with the local system ID and different content, the system might redeploy the LSP by using a greater sequence number. A notification is sent when the sequence number increases by a value greater than 1. When two ISs has the same system ID, a large number of such notifications will be generated.

Status control

ON

CLI: Use the `snmp-agent trap enable isis skip-sequence-number` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis skip-sequence-number` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCirclfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

isisAuthenticationTypeFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.9 | Authentication type errors. | Error | Warning | - | ON |

Description

A notification sent when we receive a PDU with an error authentication type field. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

The agent must throttle the generation of consecutive isisAuthenticationTypeFailure notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis authentication-type` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis authentication-type` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------|-------|-----------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|---------------------------|
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Modify configuration on the two ends so that they have matching authentication type.
2. If the issue persists, contact H3C Support.

isisAuthenticationFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.1 0 | Authentication failures. | Error | Warning | - | ON |

Description

A notification sent when we receive a PDU with incorrect authentication information field. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

The agent must throttle the generation of consecutive isisAuthenticationFailure notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis authentication` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis authentication` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------|-------|------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|----------------------|
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Modify configuration on the two ends so that they have matching authentication information.
2. If the issue persists, contact H3C Support.

isisVersionSkew

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|----------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.1 1 | Hello packet version mismatches. | Error | Warning | - | ON |

Description

A notification sent when we receive a hello packet from an IS running a different protocol version. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

The agent must throttle the generation of consecutive isisVersionSkew notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis version-skew` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis version-skew` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------|-------|------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCirclIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|----------------------|
| 1.3.6.1.2.1.138.1.10.1.7 (isisPduProtocolVersion) | Protocol version in the received PDU. | No | IsisUnsigned8TC | Unsigned32 (0..255) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

If the issue persists, contact H3C Support.

isisAreaMismatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.1 2 | Area address mismatches. | Error | Warning | - | ON |

Description

A notification sent when we receive a hello packet from an IS containing no matching area addresses. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

The agent must throttle the generation of consecutive isisAreaMismatch notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis area-mismatch` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis area-mismatch` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------|-------|------------|---------------------------|
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|----------------------|
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Modify configuration on the two ends so that they have at least one matching area address.
2. If the issue persists, contact H3C Support.

isisRejectedAdjacency

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.13 | Adjacency creation failures. | Error | Warning | - | ON |

Description

A notification sent when we receive a hello packet from an IS but no adjacency has been established with it.

The agent must throttle the generation of consecutive isisRejectedAdjacency notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis rejected-adjacency` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis rejected-adjacency` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------|-------|------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|----------------------|
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that the two ends have matching area addresses.
2. Verify that the two ends have matching IS levels.
3. Verify that the two ends have matching authentication types.
4. Verify that the two ends have matching authentication information.
5. If the issue persists, contact H3C Support.

isisLSPTooLargeToPropagate

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.14 | Propagation failures caused by oversized LSPs. | Error | Warning | - | ON |

Description

A notification sent when an LSP larger than the dataLinkBlockSize value of the link is propagated.

The agent must throttle the generation of consecutive isisLSPTooLargeToPropagate notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis lsp-size-exceeded` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis lsp-size-exceeded` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------|-------|-----------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------------|---------------------------|
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIflIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.8 (isisPduLspSize) | Size of the LSP that is too large to be forwarded. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Increase the interface MTU.
2. Reduce the LSP size.

isisOrigLSPBuffSizeMismatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.1 5 | Buffer size mismatches of IS-IS packets. | Error | Warning | - | ON |

Description

A notification sent when we receive an LSP (Level-1 or Level-2) that is larger than the local `isisSysLevelOrigLSPBuffSize` value or has a Buffer Size value not matching the local `isisSysLevelOrigLSPBuffSize` value. If any value of the Buffer Size or LSP size exceeds the local setting, both values are rejected.

The agent must throttle the generation of consecutive `isisOrigLSPBuffSizeMismatch` notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis buffsize-mismatch` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis buffsize-mismatch` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCirclfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |
| 1.3.6.1.2.1.138.1.10.1.9 (isisPduOriginatingBufferSize) | Peer isisSysOrigLSPBuffSize value in the TLV. | No | IsisUnsigned16TC | Unsigned32 (0..16000) |
| 1.3.6.1.2.1.138.1.10.1.10 (isisPduBufferSize) | Maximum received LSP size. | No | IsisUnsigned16TC | Unsigned32 (0..16000) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Reduce the length of LSPs generated by the neighbor.
2. Increase the LSP receive buffer size on the local end.

isisProtocolsSupportedMismatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|--------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.16 | Supported-protocol mismatches. | Error | Warning | - | ON |

Description

A notification sent when a nonpseudonode LSP fragment 0 is received but no supported protocol is available. The reason for the notification might be that the system has not generated this field or no common elements are available. This notification includes the list of supported protocols. If the system does not support the TLV or the TLV is empty, the supported protocol list will be empty.

The agent must throttle the generation of consecutive isisProtocolsSupportedMismatch notifications so that there is at least a 5-second gap between notifications of this type. When notifications are throttled, they are dropped, not queued for sending at a future time.

Status control

ON

CLI: Use the `snmp-agent trap enable isis protocol-support` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis protocol-support` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.11 (isisPduProtocolsSupported) | Protocol list supported by the neighbor. | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify the protocol support.
2. If the issue persists, contact H3C Support.

isisAdjacencyChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|---------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.17 | IS-IS adjacency status changes. | Error | Warning | - | ON |

Description

A notification sent when an adjacency enters or exits up state. The first six bytes of the isisPduLspId variable represents the system ID of the neighbor. The isisAdjState variable represents the most recent adjacency state.

Status control

ON

CLI: Use the `snmp-agent trap enable isis adjacency-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis adjacency-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|--|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCirclflIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspld) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |
| 1.3.6.1.2.1.138.1.10.1.12 (isisAdjState) | Adjacency state. | No | INTEGER | down (1) initializing (2) up (3) failed (4) |
| 1.3.6.1.2.1.31.1.1.1.1 (ifName) | Interface name | No | DisplayString | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that the neighbor state is normal.
2. If the issue persists, contact H3C Support.

isisLSPErrorDetected

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|----------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.138.0.1 8 | LSP packet parse failures. | Error | Warning | - | ON |

Description

A notification sent when an LSP with parse failure is received. `isisCirclflIndex` records the index of the link that received the PDU. `isisPduFragment` records the starting bytes of the PDU. `isisErrorOffset` indicates the problem.

If the problem was caused by malformed TLV, `isisErrorOffset` indicates the starting bytes of the TLV, and `isisErrorTLVType` records the type of the error TLV.

If the problem was caused by LSP header error, `isisErrorOffset` indicates the suspicious bytes.

The number of the LSPs of this type is recorded in `isisSysStatLSPErrors`.

Status control

ON

CLI: Use the `snmp-agent trap enable isis lsp-parse-error` command.

OFF

CLI: Use the `undo snmp-agent trap enable isis lsp-parse-error` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------------|---|
| 1.3.6.1.2.1.138.1.10.1.1 (isisNotificationSysLevelIndex) | IS level index. | No | IsisLevel | level1(1) level2(2) level1and2(3) |
| 1.3.6.1.2.1.138.1.10.1.3 (isisPduLspId) | String that uniquely identifies a link state PDU. | No | IsisLinkStatePDUID | OCTET STRING (8) |
| 1.3.6.1.2.1.138.1.10.1.2 (isisNotificationCircIfIndex) | Interface index. | No | Unsigned32 | Unsigned32(1..2147483647) |
| 1.3.6.1.2.1.138.1.10.1.4 (isisPduFragment) | First 64 bytes in the PDU that triggers the notification. | No | IsisPDUHeader | OCTET STRING (0..64) |
| 1.3.6.1.2.1.138.1.10.1.13 (isisErrorOffset) | Offset of the error TLV. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.138.1.10.1.14 (isisErrorTLVType) | Type of the error TLV. | No | Unsigned32 | Unsigned32(0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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OSPF-MIB

About this MIB

This document contains MIB and Trap features compliant with RFC 4750.

MIB file name

rfc4750-ospf.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ospf(14)

Scalar objects

ospfRouterId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|------------|----------|------------------|---|-----------------------------------|
| ospfRouterId (1.3.6.1.2.1.14.1.1) | read-write | RouterID | OCTET STRING (4) | Router ID that uniquely identifies a router in an AS. | Supports only the read operation. |

ospfAdminStat

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|------------|--------|------------------------------------|---|-----------------------------------|
| ospfAdminStat (1.3.6.1.2.1.14.1.2) | read-write | Status | INTEGER{ enabled(1), disabled(2) } | OSPF administrative state of the router. Enabled indicates at least one OSPF interface exists. Disabled indicates no OSPF interface exists. | Supports only the read operation. |

ospfVersionNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--------------|---------------------|-----------------|
| ospfVersionNumber (1.3.6.1.2.1.14.1.3) | read-only | INTEGER | version2 (2) | Version number (2). | As per the MIB. |

ospfAreaBdrRtrStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|-------------------------------|-----------------|
| ospfAreaBdrRtrStatus (1.3.6.1.2.1.14.1.4) | read-only | TruthValue | true(1), false(2) | Whether the router is an ABR. | As per the MIB. |

ospfASBdrRtrStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--------------------------------|-----------------------------------|
| ospfASBdrRtrStatus (1.3.6.1.2.1.14.1.5) | read-write | TruthValue | true(1), false(2) | Whether the router is an ASBR. | Supports only the read operation. |

ospfExternLsaCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|------------------------|------------------------|-----------------|
| ospfExternLsaCount (1.3.6.1.2.1.14.1.6) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of Type-5 LSAs. | As per the MIB. |

ospfExternLsaCksumSum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|----------------------------------|-----------------|
| ospfExternLsaCksumSum (1.3.6.1.2.1.14.1.7) | read-only | Integer32 | Standard MIB values. | Sum of checksums in Type-5 LSAs. | As per the MIB. |

ospfTOSSupport

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---------------------------|-----------------------------------|
| ospfTOSSupport (1.3.6.1.2.1.14.1.8) | read-write | TruthValue | true(1), false(2) | Whether ToS is supported. | Supports only the read operation. |

ospfOriginateNewLsas

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|------------------------------|-----------------|
| ospfOriginateNewLsas (1.3.6.1.2.1.14.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Number of new LSAs that have | As per the MIB. |

| | | | | | |
|--|--|--|----------|--|--|
| | | | 4967295) | been originated. This number is incremented each time the router originates a new LSA. | |
|--|--|--|----------|--|--|

ospfRxNewLsas

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--|-----------------|
| ospfRxNewLsas (1.3.6.1.2.1.14.1.10) | read-only | Counter32 | INTEGER(0..4294967295) | Number of newly received LSAs, excluding self-originated LSAs. | As per the MIB. |

ospfExtLsdbLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-----------------------------|---|---|
| ospfExtLsdbLimit (1.3.6.1.2.1.14.1.11) | read-write | Integer32 | Integer32 (-1..'7FFFFFFF'h) | Maximum number of non-default ASEs in the LSDB. A value of -1 indicates no limit. | The value takes -1, or is in the range of 1 to 1000000. |

ospfMulticastExtensions

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|--|-----------------------------------|
| ospfMulticastExtensions (1.3.6.1.2.1.14.1.12) | read-write | Integer32 | Standard MIB values. | Whether the router is multicast capable. Bit 0 indicates intra-area multicast; bit 1 indicates inter-area multicast; bit 2 indicates inter-AS multicast. The value can be 0, 1, 3, 5, and 7. The default value is 0. | Supports only the read operation. |

ospfExitOverflowInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|----------------------------|--|-----------------|
| ospfExitOverflowInterval (1.3.6.1.2.1.14.1.13) | read-write | Positive integer | Integer32 (0..'7FFFFFFF'h) | Time that the router takes to leave the OverflowState. 0 | As per the MIB. |

| | | | | | |
|--|--|--|--|--|--|
| | | | | indicates the router does not leave the OverflowState until it is restarted. | |
|--|--|--|--|--|--|

ospfDemandExtensions

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|-----------------------------|-----------------------------------|
| ospfDemandExtensions (1.3.6.1.2.1.14.1.14) | read-write | TruthValue | true(1), false(2) | Support for demand routing. | Supports only the read operation. |

ospfRFC1583Compatibility

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| ospfRFC1583Compatibility (1.3.6.1.2.1.14.1.15) | read-write | TruthValue | true(1), false(2) | Compatibility with RFC 1583. When compatibility is enabled, only cost will be used when choosing among multiple ASE LSAs advertising the same destination. When compatibility is disabled, preference will be used first. | As per the MIB. |

ospfOpaqueLsaSupport

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--------------------------|-----------------|
| ospfOpaqueLsaSupport (1.3.6.1.2.1.14.1.16) | read-only | TruthValue | true(1), false(2) | Support for Opaque LSAs. | As per the MIB. |

ospfReferenceBandwidth

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|--------------|---------------------------------|--|
| ospfReferenceBandwidth (1.3.6.1.2.1.14.1.17) | read-write | Unsigned 32 | Standard MIB | Reference bandwidth in Kb/s for | When the value is divided by 1000, the decimal |

| | | | | | |
|--|--|--|---------|---------------------------------|-------------------------|
| | | | values. | calculating the interface cost. | number will be ignored. |
|--|--|--|---------|---------------------------------|-------------------------|

ospfRestartSupport

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---|-----------------|---|
| ospfRestartSupport (1.3.6.1.2.1.14.1.18) | read-write | INTEGER | none (1), planned Only (2), plannedAndUnplanned (3) | Support for GR. | If the value changes from 1 to 2 or 3, IETF GR is supported. If the value changes between 2 and 3, the original GR type remains unchanged. |

ospfRestartInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---------------------|------------------------------------|--------------------------|
| ospfRestartInterval (1.3.6.1.2.1.14.1.19) | read-write | Integer32 | Integer32 (1..1800) | Graceful restart timeout interval. | Value range: 40 to 1800. |

ospfRestartStrictLsaChecking

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| ospfRestartStrictLsaChecking (1.3.6.1.2.1.14.1.20) | read-write | TruthValue | true(1), false(2) | Whether the strict LSA checking capability is enabled for GR. | As per the MIB. |

ospfRestartStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|-------------------------|-----------------|
| ospfRestartStatus (1.3.6.1.2.1.14.1.21) | read-only | INTEGER | notRestarting (1), plannedRestart (2), unplannedRestart (3) | Graceful restart state. | As per the MIB. |

ospfRestartAge

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|----------------------|---|-----------------|
| ospfRestartAge (1.3.6.1.2.1.14.1.22) | read-only | Unsigned 32 | Standard MIB values. | Remaining time for the current graceful restart | As per the MIB. |

ospfRestartExitReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|-----------------|-----------------|
| ospfRestartExitReason (1.3.6.1.2.1.14.1.23) | read-only | INTEGER | none (1), inProgress (2), completed (3), timedOut (4), topologyChanged (5) | GR exit reason. | As per the MIB. |

ospfAsLsaCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|--------------------------|-----------------|
| ospfAsLsaCount (1.3.6.1.2.1.14.1.24) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of AS-scope LSAs. | As per the MIB. |

ospfAsLsaCksumSum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|--------------------------------|-----------------|
| ospfAsLsaCksumSum (1.3.6.1.2.1.14.1.25) | read-only | Unsigned 32 | Standard MIB values. | Sum of AS-scope LSA checksums. | As per the MIB. |

ospfStubRouterSupport

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------|--------------------------|-----------------|
| ospfStubRouterSupport (1.3.6.1.2.1.14.1.26) | read-only | TruthValue | true(1), false(2) | Support for stub router. | As per the MIB. |

ospfStubRouterAdvertisement

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--------------------------------------|--|-----------------|
| ospfStubRouterAdvertisement(1.3.6.1.2.1.14.1.27) | read-write | INTEGER | doNotAdvertise (1), advertise (2) | Whether to advertise stub router LSAs. | As per the MIB. |

ospfDiscontinuityTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------|----------------------------------|-----------------|
| ospfDiscontinuityTime (1.3.6.1.2.1.14.1.28) | read-only | TimeStamp | TimeTicks | Most recent system startup time. | As per the MIB. |

Tabular objects

ospfAreaTable

About this table

This table contains parameter and statistics information about each area on the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ospfAreaId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-------------|------------------------|---|---|-----------------------------------|
| ospfAreaId (1.3.6.1.2.1.14.2.1.1) | read-only | AreaID | OCTET STRING (4) | Area ID, a 32-bit integer that uniquely identifies an area. | As per the MIB. |
| ospfAuthType (1.3.6.1.2.1.14.2.1.2) | read-create | OspfAuthenticationType | none (0), simplePassword (1), md5 (2) | Authentication type. | Supports only the read operation. |
| ospfImportAsExtern | read-create | INTEGER | importExtern | Area type, stub, | Supports only the read |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------------|---|---|---|
| (1.3.6.1.2.1.14.2.1.3) | | R | nal(1), importNoEx ternal (2), importNssa (3) | NSSA, or common area. | operation. |
| ospfSpfRuns (1.3.6.1.2.1.14.2.1.4) | read-only | Counter32 | INTEGER(0 ..42949672 95) | Time of route calculations in the area. | As per the MIB. |
| ospfAreaBdrRtrCount (1.3.6.1.2.1.14.2.1.5) | read-only | Gauge32 | INTEGER(0 ..42949672 95) | Number of reachable ABRs in the area. | As per the MIB. |
| ospfAsBdrRtrCount (1.3.6.1.2.1.14.2.1.6) | read-only | Gauge32 | INTEGER(0 ..42949672 95) | Number of reachable ASBRs in the area. | As per the MIB. |
| ospfAreaLsaCount (1.3.6.1.2.1.14.2.1.7) | read-only | Gauge32 | INTEGER(0 ..42949672 95) | Number of LSAs in the LSDB of the area. | As per the MIB. |
| ospfAreaLsaCksumSum (1.3.6.1.2.1.14.2.1.8) | read-only | Integer32 | Standard MIB values. | Sum of the checksums of the LSAs in the area. | As per the MIB. |
| ospfAreaSummary (1.3.6.1.2.1.14.2.1.9) | read-create | INTEGER | noAreaSum mary (1), sendAreaS ummary (2) | Whether to send summary LSAs to stub and NSSA areas. | Supports only the read and write operations. |
| ospfAreaStatus (1.3.6.1.2.1.14.2.1.10) | read-create | RowStat us | active(1), notInServic e(2), notReady(3) createAndG o(4), createAnd Wait(5), destroy(6) | Area state. | Supports only the read operation. |
| ospfAreaNssaTranslatorRole (1.3.6.1.2.1.14.2.1.11) | read-create | INTEGER | always (1), candidate (2) | Ability of the NSSA ABR to translate Type-7 LSAs into Type-5 LSAs. | Supports only the read and write operations. |
| ospfAreaNssaTranslatorState (1.3.6.1.2.1.14.2.1.12) | read-only | INTEGER | enabled (1), elected (2), disabled (3) | Method for the NSSA ABR to become capable of translating Type-7 LSAs into Type-5 LSAs. | As per the MIB. |
| ospfAreaNssaTranslatorStabilityIn terval(1.3.6.1.2.1.14.2.1.13) | read-create | Positivel nteger | Integer32(0 ..'7FFFFFFF' h) | Time for the elected translator to continue to | Supports only the read and write operations. Value range: 0 to 900. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|-------------------------------------|-----------------|
| | | | | perform translation. | |
| ospfAreaNssaTranslatorEvents (1.3.6.1.2.1.14.2.1.14) | read-only | Counter32 | INTEGER(0..4294967295) | Number of translator state changes. | As per the MIB. |

ospfStubAreaTable

About this table

This table contains cost information that is advertised to a stub area.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfStubAreaId and ospfStubTOS.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|---|---|
| ospfStubAreaId (1.3.6.1.2.1.14.3.1.1) | read-only | AreaID | OCTET STRING (4) | Area ID, a 32-bit integer that uniquely identifies a stub area. | As per the MIB. |
| ospfStubTOS (1.3.6.1.2.1.14.3.1.2) | read-only | TOSType | Integer32 (0..30) | Type of Service associated with the cost. | As per the MIB. |
| ospfStubMetric (1.3.6.1.2.1.14.3.1.3) | read-create | BigMetric | Integer32(0.. 'FFFFFF'h) | Default cost of generated default LSAs, including Type-3 and Type-7 LSAs. | Supports only the read and write operations. Value range: 0 to 16777214. |
| ospfStubStatus (1.3.6.1.2.1.14.3.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Area state. | Supports only the read operation. |
| ospfStubMetricType (1.3.6.1.2.1.14.3.1.5) | read-create | INTEGER | ospfMetric(1), comparableCost(2), nonCompar | Cost type. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
| | | | able (3) | | |

ospfLsdbTable

About this table

This table contains OSPF LSDB information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfLsdbAreald, ospfLsdbType, ospfLsdbLsid, and ospfLsdbRouterId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|--|--|-----------------|
| ospfLsdbAreald (1.3.6.1.2.1.14.4.1.1) | read-only | AreaID | OCTET STRING (4) | ID of the area from which the LSA was received. | As per the MIB. |
| ospfLsdbType (1.3.6.1.2.1.14.4.1.2) | read-only | INTEGER | routerLink (1), networkLink (2), summaryLink (3), asSummaryLink (4), asExternalLink (5), multicastLink (6), nssaExternalLink (7), areaOpaqueLink (10) | LSA type. Type-5 LSAs are not displayed. | As per the MIB. |
| ospfLsdbLsid (1.3.6.1.2.1.14.4.1.3) | read-only | IpAddress | OCTET STRING (4) | LS ID | As per the MIB. |
| ospfLsdbRouterId (1.3.6.1.2.1.14.4.1.4) | read-only | RouterID | OCTET STRING (4) | Router ID of the LSA originator. | As per the MIB. |
| ospfLsdbSequence (1.3.6.1.2.1.14.4.1.5) | read-only | Integer32 | Standard MIB values. | LSA sequence number. | As per the MIB. |
| ospfLsdbAge (1.3.6.1.2.1.14.4.1.6) | read-only | Integer32 | Standard MIB values. | LSA age. | As per the MIB. |
| ospfLsdbChecksum (1.3.6.1.2.1.14.4.1.7) | read-only | Integer32 | Standard MIB values. | Checksum of the complete contents of the LSA except the age field. | As per the MIB. |
| ospfLsdbAdvertiseme nt (1.3.6.1.2.1.14.4.1.8) | read-only | OCTET STRING | OCTET STRING (1..65535) | Complete LSA information, including the LSA header. | As per the MIB. |

ospfHostTable

About this table

This table contains host route information on the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfHostIpAddress and ospfHostTOS.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------|--|---|---|
| ospfHostIpAddress (1.3.6.1.2.1.14.6.1.1) | read-only | IpAddress s | OCTET STRING (4) | IP address of the host route. | As per the MIB. |
| ospfHostTOS (1.3.6.1.2.1.14.6.1.2) | read-only | TOSType | Integer32 (0..30) | Type of Service. | As per the MIB. |
| ospfHostMetric (1.3.6.1.2.1.14.6.1.3) | read-create | Metric | Integer32(0..'FFFF'h) | Host route cost. | Supports only the read and write operations. Value range: 1 to 65535. |
| ospfHostStatus (1.3.6.1.2.1.14.6.1.4) | read-create | RowStat us | active(1), notInService(2), notReady(3), createAndGo(4), createAndWai t(5), destroy(6) | Host route state. | Supports only the read operation. |
| ospfHostAreaID (1.3.6.1.2.1.14.6.1.5) | read-only | AreaID | OCTET STRING (4) | ID of the area to which the host route belongs. | As per the MIB. |
| ospfHostCfgAreaID (1.3.6.1.2.1.14.6.1.6) | read-create | AreaID | OCTET STRING (4) | Configured area ID of the host route. | Supports only the read operation. |

ospfIfTable

About this table

This table contains OSPF interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospflfIpAddress and ospfAddressLessIf.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------------------|---|---|--|
| ospflfIpAddress (1.3.6.1.2.1.14.7.1.1) | read-only | IpAddresses | OCTET STRING (4) | Interface IP address. | As per the MIB. |
| ospfAddressLessIf (1.3.6.1.2.1.14.7.1.2) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Used to distinguish interface instances with addresses configured and those without addresses configured. | As per the MIB. |
| ospflfAreaId (1.3.6.1.2.1.14.7.1.3) | read-create | AreaID | OCTET STRING (4) | Area ID. | Supports only the read operation. |
| ospflfType (1.3.6.1.2.1.14.7.1.4) | read-create | INTEGER | broadcast(1), nbma (2), pointToPoint (3), pointToPoint (5) | OSPF interface type. | Supports only the read and write operations. Loopback interfaces do not support the write operation. |
| ospflfAdminStat (1.3.6.1.2.1.14.7.1.5) | read-create | Status | INTEGER{ enabled(1), disabled(2) } | Administrative state of the OSPF interface. It is enabled when the interface is active and disabled when the interface is in other state. | Supports only the read operation. |
| ospflfRtrPriority (1.3.6.1.2.1.14.7.1.6) | read-create | DesignatedRouterPriority | Integer32(0..FF'h) | Interface priority. | Supports only the read and write operations. Loopback interfaces do not support the write operation. |
| ospflfTransitDelay (1.3.6.1.2.1.14.7.1.7) | read-create | UpToMaxAge | Integer32(0..3600) | Delay time interval. | Supports only the read and write operations. Value range: 1 to 3600. Loopback interfaces do not support the write operation. |
| ospflfRetransInterval (1.3.6.1.2.1.14.7.1.8) | read-create | UpToMaxAge | Integer32(0..3600) | Retransmission interval. | Supports only the read and write operations. Value range: 1 to |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------|---|------------------------------------|--|
| | | | | | 3600. Loopback interfaces do not support the write operation. |
| ospflfHelloInterval (1.3.6.1.2.1.14.7.1.9) | read-create | HelloRange | Integer32(1..FFFF'h) | Hello interval. | Supports only the read and write operations. Loopback interfaces do not support the write operation. |
| ospflfRtrDeadInterval (1.3.6.1.2.1.14.7.1.10) | read-create | Positive integer | Integer32(0..7FFFFFFF'h) | Dead interval. | Supports only the read and write operations. Value range: 1 to 2147483647. Loopback interfaces do not support the write operation. |
| ospflfPollInterval (1.3.6.1.2.1.14.7.1.11) | read-create | Positive integer | Integer32(0..7FFFFFFF'h) | Poll interval. | Supports only the read and write operations. Value range: 1 to 2147483647. Loopback interfaces do not support the write operation. |
| ospflfState (1.3.6.1.2.1.14.7.1.12) | read-only | INTEGER | down (1), loopback(2), , waiting(3), pointToPoint (4), designated Router(5), backupDesignatedRouter (6), otherDesignatedRouter (7) | Interface state. | As per the MIB. |
| ospflfDesignatedRouter (1.3.6.1.2.1.14.7.1.13) | read-only | IpAddress | OCTET STRING (4) | DR address. | As per the MIB. |
| ospflfBackupDesignatedRouter (1.3.6.1.2.1.14.7.1.14) | read-only | IpAddress | OCTET STRING (4) | BDR address. | As per the MIB. |
| ospflfEvents (1.3.6.1.2.1.14.7.1.15) | read-only | Counter32 | INTEGER(0..4294967295) | Number of interface state changes. | As per the MIB. |
| ospflfAuthKey (1.3.6.1.2.1.14.7.1.16) | read-create | OCTET STRING | OCTET STRING (0..256) | Authentication key. | Supports only the read operation. |
| ospflfStatus (1.3.6.1.2.1.14.7.1.17) | read-create | RowStatus | active(1), notInService(2), | Row status. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------------|--|--|-----------------------------------|
| | | | notReady(3), createAndGo(4), createAndWait(5), destroy(6) | | |
| ospflfMulticastForwarding (1.3.6.1.2.1.14.7.1.18) | read-create | INTEGER | blocked(1), multicast(2), unicast (3) | Multicast forwarding way on the interface. | Supports only the read operation. |
| ospflfDemand (1.3.6.1.2.1.14.7.1.19) | read-create | TruthValue | true(1), false(2) | Whether the interface performs demand routing. | Supports only the read operation. |
| ospflfAuthType (1.3.6.1.2.1.14.7.1.20) | read-create | OspfAuthenticationType | none (0), simplePassword (1), md5 (2) | Authentication type. | Supports only the read operation. |
| ospflfLsaCount (1.3.6.1.2.1.14.7.1.21) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of Type-9 LSAs. | As per the MIB. |
| ospflfLsaChecksumSum (1.3.6.1.2.1.14.7.1.22) | read-only | Unsigned 32 | INTEGER(0..4294967295) | Sum of checksums in Type-9 LSAs. | As per the MIB. |
| ospflfDesignatedRouterId (1.3.6.1.2.1.14.7.1.23) | read-only | RouterID | OCTET STRING (4) | Router ID of the DR. | As per the MIB. |
| ospflfBackupDesignatedRouterId (1.3.6.1.2.1.14.7.1.24) | read-only | RouterID | OCTET STRING (4) | Router ID of the BDR. | As per the MIB. |

ospflfMetricTable

About this table

This table contains information about costs to be advertised for a specific interface at various service types.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospflfMetricIpAddress and ospflfMetricAddressLessIf.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|------------------|-----------------------------------|-----------------|
| ospflfMetricIpAddress (1.3.6.1.2.1.14.8.1.1) | read-only | IpAddresses | OCTET STRING (4) | IP address of the OSPF interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------------------|--|---|--|
| ospflfMetricAddressLesslf (1.3.6.1.2.1.14.8.1.2) | read-only | Interfacel ndexOrZ ero | Integer32 (0..21474 83647) | Used to distinguish interface instances with addresses configured and those without addresses configured. | As per the MIB. |
| ospflfMetricTOS (1.3.6.1.2.1.14.8.1.3) | read-only | TOSType | Integer32 (0..30) | ToS cost being used. | As per the MIB. |
| ospflfMetricValue (1.3.6.1.2.1.14.8.1.4) | read-create | Metric | Integer32 (0..'FFFF' h) | Interface cost. | Supports only the read and write operations. Value range for a loopback interface: 0 to 65535. Value range for other interfaces: 1 to 65535. |
| ospflfMetricStatus (1.3.6.1.2.1.14.8.1.5) | read-create | RowStat us | active(1), notInServ ice(2), notReady (3), createAn dGo(4), createAn dWait(5), destroy(6) | Row status. | Supports only the read operation. |

ospfVirtIfTable

About this table

This table contains OSPF virtual interface information of the router.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfVirtIfAreald and ospfVirtIfNeighbor.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|------------------------|---|-----------------|
| ospfVirtIfAreald (1.3.6.1.2.1.14.9.1.1) | read-only | AreaID | OCTET STRING (4) | ID of the area to which the virtual link belongs. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------------|---|---|--|
| ospfVirtIfNeighbor (1.3.6.1.2.1.14.9.1.2) | read-only | RouterID | OCTET STRING (4) | Router ID of the virtual neighbor. | As per the MIB. |
| ospfVirtIfTransitDelay (1.3.6.1.2.1.14.9.1.3) | read-create | UpToMaxAge | Integer32 (0..3600) | Delay interval. | Supports only the read and write operations. Value range: 1 to 3600. |
| ospfVirtIfRetransInterval (1.3.6.1.2.1.14.9.1.4) | read-create | UpToMaxAge | Integer32 (0..3600) | Retransmission interval. | Supports only the read and write operations. Value range: 1 to 3600. |
| ospfVirtIfHelloInterval (1.3.6.1.2.1.14.9.1.5) | read-create | HelloRange | Integer32 (1..'FFFF'h) | Hello interval. | Supports only the read and write operations. Value range: 1 to 8192. |
| ospfVirtIfRtrDeadInterval (1.3.6.1.2.1.14.9.1.6) | read-create | PositiveInteger | Integer32 (0..'7FFF'FFFF'h) | Dead interval. | Supports only the read and write operations. Value range: 1 to 32768. |
| ospfVirtIfState (1.3.6.1.2.1.14.9.1.7) | read-only | INTEGER | down (1), pointToPoint (4) | OSPF virtual interface state. | As per the MIB. |
| ospfVirtIfEvents (1.3.6.1.2.1.14.9.1.8) | read-only | Counter32 | INTEGER (0..4294967295) | Number of state changes on the interface. | As per the MIB. |
| ospfVirtIfAuthKey (1.3.6.1.2.1.14.9.1.9) | read-create | OCTET STRING | OCTET STRING (0..256) | Authentication key. | Supports only the read operation. |
| ospfVirtIfStatus (1.3.6.1.2.1.14.9.1.10) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| ospfVirtIfAuthType (1.3.6.1.2.1.14.9.1.11) | read-create | OspfAuthenticationType | none (0), simplePassword (1), md5 (2) | Authentication type. | Supports only the read operation. |
| ospfVirtIfLsaCount (1.3.6.1.2.1.14.9.1.12) | read-only | Gauge32 | INTEGER (0..4294967295) | Number of Type-9 LSAs. | As per the MIB. |
| ospfVirtIfLsaChecksumSum (1.3.6.1.2.1.14.9.1.13) | read-only | Unsigned32 | Standard MIB values. | Sum of checksums in Type-9 LSAs. | As per the MIB. |

ospfNbrTable

About this table

This table contains information about non-virtual neighbors of the local OSPF router.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfNbrIpAddr and ospfNbrAddressLessIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------------------|--|---|--|
| ospfNbrIpAddr (1.3.6.1.2.1.14.10.1.1) | read-only | IpAddress | OCTET STRING (4) | Neighbor IP address. | As per the MIB. |
| ospfNbrAddressLessIndex (1.3.6.1.2.1.14.10.1.2) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Set to 0 on an interface having an IP address, and set to the value of interface index in the Internet Standard MIB on an interface having no IP address. | As per the MIB. |
| ospfNbrRtrId (1.3.6.1.2.1.14.10.1.3) | read-only | RouterID | OCTET STRING (4) | Router ID of the neighbor. | As per the MIB. |
| ospfNbrOptions (1.3.6.1.2.1.14.10.1.4) | read-only | Integer32 | Standard MIB values. | Option field of the neighbor. | As per the MIB. |
| ospfNbrPriority (1.3.6.1.2.1.14.10.1.5) | read-create | DesignatedRouterPriority | Integer32(0..255) | Priority of the neighbor. | Supports only the read and write operations. NBMA neighbors support only the write operations. |
| ospfNbrState (1.3.6.1.2.1.14.10.1.6) | read-only | INTEGER | down (1), attempt (2), init (3), twoWay (4), exchangeStart (5), exchange (6), loading (7), full (8) | State of the relationship with the neighbor. | As per the MIB. |
| ospfNbrEvents (1.3.6.1.2.1.14.10.1.7) | read-only | Counter32 | INTEGER(0..4294967295) | Number of neighbor state changes. | As per the MIB. |
| ospfNbrLsRetransQLen (1.3.6.1.2.1.14.10.1.8) | read-only | Gauge32 | INTEGER(0..4294967295) | Retransmission queue length. | As per the MIB. |
| ospfNbmaNbrStatus (1.3.6.1.2.1.14.10.1.9) | read-create | RowStatus | active(1), notInService | Row status. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|--|--|-----------------|
| | | | (2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | | |
| ospfNbmaNbrPermanence (1.3.6.1.2.1.14.10.1.10) | read-only | INTEGER | dynamic(1), permanent(2) | Entry status. □The values dynamic and permanent refer to how the neighbor became known. | As per the MIB. |
| ospfNbrHelloSuppressed (1.3.6.1.2.1.14.10.1.11) | read-only | TruthValue | true(1), false(2) | Whether hello packets are being suppressed to the neighbor. | As per the MIB. |
| ospfNbrRestartHelperStatus (1.3.6.1.2.1.14.10.1.12) | read-only | INTEGER | notHelping(1), helping (2) | Whether the router is acting as a GR helper for the neighbor. | As per the MIB. |
| ospfNbrRestartHelperAge (1.3.6.1.2.1.14.10.1.13) | read-only | Unsigned32 | Standard MIB values. | Remaining time of the GR interval when the router is acting as a GR helper for the neighbor. | As per the MIB. |
| ospfNbrRestartHelperExitReason (1.3.6.1.2.1.14.10.1.14) | read-only | INTEGER | none (1),inProgress (2),completed (3),timedOut (4),topology Changed (5) | GR helper exit reason. | As per the MIB. |

ospfVirtNbrTable

About this table

This table contains information about all virtual neighbors.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfVirtNbrArea and ospfVirtNbrRtrId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------|---------------------|--------------------------------|-----------------|
| ospfVirtNbrArea (1.3.6.1.2.1.14.11.1.1) | read-only | AreaID | OCTET STRING (4) | Transit area identifier. | As per the MIB. |
| ospfVirtNbrRtrId (1.3.6.1.2.1.14.11.1.2) | read-only | RouterID | OCTET STRING (4) | A 32-bit integer that uniquely | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|--|--|-----------------|
| | | | | identifies the neighboring router in the AS. | |
| ospfVirtNbrIpAddr (1.3.6.1.2.1.14.11.1.3) | read-only | IpAddress | OCTET STRING (4) | IP address of the virtual neighbor. | As per the MIB. |
| ospfVirtNbrOptions (1.3.6.1.2.1.14.11.1.4) | read-only | Integer32 | Standard MIB values. | Option field of the neighbor. | As per the MIB. |
| ospfVirtNbrState (1.3.6.1.2.1.14.11.1.5) | read-only | INTEGER | down (1), attempt (2), init (3), twoWay (4), exchangeStart (5), exchange (6), loading (7), full (8) | State of the virtual neighbor relationship. | As per the MIB. |
| ospfVirtNbrEvents (1.3.6.1.2.1.14.11.1.6) | read-only | Counter32 | INTEGER(0..4294 967295) | Number of virtual link state changes. | As per the MIB. |
| ospfVirtNbrLsRetransQLen (1.3.6.1.2.1.14.11.1.7) | read-only | Gauge32 | INTEGER(0..4294 967295) | Retransmission queue length. | As per the MIB. |
| ospfVirtNbrHelloSuppressed (1.3.6.1.2.1.14.11.1.8) | read-only | TruthValue | true(1), false(2) | Whether hello packets are being suppressed to the neighbor. | As per the MIB. |
| ospfVirtNbrRestartHelperStatus (1.3.6.1.2.1.14.11.1.9) | read-only | INTEGER | notHelping(1), helping (2) | Whether the router is acting as a GR helper for the neighbor. | As per the MIB. |
| ospfVirtNbrRestartHelperAge (1.3.6.1.2.1.14.11.1.10) | read-only | Unsigned32 | Standard MIB values. | Remaining time of the GR interval when the router is acting as a GR helper for the neighbor. | As per the MIB. |
| ospfVirtNbrRestartHelperExitReason (1.3.6.1.2.1.14.11.1.11) | read-only | INTEGER | none(1), inProgress(2), completed (3), timedOut (4), topologyChanged (5) | GR helper exit reason. | As per the MIB. |

ospfExtLsdbTable

About this table

This table contains information about the LSDB of external LSAs for the OSPF process.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfExtLsdbType, ospfExtLsdbLsid, and ospfExtLsdbRouterId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|----------------------|--|-----------------|
| ospfExtLsdbType (1.3.6.1.2.1.14.12.1.1) | read-only | INTEGER | asExternalLink(5) | LSA type. | As per the MIB. |
| ospfExtLsdbLsid (1.3.6.1.2.1.14.12.1.2) | read-only | IpAddress | OCTET STRING (4) | LS ID, an LS type specific field containing either a router ID or an IP address. | As per the MIB. |
| ospfExtLsdbRouterId (1.3.6.1.2.1.14.12.1.3) | read-only | RouterID | OCTET STRING (4) | A 32-bit number that uniquely identifies the originating router in the AS. | As per the MIB. |
| ospfExtLsdbSequence (1.3.6.1.2.1.14.12.1.4) | read-only | Integer32 | Standard MIB values. | Sequence number. | As per the MIB. |
| ospfExtLsdbAge (1.3.6.1.2.1.14.12.1.5) | read-only | Integer32 | Standard MIB values. | Age of the LSA. | As per the MIB. |
| ospfExtLsdbChecksum (1.3.6.1.2.1.14.12.1.6) | read-only | Integer32 | Standard MIB values. | Checksum of the complete contents of the LSA, except the age field. | As per the MIB. |
| ospfExtLsdbAdvertisement (1.3.6.1.2.1.14.12.1.7) | read-only | OCTET STRING | OCTET STRING (36) | Complete LSA information. | As per the MIB. |

ospfAreaAggregateTable

About this table

This table contains information about configured summary routes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfAreaAggregateAreaID, ospfAreaAggregateLsdbType, ospfAreaAggregateNet, and ospfAreaAggregateMask.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|--|--|---|
| ospfAreaAggregateAreaID (1.3.6.1.2.1.14.14.1.1) | read-only | AreaID | OCTET STRING (4) | Area where the summary route resides. | As per the MIB. |
| ospfAreaAggregateLsdbType (1.3.6.1.2.1.14.14.1.2) | read-only | INTEGER | summary Link(3), nssaExternalLink (7) | Summary route type. | As per the MIB. |
| ospfAreaAggregateNet (1.3.6.1.2.1.14.14.1.3) | read-only | IpAddresses | OCTET STRING (4) | Network address. | As per the MIB. |
| ospfAreaAggregateMask (1.3.6.1.2.1.14.14.1.4) | read-only | IpAddresses | OCTET STRING (4) | Subnet mask. | As per the MIB. |
| ospfAreaAggregateStatus (1.3.6.1.2.1.14.14.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| ospfAreaAggregateEffect (1.3.6.1.2.1.14.14.1.6) | read-create | INTEGER | advertiseMatching (1), doNotAdvertiseMatching (2) | Whether subnets are included in the summary route. | Supports only the read and write operations. |
| ospfAreaAggregateExtRouteTag (1.3.6.1.2.1.14.14.1.7) | read-create | Unsigned 32 | INTEGER(0..4294967295) | External route tag in Type-7 LSAs. | Supports only the read and write operations. nssaExternalLink supports only the write operation. |

ospfLocalLsdbTable

About this table

This table contains all local LSDB information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfLocalLsdbIpAddress, ospfLocalLsdbAddressLessIf, ospfLocalLsdbType, ospfLocalLsdbLsid, and ospfLocalLsdbRouterId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------------|-----------------------------------|--|-----------------|
| ospfLocalLsdbIpAddress (1.3.6.1.2.1.14.17.1.1) | not-accessible | IpAddress s | OCTET STRING (4) | IP address of the interface that received the LSA. | As per the MIB. |
| ospfLocalLsdbAddressLessIf (1.3.6.1.2.1.14.17.1.2) | not-accessible | Interfacel ndexOrZ ero | Integer32 (0..21474 83647) | Index of the interface that received the LSA. | As per the MIB. |
| ospfLocalLsdbType (1.3.6.1.2.1.14.17.1.3) | not-accessible | INTEGE R | localOpa queLink (9) | LSA type. | As per the MIB. |
| ospfLocalLsdbLsid (1.3.6.1.2.1.14.17.1.4) | not-accessible | IpAddress s | OCTET STRING (4) | LS ID. | As per the MIB. |
| ospfLocalLsdbRouterId (1.3.6.1.2.1.14.17.1.5) | not-accessible | RouterID | OCTET STRING (4) | A 32-bit number that uniquely identifies the originating router in the AS. | As per the MIB. |
| ospfLocalLsdbSequence (1.3.6.1.2.1.14.17.1.6) | read-only | Integer32 | Standard MIB values. | LSA sequence number. | As per the MIB. |
| ospfLocalLsdbAge (1.3.6.1.2.1.14.17.1.7) | read-only | Integer32 | Standard MIB values. | LSA age in seconds. | As per the MIB. |
| ospfLocalLsdbChecksum (1.3.6.1.2.1.14.17.1.8) | read-only | Integer32 | Standard MIB values. | LSA checksum. | As per the MIB. |
| ospfLocalLsdbAdvertisement (1.3.6.1.2.1.14.17.1.9) | read-only | OCTET STRING | OCTET STRING (1..65535) | Complete LSA information. | As per the MIB. |

ospfVirtLocalLsdbTable

About this table

This table contains local LSDB information for all virtual links.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfVirtLocalLsdbTransitArea, ospfVirtLocalLsdbNeighbor, ospfVirtLocalLsdbType, ospfVirtLocalLsdbLsid, and ospfVirtLocalLsdbRouterId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|----------------------------|--|-----------------|
| ospfVirtLocalLsdbTransitArea (1.3.6.1.2.1.14.18.1.1) | not-accessible | AreaID | OCTET STRING (4) | Transit area that the virtual link traverses. | As per the MIB. |
| ospfVirtLocalLsdbNeighbor (1.3.6.1.2.1.14.18.1.2) | not-accessible | RouterID | OCTET STRING (4) | Router ID of the virtual neighbor. | As per the MIB. |
| ospfVirtLocalLsdbType (1.3.6.1.2.1.14.18.1.3) | not-accessible | INTEGER | localOpaqueLink (9) | LSA type. | As per the MIB. |
| ospfVirtLocalLsdbLsid (1.3.6.1.2.1.14.18.1.4) | not-accessible | IpAddress | OCTET STRING (4) | LS ID. | As per the MIB. |
| ospfVirtLocalLsdbRouterId (1.3.6.1.2.1.14.18.1.5) | not-accessible | RouterID | OCTET STRING (4) | A 32-bit number that uniquely identifies the originating router in the AS. | As per the MIB. |
| ospfVirtLocalLsdbSequence (1.3.6.1.2.1.14.18.1.6) | read-only | Integer32 | Standard MIB values. | LSA sequence number. | As per the MIB. |
| ospfVirtLocalLsdbAge (1.3.6.1.2.1.14.18.1.7) | read-only | Integer32 | Standard MIB values. | LSA age in seconds. | As per the MIB. |
| ospfVirtLocalLsdbChecksum (1.3.6.1.2.1.14.18.1.8) | read-only | Integer32 | Standard MIB values. | LSA checksum. | As per the MIB. |
| ospfVirtLocalLsdbAdvertisement (1.3.6.1.2.1.14.18.1.9) | read-only | OCTET STRING | OCTET STRING (1..65535) | Complete LSA information. | As per the MIB. |

ospfAsLsdbTable

About this table

This table contains information about LSDB information of an AS.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfAsLsdbType, ospfAsLsdbLsid, and ospfAsLsdbRouterId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|--|-----------------|
| ospfAsLsdbType (1.3.6.1.2.1.14.19.1.1) | not-accessible | INTEGER | asExternalLink (5), asOpaqueLink (11) | LSA type. | As per the MIB. |
| ospfAsLsdbLsid (1.3.6.1.2.1.14.19.1.2) | not-accessible | IpAddress | OCTET STRING (4) | LS ID. | As per the MIB. |
| ospfAsLsdbRouterId (1.3.6.1.2.1.14.19.1.3) | not-accessible | RouterID | OCTET STRING (4) | A 32-bit number that uniquely identifies the originating router in the AS. | As per the MIB. |
| ospfAsLsdbSequence (1.3.6.1.2.1.14.19.1.4) | read-only | Integer32 | Standard MIB values. | LSA sequence number. | As per the MIB. |
| ospfAsLsdbAge (1.3.6.1.2.1.14.19.1.5) | read-only | Integer32 | Standard MIB values. | LSA age in seconds. | As per the MIB. |
| ospfAsLsdbChecksum (1.3.6.1.2.1.14.19.1.6) | read-only | Integer32 | Standard MIB values. | LSA checksum. | As per the MIB. |
| ospfAsLsdbAdvertisement (1.3.6.1.2.1.14.19.1.7) | read-only | OCTET STRING | OCTET STRING (1..65535) | Complete LSA information. | As per the MIB. |

ospfAreaLsaCountTable

About this table

This table contains LSA statistics information of all areas and types.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfAreaLsaCountAreald and ospfAreaLsaCountLsaType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------|------------------|-------------|-----------------|
| ospfAreaLsaCountAreald (1.3.6.1.2.1.14.20.1.1) | not-accessible | AreaID | OCTET STRING (4) | Area ID. | As per the MIB. |

| | | | | | |
|--|----------------|---------|--|---|-----------------|
| ospfAreaLsaCountLsaType (1.3.6.1.2.1.14.20.1.2) | not-accessible | INTEGER | routerLink (1), networkLink (2), summaryLink (3), asSummaryLink (4), multicastLink (6), nssaExternalLink (7), areaOpaqueLink (10) | LSA type. | As per the MIB. |
| ospfAreaLsaCountNumber (1.3.6.1.2.1.14.20.1.3) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of LSAs of the specified type in the specified area. | As per the MIB. |

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OSPF-TRAP-MIB

About this MIB

Use this MIB to set, edit, and view OSPF protocol and notification information about network devices.

MIB file name

rfc4750-ospf-trap.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ospf(14)

Scalar objects

ospfSetTrap

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|------------------|--|-----------------|
| ospfSetTrap (1.3.6.1.2.1.14.16.1.1) | read-write | OCTET STRING | OCTET STRING (4) | Whether OSPF notification is enabled. | As per the MIB. |

ospfConfigErrorType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|---------------------------------------|-----------------|
| ospfConfigErrorType (1.3.6.1.2.1.14.16.1.2) | read-only | INTEGER | badVersion (1), areaMismatch (2), unknownNbmaNbr (3), unknownVirtualNbr (4), authTypeMismatch(5), authFailure (6), netMaskMismatch (7), helloIntervalMismat ch (8), deadIntervalMismat ch (9), optionMismatch (10), mtuMismatch (11), duplicateRouterId (12), noError (13) | Possible configuration error type. | As per the MIB. |

ospfPacketType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|-------------------|-----------------|
| ospfPacketType (1.3.6.1.2.1.14.16.1.3) | read-only | INTEGER | hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5), nullPacket (6) | OSPF packet type. | As per the MIB. |

ospfPacketSrc

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|---|-----------------|
| ospfPacketSrc (1.3.6.1.2.1.14.16.1.4) | read-only | IpAddress | OCTET STRING (4) | IP address that cannot be identified by a neighbor. | As per the MIB. |

Notifications

ospfVirtIfStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.1 | Virtual interface state changes. | Informational | - | - | ON |

Description

A notification sent when the state of a virtual interface regresses (for example, changing from P2P to Down) or progresses to a terminal state (for example, P2P).

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virtif-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virtif-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-----------------------------------|---|-------|----------|-------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------|------------------------------|
| 1.3.6.1.2.1.14.9.1.1 (ospfVirtIfAreaId) | ID of the area to which the virtual link belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.9.1.2 (ospfVirtIfNeighbor) | Router ID of the virtual neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.9.1.7 (ospfVirtIfState) | Virtual interface state. | No | INTEGER | down (1) pointToPoint (4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfNbrStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|-------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.2 | Neighbor state changes. | Informational | - | - | ON |

Description

A notification sent when the state of a neighbor regresses (for example, changing from Attempt or Full to 1-Way or Down) or progresses to a terminal state (for example, 2-Way or Full). When the state of a neighbor in an NBMA or broadcast network changes from Full to another state or changes from another state to Full, the notification is generated by the DR. An ospfIfStateChange notification will be generated when the DR does down.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf neighbor-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf neighbor-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|----------------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.10.1.1 (ospfNbrIpAddr) | IP address of the neighbor. | No | IpAddress | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------------------|---|
| 1.3.6.1.2.1.14.10.1.2 (ospfNbrAddressLessIndex) | Set to 0 on an interface having an IP address, and set to the value of interface index in the Internet Standard MIB on an interface having no IP address. | No | InterfaceIndex OrZero | Integer32 (0..2147483647) |
| 1.3.6.1.2.1.14.10.1.3 (ospfNbrRtrId) | Router ID of the neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.10.1.6 (ospfNbrState) | Neighbor state. | No | INTEGER | down (1) attempt (2) init (3) twoWay (4) exchangeStart (5) exchange (6) loading (7) full (8) |
| 1.3.6.1.2.1.31.1.1.1.1 (ifName) | Interface name | No | DisplayString | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfVirtNbrStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.3 | Virtual neighbor state changes. | Informational | - | - | ON |

Description

A notification sent when the state of a virtual neighbor regresses (for example, changing from Attempt or Full to 1-Way or Down) or progresses to a terminal state (for example, Full).

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virtneighbor-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virtneighbor-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------|---|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.11.1.1 (ospfVirtNbrArea) | ID of the area to which the virtual neighbor belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.11.1.2 (ospfVirtNbrRtrId) | A 32-bit integer that uniquely identifies the neighboring router in the AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.11.1.5 (ospfVirtNbrState) | Neighbor state. | No | INTEGER | down (1) attempt (2) init (3) twoWay (4) exchangeStart (5) exchange (6) loading (7) full (8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfIfConfigError

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|--------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.4 | Interface configuration error. | Error | Warning | - | ON |

Description

A notification sent when an interface on a router receives a packet from another router with mismatched configuration. The optionMismatch event causes a notification only if it prevents an adjacency from establishing.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf config-error` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf config-error` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------------|---|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.7.1.1 (ospfIfIpAddress) | IP address of the interface. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.7.1.2 (ospfAddressLessIf) | Used to distinguish interface instances with addresses configured and those without addresses configured. | No | InterfaceIndexOrZero | Integer32 (0..2147483647) |
| 1.3.6.1.2.1.14.16.1.4 (ospfPacketSrc) | IP address that cannot be identified by a neighbor. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.16.1.2 (ospfConfigErrorType) | Configuration error type. | No | INTEGER | badVersion (1) areaMismatch (2) unknownNbmaNbr (3) unknownVirtualNbr (4) authTypeMismatch (5) authFailure (6) netMaskMismatch (7) helloIntervalMismatch (8) deadIntervalMismatch (9) optionMismatch (10) mtuMismatch (11) duplicateRouterId (12) noError (13) |
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) lsReq (3) lsUpdate (4) lsAck (5) nullPacket (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the interface configuration is correct.
2. If the issue persists, contact H3C Support.

ospfVirtIfConfigError

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.5 | Virtual interface configuration error. | Error | Warning | - | ON |

Description

A notification sent when an OSPF virtual interface on a router receives a packet from another router with mismatched configuration. The optionMismatch event causes a notification only if it prevents establishment of an adjacency.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virt-config-error` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virt-config-error` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------|--|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.9.1.1 (ospfVirtIfAreaId) | ID of the area to which the virtual link belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.9.1.2 (ospfVirtIfNeighbor) | Router ID of the virtual neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.16.1.2 (ospfConfigErrorType) | Configuration error type. | No | INTEGER | badVersion (1) areaMismatch (2) unknownNbmaNbr (3) unknownVirtualNbr (4) authTypeMismatch(5) authFailure (6) netMaskMismatch (7) helloIntervalMismatch (8) deadIntervalMismatch (9) optionMismatch (10) mtuMismatch (11) duplicateRouterId (12) noError (13) |

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------|-------|---------|---|
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) lsReq (3) lsUpdate (4) lsAck (5) nullPacket (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the virtual interface configuration is correct.
2. If the issue persists, contact H3C Support.

ospfIfAuthFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|-----------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.6 | Interface authentication failure. | Error | Warning | - | ON |

Description

A notification sent when an interface on a router receives a packet from another router with mismatched authentication key or authentication type.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf authentication-failure` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf authentication-failure` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|----------------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.7.1.1 (ospfIfIpAddress) | IP address of the interface. | No | IpAddress | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------------|--|
| 1.3.6.1.2.1.14.7.1.2 (ospfAddressLessIf) | Used to distinguish interface instances with addresses configured and those without addresses configured. | No | InterfaceIndexOrZero | Integer32 (0..2147483647) |
| 1.3.6.1.2.1.14.16.1.4 (ospfPacketSrc) | IP address that cannot be identified by a neighbor instance. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.16.1.2 (ospfConfigErrorType) | Configuration error type. | No | INTEGER | badVersion (1) areaMismatch (2) unknownNbmaNbr (3) unknownVirtualNbr (4) authTypeMismatch(5) authFailure (6) netMaskMismatch (7) helloIntervalMismatch (8) deadIntervalMismatch (9) optionMismatch (10) mtuMismatch (11) duplicateRouterId (12) noError (13) |
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) IsReq (3) IsUpdate (4) IsAck (5) nullPacket (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the interface authentication settings are correct.
2. If the issue persists, contact H3C Support.

ospfVirtIfAuthFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.7 | Virtual interface authentication failure. | Error | Warning | - | ON |

Description

A notification sent when an OSPF virtual interface on a router receives a packet from another router with mismatched authentication key or authentication type.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virt-authentication-failure` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virt-authentication-failure` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------|--|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.9.1.1 (ospfVirtIfAreaId) | ID of the area to which the virtual link belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.9.1.2 (ospfVirtIfNeighbor) | Router ID of the virtual neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.16.1.2 (ospfConfigErrorType) | Configuration error type. | No | INTEGER | badVersion (1) areaMismatch (2) unknownNbmaNbr (3) unknownVirtualNbr (4) authTypeMismatch(5) authFailure (6) netMaskMismatch (7) helloIntervalMismatch (8) deadIntervalMismatch (9) optionMismatch (10) mtuMismatch (11) duplicateRouterId (12) noError (13) |
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) lsReq (3) lsUpdate (4) lsAck (5) nullPacket (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the virtual interface authentication settings are correct.
2. If the issue persists, contact H3C Support.

ospfIfRxBadPacket

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.8 | An interface receives an error packet. | Informational | - | - | ON |

Description

A notification sent when an interface receives an OSPF packet that cannot be parsed.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf bad-packet` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf bad-packet` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------------|---------------------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.7.1.1 (ospfIfIpAddress) | IP address of the interface. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.7.1.2 (ospfAddressLessIf) | Used to distinguish interface instances with addresses configured and those without addresses configured. | No | InterfaceIndexOrZero | Integer32 (0..2147483647) |
| 1.3.6.1.2.1.14.16.1.4 (ospfPacketSrc) | IP address that cannot be identified by a neighbor. | No | IpAddress | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------|-------|---------|---|
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) IsReq (3) IsUpdate (4) IsAck (5) nullPacket (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfVirtIfRxBadPacket

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.9 | A virtual interface receives an error packet. | Informational | - | - | ON |

Description

A notification sent when a virtual interface receives an OSPF packet that cannot be parsed.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virt-bad-packet` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virt-bad-packet` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------|-------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.9.1.1 (ospfVirtIfAreaId) | ID of the area to which the virtual link belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.9.1.2 (ospfVirtIfNeighbor) | Router ID of the virtual neighbor. | No | RouterID | IpAddress |

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------|-------|---------|---|
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) lsReq (3) lsUpdate (4) lsAck (5) nullPacket (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfTxRetransmit

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.10 | An interface retransmits an OSPF packet. | Informational | - | - | ON |

Description

A notification sent when an interface retransmits an OSPF packet. All packets that might be retransmitted are associated with an LSDB entry, which is identified by the LS type, LS ID, and Router ID.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf retransmit` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf retransmit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------------|---------------------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.7.1.1 (ospfIfIpAddress) | IP address of the interface. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.7.1.2 (ospfAddressLessIf) | Used to distinguish interface instances with addresses configured and those without addresses configured. | No | InterfaceIndexOrZero | Integer32 (0..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|---|
| 1.3.6.1.2.1.14.10.1.3 (ospfNbrRtrld) | Router ID of the neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) IsReq (3) IsUpdate (4) IsAck (5) nullPacket (6) |
| 1.3.6.1.2.1.14.4.1.2 (ospfLsdbType) | LSA type. Type-5 LSAs are not displayed. | No | INTEGER | routerLink (1) networkLink (2) summaryLink (3) asSummaryLink (4) asExternalLink (5) multicastLink (6) nssaExternalLink (7) areaOpaqueLink (10) |
| 1.3.6.1.2.1.14.4.1.3 (ospfLsdbLsid) | LS ID. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.4.1.4 (ospfLsdbRouterId) | Router ID of the device that generates the LSA. | No | RouterID | IpAddress |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfVirtIfTxRetransmit

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.11 | A virtual interface retransmits an OSPF packet. | Informational | - | - | ON |

Description

A notification sent when a virtual interface retransmits an OSPF packet. All packets that might be retransmitted are associated with an LSDB entry, which is identified by the LS type, LS ID, and Router ID.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virt-retransmit` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virt-retransmit` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|---|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.9.1.1 (ospfVirtIfArealD) | ID of the area to which the virtual link belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.9.1.2 (ospfVirtIfNeighbor) | Router ID of the virtual neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.16.1.3 (ospfPacketType) | OSPF packet type. | No | INTEGER | hello (1) dbDescript (2) lsReq (3) lsUpdate (4) lsAck (5) nullPacket (6) |
| 1.3.6.1.2.1.14.4.1.2 (ospfLsdbType) | LSA type. Type-5 LSAs are not displayed. | No | INTEGER | routerLink (1) networkLink (2) summaryLink (3) asSummaryLink (4) asExternalLink (5) multicastLink (6) nssaExternalLink (7) areaOpaqueLink (10) |
| 1.3.6.1.2.1.14.4.1.3 (ospfLsdbLsid) | LS ID | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.4.1.4 (ospfLsdbRouterId) | Router ID of the device that generates the LSA. | No | RouterID | IpAddress |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfOriginateLsa

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.12 | The local device generates a new LSA. | Informational | - | - | ON |

Description

A notification sent when the local device generates a new LSA. This notification is generated only when an LSA is originated because of a topology change. Flushing of aged LSAs and refreshes of LSAs will not trigger this notification.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf lsa-originate` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf lsa-originate` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|---|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.4.1.1 (ospfLsdbAreaId) | ID of the area from which the LSA was received. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.4.1.2 (ospfLsdbType) | LSA type. Type-5 LSAs are not displayed. | No | INTEGER | routerLink (1) networkLink (2) summaryLink (3) asSummaryLink (4) asExternalLink (5) multicastLink (6) nssaExternalLink (7) areaOpaqueLink (10) |
| 1.3.6.1.2.1.14.4.1.3 (ospfLsdbLsid) | LS ID. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.4.1.4 (ospfLsdbRouterId) | Router ID of the device that generates the LSA. | No | RouterID | IpAddress |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfMaxAgeLsa

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.13 | An LSA in the LSDB ages. | Informational | - | - | ON |

Description

A notification sent when an LSA in the LSDB ages.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf lsa-maxage` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf lsa-maxage` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|---|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.4.1.1 (ospfLsdbAreaId) | ID of the area from which the LSA was received. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.4.1.2 (ospfLsdbType) | LSA type. Type-5 LSAs are not displayed. | No | INTEGER | routerLink (1) networkLink (2) summaryLink (3) asSummaryLink (4) asExternalLink (5) multicastLink (6) nssaExternalLink (7) areaOpaqueLink (10) |
| 1.3.6.1.2.1.14.4.1.3 (ospfLsdbLsid) | LS ID. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.4.1.4 (ospfLsdbRouterId) | Router ID of the device that generates the LSA. | No | RouterID | IpAddress |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfLsdbOverflow

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.14 | The number of LSAs in the LSDB of a device exceeds the | Error | Warning | - | ON |

| | | | | | |
|--|--------------|--|--|--|--|
| | upper limit. | | | | |
|--|--------------|--|--|--|--|

Description

A notification sent when the number of LSAs in the LSDB of a device exceeds the upper limit.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf lsdb-overflow` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf lsdb-overflow` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|-----------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.1.11 (ospfExtLsdbLimit) | Maximum number of non-default ASEs in the LSDB. A value of -1 indicates no limit. | No | Integer32 | -1..'7FFFFFFF'h |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Reduce the number of LSAs.
2. If the issue persists, contact H3C Support.

ospfLsdbApproachingOverflow

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.15 | The number of LSAs in the LSDB of a device reaches 90% the upper limit. | Error | Warning | - | ON |

Description

A notification sent when the number of LSAs in the LSDB of a device reaches 90% the upper limit.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf lsdb-approaching-overflow` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf lsdb-approaching-overflow` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|-----------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.1.11 (ospfExtLsdbLimit) | Maximum number of non-default ASEs in the LSDB. A value of -1 indicates no limit. | No | Integer32 | -1..'7FFFFFFF'h |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Reduce the number of LSAs.
2. If the issue persists, contact H3C Support.

ospfIfStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.16 | Interface state changes. | Informational | - | - | ON |

Description

A notification sent when the state of an OSPF interface regresses (for example, changing from Dr to Down) or progresses to a terminal state (for example, Point-to-Point, DR Other, Dr, or Backup).

Status control

ON

CLI: Use the `snmp-agent trap enable ospf if-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf if-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------------------|--|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.7.1.1 (ospfIfIpAddress) | IP address of the interface. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.7.1.2 (ospfAddressLessIf) | Used to distinguish interface instances with addresses configured and those without addresses configured. | No | InterfaceIndexOrZero | Integer32 (0..2147483647) |
| 1.3.6.1.2.1.14.7.1.12 (ospfIfState) | Interface state. | No | INTEGER | down (1) loopback (2) waiting (3) pointToPoint (4) designatedRouter (5) backupDesignatedRouter (6) otherDesignatedRouter (7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfNssaTranslatorStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.17 | A router's ability to translate OSPF type-7 LSAs into OSPF type-5 LSAs changes. | Informational | - | - | ON |

Description

A notification sent when a router's ability to translate OSPF type-7 LSAs into OSPF type-5 LSAs changes.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf nssatranslator-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf nssatranslator-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|----------|--|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.2.1.1 (ospfAreaId) | Area ID, a 32-bit integer that uniquely identifies an area. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.2.1.12 (ospfAreaNssaTranslatorState) | Method for the NSSA ABR to become capable of translating Type-7 LSAs into Type-5 LSAs. | No | INTEGER | enabled (1) elected (2) disabled (3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfRestartStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.18 | GR restarter state changes. | Informational | - | - | ON |

Description

A notification sent when the state of the GR restarter changes.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf grrestarter-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf grrestarter-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------|---|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.1.21 (ospfRestartStatus) | GR restarter state. | No | INTEGER | notRestarting (1) plannedRestart (2) unplannedRestart (3) |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-----------|--|
| 1.3.6.1.2.1.14.1.19 (ospfRestartInterval) | Graceful restart timeout interval. | No | Integer32 | 1..1800 |
| 1.3.6.1.2.1.14.1.23 (ospfRestartExitReason) | Reason why the GR restarter exited. | No | INTEGER | none (1) inProgress (2) completed (3) timedOut (4) topologyChanged (5) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfNbrRestartHelperStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.19 | GR helper state changes. | Informational | - | - | ON |

Description

A notification sent when the GR helper state of a neighbor changes.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf grhelper-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf grhelper-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------------|---------------------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.10.1.1 (ospfNbrIpAddr) | IP address of the neighbor. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.2.1.14.10.1.2 (ospfNbrAddressLessIndex) | Set to 0 on an interface having an IP address, and set to the value of interface index in the Internet Standard MIB on an interface having no IP address. | No | InterfaceIndexOrZero | Integer32 (0..2147483647) |

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------|--|
| 1.3.6.1.2.1.14.10.1.3 (ospfNbrRtrId) | Router ID of the neighbor. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.10.1.12 (ospfNbrRestartHelperStatus) | GR helper state. | No | INTEGER | notHelping (1) helping (2) |
| 1.3.6.1.2.1.14.10.1.13 (ospfNbrRestartHelperAge) | Remaining time of the GR interval when the router is acting as a GR helper for the neighbor. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.14.10.1.14 (ospfNbrRestartHelperExitReason) | Reason why the GR helper exited. | No | INTEGER | none (1) inProgress (2) completed (3) timedOut (4) topologyChanged (5) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfVirtNbrRestartHelperStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.14.16.2.20 | The GR helper state of a virtual neighbor changes. | Informational | - | - | ON |

Description

A notification sent when the GR helper state of a virtual neighbor changes.

Status control

ON

CLI: Use the `snmp-agent trap enable ospf virtgrhelper-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospf virtgrhelper-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--------------------------------------|---|-------|----------|-------------|
| 1.3.6.1.2.1.14.1.1 (ospfRouterId) | Unique identifier of a router in an AS. | No | RouterID | IpAddress |

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------|--|
| 1.3.6.1.2.1.14.11.1.1 (ospfVirtNbrArea) | ID of the area to which the virtual neighbor belongs. | No | AreaID | IpAddress |
| 1.3.6.1.2.1.14.11.1.2 (ospfVirtNbrRtrId) | A 32-bit integer that uniquely identifies the neighboring router in the AS. | No | RouterID | IpAddress |
| 1.3.6.1.2.1.14.11.1.9 (ospfVirtNbrRestartHelperStatus) | Whether the router is acting as a GR helper for the virtual neighbor. | No | INTEGER | notHelping (1) helping (2) |
| 1.3.6.1.2.1.14.11.1.10 (ospfVirtNbrRestartHelperAge) | Remaining time of the GR interval when the router is acting as a GR helper for the neighbor. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.14.11.1.11 (ospfVirtNbrRestartHelperExitReason) | Reason why the GR helper exited. | No | INTEGER | none (1) inProgress (2) completed (3) timedOut (4) topologyChanged (5) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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OSPFV3-MIB

About this MIB

Use this MIB to obtain OSPFv3 information.

MIB file name

rfc5643-ospfv3.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ospfv3MIB(191)

Scalar objects

ospfv3RouterId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|----------------------------|---|-----------------------------------|
| ospfv3RouterId (1.3.6.1.2.1.191.1.1.1) | read-write | Ospfv3RouterIdTC | Unsigned32(1..'FFFFFFFF'h) | Unique identifier of a router in an AS. | Supports only the read operation. |

ospfv3AdminStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------|---|--|-----------------------------------|
| ospfv3AdminStatus (1.3.6.1.2.1.191.1.1.2) | read-write | Status | INTEGER{ enabled (1), disabled (2) } | Enabled indicates that a minimum of one interface is in up state. Disabled indicates that no interface is in up state. | Supports only the read operation. |

ospfv3VersionNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--------------|---------------------|-----------------|
| ospfv3VersionNumber (1.3.6.1.2.1.191.1.1.3) | read-only | INTEGER | version3 (3) | Version number (3). | As per the MIB. |

ospfv3AreaBdrRtrStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------|-----------|------------|----------------------|-------------------------------|-----------------|
| ospfv3AreaBdrRtrStatus | read-only | TruthValue | true(1), false(2) | Whether the device is an ABR. | As per the MIB. |

| | | | | | |
|-------------------------|--|--|--|--|--|
| (1.3.6.1.2.1.191.1.1.4) | | | | | |
|-------------------------|--|--|--|--|--|

ospfv3ASBdrRtrStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|--------------------------------|-----------------------------------|
| ospfv3ASBdrRtrStatus (1.3.6.1.2.1.191.1.1.5) | read-write | TruthValue | true(1), false(2) | Whether the device is an ASBR. | Supports only the read operation. |

ospfv3AsScopeLsaCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|-----------------------------|-----------------|
| ospfv3AsScopeLsaCount (1.3.6.1.2.1.191.1.1.6) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of AS external LSAs. | As per the MIB. |

ospfv3AsScopeLsaCksumSum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|------------------------------------|-----------------|
| ospfv3AsScopeLsaCksumSum (1.3.6.1.2.1.191.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Sum of checksums in external LSAs. | As per the MIB. |

ospfv3OriginateNewLsas

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|---|-----------------|
| ospfv3OriginateNewLsas (1.3.6.1.2.1.191.1.1.8) | read-only | Counter32 | INTEGER(0..4294967295) | Number of new LSAs that have been originated. This number is incremented each time the device originates a new LSA. | As per the MIB. |

ospfv3RxNewLsas

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|--|-----------------|
| ospfv3RxNewLsas (1.3.6.1.2.1.191.1.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Number of newly received LSAs, excluding self-originated LSAs. | As per the MIB. |

ospfv3ExtLsaCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|------------------------|------------------------|-----------------|
| ospfv3ExtLsaCount (1.3.6.1.2.1.191.1.1.10) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of Type-5 LSAs. | As per the MIB. |

ospfv3ExtAreaLsdbLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------------|---|-----------------------------------|
| ospfv3ExtAreaLsdbLimit (1.3.6.1.2.1.191.1.1.11) | read-write | Integer32 | Integer32(-1..'7FFFFFFF'h) | Maximum number of non-default ASEs in the LSDB. A value of -1 indicates no limit. | Supports only the read operation. |

ospfv3ExitOverflowInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------------------------|
| ospfv3ExitOverflowInterval (1.3.6.1.2.1.191.1.1.12) | read-write | Unsigned32 | Standard MIB values. | Time that the router takes to leave the OverflowState. 0 indicates the router does not leave the OverflowState until it is restarted. | Supports only the read operation. |

ospfv3DemandExtensions

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|-----------------------------|-----------------------------------|
| ospfv3DemandExtensions (1.3.6.1.2.1.191.1.1.13) | read-write | TruthValue | true(1), false(2) | Support for demand routing. | Supports only the read operation. |

ospfv3ReferenceBandwidth

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|--|
| ospfv3ReferenceBandwidth (1.3.6.1.2.1.191.1.1.14) | read-write | Unsigned32 | Standard MIB values. | Reference bandwidth in Kbps for calculating the interface cost. | When the value is divided by 1000, the decimal number will be ignored. |

ospfv3RestartSupport

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|-----------------|---|
| ospfv3RestartSupport (1.3.6.1.2.1.191.1.1.15) | read-write | INTEGER | none(1), plannedOnly(2), plannedAndUnplanned(3) | Support for GR. | If the value changes from 1 to 2 or 3, IETF GR is supported. If the value changes between 2 and 3, the original GR type remains unchanged. |

ospfv3RestartInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------------------|--------------------------|-------------------|--------------------------|
| ospfv3RestartInterval (1.3.6.1.2.1.191.1.1.16) | read-write | Ospfv3UpToRefreshIntervalTC | Unsigned32 (40..1800) | GR timeout timer. | Value range: 40 to 1800. |

ospfv3RestartStrictLsaChecking

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|--------------------|
| ospfv3RestartStrictLsaChecking (1.3.6.1.2.1.191.1.1.17) | read-write | TruthValue | true(1), false(2) | Whether the strict LSA checking capability is enabled for GR. | Default: false(2). |

ospfv3RestartStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|-------------------------|-----------------|
| ospfv3RestartStatus (1.3.6.1.2.1.191.1.1.18) | read-only | INTEGER | notRestarting(1), plannedRestart(2), unplannedRestart(3) | Graceful restart state. | As per the MIB. |

ospfv3RestartAge

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------------|-------------------------|--|-----------------|
| ospfv3RestartAge (1.3.6.1.2.1.191.1.1.19) | read-only | Ospfv3UpToRefreshIntervalTC | Unsigned32 (1..1800) | Remaining time for the current graceful restart. | As per the MIB. |

ospfv3RestartExitReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|-----------------|-----------------|
| ospfv3RestartExitReason (1.3.6.1.2.1.191.1.1.20) | read-only | INTEGER | none(1), inProgress(2), completed(3), timedOut(4), topologyChanged(5) | GR exit reason. | As per the MIB. |

ospfv3NotificationEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|---|
| ospfv3NotificationEnable (1.3.6.1.2.1.191.1.1.21) | read-write | TruthValue | true(1), false(2) | Whether OSPFv3 notification is enabled. | If the value of this object is true(1), all OSPFv3 notifications are enabled. |

ospfv3StubRouterSupport

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--------------------------|-----------------|
| ospfv3StubRouterSupport (1.3.6.1.2.1.191.1.1.22) | read-only | TruthValue | true(1), false(2) | Support for stub router. | As per the MIB. |

ospfv3StubRouterAdvertisement

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|-------------------------------------|--|-----------------|
| ospfv3StubRouterAdvertisement (1.3.6.1.2.1.191.1.1.23) | read-write | INTEGER | doNotAdvertise (1), advertise(2) | Whether to advertise stub router LSAs. | As per the MIB. |

ospfv3DiscontinuityTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------|----------------------------------|-----------------|
| ospfv3DiscontinuityTime (1.3.6.1.2.1.191.1.1.24) | read-only | TimeStamp | TimeTicks | Most recent system startup time. | As per the MIB. |

ospfv3RestartTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------|--|-----------------|
| ospfv3RestartTime (1.3.6.1.2.1.191.1.1.25) | read-only | TimeStamp | TimeTicks | Time when the most recent GR occurred. | As per the MIB. |

Tabular objects

ospfv3AreaTable

About this table

This table contains parameter and statistics information about each area on the device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ospfv3Areald.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--|--|---|
| ospfv3Areald (1.3.6.1.2.1.191.1.2.1.1) | not-accessible | Ospfv3ArealdTC | Unsigned32 (0..FFFFFFFF'h) | Area ID, a 32-bit integer that uniquely identifies an area. | As per the MIB. |
| ospfv3AreaImportAsExtern (1.3.6.1.2.1.191.1.2.1.2) | read-create | INTEGER | importExternal(1), importNoExternal(2), importNssa(3) | Area type, stub, NSSA, or common area. | Supports only the read operation. |
| ospfv3AreaSpfRuns (1.3.6.1.2.1.191.1.2.1.3) | read-only | Counter32 | INTEGER(0..4294967295) | Time of route calculations in the area. | As per the MIB. |
| ospfv3AreaBdrRtrCount (1.3.6.1.2.1.191.1.2.1.4) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of reachable ABRs in the area. | As per the MIB. |
| ospfv3AreaAsBdrRtrCount (1.3.6.1.2.1.191.1.2.1.5) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of reachable ASBRs in the area. | As per the MIB. |
| ospfv3AreaScopeLsaCount (1.3.6.1.2.1.191.1.2.1.6) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of LSAs in the LSDB of the area. | As per the MIB. |
| ospfv3AreaScopeLsaChecksumSum (1.3.6.1.2.1.191.1.2.1.7) | read-only | Unsigned32 | Standard MIB values. | Sum of the checksums of the LSAs in the area. | As per the MIB. |
| ospfv3AreaSummary (1.3.6.1.2.1.191.1.2.1.8) | read-create | INTEGER | noAreaSummary(1), sendAreaSummary(2) | Whether to send summary LSAs to stub and NSSA areas. | Supports read and write operations. |
| ospfv3AreaRowStatus (1.3.6.1.2.1.191.1.2.1.9) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Area state. | Supports only the read operation. |
| ospfv3AreaStubMetric (1.3.6.1.2.1.191.1.2.1.10) | read-create | BigMetric | Integer32(0..16777215) | Cost of the default route advertised to a stub or NSSA area. | Supports read and write operations. Default: 1. Value range: 0 to 16777214. |
| ospfv3AreaNssaTranslatorRole (1.3.6.1.2.1.191.1.2.1.11) | read-create | INTEGER | always(1), candidate(2) | Ability of the NSSA ABR to translate Type-7 LSAs into | Supports read and write operations. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|---|---|--|
| | | | | Type-5 LSAs. | |
| ospfv3AreaNssaTranslat orState (1.3.6.1.2.1.191.1.2.1.12) | read-only | INTEGER | enabled(1), elected(2), disabled(3) | State for the NSSA ABR to become capable of translating Type-7 LSAs into Type-5 LSAs. | As per the MIB. |
| ospfv3AreaNssaTranslat orStabInterval (1.3.6.1.2.1.191.1.2.1.13) | read-create | Unsigned32 | Standard MIB values. | Time period during which the elected translator continues to perform translation after determining that its services are no longer required. | Supports read and write operations. Default: 0. Value range: 0 to 900. |
| ospfv3AreaNssaTranslat orEvents (1.3.6.1.2.1.191.1.2.1.14) | read-only | Counter32 | INTEGER(0..42 94967295) | Number of role changes. | As per the MIB. |
| ospfv3AreaStubMetricTy pe (1.3.6.1.2.1.191.1.2.1.15) | read-create | INTEGER | ospfv3Metric(1), ableCost(2), mparable(3) | Cost type of the default route advertised to a stub or NSSA area. | Supports only the read operation. |
| ospfv3AreaTEEnabled (1.3.6.1.2.1.191.1.2.1.16) | read-create | TruthValue | true(1), false(2) | Whether TE is enabled. | Supports only the read and write operations. |

ospfv3AsLsdbTable

About this table

This table contains information about LSDB information of an AS.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfv3AsLsdbType, ospfv3AsLsdbRouterId, and ospfv3AsLsdbLsid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------------|-------------------------------------|---|-----------------|
| ospfv3AsLsdbType (1.3.6.1.2.1.191.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32(0.. 'FFFFFFFF'h) | LSA type. | As per the MIB. |
| ospfv3AsLsdbRouterId (1.3.6.1.2.1.191.1.3.1.2) | not-accessible | Ospfv3Route rIdTC | Unsigned32(1.. 'FFFFFFFF'h) | Router ID of the device that generates the LSA. | As per the MIB. |
| ospfv3AsLsdbLsid (1.3.6.1.2.1.191.1.3.1.3) | not-accessible | Ospfv3LsIdT C | Unsigned32 (1..'FFFFFFFF' 'h) | LS ID. | As per the MIB. |
| ospfv3AsLsdbSequence | read-only | Ospfv3LsaS | Integer32 | LSA sequence | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-------------------------------|--|-----------------|
| (1.3.6.1.2.1.191.1.3.1.4) | | sequenceTC | | number. | |
| ospfv3AsLsdbAge (1.3.6.1.2.1.191.1.3.1.5) | read-only | Ospfv3LsaAgeTC | Unsigned32 (0..3600) | LSA age. | As per the MIB. |
| ospfv3AsLsdbChecksum (1.3.6.1.2.1.191.1.3.1.6) | read-only | Integer32 | Standard MIB values. | Checksum. | As per the MIB. |
| ospfv3AsLsdbAdvertisement (1.3.6.1.2.1.191.1.3.1.7) | read-only | OCTET STRING | OCTET STRING(1..65 535) | LSA information, including the header. | As per the MIB. |
| ospfv3AsLsdbTypeKnown (1.3.6.1.2.1.191.1.3.1.8) | read-only | TruthValue | true(1), false(2) | Whether the LSA type is unknown. | As per the MIB. |

ospfv3AreaLsdbTable

About this table

This table contains information about LSDB information of an area.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfv3AreaLsdbAreaId, ospfv3AreaLsdbType, ospfv3AreaLsdbRouterId, and ospfv3AreaLsdbLsid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------|--------------------------------|--|-----------------|
| ospfv3AreaLsdbAreaId (1.3.6.1.2.1.191.1.4.1.1) | not-accessible | Ospfv3AreaIdTC | Unsigned32 (0..'FFFFFFFF'h) | Area from which the LSA was received. | As per the MIB. |
| ospfv3AreaLsdbType (1.3.6.1.2.1.191.1.4.1.2) | not-accessible | Unsigned32 | Unsigned32(0..'FFFFFFFF'h) | LSA type. | As per the MIB. |
| ospfv3AreaLsdbRouterId (1.3.6.1.2.1.191.1.4.1.3) | not-accessible | Ospfv3RouterIdTC | Unsigned32(1..'FFFFFFFF'h) | Router ID of the device that generates the LSA. | As per the MIB. |
| ospfv3AreaLsdbLsid (1.3.6.1.2.1.191.1.4.1.4) | not-accessible | Ospfv3LsidTC | Unsigned32 (1..'FFFFFFFF'h) | LS ID. | As per the MIB. |
| ospfv3AreaLsdbSequence (1.3.6.1.2.1.191.1.4.1.5) | read-only | Ospfv3LsaSequenceTC | Integer32 | LSA sequence number. | As per the MIB. |
| ospfv3AreaLsdbAge (1.3.6.1.2.1.191.1.4.1.6) | read-only | Ospfv3LsaAgeTC | Unsigned32 (0..3600) | LSA age. | As per the MIB. |
| ospfv3AreaLsdbChecksum (1.3.6.1.2.1.191.1.4.1.7) | read-only | Integer32 | Standard MIB values. | Checksum. | As per the MIB. |
| ospfv3AreaLsdbAdvertisement | read-only | OCTET STRING | OCTET STRING(1..6553 | LSA information, including the | As per the MIB. |

| | | | | | |
|---|-----------|------------|----------------------|----------------------------------|-----------------|
| (1.3.6.1.2.1.191.1.4.1.8) | | | 5) | header. | |
| ospfv3AreaLsdbTypeKnown (1.3.6.1.2.1.191.1.4.1.9) | read-only | TruthValue | true(1), false(2) | Whether the LSA type is unknown. | As per the MIB. |

ospfv3LinkLsdbTable

About this table

This table contains link-scope LSDB information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfv3LinkLsdbIfIndex, ospfv3LinkLsdbIfInstId, ospfv3LinkLsdbType, ospfv3LinkLsdbRouterId, and ospfv3LinkLsdbLsid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------|---------------------------|---|-----------------|
| ospfv3LinkLsdbIfIndex (1.3.6.1.2.1.191.1.5.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Interface index. | As per the MIB. |
| ospfv3LinkLsdbIfInstId (1.3.6.1.2.1.191.1.5.1.2) | not-accessible | Ospfv3IfInstIdTC | Unsigned32(0..255) | Instance ID. | As per the MIB. |
| ospfv3LinkLsdbType (1.3.6.1.2.1.191.1.5.1.3) | not-accessible | Unsigned32 | Unsigned32(0..FFFFFFFF'h) | LSA type. | As per the MIB. |
| ospfv3LinkLsdbRouterId (1.3.6.1.2.1.191.1.5.1.4) | not-accessible | Ospfv3RouterIdTC | Unsigned32(1..FFFFFFFF'h) | Router ID of the device that generates the LSA. | As per the MIB. |
| ospfv3LinkLsdbLsid (1.3.6.1.2.1.191.1.5.1.5) | not-accessible | Ospfv3LsidTC | Unsigned32(1..FFFFFFFF'h) | LS ID. | As per the MIB. |
| ospfv3LinkLsdbSequence (1.3.6.1.2.1.191.1.5.1.6) | read-only | Ospfv3LsaSequenceTC | Integer32 | LSA sequence number. | As per the MIB. |
| ospfv3LinkLsdbAge (1.3.6.1.2.1.191.1.5.1.7) | read-only | Ospfv3LsaAgeTC | Unsigned32(0..3600) | LSA age. | As per the MIB. |
| ospfv3LinkLsdbChecksum (1.3.6.1.2.1.191.1.5.1.8) | read-only | Integer32 | Standard MIB values. | Checksum. | As per the MIB. |
| ospfv3LinkLsdbAdvertisement (1.3.6.1.2.1.191.1.5.1.9) | read-only | OCTET STRING | OCTET STRING(1..65535) | LSA information, including the header. | As per the MIB. |
| ospfv3LinkLsdbTypeKnown (1.3.6.1.2.1.191.1.5.1.10) | read-only | TruthValue | true(1), false(2) | Whether the LSA type is unknown. | As per the MIB. |

ospfv3HostTable

About this table

This table contains host route information (not supported in the current software version).

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ospfv3HostAddressType and ospfv3HostAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--|---|----------------|
| ospfv3HostAddressType (1.3.6.1.2.1.191.1.6.1.) | not-accessible | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Host route address type. | Not supported |
| ospfv3HostAddress (1.3.6.1.2.1.191.1.6.2.) | not-accessible | InetAddress | OCTET STRING(0..255) | Host route address. | Not supported |
| ospfv3HostMetric (1.3.6.1.2.1.191.1.6.3.) | read-create | Metric | Integer32(0..'FFFFFF'h) | Host route cost. | Not supported |
| ospfv3HostRowStatus (1.3.6.1.2.1.191.1.6.4.) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Not supported |
| ospfv3HostAreaID (1.3.6.1.2.1.191.1.6.5.) | read-create | Ospfv3AreaIdTC | Unsigned32 (0..'FFFFFFF'h) | ID of the area to which the host route belongs. | Not supported |

ospfv3IfTable

About this table

This table contains OSPFv3 interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfv3IfIndex and ospfv3IfInstId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------------|---|---|---|
| ospfv3IfIndex (1.3.6.1.2.1.191.1.7.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Interface index. | As per the MIB. |
| ospfv3IfInstId (1.3.6.1.2.1.191.1.7.1.2) | not-accessible | Ospfv3IfInstIdTC | Unsigned32(0..255) | Interface instance ID. | As per the MIB. |
| ospfv3IfAreaId (1.3.6.1.2.1.191.1.7.1.3) | read-create | Ospfv3AreaIdTC | Unsigned32(0..'FFFFFFF'h) | Area ID. | Supports only the read operation. |
| ospfv3IfType (1.3.6.1.2.1.191.1.7.1.4) | read-create | INTEGER | broadcast(1), nbma(2), pointToPoint(3), pointToMultiPoint(5) | Interface type. | Supports read and write operations. Loopback interfaces do not support the write operation. |
| ospfv3IfAdminStatus (1.3.6.1.2.1.191.1.7.1.5) | read-create | Status | INTEGER{ enabled (1), disabled (2) } | Administrative state of the interface. | Supports only the read operation. |
| ospfv3IfRtrPriority (1.3.6.1.2.1.191.1.7.1.6) | read-create | DesignatedRouterPriority | Integer32(0..'FF'h) | DR priority of the interface. | Supports read and write operations. Loopback interfaces do not support the write operation. |
| ospfv3IfTransitDelay (1.3.6.1.2.1.191.1.7.1.7) | read-create | Ospfv3UpToRefreshIntervalTC | Unsigned32(1..1800) | LSA transmission delay. | Supports read and write operations. Loopback interfaces do not support the write operation. Value range: 1 to 1800. |
| ospfv3IfRetransInterval (1.3.6.1.2.1.191.1.7.1.8) | read-create | Ospfv3UpToRefreshIntervalTC | Unsigned32(1..1800) | Retransmission interval of the interface. | Supports read and write operations. Loopback interfaces do not support the write operation. Value range: 1 to 1800. |
| ospfv3IfHelloInterval (1.3.6.1.2.1.191.1.7.1.9) | read-create | HelloRange | Integer32(1..'FFFF'h) | Hello interval of the interface. | Supports read and write operations. Loopback interfaces do not support the write operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------------------|--|--|--|
| ospfv3IfRtrDeadInterval (1.3.6.1.2.1.191.1.7.1.10) | read-create | Ospfv3DeadIntervalRangeTC | Integer32(1..'FFFF'h) | Dead interval. | Supports read and write operations. Loopback interfaces do not support the write operation. When the value of ospfv3IfRtrDeadInterval is larger than 65535, this object returns 65535. |
| ospfv3IfPollInterval (1.3.6.1.2.1.191.1.7.1.11) | read-create | Unsigned32 | Standard MIB values. | Poll interval. | Supports read and write operations. Value range: 1 to 65535. Loopback interfaces do not support the write operation. |
| ospfv3IfState (1.3.6.1.2.1.191.1.7.1.12) | read-only | INTEGER | down(1), loopback(2), waiting(3), pointToPoint(4), designatedRouter(5), backupDesignatedRouter(6), otherDesignatedRouter(7), standby(8) | Interface state. | As per the MIB. |
| ospfv3IfDesignatedRouter (1.3.6.1.2.1.191.1.7.1.13) | read-only | Ospfv3RouteIdTC | Unsigned32(1..'FFFFFFF'h) | DR address. | As per the MIB. |
| ospfv3IfBackupDesignatedRouter (1.3.6.1.2.1.191.1.7.1.14) | read-only | Ospfv3RouteIdTC | Unsigned32(1..'FFFFFFF'h) | BDR address. | As per the MIB. |
| ospfv3IfEvents(1.3.6.1.2.1.191.1.7.1.15) | read-only | Counter32 | INTEGER(0..4294967295) | Number of interface state changes. | As per the MIB. |
| ospfv3IfRowStatus (1.3.6.1.2.1.191.1.7.1.16) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| ospfv3IfDemand (1.3.6.1.2.1.191.1.7.1.17) | read-create | TruthValue | true(1), false(2) | Whether the interface performs demand routing. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|-------------------------|---|--|
| ospfv3IfMetricValue (1.3.6.1.2.1.191.1.7.1.18) | read-create | Metric | Integer32(0.. 'FFFF'h) | Interface cost. | Supports read and write operations. Value range for loopback interfaces: 0 to 65535. Value range for other interfaces: 1 to 65535. |
| ospfv3IfLinkScopeLsaCount (1.3.6.1.2.1.191.1.7.1.19) | read-only | Gauge32 | INTEGER(0.. 4294967295) | Number of link-scope LSAs. | As per the MIB. |
| ospfv3IfLinkLsaCksumSum (1.3.6.1.2.1.191.1.7.1.20) | read-only | Unsigned32 | Standard MIB values. | LSA checksum. | As per the MIB. |
| ospfv3IfDemandNbrProbe (1.3.6.1.2.1.191.1.7.1.21) | read-create | TruthValue | true(1), false(2) | Whether neighbor probing is enabled. | Supports only the read operation. |
| ospfv3IfDemandNbrProbeRe transLimit (1.3.6.1.2.1.191.1.7.1.22) | read-create | Unsigned32 | Standard MIB values. | Number of neighbor probing times. | Supports only the read operation. |
| ospfv3IfDemandNbrProbeInt erval (1.3.6.1.2.1.191.1.7.1.23) | read-create | Unsigned32 | Standard MIB values. | Neighbor probing interval. | Supports only the read operation. |
| ospfv3IfTEDisabled (1.3.6.1.2.1.191.1.7.1.24) | read-create | TruthValue | true(1), false(2) | Whether TE is enabled on the interface. | Supports only the read operation. The value is fixed at false(2). |
| ospfv3IfLinkLSASuppression (1.3.6.1.2.1.191.1.7.1.25) | read-create | TruthValue | true(1), false(2) | Whether LSA suppression is enabled. | Supports only the read operation. The value is fixed at false(2). |

ospfv3VirtIfTable

About this table

This table contains OSPFv3 virtual interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfv3VirtIfAreaid and ospfv3VirtIfNeighbor.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------|--------------------------------|--|-----------------|
| ospfv3VirtIfAreaid (1.3.6.1.2.1.191.1.8.1.1) | not-accessible | Ospfv3Areal dTC | Unsigned32 (0.. 'FFFFFFF'h) | ID of the area to which the virtual interface belongs. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------------------------|---|---|---|
| ospfv3VirtIfNeighbor (1.3.6.1.2.1.191.1.8.1.2) | not-accessible | Ospfv3Route rIdTC | Unsigned32(1.. 'FFFFFFF'h) | Router ID of the virtual neighbor. | As per the MIB. |
| ospfv3VirtIfIndex (1.3.6.1.2.1.191.1.8.1.3) | read-only | InterfaceInde x | Integer32(1..2 147483647) | Virtual interface index. | As per the MIB. |
| ospfv3VirtIfInstId (1.3.6.1.2.1.191.1.8.1.4) | read-only | Ospfv3IfInstl dTC | Unsigned32(0.. .255) | Virtual interface instance ID. | As per the MIB. |
| ospfv3VirtIfTransitDelay (1.3.6.1.2.1.191.1.8.1.5) | read-create | Ospfv3UpTo RefreshInter valTC | Unsigned32 (1..1800) | Transmission delay of the virtual interface. | Supports read and write operations. Value range: 1 to 1800. |
| ospfv3VirtIfRetransInterv al (1.3.6.1.2.1.191.1.8.1.6) | read-create | Ospfv3UpTo RefreshInter valTC | Unsigned32 (1..1800) | Retransmission interval of the virtual interface. | Supports read and write operations. Value range: 1 to 1800. |
| ospfv3VirtIfHelloInterval (1.3.6.1.2.1.191.1.8.1.7) | read-create | HelloRange | Integer32(1..'F FFF'h) | Hello interval of the virtual interface. | Supports read and write operations. Value range: 1 to 8192. |
| ospfv3VirtIfRtrDeadInterv al (1.3.6.1.2.1.191.1.8.1.8) | read-create | Ospfv3Deadl ntervalRang eTC | Integer32(1..'F FFF'h) | Dead interval of the virtual interface. | Supports read and write operations. Default: 40. Value range: 1 to 32768. |
| ospfv3VirtIfState (1.3.6.1.2.1.191.1.8.1.9) | read-only | INTEGER | down(1), pointToPoint(4) | Virtual interface state. | As per the MIB. |
| ospfv3VirtIfEvents (1.3.6.1.2.1.191.1.8.1.10) | read-only | Counter32 | INTEGER(0..4 294967295) | Number of virtual interface state changes. | As per the MIB. |
| ospfv3VirtIfRowStatus (1.3.6.1.2.1.191.1.8.1.11) | read-create | RowStatus | active(1), notInService(2) notReady(3), createAndGo(4), createAndWait (5), destroy(6) | Row status. | Supports only the read operation. |
| ospfv3VirtIfLinkScopeLsa Count (1.3.6.1.2.1.191.1.8.1.12) | read-only | Gauge32 | INTEGER(0..4 294967295) | Number of link LSAs on the virtual interface. | As per the MIB. |
| ospfv3VirtIfLinkLsaCksu mSum (1.3.6.1.2.1.191.1.8.1.13) | read-only | Unsigned32 | Standard MIB values. | Sum of checksums in link-scope LSAs. | As per the MIB. |

ospfv3NbrTable

About this table

This table contains OSPFv3 neighbor information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfv3NbrIfIndex, ospfv3NbrIfInstId, and ospfv3NbrRtrId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|--|-----------------------------------|-----------------|
| ospfv3NbrIfIndex (1.3.6.1.2.1.191.1.9.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Egress interface index. | As per the MIB. |
| ospfv3NbrIfInstId (1.3.6.1.2.1.191.1.9.1.2) | not-accessible | Ospfv3IfInstIdTC | Unsigned32(0..255) | Egress interface instance ID. | As per the MIB. |
| ospfv3NbrRtrId (1.3.6.1.2.1.191.1.9.1.3) | not-accessible | Ospfv3RouterIdTC | Unsigned32(1..'FFFF'FFF'h) | Router ID of the neighbor. | As per the MIB. |
| ospfv3NbrAddressType (1.3.6.1.2.1.191.1.9.1.4) | read-only | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Neighbor address type. | As per the MIB. |
| ospfv3NbrAddress (1.3.6.1.2.1.191.1.9.1.5) | read-only | InetAddress | OCTET STRING(0..255) | Neighbor address. | As per the MIB. |
| ospfv3NbrOptions (1.3.6.1.2.1.191.1.9.1.6) | read-only | Integer32 | Standard MIB values. | Priority of the neighbor. | As per the MIB. |
| ospfv3NbrPriority (1.3.6.1.2.1.191.1.9.1.7) | read-only | DesignatedRouterPriority | Integer32(0..'FF'h) | Option field of the neighbor. | As per the MIB. |
| ospfv3NbrState (1.3.6.1.2.1.191.1.9.1.8) | read-only | INTEGER | down(1), attempt(2), init(3), twoWay(4), exchangeStart(5), exchange(6), loading(7), full(8) | Neighbor state. | As per the MIB. |
| ospfv3NbrEvents (1.3.6.1.2.1.191.1.9.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Number of neighbor state changes. | As per the MIB. |
| ospfv3NbrLsRetransQLen (1.3.6.1.2.1.191.1.9.1.10) | read-only | Gauge32 | INTEGER(0..4294967295) | Retransmission queue length. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------------|---|--|-----------------|
| ospfv3NbrHelloSuppressed (1.3.6.1.2.1.191.1.9.1.11) | read-only | TruthValue | true(1), false(2) | Whether hello packets are being suppressed to the neighbor. | As per the MIB. |
| ospfv3NbrIfId (1.3.6.1.2.1.191.1.9.1.12) | read-only | InterfaceIndex | Integer32(1..2147483647) | Neighbor interface ID. | As per the MIB. |
| ospfv3NbrRestartHelperStatus (1.3.6.1.2.1.191.1.9.1.13) | read-only | INTEGER | notHelping(1), helping(2) | Whether the router is acting as a GR helper for the neighbor. | As per the MIB. |
| ospfv3NbrRestartHelperAge (1.3.6.1.2.1.191.1.9.1.14) | read-only | Ospfv3UpToRefreshInterval | Unsigned32 (1..1800) | Remaining time of the GR interval when the router is acting as a GR helper for the neighbor. | As per the MIB. |
| ospfv3NbrRestartHelperExitReason (1.3.6.1.2.1.191.1.9.1.15) | read-only | INTEGER | none(1), inProgress(2), completed(3), timedOut(4), topologyChanged(5) | GR helper exit reason. | As per the MIB. |

ospfv3CfgrTable

About this table

This table contains OSPFv3 neighbor information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfv3CfgrIfIndex, ospfv3CfgrIfInstId, ospfv3CfgrAddressType, and ospfv3CfgrAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--------------------------|--|-----------------|
| ospfv3CfgrIfIndex (1.3.6.1.2.1.191.1.10.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Configured neighbor interface index. | As per the MIB. |
| ospfv3CfgrIfInstId (1.3.6.1.2.1.191.1.10.1.2) | not-accessible | Ospfv3IfInstId | Unsigned32(0..255) | Configured neighbor interface instance ID. | As per the MIB. |

| | | | | | |
|---|----------------|--------------------------|--|-----------------------------------|---|
| ospfv3CfgNbrAddressType (1.3.6.1.2.1.191.1.10.1.3) | not-accessible | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Configured neighbor address type. | As per the MIB. |
| ospfv3CfgNbrAddress (1.3.6.1.2.1.191.1.10.1.4) | not-accessible | InetAddress | OCTET STRING(0..255) | Configured neighbor address. | As per the MIB. |
| ospfv3CfgNbrPriority (1.3.6.1.2.1.191.1.10.1.5) | read-create | DesignatedRouterPriority | Integer32(0..FF'h) | Configured neighbor priority. | Supports read and write operations. Only neighbors on an NBMA network support the write operation. |
| ospfv3CfgNbrRowStatus (1.3.6.1.2.1.191.1.10.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

ospfv3VirtNbrTable

About this table

This table contains OSPFv3 virtual neighbor information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfv3VirtNbrArea and ospfv3VirtNbrRtrId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|-------------------------|---|-----------------|
| ospfv3VirtNbrArea (1.3.6.1.2.1.191.1.11.1.1) | not-accessible | Ospfv3AreaIdTC | Unsigned32(0..FFFFFF'h) | Area to which the virtual neighbor belongs. | As per the MIB. |
| ospfv3VirtNbrRtrId (1.3.6.1.2.1.191.1.11.1.2) | not-accessible | Ospfv3RouterIdTC | Unsigned32(1..FFFFFF'h) | Router ID of the virtual neighbor. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------------------|--|--|-----------------|
| ospfv3VirtNbrIfIndex (1.3.6.1.2.1.191.1.11.1.3) | read-only | InterfaceIndex | Integer32(1..2147483647) | Virtual interface index. | As per the MIB. |
| ospfv3VirtNbrIfInstId (1.3.6.1.2.1.191.1.11.1.4) | read-only | Ospfv3IfInstId TC | Unsigned32(0..255) | Virtual interface instance ID. | As per the MIB. |
| ospfv3VirtNbrAddressType (1.3.6.1.2.1.191.1.11.1.5) | read-only | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Virtual neighbor address type. | As per the MIB. |
| ospfv3VirtNbrAddress (1.3.6.1.2.1.191.1.11.1.6) | read-only | InetAddress | OCTET STRING(0..255) | Virtual neighbor address. | As per the MIB. |
| ospfv3VirtNbrOptions (1.3.6.1.2.1.191.1.11.1.7) | read-only | Integer32 | Standard MIB values. | Option field of the virtual neighbor. | As per the MIB. |
| ospfv3VirtNbrState (1.3.6.1.2.1.191.1.11.1.8) | read-only | INTEGER | down(1), attempt(2), init(3), twoWay(4), exchangeStart(5), exchange(6), loading(7), full(8) | State of the virtual neighbor. | As per the MIB. |
| ospfv3VirtNbrEvents (1.3.6.1.2.1.191.1.11.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Number of virtual neighbor state changes. | As per the MIB. |
| ospfv3VirtNbrLsRetransQLen (1.3.6.1.2.1.191.1.11.1.10) | read-only | Gauge32 | INTEGER(0..4294967295) | Retransmission queue length. | As per the MIB. |
| ospfv3VirtNbrHelloSuppressed (1.3.6.1.2.1.191.1.11.1.11) | read-only | TruthValue | true(1), false(2) | Whether hello packets are being suppressed to the virtual neighbor. | As per the MIB. |
| ospfv3VirtNbrIfId (1.3.6.1.2.1.191.1.11.1.12) | read-only | InterfaceIndex | Integer32(1..2147483647) | Neighbor interface ID. | As per the MIB. |
| ospfv3VirtNbrRestartHelperStatus (1.3.6.1.2.1.191.1.11.1.13) | read-only | INTEGER | notHelping(1), helping(2) | Whether the router is acting as a GR helper for the virtual neighbor. | As per the MIB. |
| ospfv3VirtNbrRestartHelperAge (1.3.6.1.2.1.191.1.11.1.14) | read-only | Ospfv3UpToRefreshIntervalTC | Unsigned32(1..1800) | Remaining time of the GR interval when the router is acting as a GR helper for the virtual neighbor. | As per the MIB. |
| ospfv3VirtNbrRestartHelperExitReason | read-only | INTEGER | none(1), inProgress | GR helper exit reason. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------|--------|--------|--|-------------|----------------|
| (1.3.6.1.2.1.191.1.11.1.15) | | | (2), completed(3), timedOut(4), topologyChanged(5) | | |

ospfv3AreaAggregateTable

About this table

This table contains information about configured OSPFv3 summary routes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ospfv3AreaAggregateAreaID, ospfv3AreaAggregateAreaLsdbType, ospfv3AreaAggregatePrefixType, ospfv3AreaAggregatePrefix, and ospfv3AreaAggregatePrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------------|--|---------------------------------------|------------------------|
| ospfv3AreaAggregateAreaID (1.3.6.1.2.1.191.1.12.1.1) | not-accessible | Ospfv3AreaIDTC | Unsigned 32 (0..FFFF FFFF'h) | Area where the summary route resides. | As per the MIB. |
| ospfv3AreaAggregateAreaLsdbType (1.3.6.1.2.1.191.1.12.1.2) | not-accessible | INTEGER | interAreaPrefixLsa (8195), nssaExternalLsa(8199) | LSA type. | As per the MIB. |
| ospfv3AreaAggregatePrefixType (1.3.6.1.2.1.191.1.12.1.3) | not-accessible | InetAddressType | unknown (0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Summary network address type. | As per the MIB. |
| ospfv3AreaAggregatePrefix (1.3.6.1.2.1.191.1.12.1.4) | not-accessible | InetAddress | OCTET STRING(0..16) | Summary network address. | As per the MIB. |
| ospfv3AreaAggregatePrefixLength (1.3.6.1.2.1.191.1.12.1.5) | not-accessible | InetAddressPrefixLength | Unsigned 32(3..128) | Summary network address length. | As per the MIB. |
| ospfv3AreaAggregateRowStat | read-create | RowStat | active(1), | Row status. | Supports only the read |

| | | | | | |
|--|-------------|-------------|--|--|-------------------------------------|
| us (1.3.6.1.2.1.191.1.12.1.6) | | us | notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | | operation. |
| ospfv3AreaAggregateEffect (1.3.6.1.2.1.191.1.12.1.7) | read-create | INTEGER | advertiseMatching(1), doNotAdvertiseMatching(2) | Whether subnets are included in the summary route. | Supports read and write operations. |
| ospfv3AreaAggregateRouteTag (1.3.6.1.2.1.191.1.12.1.8) | read-create | Unsigned 32 | Standard MIB values. | Tag information. | Supports read and write operations. |

ospfv3VirtLinkLsdbTable

About this table

This table contains OSPFv3 link-scope LSDB information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ospfv3VirtLinkLsdbIfAreaId, ospfv3VirtLinkLsdbIfNeighbor, ospfv3VirtLinkLsdbType, ospfv3VirtLinkLsdbRouterId, and ospfv3VirtLinkLsdbLsid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|-------------------------------|---|-----------------|
| ospfv3VirtLinkLsdbIfAreaId (1.3.6.1.2.1.191.1.13.1.1) | not-accessible | Ospfv3AreaIdTC | Unsigned 32 (0..'FFFF FFFF'h) | ID of the area to which the virtual link belongs. | As per the MIB. |
| ospfv3VirtLinkLsdbIfNeighbor(1.3.6.1.2.1.191.1.13.1.2) | not-accessible | Ospfv3RouterIdTC | Unsigned 32(1..'FFFFFFFF'h) | Router ID of the virtual neighbor. | As per the MIB. |
| ospfv3VirtLinkLsdbType (1.3.6.1.2.1.191.1.13.1.3) | not-accessible | Unsigned 32 | Unsigned 32(0..'FFFFFFFF'h) | LSA type. | As per the MIB. |
| ospfv3VirtLinkLsdbRouterId (1.3.6.1.2.1.191.1.13.1.4) | not-accessible | Ospfv3RouterIdTC | Unsigned 32(1..'FFFFFFFF'h) | Router ID of the device that generates the LSA. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|--|-----------------------------------|-----------------|
| | | C | h) | | |
| ospfv3VirtLinkLsdbLsid (1.3.6.1.2.1.191.1.13.1.5) | not-accessible | Ospfv3Ls IdTC | Unsigned 32 (1..'FFFF FFFF'h) | LSA LS ID. | As per the MIB. |
| ospfv3VirtLinkLsdbSequence(1.3. 6.1.2.1.191.1.13.1.6) | read-only | Ospfv3Ls aSequen ceTC | Integer32 | LSA sequence number. | As per the MIB. |
| ospfv3VirtLinkLsdbAge (1.3.6.1.2.1.191.1.13.1.7) | read-only | Ospfv3Ls aAgeTC | Unsigned 32 (0..3600) | LSA age. | As per the MIB. |
| ospfv3VirtLinkLsdbChecksum(1.3. 6.1.2.1.191.1.13.1.8) | read-only | Integer32 | Standard MIB values. | LSA checksum information. | As per the MIB. |
| ospfv3VirtLinkLsdbAdvertisement (1.3.6.1.2.1.191.1.13.1.9) | read-only | OCTET STRING | OCTET STRING(1..65535) | LSA advertisement content. | As per the MIB. |
| ospfv3VirtLinkLsdbTypeKnown (1.3.6.1.2.1.191.1.13.1.10) | read-only | TruthVal ue | true(1), false(2) | Whether the LSA type is known. | As per the MIB. |

Notifications

ospfv3VirtIfStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.1 | Virtual interface state changes. | Informational | - | - | ON |

Description

A notification sent when the state of a virtual interface changes to Point-to-Point or changes from Point-to-Point to another state. To reduce unnecessary notifications caused by virtual interface up events, no virtual interface state change notification will be sent within 2 times the dead interval since the virtual interface state changes to a value other than DOWN.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 virtif-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 virtif-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------------|-----------------------------|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.8.1.9 (ospfv3VirtIfState) | Virtual interface state. | No | INTEGER | down(1) pointToPoint(4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3NbrStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.2 | Neighbor state changes. | Informational | - | - | ON |

Description

For DR and BDR, this notification is sent when the state of a neighbor changes to FULL or changes from FULL to another state. For DRother, this notification is sent when the state of a neighbor changes to 2-way or changes from 2-way to another state.

To reduce unnecessary notifications caused by interface up events, no neighbor state change notification will be sent within 2 times the dead interval since the interface state changes to a value other than DOWN.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 neighbor-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 neighbor-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------------|-----------------------------|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------|-------|---------|---|
| 1.3.6.1.2.1.191.1.9.1.8 (ospfv3NbrState) | Neighbor state. | No | INTEGER | down(1) attempt(2) init(3) twoWay(4) exchangeStart(5) exchange(6) loading(7) full(8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check whether the interface state has changed.

ospfv3VirtNbrStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.3 | Virtual neighbor state changes. | Informational | - | - | ON |

Description

A notification sent when the state of a virtual neighbor changes to FULL or changes from FULL to another state. To reduce unnecessary notifications caused by virtual interface up events, no virtual neighbor state change notification will be sent within 2 times the dead interval since the virtual interface state changes to a value other than DOWN.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 virtneighbor-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 virtneighbor-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------------|--------------------------------|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------|-------|---------|---|
| 1.3.6.1.2.1.191.1.11.1.8 (ospfv3VirtNbrState) | Virtual neighbor state. | No | INTEGER | down(1) attempt(2) init(3) twoWay(4) exchangeStart(5) exchange(6) loading(7) full(8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3IfConfigError

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|--------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.4 | Interface configuration error. | Informational | - | - | ON |

Description

A notification sent when a non-virtual interface receives a packet from another router with mismatched configuration.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 if-cfg-error` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 if-cfg-error` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------------|-----------------------------|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------------|--|
| 1.3.6.1.2.1.191.1.7.1.12 (ospfv3IfState) | Interface state. | No | INTEGER | down(1) loopback(2) waiting(3) pointToPoint(4) designatedRouter(5) backupDesignatedRouter(6) otherDesignatedRouter(7) standby(8) |
| 1.3.6.1.2.1.191.1.14.3 (ospfv3PacketSrc) | IPv6 packet that cannot be identified by a neighbor. | No | InetAddressIPv6 | OCTET STRING (16) |
| 1.3.6.1.2.1.191.1.14.1 (ospfv3ConfigErrorType) | OSPFv3 configuration error type. | No | INTEGER | badVersion(1) areaMismatch(2) unknownNbmaNbr(3) unknownVirtualNbr(4) helloIntervalMismatch(5) deadIntervalMismatch(6) optionMismatch(7) mtuMismatch(8) duplicateRouterId(9) noError(10) |
| 1.3.6.1.2.1.191.1.14.2 (ospfv3PacketType) | OSPFv3 data packet type. | No | INTEGER | hello(1) dbDescript(2) IsReq(3) IsUpdate(4) IsAck(5) nullPacket(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the parameters configured on the interface are consistent with parameters in the hello packets.

ospfv3VirtIfConfigError

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.5 | Virtual interface configuration error. | Error | Warning | - | ON |

Description

A notification sent when a virtual interface receives a packet from another router with mismatched configuration.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 virtif-cfg-error` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 virtif-cfg-error` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------------|--|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.8.1.9 (ospfv3VirtIfState) | Virtual interface state. | No | INTEGER | down(1) pointToPoint(4) |
| 1.3.6.1.2.1.191.1.14.1 (ospfv3ConfigErrorType) | OSPFv3 configuration error type. | No | INTEGER | badVersion(1) areaMismatch(2) unknownNbmaNbr(3) unknownVirtualNbr(4) helloIntervalMismatch(5) deadIntervalMismatch(6) optionMismatch(7) mtuMismatch(8) duplicateRouterId(9) noError(10) |
| 1.3.6.1.2.1.191.1.14.2 (ospfv3PacketType) | OSPFv3 data packet type. | No | INTEGER | hello(1) dbDescript(2) lsReq(3) lsUpdate(4) lsAck(5) nullPacket(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the parameters configured on the interface are consistent with parameters in the hello packets.

ospfv3IfRxBadPacket

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.6 | A non-virtual interface receives an error packet. | Error | Warning | - | ON |

Description

A notification sent when a non-virtual interface receives an OSPFv3 packet that cannot be parsed.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 if-bad-pkt` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 if-bad-pkt` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------------|---|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.7.1.12 (ospfv3IfState) | Interface state. | No | INTEGER | down(1) loopback(2) waiting(3) pointToPoint(4) designatedRouter(5) backupDesignatedRouter(6) otherDesignatedRouter(7) standby(8) |
| 1.3.6.1.2.1.191.1.14.3 (ospfv3PacketSrc) | IPv6 packet that cannot be identified by the neighbor. | No | InetAddressIPv6 | OCTET STRING (16) |
| 1.3.6.1.2.1.191.1.14.2 (ospfv3PacketType) | OSPFv3 data packet type. | No | INTEGER | hello(1) dbDescript(2) IsReq(3) IsUpdate(4) IsAck(5) nullPacket(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the parameters configured on the interface are consistent with parameters in the hello packets.

ospfv3VirtIfRxBadPacket

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.7 | A virtual interface receives an error | Informational | - | - | ON |

| | | | | | |
|--|---------|--|--|--|--|
| | packet. | | | | |
|--|---------|--|--|--|--|

Description

A notification sent when a virtual interface receives an OSPFv3 packet that cannot be parsed.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 virtif-bad-pkt` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 virtif-bad-pkt` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------------|---|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.8.1.9 (ospfv3VirtIfState) | Virtual interface state. | No | INTEGER | down(1) pointToPoint(4) |
| 1.3.6.1.2.1.191.1.14.2 (ospfv3PacketType) | OSPFv3 data packet type. | No | INTEGER | hello(1) dbDescript(2) IsReq(3) IsUpdate(4) IsAck(5) nullPacket(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3IfStateChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.1 0 | Interface state changes. | Error | Warning | - | ON |

Description

A notification sent when the state of a non-virtual interface changes from DR to Down or changes to the Point-to-Point, DR, BDR, or Drother state.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 if-state-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 if-state-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------------|---|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.7.1.12 (ospfv3IfState) | Interface state. | No | INTEGER | down(1) loopback(2) waiting(3) pointToPoint(4) designatedRouter(5) backupDesignatedRouter(6) otherDesignatedRouter(7) standby(8) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3NssaTranslatorStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.1 1 | A router's ability to translate type-7 LSAs into type-5 LSAs changes. | Error | Warning | - | ON |

Description

A notification sent when a router's ability to translate type-7 LSAs into type-5 LSAs changes.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 nssatranslator-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 nssatranslator-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|------------------|---|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.2.1.12 (ospfv3AreaNssaTranslatorState) | Method for the NSSA ABR to become capable of translating Type-7 LSAs into Type-5 LSAs. | No | INTEGER | enabled(1) elected(2) disabled(3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3RestartStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|-----------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.1 2 | GR restarter state changes. | Error | Warning | - | ON |

Description

A notification sent when the GR restarter state changes.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 grrestarter-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 grrestarter-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------------------|--|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.1.18 (ospfv3RestartStatus) | GR restarter state. | No | INTEGER | notRestarting(1) plannedRestart(2) unplannedRestart(3) |
| 1.3.6.1.2.1.191.1.1.16 (ospfv3RestartInterval) | GR timeout interval. | No | Ospfv3UpToRefreshIntervalTC | Unsigned32 (40..1800) |

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------|---|
| 1.3.6.1.2.1.191.1.1.20 (ospfv3RestartExitReason) | Reason why the device exited GR restarter state. | No | INTEGER | none(1) inProgress(2) completed(3) timedOut(4) topologyChanged(5) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3NbrRestartHelperStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.13 | The GR helper state of a neighbor changes. | Error | Warning | - | ON |

Description

A notification sent when a neighbor enters or exits GR helper state.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 grhelper-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 grhelper-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------------------|-----------------------------|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.9.1.13 (ospfv3NbrRestartHelperStatus) | GR helper state of the neighbor. | No | INTEGER | notHelping(1) helping(2) |
| 1.3.6.1.2.1.191.1.9.1.14 (ospfv3NbrRestartHelperAge) | GR helper aging timer. | No | Ospfv3UpToRefreshIntervalTC | Unsigned32 (1..1800) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------|---|
| 1.3.6.1.2.1.191.1.9.1.15 (ospfv3NbrRestartHelperExit Reason) | Reason why the neighbor exited GR helper state. | No | INTEGER | none(1) inProgress(2) completed(3) timedOut(4) topologyChanged(5) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

ospfv3VirtNbrRestartHelperStatusChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|--|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.191.0.14 | The GR helper state of a virtual neighbor changes. | Error | Warning | - | ON |

Description

A notification sent when a virtual neighbor enters or exits GR helper state.

Status control

ON

CLI: Use the `snmp-agent trap enable ospfv3 virtgrhelper-status-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable ospfv3 virtgrhelper-status-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------------------------|-----------------------------|
| 1.3.6.1.2.1.191.1.1.1 (ospfv3RouterId) | Unique identifier of a router in an AS. | No | Ospfv3RouterIdTC | Unsigned32 (1..'FFFFFFFF'h) |
| 1.3.6.1.2.1.191.1.11.1.13 (ospfv3VirtNbrRestartHelper Status) | GR helper state of the virtual neighbor. | No | INTEGER | notHelping(1) helping(2) |
| 1.3.6.1.2.1.191.1.11.1.14 (ospfv3VirtNbrRestartHelper Age) | Remaining time of the GR interval when the router is acting as a GR helper for the virtual neighbor. | No | Ospfv3UpToRefres hIntervalTC | Unsigned32 (1..1800) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------|---|
| 1.3.6.1.2.1.191.1.11.1.15 (ospfv3VirtNbrRestartHelperExitReason) | Reason why the virtual neighbor exited GR helper state. | No | INTEGER | none(1) inProgress(2) completed(3) timedOut(4) topologyChanged(5) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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RIPv2-MIB

About this MIB

Use this table to obtain RIPv2 interface statistics information, interface configuration information, and neighbor information.

MIB file name

rfc1724-rip.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).rip2(23)

Scalar objects

rip2GlobalRouteChanges

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--------------------------|-----------------|
| rip2GlobalRouteChanges (1.3.6.1.2.1.23.1.1) | read-only | Counter32 | INTEGER(0..4294967295) | Number of route changes. | As per the MIB. |

rip2GlobalQueries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|--------------------------|-----------------|
| rip2GlobalQueries (1.3.6.1.2.1.23.1.2) | read-only | Counter32 | INTEGER(0..4294967295) | Number of RIP responses. | As per the MIB. |

Tabular objects

rip2IfStatTable

About this table

This table contains interface statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is rip2IfStatAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|-----------------------------------|-----------------------------------|
| rip2IfStatAddress (1.3.6.1.2.1.23.2.1.1) | read-only | IpAddress | OCTET STRING (4) | Interface IP address. | As per the MIB. |
| rip2IfStatRcvBadPackets (1.3.6.1.2.1.23.2.1.2) | read-only | Counter32 | INTEGER(0..4294967295) | Number of received bad packets. | As per the MIB. |
| rip2IfStatRcvBadRoutes (1.3.6.1.2.1.23.2.1.3) | read-only | Counter32 | INTEGER(0..4294967295) | Number of received bad routes. | As per the MIB. |
| rip2IfStatSentUpdates (1.3.6.1.2.1.23.2.1.4) | read-only | Counter32 | INTEGER(0..4294967295) | Number of triggered updates sent. | As per the MIB. |
| rip2IfStatStatus (1.3.6.1.2.1.23.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Interface state. | Supports only the read operation. |

rip2IfConfTable

About this table

This table contains interface configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is rip2IfConfAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|---|--------------------------|-----------------------------------|
| rip2IfConfAddress (1.3.6.1.2.1.23.3.1.1) | read-only | IpAddress | OCTET STRING (4) | Interface IP address. | As per the MIB. |
| rip2IfConfDomain (1.3.6.1.2.1.23.3.1.2) | read-create | RouteTag | OCTET STRING (2) | Route tag in the packet. | Supports only the read operation. |
| rip2IfConfAuthType (1.3.6.1.2.1.23.3.1.3) | read-create | INTEGER | noAuthentication (1), simplePassword (2), md5 (3) | Authentication mode. | Supports only the read operation. |
| rip2IfConfAuthKey (1.3.6.1.2.1.23.3.1.4) | read-create | OCTET STRING | OCTET STRING (0..16) | Authentication key. | Supports only the read operation. |
| rip2IfConfSend (1.3.6.1.2.1.23.3.1.5) | read-create | INTEGER | doNotSend (1), | Version of sent packets. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|--|--------------------------------------|
| | | | ripVersion1 (2), rip1Compatible (3), ripVersion2 (4), ripV1Demand (5), ripV2Demand (6) | | |
| rip2IfConfReceive (1.3.6.1.2.1.23.3.1.6) | read-create | INTEGER | rip1 (1), rip2 (2), rip1OrRip2 (3), doNotRecieve (4) | Version of received packets. | Supports only the read operation. |
| rip2IfConfDefaultMetric (1.3.6.1.2.1.23.3.1.7) | read-create | INTEGER | INTEGER(0..15) | Default cost of redistributed routes. | Supports only the read operation. |
| rip2IfConfStatus (1.3.6.1.2.1.23.3.1.8) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Interface state. | Supports only the read operation. |
| rip2IfConfSrcAddress (1.3.6.1.2.1.23.3.1.9) | read-create | IpAddress | OCTET STRING (4) | Packet source IP address. | Supports only the read operation. |

rip2PeerTable

About this table

This table contains neighbor information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are rip2PeerAddress and rip2PeerDomain.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---------------------|-----------------------------|-----------------|
| rip2PeerAddress (1.3.6.1.2.1.23.4.1.1) | read-only | IpAddress | OCTET STRING (4) | Neighbor IP address. | As per the MIB. |
| rip2PeerDomain (1.3.6.1.2.1.23.4.1.2) | read-only | RouteTag | OCTET STRING (2) | Route tag in the packet. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|--|-----------------|
| rip2PeerLastUpdate (1.3.6.1.2.1.23.4.1.3) | read-only | TimeTicks | Standard MIB values. | Time when the most recent update was received from the neighbor. | As per the MIB. |
| rip2PeerVersion (1.3.6.1.2.1.23.4.1.4) | read-only | INTEGER | INTEGER(0..255) | Version of the most recent packet received from the neighbor. | As per the MIB. |
| rip2PeerRcvBadPackets (1.3.6.1.2.1.23.4.1.5) | read-only | Counter32 | INTEGER(0..4294967295) | Number of received bad packets. | As per the MIB. |
| rip2PeerRcvBadRoutes (1.3.6.1.2.1.23.4.1.6) | read-only | Counter32 | INTEGER(0..4294967295) | Number of received bad routes. | As per the MIB. |

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HH3C-LswIGSP-MIB

About this MIB

IGMP snooping runs on a Layer 2 device as a multicast constraining mechanism to improve multicast forwarding efficiency. When IGMP snooping is not enabled, the Layer 2 switch floods multicast packets to all hosts in a VLAN or VSI. When IGMP snooping is enabled, the Layer 2 switch forwards multicast packets of known multicast groups to only the receivers. In addition to this basic function, Comware implements the following IGMP management and control functions:

- Limit the number of multicast groups that hosts attached to a switch port can join.
- Control the enabling status of fast-leaving on a switch port.
- Control the multicast groups that hosts can join by using an ACL that specifies the multicast groups and the optional sources.

IGMP snooping MIBs are private MIBs used to manage IGMP snooping. This module defines MIB variables corresponding to the parameters and status for the above IGMP management and control functions and combines them to private IGMP snooping MIBs. This module also supports Get and Getnext operations for MIB variables newly added to the IGMP snooping module deployed by the agent.

MIB file name

hh3c-splat-igsp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3clswCommon(35).hh3cLswIgmppsnoopingMib(7)

Scalar objects

hh3clgmpSnoopingStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------------|--|----------------------------------|--------------------|
| hh3clgmpSnoopingStatus (1.3.6.1.4.1.25506.8.35.7.1.1) | read-write | EnabledStatus | INTEGER { enabled(1), disabled(2) } | Enable or disable IGMP snooping. | Default: Disabled. |

hh3clgmpSnoopingRouterPortAge

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|------------------|-------------------------------------|--|
| hh3clgmpSnoopingRouterPortAge (1.3.6.1.4.1.25506.8.35.7.1.2) | read-write | INTEGER | INTEGER(1..1000) | Set the aging time of router ports. | Default: 260. The return value is 260 when the actual value is greater than 1000. |

hh3clgmpSnoopingResponseTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|----------------|--------------------------------------|---|
| hh3clgmpSnoopingResponseTime (1.3.6.1.4.1.25506.8.35.7.1.3) | read-write | INTEGER | INTEGER(1..25) | Set the maximum query response time. | As per the MIB. The return value is 25 when the actual value is greater than 25. |

hh3clgmpSnoopingHostTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--------------------|---|---|
| hh3clgmpSnoopingHostTime (1.3.6.1.4.1.25506.8.35.7.1.4) | read-write | INTEGER | INTEGER(200..1000) | Set the aging time of the multicast group port. | As per the MIB. The return value is 1000 when the actual value is greater than 1000. The return value is 200 when the actual value is greater than 200. |

hh3clgmpSnoopingNonFloodingStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|--|--|---|
| hh3clgmpSnoopingNonFloodingStatus (1.3.6.1.4.1.25506.8.35.7.1.8) | read-write | EnabledStatus | INTEGER { enabled(1), disabled(2) } | Configure to disable multicast flooding when no member exists in the designated group. | Implementation varies by product. Default: Disabled. |

hh3cRecvIGMPGQueryNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--|---|
| hh3cRecvIGMPGQueryNum (1.3.6.1.4.1.25506.8.35.7.1.10.1) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of IGMP general query packets received on the device. | Globally disabling or enabling IGMP snooping will initialize IGMP snooping data packet statistics collection. |

hh3cRecvIGMPSQueryNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|-----------------------------------|-------------------------------------|
| hh3cRecvIGMPSQueryNum (1.3.6.1.4.1.25506.8.35.7.1.10.2) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of IGMP specific query | Globally disabling or enabling IGMP |

| | | | | | |
|----|--|--|---------|---------------------------------|---|
| 2) | | | 967295) | packets received on the device. | snooping will initialize IGMP snooping data packet statistics collection. |
|----|--|--|---------|---------------------------------|---|

hh3cRecvIGMPV1ReportNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|---|---|
| hh3cRecvIGMPV1ReportNum (1.3.6.1.4.1.25506.8.35.7.1.10.3) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of IGMPv1 report packets received on the device. | Globally disabling or enabling IGMP snooping will initialize IGMP snooping data packet statistics collection. |

hh3cRecvIGMPV2ReportNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|---|---|
| hh3cRecvIGMPV2ReportNum (1.3.6.1.4.1.25506.8.35.7.1.10.4) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of IGMPv2 report packets received on the device. | Globally disabling or enabling IGMP snooping will initialize IGMP snooping data packet statistics collection. |

hh3cRecvIGMPLeaveNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|--|---|
| hh3cRecvIGMPLeaveNum (1.3.6.1.4.1.25506.8.35.7.1.10.5) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of IGMP leave packets received on the device. | Globally disabling or enabling IGMP snooping will initialize IGMP snooping data packet statistics collection. |

hh3cRecvErrorIGMPPacketNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|--|---|
| hh3cRecvErrorIGMPPacketNum (1.3.6.1.4.1.25506.8.35.7.1.10.6) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of error IGMP packets received on the device. | Globally disabling or enabling IGMP snooping will initialize IGMP snooping data packet statistics collection. |

hh3cSentIGMPQueryNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|---|---|
| hh3cSentIGMPQueryNum (1.3.6.1.4.1.25506.8.35.7.1.10.7) | read-only | Counter32 | INTEGER(0..4294967295) | Statistics of IGMP specific query packets sent from the device. | Globally disabling or enabling IGMP snooping will initialize IGMP snooping data packet statistics collection. |

hh3clgmpSnoopingClearStats

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|---------------------------------------|-----------------|
| hh3clgmpSnoopingClearStats (1.3.6.1.4.1.25506.8.35.7.1.10.8) | read-write | INTEGER | INTEGER { clear(1), counting(2) } | Clear the statistics of IGMP packets. | As per the MIB. |

Tabular objects

hh3clgmpSnoopingVlanStatusTable

About this table

Use this table to enable or disable IGMP snooping in a VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3clgmpSnoopingVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|--|--|-----------------|
| hh3clgmpSnoopingVlanID (1.3.6.1.4.1.25506.8.35.7.1.9.1.1) | not-accessible | Integer32 | Integer32(1..4094) | An index uniquely identifies on which VLAN IGMP snooping is enabled or disabled. | As per the MIB. |
| hh3clgmpSnoopingVlanEnabled (1.3.6.1.4.1.25506.8.35.7.1.9.1.2) | read-write | EnabledStatus | INTEGER { enabled(1), disabled(2) } | Whether IGMP snooping is enabled in the VLAN. | As per the MIB. |

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HH3C-MPM-MIB

About this MIB

The hh3cHostStaticJoinTable table was added to this MIB to configure a host as a static member of a multicast group.

MIB file name

hh3c-mpm.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMpm(51)

Scalar objects

hh3cMPortGroupLimitMinNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|---------------------------------------|
| hh3cMPortGroupLimitMinNumber (1.3.6.1.4.1.25506.2.51.1.1) | read-only | Unsigned32 | Standard MIB values. | Minimum number of groups that a port can join. | The value of this object is always 0. |

hh3cMPortGroupLimitMaxNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|--|
| hh3cMPortGroupLimitMaxNumber (1.3.6.1.4.1.25506.2.51.1.2) | read-only | Unsigned32 | Standard MIB values. | Maximum number of groups that a port can join. | The value of this object is always 4294967295. |

Tabular objects

hh3cMPortGroupJoinTable

About this table

Use this table to configure a port in a VLAN to join a multicast group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex, hh3cMPortGroupJoinVlanID, hh3cMPortGroupJoinAddressType, and hh3cMPortGroupJoinAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|--|---|
| hh3cMPortGroupJoinVlanID (1.3.6.1.4.1.25506.2.51.2.1.1.1) | not-accessible | Integer32 | Standard MIB values. | An index uniquely identifying a port in a VLAN which joined the multicast group. | As per the MIB. |
| hh3cMPortGroupJoinAddressType (1.3.6.1.4.1.25506.2.51.2.1.1.2) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Type of the multicast group address. | As per the MIB. |
| hh3cMPortGroupJoinAddress (1.3.6.1.4.1.25506.2.51.2.1.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | Address of the multicast group. It must be a valid multicast IP address. | As per the MIB. |
| hh3cMPortGroupJoinStatus (1.3.6.1.4.1.25506.2.51.2.1.1.4) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

hh3cMPortGroupTable

About this table

This table contains information about the status of a port which joined a multicast group in a VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3cMPortGroupVlanID, hh3cMPortGroupAddressType, and hh3cMPortGroupAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-------------------------------------|---|-----------------|
| hh3cMPortGroupVlanID (1.3.6.1.4.1.25506.2.51.2.2.1.1) | not-accessible | Integer32 | Standard MIB values. | An index uniquely identifies that a port belongs to a specified VLAN. | As per the MIB. |
| hh3cMPortGroupAddressType (1.3.6.1.4.1.25506.2.51.2.2.1.2) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), | Type of the multicast group address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|--------------------------|------------------------------------|-----------------|
| | | | ipv6(2), dns(16) } | | |
| hh3cMPortGroup Address (1.3.6.1.4.1.25506 .2.51.2.2.1.3) | read-only | InetAddress | OCTET STRING (0..255) | Address of the multicast group. | As per the MIB. |

hh3cMPortConfigEntry

About this table

This table contains information about the fast-leaving status, group limit number, and group policy parameters of a port in a VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and hh3cMPortConfigVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|--|--|
| hh3cMPortConfig VlanID (1.3.6.1.4.1.25506 .2.51.2.3.1.1) | not-accessible | Integer32 | Standard MIB values. | An index uniquely identifies that a port belongs to a specified VLAN. | As per the MIB. |
| hh3cMPortGroupL imitNumber (1.3.6.1.4.1.25506 .2.51.2.3.1.2) | read-create | Unsigned32 | Standard MIB values. | Maximum number of groups that a port can join. | As per the MIB. |
| hh3cMPortFastLe aveStatus (1.3.6.1.4.1.25506 .2.51.2.3.1.3) | read-create | EnabledStatus | INTEGER{ enabled(1), disabled(2) } | Fast-leaving status of the port. | As per the MIB. |
| hh3cMPortGroup PolicyParameter (1.3.6.1.4.1.25506 .2.51.2.3.1.4) | read-create | Integer32 | Integer32(0 2000.. 2999) | ACL number which is used as the group policy of the port. | As per the MIB. |
| hh3cMPortConfig RowStatus (1.3.6.1.4.1.25506 .2.51.2.3.1.5) | read-create | RowStatus | active(1), notReady(3), createAndGo(4), destroy(6) | Row status. | Supports only the following values: destroy(6), notReady(3),, createAndGo(4), and destroy(6). |
| hh3cMPortGroupL imitReplace (1.3.6.1.4.1.25506 .2.51.2.3.1.6) | read-create | EnabledStatus | INTEGER{ enabled(1), disabled(2) } | This object is related to the object hh3cMPortGroupL imitNumber. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------|--------|--------|------------------|--|----------------|
| .2.51.2.3.1.6) | | | disabled(2) } | imitNumber. If the current IGMP group number is less than the value of hh3cMPortGroupL imitNumber, any new IGMP group is permitted. | |

hh3cHostStaticJoinTable

About this table

Use this table to configure a host on a port in a VLAN statically to join a multicast group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are ifIndex, hh3cHostStaticJoinVlanID, hh3cHostStaticJoinAddressType, and hh3cHostStaticJoinAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|--|--|
| hh3cHostStaticJoinVlanID (1.3.6.1.4.1.25506.2.51.2.4.1.1) | not-accessible | Integer32 | Standard MIB values. | An index uniquely identifies the VLAN in which a host on a port statically joined a multicast group. | As per the MIB. |
| hh3cHostStaticJoinAddressType (1.3.6.1.4.1.25506.2.51.2.4.1.2) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Type of the multicast group address. | As per the MIB. |
| hh3cHostStaticJoinAddress (1.3.6.1.4.1.25506.2.51.2.4.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | Address of the multicast group. | As per the MIB. |
| hh3cHostStaticJoinStatus (1.3.6.1.4.1.25506.2.51.2.4.1.4) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports only the following values: createAndGo(4), active(1), and destroy(6). |

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HH3C-MULTICAST-SNOOPING-MIB

About this MIB

Multicast snooping runs on a Layer 2 device as a multicast constraining mechanism to improve multicast forwarding efficiency. It creates Layer 2 multicast forwarding entries from IGMP or MLD packets that are exchanged between the hosts and the Layer 3 device.

Use this MIB to manage IGMP snooping and MLD snooping.

MIB file name

hh3c-multicast-snooping.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMulticastSnoop(123)

Tabular objects

hh3cMcsGlobalConfigTable

About this table

This table contains the global configuration of IGMP or MLD snooping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cMcsGlbSnoopingType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|---|--|
| hh3cMcsGlbSnoopingType (1.3.6.1.4.1.25506.2.123.1.1.1.1) | not-accessible | InetAddressType | IPv4: IGMP snooping IPv6: MLD snooping | Type of the global configuration. | As per the MIB. |
| hh3cMcsGlbRowStatus (1.3.6.1.4.1.25506.2.123.1.1.1.2) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |
| hh3cMcsGlbEntryLimit (1.3.6.1.4.1.25506.2.123.1.1.1.3) | read-create | Unsigned32 | Standard MIB values. | Global maximum number of IGMP or MLD snooping forwarding entries. | As per the MIB. |
| hh3cMcsGlbHostAgingTime (1.3.6.1.4.1.25506.2.123.1.1.1.4) | read-create | Unsigned32 | Unsigned32 (1..8097894) | Global aging time of the multicast | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|-------------------------|--|--|
| .4.1.25506.2.123.1.1.1.4) | | | | group on ports. | |
| hh3cMcsGlbMaxResponseTime(1.3.6.1.4.1.25506.2.123.1.1.1.5) | read-create | Unsigned32 | Unsigned32(1..3174) | Global maximum query response time. | As per the MIB. |
| hh3cMcsGlbRouterAgingTime(1.3.6.1.4.1.25506.2.123.1.1.1.6) | read-create | Unsigned32 | Unsigned32 (1..8097894) | Global aging time of router ports. | As per the MIB. |
| hh3cMcsGlbLastMemQryInterval(1.3.6.1.4.1.25506.2.123.1.1.1.7) | read-create | Unsigned32 | Unsigned32(1..25) | Global last member query interval. | As per the MIB. |
| hh3cMcsGlbDropUnknownEnabled(1.3.6.1.4.1.25506.2.123.1.1.1.8) | read-create | TruthValue | true(1), false(2) | Whether the feature of dropping unknown packets is enabled globally. | Implementation varies by product. Default: Disabled. |

hh3cMcsVirtualUnitConfigTable

About this table

This table contains IGMP or MLD snooping settings for a virtual unit (VLAN or VSI).

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cMcsVUType, hh3cMcsVUID, and hh3cMcsVUSnoopingType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------|---|-------------------------------------|--|
| hh3cMcsVUType (1.3.6.1.4.1.25506.2.123.1.2.1.1) | not-accessible | Hh3cVirtualUnitType | INTEGER{ vlan(1), vsi(2) } | Type of a virtual unit. | As per the MIB. |
| hh3cMcsVUID (1.3.6.1.4.1.25506.2.123.1.2.1.2) | not-accessible | Unsigned32, | Standard MIB values. | VLAN ID or VSI Index. | As per the MIB. |
| hh3cMcsVUSnoopingType(1.3.6.1.4.1.25506.2.123.1.2.1.3) | not-accessible | InetAddressType | IPv4: igmp snooping IPv6: mld snooping | Type of the snooping configuration. | As per the MIB. |
| hh3cMcsVURowStatus (1.3.6.1.4.1.25506.2.123.1.2.1.4) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|-------------------------|--|--|
| hh3cMcsVUHostAgingTime(1.3.6.1.4.1.25506.2.123.1.2.1.5) | read-create | Unsigned32 | Unsigned32 (0..8097894) | Aging time of the multicast group on ports in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUMaxResponseTime(1.3.6.1.4.1.25506.2.123.1.2.1.6) | read-create | Unsigned32 | Unsigned32(0..3174) | Maximum query response time in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVURouterAgingTime(1.3.6.1.4.1.25506.2.123.1.2.1.7) | read-create | Unsigned32 | Unsigned32 (0..8097894) | Aging time of the router port in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVULastMemberQryInterval(1.3.6.1.4.1.25506.2.123.1.2.1.8) | read-create | Unsigned32 | Unsigned32(0..25) | Last member query interval in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUDropUnknownEnabled(1.3.6.1.4.1.25506.2.123.1.2.1.9) | read-create | TruthValue | true(1), false(2) | Whether the feature of dropping unknown packets is enabled in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUPimSnoopingEnabled(1.3.6.1.4.1.25506.2.123.1.2.1.10) | read-create | TruthValue | true(1), false(2) | Whether PIM snooping is enabled in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUVersion(1.3.6.1.4.1.25506.2.123.1.2.1.11) | read-create | Unsigned32 | 2 3 | Version of IGMP or MLD snooping that is running on the VLAN or VSI. | As per the MIB. <ul style="list-style-type: none"> • 2—IGMPv2 snooping or MLDV1 snooping. • 3—IGMPv3 snooping or MLDv2 snooping. |
| hh3cMcsVUQuerierEnabled(1.3.6.1.4.1.25506.2.123.1.2.1.12) | read-create | TruthValue | true(1), false(2) | Whether the querier feature is enabled in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUQuerierInterval(1.3.6.1.4.1.25506.2.123.1.2.1.13) | read-create | Unsigned32 | Unsigned32(2..31744) | General query interval in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUGeneQuerierSourceAddress(1.3.6.1.4.1.25506.2.123.1.2.1.14) | read-create | InetAddress | OCTET STRING (0..255) | Source IP address of IGMP or MLD general query packets. | As per the MIB. |
| hh3cMcsVUSpecQuerierSourceAddress(1.3.6.1.4.1.25506.2.123.1.2.1.15) | read-create | InetAddress | OCTET STRING (0..255) | Source IP address of IGMP or MLD group-specific query packets. | As per the MIB. |
| hh3cMcsVULeaveSourceAddress(1.3.6.1.4.1.25506.2.123.1.2.1.16) | read-create | InetAddress | OCTET STRING (0..255) | Source IP address of IGMP or MLD leave packets. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|-----------------------|---|-----------------|
| 123.1.2.1.16) | | | | | |
| hh3cMcsVUReportSourceAddress(1.3.6.1.4.1.25506.2.123.1.2.1.17) | read-create | InetAddress | OCTET STRING (0..255) | Source IP address of IGMP or MLD report packets. | As per the MIB. |
| hh3cMcsVUProxyEnabled(1.3.6.1.4.1.25506.2.123.1.2.1.18) | read-create | TruthValue | true(1), false(2) | Whether the proxy feature is enabled in the VLAN or VSI. | As per the MIB. |
| hh3cMcsVUQuerierElection(1.3.6.1.4.1.25506.2.123.1.2.1.19) | read-create | TruthValue | true(1), false(2) | Whether the querier election feature is enabled in the VLAN or VSI. | As per the MIB. |

hh3cMcsL2EntryTable

About this table

This table containing a list of Layer 2 multicast group entries in a VLAN or VSI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cMcsL2EntryVUType, hh3cMcsL2EntryVUID, hh3cMcsL2EntryAddressType, hh3cMcsL2EntryGroupAddress, hh3cMcsL2EntrySourceAddress, and hh3cMcsL2EntryIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------|---|---|-----------------|
| hh3cMcsL2EntryVUType (1.3.6.1.4.1.25506.2.123.1.3.1.1) | not-accessible | Hh3cVirtualUnitType | INTEGER{ vlan(1), vsi(2) } | Type of a virtual unit. | As per the MIB. |
| hh3cMcsL2EntryVUID (1.3.6.1.4.1.25506.2.123.1.3.1.2) | not-accessible | Unsigned32, | Standard MIB values. | VLAN ID or VSI index. | As per the MIB. |
| hh3cMcsL2EntryAddressType(1.3.6.1.4.1.25506.2.123.1.3.1.3) | not-accessible | InetAddressType | IPv4: IGMP snooping IPv6: MLD snooping | Type of the multicast group address. | As per the MIB. |
| hh3cMcsL2EntryGroupAddress(1.3.6.1.4.1.25506.2.123.1.3.1.4) | not-accessible | InetAddress | OCTET STRING (0..255) | Address of the multicast group which the port joined. | As per the MIB. |
| hh3cMcsL2EntrySourceAddress(1.3.6.1.4.1.25506.2.123.1.3.1.5) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the unicast source which the port | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--|---------------------------------------|-----------------|
| 23.1.3.1.5) | | | | joined. | |
| hh3cMcsL2EntryIfIndex(1.3.6.1.4.1.25506.2.123.1.3.1.6) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an outgoing interface. | As per the MIB. |
| hh3cMcsL2EntryPortType(1.3.6.1.4.1.25506.2.123.1.3.1.7) | read-only | INTEGER | interface(1), ac(2), npw(3), upw(4), trill(5), tunnel(6), mtunnel(7) | Type of the outgoing interface. | As per the MIB. |
| hh3cMcsL2EntryPortAttribute(1.3.6.1.4.1.25506.2.123.1.3.1.8) | read-only | BITS | BITS { d(0), s(1), p(2), k(3), r(4), w(5), b(6), e(7), de(8), ee(9), suc(10), f(11) } | Attributes of the outgoing interface. | As per the MIB. |

hh3cMcsPacketStatisticsTable

About this table

This table contains IGMP or MLD packets statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cMcsStatisticsSnoopingType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|-------------------------------------|-----------------|
| hh3cMcsStatisticsSnoopingType(1.3.6.1.4.1.25506.2.123.1.4.1.1) | not-accessible | InetAddressType | IPv4: IGMP Snooping IPv6: MLD Snooping | Type of the snooping configuration. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| hh3cMcsRxGeneryQueryNum(1.3.6.1.4.1.25506.2.123.1.4.1.2) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMP or MLD general query packets received on the device. | As per the MIB. |
| hh3cMcsRxV2SpecificQueryNum(1.3.6.1.4.1.25506.2.123.1.4.1.3) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv2 or MLDv1 group-specific query packets received on the device. | As per the MIB. |
| hh3cMcsRxV3SpecificQueryNum(1.3.6.1.4.1.25506.2.123.1.4.1.4) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv3 or MLDv2 group-specific query packets received on the device. | As per the MIB. |
| hh3cMcsRxV1ReportNum(1.3.6.1.4.1.25506.2.123.1.4.1.5) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv1 report packets received on the device. | As per the MIB. |
| hh3cMcsRxV2ReportNum(1.3.6.1.4.1.25506.2.123.1.4.1.6) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv2 or MLDv1 report packets received on the device. | As per the MIB. |
| hh3cMcsRxV3ReportNum(1.3.6.1.4.1.25506.2.123.1.4.1.7) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv3 or MLDv2 report packets received on the device. | As per the MIB. |
| hh3cMcsRxV3ErrCorReportNum(1.3.6.1.4.1.25506.2.123.1.4.1.8) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv3 or MLDv2 report packets with correct and incorrect records received on the device. | As per the MIB. |
| hh3cMcsRxLeaveNum(1.3.6.1.4.1.25506.2.123.1.4.1.9) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of leave packets received on the device. | As per the MIB. |
| hh3cMcsRxPimHelloNum(1.3.6.1.4.1.25506.2.123.1.4.1.10) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of PIM hello packets received on the device. | As per the MIB. |
| hh3cMcsRxErrorPacketNum(1.3.6.1.4.1.25506.2.123.1.4.1.11) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of error IGMP or MLD packets received on the device. | As per the MIB. |
| hh3cMcsTxV2SpecificQueryNum(1.3.6.1.4.1.25506.2.123.1.4.1.12) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv2 or MLDv1 group-specific query packets sent from the device. | As per the MIB. |
| hh3cMcsTxV3Spe | read-only | Counter64 | INTEGER(0..1844 | Number of | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|-----------------|
| cificQueryNum(1.3.6.1.4.1.25506.2.123.1.4.1.13) | | | 6744073709551615) | IGMPv3 or MLDv2 group-specific query packets sent from the device. | |
| hh3cMcsTxV3SpecificSGQueryNum(1.3.6.1.4.1.25506.2.123.1.4.1.14) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of IGMPv3 or MLDv2 group-and-source-specific query packets sent from the device. | As per the MIB. |

hh3cMcsPortJoinGroupConfigTable

About this table

This table contains settings of a port configured as a simulated member host for a multicast group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|-------------|-----------|-----------|
| Supported only when global IGMP or MLD snooping is enabled. | Supported | Supported | Supported |

Columns

The table indexes are hh3cMcsPortJoinGroupIfIndex, hh3cMcsPortJoinGroupSnoopingType, hh3cMcsPortJoinGroupVlanID, hh3cMcsPortJoinGroupGroupAddress, and hh3cMcsPortJoinGroupSourceAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|-----------------|
| hh3cMcsPortJoinGroupIfIndex(1.3.6.1.4.1.25506.2.123.1.5.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the port for which this entry contains information. | As per the MIB. |
| hh3cMcsPortJoinGroupSnoopingType(1.3.6.1.4.1.25506.2.123.1.5.1.2) | not-accessible | InetAddressType | IPv4: igmp snooping IPv6: mld snooping | Type of snooping configuration, which also indicates the protocol type of addresses. | As per the MIB. |
| hh3cMcsPortJoinGroupVlanID(1.3.6.1.4.1.25506.2.123.1.5.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4094) | VLAN ID. | As per the MIB. |
| hh3cMcsPortJoinGroupGroupAddress(1.3.6.1.4.1.25506.2.123.1.5.1.4) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the group to which the host belongs. | As per the MIB. |
| hh3cMcsPortJoinGroupSourceAddress(1.3.6.1.4.1.25506.2.123.1.5.1.5) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the source. | As per the MIB. |

| | | | | | |
|---|-------------|-----------|---|-------------|--|
| hh3cMcsPortJoinGroupStatus(1.3.6.1.4.1.25506.2.123.1.5.1.6) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |
|---|-------------|-----------|---|-------------|--|

hh3cMcsPortStaticGroupConfigTable

About this table

This table contains static group membership entries on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|-------------|-----------|-----------|
| Supported only when global IGMP or MLD snooping is enabled. | Supported | Supported | Supported |

Columns

The table indexes are hh3cMcsPortStaticGroupIfIndex, hh3cMcsPortStaticGroupSnoopingType, hh3cMcsPortStaticGroupVlanID, hh3cMcsPortStaticGroupGroupAddress, and hh3cMcsPortStaticGroupSourceAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|--|
| hh3cMcsPortStaticGroupIfIndex(1.3.6.1.4.1.25506.2.123.1.6.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the port for which this entry contains information. | As per the MIB. |
| hh3cMcsPortStaticGroupSnoopingType(1.3.6.1.4.1.25506.2.123.1.6.1.2) | not-accessible | InetAddressType | IPv4: IGMP snooping IPv6: MLD snooping | Type of snooping configuration, which also indicates the protocol type of addresses. | As per the MIB. |
| hh3cMcsPortStaticGroupVlanID(1.3.6.1.4.1.25506.2.123.1.6.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4094) | VLAN ID. | As per the MIB. |
| hh3cMcsPortStaticGroupGroupAddress(1.3.6.1.4.1.25506.2.123.1.6.1.4) | not-accessible | InetAddress | OCTET STRING (0..255) | Address of the multicast group. | As per the MIB. |
| hh3cMcsPortStaticGroupSourceAddress(1.3.6.1.4.1.25506.2.123.1.6.1.5) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the source. | As per the MIB. |
| hh3cMcsPortStaticGroupStatus(1.3.6.1.4.1.25506.2.123.1.6.1.6) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

hh3cMcsRouterPortConfigEntry

About this table

This table contains static router port entries for a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|-------------|-----------|-----------|
| Supported only when global IGMP or MLD snooping is enabled. | Supported | Supported | Supported |

Columns

The table indexes are hh3cMcsRouterPortConfigIfIndex, hh3cMcsRouterPortConfigSnoopingType, and hh3cMcsRouterPortConfigVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|--|
| hh3cMcsRouterPortConfigIfIndex(1.3.6.1.4.1.25506.2.123.1.7.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the port for which this entry contains information. | As per the MIB. |
| hh3cMcsRouterPortConfigSnoopingType(1.3.6.1.4.1.25506.2.123.1.7.1.2) | not-accessible | InetAddressType | IPv4: IGMP snooping IPv6: MLD snooping | Type of snooping configuration. | As per the MIB. |
| hh3cMcsRouterPortConfigVlanID(1.3.6.1.4.1.25506.2.123.1.7.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4094) | VLAN ID | As per the MIB. |
| hh3cMcsRouterPortConfigRowStatus(1.3.6.1.4.1.25506.2.123.1.7.1.4) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

hh3cMcsPortConfigTable

About this table

This table contains the fast-leaving status, group limit number, group policy parameters and overflow replacement status on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cMcsPortConfigIfIndex, hh3cMcsPortConfigSnoopingType, and hh3cMcsPortConfigVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|--|
| hh3cMcsPortConfigIfIndex(1.3.6.1.4.1.25506.2.123.1.8.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the port for which this entry contains information. | As per the MIB. |
| hh3cMcsPortConfigSnoopingType(1.3.6.1.4.1.25506.2.123.1.8.1.2) | not-accessible | InetAddressType | IPv4: IGMP snooping IPv6: MLD snooping | Type of snooping configuration. | As per the MIB. |
| hh3cMcsPortConfigVlanID(1.3.6.1.4.1.25506.2.123.1.8.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4094) | VLAN ID. | As per the MIB. |
| hh3cMcsPortConfigGroupLimitNumber(1.3.6.1.4.1.25506.2.123.1.8.1.4) | read-create | Unsigned32 | Standard MIB values. | Group limit number of the port. | As per the MIB. |
| hh3cMcsPortConfigFastLeaveStatus(1.3.6.1.4.1.25506.2.123.1.8.1.5) | read-create | TruthValue | true(1), false(2) | Fast-leaving status of the port. | As per the MIB. |
| hh3cMcsPortConfigGroupPolicyParameter(1.3.6.1.4.1.25506.2.123.1.8.1.6) | read-create | Unsigned32 | Unsigned32(0 2000..3999) | ACL number which is used as the group policy parameter of the port. | As per the MIB. |
| hh3cMcsPortConfigOverflowReplace(1.3.6.1.4.1.25506.2.123.1.8.1.7) | read-create | TruthValue | true(1), false(2) | Status of overflow replacement for the hh3cMcsPortConfigGroupLimitNumber object. | As per the MIB. |
| hh3cMcsPortConfigRowStatus(1.3.6.1.4.1.25506.2.123.1.8.1.8) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

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IGMP-STD-MIB

About this MIB

Use this MIB to manage IGMP.

This MIB contains the following tables:

- **IGMP interface table**—Each row contains an interface enabled with IGMP.
- **IGMP cache table**—Each row contains a multicast group for which an IGMP interface maintain membership.

These tables are intended to be implemented by hosts and routers. However, some objects in the table are applicable only to routers.

MIB file name

rfc2933-igmp-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).igmpStdMIB(85)

Tabular objects

igmpInterfaceTable

About this table

This table contains settings of an interface enabled with IGMP.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is igmpInterfaceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|---|--|--|
| igmpInterfaceIndex (1.3.6.1.2.1.85.1.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an interface enabled with IGMP. | As per the MIB. |
| igmpInterfaceQueryInterval (1.3.6.1.2.1.85.1.1.2) | read-create | Unsigned32 | Unsigned32(1..31744) | General query interval of the interface, in seconds. | Value range: 1 to 31744. |
| igmpInterfaceStatus (1.3.6.1.2.1.85.1.1.3) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------|--------------------------|--|--|
| .1.3) | | | | | and destroy(6). <ul style="list-style-type: none"> createAndGo(4)—Enable IGMP on the interface. destroy(6)—Disable IGMP on the interface. |
| igmpInterfaceVersion (1.3.6.1.2.1.85.1.1.1.4) | read-create | Unsigned32 | Unsigned32(1..2) | IGMP version. | Value range: 1 to 3. |
| igmpInterfaceQuerier (1.3.6.1.2.1.85.1.1.1.5) | read-only | IpAddress | OCTET STRING (4) | IP address of the IGMP querier of the subnet to which the interface is attached. | As per the MIB. |
| igmpInterfaceQueryMaxResponseTime (1.3.6.1.2.1.85.1.1.1.6) | read-create | Unsigned32 | Unsigned32(10..250) | Maximum response time, in tenth seconds. | Value range: 10 to 250. |
| igmpInterfaceQuerierUpTime (1.3.6.1.2.1.85.1.1.1.7) | read-only | Timeticks | Standard MIB values. | Time elapsed since the IGMP querier was elected. | As per the MIB. |
| igmpInterfaceQuerierExpiryTime (1.3.6.1.2.1.85.1.1.1.8) | read-only | Timeticks | Standard MIB values. | Time remaining before the IGMP querier ages out. | As per the MIB. |
| igmpInterfaceVersion1QuerierTimer (1.3.6.1.2.1.85.1.1.1.9) | read-only | Timeticks | Standard MIB values. | Time remaining until the host assumes that there are no IGMPv1 routers present on the interface. | Not supported |
| igmpInterfaceWrongVersionQueries (1.3.6.1.2.1.85.1.1.1.10) | read-only | Counter32 | INTEGER(0..4294967295) | Number of queries received whose IGMP version does not match the IGMP version on the interface. | Not supported |
| igmpInterfaceJoins (1.3.6.1.2.1.85.1.1.1.11) | read-only | Counter32 | INTEGER(0..4294967295) | Number of times a group membership has been added on this interface. | As per the MIB. |
| igmpInterfaceProxyIndex (1.3.6.1.2.1.85.1.1.1.12) | read-create | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the interface acting as the IGMP proxy on the interface. | Supports only the read operation. |
| igmpInterfaceGroups (1.3.6.1.2.1.85.1.1.1.13) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of groups for which the interface | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|---------------------|---|-------------------------|
| .1.13) | | | | maintains membership. | |
| igmpInterfaceRobustness (1.3.6.1.2.1.85.1.1.1.14) | read-create | Unsigned32 | Unsigned32(1..255) | Robustness variable of the interface. | As per the MIB. |
| igmpInterfaceLastMembQueryIntvl (1.3.6.1.2.1.85.1.1.1.15) | read-create | Unsigned32 | Unsigned32(10..250) | Last member interface of the interface, in tenth seconds. | Value range: 10 to 250. |

igmpCacheTable

About this table

This table contains multicast groups for which there are members on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are igmpCacheAddress and igmpCacheIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|--------------------------|--|--|
| igmpCacheAddresses (1.3.6.1.2.1.85.1.2.1.1) | not-accessible | IpAddress | OCTET STRING (4) | IP multicast group address. | As per the MIB. |
| igmpCacheIndex (1.3.6.1.2.1.85.1.2.1.2) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Interface for which this entry contains information for an IP multicast group address. | As per the MIB. |
| igmpCacheSelf (1.3.6.1.2.1.85.1.2.1.3) | read-create | TruthValue | false(2) | Whether the local system is a member of this group address on this interface. | Supports only the read operation. Supports only false(2). |
| igmpCacheLastReporter (1.3.6.1.2.1.85.1.2.1.4) | read-only | IpAddress | OCTET STRING (4) | IP address of the source of the last membership report received for this IP Multicast group address on this interface. | As per the MIB. |
| igmpCacheUpTime (1.3.6.1.2.1.85.1.2.1.5) | read-only | Timeticks | Standard MIB values. | Time elapsed since this entry was created. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|--|--------------------------------------|
| .1.5) | | | | | |
| igmpCacheExpiry Time (1.3.6.1.2.1.85.1.2 .1.6) | read-only | Timeticks | Standard MIB values. | Minimum amount of time remaining before this entry ages out. | As per the MIB. |
| igmpCacheStatus (1.3.6.1.2.1.85.1.2 .1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| igmpCacheVersio n1HostTimer (1.3.6.1.2.1.85.1.2 .1.8) | read-only | TimeTicks | Standard MIB values. | Time remaining until the local router will assume that there are no longer any IGMP version 1 members on the IP subnet attached to this interface. | As per the MIB. |

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IPMCAST-MIB

About this MIB

The multicast technique effectively addresses the issue of point-to-multipoint data transmission. By enabling high-efficiency point-to-multipoint data transmission over a network, multicast greatly saves network bandwidth and reduces network load.

By using multicast technology, a network operator can easily provide bandwidth-critical and time-critical information services. These services include live webcasting, Web TV, distance learning, telemedicine, Web radio, and real-time video conferencing.

Use the MIB to manage IP multicast settings, including multicast routes.

MIB file name

rfc5132-ipmcast.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ipMcastMIB(168)

Scalar objects

ipMcastEnabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|----------------------------------|-----------------|
| ipMcastEnabled (1.3.6.1.2.1.168.1.1) | read-write | TruthValue | true(1), false(2) | Enabling status of IP multicast. | As per the MIB. |

ipMcastRouteEntryCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|--|-----------------|
| ipMcastRouteEntryCount (1.3.6.1.2.1.168.1.2) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the MRIB routing table. | As per the MIB. |

ipMcastDeviceConfigStorageType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|--|--|---|
| ipMcastDeviceConfigStorageType (1.3.6.1.2.1.168.1.11) | read-write | StorageType | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5)} | Storage type used for the global IP multicast configuration. | Supports only the read operation. The value of this object is always nonVolatile(3). |

| | | | | | |
|--|--|--|---|--|--|
| | | | } | | |
|--|--|--|---|--|--|

Tabular objects

ipMcastInterfaceTable

About this table

This table contains an interface configured with IP multicast.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipMcastInterfaceIPVersion and ipMcastInterfaceIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--|--|--|
| ipMcastInterfaceIPVersion (1.3.6.1.2.1.168.1.3.1.1) | not-accessible | InetVersion | INTEGER { unknown(0), ipv4(1), ipv6(2) } | IP version. | As per the MIB. |
| ipMcastInterfaceIfIndex (1.3.6.1.2.1.168.1.3.1.2) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of a multicast interface. | As per the MIB. |
| ipMcastInterfaceTtl (1.3.6.1.2.1.168.1.3.1.3) | read-write | Unsigned32 | Unsigned32(0..256) | TTL of the interface. | Supports only the read operation. The value of this object is always 0. |
| ipMcastInterfaceRateLimit (1.3.6.1.2.1.168.1.3.1.4) | read-write | Unsigned32 | Standard MIB values. | Limited rate of multicast traffic on the interface, in kbps. | Supports only the read operation. The value of this object is always 0. |
| ipMcastInterfaceStorageType(1.3.6.1.2.1.168.1.3.1.5) | read-write | StorageType | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) } | Row storage type. | Supports only the read operation. The value of this object is always readOnly(5). |

ipMcastSsmRangeTable

About this table

This table contains multicast group range settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are McastSsmRangeAddressType, ipMcastSsmRangeAddress, and ipMcastSsmRangePrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|--|---|--|
| ipMcastSsmRangeAddressType (1.3.6.1.2.1.168.1.4.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of a multicast group prefix. | As per the MIB. |
| ipMcastSsmRangeAddress (1.3.6.1.2.1.168.1.4.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | Multicast group address gives the group prefix for this SSM range. | As per the MIB. |
| ipMcastSsmRangePrefixLength (1.3.6.1.2.1.168.1.4.1.3) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Length of the mask which gives the group prefix for this SSM range. | As per the MIB. |
| ipMcastSsmRangeRowStatus (1.3.6.1.2.1.168.1.4.1.4) | read-create | RowStatus | active(1) | Row status. | Supports only the read operation. The value of this object is always active(1). |
| ipMcastSsmRangeStorageType (1.3.6.1.2.1.168.1.4.1.5) | read-create | StorageType | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) } | Row storage type. | Supports only the read operation. The value of this object is always readOnly(5). |

ipMcastRouteTable

About this table

This table contains multicast routing entry information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipMcastRouteGroupAddressType, ipMcastRouteGroup, ipMcastRouteGroupPrefixLength, ipMcastRouteSourceAddressType, ipMcastRouteSource, and ipMcastRouteSourcePrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------------|---|--|-----------------|
| ipMcastRouteGroupAddressType (1.3.6.1.2.1.168.1.5.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address family of multicast group address in a multicast routing entry. | As per the MIB. |
| ipMcastRouteGroup (1.3.6.1.2.1.168.1.5.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | Multicast group address in the entry. | As per the MIB. |
| ipMcastRouteGroupPrefixLength (1.3.6.1.2.1.168.1.5.1.3) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Length of the mask which identifies the groups for which this entry contains multicast routing information. | As per the MIB. |
| ipMcastRouteSourceAddressType (1.3.6.1.2.1.168.1.5.1.4) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the multicast source address in the entry. | As per the MIB. |
| ipMcastRouteSource (1.3.6.1.2.1.168.1.5.1.5) | not-accessible | InetAddress | OCTET STRING (0..255) | Multicast source address in the entry. | As per the MIB. |
| ipMcastRouteSourcePrefixLength (1.3.6.1.2.1.168.1.5.1.6) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Length of the mask which identifies the sources for which this entry contains multicast routing information. | As per the MIB. |
| ipMcastRouteUpstreamNeighborType (1.3.6.1.2.1.168.1.5.1.7) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Type of the upstream neighbor. | As per the MIB. |
| ipMcastRouteUpst | read-only | InetAddress | OCTET STRING | Address of the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------------|--|---|-----------------|
| reachNeighbor (1.3.6.1.2.1.168.1.5.1.8) | | | (0..255) | upstream neighbor. | |
| ipMcastRouteInflIndex (1.3.6.1.2.1.168.1.5.1.9) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the incoming interface in the entry. | As per the MIB. |
| ipMcastRouteTimeStamp (1.3.6.1.2.1.168.1.5.1.10) | read-only | TimeStamp | TimeTicks | Time when the entry was learned. | As per the MIB. |
| ipMcastRouteExpiryTime (1.3.6.1.2.1.168.1.5.1.11) | read-only | TimeTicks | Standard MIB values. | Time before the entry ages out. | As per the MIB. |
| ipMcastRouteProtocol (1.3.6.1.2.1.168.1.5.1.12) | read-only | IANAipMRouteProtocol | INTEGER { other(1), local(2), netmgmt(3), dvmrp(4), mospf(5), pimSparseDense(6), cbt(7), pimSparseMode(8), pimDenseMode(9), igmpOnly(10), bgmp(11), msdp(12) } | Protocol type of the entry. | As per the MIB. |
| ipMcastRouteRtProtocol (1.3.6.1.2.1.168.1.5.1.13) | read-only | IANAipRouteProtocol | INTEGER { other (1), local (2), netmgmt (3), icmp(4), egp (5), ggp (6), hello (7), rip (8), isls (9), esls (10), ciscoIgrp (11), bbnSpflgp (12), ospf (13), bgp (14), idpr (15), ciscoEigrp (16), dvmrp (17) } | Protocol type of the RPF route. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------------------|---|---|---|
| | | | } | | |
| ipMcastRouteRtAddressType (1.3.6.1.2.1.168.1.5.1.14) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the RPF route. | As per the MIB. |
| ipMcastRouteRtAddress (1.3.6.1.2.1.168.1.5.1.15) | read-only | InetAddress | OCTET STRING (0..255) | IP address in the RPF route. | As per the MIB. |
| ipMcastRouteRtPrefixLength (1.3.6.1.2.1.168.1.5.1.16) | read-only | InetAddressPrefixLength | Unsigned32(0..2040) | Mask length for the RPF route. | Value range: <ul style="list-style-type: none"> IPv4: 0 to 32. IPv6: 0 to 128. |
| ipMcastRouteRtType (1.3.6.1.2.1.168.1.5.1.17) | read-only | INTEGER | unicast (1), multicast (2) | Reason the RPF route was added. Type of the route on which the RPF route depends. | As per the MIB. |
| ipMcastRouteOctets (1.3.6.1.2.1.168.1.5.1.18) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of octets forwarded by using the entry. | As per the MIB. |
| ipMcastRoutePkts (1.3.6.1.2.1.168.1.5.1.19) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets forwarded by using the entry. | As per the MIB. |
| ipMcastRouteTtlDroppedOctets (1.3.6.1.2.1.168.1.5.1.20) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of octets dropped because the TTL was too small. | Not supported |
| ipMcastRouteTtlDroppedPackets (1.3.6.1.2.1.168.1.5.1.21) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets dropped because the TTL was too small. | Not supported |
| ipMcastRouteDifferentInOctets (1.3.6.1.2.1.168.1.5.1.22) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of octets dropped because the receiving interface was incorrect. | As per the MIB. |
| ipMcastRouteDifferentInPackets (1.3.6.1.2.1.168.1.5.1.23) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets dropped because receiving interface was incorrect. | As per the MIB. |
| ipMcastRouteBps (1.3.6.1.2.1.168.1.5.1.24) | read-only | CounterBasedGauge64 | INTEGER(0..18446744073709551615) | Bits per second forwarded by this router using the entry in the last second. | Not supported |

ipMcastRouteNextHopTable

About this table

This table contains information about the next-hop on outgoing interfaces in a multicast routing entry.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipMcastRouteNextHopGroupAddressType, ipMcastRouteNextHopGroup, ipMcastRouteNextHopGroupPrefixLength, ipMcastRouteNextHopSourceAddressType, ipMcastRouteNextHopSource, ipMcastRouteNextHopSourcePrefixLength, ipMcastRouteNextHopIfIndex, ipMcastRouteNextHopAddressType, and ipMcastRouteNextHopAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|---|---|-----------------|
| ipMcastRouteNextHopGroupAddressType (1.3.6.1.2.1.168.1.6.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Type of the address in an entry. | As per the MIB. |
| ipMcastRouteNextHopGroup (1.3.6.1.2.1.168.1.6.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | Address of the multicast source address. | As per the MIB. |
| ipMcastRouteNextHopGroupPrefixLength (1.3.6.1.2.1.168.1.6.1.3) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Mask length of the multicast group address. | As per the MIB. |
| ipMcastRouteNextHopSourceAddressType (1.3.6.1.2.1.168.1.6.1.4) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Type of the multicast source address. | As per the MIB. |
| ipMcastRouteNextHopSource (1.3.6.1.2.1.168.1.6.1.5) | not-accessible | InetAddress | OCTET STRING (0..255) | Multicast source address. | As per the MIB. |
| ipMcastRouteNextHopSourcePrefixLength (1.3.6.1.2.1.168.1.6.1.6) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Prefix length of the multicast source. | As per the MIB. |
| ipMcastRouteNextHopIfIndex (1.3.6.1.2.1.168.1.6.1.7) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the outgoing interface for the next hop. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------|--|---|--|
| ipMcastRouteNextHopAddressType (1.3.6.1.2.1.168.1.6.1.8) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the next hop. | As per the MIB. |
| ipMcastRouteNextHopAddress (1.3.6.1.2.1.168.1.6.1.9) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the next-hop. | As per the MIB. |
| ipMcastRouteNextHopState (1.3.6.1.2.1.168.1.6.1.10) | read-only | INTEGER | pruned(1), forwarding(2) | Whether the next hop is currently being used to forward IP datagrams. | The value of this object is always forward(2). |
| ipMcastRouteNextHopTimeStamp (1.3.6.1.2.1.168.1.6.1.11) | read-only | TimeStamp | TimeTicks | Time when the next hop entry was added. | As per the MIB. |
| ipMcastRouteNextHopExpiryTime (1.3.6.1.2.1.168.1.6.1.12) | read-only | TimeTicks | Standard MIB values. | Time remaining before the next hop entry ages out. | As per the MIB. |
| ipMcastRouteNextHopClosestMemberHops (1.3.6.1.2.1.168.1.6.1.13) | read-only | Unsigned32 | Unsigned32(0..256) | Minimum number of hops between this router and the nearest group member. | The value of this object is always 0. |
| ipMcastRouteNextHopProtocol (1.3.6.1.2.1.168.1.6.1.14) | read-only | IANAipMRouteProtocol | INTEGER { other(1), local(2), netmgmt(3), dvmrp(4), mospf(5), pimSparseDense(6), cbt(7), pimSparseMode(8), pimDenseMode(9), , igmpOnly(10), bgmp(11), msdp(12) } | Protocol through which the next hop entry was learned. | As per the MIB. |
| ipMcastRouteNextHopOctets (1.3.6.1.2.1.168.1.6.1.15) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of octets of multicast packets that have been forwarded using this next hop. | Not supported |
| ipMcastRouteNextHopPkts | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of packets which | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------|--------|--------|-------------|--|----------------|
| (1.3.6.1.2.1.168.1.6.1.16) | | | 15) | have been forwarded using this next hop. | |

ipMcastBoundaryTable

About this table

This table contains multicast boundary settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ipMcastBoundaryIfIndex, ipMcastBoundaryAddressType, ipMcastBoundaryAddress, and ipMcastBoundaryAddressPrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------------|---|---|-----------------|
| ipMcastBoundaryIfIndex (1.3.6.1.2.1.168.1.7.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an interface that is configured as the multicast boundary. | As per the MIB. |
| ipMcastBoundaryAddressType (1.3.6.1.2.1.168.1.7.1.2) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the multicast boundary. | As per the MIB. |
| ipMcastBoundaryAddress (1.3.6.1.2.1.168.1.7.1.3) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the multicast boundary. | As per the MIB. |
| ipMcastBoundaryAddressPrefixLength (1.3.6.1.2.1.168.1.7.1.4) | not-accessible | InetAddressPrefixLength | Unsigned32(0..2040) | Length of the mask which identifies the group range for which the scoped boundary exists. | As per the MIB. |
| ipMcastBoundaryTimeStamp (1.3.6.1.2.1.168.1.7.1.5) | read-only | TimeStamp | TimeTicks | Time when the multicast boundary entry was learned. | As per the MIB. |
| ipMcastBoundaryDroppedMcastOctets (1.3.6.1.2.1.168.1.7.1.6) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of octets of multicast packets that have been dropped by the multicast | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|--|---|--|
| | | | | boundary. | |
| ipMcastBoundaryDroppedMcastPkts (1.3.6.1.2.1.168.1.7.1.7) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of multicast packets that have been dropped by the multicast boundary. | Not supported |
| ipMcastBoundaryStatus (1.3.6.1.2.1.168.1.7.1.8) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. The value of this object is always (1). |
| ipMcastBoundaryStorageType (1.3.6.1.2.1.168.1.7.1.9) | read-create | StorageType | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) } | Row storage type. | Supports only the read operation. The value of this object is always readOnly(5). |

Contents

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IPV6-MLD-MIB

About this MIB

Use this table to manage MLD.

This MIB contains the following tables:

- **MLD interface table**—Each row contains an interface that is enabled with MLD.
- **MLD cache table**—Each row contains an IPv6 multicast group that has members on an interface.

The tables are intended to be implemented by hosts and routers. However, some objects in the tables are applicable only to routers.

MIB file name

rfc3019-ipv6-mld.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).mldMIB(91)

Tabular objects

mldInterfaceTable

About this table

This table contains an interface that is enabled with MLD.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is mldInterfaceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|--------------------------|---|--------------------------|
| mldInterfaceIndex (1.3.6.1.2.1.91.1.1.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an interface enabled with MLD. | As per the MIB. |
| mldInterfaceQueryInterval (1.3.6.1.2.1.91.1.1.1.2) | read-create | Unsigned32 | Unsigned32(1..31744) | General query interval, in seconds. | Value range: 1 to 31744. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------|---|---|--|
| mldInterfaceStatus (1.3.6.1.2.1.91.1.1.1.3) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |
| mldInterfaceVersion (1.3.6.1.2.1.91.1.1.1.4) | read-create | Unsigned32 | Standard MIB values. | MLD version. | Value range: 1 to 2. |
| mldInterfaceQuerier (1.3.6.1.2.1.91.1.1.1.5) | read-only | InetAddressIPv6 | OCTET STRING(16) | IP address of the MLD querier on the subnet to which the interface is attached. | As per the MIB. |
| mldInterfaceQueryMaxResponseDelay (1.3.6.1.2.1.91.1.1.1.6) | read-create | Unsigned32 | Unsigned32(1..3174) | Maximum response time, in seconds. | Value range: 1 to 3174. |
| mldInterfaceJoins (1.3.6.1.2.1.91.1.1.1.7) | read-only | Counter32 | INTEGER(0..4294967295) | Number of times a group membership has been added on the interface. | As per the MIB. |
| mldInterfaceGroups (1.3.6.1.2.1.91.1.1.1.8) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of group entries on the interface. | As per the MIB. |
| mldInterfaceRobustness (1.3.6.1.2.1.91.1.1.1.9) | read-create | Unsigned32 | Unsigned32(1..255) | Robustness variable. | Value range: 1 to 155. |
| mldInterfaceLastListenQueryIntvl (1.3.6.1.2.1.91.1.1.1.10) | read-create | Unsigned32 | Unsigned32(1..25) | Last member query interval, in seconds. | Value range: 1 to 25. |
| mldInterfaceProxyIfIndex (1.3.6.1.2.1.91.1.1.1.11) | read-create | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the interface that acts as the proxy. | Supports only the read operation. |
| mldInterfaceQuerierUpTime (1.3.6.1.2.1.91.1.1.1.12) | read-only | Timeticks | Standard MIB values. | Time elapsed since the MLD querier was changed. | As per the MIB. |
| mldInterfaceQuerierExpiryTime (1.3.6.1.2.1.91.1.1.1.13) | read-only | Timeticks | Standard MIB values. | Time remaining before the other querier present timer expires. | As per the MIB. |

mldCacheTable

About this table

This table contains IPv6 multicast groups for which there are members on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mldCacheAddress and mldCacheIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|---|--|
| mldCacheAddress (1.3.6.1.2.1.91.1.2.1.1) | not-accessible | InetAddressIPv6 | OCTET STRING (16) | IPv6 address of a multicast group. | As per the MIB. |
| mldCacheIfIndex (1.3.6.1.2.1.91.1.2.1.2) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an interface that has members of the IPv6 multicast group. | As per the MIB. |
| mldCacheSelf (1.3.6.1.2.1.91.1.2.1.3) | read-create | TruthValue | false(2) | whether the local system is a member of the group address on the interface. | Supports only the read operation. Supports only false(2). |
| mldCacheLastReporter (1.3.6.1.2.1.91.1.2.1.4) | read-only | InetAddressIPv6 | OCTET STRING (16) | IPv6 address of the last host that joined the multicast group. | As per the MIB. |
| mldCacheUpTime (1.3.6.1.2.1.91.1.2.1.5) | read-only | Timeticks | Standard MIB values. | Time elapsed since this entry was created. | As per the MIB. |
| mldCacheExpiryTime (1.3.6.1.2.1.91.1.2.1.6) | read-only | Timeticks | Standard MIB values. | Time remaining before this entry ages out. | As per the MIB. |
| mldCacheStatus (1.3.6.1.2.1.91.1.2.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

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MGMD-STD-MIB

About this MIB

Use this MIB to manage IGMPv1, IGMPv2, IGMPv3, MLDv1, and MLDv2.

This MIB contains the following tables:

- **MGMD host interface table**—Each row contains an interface that is enabled with IGMP or MLD.
- **MGMD router interface table**—Each row contains an interface that is enabled with MGMD.
- **MGMD host cache table**—Each row contains an IP multicast group for which there are members on a host interface.
- **MGMD router cache table**—Each row contains an IP multicast group for which there are members on a router interface.
- **MGMD reverse host table**—Each row contains a host interface that is a member of a multicast group.
- **MGMD reverse router table**—Each row contains a router interface that is a member of a multicast group.
- **MGMD host source list table**—Each row contains a source list entry corresponding to each interface and multicast group pair on a host.
- **MGMD router source list table**—Each row contains a source list entry corresponding to each interface and multicast group pair on a router.

All tables are used for the ETHER router or host function indicated by the name and corresponding description. In some cases, a device might have both the router and host functions. For example, a router that joins a multicast group as a host can be used for measurement purpose.

The source list table is an extension to the cache table, which explicitly indicates to include or exclude sources corresponding to multicast groups on an interface. Only IGMPv3 or MLDv2-capable nodes support the source list.

This MIB adds objects used to manage IGMP and MLD proxy devices as stated in RFC 4605. In a simple multicast topology that does not run multicast routing protocols, a proxy device can forward packets based on IGMP and MLD group memberships.

This MIB uses InterfaceIndex and InterfaceIndexOrZero objects defined by RFC 2863, which indicate identify an interface or interface sub-layer in the managed system.

This MIB also use InetAddress and InetAddressType objects defined in RFC 4001.

MIB file name

rfc5519-mgmd-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).mgmdStdMIB(185)

Tabular objects

mgmdRouterInterfaceTable

About this table

This MIB contains the interfaces on which IGMP or MLD is enabled.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are mgmdRouterInterfaceIndex and mgmdRouterInterfaceQuerierType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|--|
| mgmdRouterInterfaceIndex (1.3.6.1.2.1.185.1.2.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an interface enabled with IGMP or MLD. | As per the MIB. |
| mgmdRouterInterfaceQuerierType (1.3.6.1.2.1.185.1.2.1.2) | not-accessible | InetAddressType | ipv4(1), ipv6(2) | Address type of the interface. | As per the MIB. |
| mgmdRouterInterfaceQuerier (1.3.6.1.2.1.185.1.2.1.3) | read-only | InetAddress | OCTET STRING (4 16) | Address of the querier on the IP subnet to which this interface is attached. | As per the MIB. |
| mgmdRouterInterfaceQueryInterval (1.3.6.1.2.1.185.1.2.1.4) | read-create | Unsigned32 | Unsigned32(1..31744) | Frequency at which Host-Query packets are transmitted on this interface, in seconds. | As per the MIB. |
| mgmdRouterInterfaceStatus (1.3.6.1.2.1.185.1.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |
| mgmdRouterInterfaceVersion (1.3.6.1.2.1.185.1.2.1.6) | read-create | Unsigned32 | Unsigned32(1..3) | Version of MGMT that is running on the interface. | Default: 2. |
| mgmdRouterInterfaceQueryMaxResponseTime (1.3.6.1.2.1.185.1.2.1.7) | read-create | Unsigned32 | Unsigned32(0..31744) | Maximum query response interval, in 1/10 seconds. | Value range: 10 to 31740. |
| mgmdRouterInterfaceQuerierUpTime (1.3.6.1.2.1.185.1.2.1.8) | read-only | TimeTicks | Standard MIB values. | Time since the querier was last changed. | As per the MIB. |
| mgmdRouterInterfaceQuerierExpiryTime (1.3.6.1.2.1.185.1.2.1.9) | read-only | TimeTicks | Standard MIB values. | Time remaining before the MGMT other querier present timer | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------------------|--------------------------|--|-----------------------------------|
| 2.1.9) | | | | expires. | |
| mgmdRouterInterfaceWrongVersionQueries (1.3.6.1.2.1.185.1.2.1.10) | read-only | Counter32 | INTEGER(0..4294967295) | Number of general queries received whose version does not match the specified version. | Not supported |
| mgmdRouterInterfaceJoins (1.3.6.1.2.1.185.1.2.1.11) | read-only | Counter32 | INTEGER(0..4294967295) | Number of times a group membership has been added on this interface. | As per the MIB. |
| mgmdRouterInterfaceProxyIfIndex (1.3.6.1.2.1.185.1.2.1.12) | read-create | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the interface that acts as the proxy. | Supports only the read operation. |
| mgmdRouterInterfaceGroups (1.3.6.1.2.1.185.1.2.1.13) | read-only | Gauge32 | INTEGER(0..4294967295) | Current number of entries for this interface. | As per the MIB. |
| mgmdRouterInterfaceRobustness (1.3.6.1.2.1.185.1.2.1.14) | read-create | Unsigned32 | Unsigned32(1..255) | Robustness variable of the MGMT querier. | As per the MIB. |
| mgmdRouterInterfaceLastMemberQueryInterval (1.3.6.1.2.1.185.1.2.1.15) | read-create | Unsigned32 | Unsigned32(0..31744) | Last member query interval on the interface, in 1/10 seconds. | Value range: 10 to 250. |
| mgmdRouterInterfaceLastMemberQueryCount (1.3.6.1.2.1.185.1.2.1.16) | read-only | Unsigned32 | Unsigned32(1..255) | Last member query count on the interface. | As per the MIB. |
| mgmdRouterInterfaceStartupQueryCount (1.3.6.1.2.1.185.1.2.1.17) | read-only | Unsigned32 | Unsigned32(1..255) | Startup query count on the interface. | As per the MIB. |
| mgmdRouterInterfaceStartupQueryInterval (1.3.6.1.2.1.185.1.2.1.18) | read-only | Unsigned32 | Unsigned32(0..31744) | Startup query interval on the interface, in seconds. | Value range: 1 to 31744. |

mgmdRouterCacheTable

About this table

This table contains multicast groups for which there are members on a router interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mgmdRouterCacheAddressType, mgmdRouterCacheAddress, and mgmdRouterCacheIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--------------------------|---|-----------------|
| mgmdRouterCacheAddressType (1.3.6.1.2.1.185.1.4.1.1) | not-accessible | InetAddressType | ipv4(1), ipv6(2) | Address type of a multicast group membership entry on an interface. | As per the MIB. |
| mgmdRouterCacheAddress (1.3.6.1.2.1.185.1.4.1.2) | not-accessible | InetAddress | OCTET STRING (4 16) | Address of the multicast group. | As per the MIB. |
| mgmdRouterCacheIfIndex (1.3.6.1.2.1.185.1.4.1.3) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface for which this entry contains information for the multicast group. | As per the MIB. |
| mgmdRouterCacheLastReporter (1.3.6.1.2.1.185.1.4.1.4) | read-only | InetAddress | OCTET STRING (4 16) | IP address of the last multicast receiver that joined the multicast group. | As per the MIB. |
| mgmdRouterCacheUpTime (1.3.6.1.2.1.185.1.4.1.5) | read-only | TimeTicks | Standard MIB values. | Time elapsed since this entry was created. | As per the MIB. |
| mgmdRouterCacheExpiryTime (1.3.6.1.2.1.185.1.4.1.6) | read-only | TimeTicks | Standard MIB values. | Time remaining before the group membership interval state expires. | As per the MIB. |
| mgmdRouterCacheExcludeModeExpiryTimer (1.3.6.1.2.1.185.1.4.1.7) | read-only | TimeTicks | Standard MIB values. | Time remaining before the interface EXCLUDE state expires and the interface state transitions to INCLUDE mode. This object is applicable only to MGMDv3. | As per the MIB. |
| mgmdRouterCacheVersion1HostTimer (1.3.6.1.2.1.185.1.4.1.8) | read-only | TimeTicks | Standard MIB values. | Time remaining until the local router will assume that there are no longer any MGMD version 1 members on the | As per the MIB. |

| | | | | | |
|---|-----------|-----------|--------------------------|--|-----------------|
| | | | | IP subnet attached to this interface. | |
| mgmdRouterCacheVersion2HostTimer (1.3.6.1.2.1.185.1.4.1.9) | read-only | TimeTicks | Standard MIB values. | Time remaining until the local router will assume that there are no longer any MGMD version 2 members on the IP subnet attached to this interface. | As per the MIB. |
| mgmdRouterCacheSourceFilterMode (1.3.6.1.2.1.185.1.4.1.10) | read-only | INTEGER | include (1), exclude (2) | Current cache state, applicable to MGMDv3-compatible nodes. | As per the MIB. |

mgmdInverseRouterCacheTable

About this table

This table contains the interfaces that are members of a multicast group. This is an inverse lookup table for entries in the mgmdRouterCacheTable.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mgmdInverseRouterCacheIndex, mgmdInverseRouterCacheAddressType, and mgmdInverseRouterCacheAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--------------------------|--|-----------------|
| mgmdInverseRouterCacheIndex (1.3.6.1.2.1.185.1.6.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Interface for which an entry contains information for an IP multicast group address. | As per the MIB. |
| mgmdInverseRouterCacheAddressType (1.3.6.1.2.1.185.1.6.1.2) | not-accessible | InetAddressType | ipv4(1), ipv6(2) | Address type of the entry. | As per the MIB. |
| mgmdInverseRouterCacheAddress (1.3.6.1.2.1.185.1.6.1.3) | read-only | InetAddress | OCTET STRING (4 16) | IP multicast group address for which this entry contains information. | As per the MIB. |

mgmdRouterSrcListTable

About this table

This table contains the Source List entries corresponding to each interface and multicast group pair on a host.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mgmdRouterSrcListAddressType, mgmdRouterSrcListAddress, mgmdRouterSrcListIfIndex, and mgmdRouterSrcListHostAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--------------------------|---|-----------------|
| mgmdRouterSrcListAddressType (1.3.6.1.2.1.185.1.8.1.1) | not-accessible | InetAddressType | ipv4(1), ipv6(2) | Address type of the InetAddress variables in a table. | As per the MIB. |
| mgmdRouterSrcListAddress (1.3.6.1.2.1.185.1.8.1.2) | not-accessible | InetAddress | OCTET STRING (4 16) | Multicast group address for which this entry contains information. | As per the MIB. |
| mgmdRouterSrcListIfIndex (1.3.6.1.2.1.185.1.8.1.3) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface for which this entry contains information for an IP multicast group address. | As per the MIB. |
| mgmdRouterSrcListHostAddress (1.3.6.1.2.1.185.1.8.1.4) | not-accessible | InetAddress | OCTET STRING (4 16) | IP address of the multicast source to which this entry corresponds. | As per the MIB. |
| mgmdRouterSrcListExpire (1.3.6.1.2.1.185.1.8.1.5) | read-only | TimeTicks | Standard MIB values. | Time before this entry ages out. | As per the MIB. |

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PIM-BSR-MIB

About this MIB

Use this MIB to manage PIM BSR settings.

MIB file name

rfc5240-pim-bsr.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).pimBsrMIB(172)

Tabular objects

pimBsrCandidateRPTable

About this table

This table contains the IP multicast group for which the local router is to advertise itself as a Candidate-RP.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimBsrCandidateRPAddressType, pimBsrCandidateRPAddress, pimBsrCandidateRPGroupAddress, and pimBsrCandidateRPGroupPrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------------|------------------------|---|---|
| pimBsrCandidateRPAddressType (1.3.6.1.2.1.172.1.1.1) | not-accessible | InetAddressType | ipv4(1), ipv6(2), | Address type of a C-RP. | Supports only values ipv4(1) and ipv6(2). |
| pimBsrCandidateRPAddress (1.3.6.1.2.1.172.1.1.2) | not-accessible | InetAddress | OCTET STRING (4 16) | IP address of the C-RP. | As per the MIB. |
| pimBsrCandidateRPGroupAddress (1.3.6.1.2.1.172.1.1.3) | not-accessible | InetAddress | OCTET STRING (4 16) | IP address of the multicast group for which the C-RP is advertised. | Supports only multicast group addresses. |
| pimBsrCandidateRPGroupPrefixLength (1.3.6.1.2.1.172.1.1.4) | not-accessible | InetAddressPrefixLength | Unsigned32(4..128) | Mask of the multicast group for which the C-RP is advertised. | Supports only multicast group addresses. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|---|---|--|
| pimBsrCandidate RPBidir (1.3.6.1.2.1.172.1.1.1.5) | read-create | TruthValue | true(1), false(2) | PIM mode of the multicast group range for the RP, BIDIR-PIM or PIM-SM. | Read-only. |
| pimBsrCandidate RPAdvTimer (1.3.6.1.2.1.172.1.1.1.6) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router sends a Candidate-RP-Advertisement to the elected BSR for this zone. | To disable this timer, set the value of this object to 0. |
| pimBsrCandidate RPPriority (1.3.6.1.2.1.172.1.1.1.7) | read-create | Unsigned32 | Unsigned32(0..255) | Priority for the C-RP. | Read-only. |
| pimBsrCandidate RPAdvInterval (1.3.6.1.2.1.172.1.1.1.8) | read-create | Unsigned32 | Unsigned32(1..26214) | Time interval between two consecutive advertisements, in seconds. | Read-only. |
| pimBsrCandidate RPHoldtime (1.3.6.1.2.1.172.1.1.1.9) | read-create | Unsigned32 | Unsigned32(0..65535) | Holdtime for the C-RP. | Read-only. Value table: 1:1..65535. |
| pimBsrCandidate RPStatus (1.3.6.1.2.1.172.1.1.1.10) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Read-only. Supports only the following values: active(1), createAndGo(4), and destroy(6). |
| pimBsrCandidate RPStorageType (1.3.6.1.2.1.172.1.1.1.11) | read-create | StorageType | other(1) | Row storage type. | Read-only. Supports only value other(1). |

pimBsrElectedBSRRPSetTable

About this table

This table contains BSR-specific information about PIM group mappings. It supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimBsrElectedBSRGrpMappingAddrType, pimBsrElectedBSRGrpMappingGrpAddr, pimBsrElectedBSRGrpMappingGrpPrefixLen, and pimBsrElectedBSRGrpMappingRPAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|------------------------|---|---|
| pimBsrElectedBSRGrpMappingAddrType (1.3.6.1.2.1.172.1.2.1.2) | not-accessible | InetAddressType | ipv4(1), ipv6(2) | Address type of a multicast group. | Supports only values ipv4(1) and ipv6(2). |
| pimBsrElectedBSRGrpMappingGrpAddr (1.3.6.1.2.1.172.1.2.1.3) | not-accessible | InetAddress | OCTET STRING (4 16) | IP address of the multicast group. | As per the MIB. |
| pimBsrElectedBSRGrpMappingGrpPrefixLen (1.3.6.1.2.1.172.1.2.1.4) | not-accessible | InetAddressPrefix Length | Unsigned32(4..128) | Mask of the multicast group address. | As per the MIB. |
| pimBsrElectedBSRGrpMappingRPAddr (1.3.6.1.2.1.172.1.2.1.5) | not-accessible | InetAddress | OCTET STRING (4 16) | IP address of the RP to be used for the multicast group. | As per the MIB. |
| pimBsrElectedBSRRPSetPriority (1.3.6.1.2.1.172.1.2.1.6) | read-only | Unsigned32 | Unsigned32(0..255) | Priority of the RP. | As per the MIB. |
| pimBsrElectedBSRRPSetHoldtime (1.3.6.1.2.1.172.1.2.1.7) | read-only | Unsigned32 | Unsigned32(0..65535) | Holdtime of the RP. | As per the MIB. |
| pimBsrElectedBSRRPSetExpiryTime (1.3.6.1.2.1.172.1.2.1.8) | read-only | TimeTicks | Standard MIB values. | Minimum time remaining before this entry will be aged out. | Value zero indicates that the entry will age out immediately. |
| pimBsrElectedBSRRPSetGrpBidir (1.3.6.1.2.1.172.1.2.1.9) | read-only | TruthValue | true(1), false(2) | PIM mode used for the multicast group, BIDIR-PIM or PIM-SM. | As per the MIB. |

pimBsrCandidateBSRTable

About this table

This table contains C-BSR settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is pimBsrCandidateBSRZoneIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|--|--|
| pimBsrCandidateBSRZoneIndex (1.3.6.1.2.1.172.1.3.1.1) | not-accessible | InetZoneIndex | Unsigned32(1..4294967295) | Index of the zone to which a C-BSR is attached. | Supports only 0xFFFFFFFF 0X7FFFFFFF. |
| pimBsrCandidateBSRAddressType (1.3.6.1.2.1.172.1.3.1.2) | read-create | InetAddressType | ipv4(1), ipv6(2) | Address type of the C-BSR. | Supports only values ipv4(1) and ipv6(2). |
| pimBsrCandidateBSRAddress (1.3.6.1.2.1.172.1.3.1.3) | read-create | InetAddress | OCTET STRING (4 16) | IP address of the C-BSR. | As per the MIB. |
| pimBsrCandidateBSRPriority (1.3.6.1.2.1.172.1.3.1.4) | read-create | Unsigned32 | Unsigned32(0..255) | Priority of the C-BSR. | Default: 1:64 (int). Value range: 1:0..255. |
| pimBsrCandidateBSRHashMaskLength (1.3.6.1.2.1.172.1.3.1.5) | read-create | Unsigned32 | Unsigned32(0..32) | Mask length for the IP address of the C-BSR. | Value range: 1:0..32. |
| pimBsrCandidateBSRElectedBSR (1.3.6.1.2.1.172.1.3.1.6) | read-only | TruthValue | true(1), false(2) | Whether this router is a BSR. | As per the MIB. |
| pimBsrCandidateBSRBootstrapTimer (1.3.6.1.2.1.172.1.3.1.7) | read-only | TimeTicks | Standard MIB values. | Time remaining for this router to send the next BSR message. | As per the MIB. |
| pimBsrCandidateBSRStatus (1.3.6.1.2.1.172.1.3.1.8) | read-create | RowStatus | active(1) createAndGo(4) destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |
| pimBsrCandidateBSRStorageType (1.3.6.1.2.1.172.1.3.1.9) | read-create | StorageType | other(1) | Row storage type. | Read-only. Supports only value other(1). |

pimBsrElectedBSRTable

About this table

This table contains BSR settings. It supports only the public network and does not support administratively-scoped zones.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|--|
| Not supported | Not supported | Not supported | Supported. Supports only index 0xffffffff. Supports only IPv4. |

Columns

The table index is pimBsrElectedBSRZoneIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---------------------------|---|---|
| pimBsrElectedBSRZoneIndex (1.3.6.1.2.1.172.1.4.1.1) | not-accessible | InetZoneIndex | Unsigned32(1..4294967295) | Index of the zone to which a C-BSR is attached. | Supports only 0xFFFFFFFF0X7FFFFFFF. |
| pimBsrElectedBSRAddressType (1.3.6.1.2.1.172.1.4.1.2) | read-only | InetAddressType | ipv4(1), ipv6(2) | Address type of a BSR. | Supports only values ipv4(1) and ipv6(2). |
| pimBsrElectedBSRAddress (1.3.6.1.2.1.172.1.4.1.3) | read-only | InetAddress | OCTET STRING (4 16) | IP address of the BSR. | As per the MIB. |
| pimBsrElectedBSRPriority (1.3.6.1.2.1.172.1.4.1.4) | read-only | Unsigned32 | Unsigned32(0..255) | Priority of the BSR. | As per the MIB. |
| pimBsrElectedBSRHashMaskLength (1.3.6.1.2.1.172.1.4.1.5) | read-only | Unsigned32 | Unsigned32(0..128) | Mask length for the BSR's IP address. | Value range: 1:0..128. |
| pimBsrElectedBSRExpiryTime (1.3.6.1.2.1.172.1.4.1.6) | read-only | TimeTicks | Standard MIB values. | Time remaining before the BSR ages out. | As per the MIB. |

Notifications

pimBsrElectedBSRLostElection

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.172.0.1 | Lost BSR election to a new E-BSR | Informational | Warning | N/A | ON |

Description

This notification is generated when the current E-BSR lost election to a new E-BSR. Only E-BSR will generate this notification.

Status control

ON

CLI: Use the `snmp-agent trap enable { pim | pim6 } elected-bsr-lost-election` command.

OFF

CLI: Use the `undo snmp-agent trap enable { pim | pim6 } elected-bsr-lost-election` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|-----------------|---------------------|
| 1.3.6.1.2.1.172.1.4.1.2 (pimBsrElectedBSRAddressType) | Address type of a BSR. | No | InetAddressType | ipv4(1) ipv6(2) |
| 1.3.6.1.2.1.172.1.4.1.3 (pimBsrElectedBSRAddress) | IP address of the BSR. | No | InetAddress | OCTET STRING (4 16) |
| 1.3.6.1.2.1.172.1.4.1.4 (pimBsrElectedBSRPriority) | Priority of the BSR. | No | Unsigned32 | Unsigned32(0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that whether this notification is generated because of BSR or C-BSR configuration change.
2. Verify that other PIM routers are operating correctly.
3. Verify that the local router has sufficient memory.
4. Verify that the local router does not have link failures.
5. If the issue persists, contact H3C Support.

pimBsrCandidateBSRWinElection

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.172.0.2 | Win of BSR election. | Informational | Warning | N/A | ON |

Description

This notification is generated when a C-BSR was elected as the E-BSR. Only E-BSR will generate this notification.

Status control

ON

CLI: Use the `snmp-agent trap enable { pim | pim6 } candidate-bsr-win-election` command.

OFF

CLI: Use the `undo snmp-agent trap enable { pim | pim6 } candidate-bsr-win-election` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------------------|-------|------------|---------------------|
| 1.3.6.1.2.1.172.1.3.1.6 (pimBsrCandidateBSRElectedBSR) | Whether this router is the E-BSR. | No | TruthValue | true(1) false(2) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that whether this notification is generated because of BSR or C-BSR configuration change.
2. Verify that other PIM routers are operating correctly.
3. Verify that the local router has sufficient memory.
4. Verify that the local router does not have link failures.
5. If the issue persists, contact H3C Support.

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PIM-STD-MIB

About this MIB

Use this MIB to manage PIM routers.

MIB file name

rfc5060-pim-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).pimStdMIB(157)

Scalar objects

pimKeepalivePeriod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|----------------------------------|---|
| pimKeepalivePeriod (1.3.6.1.2.1.157.1.14) | read-write | Unsigned32 | Unsigned32(0..65535) | Duration of the Keepalive timer. | Supports only IPv4. Value range: 1:0..65535. When write, this object might first create a PIM view. |

pimRegisterSuppressionTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|---|
| pimRegisterSuppressionTime (1.3.6.1.2.1.157.1.15) | read-write | Unsigned32 | Unsigned32(0..65535) | Duration of the register suppression timer. | Supports only IPv4. Value range: 1:1..65535. When write, this object might first create a PIM view. |

pimStarGEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|---|-----------------|
| pimStarGEntries (1.3.6.1.2.1.157.1.16) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the pimStarGTable. | As per the MIB. |

pimStarGIEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|------------------------|--|-----------------|
| pimStarGIEntries (1.3.6.1.2.1.157.1.17) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the pimStarGITable. | As per the MIB. |

pimSGEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|------------------------|--------------------------------------|-----------------|
| pimSGEntries (1.3.6.1.2.1.157.1.18) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the pimSGTable. | As per the MIB. |

pimSGIEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|---------------------------------------|-----------------|
| pimSGIEntries (1.3.6.1.2.1.157.1.19) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the pimSGITable. | As per the MIB. |

pimSGRptEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|---|-----------------|
| pimSGRptEntries (1.3.6.1.2.1.157.1.20) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the pimSGRptTable. | As per the MIB. |

pimSGRptLEntries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|------------------------|--|-----------------|
| pimSGRptLEntries (1.3.6.1.2.1.157.1.21) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of entries in the pimSGRptLTable. | As per the MIB. |

pimOutAsserts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|--|-----------------|
| pimOutAsserts (1.3.6.1.2.1.157.1.22) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of Asserts sent by this router. | As per the MIB. |

pimInAsserts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------------------|--|-----------------|
| pimInAsserts (1.3.6.1.2.1.157.1.23) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of Asserts received by this router. | As per the MIB. |

pimLastAssertInterface

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------------|--------------------------|---|-----------------|
| pimLastAssertInterface (1.3.6.1.2.1.157.1.24) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Interface on which this router most recently sent or received an assert. If this router has not sent or received an assert, then this object is set to zero. | As per the MIB. |

pimLastAssertGroupAddressType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|---|--|---|
| pimLastAssertGroupAddressType (1.3.6.1.2.1.157.1.25) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Address type of the multicast group address in the most recently sent or received assert. If this router has not sent or received an assert, then this object is set to unknown(0). | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |

pimLastAssertGroupAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|-----------------------|---|-----------------|
| pimLastAssertGroupAddress (1.3.6.1.2.1.157.1.26) | read-only | InetAddress | OCTET STRING (0..255) | Multicast group address in the most recently sent or received assert. The InetAddressType is given by the pimLastAssertGroupAddressType | As per the MIB. |

| | | | | | |
|--|--|--|--|---------|--|
| | | | | object. | |
|--|--|--|--|---------|--|

pimLastAssertSourceAddressType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|---|--|---|
| pimLastAssertSourceAddressType (1.3.6.1.2.1.157.1.27) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Address type of the source address in the most recently sent or received assert. If the most recent assert was (*,G), or if this router has not sent or received an assert, then this object is set to unknown(0). | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |

pimLastAssertSourceAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|-------------------------------|--|-----------------|
| pimLastAssertSourceAddress (1.3.6.1.2.1.157.1.28) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Source address in the most recently sent or received assert. The InetAddressType is given by the pimLastAssertSourceAddressType object. | As per the MIB. |

pimNeighborLossNotificationPeriod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|--------------------------------------|
| pimNeighborLossNotificationPeriod (1.3.6.1.2.1.157.1.29) | read-write | Unsigned32 | Unsigned32(0..65535) | Minimum time that must elapse between pimNeighborLoss notifications originated by this router. | Read-only. Supports only value 0. |

pimNeighborLossCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--|-----------------|
| pimNeighborLossCount (1.3.6.1.2.1.157.1.30) | read-only | Counter32 | INTEGER(0..4294967295) | Number of neighbor loss events that have | As per the MIB. |

| | | | | | |
|-----|--|--|--|-----------|--|
| 30) | | | | occurred. | |
|-----|--|--|--|-----------|--|

pimInvalidRegisterNotificationPeriod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------------|---|--|
| pimInvalidRegisterNotificationPeriod (1.3.6.1.2.1.157.1.31) | read-write | Unsigned32 | Unsigned32(10..65535) | Minimum time that must elapse between pimInvalidRegister notifications originated by this router. | Read-only. Supports only value 65535. |

pimInvalidRegisterMsgsRcvd

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|---|-----------------|
| pimInvalidRegisterMsgsRcvd (1.3.6.1.2.1.157.1.32) | read-only | Counter32 | INTEGER(0..4294967295) | Number of invalid PIM register messages that have been received by this router. | As per the MIB. |

pimInvalidRegisterAddressType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|---|--|---|
| pimInvalidRegisterAddressType (1.3.6.1.2.1.157.1.33) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Address type stored in pimInvalidRegister Origin, pimInvalidRegister Group, and pimInvalidRegister Rp. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |

pimInvalidRegisterOrigin

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|-------------------------------|---|-----------------|
| pimInvalidRegisterOrigin (1.3.6.1.2.1.157.1.34) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Source address of the last invalid register message received by this device . | As per the MIB. |

pimInvalidRegisterGroup

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|-------------------------------|--|-----------------|
| pimInvalidRegisterGroup (1.3.6.1.2.1.157.1.35) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP multicast group address to which the last invalid register message received by this device was addressed. | As per the MIB. |

pimInvalidRegisterRp

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|-------------------------------|--|-----------------|
| pimInvalidRegisterRp (1.3.6.1.2.1.157.1.36) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | RP address to which the last invalid Register message received by this device was delivered. | As per the MIB. |

pimInvalidJoinPruneNotificationPeriod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------------|--|--|
| pimInvalidJoinPruneNotificationPeriod (1.3.6.1.2.1.157.1.37) | read-write | Unsigned32 | Unsigned32(10..65535) | Minimum time that must elapse between pimInvalidJoinPrune notifications originated by this router. | Read-only. Supports only value 65535. |

pimInvalidJoinPruneMsgsRcvd

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|---|-----------------|
| pimInvalidJoinPruneMsgsRcvd (1.3.6.1.2.1.157.1.38) | read-only | Counter32 | INTEGER(0..4294967295) | Number of invalid PIM Join/Prune messages that have been received by this device. | As per the MIB. |

pimInvalidJoinPruneAddressType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|---|---|---|
| pimInvalidJoinPruneAddressType (1.3.6.1.2.1.157.1.39) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2)} | Address type stored in pimInvalidJoinPruneOrigin. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |

| | | | | | |
|-----|--|--|--------------|---|----------|
| 39) | | | ipv6(2) } | pimInvalidJoinPruneGroup, and pimInvalidJoinPruneRp. | ipv6(2). |
|-----|--|--|--------------|---|----------|

pimInvalidJoinPruneOrigin

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|-------------------------------|--|-----------------|
| pimInvalidJoinPruneOrigin (1.3.6.1.2.1.157.1.40) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Source address of the last invalid join/prune message received by this device. | As per the MIB. |

pimInvalidJoinPruneGroup

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|-------------------------------|--|-----------------|
| pimInvalidJoinPruneGroup (1.3.6.1.2.1.157.1.41) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP multicast group address carried in the last invalid join/prune message received by this device. | As per the MIB. |

pimInvalidJoinPruneRp

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|-------------------------------|--|-----------------|
| pimInvalidJoinPruneRp (1.3.6.1.2.1.157.1.42) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | RP address carried in the last invalid join/prune message received by this device. | As per the MIB. |

pimRPMappingNotificationPeriod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|--|
| pimRPMappingNotificationPeriod (1.3.6.1.2.1.157.1.43) | read-write | Unsigned32 | Unsigned32(0..65535) | Minimum time that must elapse between pimRPMappingChange notifications originated by this router. | Read-only. Supports only value 65535. |

pimRPMappingChangeCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|---|----------------|
| pimRPMappingChangeCount (1.3.6.1.2.1.157.1.44) | read-only | Counter32 | INTEGER(0..4294967295) | Number of changes to active RP mappings on this device. | Not supported |

pimInterfaceElectionNotificationPeriod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|----------------|
| pimInterfaceElectionNotificationPeriod (1.3.6.1.2.1.157.1.45) | read-write | Unsigned32 | Unsigned32(0..65535) | Minimum time that must elapse between pimInterfaceElection notifications originated by this router. | Not supported. |

pimInterfaceElectionWinCount

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--|----------------|
| pimInterfaceElectionWinCount (1.3.6.1.2.1.157.1.46) | read-only | Counter32 | INTEGER(0..4294967295) | Number of times this device has been elected as DR or DF on any interface. | Not supported. |

pimRefreshInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|---|
| pimRefreshInterval (1.3.6.1.2.1.157.1.47) | read-write | Unsigned32 | Unsigned32(0..65535) | Interval between successive state refresh messages sent by an originator. | Supports only IPv4. Value range: 1:1..255. When write, this object might first create a PIM view. |

pimDeviceConfigStorageType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|--|--|----------------|
| pimDeviceConfigStorageType (1.3.6.1.2.1.157.1.48) | read-write | StorageType | INTEGER { other(1), volatile(2), nonVolatile(3), | Storage type used for the global PIM configuration of this device. | Read-only. |

| | | | | | |
|--|--|--|-----------------------------------|--|--|
| | | | permanent(4), readOnly(5) } | | |
|--|--|--|-----------------------------------|--|--|

Tabular objects

pimInterfaceTable

About this table

This table contains PIM interface settings. This table supports only the public network and is available only when the interface runs in the PIM-SM mode.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are pimInterfaceIndex and pimInterfaceIPVersion.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|---|
| pimInterfaceIndex (1.3.6.1.2.1.157.1.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of an interface. | As per the MIB. |
| pimInterfaceIPVersion (1.3.6.1.2.1.157.1.1.2) | not-accessible | InetVersion | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | IP version of this PIM interface. | As per the MIB. |
| PimInterfaceAddressType (1.3.6.1.2.1.157.1.1.3) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Address type of this PIM interface. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |
| PimInterfaceAddress (1.3.6.1.2.1.157.1.1.4) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Primary IP address of this router on this PIM interface. | As per the MIB. |
| pimInterfaceGenerationIDValue (1.3.6.1.2.1.157.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Value of the Generation ID this router inserted in the last PIM hello message it sent on this interface. | 0 means an invalid value. |
| pimInterfaceDR (1.3.6.1.2.1.157.1.1.6) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Primary IP address of the DR on this PIM interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|----------------------|--|--------------------------------------|
| pimInterfaceDRPriority (1.3.6.1.2.1.157.1.1.1.7) | read-create | Unsigned32 | Standard MIB values. | DR priority value inserted into the DR Priority option in PIM Hello messages transmitted on this interface. | As per the MIB. |
| pimInterfaceDRPriorityEnabled (1.3.6.1.2.1.157.1.1.1.8) | read-only | TruthValue | true(1), false(2) | Whether all routers on this interface are using the DR Priority option. | As per the MIB. |
| pimInterfaceHelloInterval (1.3.6.1.2.1.157.1.1.1.9) | read-create | Unsigned32 | Unsigned32(0..18000) | Interval at which PIM Hello messages are transmitted on this interface | Value range: 1:0..18000. |
| pimInterfaceTrigHelloInterval (1.3.6.1.2.1.157.1.1.1.10) | read-create | Unsigned32 | Unsigned32(0..60) | Maximum time before this router sends a triggered PIM hello message on this interface. | Value range: 1:1..60. |
| pimInterfaceHelloHoldtime (1.3.6.1.2.1.157.1.1.1.11) | read-create | Unsigned32 | Unsigned32(0..65535) | Value set in the Holdtime field of PIM Hello messages transmitted on this interface. | Value range: 1:1..65535. |
| pimInterfaceJoinPruneInterval (1.3.6.1.2.1.157.1.1.1.12) | read-create | Unsigned32 | Unsigned32(0..18000) | Interval at which this router sends PIM Join/Prune messages on this PIM interface. | Value range: 1:0..18000. |
| pimInterfaceJoinPruneHoldtime (1.3.6.1.2.1.157.1.1.1.13) | read-create | Unsigned32 | Unsigned32(0..65535) | Value inserted into the Holdtime field of a PIM Join/Prune message sent on this interface. | Value range: 1:1..65535. |
| pimInterfaceDFElectionRobustness (1.3.6.1.2.1.157.1.1.1.14) | read-create | Unsigned32 | Standard MIB values. | Minimum number of PIM DF-Election messages that must be lost in order for DF election on this interface to fail. | Read-only. Supports only value 3. |
| pimInterfaceLanDelayEnabled (1.3.6.1.2.1.157.1.1.1.15) | read-only | TruthValue | true(1), false(2) | Whether all routers on this interface are using the LAN Prune Delay option. | As per the MIB. |
| pimInterfacePropagationDelay (1.3.6.1.2.1.157.1.1.1.16) | read-create | Unsigned32 | Unsigned32(0..32767) | Expected propagation delay between PIM routers on this network or link. | Value range: 1:1..32767. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|---------------------------------------|--|--|
| pimInterfaceOverrideInterval (1.3.6.1.2.1.157.1.1.17) | read-create | Unsigned32 | Unsigned32(0..65535) | Value this router inserts into the Override_Interval field of the LAN Prune Delay option in the PIM Hello messages it sends on this interface. | Value range: 1:1..65535. |
| pimInterfaceEffectPropagDelay (1.3.6.1.2.1.157.1.1.18) | read-only | Unsigned32 | Unsigned32(0..32767) | Effective Propagation Delay on this interface. | As per the MIB. |
| pimInterfaceEffectOverrideInterval (1.3.6.1.2.1.157.1.1.19) | read-only | Unsigned32 | Unsigned32(0..65535) | Effective Override Interval on this interface. | As per the MIB. |
| pimInterfaceSuppressionEnabled (1.3.6.1.2.1.157.1.1.20) | read-only | TruthValue | true(1), false(2) | Whether join suppression is enabled on this interface. | As per the MIB. |
| pimInterfaceBidirectionalCapable (1.3.6.1.2.1.157.1.1.21) | read-only | TruthValue | true(1), false(2) | Whether all routers on this interface are using the Bidirectional-PIM Capable option. | As per the MIB. |
| pimInterfaceDomainBorder (1.3.6.1.2.1.157.1.1.22) | read-create | TruthValue | true(1), false(2) | Whether this interface is a PIM domain border. | As per the MIB. |
| pimInterfaceStubInterface (1.3.6.1.2.1.157.1.1.23) | read-create | TruthValue | true(1), false(2) | Whether this interface is a stub interface. | Read-only. The value of this object value is always false(2). |
| pimInterfacePruneLimitInterval (1.3.6.1.2.1.157.1.1.24) | read-create | Unsigned32 | Unsigned32(0..65535) | Minimum interval that must transpire between two successive Prunes sent by a router. | Read-only. Value range: 1:1..65535 Default: 1:210(int). |
| pimInterfaceGraftRetryInterval (1.3.6.1.2.1.157.1.1.25) | read-create | Unsigned32 | Unsigned32(0..65535) | Minimum interval that must elapse between two successive Grafts sent by a Pim-DM router. | Value range: 1:1..65535 |
| pimInterfaceSRPriorityEnabled (1.3.6.1.2.1.157.1.1.26) | read-only | TruthValue | true(1), false(2) | Whether all routers on this interface are using the State Refresh option. | As per the MIB. |
| pimInterfaceStatus (1.3.6.1.2.1.157.1.1.27) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none"> active(1). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|-------------|-------------------|---|
| | | | | | <ul style="list-style-type: none"> createAndGo(4)—Enable PIM-SM on this interface. destroy(6)—Disable PIM-SM on this interface. |
| pimInterfaceStorageType (1.3.6.1.2.1.157.1.1.28) | read-create | StorageType | other(1) | Row storage type. | Read-only. Supports only value other(1). |

pimNeighborTable

About this table

This table contains PIM neighbor settings. This table supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimNeighborIdx, pimNeighborAddressType, and pimNeighborAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--------------------------------------|---|--|
| pimNeighborIdx (1.3.6.1.2.1.157.1.2.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface used to reach this PIM neighbor. | As per the MIB. |
| pimNeighborAddressType (1.3.6.1.2.1.157.1.2.1.2) | not-accessible | InetAddressType | INTEGER{ ipv4(1), ipv6(2) } | Address type of this PIM neighbor. | Supports only the following values: ipv4(1) and ipv6(2). |
| pimNeighborAddress (1.3.6.1.2.1.157.1.2.1.3) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Primary IP address of this PIM neighbor. | As per the MIB. |
| pimNeighborGenerationIDPresent (1.3.6.1.2.1.157.1.2.1.4) | read-only | TruthValue | true(1), false(2) | Whether this neighbor is using the Generation ID option. | As per the MIB. |
| pimNeighborGenerationIDValue (1.3.6.1.2.1.157.1.2.1.5) | read-only | Unsigned32 | Standard MIB values. | Value of the Generation ID from the last PIM Hello message received from this neighbor. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|-----------------|
| pimNeighborUpTime (1.3.6.1.2.1.157.1.2.1.6) | read-only | TimeTicks | Standard MIB values. | Time since this PIM neighbor (last) became a neighbor of the local router. | As per the MIB. |
| pimNeighborExpiryTime (1.3.6.1.2.1.157.1.2.1.7) | read-only | TimeTicks | Standard MIB values. | Minimum time remaining before this PIM neighbor will time out. | As per the MIB. |
| pimNeighborDRPriorityPresent (1.3.6.1.2.1.157.1.2.1.8) | read-only | TruthValue | true(1), false(2) | Whether this neighbor is using the DR Priority option. | As per the MIB. |
| pimNeighborDRPriority (1.3.6.1.2.1.157.1.2.1.9) | read-only | Unsigned32 | Standard MIB values. | Value of the Designated Router Priority from the last PIM Hello message received from this neighbor. | As per the MIB. |
| pimNeighborLANPruneDelayPresent (1.3.6.1.2.1.157.1.2.1.10) | read-only | TruthValue | true(1), false(2) | Whether this neighbor is using the LAN Prune Delay option. | As per the MIB. |
| pimNeighborTBit (1.3.6.1.2.1.157.1.2.1.11) | read-only | TruthValue | true(1), false(2) | Whether the T bit was set in the LAN Prune Delay option received from this neighbor. | As per the MIB. |
| pimNeighborPropagationDelay (1.3.6.1.2.1.157.1.2.1.12) | read-only | Unsigned32 | Unsigned32(0..32767) | Value of the Propagation_Delay field of the LAN Prune Delay option received from this neighbor. | As per the MIB. |
| PimNeighborOverrideInterval (1.3.6.1.2.1.157.1.2.1.13) | read-only | Unsigned32 | Unsigned32(0..65535) | Value of the Override_Interval field of the LAN Prune Delay option received from this neighbor. | As per the MIB. |
| pimNeighborBidirectionalCapable (1.3.6.1.2.1.157.1.2.1.14) | read-only | TruthValue | true(1), false(2) | Whether this neighbor is using the Bidirectional-PIM Capable option. | As per the MIB. |
| pimNeighborSRCapable (1.3.6.1.2.1.157.1.2.1.15) | read-only | TruthValue | true(1), false(2) | Whether this neighbor is using the State Refresh Capable option. | As per the MIB. |

pimNbrSecAddressTable

About this table

This table contains secondary addresses advertised by a PIM neighbor.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimNbrSecAddressIfIndex, pimNbrSecAddressType, pimNbrSecAddressPrimary, and pimNbrSecAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|---|------------------------------|
| pimNbrSecAddressIfIndex (1.3.6.1.2.1.157.1.3.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface used to reach this PIM neighbor. | As per the MIB. |
| pimNbrSecAddressType (1.3.6.1.2.1.157.1.3.1.2) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Address type of this PIM neighbor. | As per the MIB. |
| pimNbrSecAddressPrimary (1.3.6.1.2.1.157.1.3.1.3) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Primary IP address of this PIM neighbor. | As per the MIB. |
| pimNbrSecAddress (1.3.6.1.2.1.157.1.3.1.4) | read-only | InetAddress | OCTET STRING (4 8 16 20) | Secondary IP address of this PIM neighbor. | Supports only value ipv6(2). |

pimStarGTable

About this table

This table contains the non-interface specific (*,G) state that PIM has. This table supports only the public network and is available only to PIM-SM.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimStarGAddressType and pimStarGGrpAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------------|---|--|---|
| pimStarGAddressType (1.3.6.1.2.1.157.1.4.1.1) | not-accessible | InetAddressType | INTEGER{ ipv4(1), ipv6(2) } | Address type of a multicast group. | Supports only the following values: ipv4(1) and ipv6(2). |
| pimStarGGrpAddress (1.3.6.1.2.1.157.1.4.1.2) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Multicast group address. | As per the MIB. |
| pimStarGUpTime (1.3.6.1.2.1.157.1.4.1.3) | read-only | TimeTicks | Standard MIB values. | Time since this entry was created by the local router. | As per the MIB. |
| pimStarGPimMode (1.3.6.1.2.1.157.1.4.1.4) | read-only | PimMode | asm(3), bidir(4) | PIM mode of this entry: ASM or BIDIR-PIM. | Supports only the following values: asm(3) and bidir(4). |
| pimStarGRPAddressType (1.3.6.1.2.1.157.1.4.1.5) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Address type of the RP. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). This object is associated with the current designated RP, which might be different from the actual RP. |
| pimStarGRPAddress (1.3.6.1.2.1.157.1.4.1.6) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP address of the RP for the group. | This object is associated with the current designated RP, which might be different from the actual RP. |
| pimStarGPimModeOrigin (1.3.6.1.2.1.157.1.4.1.7) | read-only | PimGroupMappingOriginType | INTEGER { fixed(1), configRp(2), configSsm(3), bsr(4), autoRP(5), embedded(6), other(7) } | Mechanism by which the PIM mode and RP for the group were learned. | Supported only the following values: configRp (2), bsr(4), and other(7). |
| pimStarGRPIsLocal (1.3.6.1.2.1.157.1.4.1.8) | read-only | TruthValue | true(1), false(2) | Whether the local router is the RP for the group. | As per the MIB. This object is associated with the current designated RP, which might be different from the actual RP. |
| pimStarGUpstream | read-only | INTEGER | notJoined (1), | Whether the local | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------------------|--|--|--|
| mJoinState (1.3.6.1.2.1.157.1.4.1.9) | | | joined (2) | router should join the RP tree for the group. | |
| pimStarGUpstreamJoinTimer (1.3.6.1.2.1.157.1.4.1.10) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router sends a next periodic (*,G) Join message. | As per the MIB. |
| pimStarGUpstreamNeighborType (1.3.6.1.2.1.157.1.4.1.11) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Primary address type of the upstream neighbor. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |
| pimStarGUpstreamNeighbor (1.3.6.1.2.1.157.1.4.1.12) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Primary address type of the upstream neighbor. | As per the MIB. |
| PimStarGRPFInterfaceIndex (1.3.6.1.2.1.157.1.4.1.13) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the RPF towards the RP. | As per the MIB. |
| pimStarGRPFNextHopType (1.3.6.1.2.1.157.1.4.1.14) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2) } | Address type of the RPF next hop towards the RP. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |
| pimStarGRPFNextHop (1.3.6.1.2.1.157.1.4.1.15) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Address of the RPF next hop towards the RP. | As per the MIB. |
| pimStarGRPFRoutingProtocol (1.3.6.1.2.1.157.1.4.1.16) | read-only | IANAipRouteProtocol | other(1) local(2) netmgmt(3) rip(8) isis(9) ospf(13) bgp(14) | Routing mechanism via which the route used to find the RPF interface towards the RP was learned. | Supports only the following values: <ul style="list-style-type: none"> • other(1). • local(2). • netmgmt(3). • rip(8). • isis(9). • ospf(13). • bgp(14). |
| pimStarGRPFRoutingAddress (1.3.6.1.2.1.157.1.4.1.17) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP address that identifies the route used to find the RPF interface towards the RP. | As per the MIB. |
| pimStarGRPFRoutingPrefixLength (1.3.6.1.2.1.157.1.4.1.18) | read-only | InetAddressPrefixLength | Unsigned32(0..2040) | Prefix length that identifies the route used to find the RPF interface towards the RP. | If pimStarGRPFInterfaceIndex is 0, this object value is always 0. |
| pimStarGRPFRoutingMetricPreference (1.3.6.1.2.1.157.1.4.1.19) | read-only | Unsigned32 | Unsigned32(0..2147483647) | Metric preference of the route used to find the RPF | If pimStarGRPFInterfaceIndex is 0, this object |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|--|
| (1.3.6.1.2.1.157.1.4.1.19) | | | | interface towards the RP. | value is always 2147483647. |
| pimStarGRPFRoutingMetric (1.3.6.1.2.1.157.1.4.1.20) | read-only | Unsigned32 | Standard MIB values. | Routing metric of the route used to find the RPF interface towards the RP. | If pimStarGRPFRoutingIndex is 0, this object value is always 4294967295. |

pimStarGITable

About this table

This table contains interface-specific (*,G) state that PIM has. This table supports only the public network and is available only to PIM-SM.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimStarGAddressType, pimStarGGrpAddress, and pimStarGIIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|--|---|-----------------|
| pimStarGIIfIndex (1.3.6.1.2.1.157.1.5.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface that an entry corresponds to. | As per the MIB. |
| pimStarGIUpTime (1.3.6.1.2.1.157.1.5.1.2) | read-only | TimeTicks | Standard MIB values. | Time since this entry was created by the local router. | Not supported |
| pimStarGILocalMembership (1.3.6.1.2.1.157.1.5.1.3) | read-only | TruthValue | true(1), false(2) | Whether the local router has (*,G) local membership on this interface. | As per the MIB. |
| pimStarGIJoinPruneState (1.3.6.1.2.1.157.1.5.1.4) | read-only | INTEGER | noInfo (1), join (2), prunePending (3) | State resulting from (*,G) Join/Prune messages received on this interface. | As per the MIB. |
| pimStarGIPrunePendingTimer (1.3.6.1.2.1.157.1.5.1.5) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router acts on a (*,G) Prune message received on this interface, during which the router is waiting to see whether another downstream | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|---|---|-----------------|
| | | | | router will override the Prune message. | |
| pimStarGJoinExpiryTimer (1.3.6.1.2.1.157.1.5.1.6) | read-only | TimeTicks | Standard MIB values. | Time remaining before (*,G) Join state for this interface expires. | As per the MIB. |
| pimStarGAssertState (1.3.6.1.2.1.157.1.5.1.7) | read-only | INTEGER | noInfo (1), iAmAssertWinner (2), iAmAssertLoser (3) | (*,G) Assert state for this interface. | Not supported |
| pimStarGAssertTimer (1.3.6.1.2.1.157.1.5.1.8) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router next sends a (*,G) Assert message on this interface. | Not supported |
| pimStarGAssertWinnerAddressType (1.3.6.1.2.1.157.1.5.1.9) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the assert winner. | Not supported |
| pimStarGAssertWinnerAddress (1.3.6.1.2.1.157.1.5.1.10) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP address of the assert winner. | Not supported |
| pimStarGAssertWinnerMetricPref (1.3.6.1.2.1.157.1.5.1.11) | read-only | Unsigned32 | Unsigned32(0..2147483647) | Metric preference of the route to the RP advertised by the assert winner. | Not supported |
| pimStarGAssertWinnerMetric (1.3.6.1.2.1.157.1.5.1.12) | read-only | Unsigned32 | Standard MIB values. | Routing metric of the route to the RP advertised by the assert winner. | Not supported |

pimSGTable

About this table

This table contains the non-interface specific (S,G) state that PIM has. This table supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimSGAddressType, pimSGGrpAddress, and pimSGSrcAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------------|--|--|--|
| pimSGAddressType (1.3.6.1.2.1.157.1.6.1.1) | not-accessible | InetAddressType | INTEGER{ ipv4(1), ipv6(2), } | Address type of the source and multicast group for an entry. | Supports only the following values: ipv4(1) and ipv6(2). |
| pimSGGrpAddresses (1.3.6.1.2.1.157.1.6.1.2) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Multicast group address for this entry. | As per the MIB. |
| pimSGSrcAddress (1.3.6.1.2.1.157.1.6.1.3) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Source address for this entry. | As per the MIB. |
| pimSGUpTime (1.3.6.1.2.1.157.1.6.1.4) | read-only | TimeTicks | Standard MIB values. | Time since this entry was created by the local router. | As per the MIB. |
| pimSGPimMode (1.3.6.1.2.1.157.1.6.1.5) | read-only | PimMode | ssm(2), asm(3) | PIM mode of the group for this entry, SSM or ASM. | Supports only the following values: ssm(2), asm(3), and dm(5). |
| pimSGUpstreamJoinState (1.3.6.1.2.1.157.1.6.1.6) | read-only | INTEGER | notJoined (1), joined (2) | Whether the local router should join the SPT for the source and group represented by this entry. | If the PIM mode is not PIM-SM, this object value is always joined (2). |
| pimSGUpstreamJoinTimer (1.3.6.1.2.1.157.1.6.1.7) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router sends a next periodic (S,G) Join message. | As per the MIB. |
| pimSGUpstreamNeighbor (1.3.6.1.2.1.157.1.6.1.8) | read-only | InetAddress | OCTET STRING (4 8 16 20) | Primary IP address of the upstream neighbor. | As per the MIB. |
| pimSGRPFInterfaceIndex (1.3.6.1.2.1.157.1.6.1.9) | read-only | InterfaceIndexOrZero | Integer32(0..2147483647) | Index of the RPF interface towards the source. | As per the MIB. |
| pimSGRPFNextHopType (1.3.6.1.2.1.157.1.6.1.10) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Address type of the RPF next hop towards the source. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |
| pimSGRPFNextHop (1.3.6.1.2.1.157.1.6.1.11) | read-only | InetAddress | OCTET STRING (4 8 16 20) | IP address of the RPF next hop towards the source. | As per the MIB. |
| pimSGRPFRouteProtocol (1.3.6.1.2.1.157.1.6.1.12) | read-only | IANAipRouteProtocol | INTEGER { other (1), } | Routing mechanism via which the route used to find the | Supports only the following values: • other(1). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------|---|--|--|
| 6.1.12) | | | local (2), netmgmt (3), icmp(4), egp (5), ggp (6), hello (7), rip (8), isis (9), esls (10), ciscolgrp (11), bbnSpflgp (12), ospf (13), bgp (14), idpr (15), ciscoEigrp (16), dvmrp (17) } | RPF interface towards the source was learned. | <ul style="list-style-type: none"> • local(2). • netmgmt(3). • rip(8). • isis(9). • ospf(13). • bgp(14). |
| pimSGRPFRoute Address (1.3.6.1.2.1.157.1.6.1.13) | read-only | InetAddress | OCTET STRING (4 8 16 20) | IP address that identifies the route used to find the RPF interface towards the source. | As per the MIB. |
| pimSGRPFRoute PrefixLength (1.3.6.1.2.1.157.1.6.1.14) | read-only | InetAddressPrefix Length | Unsigned32(0..2040) | Prefix length that identifies the route used to find the RPF interface towards the source. | If pimSGRPFIIndex is 0, this object value is always 0. |
| pimSGRPFRoute MetricPref (1.3.6.1.2.1.157.1.6.1.15) | read-only | Unsigned32 | Unsigned32(0..2147483647) | Metric preference of the route used to find the RPF interface towards the source. | If pimSGRPFIIndex is 0, this object value is always 2147483647. |
| pimSGRPFRoute Metric (1.3.6.1.2.1.157.1.6.1.16) | read-only | Unsigned32 | Standard MIB values. | Routing metric of the route used to find the RPF interface towards the source. | If pimSGRPFIIndex is 0, this object is 4294967295. |
| pimSGSPTBit (1.3.6.1.2.1.157.1.6.1.17) | read-only | TruthValue | true(1), false(2) | Whether the SPT bit is set. | As per the MIB. |
| pimSGKeepaliveTimer (1.3.6.1.2.1.157.1.6.1.18) | read-only | TimeTicks | Standard MIB values. | Time remaining before this (S,G) state expires. | If the PIM mode is not PIM-SM, this object value is always 0. |
| pimSGDRRegister State (1.3.6.1.2.1.157.1.6.1.19) | read-only | INTEGER | noInfo (1), join (2), joinPending (3), prune (4) | Whether the local router should encapsulate (S,G) data packets in Register messages and send them to the RP. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|---|---|---|
| pimSGDRRegisterStopTimer (1.3.6.1.2.1.157.1.6.1.20) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router sends a Null-Register message to the RP. | As per the MIB. |
| pimSGRPRegisterPMBRAAddressType (1.3.6.1.2.1.157.1.6.1.21) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the first PIM Multicast Border Router to send a Register message with the Border bit set. | Not supported |
| pimSGRPRegisterPMBRAAddress (1.3.6.1.2.1.157.1.6.1.22) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP address of the first PIM Multicast Border Router to send a Register message with the Border bit set. | Not supported |
| pimSGUpstreamPruneState (1.3.6.1.2.1.157.1.6.1.23) | read-only | INTEGER | forwarding (1), ackpending (2), pruned (3) | Whether the local router has pruned itself from the tree. | If the PIM mode is not PIM-SM, this object value is always forwarding |
| pimSGUpstreamPruneLimitTimer (1.3.6.1.2.1.157.1.6.1.24) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router may send a (S,G) Prune message. | As per the MIB. |
| pimSGOriginatorState (1.3.6.1.2.1.157.1.6.1.25) | read-only | INTEGER | notOriginator (1), originator (2) | Whether the router is an originator for an (S,G) message flow. | As per the MIB. |
| pimSGSourceActiveTimer (1.3.6.1.2.1.157.1.6.1.26) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router reverts to a notOriginator state. | As per the MIB. |
| pimSGStateRefreshTimer (1.3.6.1.2.1.157.1.6.1.27) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router sends a State Refresh message. | As per the MIB. |

pimSGITable

About this table

This table contains interface-specific (S,G) state that PIM has. This table supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimSGAddressType, pimSGGrpAddress, pimSGSrcAddress, and pimSGIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|--|--|
| PimSGIfIndex (1.3.6.1.2.1.157.1.7.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface that an entry corresponds to. | As per the MIB. |
| pimSGIUpTime (1.3.6.1.2.1.157.1.7.1.2) | read-only | TimeTicks | 0 (by default) | Time since this entry was created by the local router. | Not supported |
| pimSGILocalMembership (1.3.6.1.2.1.157.1.7.1.3) | read-only | TruthValue | true(1), false(2) | Whether the local router has (S,G) local membership on this interface. | As per the MIB. |
| PimSGIJoinPruneState (1.3.6.1.2.1.157.1.7.1.4) | read-only | INTEGER | noInfo (1), join (2), prunePending (3) | State resulting from (S,G) Join/Prune messages received on this interface. | In PIM-DM, v noInfo(1) indicates pruned, and join(2) indicates no information. |
| pimSGIPrunePendingTimer (1.3.6.1.2.1.157.1.7.1.5) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router acts on an (S,G) Prune message received on this interface, during which the router is waiting to see whether another downstream router will override the Prune message. | This timer is available to PIM-SM, PIM-DM, and PIM-SSM. |
| pimSGIJoinExpiryTimer (1.3.6.1.2.1.157.1.7.1.6) | read-only | TimeTicks | Standard MIB values. | Time remaining before (S,G) Join state for this interface expires. | This timer is available to PIM-SM, PIM-DM, and PIM-SSM. |
| pimSGIAssertState (1.3.6.1.2.1.157.1.7.1.7) | read-only | INTEGER(| noInfo (1), iAmAssertWinner (2), iAmAssertLoser (3) | (S,G) Assert state for this interface. | This timer is available to PIM-SM, PIM-DM, and PIM-SSM. |
| pimSGIAssertTimer (1.3.6.1.2.1.157.1.7.1.8) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router next sends a (S,G) Assert message on this interface | This timer is available to PIM-SM, PIM-DM, and PIM-SSM. |
| PimSGIAssertWinnerAddressType (1.3.6.1.2.1.157.1.7.1.9) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Address type of the assert winner. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------------|---|-----------------|
| pimSGIAssertWinnerAddress (1.3.6.1.2.1.157.1.7.1.10) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | Address of the assert winner. | As per the MIB. |
| pimSGIAssertWinnerMetricPref (1.3.6.1.2.1.157.1.7.1.11) | read-only | Unsigned32 | Unsigned32(0..2147483647) | Metric preference of the route to the source advertised by the assert winner. | As per the MIB. |
| pimSGIAssertWinnerMetric (1.3.6.1.2.1.157.1.7.1.12) | read-only | Unsigned32 | Standard MIB values. | Routing metric of the route to the source advertised by the assert winner. | As per the MIB. |

pimSGRptTable

About this table

This table contains the non-interface specific (S,G,rpt) state that PIM has. It supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimStarGAddressType, pimStarGGrpAddress, and pimSGRptSrcAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|---|---|-----------------|
| pimSGRptSrcAddress (1.3.6.1.2.1.157.1.8.1.1) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Source address for an entry. | As per the MIB. |
| pimSGRptUpTime (1.3.6.1.2.1.157.1.8.1.2) | read-only | TimeTicks | Standard MIB values. | Time since this entry was created by the local router. | As per the MIB. |
| pimSGRptUpstreamPruneState (1.3.6.1.2.1.157.1.8.1.3) | read-only | INTEGER | rptNotJoined (1), pruned (2), notPruned (3) | Whether the local router should prune the source off the RP tree. | As per the MIB. |
| pimSGRptUpstreamOverrideTimer (1.3.6.1.2.1.157.1.8.1.4) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router sends a triggered (S,G,rpt) Join message | As per the MIB. |

pimSGRptlTable

About this table

This table contains the interface-specific (S,G,rpt) state that PIM has. It supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimSGRptlTable, pimStarGGrpAddress, pimSGRptSrcAddress, and pimSGRptlflIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|---|---|-----------------|
| pimSGRptlflIndex (1.3.6.1.2.1.157.1.9.1.1) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface that an entry corresponds to. | As per the MIB. |
| pimSGRptlUpTime (1.3.6.1.2.1.157.1.9.1.2) | read-only | TimeTicks | 0 (by default) | Time since this entry was created by the local router. | Not supported |
| pimSGRptlLocalMembership (1.3.6.1.2.1.157.1.9.1.3) | read-only | TruthValue | true(1), false(2) | Whether the local router has both (*,G) include local membership and (S,G) exclude local membership on this interface.. | As per the MIB. |
| pimSGRptlJoinPruneState (1.3.6.1.2.1.157.1.9.1.4) | read-only | INTEGER | noInfo(1), prune(2), prunePending (3) | State resulting from (S,G,rpt) Join/Prune messages received on this interface. | As per the MIB. |
| pimSGRptlPrunePendingTimer (1.3.6.1.2.1.157.1.9.1.5) | read-only | TimeTicks | Standard MIB values. | Time remaining before the local router starts pruning this source off the RP tree. | As per the MIB. |
| pimSGRptlPruneExpiryTimer (1.3.6.1.2.1.157.1.9.1.6) | read-only | TimeTicks | Standard MIB values. | Time remaining before (S,G,rpt) Prune state for this interface expires. | As per the MIB. |

pimBidirDFElectionEntry

About this table

This table contains BIDIR-PIM DF settings. It supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimBidirDFElectionAddressType, pimBidirDFElectionRPAAddress, and pimBidirDFElectionIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|---|--|
| pimBidirDFElectionAddressType (1.3.6.1.2.1.157.1.10.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Address type of the RP associated with a DF. | As per the MIB. |
| pimBidirDFElectionRPAAddress (1.3.6.1.2.1.157.1.10.1.2) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | IP address of the RP associated with the DF. | As per the MIB. |
| pimBidirDFElectionIfIndex (1.3.6.1.2.1.157.1.10.1.3) | not-accessible | InterfaceIndex | Integer32(1..2147483647) | Index of the interface used in DF selection . | As per the MIB. |
| pimBidirDFElectionWinnerAddressType (1.3.6.1.2.1.157.1.10.1.4) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Address type of the DF winner. | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |
| pimBidirDFElectionWinnerAddress (1.3.6.1.2.1.157.1.10.1.5) | read-only | InetAddress | OCTET STRING (0 4 8 16 20) | IP address of the DF winner. | As per the MIB. |
| pimBidirDFElectionWinnerUpTime (1.3.6.1.2.1.157.1.10.1.6) | read-only | TimeTicks | Standard MIB values. | Time since the DF winner has come up. | As per the MIB. |
| pimBidirDFElectionWinnerMetricPref (1.3.6.1.2.1.157.1.10.1.7) | read-only | Unsigned32 | Standard MIB values. | Metric preference of the DF winner. | As per the MIB. |
| pimBidirDFElectionWinnerMetric (1.3.6.1.2.1.157.1.10.1.8) | read-only | Unsigned32 | Standard MIB values. | Metric of the DF winner. | As per the MIB. |
| pimBidirDFElectionState (1.3.6.1.2.1.157.1.10.1.9) | read-only | INTEGER | dfOffer(1), dfLose(2), dfWinner(3), dfBackoff(4) | DF status of the interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| pimBidirDFElectionStateTimer (1.3.6.1.2.1.157.1.10.1.10) | read-only | Timeticks | Standard MIB values. | DF election timeout time of the interface. | As per the MIB. |

pimStaticRPEntry

About this table

This table contains static RP settings. It supports only the public network. ACL-based multicast group filtering for static RPs configured by using the **static-rp** command is not supported.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|--|
| Supported | Supported | Supported | Read of the static-rp command with an ACL specified is not supported. |

Columns

The table indexes are pimStaticRPAddressType, pimStaticRPGrpAddress, and pimStaticRPGrpPrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|--|--|--|
| pimStaticRPAddressType (1.3.6.1.2.1.157.1.11.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Type of a static RP. | As per the MIB. |
| pimStaticRPGrpAddress (1.3.6.1.2.1.157.1.11.1.2) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Address of the multicast group to which the static RP is designated.. | Supports only the following values: 224.0.0.0/4(ipv4) and FF :: / 8(ipv6). |
| pimStaticRPGrpPrefixLength (1.3.6.1.2.1.157.1.11.1.3) | not-accessible | InetAddressPrefix Length | Unsigned32(4..128) | Mask length of the multicast group address to which the static RP is designated. | Supports only the following values: 4(ipv4) and 8(ipv6). |
| pimStaticRPRPAddress (1.3.6.1.2.1.157.1.11.1.4) | read-create | InetAddress | OCTET STRING (4 8 16 20) | IP address of the static RP. | As per the MIB. |
| pimStaticRPPimMode (1.3.6.1.2.1.157.1.11.1.5) | read-create | PimMode | ssm(2), asm(3), bidir(4) | Mode of the static RP. | Supports only the following values: asm(3) and bidir(4). |
| pimStaticRPOverrideDynamic (1.3.6.1.2.1.157.1.11.1.6) | read-create | TruthValue | true(1), false(2) | Whether priority has been given to the static RP. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|---|----------------------------|---|
| 11.1.6) | | | | | |
| pimStaticRPPrecedence (1.3.6.1.2.1.157.1.11.1.7) | read-create | Unsigned32 | Standard MIB values. | Priority of the static RP. | Read-only. The value is always 1342177280. |
| pimStaticRPRowStatus (1.3.6.1.2.1.157.1.11.1.8) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |
| pimStaticRPStorageType (1.3.6.1.2.1.157.1.11.1.9) | read-create | StorageType | other(1) | Row storage type. | Read-only. Supports only value other(1). |

pimGroupMappingTable

About this table

This table contains mappings between multicast group addresses to RPs. It supports only the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pimGroupMappingOrigin, pimGroupMappingAddressType, pimGroupMappingGrpAddress, pimGroupMappingGrpPrefixLength, pimGroupMappingRPAddressType, and pimGroupMappingRPAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------------|--|--|---|
| pimGroupMappingOrigin (1.3.6.1.2.1.157.1.13.1.1) | not-accessible | PimGroupMappingOriginType | fixed(1); configRp(2); configSsm(3); bsr(4); autoRP(5); embedded(6); other(7) | Mechanism by which this group mapping was learned. | Supports only BSR, SRP, and SSM. |
| pimGroupMappingAddressType (1.3.6.1.2.1.157.1.13.1.2) | not-accessible | InetAddressType | INTEGER{ ipv4(1), ipv6(2), } | Address type of the IP multicast group prefix. | Supports only values ipv4(1) and ipv6(2). |
| pimGroupMappingGrpAddress (1.3.6.1.2.1.157.1.13.1.3) | not-accessible | InetAddress | OCTET STRING (4 8 16 20) | Multicast group address that gives the group prefix for this mapping. | As per the MIB. |
| pimGroupMappingGrpPrefixLength (1.3.6.1.2.1.157.1.13.1.4) | not-accessible | InetAddressPrefixLength | Unsigned32(4..128) | Prefix length of the multicast group address that gives the group prefix for this mapping. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--|---|--|
| pimGroupMapping RPAAddressType (1.3.6.1.2.1.157.1.13.1.5) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), } | Address type of the RP to be used for groups within this group prefix | Supports only the following values: unknown(0), ipv4(1), and ipv6(2). |
| pimGroupMapping RPAAddress (1.3.6.1.2.1.157.1.13.1.6) | not-accessible | InetAddress | OCTET STRING (0 4 8 16 20) | IP address of the RP to be used for groups within this group prefix. | As per the MIB. |
| pimGroupMapping PimMode (1.3.6.1.2.1.157.1.13.1.7) | read-only | PimMode | none(1); ssm(2); asm(3); bidir(4); dm(5); other(6) | PIM mode to be used for groups in this group prefix. | Supports only the following values: asm, ssm, and bidir. |
| pimGroupMapping Precedence (1.3.6.1.2.1.157.1.13.1.8) | read-only | Unsigned32 | Standard MIB values. | Precedence of the SSM mapping. | If pimGroupMapping Origin is bsr(4), this object is (0x30000000 + rp priority). If pimGroupMapping Origin is configRp(2), this object is (0x50000000). If pimGroupMapping Origin is configSsm(3), this object is (0x00000000). |

Notifications

pimNeighborLoss

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|--------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.157.0.1 | PIM neighbor loss. | Informational | Minor | N/A | ON |

Description

This notification indicates the loss of a PIM neighbor. This notification is generated when the PIM neighbor timer expires and the router does not have another neighbor on the same interface with the same IP version and a lower IP address than itself.

Status control

ON

CLI: Use the `snmp-agent trap enable { pim | pim6 } neighbor-loss` command.

OFF

CLI: Use the `undo snmp-agent trap enable { pim | pim6 } neighbor-loss` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------------|-------|-----------|----------------------|
| 1.3.6.1.2.1.157.1.2.1.6 (pimNeighborUpTime) | Time since the neighbor has come up. | No | TimeTicks | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Verify that whether this notification is generated because of PIM neighbor configuration change.
2. Verify that PIM is correctly configured on the interface.
3. Verify that the lost PIM neighbor can operate correctly.
4. Verify that this router has sufficient memory.
5. Verify that this router does not have link failures.
6. If the issue persists, contact H3C Support.

pimRPMappingChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.157.0.4 | RP change. | Informational | N/A | N/A | ON |

Description

This notification is generated when the RP in PIM changes.

Status control

ON

CLI: Use the `snmp-agent trap enable { pim | pim6 } rp-mapping-change` command.

OFF

CLI: Use the `undo snmp-agent trap enable { pim | pim6 } rp-mapping-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------|-------|------------|----------------------|
| 1.3.6.1.2.1.157.1.13.1.7 (pimGroupMappingPimMode) | PIM mode. | No | PimMode | Standard MIB values. |
| 1.3.6.1.2.1.157.1.13.1.8 (pimGroupMappingPrecedence) | Priority. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

pimInterfaceElection

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.157.0.5 | DR change. | Informational | N/A | N/A | ON |

Description

This notification is generated when an interface is elected as the DR in PIM.

Status control

ON

CLI: Use the `snmp-agent trap enable { pim | pim6 } interface-election` command.

OFF

CLI: Use the `undo snmp-agent trap enable { pim | pim6 } interface-election` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------|-------|-----------------|----------------------|
| 1.3.6.1.2.1.157.1.1.1.3 (pimInterfaceAddressType) | Interface address type. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.157.1.1.1.4 (pimInterfaceAddress) | Interface address | No | InetAddress | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-EVC-MIB

About this MIB

Use this MIB to configure EVC related settings.

MIB file name

hh3c-evc.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cEvc(106)

Tabular objects

hh3cEvcScalarGroup

About this table

Use this table to obtain global EVC information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|---|---|-----------------|
| hh3cEvcSrvInstEncapCapabilities (1.3.6.1.4.1.25506.2.106.1.1.1) | read-only | BITS | encapDefault(0), encapUntagged(1), encapTagged(2), encapSvlanId(3), encapSvlanIdList(4), encapSvlanIdOnlyTagged(5), encapSvlanIdCvlanId(6), encapSvlanIdCvlanIdList(7), encapCvlanId(8), encapCvlanIdList(9) | Capabilities of the EVC service instance. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cEvcPortMaxSrvInstNum (1.3.6.1.4.1.25506.2.106.1.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Maximum number of EVC service instances supported on a port. | As per the MIB. |

hh3cEvcSrvInstTable

About this table

Use this table to create and delete EVC service instances.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are ifIndex and hh3cEvcSrvInstId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|---|-----------------|
| hh3cEvcSrvInstId (1.3.6.1.4.1.25506.2.106.1.2.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Service instance ID. | As per the MIB. |
| hh3cEvcSrvInstEncap (1.3.6.1.4.1.25506.2.106.1.2.1.2) | read-create | INTEGER | none(0), default(1), untagged(2), tagged(3), svlanIdList(4), svlanIdListOnlyTagged(5), svlanIdCvlanId(6), svlanIdCvlanIdList(7), svlanIdCvlanIdAll(8), cvlanIdList(9) | Encapsulation type of the service instance. | As per the MIB. |
| hh3cEvcSrvInstSvlanIdListLow (1.3.6.1.4.1.25506.2.106.1.2.1.3) | read-create | OCTET STRING | OCTET STRING (0..256) | Low bit of the SVLAN list. | As per the MIB. |
| hh3cEvcSrvInstSvlanIdListHigh (1.3.6.1.4.1.25506.2.106.1.2.1.4) | read-create | OCTET STRING | OCTET STRING (0..256) | High bit of the SVLAN list. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|--|-------------------------------|---|
| hh3cEvcSrvInstRowStatus (1.3.6.1.4.1.25506.2.106.1.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports active(1), createAndGo(4), and destroy(6). |
| hh3cEvcSrvInstEnableInStat (1.3.6.1.4.1.25506.2.106.1.2.1.6) | read-create | TruthValue | true(1), false(2) | Inbound statistics function. | Supports only the read operation. The set operation will be ignored. |
| hh3cEvcSrvInstEnableOutStat (1.3.6.1.4.1.25506.2.106.1.2.1.7) | read-create | TruthValue | true(1), false(2) | Outbound statistics function. | Supports only the read operation. The set operation will be ignored. |
| hh3cEvcSrvInstCvlanIdListLow (1.3.6.1.4.1.25506.2.106.1.2.1.8) | read-create | OCTET STRING | OCTET STRING (0..256) | Low bit of the CVLAN list. | As per the MIB. |
| hh3cEvcSrvInstCvlanIdListHigh (1.3.6.1.4.1.25506.2.106.1.2.1.9) | read-create | OCTET STRING | OCTET STRING (0..256) | High bit of the CVLAN list. | As per the MIB. |

hh3cEvcSrvInstCarTable

About this table

Use this table to configure CAR for EVC service instances.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are ifIndex and hh3cEvcSrvInstId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---------------------------|---|-----------------------------------|
| hh3cEvcSrvInstInCarIndex (1.3.6.1.4.1.25506.2.106.1.3.1.1) | read-write | Integer32 | Integer32 (1..2147483647) | Global CAR index in the inbound direction. | Supports only the read operation. |
| hh3cEvcSrvInstOutCarIndex (1.3.6.1.4.1.25506.2.106.1.3.1.2) | read-write | Integer32 | Integer32 (1..2147483647) | Global CAR index in the outbound direction. | Supports only the read operation. |

hh3cEvcSrvInstStatInfoTable

About this table

Use this table to obtain forwarding statistics about an EVC service instance.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cEvcSrvInstId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cEvcSrvInstInPackets (1.3.6.1.4.1.25506.2.106.1.4.1.1) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets received on this service instance. | As per the MIB. |
| hh3cEvcSrvInstInBytes (1.3.6.1.4.1.25506.2.106.1.4.1.2) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of bytes received on this service instance. | As per the MIB. |
| hh3cEvcSrvInstOutPackets (1.3.6.1.4.1.25506.2.106.1.4.1.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets transmitted on this service instance. | As per the MIB. |
| hh3cEvcSrvInstOutBytes (1.3.6.1.4.1.25506.2.106.1.4.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of bytes transmitted on this service instance. | As per the MIB. |

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HH3C-L2VPN-MIB

About this MIB

Use this MIB to obtain L2VPN configuration information. This MIB also contains notifications about PW state changes.

MIB file name

hh3c-l2vpn.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3L2vpn(162)

Tabular objects

hh3cL2vpnPwcTable

About this table

This table contains PW class information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cL2vpnPwcName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|--|-----------------------------------|
| hh3cL2vpnPwcName (1.3.6.1.4.1.25506.2.162.2.1.1.1) | not-accessible | OCTET STRING | OCTET STRING (0..19) | PW class name. | As per the MIB. |
| hh3cL2vpnPwcCvType (1.3.6.1.4.1.25506.2.162.2.1.1.2) | read-create | INTEGER | unknown(1), bfd(2), rawBFD(3) | Encapsulation mode used by BFD packets for PW fault detection. | Supports only the read operation. |
| hh3cL2vpnPwcCcType (1.3.6.1.4.1.25506.2.162.2.1.1.3) | read-create | INTEGER | unknown(1), controlWord(2), routerAlert(3), ttl(4) | VCCV control channel type. | Supports only the read operation. |
| hh3cL2vpnPwcControlWord (1.3.6.1.4.1.25506.2.162.2.1.1.4) | read-create | TruthValue | true(1) false(2) | Whether the control word feature is enabled. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|-----------------------------|-----------------------------------|
| hh3cL2vpnPwcPwType (1.3.6.1.4.1.25506.2.162.2.1.1.5) | read-create | INTEGER | vlan(4), ethernet(5) | PW data encapsulation type. | Supports only the read operation. |
| hh3cL2vpnPwcRowStatus (1.3.6.1.4.1.25506.2.162.2.1.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| hh3cL2vpnPwcFlowLabel (1.3.6.1.4.1.25506.2.162.2.1.1.7) | read-create | INTEGER | unknown(1), send(2), receive(3), both(4) | PW flow label. | Supports only the read operation. |

hh3cL2vpnXcgTable

About this table

This table contains L2VPN cross-connect group information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cL2vpnXcgName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--|--|-----------------------------------|
| hh3cL2vpnXcgName (1.3.6.1.4.1.25506.2.162.3.1.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..31) | Name of the cross-connect group. | As per the MIB. |
| hh3cL2vpnXcgAdminState (1.3.6.1.4.1.25506.2.162.3.1.1.2) | read-create | INTEGER | adminUp(1), adminDown(2) | Administrative state of the cross-connect group. | Supports only the read operation. |
| hh3cL2vpnXcgRowStatus (1.3.6.1.4.1.25506.2.162.3.1.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

hh3cL2vpnXcgConnTable

About this table

This table contains L2VPN cross-connect information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cL2vpnXcgName and hh3cL2vpnXcgConnName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|----------------------------|-----------------------------------|
| hh3cL2vpnXcgConnName (1.3.6.1.4.1.25506.2.162.3.2.1.1) | not-accessible | OCTET STRING | OCTET STRING (1..20) | Name of the cross-connect. | As per the MIB. |
| hh3cL2vpnXcgConnRowStatus (1.3.6.1.4.1.25506.2.162.3.2.1.2) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

hh3cL2vpnXcgAcTable

About this table

This table contains cross-connect group AC information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cL2vpnXcgName, hh3cL2vpnXcgConnName, hh3cL2vpnXcgAcIfIndex, and hh3cL2vpnXcgAcEvcsrvInstId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|--------------------------------|---|---|
| hh3cL2vpnXcgAcIfIndex (1.3.6.1.4.1.25506.2.162.3.3.1.1) | not-accessible | InterfaceIndex | InterfaceIndex (1..2147483647) | Interface index of the AC. | As per the MIB. |
| hh3cL2vpnXcgAcEvcsrvInstId (1.3.6.1.4.1.25506.2.162.3.3.1.2) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | ID of the Ethernet service instance bound to the cross-connect group. | As per the MIB. The value of this object is fixed at 0 for a Layer 3 |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|---------------------------|---|
| | | | | | interface. |
| hh3cL2vpnXcgAc AccessMode (1.3.6.1.4.1.25506 .2.162.3.3.1.3) | read-create | INTEGER | vlan(1), ethernet(2) | Access mode of the AC. | Supports only the read operation. This object is meaningless when the AC is not a Layer 2 Ethernet interface. |
| hh3cL2vpnXcgAc RowStatus (1.3.6.1.4.1.25506 .2.162.3.3.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

hh3cL2vpnXcgPwTable

About this table

This table contains cross-connect group PW information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cL2vpnXcgName, hh3cL2vpnXcgConnName, and hh3cL2vpnXcgPwIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|--------------|-------------------------------|---|--------------------------------------|
| hh3cL2vpnXcgPw Index (1.3.6.1.4.1.25506 .2.162.3.4.1.1) | accessible-for-noti fy | Unsigned32 | Unsigned32 (0..4294967295) | PW index. | As per the MIB. |
| hh3cL2vpnXcgPw CfgType (1.3.6.1.4.1.25506 .2.162.3.4.1.2) | read-create | INTEGER | primary(1), backup(2) | PW type, primary PW or backup PW. | Supports only the read operation. |
| hh3cL2vpnXcgPw ClassName (1.3.6.1.4.1.25506 .2.162.3.4.1.3) | read-create | OCTET STRING | OCTET STRING (0..19) | Name of the used PW class. | Supports only the read operation. |
| hh3cL2vpnXcgPw TunnelPolicy (1.3.6.1.4.1.25506 .2.162.3.4.1.4) | read-create | OCTET STRING | OCTET STRING (0..19) | Name of the used tunnel policy. | Supports only the read operation. |
| hh3cL2vpnXcgPw PeerIp (1.3.6.1.4.1.25506 .2.162.3.4.1.5) | accessible-for-noti fy | IpAddress | OCTET STRING (SIZE (4)) | Peer's IP address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|------------|--|-------------|-----------------------------------|
| hh3cL2vpnXcgPwPwID (1.3.6.1.4.1.25506.2.162.3.4.1.6) | accessible-for-notify | Unsigned32 | Unsigned32 (0..4294967295) | PW ID. | As per the MIB. |
| hh3cL2vpnXcgPwRowStatus (1.3.6.1.4.1.25506.2.162.3.4.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

hh3cL2vpnLinkTable

About this table

This table contains L2VPN link information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cL2vpnLinkVsiIndex and hh3cL2vpnLinkLinkID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|------------------------------------|---|-----------------|
| hh3cL2vpnLinkVsiIndex (1.3.6.1.4.1.25506.2.162.2.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | VSI index. | As per the MIB. |
| hh3cL2vpnLinkLinkID (1.3.6.1.4.1.25506.2.162.2.2.1.2) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Link ID | As per the MIB. |
| hh3cL2vpnLinkType (1.3.6.1.4.1.25506.2.162.2.2.1.3) | read-only | INTEGER | unknown(1), ac(2), tunnel(3) | VSI link type. | As per the MIB. |
| hh3cL2vpnLinkIfIndex (1.3.6.1.4.1.25506.2.162.2.2.1.4) | read-only | InterfaceIndex | InterfaceIndex (1..2147483647) | Interface index of the VSI link. | As per the MIB. |
| hh3cL2vpnLinkSvcID (1.3.6.1.4.1.25506.2.162.2.2.1.5) | read-only | Unsigned32 | Unsigned32(0..4294967295) | Ethernet service instance ID of the VSI link. | As per the MIB. |
| hh3cL2vpnLinkTunnelID (1.3.6.1.4.1.25506.2.162.2.2.1.6) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Tunnel interface number of the VSI link. | As per the MIB. |

| | | | | | |
|-----------------|--|--|--|--|--|
| .2.162.2.2.1.6) | | | | | |
|-----------------|--|--|--|--|--|

hh3cL2vpnMacLimitPwTable

About this table

This table contains L2VPN MAC limit alarm information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cL2vpnMacLimitPwVsiIndex and hh3cL2vpnMacLimitPwLinkID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------------|--|-------------------------------------|-----------------------------------|
| hh3cL2vpnMacLimitPwVsiIndex (1.3.6.1.4.1.25506.2.162.2.3.1.1) | accessible-for-notify | Unsigned32 | Unsigned32 (0..4294967295) | VSI index. | As per the MIB. |
| hh3cL2vpnMacLimitPwLinkID (1.3.6.1.4.1.25506.2.162.2.3.1.2) | accessible-for-notify | Unsigned32 | Unsigned32 (0..4294967295) | Link ID of the PW. | As per the MIB. |
| hh3cL2vpnMacLimitPwVsiName (1.3.6.1.4.1.25506.2.162.2.3.1.3) | read-create | DisplayString | OCTET STRING (0..255) | VSI name. | As per the MIB. |
| hh3cL2vpnMacLimitPwRowStatus (1.3.6.1.4.1.25506.2.162.2.3.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status of the MacLimitPw table. | Supports only the read operation. |

Notifications

hh3cL2vpnPwSwitchPtoB

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.162.0.1 | Traffic is switched from the primary PW to the backup PW. | Error | Warning | 1.3.6.1.4.1.25506.2.162.0.2(hh3cL2vpnPwSwitchBtoP) | OFF |

Description

A notification sent when the traffic is switched from the primary PW to the backup PW.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [pw-switch]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [pw-switch]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.3.4.1.1 (hh3cL2vpnXcgPwIndex) | PW index associated with the cross-connect. | Yes | Unsigned32 | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.3.4.1.5 (hh3cL2vpnXcgPwPeerIp) | IP address of the PW associated with the cross-connect. | No | IpAddress | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.3.4.1.6 (hh3cL2vpnXcgPwPwID) | ID of the PW associated with the cross-connect. | No | Unsigned32 | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnPwSwitchBtoP

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.162.0.2 | Traffic is switched from the backup PW to the primary PW. | Recovery | Warning | - | OFF |

Description

A notification sent when the traffic is switched from the backup PW to the primary PW.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [pw-switch]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [pw-switch]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.3.4.1.1 (hh3cL2vpnXcgPwIndex) | PW index associated with the cross-connect. | Yes | Unsigned32 | As per the MIB. |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.3.4.1.5 (hh3cL2vpnXcgPwPeerIp) | IP address of the PW associated with the cross-connect. | No | IpAddress | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.3.4.1.6 (hh3cL2vpnXcgPwPwID) | ID of the PW associated with the cross-connect. | No | Unsigned32 | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnMacLimitMaxPw

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.162.0.3 | The number of MAC addresses learned on a PW exceeded the limit. | Error | Warning | 1.3.6.1.4.1.25506.2.162.0.4(hh3cL2vpnMacLimitMaxPw_Clear) | OFF |

Description

This notification is generated when the number of MAC addresses learned on a PW exceeds the limit.

Status control

CLI: Use the `snmp-agent trap enable l2vpn [maclimit-pw]` command.

CLI: Use the `undo snmp-agent trap enable l2vpn [maclimit-pw]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------|-------|---------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.2.3.1.1 (hh3cL2vpnMacLimitPwVsiIndex) | VSI index. | Yes | Unsigned32 | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.2.3.1.12 (hh3cL2vpnMacLimitPwLinkId) | Link ID of the PW. | Yes | Unsigned32 | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.2.3.1.3 (hh3cL2vpnMacLimitPwVsiName) | VSI name. | No | DisplayString | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnMacLimitMaxPw_Clear

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.162.0.4 | The number of MAC addresses learned on a PW | Recovery | Warning | N/A | OFF |

| | | | | | |
|--|--------------------------|--|--|--|--|
| | dropped below the limit. | | | | |
|--|--------------------------|--|--|--|--|

Description

This notification is generated when the number of MAC addresses learned on a PW drops below the limit.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [maclimit-pw]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [maclimit-pw]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------|-------|---------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.2.3.1.1 (hh3cL2vpnMacLimitPwVsiIndex) | VSI index. | Yes | Unsigned32 | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.2.3.1.12 (hh3cL2vpnMacLimitPwLinkId) | Link ID of the PW. | Yes | Unsigned32 | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.2.3.1.3 (hh3cL2vpnMacLimitPwVsiName) | VSI name. | No | DisplayString | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnMacLimitMaxAc

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.162.0.5 | The number of MAC addresses learned on an AC exceeded the limit. | Error | Warning | 1.3.6.1.4.1.25506.2.162.0.6(hh3cL2vpnMacLimitMaxAc_Clear) | OFF |

Description

This notification is generated when the number of MAC addresses learned on an AC exceeds the limit.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [maclimit-ac]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [maclimit-ac]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------------|-------|---------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.4.1.1.3 (hh3cL2vpnAcIfName) | Name of the interface (AC). | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.4.1.1.4 (hh3cL2vpnAcVsiName) | Name of the VSI bound to the AC. | No | DisplayString | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnMacLimitMaxAc_Clear

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.162.0.6 | The number of MAC addresses learned on an AC dropped below the limit. | Recovery | Warning | N/A | OFF |

Description

This notification is generated when the number of MAC addresses learned on an AC drops below the limit.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [maclimit-ac]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [maclimit-ac]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------------|-------|---------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.4.1.1.3 (hh3cL2vpnAcIfName) | Name of the interface (AC). | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.4.1.1.4 (hh3cL2vpnAcVsiName) | Name of the VSI bound to the AC. | No | DisplayString | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnPwParaMisMatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|------------------------------|-------|----------|-----------------------------|----------------|
| 1.3.6.1.4.1.25506.2.162.0.7 | PW parameter settings do not | Error | Warning | 1.3.6.1.4.1.25506.2.162.0.8 | OFF |

| | | | | | |
|--|--------|--|--|------------------------|--|
| | match. | | | (hh3cL2vpnPwParaMatch) | |
|--|--------|--|--|------------------------|--|

Description

This notification is generated when the settings of the PW parameters do not match.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [pw-parameter]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [pw-parameter]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.5.1.1.6 (hh3cL2vpnPwVsiName) | Name of the VSI to which the PW is bound. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.5.1.1.7 (hh3cL2vpnPwXcgName) | Name of the cross-connect group to which the PW is bound. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.5.1.1.8 (hh3cL2vpnPwXcgConnName) | Name of the cross-connect to which the PW is bound. | No | DisplayString | As per the MIB. |

Recommended action

No action is required.

hh3cL2vpnPwParaMatch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.162.0.8 | PW parameter settings are consistent. | Recovery | Warning | N/A | OFF |

Description

This notification is generated when the PW parameters settings are matching.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [pw-parameter]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [pw-parameter]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|-----------------|
| 1.3.6.1.4.1.25506.2.162.5.1.1.6 (hh3cL2vpnPwVsiName) | Name of the VSI to which the PW is bound. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.5.1.1.7 (hh3cL2vpnPwXcgName) | Name of the cross-connect group to which the PW is bound. | No | DisplayString | As per the MIB. |
| 1.3.6.1.4.1.25506.2.162.5.1.1.8 (hh3cL2vpnPwXcgConnName) | Name of the cross-connect to which the PW is bound. | No | DisplayString | As per the MIB. |

Recommended action

No action is required.

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HH3C-L3VPN-MIB

About this MIB

This MIB contains L3VPN information.

MIB file name

hh3c-l3vpn.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cL3vpn (228)

Scalar objects

hh3cL3vpnVrfName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|--------------|----------------------|----------------|-----------------|
| hh3cL3vpnVrfName (1.3.6.1.4.1.25506.2.228.1.1) | accessible-for-notification | OCTET STRING | OCTET STRING (0..31) | Name of a VRF. | As per the MIB. |

hh3cL3vpnIfName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|---------------|-----------------------|--------------------------------------|-----------------|
| hh3cL3vpnIfName (1.3.6.1.4.1.25506.2.228.1.2) | accessible-for-notification | DisplayString | OCTET STRING (1..255) | Name of an interface bound to a VRF. | As per the MIB. |

Notifications

hh3cL3vpnVrfV6Up

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.228.0.1 | At least one of the IPv6 interfaces bound to the VRF come up from the down state. | Informational | Warning | N/A | ON |

Description

This notification is generated when the status of the IPv6 interfaces associated with the VPN instance (VRF) changes from all down to partially up.

Status control

ON

CLI: Use the `snmp-agent trap enable l3vpn vrf-ipv6-up` command.

Off

CLI: Use the `undo snmp-agent trap enable l3vpn vrf-ipv6-up` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------------|----------------------|
| 1.3.6.1.4.1.25506.2.228.1.1 (hh3cL3vpnVrfName) | Name of a VRF. | No | OCTET STRING | OCTET STRING(0..31) |
| 1.3.6.1.4.1.25506.2.228.1.2 (hh3cL3vpnIfName) | Name of an interface bound to the VRF. | No | DisplayString | OCTET STRING(1..255) |

Recommended action

Check the IPv6 interfaces bound to the VRF. If the status of the IPv6 interfaces is not as expected, collect trap and configuration information of the interfaces and then contact the technical support.

hh3cL3vpnVrfV6Down

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.228.0.2 | The IPv6 interfaces bound to the VRF are all down. | Informational | Warning | N/A | ON |

Description

This notification is generated when the IPv6 interfaces bound to the VPN instance (VRF) are all down.

Status control

ON

CLI: Use the `snmp-agent trap enable l3vpn vrf-ipv6-down` command.

Off

CLI: Use the `undo snmp-agent trap enable l3vpn vrf-ipv6-down` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------------|----------------------|
| 1.3.6.1.4.1.25506.2.228.1.1 (hh3cL3vpnVrfName) | Name of a VRF. | No | OCTET STRING | OCTET STRING(0..31) |
| 1.3.6.1.4.1.25506.2.228.1.2 (hh3cL3vpnIfName) | Name of an interface bound to the VRF. | No | DisplayString | OCTET STRING(1..255) |

Recommended action

Check the IPv6 interfaces bound to the VRF. If the status of the IPv6 interfaces is not as expected, collect trap and configuration information of the interfaces and then contact the technical support.

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HH3C-MPLSSCRLSP-MIB

About this MIB

Use this MIB to notify traps about static CRLSPs.

MIB file name

hh3c-mplsscrlsp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(4).mib-2(1).transmission(25506).mplsStdMIB(2).mplsTeCrlspStdMIB(231)

Tabular objects

hh3cMplsScrIspBaseInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|--------------|-----------------------|--------------------------------|-----------------|
| hh3cMplsScrIspBaseInfo (1.3.6.1.4.1.25506.2.231.1.1.1) | accessible-for-notification | OCTET STRING | OCTET STRING (1..127) | Static CRLSP basic information | As per the MIB. |

hh3cMplsScrIspExtInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|--------------|-----------------------|-----------------------------------|-----------------|
| hh3cMplsScrIspExtInfo (1.3.6.1.4.1.25506.2.231.1.1.2) | accessible-for-notification | OCTET STRING | OCTET STRING (1..127) | Static CRLSP extended information | As per the MIB. |

Notifications

hh3cMplsScrIspDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|-------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.231.0.1 | Static CRLSP down | Error | Major | 1.3.6.1.4.1.25506.2.231.0.2 (hh3cMplsScrIspUp) | ON |

Description

This notification is generated when a static CRLSP goes down. The MPLS TE tunnel that uses the static CRLSP will fail to forward traffic.

Status control

ON

CLI: Use the `snmp-agent trap enable lsm` command.

OFF

CLI: Use the `undo snmp-agent trap enable lsm` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------------------|-------|--------------|-----------------|
| (1.3.6.1.4.1.25506.2.231.1.1.1) hh3cMplsScrIspBaseInfo | Static CRLSP basic information | Yes | OCTET STRING | As per the MIB. |
| (1.3.6.1.4.1.25506.2.231.1.1.2) hh3cMplsScrIspExtInfo | Static CRLSP extended information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsScrIspUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|-----------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.231.0.2 | Static CRLSP up | Recovery | N/A | N/A | ON |

Description

This notification is generated when a static CRLSP comes up.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------------------|-------|--------------|-----------------|
| (1.3.6.1.4.1.25506.2.231.1.1.1) hh3cMplsScrIspBaseInfo | Static CRLSP basic information | Yes | OCTET STRING | As per the MIB. |
| (1.3.6.1.4.1.25506.2.231.1.1.2) hh3cMplsScrIspExtInfo | Static CRLSP extended information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

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HH3C-MPLSEXT-MIB

About this MIB

Use this MIB to manage MPLS and LDP capabilities and MPLS BFD sessions.

MIB file name

rfc3812-mpls-te-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166).mplsTeStdMIB(3)

Scalar objects

hh3cMplsExtLsrID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|--------------------------|----------------|-----------------|
| hh3cMplsExtLsrID (1.3.6.1.4.1.25506 .2.142.1.1.1) | read-write | OCTET STRING | OCTET STRING (0..255) | Global LSR ID. | As per the MIB. |

hh3cMplsExtLdpStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|-----------------------------------|-----------------|
| hh3cMplsExtLdpS tatus (1.3.6.1.4.1.25506 .2.142.1.1.2) | read-write | TruthValue | true(1), false(2) | Enabling status of global LDP. | As per the MIB. |

Tabular objects

hh3cMplsExtTable

About this table

Use this table to configure the MPLS capability for interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---|-----------|-----------|
| You cannot set an MTU for a tunnel interface. By default, the MPLS MTU depends on the interface MTU. Different types of interfaces have different MTU values. | The MTU of a tunnel interface cannot be modified. | Supported | Supported |

Columns

The table index is hh3cMplsExtIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--|-----------------------------------|--|
| hh3cMplsExtIndex (1.3.6.1.4.1.25506.2.142.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of an interface. | As per the MIB. |
| hh3cMplsExtCapability (1.3.6.1.4.1.25506.2.142.1.2.1.2) | read-create | TruthValue | true(1), false(2) | MPLS capability of the interface. | As per the MIB. |
| hh3cMplsExtMtu (1.3.6.1.4.1.25506.2.142.1.2.1.3) | read-create | Unsigned32 | Unsigned32 (46..65535) | MPLS MTU of the interface. | As per the MIB. |
| hh3cMplsExtRowStatus (1.3.6.1.4.1.25506.2.142.1.2.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cMplsExtLdpTable

About this table

Use this table to configure the LDP capability for interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|-------------|-----------|-----------|
| When create, the value of hh3cMplsExtLdpCapability must be true(1). | Supported | Supported | Supported |

Columns

The table index is hh3cMplsExtLdpIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|-------------------------------|----------------------------------|-----------------|
| hh3cMplsExtLdpIndex (1.3.6.1.4.1.25506.2.142.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of an interface. | As per the MIB. |
| hh3cMplsExtLdpCapability (1.3.6.1.4.1.25506.2.142.1.3.1.2) | read-create | TruthValue | false(0), true(1) | LDP capability of the interface. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|-------------|--|
| hh3cMplsExtLdpRowStatus (1.3.6.1.4.1.25506.2.142.1.3.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cMplsExtBfdTable

About this table

This table contains information about MPLS BFD sessions.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cMplsExtBfdLocalDiscr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|---|---|-----------------|
| hh3cMplsExtBfdLocalDiscr (1.3.6.1.4.1.25506.2.142.1.4.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Local discriminator of a BFD session. | As per the MIB. |
| hh3cMplsExtBfdType (1.3.6.1.4.1.25506.2.142.1.4.1.2) | read-only | INTEGER | 1: unknown 2: BFD for LSP 3: BFD for VPWS PW 4: BFD for VPLS PW 5: BFD for TE | Type of the BFD session. | As per the MIB. |
| hh3cMplsExtBfdBindIfIndex (1.3.6.1.4.1.25506.2.142.1.4.1.3) | read-only | InterfaceIndex OrZero | This object displays a tunnel interface index when the value of hh3cMplsExtBfdType is 5 (BFD for TE) and displays the index of an AC interface bound to a PW when the value of hh3cMplsExtBfdType is 3 (BFD for VPWS PW). This object is invalid and displays 0 when the value of hh3cMplsExtBfdType is not 5 (BFD for TE) or 3 (BFD for VPWS PW). | Index of the bound local interface. | As per the MIB. |
| hh3cMplsExtBfdBindIfName (1.3.6.1.4.1.25506.2.142.1.4.1.4) | read-only | DisplayString | DisplayString (0..255) | Name of the bound local interface. | As per the MIB. |
| hh3cMplsExtBfdXclIndex (1.3.6.1.4.1.25506.2.142.1.4.1.5) | read-only | OCTET STRING | OCTET STRING (0..24) | MplsOutSegmentEntry index for an LSP entry. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|---|----------------------------------|-----------------|
| .2.142.1.4.1.5) | | | | | |
| hh3cMplsExtBfdPwBackupFlag (1.3.6.1.4.1.25506.2.142.1.4.1.6) | read-only | INTEGER | 1: Non-PW 2: Primary PW 3: Backup PW | Primary or backup flag of a PW. | As per the MIB. |
| hh3cMplsExtBfdPwId (1.3.6.1.4.1.25506.2.142.1.4.1.7) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | PW identifier. | As per the MIB. |
| hh3cMplsExtBfdVsiIndex (1.3.6.1.4.1.25506.2.142.1.4.1.8) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | VSI index + 1. | As per the MIB. |
| hh3cMplsExtBfdPwPeerIpType (1.3.6.1.4.1.25506.2.142.1.4.1.9) | read-only | InetAddressType | IPv4 or IPv6. The value of this object is 0 if the BFD session is not for a PW. | Type of the PW peer address. | As per the MIB. |
| hh3cMplsExtBfdPwPeerIp (1.3.6.1.4.1.25506.2.142.1.4.1.10) | read-only | InetAddress | OCTET STRING (0..255) | Peer address of the PW. | As per the MIB. |
| hh3cMplsExtBfdPwSPE (1.3.6.1.4.1.25506.2.142.1.4.1.11) | read-only | INTEGER | 1: Non-VPWS PW 2: UPE (User facing-Provider Edge) 3: SPE (Switching Provider Edge, a transit node of a multi-segment PW) | Node information of the VPWS PW. | As per the MIB. |
| hh3cMplsExtBfdPwEncapType (1.3.6.1.4.1.25506.2.142.1.4.1.12) | read-only | INTEGER | 1: unknown 2: fr-dlci-martini 3: atm-aal5-sdu 4: atm-trans-cell 5: vlan 6: ethernet 7: hdlc 8: ppp 9: cesom 10: atm-nto1-vcc 11: atm-nto1-vpc 12: ip-interworking 13: atm-1to1-vcc 14: atm-1to1-vpc 15: atm-aal5-pdu 16: fr-port 17: cep 18: satop-e1 19: satop-t1 20: satop-e3 21: satop-t3 22: esopsn-basic 23: tdmop-aal1-mode | Encapsulation type of the PW. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| | | | 24: tdm-cesopsn-with-cas 25: tdmop-aal2-mode 26: fr-dlci | | |

hh3cMplsExtVpnStatsTable

About this table

This table contains statistical information about packets received and sent by VPNs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cMplsExtVpnStatsVrflIndex .

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|---|--|
| hh3cMplsExtVpnStatsVrflIndex (1.3.6.1.4.1.25506.2.142.1.5.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of a VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsVpnName (1.3.6.1.4.1.25506.2.142.1.5.1.2) | read-only | OCTET STRING | OCTET STRING (1..31) | Name of the VPN instance. | As per the MIB. This object is invalid if VPN statistics is not enabled. When read, this object returns a zero-length string. |
| hh3cMplsExtVpnStatsInOctets (1.3.6.1.4.1.25506.2.142.1.5.1.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets received by the VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsInPackets (1.3.6.1.4.1.25506.2.142.1.5.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets received by the VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsInErrors (1.3.6.1.4.1.25506.2.142.1.5.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of error packets received by the VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsInDiscards (1.3.6.1.4.1.25506.2.142.1.5.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming packets discarded by the VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsOutOctets (1.3.6.1.4.1.25506.2.142.1.5.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets sent by the VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsOutPackets | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets sent by the VPN instance. | As per the MIB. |

| | | | | | |
|--|-----------|-----------|--|---|-----------------|
| (1.3.6.1.4.1.25506.2.142.1.5.1.8) | | | 09551615) | | |
| hh3cMplsExtVpnStatsOutErrors (1.3.6.1.4.1.25506.2.142.1.5.1.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of error packets sent by the VPN instance. | As per the MIB. |
| hh3cMplsExtVpnStatsOutDiscards (1.3.6.1.4.1.25506.2.142.1.5.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing packets discarded by the VPN instance. | As per the MIB. |

Notifications

mplsTunnelUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|-----------|----------|----------|--|----------------|
| 1.3.6.1.2.1.10.166.3.0.1 | Tunnel up | Recovery | - | 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | ON |

Description

This notification is generated when an MPLS tunnel's operating status (mplsTunnelOperStatus) changes from down to a state other than notPresent.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Actual operating status of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsTunnelDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|-------------|-------|----------|--|----------------|
| 1.3.6.1.2.1.10.166.3.0.2 | Tunnel down | Error | Major | 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | ON |

Description

This notification is generated when an MPLS tunnel's operating status (mplsTunnelOperStatus) changes to down from a state other than notPresent.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Actual operating status of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Examine the parameter settings for the tunnel.

If the issue persists, contact H3C Support.

mplsTunnelRerouted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|-----------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.3.0.3 | Tunnel rerouted | Informational | - | - | ON |

Description

This notification is generated when an MPLS tunnel rerouted event occurs. If the mplsTunnelARHopTable has been used, the entry for the tunnel in the mplsTunnelARHopTable might save the rerouted new path for a while after the agent sends the notification.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Actual operating status of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Examine the parameter settings for the tunnel.

If the issue persists, contact H3C Support.

mplsTunnelReoptimized

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.3.0.4 | Tunnel reoptimized | Informational | - | - | ON |

Description

This notification is generated when an MPLS tunnel reoptimized event occurs. If the mplsTunnelARHopTable has been used, the entry for the tunnel in the mplsTunnelARHopTable might save the reoptimized new path for a while after the agent sends the notification.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Actual operating status of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Examine the new path for the tunnel.

If the issue persists, contact H3C Support.

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HH3C-MPLSRSPV-MIB

About this MIB

Use this MIB to notify RSVP traps.

MIB file name

hh3c-mplsrsvp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMplsRsvp(229)

Scalar objects

hh3cMplsRsvpNbrAddr

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|--------------|-----------------------|-----------------------------|-----------------|
| hh3cMplsRsvpNbrAddr (1.3.6.1.4.1.25506.2.229.1.1.1) | accessible-for-notification | OCTET STRING | OCTET STRING (1..127) | Address of an RSVP neighbor | As per the MIB. |

hh3cMplsRsvpFrrMainInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|--------------|-----------------------|-----------------------------------|-----------------|
| hh3cMplsRsvpFrrMainInfo (1.3.6.1.4.1.25506.2.229.1.1.2) | accessible-for-notification | OCTET STRING | OCTET STRING (1..127) | Information of a protected tunnel | As per the MIB. |

hh3cMplsRsvpFrrByPassInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|--------------|-----------------------|------------------------------------|-----------------|
| hh3cMplsRsvpFrrByPassInfo (1.3.6.1.4.1.25506.2.229.1.1.3) | accessible-for-notification | OCTET STRING | OCTET STRING (1..127) | Information of a protection tunnel | As per the MIB. |

Notifications

hh3cMplsRsvpNeighborLostRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.229.0.2 | The RSVP neighbor recovered, the device received a hello from the RSVP neighbor, and the hello state of the RSVP neighbor changed from init to up. | Recovery | N/A | N/A | ON |

Description

This notification is generated when an RSVP neighbor recovers and the device receives hello messages from the RSVP neighbor again.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1 (1hh3cMplsRsvpNbrAddr) | RSVP neighbor address | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsRsvpAuthFail

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.229.0.3 | RSVP authentication failed. The device cannot receive RSVP packets from the RSVP neighbor. | Error | Major | 1.3.6.1.4.1.25506.2.229.0.4 (hh3cMplsRsvpAuthFailRecovery) | ON |

Description

This notification is generated when RSVP authentication fails.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1 (1hh3cMplsRsvpNbrAddr) | RSVP neighbor address | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsRsvpAuthFailRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.229.0.4 | The device received correct RSVP authentication packets from the RSVP neighbor. The RSVP authentication failure recovers. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the device receives correct RSVP authentication packets from an authentication-failed RSVP neighbor.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1 (1hh3cMplsRsvpNbrAddr) | RSVP neighbor address | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsRsvpFrrProtAval

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.229.0.5 | The main tunnel was bound to the bypass tunnel. The bypass tunnel then can protect the main tunnel. When the main tunnel fails, the bypass tunnel takes over to avoid traffic forwarding failure. | Error | Major | 1.3.6.1.4.1.25506.2.229.0.6 (hh3cMplsRsvpFrrProtNotAval) | ON |

Description

This notification is generated when a main tunnel is bound to a bypass tunnel.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1.2 (hh3cMplsRsvpFrrMainInfo) | Information of the protected tunnel (main tunnel) | Yes | OCTET STRING | As per the MIB. |
| hh3cMplsRsvpFrrByPassInfo (1.3.6.1.4.1.25506.2.229.1.1.3) | Information of the protection tunnel (bypass tunnel) | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsRsvpFrrProtNotAval

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.229.0.6 | The main tunnel was unbound from the bypass tunnel. The bypass tunnel then cannot protect the main tunnel. When the main tunnel fails, traffic forwarding | Recovery | N/A | N/A | ON |

| | | | | | |
|--|--------|--|--|--|--|
| | fails. | | | | |
|--|--------|--|--|--|--|

Description

This notification is generated when a main tunnel is unbound from its bypass tunnel.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1.2 (hh3cMplsRsvpFrrMainInfo) | Information of the protected tunnel (main tunnel) | Yes | OCTET STRING | As per the MIB. |
| hh3cMplsRsvpFrrByPassInfo (1.3.6.1.4.1.25506.2.229.1.1.3) | Information of the protection tunnel (bypass tunnel) | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsRsvpFrrSwitch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.229.0.7 | The main tunnel fails and traffic is switched from the main tunnel to the bypass tunnel. | Error | Major | 1.3.6.1.4.1.25506.2.229.0.8 (hh3cMplsRsvpFrrResume) | ON |

Description

This notification is generated when the main tunnel fails and the bypass tunnel takes over to protect traffic forwarding.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1.2 (hh3cMplsRsvpFrrMainInfo) | Information of the protected tunnel (main tunnel) | Yes | OCTET STRING | As per the MIB. |

| | | | | |
|--|--|-----|--------------|-----------------|
| hh3cMplsRsvpFrrByPassInfo (1.3.6.1.4.1.25506.2.229.1.1.3) | Information of the protection tunnel (bypass tunnel) | Yes | OCTET STRING | As per the MIB. |
|--|--|-----|--------------|-----------------|

Recommended action

No action is required.

hh3cMplsRsvpFrrResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.229.0.8 | The main tunnel recovers, and traffic is switched back from the bypass tunnel to the main tunnel. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the main tunnel recovers, and traffic is switched back from the bypass tunnel to the main tunnel.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.229.1.1.2 (hh3cMplsRsvpFrrMainInfo) | Information of the protected tunnel (main tunnel) | Yes | OCTET STRING | As per the MIB. |
| hh3cMplsRsvpFrrByPassInfo (1.3.6.1.4.1.25506.2.229.1.1.3) | Information of the protection tunnel (bypass tunnel) | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

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HH3C-MPLSSLSP-MIB

About this MIB

Use this MIB to notify static LSP traps.

MIB file name

hh3c-mplsslsp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMplsSlsp(230)

Tabular objects

hh3cMplsSlspBaseInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|--------------|-----------------------|------------------------------|-----------------|
| hh3cMplsSlspBaseInfo (1.3.6.1.4.1.25506.2.230.1.1.1) | accessible-for-notification | OCTET STRING | OCTET STRING (0..127) | Static LSP basic information | As per the MIB. |

hh3cMplsSlspExtInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|--------------|-----------------------|---------------------------------|-----------------|
| hh3cMplsSlspExtInfo (1.3.6.1.4.1.25506.2.230.1.1.2) | accessible-for-notification | OCTET STRING | OCTET STRING (0..127) | Static LSP extended information | As per the MIB. |

Notifications

hh3cMplsSlspDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|-----------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.230.0.1 | Static LSP down | Error | Major | 1.3.6.1.4.1.25506.2.230.0.2(hh3cMplsSlspUp) | ON |

Description

This notification is generated when a static LSP goes down. Traffic forwarding over the static LSP will fail.

Status control

ON

CLI: Use the `snmp-agent trap enable lsm` command.

OFF

CLI: Use the `undo snmp-agent trap enable lsm` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.230.1.1 (hh3cMplsSlspBaseInfo) | Static LSP basic information | Yes | OCTET STRING | As per the MIB. |
| 1.3.6.1.4.1.25506.2.230.1.1.2 (hh3cMplsSlspExtInfo) | Static LSP extended information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsSlspUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.226.0.2 | Static LSP up | Recovery | - | - | ON |

Description

This notification is generated when a static LSP comes up.

Status control

ON

CLI: Use the `snmp-agent trap enable lsm` command.

OFF

CLI: Use the `undo snmp-agent trap enable lsm` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.230.1.1 (hh3cMplsSlspBaseInfo) | Static LSP basic information | Yes | OCTET STRING | As per the MIB. |
| 1.3.6.1.4.1.25506.2.230.1.1.2 (hh3cMplsSlspExtInfo) | Static LSP extended information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

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HH3C-MPLSTE-MIB

About this MIB

Use this MIB to manage MPLS TE and RSVP TE settings.

MIB file name

hh3c-mplste.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166).mplsTeStdMIB(3)

Scalar objects

hh3cMplsTeStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| hh3cMplsTeStatus (1.3.6.1.4.1.25506.2.143.1.1.1) | read-write | TruthValue | true(1), false(2) | Globally enable MPLS TE (mpls te) or TE attribute (te attribute enable) for the device. | As per the MIB. |

hh3cMplsTeRsvpStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|------------------------|-----------------|
| hh3cMplsTeRsvpStatus (1.3.6.1.4.1.25506.2.143.1.1.2) | read-write | TruthValue | true(1), false(2) | Enable global RSVP TE. | As per the MIB. |

hh3cMplsTeTunnelInfo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|--------------|--------------------------|----------------------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | accessible-for-notification | OCTET STRING | OCTET STRING (1..127) | MPLS TE tunnel information | As per the MIB. |

Tabular objects

hh3cMplsTeTable

About this table

This table specifies per-interface MPLS TE settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| Supported only when the value for hh3cMplsTeCapability is true(1) | Not supported | Supported | Supported |

Columns

The table index is hh3cMplsTeIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|--|--|
| hh3cMplsTeIndex (1.3.6.1.4.1.25506.2.143.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of an MPLS TE interface. | As per the MIB. |
| hh3cMplsTeCapability (1.3.6.1.4.1.25506.2.143.1.2.1.2) | read-create | TruthValue | true(1), false(2) | MPLS TE capability of the interface. No MPLS TE capability information can be obtained when MPLS TE is not enabled on the interface. | As per the MIB. |
| hh3cMplsTeRowStatus (1.3.6.1.4.1.25506.2.143.1.2.1.3) | read-create | RowStatus | active(1) createAndGo(4) destroy(6). | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

hh3cMplsTeRsvpTable

About this table

This table specifies per-interface RSVP TE settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| Supported only when the value for hh3cMplsTeRsvpCapability is true(1) | Not supported | Supported | Supported |

Columns

The table index is hh3cMplsTeRsvplIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|---|--|
| hh3cMplsTeRsvplIndex (1.3.6.1.4.1.25506.2.143.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of an RSVP TE interface. | As per the MIB. |
| hh3cMplsTeRsvpCapability (1.3.6.1.4.1.25506.2.143.1.3.1.2) | read-create | TruthValue | true(1), false(2) | RSVP TE capability of the interface. No RSVP TE capability information can be obtained when RSVP is not enabled on the interface. | As per the MIB. |
| hh3cMplsTeRsvpRowStatus (1.3.6.1.4.1.25506.2.143.1.3.1.3) | read-create | RowStatus | active(1) createAndGo(4) destroy(6). | Row status. | Supports only the following values: active(1), createAndGo(4), and destroy(6). |

Notifications

hh3cMplsTeTunnelHsbSwitch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.143.0.1 | The primary LSP fails, and traffic is switched to the hot-standby backup LSP. | Error | Major | 1.3.6.1.4.1.25506.2.143.0.2 (hh3cMplsTeTunnelHsbResume) | ON |

Description

This notification is generated when the primary LSP fails and the system detects a hot-standby backup LSP and switches the traffic to the backup LSP.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelHsbResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.143.0.2 | The main LSP recovers from failure and traffic is switched back from the backup LSP to the main LSP. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the primary LSP recovers from failure and traffic is switched back from the hot-standby backup LSP to the primary LSP.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelObSwitch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|--------------------------------------|-------|----------|-----------------------------|----------------|
| 1.3.6.1.4.1.25506. | The primary LSP fails and traffic is | Error | Major | 1.3.6.1.4.1.25506.2.143.0.4 | ON |

| | | | | | |
|-----------|--------------------------------------|--|--|----------------------------|--|
| 2.143.0.3 | switched to the ordinary backup LSP. | | | (hh3cMplsTeTunnelObResume) | |
|-----------|--------------------------------------|--|--|----------------------------|--|

Description

This notification is generated when the primary LSP fails and an ordinary backup LSP becomes up and takes over traffic forwarding.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelObResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.143.0.4 | The primary LSP recovers from failure and traffic is switched back from the ordinary backup LSP to the primary LSP. | Recovery | N/A | N/A | ON |

Description

This notification is generated when the primary LSP recovers from failure and traffic is switched back from the ordinary backup LSP to the primary LSP.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelHsbLspDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506. 2.143.0.5 | Hot-standby LSP down | Error | Major | 1.3.6.1.4.1.25506. 2.143.0.6 (hh3cMplsTeTunn elHsbLspUp) | ON |

Description

This notification is generated when LSP hot standby is configured on an MPLS TE tunnel interface and the hot-standby LSP goes down.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelHsbLspUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------|----------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.143.0.6 | Hot-standby LSP up | Recovery | N/A | N/A | ON |

Description

This notification is generated when LSP hot standby is configured on an MPLS TE tunnel interface and the hot-standby LSP comes up.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelObLspDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--------------------------|-------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.143.0.7 | Ordinary backup LSP down | Error | Major | 1.3.6.1.4.1.25506.2.143.0.8 (hh3cMplsTeTunnelObLspUp) | ON |

Description

This notification is generated when ordinary backup is configured on an MPLS TE tunnel interface and the backup LSP goes down.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelObLspUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.143.0.8 | Ordinary backup LSP up | Recovery | N/A | N/A | ON |

Description

This notification is generated when ordinary backup is configured on an MPLS TE tunnel interface and the backup LSP comes up.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelMainLspDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.143.0.9 | Primary LSP down | Error | Major | 1.3.6.1.4.1.25506.2.143.0.10 (hh3cMplsTeTunnelMainLspUp) | ON |

Description

This notification is generated when the primary LSP goes down from the up state. At this time, if a backup LSP is available, the tunnel uses the backup LSP to forward traffic, and if no backup LSP is available, the tunnel goes down.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelMainLspUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|----------------|----------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.143.0.10 | Primary LSP up | Recovery | N/A | N/A | ON |

Description

This notification is generated when the primary LSP comes up from the down state. At this time, if the tunnel is down, the tunnel will come up. If the tunnel uses the backup LSP to forward traffic, the tunnel will switch the traffic back to the primary LSP.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeTunnelChangeBw

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|-----------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.143.0.11 | MPLS TE tunnel bandwidth changes. | Error | Major | None | ON |

Description

This notification is generated when the bandwidth of the MPLS TE tunnel changes in the following situation:

- Set or edit the bandwidth of the tunnel.
- Automatic bandwidth adjustment is enabled for the tunnel and a traffic change triggers a bandwidth adjustment.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cMplsTeAutoTunnelUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.143.0.12 | Automatic TE tunnel up | Error | Major | None | ON |

Description

This notification is generated when an automatic TE tunnel comes up.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------|-------|--------------|-----------------|
| hh3cMplsTeTunnelInfo (1.3.6.1.4.1.25506.2.143.1.1.3) | MPLS TE tunnel information | Yes | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

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HH3C-MPLS-VPN-BGP-MIB

About this MIB

Use this MIB to manage the L3VPN related configuration and obtain path and prefix information about MPLS VPN BGP peers.

MIB file name

hh3c-mpls-vpn-bgp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3cMpls(12).hh3cMplsVpn(3)

Tabular objects

hh3cMplsVpnVrfConfTable

About this table

This table is obsolete. It specifies per-interface MPLS/BGP VPN VRF table capabilities and the associated information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cMplsVpnVrfName and hh3cMplsVpnVrfBgpNbrAdd.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------------|--|--|-----------------|
| hh3cMplsVpnVrfName (1.3.6.1.4.1.25506.2.160.1.1.1.1.1) | not-accessible | Hh3cMplsVpnld | OCTET STRING(0..31) | Name of a VRF (VPN instance). | As per the MIB. |
| hh3cMplsVpnVrfRtDistinguisher (1.3.6.1.4.1.25506.2.160.1.1.1.1.2) | read-create | Hh3cMplsVpnRtDistinguisher | OCTET STRING(0..256) | Route distinguisher for the VRF. | As per the MIB. |
| hh3cMplsVpnVrfNetPrefixType (1.3.6.1.4.1.25506.2.160.1.1.1.1.3) | read-only | INTEGER | other(1), rip(2), ospf(3), isis(4), bgp(5), static(6) | Type of the network prefix for the PE-CE connection. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|---|---|-----------------|
| hh3cMplsVpnVrfNetPrefix (1.3.6.1.4.1.25506.2.160.1.1.1.4) | read-only | IpAddress | OCTET STRING (4) | Network prefix of the PE-CE connection. | As per the MIB. |
| hh3cMplsVpnVrfIpRtRedistributeConn (1.3.6.1.4.1.25506.2.160.1.1.1.5) | read-create | TruthValue | true(1), false(2) | Redistribution of directly connected networks into the VRF BGP table. | As per the MIB. |
| hh3cMplsVpnVrfIpRtRedistributeStatic (1.3.6.1.4.1.25506.2.160.1.1.1.6) | read-create | TruthValue | true(1), false(2) | Redistribution of static routes into the VRF BGP table. | As per the MIB. |
| hh3cMplsVpnVrfIpRtRedistributeRip (1.3.6.1.4.1.25506.2.160.1.1.1.7) | read-create | TruthValue | true(1), false(2) | Redistribution of RIP routes into the VRF BGP table. | As per the MIB. |
| hh3cMplsVpnVrfConfHighRtThreshold (1.3.6.1.4.1.25506.2.160.1.1.1.8) | read-create | Unsigned32 | Standard MIB values. | Warning threshold for the number of active routes in the VRF. | As per the MIB. |
| hh3cMplsVpnVrfConfWarningOnly (1.3.6.1.4.1.25506.2.160.1.1.1.9) | read-create | TruthValue | true(1), false(2) | Action to take when the number of active routes in the VRF exceeds the warning threshold. | As per the MIB. |
| hh3cMplsVpnVrfConfMaxRoutes (1.3.6.1.4.1.25506.2.160.1.1.1.10) | read-create | Unsigned32 | Standard MIB values. | Maximum number of routes set for the VRF. | As per the MIB. |
| hh3cMplsVpnVrfConfRowStatus (1.3.6.1.4.1.25506.2.160.1.1.1.11) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | This variable is used to create, edit, and/or delete a row in this table. | As per the MIB. |

hh3cMplsVpnVrfBgpNbrAddrTable

About this table

This table contains information about MPLS VPN BGP peers.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|--|-----------|-----------|
| Supported | Supported only by hh3cMplsVpnVrfBgpNbrAdminStatus. | Supported | Supported |

Columns

The table indexes are hh3cMplsVpnVrfBgpNbrAddr and hh3cMplsVpnVrfBgpNbrAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--|-------------------------------------|-----------------------------------|
| hh3cMplsVpnVrfBgpNbrAddr (1.3.6.1.4.1.25506.2.160.1.1.2.1.1) | not-accessible | IpAddress | OCTET STRING (4) | Address of the BGP peer. | As per the MIB. |
| hh3cMplsVpnVrfBgpNbrRole (1.3.6.1.4.1.25506.2.160.1.1.2.1.2) | read-create | INTEGER | ce(1) pe(2) | Role of the BGP peer. | Supports only the read operation. |
| hh3cMplsVpnVrfBgpNbrAsN umber (1.3.6.1.4.1.25506.2.160.1.1.2.1.3) | read-create | Unsigned32 | Standard MIB values. | AS number of the BGP peer | Supports only the read operation. |
| hh3cMplsVpnVrfBgpNbrAdm inStatus (1.3.6.1.4.1.25506.2.160.1.1.2.1.4) | read-create | INTEGER | mplsVpnVrfBgp NbrSetUp(1) mplsVpnVrfBgp NbrSetDown(2) | Expected BGP peer connection state. | As per the MIB. |
| hh3cMplsVpnVrfBgpNbrRow Status (1.3.6.1.4.1.25506.2.160.1.1.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| hh3cMplsVpnVrfBgpNbrStat e (1.3.6.1.4.1.25506.2.160.1.1.2.1.6) | read-only | INTEGER | idle(1) connect(2) active(3) opensent(4) openconfirm(5) established(6) | BGP peer connection state. | Supports only the read operation. |

hh3cMplsVpnVrfBgpNbrPrefixTable

About this table

This table contains path and prefix information about MPLS VPN BGP peers.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cMplsVpnVrfName, hh3cmplsVpnVrfBgpPAtrPeer, hh3cmplsVpnVrfBgpPAtrIpAddrPrefixLen, and hh3cmplsVpnVrfBgpPAtrIpAddrPrefix.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|--|--|
| hh3cMplsVpnVrfBgpPA trPeer (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.1) | not-accessible | IpAddress | OCTET STRING (4) | IP address of the EBGP peer. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trIpAddrPrefixLen (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.2) | not-accessible | Integer32 | Integer32 (0..32) | Mask length of the IP address prefix. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trIpAddrPrefix (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.3) | not-accessible | IpAddress | OCTET STRING (4) | IP address prefix. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trPeerType (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.4) | read-only | InetAddressType | IPv4(1) IPv6 (2) | Address family of the PE IP address. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trOrigin (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.5) | read-only | INTEGER | igp(1) egp(2) incomplete(3) | Ultimate origin of the path information. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trASPathSegment (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.6) | read-only | OCTET STRING | OCTET STRING (2..255) | Sequence of AS path segments. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trNextHop (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.7) | read-only | IpAddress | OCTET STRING (4) | Address of the border router. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trMultiExitDisc (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.8) | read-only | Integer32 | Integer32(-1..2 147483647) | Metric used to discriminate between multiple exit points to an adjacent autonomous system. | The return value is 2147483647 when the actual value is between 2147483647 and 4294967295. |
| hh3cMplsVpnVrfBgpPA trLocalPref (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.9) | read-only | Integer32 | Integer32(-1..2 147483647) | The originating BGP4 speaker's degree of preference for an advertised route. | The return value is 2147483647 when the actual value is between 2147483647 and 4294967295. |
| hh3cMplsVpnVrfBgpPA trAtomicAggregate (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.10) | read-only | INTEGER | lessSpecificRt NotSelected (1) lessSpecificRt Selected (2) | ATOMIC_AGGR EGATE attribute. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trAggregatorAS (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.11) | read-only | Integer32 | Integer32(0..6 5535) | AS number of the last BGP4 speaker that performed route aggregation. | The return value is 23456 when the actual value is between 65536 and 4294967295. |
| hh3cMplsVpnVrfBgpPA trAggregatorAddr (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.12) | read-only | IpAddress | OCTET STRING (4) | IP address of the last BGP4 speaker that performed route aggregation. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-------------------------------|---|--|
| hh3cMplsVpnVrfBgpPA trCalcLocalPref (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.13) | read-only | Integer32 | Integer32(-1..2 147483647) | Preference calculated by the receiving BGP4 speaker for an advertised route. | The return value is 2147483647 when the actual value is between 2147483647 and 4294967295. |
| hh3cMplsVpnVrfBgpPA trBest (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.14) | read-only | INTEGER | true(1), false(2) | Indication of whether or not this route was chosen as the best BGP4 route. | As per the MIB. |
| hh3cMplsVpnVrfBgpPA trUnknown (1.3.6.1.4.1.25506.2.16 0.1.1.3.1.15) | read-only | OCTET STRING | OCTET STRING (0..255) | One or more path attributes not understood by this BGP4 speaker. | As per the MIB. |

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HH3C-VSI-MIB

About this MIB

Use this MIB to configure VSI.

MIB file name

hh3c-vsi.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cVsi(105)

Tabular objects

hh3cVsiScalarGroup

About this table

This table describes the global configuration for VSI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------------|----------------------------------|-----------------|
| hh3cVsiNextAvailableVsiIndex (1.3.6.1.4.1.25506.2.105.1.1.1) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Next available VSI entry index. | As per the MIB. |
| hh3cVsiL2vpnStatus (1.3.6.1.4.1.25506.2.105.1.1.2) | read-write | TruthValue | true(1) false(2) | Global enabling status of L2VPN. | As per the MIB. |

hh3cVsiTable

About this table

Use this table to configure VSI parameters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cVsiIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|--|---|
| hh3cVsiIndex (1.3.6.1.4.1.25506.2.105.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Index of a VSI. | As per the MIB. |
| hh3cVsiName (1.3.6.1.4.1.25506.2.105.1.2.1.2) | read-create | OCTET STRING | OCTET STRING (1..31) | Name of a VSI. | Not editable after creation. |
| hh3cVsiMode (1.3.6.1.4.1.25506.2.105.1.2.1.3) | read-create | INTEGER | default(0), martini(1), minm(2) martiniAndMinm(3), kompella(4), kompellaAndMinm(5), minmpxp(6), martiniAndMinmpxp(7), kompellaAndMinmpxp(8), vxlan(9) | Mode of the VSI. | Supports only default(0) and vxlan(9). The set operation on other variables will be ignored. The default value is default(0). |
| hh3cMinmlsid (1.3.6.1.4.1.25506.2.105.1.2.1.4) | read-create | Integer32 | Integer32 (1..2147483647) | PBB I-SID of the VSI in MAC-in-MAC mode. | Implementation varies by product. Not editable after creation. |
| hh3cVsiId (1.3.6.1.4.1.25506.2.105.1.2.1.5) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | Default PW ID. | Not editable after creation. |
| hh3cVsiTransMode (1.3.6.1.4.1.25506.2.105.1.2.1.6) | read-create | INTEGER | vlan(1), ethernet(2) | Transmit mode of the VSI. | Supports only the read operation. The value is always vlan(1). |
| hh3cVsiEnableHubSpoke (1.3.6.1.4.1.25506.2.105.1.2.1.7) | read-create | INTEGER | disable(1), enable(2) | Hub-spoke capability of the VSI. | Implementation varies by product. Not editable after creation. |
| hh3cVsiAdminState (1.3.6.1.4.1.25506.2.105.1.2.1.8) | read-create | INTEGER | adminUp(1), adminDown(2) | Administrative state of the VSI. | Default value: adminUp(1). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|--|---|---|
| hh3cVsiRowStatus (1.3.6.1.4.1.25506.2.105.1.2.1.9) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). Active(1) is only used to change the value for hh3cVsiAdminState, hh3cVsiArpSuppression, hh3cVsiFlooding, and hh3cVsiStatistics. |
| hh3cVsiSpblsid (1.3.6.1.4.1.25506.2.105.1.2.1.10) | read-create | Integer32 | Integer32 (1..2147483647) | SPB I-SID of the VSI in MAC-in-MAC mode. | Implementation varies by product. Not editable after creation. |
| hh3cVsiVxlanID (1.3.6.1.4.1.25506.2.105.1.2.1.11) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | VXLAN ID. | As per the MIB. |
| hh3cVsiArpSuppression (1.3.6.1.4.1.25506.2.105.1.2.1.12) | read-create | TruthValue | true(1) false(2) | The capability of ARP suppression. | Implementation varies by product. |
| hh3cVsiFlooding (1.3.6.1.4.1.25506.2.105.1.2.1.13) | read-create | TruthValue | true(1) false(2) | The capability of MAC flooding. | Implementation varies by product. |
| hh3cVsiLocalMac Count (1.3.6.1.4.1.25506.2.105.1.2.1.14) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Number of local MAC addresses of the VSI. | This value is 0 if hh3cVsiVxlanID uses an invalid value. This value cannot be 0 if hh3cVsiVxlanID uses a valid value. |
| hh3cVsiInterfaceID (1.3.6.1.4.1.25506.2.105.1.2.1.15) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | VSI interface number. | Implementation varies by product. |
| hh3cVsiStatistics (1.3.6.1.4.1.25506.2.105.1.2.1.16) | read-create | TruthValue | true(1) false(2) | VSI traffic statistics capability. | Implementation varies by product. |
| hh3cVsiNvgreID (1.3.6.1.4.1.25506.2.105.1.2.1.17) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | NVGRE ID | As per the MIB. |

hh3cVsiXconnectTable

About this table

Use this table to configure AC-VSI bindings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cVsiXconnectIfIndex and hh3cVsiXconnectSvcInstId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|---|--|
| hh3cVsiXconnectIfIndex (1.3.6.1.4.1.25506.2.105.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Index of an interface. | As per the MIB. |
| hh3cVsiXconnectSvcInstId (1.3.6.1.4.1.25506.2.105.1.3.1.2) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Service instance ID. | As per the MIB. |
| hh3cVsiXconnectVsiName (1.3.6.1.4.1.25506.2.105.1.3.1.3) | read-create | OCTET STRING | OCTET STRING (1..31) | Name of the VSI. | Not editable after creation. |
| hh3cVsiXconnectAccessMode (1.3.6.1.4.1.25506.2.105.1.3.1.4) | read-create | INTEGER | vlan(1), ethernet(2) | Access mode. | Not editable after creation. |
| hh3cVsiXconnectHubSpoke (1.3.6.1.4.1.25506.2.105.1.3.1.5) | read-create | INTEGER | none(1), hub(2), spoke(3) | The hub-spoke capability of the service instance. | Not editable after creation. |
| hh3cVsiXconnectRowStatus (1.3.6.1.4.1.25506.2.105.1.3.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cVsiPwBindTable

About this table

Use this table to configure PW-VSI bindings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cVsiIndex and hh3cVsiPwIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|-------------------------------|----------------|-----------------|
| hh3cVsiPwIndex (1.3.6.1.4.1.25506.2.105.1.4.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Index of a PW. | As per the MIB. |

| | | | | | |
|--|-------------|-----------|--|---------------|---|
| hh3cVsiPwBindAttributes (1.3.6.1.4.1.25506.2.105.1.4.1.2) | read-create | BITS | noSplitHorizon (0), hub (1) | PW attribute. | As per the MIB. |
| hh3cVsiPwBindRowStatus (1.3.6.1.4.1.25506.2.105.1.4.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cVsiFloodMacTable

About this table

This table contains MAC addresses enabled with selective flooding in a VSI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cVsiIndex and hh3cVsiFloodMac.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|--------------|---|
| hh3cVsiFloodMac (1.3.6.1.4.1.25506.2.105.1.5.1.1) | not-accessible | MacAddress | OCTET STRING (6) | MAC address. | As per the MIB. |
| hh3cVsiFloodMacRowStatus (1.3.6.1.4.1.25506.2.105.1.5.1.2) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

hh3cVsiLocalMacTable

About this table

This table contains information about local MAC addresses of a VSI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cVsiIndex and hh3cVsiLocalMacAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|-----------------------------------|---|-----------------|
| hh3cVsiLocalMacAddr (1.3.6.1.4.1.25506.2.105.1.6.1.1) | not-accessible | MacAddress | OCTET STRING (6) | MAC address. | As per the MIB. |
| hh3cVsiLocalMacIfIndex (1.3.6.1.4.1.25506.2.105.1.6.1.2) | read-only | InterfaceIndex | InterfaceIndex (1..2147483647) | Outgoing interface of the MAC addresses. | As per the MIB. |
| hh3cVsiLocalMacSrvID (1.3.6.1.4.1.25506.2.105.1.6.1.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | ID of the service instance on the outgoing interface. | As per the MIB. |

hh3cVsiPerfTable

About this table

This table contains performance statistics for VSIs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cVsiIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| hh3cVsiPerfInOctets (1.3.6.1.4.1.25506.2.105.1.7.1.1) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets received by the VSI. | As per the MIB. |
| hh3cVsiPerfInPackets (1.3.6.1.4.1.25506.2.105.1.7.1.2) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets received by the VSI. | As per the MIB. |
| hh3cVsiPerfInErrors (1.3.6.1.4.1.25506.2.105.1.7.1.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of error packets received by the VSI. | As per the MIB. |
| hh3cVsiPerfInDiscards (1.3.6.1.4.1.25506.2.105.1.7.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of incoming packets discarded by the VSI. | As per the MIB. |
| hh3cVsiPerfOutOctets (1.3.6.1.4.1.25506.2.105.1.7.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets sent by the VSI. | As per the MIB. |

| | | | | | |
|---|-----------|-----------|--|--|-----------------|
| hh3cVsiPerfOutPackets (1.3.6.1.4.1.25506.2.105.1.7.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets sent by the VSI. | As per the MIB. |
| hh3cVsiPerfOutErrors (1.3.6.1.4.1.25506.2.105.1.7.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets that failed to be sent because of a VSI error. | As per the MIB. |
| hh3cVsiPerfOutDiscards (1.3.6.1.4.1.25506.2.105.1.7.1.8) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of outgoing packets discarded by the VSI because of transmission failure. | As per the MIB. |
| hh3cVsiPerfInRateOctets (1.3.6.1.4.1.25506.2.105.1.7.1.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of bytes received per second by the VSI. | As per the MIB. |
| hh3cVsiPerfInRatePackets (1.3.6.1.4.1.25506.2.105.1.7.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets received per second by the VSI. | As per the MIB. |
| hh3cVsiPerfOutRateOctets (1.3.6.1.4.1.25506.2.105.1.7.1.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of bytes sent per second by the VSI. | As per the MIB. |
| hh3cVsiPerfOutRatePackets (1.3.6.1.4.1.25506.2.105.1.7.1.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets sent per second by the VSI. | As per the MIB. |

hh3cVsiNextAvailableVsiIfID

About this table

This table contains information about next available VSI interface numbers.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|-----------------------|-----------------------------------|
| hh3cVsiNextAvailableVsiIfID (1.3.6.1.4.1.25506.2.105.1.8) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | VSI interface number. | Implementation varies by product. |

hh3cVsilfTable

About this table

Use this table to configure VSI interface parameters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cVsilfID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|--|-----------------------|--|
| hh3cVsilfID (1.3.6.1.4.1.25506.2.105.1.9.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | VSI interface number. | As per the MIB. |
| hh3cVsilfIndex (1.3.6.1.4.1.25506.2.105.1.9.1.2) | read-only | InterfaceIndex | Integer32 (1..2147483647) | VSI interface index. | As per the MIB. |
| hh3cVsilfRowStatus (1.3.6.1.4.1.25506.2.105.1.9.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

Notifications

hh3cVsiChangeToUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|----------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.105.0.1 | A VSI came up. | Recovery | Warning | - | OFF |

Description

This notification is generated if a VSI comes up.

Status control

ON

CLI: Use the `snmp-agent trap enable 12vpn [vsi-state-change]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [vsi-state-change]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cVsiChangeToDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|------------------|---------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.105.0.2 | A VSI went down. | Failure | Warning | - | OFF |

Description

This notification is generated if a VSI goes down.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [vsi-state-change]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [vsi-state-change]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|-----------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cVsiMacLimitMax

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.105.0.3 | The number of MAC address entries exceeded the warning threshold for a VSI. | Failure | Warning | - | OFF |

Description

This notification is generated if the number of MAC address entries exceeds the warning threshold for a VSI.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [maclimit-vsi]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [maclimit-vsi]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cVsiMacLimitMaxClear

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.105.0.4 | The number of MAC address entries dropped below the warning threshold for a VSI. | Recovery | Warning | | OFF |

Description

This notification is generated if the number of MAC address entries drops below the warning threshold for a VSI.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn [mac-limit-vsi]` command.

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn [mac-limit-vsi]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cVsiLabelResourceNotEnough

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---------------------------------------|---------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.105.0.5 | The label resources are insufficient. | Failure | Major | 1.3.6.1.4.1.25506.2.105.0.6 (hh3cVsiLabelResourceRestore) | OFF |

Description

This notification is generated if label request fails due to lack of label resources.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn label-resource`

OFF

CLI: Use the `undo snmp-agent trap enable l2vpn label-resource`

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cVsiLabelResourceRestore

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.105.0.6 | Label resources became sufficient. | Recovery | | | OFF |

Description

This notification is generated if label resources become sufficient.

Status control

ON

CLI: Use the `snmp-agent trap enable 12vpn label-resource` command.

OFF

CLI: Use the `undo snmp-agent trap enable 12vpn label-resource` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

hh3cVsiPwNumberMaxExceed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---------------------------|---------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.105.0.7 | The PW limit was reached. | Failure | Major | | OFF |

Description

This notification is generated if the number of PWs reaches the upper limit.

Status control

ON

CLI: Use the `snmp-agent trap enable 12vpn pw-limitnum` command.

OFF

CLI: Use the `undo snmp-agent trap enable pw-limitnum` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.105.1.2.1.2 (hh3cVsiName) | VSI name. | No | OCTET STRING | As per the MIB. |

Recommended action

No action is required.

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MPLS-FRR-FACILITY-STD-MIB

About this MIB

Use this MIB to manage tunnels on the MPLS interfaces configured for FRR protection.

MIB file name

rfc6445-mpls-frr-facility-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).mplsFrrFacilityMIB(204)

Scalar objects

mplsFrrConfiguredInterfaces

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------|
| mplsFrrConfigure dInterfaces (1.3.6.1.2.1.204.1. 1) | read-only | Integer32 | Integer32 (0..2147483647) | Number of MPLS interfaces configured for FRR protection. | As per the MIB. |

mplsFrrActiveInterfaces

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------------|--|-----------------|
| mplsFrrActiveInter faces (1.3.6.1.2.1.204.1. 2) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of interfaces currently being protected. An interface is being protected as long as the bypass tunnel on the interface is up. | As per the MIB. |

mplsFrrConfiguredBypassTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------------|--|-----------------|
| mplsFrrConfigure dBypassTunnels (1.3.6.1.2.1.204.1. 3) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of bypass tunnels configured to protect tunnels on this LSR. | As per the MIB. |

mplsFrrActiveBypassTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------------|--|-----------------|
| mplsFrrActiveBypassTunnels (1.3.6.1.2.1.204.1.4) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of bypass tunnels in up state (ready to protect tunnels). | As per the MIB. |

mplsFrrFacilityNotificationsEnabled

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|--|-----------------|
| mplsFrrFacilityNotificationsEnabled (1.3.6.1.2.1.204.1.5) | read-write | Integer32 | true(1), false(2) | The capability of sending FRR notifications. | As per the MIB. |

mplsFrrFacilityNotificationsMaxRate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|----------------------------|--|--|
| mplsFrrFacilityNotificationsMaxRate (1.3.6.1.2.1.204.1.6) | read-write | Gauge32 | Gauge32 (0..4294967295) | Maximum number of FRR notifications sent per second. | Not supported. This value is already 0. |

Tabular objects

mplsFrrFacilityDBTable

About this table

Use this table to obtain FRR database information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|--|
| Not supported | Not supported | Not supported | <p>The mplsFrrFacilityDBProtectingTunnelResvBw object displays only the bandwidth information. It does not display the CT information.</p> <p>The value active(1) for mplsFrrFacilityDBProtectingTunnelStatus indicates that a primary/bypass tunnel FRR switchover has occurred.</p> <p>The value ready(2) for mplsFrrFacilityDBProtectingTunnelStatus indicates a bypass tunnel has been bound to the primary tunnel but no FRR switchover has occurred.</p> |

Columns

The table indexes are mplsFrrFacilityProtectedIfIndex, mplsFrrFacilityProtectingTunnelIndex, mplsFrrFacilityBackupTunnelIndex, mplsFrrFacilityBackupTunnelInstance, and mplsFrrFacilityBackupTunnelIngressLSRId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|---------------------------------|--|--------------------------------------|
| mplsFrrFacilityProtectedIfIndex (1.3.6.1.2.1.204.1.7.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | Index of an interface configured for FRR protection. | As per the MIB. |
| mplsFrrFacilityProtectingTunnelIndex (1.3.6.1.2.1.204.1.7.1.2) | not-accessible | MplsTunnelIndex | Unsigned32 (0..65535) | Index for a bypass tunnel on the interface specified by mplsFrrFacilityProtectedIfIndex. | As per the MIB. |
| mplsFrrFacilityBackupTunnelIndex (1.3.6.1.2.1.204.1.7.1.3) | not-accessible | MplsTunnelIndex | Unsigned32 (0..65535) | Index of the protected tunnel on the interface specified by mplsFrrFacilityProtectedIfIndex. | As per the MIB. |
| mplsFrrFacilityBackupTunnelInstance (1.3.6.1.2.1.204.1.7.1.4) | not-accessible | MplsTunnelInstanceIndex | Unsigned32 (0..2147483647) | Index of the protected tunnel instance. | As per the MIB. |
| mplsFrrFacilityBackupTunnelIngressLSRId (1.3.6.1.2.1.204.1.7.1.5) | not-accessible | MplsLsrIdentifier | OCTET STRING (0..255) | Ingress LSR ID of the protected tunnel. | As per the MIB. |
| mplsFrrFacilityBackupTunnelEgressLSRId (1.3.6.1.2.1.204.1.7.1.6) | not-accessible | MplsLsrIdentifier | OCTET STRING (0..255) | Egress LSR ID of the protected tunnel. | As per the MIB. |
| mplsFrrFacilityDBNumProtectingTunnelOnly (1.3.6.1.2.1.204.1.7.1.7) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of bypass tunnels on the interface. | As per the MIB. |
| mplsFrrFacilityDBNumProtectedLspOnly (1.3.6.1.2.1.204.1.7.1.8) | read-only | Gauge32 | Gauge32 (0.. 4294967295) | Number of LSPs being protected on the interface. | As per the MIB. |
| mplsFrrFacilityDBNumProtectedTunnels (1.3.6.1.2.1.204.1.7.1.9) | read-only | Gauge32 | Gauge32 (0.. 4294967295) | Number of tunnels being protected on the interface. | As per the MIB. |
| mplsFrrFacilityDBNumProtectingTunnelStatus (1.3.6.1.2.1.204.1.7.1.10) | read-only | Integer32 | active(1), ready(2), partial(3) | State of the bypass tunnel. | Supports only active(1) and ready(2) |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|---|-----------------|
| mplsFrrFacilityDB NumProtectingTunnelResvBw (1.3.6.1.2.1.204.1.7.1.11) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Bandwidth reserved for the bypass tunnel to provide bandwidth protection. | As per the MIB. |

Notifications

mplsFrrFacilityInitialBackupTunnelInvoked

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---|-------|----------|---|----------------|
| 1.3.6.1.2.1.204.0.1 | Interface failed and bypass tunnel took over. | Error | Major | 1.3.6.1.2.1.204.1.7.1.7 (mplsFrrFacilityDBNumProtectingTunnelOnIf) | ON |

Description

This notification is generated when a bypass tunnel specified in mplsFrrConstraintsTable takes over the primary tunnel running over an interface also specified in the mplsFrrConstraintsTable.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|------------|-----------------------|
| 1.3.6.1.2.1.204.1.7.1.7 (mplsFrrFacilityDBNumProtectingTunnelOnIf) | Number of bypass tunnels on an interface for protection. | No | Gauge32 | Standard MIB values. |
| 1.3.6.1.2.1.204.1.7.1.8 (mplsFrrFacilityDBNumProtectedLspOnIf) | Number of CRLSPs protected on the interface. | No | Gauge32 | Standard MIB values. |
| 1.3.6.1.2.1.204.1.7.1.9 (mplsFrrFacilityDBNumProtectedTunnels) | Number of tunnels protected on the interface. | No | Gauge32 | Standard MIB values. |
| 1.3.6.1.2.1.204.1.7.1.10 (mplsFrrFacilityDBProtectingTunnelStatus) | State of a bypass tunnel on the interface. | No | INTEGER | active(1) ready(2) |
| 1.3.6.1.2.1.204.1.7.1.11 (mplsFrrFacilityDBProtectingTunnelResvBw) | Amount of bandwidth reserved by a bypass tunnel on the interface. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsFrrFacilityFinalTunnelRestored

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.204.0.2 | Interface recovered and primary tunnel recovered. | Recovery | - | - | ON |

Description

This notification is generated when the primary tunnel that is being protected by a bypass tunnel as specified in the mplsFrrConstraintsTable restores normal operation.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|------------|-----------------------|
| 1.3.6.1.2.1.204.1.7.1.7 (mplsFrrFacilityDBNumProtectingTunnelOnIf) | Number of bypass tunnels for FRR facility backup. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.204.1.7.1.8 (mplsFrrFacilityDBNumProtectedLspOnIf) | Number of LSPs protected by FRR facility backup. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.204.1.7.1.9 (mplsFrrFacilityDBNumProtectedTunnels) | Number of tunnels protected by FRR facility backup. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.204.1.7.1.10 (mplsFrrFacilityDBProtectingTunnelStatus) | State of a bypass tunnel for FRR facility backup. | No | Integer32 | active(1) ready(2) |
| 1.3.6.1.2.1.204.1.7.1.11 (mplsFrrFacilityDBProtectingTunnelResvBw) | Amount of bandwidth reserved by the bypass tunnel for FRR facility backup. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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MPLS-FRR-GENERAL-STD-MIB

About this MIB

Use this MIB to manage associations between outgoing interfaces and bypass tunnels for FRR.

MIB file name

rfc6445-mpls-frr-general-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).mplsFrrGeneralMIB(202)

Scalar objects

mplsFrrGeneralProtectionMethod

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|--|---|
| mplsFrrGeneralProtectionMethod (1.3.6.1.2.1.202.1.1) | read-write | INTEGER | unknown(1) oneToOneBackup(2) facilityBackup(3) | FRR protection method supported by the device. | Supports only the read operation. Supports only facilityBackup(3). |

mplsFrrGeneralIngressTunnelInstances

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|--|
| mplsFrrGeneralIngressTunnelInstances (1.3.6.1.2.1.204.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Number of tunnel instances for detour LSPs and bypass tunnels on the ingress LSR. | Supports displaying only the number of bypass tunnels. |

Tabular objects

mplsFrrGeneralConstraintsTable

About this table

This table specifies the FRR bypass tunnel setup constraints.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|---|
| Before the create operation, make sure the bypass tunnel identified by mplsFrrGeneralConstraintsTunnelIndex already | Not supported | Supported | The mplsFrrGeneralConstraintsBandwidth object displays no |

| | | | |
|--|--|--|--|
| exists. The value for mplsFrrGeneralConstraintsTunnelInstance must be 0. The mplsFrrGeneralConstraintsBandwidth object indicates the bandwidth reserved for a bypass tunnel, and it supports only CT0. If you do not specify this object, the default value 0 is used, indicating that the bypass tunnel provides bandwidth protection in best effort mode. For a bypass tunnel to provide guaranteed bandwidth protection, you must specify a specific bandwidth value for this object. | | | CT information or displays CT0 bandwidth. For other CTs, this object displays 0. |
|--|--|--|--|

Columns

The table indexes are mplsFrrFacilityProtectedIfIndex, mplsFrrFacilityProtectingTunnelIndex, mplsFrrFacilityBackupTunnelIndex, mplsFrrFacilityBackupTunnelInstance, and mplsFrrFacilityBackupTunnelIngressLSRId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|--|--|---|
| mplsFrrGeneralConstraintsIfIndexOrZero (1.3.6.1.2.1.202.1.3.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | Index of an interface to be protected by an FRR bypass tunnel. | As per the MIB. |
| mplsFrrGeneralConstraintsTunnelIndex (1.3.6.1.2.1.202.1.3.1.2) | not-accessible | MplsTunnelIndex | Gauge (0..65535) | Index of the bypass tunnel. | As per the MIB. |
| mplsFrrGeneralConstraintsTunnelInstance (1.3.6.1.2.1.202.1.3.1.3) | not-accessible | MplsTunnelInstanceIndex | Gauge (0..65535) | ID of a protected tunnel instance. | Supports only 0 for a set operation. |
| mplsFrrGeneralConstraintsProtectionType (1.3.6.1.2.1.202.1.3.1.4) | read-create | Integer32 | linkProtection(1) nodeProtection(2) | Protection method. | Supports only the read operation. Supports only nodeProtection(2). |
| mplsFrrGeneralConstraintsSetupPriority (1.3.6.1.2.1.202.1.3.1.5) | read-create | Unsigned32 | Unsigned32 (0..7) | Bypass tunnel setup priority. | Supports only the read operation. |
| mplsFrrGeneralConstraintsHoldingPriority (1.3.6.1.2.1.202.1.3.1.6) | read-create | Unsigned32 | Unsigned32 (0..7) | Bypass tunnel holding priority. | Supports only the read operation. |
| mplsFrrGeneralConstraintsIncludeAnyAffinity (1.3.6.1.2.1.202.1.3.1.7) | read-create | Unsigned32 | Unsigned32 (0..65535) | The include-any constraint for the bypass tunnel. | Supports only the read operation. |
| mplsFrrGeneralConstraintsIncludeAllAffinity (1.3.6.1.2.1.202.1.3.1.8) | read-create | Unsigned32 | Unsigned32 (0..65535) | The include-all constraint for the bypass tunnel. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|---|---|--|
| mplsFrrGeneralConstraintsExcludeAnyAffinity (1.3.6.1.2.1.202.1.3.1.9) | read-create | Unsigned32 | Unsigned32(0..2147483647) | The exclude-any constraint for the bypass tunnel. | Supports only the read operation. |
| mplsFrrGeneralConstraintsHopLimit (1.3.6.1.2.1.202.1.3.1.10) | read-create | Unsigned32 | Unsigned32 (0..255) | Maximum number of hops that the bypass tunnel can traverse. | Not supported. The value is always 255. |
| mplsFrrGeneralConstraintsBandwidth (1.3.6.1.2.1.202.1.3.1.11) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | Bandwidth reserved for the bypass tunnel to provide bandwidth protection. | Supports only CT0 bandwidth. |
| mplsFrrGeneralConstraintsStorageType (1.3.6.1.2.1.202.1.3.1.12) | read-create | Integer32 | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5)} | Storage type. | Not supported. The value is always nonvolatile(3). |
| mplsFrrGeneralConstraintsRowStatus (1.3.6.1.2.1.202.1.3.1.13) | read-create | Integer32 | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

mplsFrrGeneralTunnelARHopTable

About this table

Use this table to obtain AR hop information for FRR protected tunnels.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|--|---|-----------------|
| mplsFrrGeneralTunnelARHopSessionAttributeFlags (1.3.6.1.2.1.202.1.4.1.1) | read-only | BITS | arHopSessionAttrFlagsUnsupported(0) localProtectionDesired(1) labelRecordingDesired(2) sestyleDesired(3) bandwidthProtectionDesired(4) nodeProtectionDesired(5) | Values for the SESSION_ATTRIBUTE flags. | As per the MIB. |
| mplsFrrGeneralTunnelARHopRRSubObjectFlags (1.3.6.1.2.1.202.1.4.1.2) | read-only | BITS | arHopRRSubObjectFlagsUnsupported(0) localProtectionAvailable(1) | Flags that are currently in use by the associated Record Route Object | As per the MIB. |

| | | | | | |
|--------|--|--|--|----------------------|--|
| 4.1.2) | | | localProtectionInUse(2) bandwidthProtection(3) nodeProtection(4) | (RRO) sub-object. | |
|--------|--|--|--|----------------------|--|

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MPLS-FTN-STD-MIB

About this MIB

MPLS-FTN-STD-MIB is a public MIB defined by RFC 3814. This MIB mainly defines three tables (mplsFTNTable, mplsFTNMapTable, and mplsFTNPerfTable), which specify FEC to NHLFE (FTN) mappings and corresponding performance for MPLS.

MIB file name

rfc3814-mpls-ftn-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166)

Scalar objects

mplsFTNIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|--|-----------------|
| mplsFTNIndexNext (1.3.6.1.2.1.10.166.8.1.1) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Next available valid value to be used for mplsFTNIndex | As per the MIB. |

mplsFTNTableLastChanged

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------------|---|-----------------|
| mplsFTNTableLastChanged (1.3.6.1.2.1.10.166.8.1.2) | read-only | TimeTicks | Unsigned32 (0..4294967295) | Last time an entry was added, deleted, or modified in mplsFTNTable. | As per the MIB. |

mplsFTNMapTableLastChanged

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|-------------------------------|--|-----------------|
| mplsFTNMapTableLastChanged (1.3.6.1.2.1.10.166.8.1.4) | read-only | TimeTicks | Unsigned32 (0..4294967295) | Last time an entry was added, deleted, or modified in mplsFTNMapTable. | As per the MIB. |

Tabular objects

mplsFTNTable

About this table

This table contains FTN entries. Each entry defines a rule to be applied to incoming packets and an action to be taken on matching packets.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|---------------|------------|
| <p>To create an instance, the following objects must be all specified: mplsFTNRowStatus, mplsFTNAddrType, mplsFTNDestAddrMin, mplsFTNDestAddrMax, mplsFTNActionType, and mplsFTNActionPointer.</p> <p>Comware 7 classifies FECs by destination address and mask. It requires that mplsFTNDestAddrMin must be the lowest address in the subnet and mplsFTNDestAddrMax must be the highest address in the subnet.</p> <p>For example:</p> <ol style="list-style-type: none">1. FEC is 100.1.1.0/24. Set mplsFTNDestAddrMin to 100.1.1.0 and mplsFTNDestAddrMax to 100.1.1.255.2. FEC is 200.1.1.2/32. Set both mplsFTNDestAddrMin and mplsFTNDestAddrMax to 200.1.1.2. | Not supported | Not supported | Supported. |

Columns

The table index is mplsFTNMapIndex .

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|--|--|
| mplsFTNIndex (1.3.6.1.2.1.10.166.8.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of a row (FTN entry) in mplsFTNTable. | As per the MIB. |
| mplsFTNRowStatus (1.3.6.1.2.1.10.166.8.1.3.1.2) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| mplsFTNDescr (1.3.6.1.2.1.10.166.8.1.3.1.3) | read-create | OCTET STRING | OCTET STRING (0..65535) | Description for the FTN entry. | Supports only the read operation. |
| mplsFTNMask (1.3.6.1.2.1.10.166.8.1.3.1.4) | read-create | BITS | sourceAddr(0), destAddr(1), sourcePort(2), destPort(3), protocol(4), dscp(5) | Mask for matching data packets. | Supports only the read operation. |
| mplsFTNAddrType (1.3.6.1.2.1.10.166.8.1.3.1.5) | read-create | INTEGER | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Type of the address contained in the source and destination address objects. | Supports read and write operations. Supports only IPv4 address. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------------|---|---|--|
| mplsFTNSourceAddrMin (1.3.6.1.2.1.10.166.8.1.3.1.6) | read-create | OCTET STRING | OCTET STRING (0..255) | Lower end of the source address range. | Supports only the read operation. |
| mplsFTNSourceAddrMax (1.3.6.1.2.1.10.166.8.1.3.1.7) | read-create | OCTET STRING | OCTET STRING (0..255) | Upper end of the source address range. | Supports only the read operation. |
| mplsFTNDestAddrMin (1.3.6.1.2.1.10.166.8.1.3.1.8) | read-create | OCTET STRING | OCTET STRING (0..255) | Lower end of the destination address range. | Supports read and write operations. |
| mplsFTNDestAddrMax (1.3.6.1.2.1.10.166.8.1.3.1.9) | read-create | OCTET STRING | OCTET STRING (0..255) | Higher end of the destination address range. | Supports read and write operations. |
| mplsFTNSourcePortMin (1.3.6.1.2.1.10.166.8.1.3.1.10) | read-create | Unsigned32 | Unsigned32 (0..65535) | Lower end of the source port range. | Supports only the read operation. |
| mplsFTNSourcePortMax (1.3.6.1.2.1.10.166.8.1.3.1.11) | read-create | Unsigned32 | Unsigned32 (0..65535) | Higher end of the source port range. | Supports only the read operation. |
| mplsFTNDestPortMin (1.3.6.1.2.1.10.166.8.1.3.1.12) | read-create | Unsigned32 | Unsigned32 (0..65535) | Lower end of the destination port range. | Supports only the read operation. |
| mplsFTNDestPortMax (1.3.6.1.2.1.10.166.8.1.3.1.13) | read-create | Unsigned32 | Unsigned32 (0..65535) | Higher end of the destination port range. | Supports only the read operation. |
| mplsFTNProtocol (1.3.6.1.2.1.10.166.8.1.3.1.14) | read-create | Integer32 | Integer32 (0..255) | IP protocol to match against the IPv4 protocol number or IPv6 Next-Header number in the packet. A value of 255 means match all. | Supports only the read operation. |
| mplsFTNDscp (1.3.6.1.2.1.10.166.8.1.3.1.15) | read-create | Integer32 | Integer32 (0..2147483647) | Contents of the DSCP field. | Supports only the read operation. |
| mplsFTNActionType (1.3.6.1.2.1.10.166.8.1.3.1.16) | read-create | INTEGER | redirectLsp(1), redirectTunnel(2) | The type of action to be taken on packets matching this FTN entry. | Supports read and write operations. The write operation supports only the redirectLsp type. |
| mplsFTNActionPointer (1.3.6.1.2.1.10.166.8.1.3.1.17) | read-create | OBJECT IDENTIFIER | zeroDotZero | Points to the LSP or tunnel to redirect matching packets to. | Supports read and write operations. |
| mplsFTNStorageType (1.3.6.1.2.1.10.166.8.1.3.1.18) | read-create | INTEGER | other(1), volatile(2), nonVolatile(3), permanent(4), | The storage type for this FTN entry. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--------------|-------------|----------------|
| | | | readOnly(5)} | | |

mplsFTNMapTable

About this table

This table contains objects which provide the capability to apply or map FTN rules as defined by entries in mplsFTNTable to specific interfaces in the system.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsFTNMapIndex, mplsFTNMapPrevIndex, and mplsFTNMapCurrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|---|---|-----------------------------------|
| mplsFTNMapIndex (1.3.6.1.2.1.10.16 6.8.1.5.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | The interface index that this FTN entry is being applied to. | As per the MIB. |
| mplsFTNMapPrevIndex (1.3.6.1.2.1.10.16 6.8.1.5.1.2) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | The index of the previous FTN entry that was applied to this interface. The special value zero indicates that this should be the first FTN entry in the list. | As per the MIB. |
| mplsFTNMapCurrIndex (1.3.6.1.2.1.10.16 6.8.1.5.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Index of the current FTN entry that is being applied to this interface. | As per the MIB. |
| mplsFTNMapRowStatus (1.3.6.1.2.1.10.16 6.8.1.5.1.4) | read-create | INTEGER | active(1), createAndGo(4), destroy(6) | Row status. | Supports only the read operation. |
| mplsFTNMapStorageType (1.3.6.1.2.1.10.16 6.8.1.5.1.5) | read-create | INTEGER | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5)} | The storage type for this entry. | Supports only the read operation. |

mplsFTNPerfTable

About this table

This table contains performance statistics on FTN entries on a per-interface basis.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsFTNPerfIndex and mplsFTNPerfCurrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|-------------------------------|--|-----------------|
| mplsFTNPerfIndex (1.3.6.1.2.1.10.166.8.1.6.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | The interface index of an interface that an FTN entry has been applied/mapped to. FTN per interface is not supported in the current version. mplsFTNPerfIndex must be 0. | As per the MIB. |
| mplsFTNPerfCurrIndex (1.3.6.1.2.1.10.166.8.1.6.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of an FTN entry that has been applied/mapped to the specified interface. | As per the MIB. |
| mplsFTNPerfMatchedPackets (1.3.6.1.2.1.10.166.8.1.6.1.3) | read-only | Counter64 | Counter64 (0..4294967295) | Number of packets that matched the specified FTN entry if it is applied/mapped to the specified interface. | As per the MIB. |
| mplsFTNPerfMatchedOctets (1.3.6.1.2.1.10.166.8.1.6.1.4) | read-only | Counter64 | Counter64 (0..4294967295) | Number of octets that matched the specified FTN entry if it is applied/mapped to the specified interface. | As per the MIB. |
| mplsFTNPerfDiscontinuityTime (1.3.6.1.2.1.10.166.8.1.6.1.5) | read-only | TimeTicks | Counter64 (0..4294967295) | The value of sysUpTime on the most recent occasion at which any one or more of this entry's counters suffered a discontinuity. | As per the MIB. |

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MPLS-L3VPN-STD-MIB

About this MIB

Use this MIB to obtain MPLS VPN information.

MIB file name

rfc4382-mpls-l3vpn-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166).mplsL3VpnMIB(11)

Scalar objects

mplsL3VpnConfiguredVrfs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|----------------------------|-----------------|
| mplsL3VpnConfiguredVrfs (1.3.6.1.2.1.10.166.11.1.1.1) | read-only | Unsigned32 | Standard MIB values. | Number of configured VRFs. | As per the MIB. |

mplsL3VpnActiveVrfs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|------------------------|-----------------------------|-----------------|
| mplsL3VpnActiveVrfs (1.3.6.1.2.1.10.166.11.1.1.2) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of VRFs in up state. | As per the MIB. |

mplsL3VpnConnectedInterfaces

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|------------------------|--|-----------------|
| mplsL3VpnConnectedInterfaces (1.3.6.1.2.1.10.166.11.1.1.3) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of interfaces bound to the VRF. | As per the MIB. |

mplsL3VpnNotificationEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|---|-----------------|
| mplsL3VpnNotificationEnable (1.3.6.1.2.1.10.166.11.1.1.4) | read-write | TruthValue | true(1), false(2) | Whether MPLS L3VPN notification is enabled. | As per the MIB. |

mplsL3VpnVrfConfMaxPossRts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|---|
| mplsL3VpnVrfConfMaxPossRts (1.3.6.1.2.1.10.166.11.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Maximum number of routes that all VRFs on the device can have. | As per the MIB. This object is not supported. The return value is always 0. |

mplsL3VpnVrfConfRteMxThrshTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|---|
| mplsL3VpnVrfConfRteMxThrshTime (1.3.6.1.2.1.10.166.11.1.1.6) | read-only | Unsigned32 | Standard MIB values. | Interval at which the route max threshold notification is regenerated after the maximum route number is exceeded (or reached if mplsL3VpnVrfConfMaxRoutes and mplsL3VpnVrfConfHighRteThrsh are equivalent) and the initial notification is sent. If this value is set to 0, the agent generates only one notification when maximum route number is reached. | As per the MIB. This object is not supported. The return value is always 0. |

mplsL3VpnIILblRcvThrsh

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--------------------------------------|--|
| mplsL3VpnIILblRcvThrsh (1.3.6.1.2.1.10.166.11.1.1.7) | read-write | Unsigned32 | Standard MIB values. | Number of received incorrect labels. | Supports only the read operation. This object is not supported. The return value is always 32. |

Tabular objects

mplsL3VpnIfConfTable

About this table

This table specifies MPLS capability and associated VPNs for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are mplsL3VpnVrfName and mplsL3VpnIfConfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|--------------------------------|-----------------------------------|
| mplsL3VpnIfConfIndex(1.3.6.1.2.1.10.166.11.1.2.1.1.1) | not-accessible | Interface Index | Integer32(1..2147483647) | Interface index. | As per the MIB. |
| mplsL3VpnIfVpnClassification(1.3.6.1.2.1.10.166.11.1.2.1.1.2) | read-create | INTEGER | carrierOfCarrier (1), enterprise (2), interProvider (3) | Interface category. | Supports only the read operation. |
| mplsL3VpnIfVpnRouteDistributionProtocol(1.3.6.1.2.1.10.166.11.1.2.1.1.3) | read-create | BITS | none (0), bgp (1), ospf (2), rip(3), isis(4), static(5), other (6) | Route distribution protocol. | Supports only the read operation. |
| mplsL3VpnIfConfStorageType(1.3.6.1.2.1.10.166.11.1.2.1.1.4) | read-create | Storage Type | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) } | Storage type of the interface. | Supports only the read operation. |
| mplsL3VpnIfConfRowStatus(1.3.6.1.2.1.10.166.11.1.2.1.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

mplsL3VpnVrfTable

About this table

This table contains VRF configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is mplsL3VpnVrfName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|--------------------------|--|-----------------------------------|
| mplsL3VpnVrfName (1.3.6.1.2.1.10.166.11.1.2.2.1.1) | not-accessible | MplsL3VpnName | OCTET STRING (0..31) | VRF name. | As per the MIB. |
| mplsL3VpnVrfVpnId (1.3.6.1.2.1.10.166.11.1.2.2.1.2) | read-create | VPNIIdOrZero | OCTET STRING (0 7) | VPN ID. | As per the MIB. |
| mplsL3VpnVrfDescription (1.3.6.1.2.1.10.166.11.1.2.2.1.3) | read-create | SnmpAdminString | OCTET STRING (0..255) | VRF description. | As per the MIB. |
| mplsL3VpnVrfRD (1.3.6.1.2.1.10.166.11.1.2.2.1.4) | read-create | MplsL3VpnRouteDistinguisher | OCTET STRING(0..256) | Configured RD. By default, a get operation obtains the global RD. If no global RD is configured, it obtains the RD for the IPv4 unicast address family. If the IPv4 unicast address family RD is not configured either, "0:0" is displayed. | As per the MIB. |
| mplsL3VpnVrfCreationTime (1.3.6.1.2.1.10.166.11.1.2.2.1.5) | read-only | TimeStamp | TimeTicks | Time when the VRF entry was created. | As per the MIB. |
| mplsL3VpnVrfOperStatus (1.3.6.1.2.1.10.166.11.1.2.2.1.6) | read-only | INTEGER | up (1), down (2) | Up/down state. | As per the MIB. |
| mplsL3VpnVrfActiveInterfaces (1.3.6.1.2.1.10.166.11.1.2.2.1.7) | read-only | Gauge32 | INTEGER(0..4294967295) | Number of associated interfaces in up state. | As per the MIB. |
| mplsL3VpnVrfAssociatedInterfaces (1.3.6.1.2.1.10.166.11.1.2.2.1.8) | read-only | Unsigned32 | Standard MIB values. | Number of associated interfaces. | As per the MIB. |
| mplsL3VpnVrfConfMidRouteThresh (1.3.6.1.2.1.10.166.11.1.2.2.1.9) | read-create | Unsigned32 | Standard MIB values. | Mid-level water marker for the number of routes that this VRF supports. | Supports only the read operation. |
| mplsL3VpnVrfConfHighRouteThresh (1.3.6.1.2.1.10.166.11.1.2.2.1.10) | read-create | Unsigned32 | Standard MIB values. | High-level water marker for the number of routes that the VRF supports. | Supports only the read operation. |
| mplsL3VpnVrfConfMaxRoutes (1.3.6.1.2.1.10.166.11.1.2.2.1.11) | read-create | Unsigned32 | Standard MIB values. | Maximum number of routes that this VRF is configured to hold. | Supports only the read operation. |
| mplsL3VpnVrfConfLastC | read-only | TimeStamp | TimeTicks | Time when the entry | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|--|----------------------------------|-----------------------------------|
| hanged (1.3.6.1.2.1.10.166.11.1.2.2.1.12) | | | | changed most recently. | |
| mplsL3VpnVrfConfRowStatus (1.3.6.1.2.1.10.166.11.1.2.2.1.13) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |
| mplsL3VpnVrfConfAdminStatus (1.3.6.1.2.1.10.166.11.1.2.2.1.14) | read-create | INTEGER | up(1), down(2), testing(3) | Administrative state of the VRF. | Supports only the read operation. |
| mplsL3VpnVrfConfStorageType (1.3.6.1.2.1.10.166.11.1.2.2.1.15) | read-create | StorageType | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) } | Storage type of the VRF. | Supports only the read operation. |

mplsL3VpnVrfRTTable

About this table

This table contains VPN RT information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsL3VpnVrfName, mplsL3VpnVrfRTIndex, and mplsL3VpnVrfRTType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------------|--|---------------------------------|-----------------------------------|
| mplsL3VpnVrfRTIndex (1.3.6.1.2.1.10.166.11.1.2.3.1.2) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | RT index. | As per the MIB. |
| mplsL3VpnVrfRTType (1.3.6.1.2.1.10.166.11.1.2.3.1.3) | not-accessible | MplsL3VpnRouteDistinguisher | import (1), export (2), or both (3). | Incoming and outgoing policies. | As per the MIB. |
| mplsL3VpnVrfRT (1.3.6.1.2.1.10.166.11.1.2.3.1.4) | read-create | MplsL3VpnRouteDistinguisher | OCTET STRING(0..256) | RT character string. | Supports only the read operation. |
| mplsL3VpnVrfRTDescr | read-create | SnmpAdminString | OCTET | RT description. | Supports only the read operation. |

| | | | | | |
|--|-------------|--------------|--|------------------|-----------------------------------|
| (1.3.6.1.2.1.10.166.11.1.2.3.1.5) | | minString | STRING (0..255) | | operation. |
| mplsL3VpnVrfRTRowStatus (1.3.6.1.2.1.10.166.11.1.2.3.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |
| mplsL3VpnVrfRTStorageType (1.3.6.1.2.1.10.166.11.1.2.3.1.7) | read-create | Storage Type | INTEGER { other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) } | RT storage type. | Supports only the read operation. |

mplsL3VpnVrfSecTable

About this table

This table contains MPLS VRF security statistics information about interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|---|-----------------|
| mplsL3VpnVrfSecIllegalLblVltns (1.3.6.1.2.1.10.166.11.1.2.6.1.1) | read-only | Counter32 | INTEGER(0..4294967295) | Number of invalid labels that are received. | As per the MIB. |
| mplsL3VpnVrfSecDiscontinuityTime (1.3.6.1.2.1.10.166.11.1.2.6.1.2) | read-only | TimeStamp | TimeTicks | Interruption time. | As per the MIB. |

mplsL3VpnVrfPerfTable

About this table

This table contains MPLS L3VPN VRF table performance information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--|-----------------|
| mplsL3VpnVrfPerfRoutesAdded (1.3.6.1.2.1.10.166.11.1.3.1.1.1) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of added IPv4 and IPv6 routes. | As per the MIB. |
| mplsL3VpnVrfPerfRoutesDeleted (1.3.6.1.2.1.10.166.11.1.3.1.1.2) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of deleted IPv4 and IPv6 routes. | As per the MIB. |
| mplsL3VpnVrfPerfCurrNumRoutes (1.3.6.1.2.1.10.166.11.1.3.1.1.3) | read-only | Gauge32 | INTEGER(0..4294967295) | Total number of active IPv4 and IPv6 routes. | As per the MIB. |
| mplsL3VpnVrfPerfRoutesDropped (1.3.6.1.2.1.10.166.11.1.3.1.1.4) | read-only | Counter32 | INTEGER(0..4294967295) | Number of discarded routes. | As per the MIB. |
| mplsL3VpnVrfPerfDiscTime (1.3.6.1.2.1.10.166.11.1.3.1.1.5) | read-only | TimeStamp | TimeTicks | Interruption time. The value of this object is always 0. | As per the MIB. |

mplsL3VpnVrfRteTable

About this table

This table contains information about routes configured for a VRF.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsL3VpnVrfName, mplsL3VpnVrfRteInetCidrDestType, mplsL3VpnVrfRteInetCidrDest, mplsL3VpnVrfRteInetCidrPfxLen, mplsL3VpnVrfRteInetCidrPolicy, mplsL3VpnVrfRteInetCidrNHopType, and mplsL3VpnVrfRteInetCidrNextHop.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|---------------------------|-----------------|
| mplsL3VpnVrfRteInetCidrDestType (1.3.6.1.2.1.10.166.11.1.4.1.1.1) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Destination address type. | As per the MIB. |
| mplsL3VpnVrfRteInetCidrDest | not-accessible | InetAddr | OCTET | Destination IP | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------------|---|--|---|
| (1.3.6.1.2.1.10.166.11.1.4.1.1.2) | | ess | STRING (0..255) | address. | |
| mplsL3VpnVrfRtInetCidrPfxLen (1.3.6.1.2.1.10.166.11.1.4.1.1.3) | not-accessible | InetAddressPrefixLength | Unsigned32(0..128) | Prefix length of the destination address. | As per the MIB. |
| mplsL3VpnVrfRtInetCidrPolicy (1.3.6.1.2.1.10.166.11.1.4.1.1.4) | not-accessible | OBJECT IDENTIFIER | Standard MIB values. | Additional index that delineates between multiple entries to the same destination. | As per the MIB. |
| mplsL3VpnVrfRtInetCidrNHopType (1.3.6.1.2.1.10.166.11.1.4.1.1.5) | not-accessible | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Next hop type. | As per the MIB. |
| mplsL3VpnVrfRtInetCidrNextHop (1.3.6.1.2.1.10.166.11.1.4.1.1.6) | not-accessible | InetAddress | OCTET STRING (0..255) | Next hop. | As per the MIB. |
| mplsL3VpnVrfRtInetCidrIfIndex (1.3.6.1.2.1.10.166.11.1.4.1.1.7) | read-create | InterfaceIndexOrZero | Integer32(0..2147483647) | Egress interface index. | Supports only the read operation. |
| mplsL3VpnVrfRtInetCidrType (1.3.6.1.2.1.10.166.11.1.4.1.1.8) | read-create | INTEGER | other(1), reject(2), local(3), remote (4), blackhole(5) | Route type. | Supports only the read operation. |
| mplsL3VpnVrfRtInetCidrProto (1.3.6.1.2.1.10.166.11.1.4.1.1.9) | read-only | IANAipRouteProtocol | INTEGER(0..4294967295) | Routing protocol. | As per the MIB. |
| mplsL3VpnVrfRtInetCidrAge (1.3.6.1.2.1.10.166.11.1.4.1.1.10) | read-only | Gauge32 | INTEGER(0..4294967295) | Route update time. | As per the MIB. |
| mplsL3VpnVrfRtInetCidrNextHopAS (1.3.6.1.2.1.10.166.11.1.4.1.1.11) | read-create | InetAddressAutonomousSystemNumber | INTEGER(0..4294967295) | AS number of the next hop. | Supports only the read operation. |
| mplsL3VpnVrfRtInetCidrMetric1 (1.3.6.1.2.1.10.166.11.1.4.1.1.12) | read-create | Integer32 | Integer32(-1 0..2147483647) | Primary route metric. | Supports only the read operation. |
| mplsL3VpnVrfRtInetCidrMetric2 (1.3.6.1.2.1.10.166.11.1.4.1.1.13) | read-create | Integer32 | Integer32(-1 0..2147483647) | Optional route metric. | Supports only the read operation. Set the value of this object to -1 if this object is not used. |
| mplsL3VpnVrfRtInetCidrMetric3 (1.3.6.1.2.1.10.166.11.1.4.1.1.14) | read-create | Integer32 | Integer32(-1 0..2147483647) | Optional route metric. | Supports only the read operation. Set the value of this object to -1 if this object is not used. |
| mplsL3VpnVrfRtInetCidrMetric | read-create | Integer32 | Integer32(-1 | Optional route | Supports only the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|---------------|--|------------------------|---|
| 4 (1.3.6.1.2.1.10.166.11.1.4.1.1.1.5) | | | 0..2147483647) | metric. | read operation. Set the value of this object to -1 if this object is not used. |
| mplsL3VpnVrfRteInetCidrMetric 5 (1.3.6.1.2.1.10.166.11.1.4.1.1.1.6) | read-create | Integer32 | Integer32(-1 0..2147483647) | Optional route metric. | Supports only the read operation. Set the value of this object to -1 if this object is not used. |
| mplsL3VpnVrfRteXCPointer (1.3.6.1.2.1.10.166.11.1.4.1.1.1.7) | read-create | MplsIndexType | Standard MIB values. | mplsXCTable index. | Supports only the read operation. This object is not supported. The return value is always 00.00.00.00. |
| mplsL3VpnVrfRteInetCidrStatus (1.3.6.1.2.1.10.166.11.1.4.1.1.1.8) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. |

Notifications

mplsL3VpnVrfUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|--|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.11.0.1 | An interface associated with a VRF comes up. | Recovery | - | - | ON |

Description

A notification sent when the following conditions exist:

- No interface is associated with this VRF. The value of the ifOperStatus object for the first (and only the first) interface associated with it changes to up(1).
- One interface is associated with this VRF. The value of the ifOperStatus object for the interface changes to up(1).
- Multiple interfaces are associated with this VRF. The value of the ifOperStatus object for all interfaces except for the first one is down(2), and the value of the ifOperStatus object for the first interface changes to up(1).

Status control

ON

CLI: Use the `snmp-agent trap enable l3vpn` command.

OFF

CLI: Use the `undo snmp-agent trap enable l3vpn` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------|------------------|
| 1.3.6.1.2.1.10.166.11.1.2.1.1.5 (mplsL3VpnIfConfRowStatus) | Row status used to create, modify, and delete a row in this table. | No | INTEGER | active(1) |
| 1.3.6.1.2.1.10.166.11.1.2.2.1.6 (mplsL3VpnVrfOperStatus) | Operational state of the VPN. | No | INTEGER | up(1) down(2) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsL3VpnVrfDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.11.0.2 | An interface associated with a VRF goes down. | Error | Major | - | ON |

Description

A notification sent when the following conditions exist:

- One interface is associated with this VRF. The value of the ifOperStatus object for the interface changes from up to down.
- Multiple interfaces are associated with this VRF. The value of the ifOperStatus object for all interfaces except for the first one is up, and the value of the ifOperStatus object for the first interface changes from up to down.
- The last interface whose ifOperStatus value is up disassociates from this VRF.

Status control

ON

CLI: Use the `snmp-agent trap enable l3vpn` command.

OFF

CLI: Use the `undo snmp-agent trap enable l3vpn` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------|------------------|
| 1.3.6.1.2.1.10.166.11.1.2.1.1.5 (mplsL3VpnIfConfRowStatus) | Row status used to create, modify, and delete a row in this table. | No | INTEGER | active(1) |
| 1.3.6.1.2.1.10.166.11.1.2.2.1.6 (mplsL3VpnVrfOperStatus) | Operational state of the VPN. | No | INTEGER | up(1) down(2) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsL3VpnVrfRouteMidThreshExceeded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.11.0.3 | The number of routes in a VRF exceeds the value indicated by mplsL3VpnVrfMidRouteThreshold. | Error | Warning | - | ON |

Description

A notification sent when the number of routes in a VRF exceeds the value indicated by mplsL3VpnVrfMidRouteThreshold. Only one notification is generated when this threshold is exceeded. No more notifications of this type will be generated until the value of mplsL3VpnVrfPerfCurrNumRoutes falls below that of mplsL3VpnVrfConfMidRteThresh.

Status control

ON

CLI: Use the `snmp-agent trap enable l3vpn` command.

OFF

CLI: Use the `undo snmp-agent trap enable l3vpn` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|------------|------------------------|
| 1.3.6.1.2.1.10.166.11.1.3.1.1.3 (mplsL3VpnVrfPerfCurrNumRoutes) | Total number of active IPv4 and IPv6 routes. | No | Gauge32 | INTEGER(0..4294967295) |
| 1.3.6.1.2.1.10.166.11.1.2.2.1.9 | Mid-level water | No | Unsigned32 | Standard MIB values. |

| | | | | |
|--------------------------------|---|--|--|--|
| (mplsL3VpnVrfConfMidRteThresh) | marker for the number of routes that this VRF supports. | | | |
|--------------------------------|---|--|--|--|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsL3VpnVrfNumVrfRouteMaxThreshExceeded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|-------|----------|---------------------------|----------------|
| 1.3.6.1.2.1.10.166.11.0.4 | The number of routes in a VRF exceeds or about to exceed the maximum allowed value as indicated by mplsL3VpnVrfMaxRouteThreshold. | Error | Warning | 1.3.6.1.2.1.10.166.11.0.6 | ON |

Description

A notification sent when the number of routes in a VRF exceeds or about to exceed the maximum allowed value as indicated by mplsL3VpnVrfMaxRouteThreshold. If mplsL3VpnVrfConfHighRteThresh is set to the same value as mplsL3VpnVrfConfMaxRoutes, this notification is generated when mplsL3VpnVrfConfHighRteThresh is reached.

mplsL3VpnVrfConfRteMxThrshTime defines the interval at which this notification is regenerated after the maximum value has been exceeded (or reached if mplsL3VpnVrfConfMaxRoutes and mplsL3VpnVrfConfHighRteThresh are equivalent) and the initial notification has been sent. This interval prevents continuous generation of notifications by an agent when routes are continually added to a VRF after it has reached its maximum value. The default value is 0. If this value is set to 0, the agent generates a single notification when the maximum threshold has been reached and does not generate any more notifications until the number of routes falls below the configured threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable 13vpn` command.

OFF

CLI: Use the `undo snmp-agent trap enable 13vpn` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|------------|------------------------|
| 1.3.6.1.2.1.10.166.11.1.3.1.1.3 (mplsL3VpnVrfPerfCurrNumRoutes) | Total number of active IPv4 and IPv6 routes. | No | Gauge32 | INTEGER(0..4294967295) |
| 1.3.6.1.2.1.10.166.11.1.2.2.1.10 (mplsL3VpnVrfConfHighRteThresh) | High-level water marker for the number of routes | No | Unsigned32 | Standard MIB values. |

| | | | | |
|--|------------------------|--|--|--|
| | that the VRF supports. | | | |
|--|------------------------|--|--|--|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsL3VpnNumVrfRouteMaxThreshCleared

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.11.0.6 | The number of routes in a VRF falls below the value of the mplsVrfMaxRoute Threshold object. | Informational | - | - | ON |

Description

This notification is generated only after the number of routes in a VRF exceeds or about to exceed the maximum allowed value as indicated by the mplsVrfMaxRouteThreshold object and then falls below this value. The notification informs the operator that the error has been cleared and the operator does not need to check the device.

mplsL3VpnVrfConfRteMxThrshTime defines the interval at which the mplsNumVrfRouteMaxThreshExceeded notification will be regenerated after the maximum value has been exceeded (or reached if mplsL3VpnVrfConfMaxRoutes and mplsL3VpnVrfConfHighRteThresh are equivalent) and the initial notification has been sent. The generation of this notification will be triggered with the same frequency (assuming that the error condition is cleared). If the error condition is reached and cleared several times during the period of time specified in mplsL3VpnVrfConfRteMxThrshTime, only a single notification will be generated to indicate the first instance of the error condition as well as the first time the error condition is cleared.

This prevents continuous generation of notifications by an agent in the event that routes are continually added to or removed from a VRF after it has reached its maximum value. The default value is 0. If this value is set to 0, the agent sends a notification whenever the maximum threshold has been cleared.

Status control

ON

CLI: Use the `snmp-agent trap enable l3vpn` command.

OFF

CLI: Use the `undo snmp-agent trap enable l3vpn` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------|------------------------|
| 1.3.6.1.2.1.10.166.11.1.3.1.1.3 (mplsL3VpnVrfPerfCurrNumRoutes) | Total number of active IPv4 and IPv6 routes. | No | Gauge32 | INTEGER(0..4294967295) |

| | | | | |
|---|---|----|------------|----------------------|
| 1.3.6.1.2.1.10.166.11.1.2.2.1.10 (mplsL3VpnVrfConfHighRteThresh) | High-level water marker for the number of routes that the VRF supports. | No | Unsigned32 | Standard MIB values. |
|---|---|----|------------|----------------------|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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MPLS-LDP-STD-MIB

About this MIB

LDP is the core of MPLS and defines the messages and processing procedures involved in the label distribution process.

The Label Distribution Protocol (LDP) dynamically distributes FEC-label mapping information between LSRs to establish LSPs. LSPs can be established between two adjacent LSRs or terminate at the egress node of the network, so that all intermediate nodes in the network use label switching.

MPLS-LDP-STD-MIB is a public MIB defined by RFC 3815.

MIB file name

rfc3815-mpls-ldp-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166).mplsLdpStdMIB(4)

Scalar objects

mplsLdpLsrId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|----------------------------|-------------|-----------------|
| mplsLdpLsrId (1.3.6.1.2.1.10.166.4.1.1.1) | read-only | Octet string | Octet string (0..65535) | LDP LSR ID. | As per the MIB. |

mplsLdpLsrLoopDetectionCapable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|--|--|
| mplsLdpLsrLoopDetectionCapable (1.3.6.1.2.1.10.166.4.1.1.2) | read-only | Integer | 1:none(1) 2:other(2) 3:hopCount(3) 4:pathVector(4) 5:hopCountAndPathVector(5) | Whether the LSR supports loop detection. | The value of this object is fixed at hopCountAndPathVector(5). |

mplsLdpEntityLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| mplsLdpEntityLastChange (1.3.6.1.2.1.10.166.4.1.2.1) | read-only | TimeTicks | Standard MIB values. | System time when an entry in the mplsLdpEntityTable table was most recently added, deleted, or modified. | As per the MIB. |

mplsLdpEntityIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|------------------------|---|
| mplsLdpEntityIndexNext (1.3.6.1.2.1.10.166.4.1.2.2) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Next LDP entity index. | This object returns 0, which indicates that the network administrator cannot create mplsLdpEntityTable. |

mplsLdpPeerLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------|---------------------------------|-----------------|
| mplsLdpPeerLastChange (1.3.6.1.2.1.10.166.4.1.3.1) | read-only | TimeStamp | INTEGER (0..4294967295) | Time when the entry was edited. | As per the MIB. |

mplsFecLastChange

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------|--|----------------|
| mplsFecLastChange (1.3.6.1.2.1.10.166.4.1.3.8.1) | read-only | TimeStamp | INTEGER (0..4294967295) | System time when the LDP FEC entry was most recently modified. | Not supported |

mplsFecIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|----------------------|----------------------------|---------------------|---|
| mplsFecIndexNext (1.3.6.1.2.1.10.166.4.1.3.8.2) | read-only | IndexIntegerNextFree | Gauge32 (1..4294967295) | Next LDP FEC index. | This object returns 0, which indicates that the network administrator cannot create mplsFecTable. |

Tabular objects

mplsLdpEntityTable

About this table

This table contains LDP entity information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsLdpEntityLdpId and mplsLdpEntityIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|---|--|---|
| mplsLdpEntityLdpId (1.3.6.1.2.1.10.166.4.1.2.3.1.1) | not-accessible | MplsLdpIdentifier | OCTET STRING (6,6) | LDP entity ID. | As per the MIB. |
| mplsLdpEntityIndex (1.3.6.1.2.1.10.166.4.1.2.3.1.2) | not-accessible | Unsigned32 | Unsigned32 (1,4294967295) | LDP entity index. | As per the MIB. |
| mplsLdpEntityProtocolVersion (1.3.6.1.2.1.10.166.4.1.2.3.1.3) | read-create | Unsigned32 | Unsigned32 (1~65535) | Version number of the LDP protocol which will be used in the session initialization message. | As per the MIB. |
| mplsLdpEntityAdminStatus (1.3.6.1.2.1.10.166.4.1.2.3.1.4) | read-create | INTEGER | enable(1) disable(2) | Administrative state of the LDP entity. | As per the MIB. |
| mplsLdpEntityOperStatus (1.3.6.1.2.1.10.166.4.1.2.3.1.5) | read-only | INTEGER | 1:unknown(1) 2:enabled(2) 3:disabled(3) | Operational state of the LDP entity. | As per the MIB. Default: enabled. |
| mplsLdpEntityTcpPort (1.3.6.1.2.1.10.166.4.1.2.3.1.6) | read-create | Unsigned32 | Unsigned32 (0..65535) | TCP port number of the LDP entity. | As per the MIB. Default: 646. |
| mplsLdpEntityUdpDscPort (1.3.6.1.2.1.10.166.4.1.2.3.1.7) | read-create | Unsigned32 | Unsigned32 (0..65535) | UDP port number of the LDP entity. | As per the MIB. Default: 646. |
| mplsLdpEntityMaxPduLength (1.3.6.1.2.1.10.166.4.1.2.3.1.8) | read-create | Unsigned32 | Unsigned32 (256..65535) | Maximum PDU length of the LDP entity. | As per the MIB. Default: 4096. |
| mplsLdpEntityKeepAliveHoldTimer (1.3.6.1.2.1.10.166.4.1.2.3.1.9) | read-create | Unsigned32 | Unsigned32 (1..65535) | Keepalive interval of the LDP entity. | As per the MIB. Default: 40. |
| mplsLdpEntityHelloHoldTimer (1.3.6.1.2.1.10.166.4.1.2.3.1.10) | read-create | Unsigned32 | Unsigned32 (0..65535) | Hello interval of the LDP entity. | As per the MIB. Default: 0. If mplsLdpEntityTargetPeer is set to false, the actual default value is 15. If mplsLdpEntityTargetPeer is set to true, the actual default value is 45. |
| mplsLdpEntityInitSessionThreshold (1.3.6.1.2.1.10.166.4.1.2.3.1.11) | read-create | Integer32 | Integer32 (0..100) | LDP entity session initialization threshold. | As per the MIB. Default: 8. |
| mplsLdpEntityLabelDistMethod (1.3.6.1.2.1.10.166.4.1.2.3.1.12) | read-create | INTEGER | downstreamOnDemand(1) | LDP entity label distribution | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|---|--|--|
| 12) | | | downstreamUnsolicited(2) | method. | |
| mplsLdpEntityLabelRetentionMode (1.3.6.1.2.1.10.166.4.1.2.3.1.13) | read-create | INTEGER | conservative(1) liberal(2) | Label retention mode used by the LDP entity. | As per the MIB. |
| mplsLdpEntityPathVectorLimit (1.3.6.1.2.1.10.166.4.1.2.3.1.14) | read-create | Integer32 | Integer32 (0..255) | LDP entity path vector limit. | As per the MIB. 0 indicates that loop detection is not enabled. |
| mplsLdpEntityHopCountLimit (1.3.6.1.2.1.10.166.4.1.2.3.1.15) | read-create | Integer32 | Integer32 (0..255) | LDP entity hop limit. | As per the MIB. 0 indicates that loop detection is not enabled. |
| mplsLdpEntityTransportAddressKind (1.3.6.1.2.1.10.166.4.1.2.3.1.16) | read-create | INTEGER | 1:Interface(1) 2:loopback(2) | LDP entity transport address type. | As per the MIB. Default: loopback(2). |
| mplsLdpEntityTargetPeer (1.3.6.1.2.1.10.166.4.1.2.3.1.17) | read-create | INTEGER | true(1) false(2) | If this LDP entity uses targeted peer, set this to true. | As per the MIB. Default: false. |
| mplsLdpEntityTargetPeerAddressType (1.3.6.1.2.1.10.166.4.1.2.3.1.18) | read-create | InetAddressType | INTEGER unknown (0) , ipv4(1) , ipv6 (2) , ipv4z (3) , ipv6z (4), dns(16) | Type of the internetwork layer address used for the Extended Discovery. | As per the MIB. Supports only ipv4. |
| mplsLdpEntityTargetPeerAddress (1.3.6.1.2.1.10.166.4.1.2.3.1.19) | read-create | OCTET STRING | OCTET STRING (0..255) | The value of the internetwork layer address used for the Extended Discovery. | As per the MIB. |
| mplsLdpEntityLabelType (1.3.6.1.2.1.10.166.4.1.2.3.1.20) | read-create | INTEGER | generic(1), atmParameters(2), frameRelayParameters(3) | LDP entity label type. | As per the MIB. |
| mplsLdpEntityDiscontinuityTime (1.3.6.1.2.1.10.166.4.1.2.3.1.21) | read-only | TimeTicks | Standard MIB values. | System time when any one or more of this entity's counters suffered a discontinuity most recently. | As per the MIB. |
| mplsLdpEntityStorageType (1.3.6.1.2.1.10.166.4.1.2.3.1.22) | read-create | INTEGER | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for the LDP entity. | As per the MIB. |
| mplsLdpEntityRowStatus (1.3.6.1.2.1.10.166.4.1.2.3.1. | read-create | INTEGER | active(1), notInService(2), | Row status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|--|-------------|----------------|
| 23) | | | notReady(3), createAndGo(4), createAndWait(5), destroy(6) | | |

mplsLdpEntityStatsTable

About this table

This table contains LDP entity statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|-----------------|
| mplsLdpEntityStatsSessionAttempts (1.3.6.1.2.1.10.166.4.1.2.4.1.1) | read-only | Counter32 | Counter32 (0..4294967295) | Session initialization messages sent or received by this LDP entity. | As per the MIB. |
| mplsLdpEntityStatsSessionRejectedNoHelloErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Session Rejected (No Hello Error) notifications sent or received by the LDP entity. | As per the MIB. |
| mplsLdpEntityStatsSessionRejectedAdErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.3) | read-only | Counter32 | Counter32 (0..4294967295) | Session Rejected (Parameters Advertisement Mode Error) notifications sent or received by the LDP entity. | As per the MIB. |
| mplsLdpEntityStatsSessionRejectedMaxPduErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.4) | read-only | Counter32 | Counter32 (0..4294967295) | Session Rejected (Parameters Max Pdu Length Error) notifications sent or received by the LDP entity. | As per the MIB. |
| mplsLdpEntityStatsSessionRejectedLRErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.5) | read-only | Counter32 | Counter32 (0..4294967295) | Session Rejected (Parameters Label Range) notifications sent or received by the LDP entity. | As per the MIB. |
| mplsLdpEntityStatsBadLdpIdentifierErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.6) | read-only | Counter32 | Counter32 (0..4294967295) | Number of Bad LDP Identifier Fatal Errors detected by the sessions associated with this LDP entity. | As per the MIB. |
| mplsLdpEntityStatsBadPduLengthErrors | read-only | Counter | Counter32 | Number of Bad PDU Length Fatal Errors | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------|
| (1.3.6.1.2.1.10.166.4.1.2.4.1.7) | | 32 | (0..4294967295) | detected by the sessions associated with this LDP entity. | |
| mplsLdpEntityStatsBadMessageLengthErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.8) | read-only | Counter32 | Counter32 (0..4294967295) | Number of Bad Message Length Fatal Errors detected by the sessions associated with this LDP entity. | As per the MIB. |
| mplsLdpEntityStatsBadTlvLengthErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.9) | read-only | Counter32 | Counter32 (0..4294967295) | Number of Bad TLV Length Fatal Errors detected by the sessions associated with this LDP entity. | As per the MIB. |
| mplsLdpEntityStatsMalformedTlvValueErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.10) | read-only | Counter32 | Counter32 (0..4294967295) | Number of Malformed TLV Value Fatal Errors detected by the sessions associated with this LDP entity. | As per the MIB. |
| mplsLdpEntityStatsKeepAliveTimerExpErrors (1.3.6.1.2.1.10.166.4.1.2.4.1.11) | read-only | Counter32 | Counter32 (0..4294967295) | Number of Session Keep Alive Timer Expired Fatal Errors detected by the sessions associated with this LDP entity. | As per the MIB. |
| mplsLdpEntityStatsShutdownReceivedNotifications (1.3.6.1.2.1.10.166.4.1.2.4.1.12) | read-only | Counter32 | Counter32 (0..4294967295) | Number of shutdown notifications received by sessions associated with the LDP entity. | As per the MIB. |
| mplsLdpEntityStatsShutdownSentNotifications (1.3.6.1.2.1.10.166.4.1.2.4.1.13) | read-only | Counter32 | Counter32 (0..4294967295) | Number of shutdown notifications sent by sessions associated with the LDP entity. | As per the MIB. |

mplsLdpPeerTable

About this table

This table contains LDP peer information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is mplsLdpPeerLdpId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|----------------------------|-------------------------|-----------------|
| mplsLdpPeerLdpId (1.3.6.1.2.1.10.166.4.1.3.2.1.1) | not-accessible | OCTET STRING | OCTET STRING (0..65535) | LDP ID of the LDP peer. | As per the MIB. |
| mplsLdpPeerLabelDistMethod | read-only | INTEGER | downstream | Label | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--|---|-----------------|
| (1.3.6.1.2.1.10.166.4.1.3.2.1.2) | | | OnDemand(1), downstream Unsolicited(2) | distribution method of the LDP peer. | |
| mplsLdpPeerPathVectorLimit (1.3.6.1.2.1.10.166.4.1.3.2.1.3) | read-only | Integer32 | Integer32 (0..255) | Path vector limit information about the LDP peer. | As per the MIB. |
| mplsLdpPeerTransportAddrType (1.3.6.1.2.1.10.166.4.1.3.2.1.4) | read-only | INTEGER | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | LDP peer address type. | As per the MIB. |
| mplsLdpPeerTransportAddr (1.3.6.1.2.1.10.166.4.1.3.2.1.5) | read-only | OCTET STRING | OCTET STRING (0..255) | LDP peer address. | As per the MIB. |

mplsLdpSessionTable

About this table

This table contains LDP session information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|---|--|-----------------|
| mplsLdpSessionStateLastChange (1.3.6.1.2.1.10.166.4.1.3.3.1.1) | read-only | TimeTicks | Standard MIB values. | Time when the LDP session state changed. | As per the MIB. |
| mplsLdpSessionState (1.3.6.1.2.1.10.166.4.1.3.3.1.2) | read-only | INTEGER | nonexistent(1), initialized(2), openrec(3), opensent(4), operational(5) | LDP session state. | As per the MIB. |
| mplsLdpSessionRole (1.3.6.1.2.1.10.166.4.1.3.3.1.3) | read-only | INTEGER | unknown(1), active(2), passive(3) | LDP session role. | As per the MIB. |
| mplsLdpSessionProtocolVersion (1.3.6.1.2.1.10.166.4.1.3.3.1.4) | read-only | Unsigned32 | Unsigned32 (1..65535) | LDP session protocol version. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------------|---|-----------------|
| mplsLdpSessionKeepAliveHoldTimeRem (1.3.6.1.2.1.10.166.4.1.3.3.1.5) | read-only | INTEGER | INTEGER (0..2147483647) | Remaining keepalive time. | As per the MIB. |
| mplsLdpSessionKeepAliveTime (1.3.6.1.2.1.10.166.4.1.3.3.1.6) | read-only | Unsigned32 | Unsigned32 (1..65535) | Keepalive interval. | As per the MIB. |
| mplsLdpSessionMaxPduLength (1.3.6.1.2.1.10.166.4.1.3.3.1.7) | read-only | Unsigned32 | Unsigned32 (1..65535) | Maximum PDU length. | As per the MIB. |
| mplsLdpSessionDiscontinuityTime (1.3.6.1.2.1.10.166.4.1.3.3.1.8) | read-only | TimeTicks | Standard MIB values. | System time when a counter of the LDP session suffered a discontinuity. | As per the MIB. |

mplsLdpSessionStatsTable

About this table

This table contains LDP session statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| mplsLdpSessionStatsUnknownMesTypeErrors (1.3.6.1.2.1.10.166.4.1.3.4.1.1) | read-only | Counter32 | Counter32 (0..4294967295) | Number of unknown messages detected by the LSR during the session. | As per the MIB. |
| mplsLdpSessionStatsUnknownTlvErrors (1.3.6.1.2.1.10.166.4.1.3.4.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Number of unknown TLVs detected by the LSR during the session. | As per the MIB. |

mplsLdpHelloAdjacencyTable

About this table

This table contains LDP hello adjacency information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is mplsLdpHelloAdjacencyIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|-------------------------------|---|--|
| mplsLdpHelloAdjacencyIndex (1.3.6.1.2.1.10.166.4.1.3.5.1.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | LDP hello adjacency index. | As per the MIB. |
| mplsLdpHelloAdjacencyHoldTimeRem (1.3.6.1.2.1.10.166.4.1.3.5.1.1.2) | read-only | INTEGER | INTEGER (0..2147483647) | Time remaining for the hello adjacency. | As per the MIB. |
| mplsLdpHelloAdjacencyHoldTime (1.3.6.1.2.1.10.166.4.1.3.5.1.1.3) | read-only | Unsigned32 | Unsigned32 (0..65535) | Hold time for the hello adjacency. | As per the MIB. Default: 0. The actual default value is 15 for the Link Hello mode and 45 for the Targeted Hello mode. |
| mplsLdpHelloAdjacencyType (1.3.6.1.2.1.10.166.4.1.3.5.1.1.4) | read-only | INTEGER | link(1), targeted(2) | LDP hello adjacency type. | As per the MIB. |

mplsFecTable

About this table

This table contains LDP FEC information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is mplsFecIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--------------------------------|----------------|-----------------|
| mplsFecIndex (1.3.6.1.2.1.10.166.4.1.3.8.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | LDP FEC index. | As per the MIB. |
| MplsFecType (1.3.6.1.2.1.10.166.4.1.3.8.3.1.2) | read-create | INTEGER | prefix(1), hostAddresses(2) | LDP FEC type. | As per the MIB. |

| | | | | | |
|---|-------------|--------------|--|--|-----------------|
| mplsFecAddrPrefixLength (1.3.6.1.2.1.10.166.4.1.3.8.3.1.3) | read-create | Unsigned32 | Unsigned32 (0..2040) | This node will not be defined if the mplsFecType is hostAddress(2). The value for this node is 0 or the IP prefix range defined by mplsFecAddr if the mplsFecType is prefix(1). If the value for this node is 0, it means that the IP prefix matches all IP addresses. | As per the MIB. |
| mplsFecAddrType (1.3.6.1.2.1.10.166.4.1.3.8.3.1.4) | read-create | INTEGER | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | LDP FEC address type. | As per the MIB. |
| mplsFecAddr (1.3.6.1.2.1.10.166.4.1.3.8.3.1.5) | read-create | OCTET STRING | OCTET STRING (0..65535) | LDP FEC address. | As per the MIB. |
| mplsFecStorageType (1.3.6.1.2.1.10.166.4.1.3.8.3.1.6) | read-create | INTEGER | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | LDP FEC storage type. | As per the MIB. |
| mplsFecRowStatus (1.3.6.1.2.1.10.166.4.1.3.8.3.1.7) | read-create | INTEGER | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

mplsLdpSessionPeerAddrTable

About this table

This table contains LDP session peer address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is mplsLdpSessionPeerAddrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|------------------------|-----------------|
| mplsLdpSessionPeerAddrIndex (1.3.6.1.2.1.10.166.4.1.3.11.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Peer address index. | As per the MIB. |
| mplsLdpSessionPeerNextHopAddrType (1.3.6.1.2.1.10.166.4.1.3.11.1.2) | read-only | INTEGER | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Next hop address type. | As per the MIB. |
| mplsLdpSessionPeerNextHopAddr (1.3.6.1.2.1.10.166.4.1.3.11.1.3) | read-only | OCTET STRING | OCTET STRING (0..65535) | Next hop address. | As per the MIB. |

Notifications

mplsLdpInitSessionThresholdExceeded

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--|-------|----------|--|----------------|
| 1.3.6.1.2.1.10.166.4.0.1 | The number of session initialization messages exceeds the limit. | Error | Major | 1.3.6.1.2.1.10.166.4.1.2.3.1.11 (mplsLdpEntityInitSessionThreshold) | ON |

Description

A notification sent when the value of the mplsLdpEntityInitSessionThreshold object is not zero and the number of session initialization messages exceeds the value of the mplsLdpEntityInitSessionThreshold object.

Status control

ON

CLI: Use the `snmp-agent trap enable ldp` command.

OFF

CLI: Use the `undo snmp-agent trap enable ldp` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------|-------------|
| 1.3.6.1.2.1.10.166.4.1.2.3.1.11 (mplsLdpEntityInitSessionThreshold) | During the session establishment with an LDP peer, if the number of session initialization messages sent by the LDP entity exceeds the maximum value defined by the mplsLdpInitSessionThresholdExceeded object, the LDP entity will send notifications. | No | Integer32 | 0..100 |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Check LDP session initialization message parameters.
2. If the issue persists, contact H3C Support.

mplsLdpSessionUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|---|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.4.0.3 | The session state changes to operational. | Recovery | - | - | ON |

Description

A notification sent when the value of the mplsLdpSessionState object changes to operational(5).

Status control

ON

CLI: Use the `snmp-agent trap enable ldp` command.

OFF

CLI: Use the `undo snmp-agent trap enable ldp` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------|-------|---------|--|
| 1.3.6.1.2.1.10.166.4.1.3.3.1.2 (mplsLdpSessionState) | LDP session state. | No | INTEGER | nonexistent(1) initialized(2) openrec(3) opensent(4) operational(5)) |

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------|----------------------|
| 1.3.6.1.2.1.10.166.4.1.3.3.1.8 (mplsLdpSessionDiscontinuityTime) | Time when the LDP session is up. | No | Timeticks | Standard MIB values. |
| 1.3.6.1.2.1.10.166.4.1.3.4.1.1 (mplsLdpSessionStatsUnknownMesTypeErrors) | Number of unknown messages detected by the LSR during the session. | No | Counter32 | Standard MIB values. |
| 1.3.6.1.2.1.10.166.4.1.3.4.1.2 (mplsLdpSessionStatsUnknownTlvErrors) | Number of unknown TLVs detected by the LSR during the session. | No | Counter32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsLdpSessionDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|---------------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.4.0.4 | The session state is not operational. | Error | Major | - | ON |

Description

A notification sent when the value of the mplsLdpSessionState object is not operational.

Status control

ON

CLI: Use the `snmp-agent trap enable ldp` command.

OFF

CLI: Use the `undo snmp-agent trap enable ldp` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------|-------|---------|--|
| 1.3.6.1.2.1.10.166.4.1.3.3.1.2 (mplsLdpSessionState) | Session state. | No | INTEGER | nonexistent(1) initialized(2) openrec(3) opensent(4) operational(5)) |

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|----------------------|
| 1.3.6.1.2.1.10.166.4.1.3.3.1.8 (mplsLdpSessionDiscontinuityTime) | System time when a counter of the LDP session suffered a discontinuity. | No | Timeticks | Standard MIB values. |
| 1.3.6.1.2.1.10.166.4.1.3.4.1.1 (mplsLdpSessionStatsUnknownMesTypeErrors) | Number of unknown messages detected by the LSR during the session. | No | Counter32 | Standard MIB values. |
| 1.3.6.1.2.1.10.166.4.1.3.4.1.2 (mplsLdpSessionStatsUnknownTlvErrors) | Number of unknown TLVs detected by the LSR during the session. | No | Counter32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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MPLS-LSR-STD-MIB

About this MIB

A label switching router (LSR) is a router that performs MPLS forwarding. Based on the traditional routing table, LSRs establish label switching paths through a label distribution protocol to perform fast label switching.

MPLS-LSR-STD-MIB is a standard MIB based on RFC 3813.

MIB file name

rfc3813-mpls-lsr-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166)

Scalar objects

mplsInSegmentIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-------------------------|---|-----------------|
| mplsInSegmentIndexNext (1.3.6.1.2.1.10.166.2.1.3) | read-only | Octet string | Octet string (0..65535) | Next available index value for LSR incoming labels. | As per the MIB. |

mplsOutSegmentIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|-------------------------|---|-----------------|
| mplsOutSegmentIndexNext (1.3.6.1.2.1.10.166.2.1.6) | read-only | Octet string | Octet string (0..65535) | Next available index value for LSR outgoing labels. | As per the MIB. |

mplsXCIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|-------------------------|--|-----------------|
| mplsXCIndexNext (1.3.6.1.2.1.10.166.2.1.9) | read-only | Octet string | Octet string (0..65535) | Next available index value for cross-connect tables. | As per the MIB. |

mplsMaxLabelStackDepth

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------------------|------------------------------------|-----------------|
| mplsMaxLabelStackDepth (1.3.6.1.2.1.10.166.2.1.11) | read-only | Unsigned32 | Unsigned32 (0..2147483647) | Maximum allowed label stack depth. | As per the MIB. |

mplsXCNotificationsEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|---|
| mplsXCNotificationsEnable (1.3.6.1.2.1.10.166.2.1.15) | read-write | TruthValue | true(1), false(2) | Whether the notification feature is enabled. | Supports read and write operations. Default: false(2). |

Tabular objects

mplsInterfaceTable

About this table

This table contains MPLS capability information about interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is mplsInterfaceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--------------------------------|--|--|
| mplsInterfaceIndex (1.3.6.1.2.1.10.166.2.1.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | Interface index. | 0 represents the per-platform label space. |
| mplsInterfaceLabelMinIn (1.3.6.1.2.1.10.166.2.1.1.1.2) | read-only | Unsigned32 | Unsigned32 (0.. 4294967295) | Minimum incoming label of the interface. | Default: 16. |
| mplsInterfaceLabelMaxIn (1.3.6.1.2.1.10.166.2.1.1.1.3) | read-only | Unsigned32 | Unsigned32 (0.. 4294967295) | Maximum incoming label of the interface. | The actually supported value is 1048575. The default value varies by device models. |
| mplsInterfaceLabelMinOut (1.3.6.1.2.1.10.166.2.1.1.1.4) | read-only | Unsigned32 | Unsigned32 (0.. 4294967295) | Minimum outgoing label of the interface. | Default: 0. |
| mplsInterfaceLabelMaxOut | read-only | Unsigned32 | Unsigned32 | Maximum outgoing label of the | The actually supported value is |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|---------------------------------------|--|-------------------------------|
| (1.3.6.1.2.1.10.166.2.1.1.1.5) | | | (0.. 4294967295) | interface. | 1048575. Default: 1048575. |
| mplsInterfaceTotalBandwidth (1.3.6.1.2.1.10.166.2.1.1.1.6) | read-only | Unsigned32 | Unsigned32 (0 1.. 4294967295) | Total amount of usable bandwidth on this interface in Kbps. | Applies only to TE. |
| mplsInterfaceAvailableBandwidth (1.3.6.1.2.1.10.166.2.1.1.1.7) | read-only | Unsigned32 | Unsigned32 (0 1.. 4294967295) | Total amount of available bandwidth on this interface in Kbps. | Applies only to TE. |
| mplsInterfaceLabelParticipation Type (1.3.6.1.2.1.10.166.2.1.1.1.8) | read-only | BITS | perPlatform(0), perInterface(1) | Label space type. | Supports only perPlatform. |

mplsInterfacePerfTable

About this table

This table contains MPLS performance information about interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------------------------|
| mplsInterfacePerfInLabelsInUse (1.3.6.1.2.1.10.166.2.1.2.1.1) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of used incoming labels on the interface. | Supports only the read operation. |
| mplsInterfacePerfInLabelLookupFailures (1.3.6.1.2.1.10.166.2.1.2.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Number of labeled packets that have been received on this interface but were discarded because there was no matching cross-connect entry. | Supports only the read operation. |
| mplsInterfacePerfOutLabelsInUse (1.3.6.1.2.1.10.166.2.1.2.1.3) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of top-most labels in the outgoing label stacks that are in use on this interface. | Supports only the read operation. |
| mplsInterfacePerfOutFragmentedPackets (1.3.6.1.2.1.10.166.2.1.2.1.4) | read-only | Counter32 | Counter32 (0..4294967295) | Number of outgoing packets that required fragmentation before transmission on this interface. | Supports only the read operation. |

mplsInSegmentTable

About this table

This table contains incoming label configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---|--|-----------|
| To create an incoming label, the mplsInSegmentLabel and mplsInSegmentRowStatus objects must be configured together. To create a static CRLSP, set mplsInSegmentTrafficParamPtr to 1.3.6.1.2.1.10.166.3.2.6.1.2.0. | Adding and deletion must be performed on a row basis. Editing is not allowed. | To delete an incoming label used by a cross-connect, first delete the cross-connect. | Supported |

Columns

The table index is mplsInSegmentIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------------------------|---|--|
| mplsInSegmentIndex (1.3.6.1.2.1.10.166.2.1.4.1.1) | not-accessible | Octet string | Octet string (1..24) | Incoming label index. | 0x00 is invalid. |
| mplsInSegmentInterface (1.3.6.1.2.1.10.166.2.1.4.1.2) | read-create | Integer32 | Integer32 (0..2147483647) | Interface bound to the incoming label. | Supports only the read operation. |
| mplsInSegmentLabel (1.3.6.1.2.1.10.166.2.1.4.1.3) | read-create | Unsigned 32 | Unsigned32 (0..4294967295) | Incoming label. | Supports read and write operations. |
| mplsInSegmentLabelPtr (1.3.6.1.2.1.10.166.2.1.4.1.4) | read-create | RowPointer | RowPointer | Incoming label extension pointer. If the incoming label cannot be represented fully within the mplsInSegmentLabel object, this object points to an extended table. | Supports only the read operation. The default value is 0.0, which indicates that this object does not point to any extended tables. |
| mplsInSegmentNPop (1.3.6.1.2.1.10.166.2.1.4.1.5) | read-create | Integer32 | Integer32 (1..2147483647) | Number of labels to pop from the incoming packet. | Supports only the read operation. Default: 1. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|--|-----------------------------------|---|
| mplsInSegmentAddrFamily (1.3.6.1.2.1.10.166.2.1.4.1.6) | read-create | Integer | other(0), ipV4(1), ipV6(2), nsap(3), hdlc(4), bbn1822(5), all802(6), e163(7), e164(8), f69(9), x121(10), ipx(11), appleTalk(12), decnetIV(13), banyanVines(14), e164withNsap(15), dns(16), distinguishedName(17), asNumber(18), xtpOverIpv4(19), xtpOverIpv6(20), xtpNativeModeXTP(21), fibreChannelWPN(22), fibreChannelWNN(23), gwid(24), reserved(65535) | Address family. | Supports only the read operation. Supports only IPv4(1) and IPv6(2). Default: nonvolatile(3). |
| mplsInSegmentXCIndex (1.3.6.1.2.1.10.166.2.1.4.1.7) | read-only | Octet string | Octet string (1..24) | Cross-connect index. | 0x00 indicates that no corresponding entry exists in the cross-connect table. |
| mplsInSegmentOwner (1.3.6.1.2.1.10.166.2.1.4.1.8) | read-only | Integer | unknown(1), other(2), snmp(3), ldp(4), crldp(5), rsvpTe(6), policyAgent(7) | Owner of the incoming label. | Supports only the read operation. |
| mplsInSegmentTrafficParamPtr (1.3.6.1.2.1.10.166.2.1.4.1.9) | read-create | RowPointer | RowPointer | Pointer to the traffic parameter. | The default value is 0.0, which indicates that the incoming label does not point to any table. Valid value represents static CRLSP. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|--|---------------|--|
| mplsInSegmentRowStatus (1.3.6.1.2.1.10.166.2.1.4.1.10) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). This object returns active(1). |
| mplsInSegmentStorageType (1.3.6.1.2.1.10.166.2.1.4.1.11) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | Supports only the read operation. |

mplsInSegmentPerfTable

About this table

This table contains LDP entity information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsLdpEntityLdpld and mplsLdpEntityIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| mplsInSegmentPerfOctets (1.3.6.1.2.1.10.166.2.1.5.1.1) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of bytes received on this incoming label. | As per the MIB. |
| mplsInSegmentPerfPackets (1.3.6.1.2.1.10.166.2.1.5.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of packets received on this incoming label. | As per the MIB. |
| mplsInSegmentPerfErrors (1.3.6.1.2.1.10.166.2.1.5.1.3) | read-only | Counter32 | Counter32 (0..4294967295) | Number of error packets received on this incoming label. | As per the MIB. |
| mplsInSegmentPerfDiscards (1.3.6.1.2.1.10.166.2.1.5.1.4) | read-only | Counter32 | Counter32 (0..4294967295) | Number of packets received on this incoming label but were discarded. | As per the MIB. |
| mplsInSegmentPerfHCOctets (1.3.6.1.2.1.10.166.2.1.5.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of bytes received on this incoming label. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| mplsInSegmentPerfDiscontinuityTime (1.3.6.1.2.1.10.166.2.1.5.1.6) | read-only | TimeStamp | Standard MIB values. | System time when any one or more of this label's Counter32 or Counter64 suffered a discontinuity most recently. | As per the MIB. |

mplsOutSegmentTable

About this table

This table contains outgoing label configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|--|---|------------------|
| <p>To create an outgoing label, the mplsOutSegmentInterface, mplsOutSegmentLabel, and mplsOutSegmentRowStatus objects must be configured together.</p> <p>For the next hop mode, mplsOutSegmentLabel, mplsOutSegmentNextHopAddr, and mplsOutSegmentRowStatus must be configured.</p> <p>To create a static CRLSP, set mplsOutSegmentTrafficParamPtr to the combination of the OID of mplsTunnelResourceMaxRate and the value of mplsOutSegmentIndex. For example, if the value of mplsOutSegmentIndex is 2048, set mplsOutSegmentTrafficParamPtr to 1.3.6.1.2.1.10.166.3.2.6.1.2.2048.</p> | <p>Adding and deletion must be performed on a row basis. Editing is not allowed.</p> | <p>To delete an outgoing label used by a cross-connect, first delete the cross-connect.</p> | <p>Supported</p> |

Columns

The table index is mplsOutSegmentIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---------------------------|--|-------------------------------------|
| mplsOutSegmentIndex (1.3.6.1.2.1.10.166.2.1.7.1.1) | not-accessible | Octet string | Octet string (1..24) | Outgoing label index. | 0x00 is invalid. |
| mplsOutSegmentInterface (1.3.6.1.2.1.10.166.2.1.7.1.2) | read-create | Integer32 | Integer32 (0..2147483647) | Interface bound to the outgoing label. | Supports read and write operations. |
| mplsOutSegmentPushTopLabel (1.3.6.1.2.1.10.166.2.1.7.1.3) | read-create | TruthValue | true(1), false(2) | Whether or not a top label is pushed onto the outgoing | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------------------------------|--|---|---|
| | | | | packet's label stack. | |
| mplsOutSegmentTopLabel (1.3.6.1.2.1.10.166.2.1.7.1.4) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | Top-most label. | Supports read and write operations. This object is valid when the value of mplsOutSegmentPushTopLabel is true. |
| mplsOutSegmentTopLabelPtr (1.3.6.1.2.1.10.166.2.1.7.1.5) | read-create | RowPointer | RowPointer | If the label for this segment cannot be represented fully within the mplsOutSegmentLabel object, this object must point to the first accessible column of a conceptual row in an external table containing the label. | Supports only the read operation. The default value is 0.0, which indicates that the outgoing label does not point to any extended table. |
| mplsOutSegmentNextHopAddrType (1.3.6.1.2.1.10.166.2.1.7.1.6) | read-create | Integer:unknown(0),ipv4(1),ipv6(2) | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Next hop address type. | Supports only the read operation. |
| mplsOutSegmentNextHopAddr (1.3.6.1.2.1.10.166.2.1.7.1.7) | read-create | Octet string | Octet string (0..255) | Next hop address. | Supports read and write operations. |
| mplsOutSegmentXCIndex (1.3.6.1.2.1.10.166.2.1.7.1.8) | read-only | Octet string | Octet string (1..24) | Cross-connect index. | 0x00 indicates that no corresponding entry exists in the cross-connect table. |
| mplsOutSegmentOwner (1.3.6.1.2.1.10.166.2.1.7.1.9) | read-only | Integer | unknown(1), other(2), snmp(3), ldp(4), crldp(5), rsvpTe(6), policyAgent(7) | Owner of the outgoing label. | As per the MIB. |
| mplsOutSegmentTrafficParamPtr (1.3.6.1.2.1.10.166.2.1.7.1.10) | read-create | RowPointer | RowPointer | Traffic parameter pointer. | Supports only the read operation. The default value is 0.0, which indicates that the outgoing label does not point to any table. The valid value represents static CRLSP and points to mplsTunnelResourceTable |
| mplsOutSegmentRowStatus (1.3.6.1.2.1.10.166.2.1.7.1.11) | read-create | RowStatus | active(1), notInService(2), | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|--|---------------|-----------------------------------|
| | | | notReady(3), createAndGo(4), createAndWait(5), destroy(6) | | This object returns active(1). |
| mplsOutSegmentStorageType (1.3.6.1.2.1.10.166.2.1.7.1.12) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | Supports only the read operation. |

mplsOutSegmentPerfTable

About this table

This table contains outgoing label performance table information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsLdpEntityLdpId and mplsLdpEntityIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| mplsOutSegmentPerfOctets (1.3.6.1.2.1.10.166.2.1.8.1.1) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of bytes sent on this outgoing label. | As per the MIB. |
| mplsOutSegmentPerfPackets (1.3.6.1.2.1.10.166.2.1.8.1.2) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of packets sent on this outgoing label. | As per the MIB. |
| mplsOutSegmentPerfErrors (1.3.6.1.2.1.10.166.2.1.8.1.3) | read-only | Counter32 | Counter32 (0..4294967295) | Number of packets failed to be sent because of outgoing label error. | As per the MIB. |
| mplsOutSegmentPerfDiscards (1.3.6.1.2.1.10.166.2.1.8.1.4) | read-only | Counter32 | Counter32 (0..4294967295) | Number of packets sent on this outgoing label but were discarded. | As per the MIB. |
| mplsOutSegmentPerfHCOctets (1.3.6.1.2.1.10.166.2.1.8.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of bytes sent on this outgoing label. | As per the MIB. |
| mplsOutSegmentPerfDiscontinuityTime (1.3.6.1.2.1.10.166.2.1.8.1.6) | read-only | TimeStamp | Standard MIB values. | Value of sysUpTime on the most recent occasion at which any one or more of this outgoing label's Counter32 or Counter64 | As per the MIB. |

| | | | | | |
|--|--|--|--|---------------------------|--|
| | | | | suffered a discontinuity. | |
|--|--|--|--|---------------------------|--|

mplsXCTable

About this table

This table contains cross-connect table information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|-------------|-----------|-----------|
| <p>To create a static CRLSP, first create an mplsTunnelResourceTable object. The object index is the same as the value of mplsXCOutSegmentIndex.</p> <p>To create an ingress LSP or transit LSP, mplsXCIndex must be consistent with mplsXCOutSegmentIndex.</p> | Supported | Supported | Supported |

Columns

The table indexes are mplsXCIndex, mplsXCInSegmentIndex, and mplsXCOutSegmentIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|-----------------------|---|
| mplsXCIndex (1.3.6.1.2.1.10.166.2.1.10.1.1) | not-accessible | Octet string | Octet string (1..24) | Cross-connect index. | 0x00 is invalid. |
| mplsXCInSegmentIndex (1.3.6.1.2.1.10.166.2.1.10.1.2) | not-accessible | Octet string | Octet string (1..24) | Incoming label index. | 0x00 indicates that no corresponding incoming label exists and the LSR is an ingress LSR. |
| mplsXCOutSegmentIndex (1.3.6.1.2.1.10.166.2.1.10.1.3) | not-accessible | Octet string | Octet string (1..24) | Outgoing label index. | 0x00 indicates that no corresponding outgoing label exists and the LSR is an egress LSR. |
| mplsXCLspld (1.3.6.1.2.1.10.166.2.1.10.1.4) | read-create | Octet string | Octet string (2 6) | LSP ID. | Supports only the read operation. |
| mplsXCOwner (1.3.6.1.2.1.10.166.2.1.10.1.6) | read-only | Integer | unknown(1), other(2), snmp(3), ldp(4), crldp(5), rsvpTe(6), policyAgent(7) | Owner. | As per the MIB. |
| mplsXCRowStatus (1.3.6.1.2.1.10.166.2.1.10.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). This object returns active(1). |
| mplsXCStorageType | read-create | StorageTy | other(1), | Storage type. | Supports only the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------|--|-----------------------|--------------------------------------|
| (1.3.6.1.2.1.10.166.2.1.10.1.8) | | pe | volatile(2), nonVolatile(3), permanent(4), readOnly(5) | | read operation. |
| mplsXCAdminStatus (1.3.6.1.2.1.10.166.2.1.10.1.9) | read-create | Integer: | up(1), down(2), testing(3) | Administrative state. | Supports only the read operation. |
| mplsXCOperStatus (1.3.6.1.2.1.10.166.2.1.10.1.10) | read-only | Integer | up(1),down(2), testing(3),unkn own(4),dorma nt(5),notPrese nt(6),lowerLay erDown(7) | Operational state. | As per the MIB. |

mplsInSegmentMapTable

About this table

This table contains incoming label mapping table information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsInSegmentMapInterface, mplsInSegmentMapLabel, and mplsInSegmentMapLabelPtrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------------------------|--|---|
| mplsInSegmentMapInterface (1.3.6.1.2.1.10.166.2.1.14.1.1) | not-accessible | Integer32 | Integer32 (0..2147483647) | Ingress interface. | As per the MIB. |
| mplsInSegmentMapLabel (1.3.6.1.2.1.10.166.2.1.14.1.2) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Incoming label. | As per the MIB. |
| mplsInSegmentMapLabelPtrIndex (1.3.6.1.2.1.10.166.2.1.14.1.3) | not-accessible | RowPointer | RowPointer | Incoming label extension pointer. If the incoming label cannot be represented fully within the mplsInSegmentM apLabel object, this object points to an extended table. | 0.0 indicates that this object does not point any extended tables. |
| mplsInSegmentMapIndex (1.3.6.1.2.1.10.166.2.1.14.1.4) | read-only | Octet string | Octet string (1..24) | Incoming label index. | As per the MIB. |

Notifications

mplsXCUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|----------|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.2.0.1 | mplsXCUp | Recovery | - | - | ON |

Description

A notification sent when the cross-connect for a tunnel enters up state. The cross-connect state is indicated by the mplsXCOperStatus object.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------|--|
| 1.3.6.1.2.1.10.166.2.1.10.1.9 (mplsXCAdminStatus) | Operational status of the label. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.2.1.10.1.10 (mplsXCOperStatus) | Actual operational status of the cross-connect. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsXCDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|------------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.2.0.2 | A cross-connect enters down state. | Recovery | Major | - | ON |

Description

A notification sent when the cross-connect for a tunnel enters down state. The cross-connect state is indicated by the mplsXCOperStatus object.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------|--|
| 1.3.6.1.2.1.10.166.2.1.10.1.9 (mplsXCAdminStatus) | Operational status of the label. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.2.1.10.1.10 (mplsXCOperStatus) | Actual operational status of the cross-connect. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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MPLS-TE-STD-MIB

About this MIB

MPLS-TE-STD-MIB is a standard MIB based on RFC 3812.

Network congestion can degrade the network backbone performance. It might occur when network resources are inadequate or when load distribution is unbalanced. Traffic engineering (TE) is intended to avoid the latter situation where partial congestion might occur because of improper resource allocation.

TE can make the best use of network resources and avoid uneven load distribution by using the following functionalities:

- Real-time monitoring of traffic and traffic load on network elements.
- Dynamic tuning of traffic management attributes, routing parameters, and resources constraints.

MPLS TE combines the MPLS technology and traffic engineering. It reserves resources by establishing LSP tunnels along the specified paths, allowing traffic to bypass congested nodes to achieve appropriate load distribution.

With MPLS TE, a service provider can deploy traffic engineering on the existing MPLS backbone to provide various services and optimize network resources management.

MIB file name

rfc3812-mpls-te-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).mplsStdMIB(166).mplsTeStdMIB(3)

Scalar objects

mplsTunnelConfigured

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|-------------------------------|-----------------|
| mplsTunnelConfigured (1.3.6.1.2.1.10.166.3.1.1) | read-only | Integer32 | Integer32 (0..4294967295) | Number of configured tunnels. | As per the MIB. |

mplsTunnelActive

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|---------------------------|-----------------|
| mplsTunnelActive (1.3.6.1.2.1.10.166.3.1.2) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Number of active tunnels. | As per the MIB. |

mplsTunnelTEDistProto

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------|--------------------------------|---|-----------------|
| mplsTunnelTEDistProto (1.3.6.1.2.1.10.16 6.3.1.3) | read-only | BITS | other(0) ospf(1) isis(2) | IGP used to advertise link information. | As per the MIB. |

mplsTunnelMaxHops

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|---------------------|---|-----------------|
| mplsTunnelMaxHops (1.3.6.1.2.1.10.16 6.3.1.4) | read-only | Unsigned32 | Unsigned32 (255) | Maximum number of hops allowed by a tunnel. | As per the MIB. |

mplsTunnelNotificationMaxRate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------------|---------------------------------|-----------------------------------|
| mplsTunnelNotificationMaxRate (1.3.6.1.2.1.10.16 6.3.1.5) | read-write | Unsigned32 | Unsigned32 (0..4294967295) | Tunnel advertisement frequency. | Supports only the read operation. |

mplsTunnelIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|--------------------------|--------------------|-----------------|
| mplsTunnelIndexNext (1.3.6.1.2.1.10.16 6.3.2.1) | read-only | Unsigned32 | Unsigned32 (0..65535) | Next tunnel index. | As per the MIB. |

mplsTunnelHopListIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|--|-----------------|
| mplsTunnelHopListIndexNext (1.3.6.1.2.1.10.16 6.3.2.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Appropriate value to be used for mplsTunnelHopListIndex when creating entries in the mplsTunnelHopTable. | As per the MIB. |

mplsTunnelResourceIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------------|----------------------------|-----------------|
| mplsTunnelResourceIndexNext (1.3.6.1.2.1.10.16.6.3.2.5) | read-only | Unsigned32 | Unsigned32 (0..2147483647) | Next resource table index. | As per the MIB. |

mplsTunnelNotificationEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|-----------------|
| mplsTunnelNotificationEnable (1.3.6.1.2.1.10.16.6.3.2.11) | read-write | TruthValue | true(1), false(2) | Whether MPLS TE notification is enabled. | As per the MIB. |

Tabular objects

mplsTunnelTable

About this table

This table allows you to create new MPLS tunnels between an LSR and a remote endpoint and delete existing tunnels.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|-----------|-----------|
| You can create only tunnel interfaces. To create a tunnel interface, configure mplsTunnelIndex, mplsTunnelInstance, mplsTunnelIngressLSRId, and mplsTunnelEgressLSRId, and use the default settings for other objects. The value of the mplsTunnelInstance object must be 0. To create a static tunnel interface, associate it with a static CRLSP. | Not supported | Supported | Supported |

Columns

The table indexes are mplsTunnelIndex, mplsTunnelInstance, mplsTunnelIngressLSRId, and mplsTunnelEgressLSRId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|-------------------------------|---------------------|-----------------|
| mplsTunnelIndex (1.3.6.1.2.1.10.166.3.2.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Tunnel index. | As per the MIB. |
| mplsTunnelInstance (1.3.6.1.2.1.10.166.3.2.2.1.2) | not-accessible | Unsigned32 | Unsigned32 | Tunnel instance ID. | As per the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|---|--|--|
| 2) | | 2 | (1..4294967295) | | MIB. |
| mplsTunnelIngressLSRId (1.3.6.1.2.1.10.166.3.2.2.1.3) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Router ID of the ingress LSR. | As per the MIB. |
| mplsTunnelEgressLSRId (1.3.6.1.2.1.10.166.3.2.2.1.4) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Router ID of the egress LSR. | As per the MIB. |
| mplsTunnelName (1.3.6.1.2.1.10.166.3.2.2.1.5) | read-create | Octet String | Octet String (0..255) | Tunnel name. | As per the MIB. |
| mplsTunnelDescr (1.3.6.1.2.1.10.166.3.2.2.1.6) | read-create | Octet String | Octet String (0..255) | Tunnel description. | As per the MIB. |
| mplsTunnelSelf (1.3.6.1.2.1.10.166.3.2.2.1.7) | read-create | TruthValue | true(1), false(2) | Tunnel. | As per the MIB. |
| mplsTunnelIfIndex (1.3.6.1.2.1.10.166.3.2.2.1.8) | read-only | Integer32 | Integer32 (0..2147483647) | Tunnel interface index. | As per the MIB. |
| mplsTunnelOwner (1.3.6.1.2.1.10.166.3.2.2.1.9) | read-only | Integer | unknown(1), other(2), snmp(3), ldp(4), crldp(5), rsvpTe(6), policyAgent(7) | Tunnel owner. | As per the MIB. |
| mplsTunnelRole (1.3.6.1.2.1.10.166.3.2.2.1.10) | read-create | Integer | head(1), transit(2), tail(3), headTail(4) | Role that this tunnel entry/instance represents. | The value of Set operation is head(1). |
| mplsTunnelXCPointer (1.3.6.1.2.1.10.166.3.2.2.1.11) | read-create | Object Identifier | Standard MIB values. | Pointer to a row in the mplsXCTable. | As per the MIB. |
| mplsTunnelSignallingProto (1.3.6.1.2.1.10.166.3.2.2.1.12) | read-create | Integer | none(1), rsvp(2), crldp(3), other(4) | Tunnel signaling protocol. | Supports only rsvp(2) and other(4). |
| mplsTunnelSetupPrio (1.3.6.1.2.1.10.166.3.2.2.1.13) | read-create | Integer32 | Integer32 (0..7) | Tunnel setup priority. | As per the MIB. |
| mplsTunnelHoldingPrio (1.3.6.1.2.1.10.166.3.2.2.1.14) | read-create | Integer32 | Integer32 (0..7) | Tunnel holding priority. | As per the MIB. |
| mplsTunnelSessionAttributes (1.3.6.1.2.1.10.166.3.2.2.1.15) | read-create | BITS | fastReroute (0), mergingPermitted (1), isPersistent (2), isPinned (3), recordRoute(4) | Tunnel session attributes. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------------|-------------------------------|---|--|
| mplsTunnelLocalProtectInUse (1.3.6.1.2.1.10.166.3.2.2.1.16) | read-create | TruthValue | true(1), false(2) | Whether local protection is enabled for the tunnel. | As per the MIB. |
| mplsTunnelResourcePointer (1.3.6.1.2.1.10.166.3.2.2.1.17) | read-create | Object Identifier | Standard MIB values. | Tunnel resource pointer. | Supports only the read operation. |
| mplsTunnelPrimaryInstance (1.3.6.1.2.1.10.166.3.2.2.1.18) | read-only | Unsigned32 | Unsigned32 (0..2147483647) | Primary instance of the tunnel. | As per the MIB. |
| mplsTunnelInstancePriority (1.3.6.1.2.1.10.166.3.2.2.1.19) | read-creaet | Unsigned32 | Unsigned32 (1..4294967295) | Tunnel instance priority. | Not supported. The value is fixed at 1. |
| mplsTunnelHopTableIndex (1.3.6.1.2.1.10.166.3.2.2.1.20) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | Hop table index. | Supports only the read operation. |
| mplsTunnelPathInUse (1.3.6.1.2.1.10.166.3.2.2.1.21) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | Path used by the tunnel. | Supports only the read operation. |
| mplsTunnelARHopTableIndex (1.3.6.1.2.1.10.166.3.2.2.1.22) | read-only | Unsigned32 | Unsigned32 (0..2147483647) | ARHop table index. | As per the MIB. |
| mplsTunnelCHopTableIndex (1.3.6.1.2.1.10.166.3.2.2.1.23) | read-only | Unsigned32 | Unsigned32 (0..2147483647) | Chop table index. | As per the MIB. |
| mplsTunnelIncludeAnyAffinity (1.3.6.1.2.1.10.166.3.2.2.1.24) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | IncludeAny affinity attribute. | As per the MIB. |
| mplsTunnelIncludeAllAffinity (1.3.6.1.2.1.10.166.3.2.2.1.25) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | IncludeAll affinity attribute. | The value is fixed at 0. If set to other values, this parameter will be ignored. This value can be obtained after the path for the MPLS TE tunnel is established. |
| mplsTunnelExcludeAnyAffinity (1.3.6.1.2.1.10.166.3.2.2.1.26) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | A link satisfies the exclude-any constraint if and only if the link contains none of the administrative groups specified in the constraint. | As per the MIB. |
| mplsTunnelTotalUpTime | read-only | TimeTicks | Standard MIB values. | Aggregate up time for | As per the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|--|--|---|
| (1.3.6.1.2.1.10.166.3.2.2.1.27) | | | | all instances of this tunnel, if available. | MIB. |
| mplsTunnelInstanceUpTime (1.3.6.1.2.1.10.166.3.2.2.1.28) | read-only | TimeTicks | Standard MIB values. | Total time that the tunnel instance's operStatus has been Up(1). | As per the MIB. |
| mplsTunnelPrimaryUpTime (1.3.6.1.2.1.10.166.3.2.2.1.29) | read-only | TimeTicks | Standard MIB values. | Total time the primary instance of the tunnel has been active. | As per the MIB. |
| mplsTunnelPathChanges (1.3.6.1.2.1.10.166.3.2.2.1.30) | read-only | Counter32 | Standard MIB values. | Number of times the actual path for the tunnel instance has changed. | As per the MIB. |
| mplsTunnelLastPathChange (1.3.6.1.2.1.10.166.3.2.2.1.31) | read-only | TimeTicks | Standard MIB values. | Time since the last change to the actual path for the tunnel instance. | As per the MIB. |
| mplsTunnelCreationTime (1.3.6.1.2.1.10.166.3.2.2.1.32) | read-only | TimeTicks | Standard MIB values. | Time when the tunnel was created. | As per the MIB. |
| mplsTunnelStateTransitions (1.3.6.1.2.1.10.166.3.2.2.1.33) | read-only | Counter32 | Counter32 (0..4294967295) | Number of times the state of this tunnel instance has changed. | As per the MIB. |
| mplsTunnelAdminStatus (1.3.6.1.2.1.10.166.3.2.2.1.34) | read-create | Integer | up(1), down(2), testing(3) | Administrative state of the tunnel. | Supports only the read operation. Supports only up(1). |
| mplsTunnelOperStatus (1.3.6.1.2.1.10.166.3.2.2.1.35) | read-only | Integer | up(1), down(2), testing(3), unknown(4), dormant(5), notPresent(6), lowerlayerDown(7) | Operational state of the tunnel. | Supports only up(1) and down(2). |
| mplsTunnelRowStatus (1.3.6.1.2.1.10.166.3.2.2.1.36) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| mplsTunnelStorageType (1.3.6.1.2.1.10.166.3.2.2.1.37) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | As per the MIB. |

mplsTunnelHopTable

About this table

This table contains explicit path information for tunnel interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|-----------|-----------|
| <p>The mplsTunnelHopPathOptionName object must be specified.</p> <p>The value range for the mplsTunnelHopPathOptionIndex object is 1 to 10 for the primary CRLSP and 101 to 110 for the backup CRLSP.</p> <p>When the value of the mplsTunnelHopEntryPathComponent object is dynamic(1), the value of the mplsTunnelHopIndex object must be 0.</p> | Not supported | Supported | Supported |

Columns

The table indexes are mplsTunnelHopListIndex, mplsTunnelHopPathOptionIndex, and mplsTunnelHopIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------|-------------------------------|--------------------|------------------------|
| mplsTunnelHopListIndex (1.3.6.1.2.1.10.16.6.3.2.4.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Hop table index. | As per the MIB. |
| mplsTunnelHopPathOptionIndex (1.3.6.1.2.1.10.16.6.3.2.4.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Path option index. | As per the MIB. |
| mplsTunnelHopIndex (1.3.6.1.2.1.10.16.6.3.2.4.1.3) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Hop index. | As per the MIB. |
| mplsTunnelHopAddressType (1.3.6.1.2.1.10.16.6.3.2.4.1.4) | read-create | TeHopAddressType Integer | Unsigned32 (1..2147483647) | Address type. | Supports only ipv4(1). |
| mplsTunnelHopIpAddress (1.3.6.1.2.1.10.16.6.3.2.4.1.5) | read-create | TeHopAddress | OCTET STRING (0..32) | Address. | As per the MIB. |
| mplsTunnelHopIpAddressPrefixLength (1.3.6.1.2.1.10.16.6.3.2.4.1.6) | read-create | InetAddressPrefixLength | Unsigned32 (0..2040) | Address prefix. | As per the MIB. |
| mplsTunnelHopType | read-create | Integer | strict(1), loose(2) | Hop type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|--|---|--|
| (1.3.6.1.2.1.10.16 6.3.2.4.1.10) | | | | | |
| mplsTunnelHopInclude (1.3.6.1.2.1.10.16 6.3.2.4.1.11) | read-create | TurthValue | true(1), false(2) | Whether this hop is included in the tunnel's path. | As per the MIB. |
| mplsTunnelHopPathOptionName (1.3.6.1.2.1.10.16 6.3.2.4.1.12) | read-create | SnmpAdminString | OCTET STRING (0..255) | Description of this series of hops as they relate to the specified path option. | As per the MIB. |
| mplsTunnelHopEntryPathComp (1.3.6.1.2.1.10.16 6.3.2.4.1.13) | read-create | Integer | dynamic(1), explicit(2) | Features using the path. | As per the MIB. |
| mplsTunnelHopRowStatus (1.3.6.1.2.1.10.16 6.3.2.4.1.14) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| mplsTunnelHopStorageType (1.3.6.1.2.1.10.16 6.3.2.4.1.15) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | The value of this object is fixed at nonvolatile(3). |

mplsTunnelResourceTable

About this table

This table contains tunnel resource information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|--|-----------|
| Supported | Not supported | Objects used by mplsXCEntry objects cannot be deleted. | Supported |

Columns

The table index is mplsTunnelResourceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|-------------------------------|-----------------------|-----------------|
| mplsTunnelResourceIndex (1.3.6.1.2.1.10.16 6.3.2.6.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | Resource table index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|--|-----------------------------|---|
| mplsTunnelResourceMaxRate (1.3.6.1.2.1.10.16.6.3.2.6.1.2) | read-only | Unsigned32 | Unsigned32 (0) | Maximum transmission rate. | As per the MIB. |
| mplsTunnelResourceMeanRate (1.3.6.1.2.1.10.16.6.3.2.6.1.3) | read-create | Unsigned32 | Unsigned32 (1..4294967295) | Minimum transmission rate. | As per the MIB. |
| mplsTunnelResourceMaxBurstSize (1.3.6.1.2.1.10.16.6.3.2.6.1.4) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | Maximum burst size. | As per the MIB. |
| mplsTunnelResourceMeanBurstSize (1.3.6.1.2.1.10.16.6.3.2.6.1.5) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | Minimum burst size. | As per the MIB. |
| mplsTunnelResourceExBurstSize (1.3.6.1.2.1.10.16.6.3.2.6.1.6) | read-create | Unsigned32 | Unsigned32 (0..2147483647) | Excess burst size in bytes. | As per the MIB. |
| mplsTunnelResourceRowStatus (1.3.6.1.2.1.10.16.6.3.2.6.1.9) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| mplsTunnelResourceStorageType (1.3.6.1.2.1.10.16.6.3.2.6.1.10) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | Not supported. The value of this object is fixed at 3. |

mplsTunnelARHopTable

About this table

This table contains tunnel ARHop information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsTunnelARHopListIndex and mplsTunnelARHopIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------|----------------|------------|-------------|-------------|-----------------|
| mplsTunnelARHo | not-accessible | Unsigned32 | Unsigned32 | ARHop table | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------|--|---------------|---------------------------|
| pListIndex (1.3.6.1.2.1.10.16 6.3.2.7.1.1) | | | (1..2147483647) | index. | |
| mplsTunnelARHopIndex (1.3.6.1.2.1.10.16 6.3.2.7.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | ARHop index. | As per the MIB. |
| mplsTunnelARHopAddrType (1.3.6.1.2.1.10.16 6.3.2.7.1.3) | read-only | TeHopAddressType | unknown(0), ipv4(1), ipv6(2), asnumber(3), unnum(4), lspid(5) | Address type. | Supports only ipv4(1). |
| mplsTunnelARHopAddr (1.3.6.1.2.1.10.16 6.3.2.7.1.4) | read-only | TeHopAddress | OCTET STRING (0..32) | IP address. | As per the MIB. |

mplsTunnelCHopTable

About this table

This table contains CHop information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are mplsTunnelCHopListIndex and mplsTunnelCHopIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------|--|-------------------|---------------------------|
| mplsTunnelCHopListIndex (1.3.6.1.2.1.10.16 6.3.2.8.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | CHop table index. | As per the MIB. |
| mplsTunnelCHopIndex (1.3.6.1.2.1.10.16 6.3.2.8.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | CHop index | As per the MIB. |
| mplsTunnelCHopAddrType (1.3.6.1.2.1.10.16 6.3.2.8.1.3) | read-only | TeHopAddressType | unknown(0), ipv4(1), ipv6(2), asnumber(3), unnum(4), lspid(5) | Address type. | Supports only ipv4(1). |
| mplsTunnelCHopAddr (1.3.6.1.2.1.10.16) | read-only | TeHopAddress | OCTET STRING (0..32) | IP address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------------|-------------------------|-----------------|-----------------|
| 6.3.2.8.1.4) | | | | | |
| mplsTunnelCHopLPrefixLen (1.3.6.1.2.1.10.16 6.3.2.8.1.5) | read-only | InetAddressPrefix Length | OCTET STRING (0..32) | Address prefix. | As per the MIB. |
| mplsTunnelCHopType (1.3.6.1.2.1.10.16 6.3.2.8.1.9) | read-only | Integer | strict(1), loose(2) | CHop type. | As per the MIB. |

mplsTunnelPerfTable

About this table

This table contains tunnel performance parameters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| mplsTunnelPerfPackets (1.3.6.1.2.1.10.16 6.3.2.9.1.1) | read-only | Counter32 | Counter32 (0..4294967295) | Number of forwarded packets. This object represents the 32-bit value of the least significant part of the 64-bit value if mplsTunnelPerfHCPackets is also returned. | As per the MIB. |
| mplsTunnelPerfHCPackets (1.3.6.1.2.1.10.16 6.3.2.9.1.2) | read-only | Counter64 | Counter64 (0..1844674407370 9551615) | High capacity counter for number of packets forwarded by this tunnel. | As per the MIB. |
| mplsTunnelPerfErrors (1.3.6.1.2.1.10.16 6.3.2.9.1.3) | read-only | Counter32 | Counter32 (0..4294967295) | Number of error packets. | As per the MIB. |
| mplsTunnelPerfBytes (1.3.6.1.2.1.10.16 6.3.2.9.1.4) | read-only | Counter32 | Counter32 (0..4294967295) | Number of forwarded bytes. This object represents the 32-bit value of the least significant part of the 64-bit value if mplsTunnelPerfHCBytes is also returned. | As per the MIB. |
| mplsTunnelPerfHCBytes (1.3.6.1.2.1.10.16 6.3.2.9.1.5) | read-only | Counter64 | Counter64 (0..1844674407370 9551615) | High capacity counter for number of bytes forwarded by the tunnel. | As per the MIB. |

Notifications

mplsTunnelUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--------------------|----------|----------|---|----------------|
| 1.3.6.1.2.1.10.166.3.0.1 | A tunnel comes up. | Recovery | - | 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | ON |

Description

A notification sent when the operational state (indicated by the mplsTunnelOperStatus object) of a tunnel changes from down to another value (except for notPresent).

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------------|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Actual state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mplsTunnelDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|---|-------|----------|--|----------------|
| 1.3.6.1.2.1.10.166.3.0.2 | The operation state of a tunnel becomes down. | Error | Major | 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | ON |

Description

A notification sent when the operational state (indicated by the mplsTunnelOperStatus object) of a tunnel changes to down from another value (except for notPresent).

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Operational state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the tunnel settings are correct.
2. If the issue persists, contact H3C Support.

mplsTunnelRerouted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.3.0.3 | A tunnel is rerouted. | Informational | - | - | ON |

Description

A notification sent when a tunnel is rerouted. If the mplsTunnelARHopTable is used, the tunnel entry in the mplsTunnelARHopTable might contain the new path of the tunnel for a time period after the agent sends this notification.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Operational state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Verify that the tunnel settings are correct.
2. If the issue persists, contact H3C Support.

mplsTunnelReoptimized

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.166.3.0.4 | A tunnel is reoptimized. | Informational | - | - | ON |

Description

A notification sent when a tunnel is reoptimized. If the mplsTunnelARHopTable is used, the tunnel entry in the mplsTunnelARHopTable might contain the new path of the tunnel for a time period after the agent sends this notification.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------------------------|-------|---------|--|
| 1.3.6.1.2.1.10.166.3.2.2.1.34 (mplsTunnelAdminStatus) | Administrative state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) |
| 1.3.6.1.2.1.10.166.3.2.2.1.35 (mplsTunnelOperStatus) | Operational state of the tunnel. | No | INTEGER | up(1) down(2) testing(3) unknown(4) dormant(5) notPresent(6) lowerLayerDown(7) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve this issue:

1. Check the new path of the tunnel.
2. If the issue persists, contact H3C Support.

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PW-ENET-STD-MIB

About this MIB

Use this MIB to configure Ethernet PW related settings.

MIB file name

rfc5603-pw-enet-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).pwEnetStdMIB(180)

Tabular objects

pwEnetTable

About this table

This table contains the AC configuration for Ethernet PW.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are pwIndex and pwEnetPwInstance.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------|--|--|-----------------|
| pwEnetPwInstance (1.3.6.1.2.1.180.1.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Index of an AC configuration entry for an Ethernet PW. | As per the MIB. |
| pwEnetPwVlan (1.3.6.1.2.1.180.1.1.2) | read-create | VlanIdOrAnyOrNone | Integer32 (0 1..4094 4095) | Negotiated VLAN ID. | As per the MIB. |
| pwEnetVlanMode (1.3.6.1.2.1.180.1.1.3) | read-create | INTEGER | other(0), portBased(1), noChange(2), changeVlan(3), addVlan(4), removeVlan(5) | VLAN handling mode. | As per the MIB. |
| pwEnetPortVlan (1.3.6.1.2.1.180.1.1.4) | read-create | VlanIdOrAnyOrNone | Integer32 (0 1..4094 4095) | Port VLAN ID. | As per the MIB. |
| pwEnetPortIfIndex (1.3.6.1.2.1.180.1.1.5) | read-create | InterfaceIndexOrZero | Integer32 (0..2147483647) | Index of the Ethernet port. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|--|---|---|
| 1.1.5) | | | | | |
| pwEnetRowStatus (1.3.6.1.2.1.180.1.1.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| pwEnetStorageType (1.3.6.1.2.1.180.1.1.1.8) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for the AC configuration entry. | Supports only the read operation. The value is always nonVolatile(3). |

If the AC is an Ethernet service instance, the values for pwType (see PW-STD-MIB), pwEnetPortVlan, pwEnetVlanMode, and pwEnetPwVlan are as follows:

| encapsulation | AC access mode | pwType | pwEnetPort Vlan | pwEnetVlan Mode | pwEnetPwVlan | Implementation |
|------------------------|----------------|----------------|-----------------|------------------------|-------------------------|---|
| default tagged | ethernet | ethernet | 4095 | portBased | 4095 | For a set operation, the encapsulation supports only default. |
| default tagged | ethernet | ethernetTagged | 4095 | addVlan | 0 or requested VLAN | For a set operation, the encapsulation supports only default. |
| default tagged | vlan | ethernet | 4095 | removeVlan | 0 | For a set operation, the encapsulation supports only default. |
| default tagged | vlan | ethernetTagged | 4095 | noChange or changeVlan | 4095 or requested VLAN | For a set operation, the encapsulation supports only default. |
| untagged | ethernet | ethernet | 0 | nochange | 0 | - |
| untagged | ethernet | ethernetTagged | 0 | addVlan | 0 or requested VLAN | - |
| untagged | vlan | ethernet | 0 | nochange | 0 | Supports only the read operation. |
| untagged | vlan | ethernetTagged | 0 | addVlan | 0 or requested VLAN | Supports only the read operation. |
| s-vid [only-tagged] | ethernet | ethernet | s-vid | noChange | s-vid | For a set operation, the encapsulation supports only s-vid. |
| s-vid [only-tagged] | ethernet | ethernetTagged | s-vid | addVlan | 0 or requested VLAN | For a set operation, the encapsulation supports only s-vid. |
| s-vid [only-tagged] | vlan | ethernet | s-vid | removeVlan | 0 | For a set operation, the encapsulation supports only s-vid. |
| s-vid [only-tagged] | vlan | ethernetTagged | s-vid | noChange or changeVlan | s-vid or requested VLAN | For a set operation, the encapsulation supports only s-vid. |

If the AC is a Layer 3 interface, the values for pwType (see PW-STD-MIB), pwEnetPortVlan, pwEnetVlanMode, and pwEnetPwVlan are as follows:

| interface type | AC access mode | pwType | pwEnetPortVlan | pwEnetVlanMode | pwEnetPwVlan |
|----------------|----------------|----------------|----------------|----------------|---------------------|
| main | ethernet | ethernet | 4095 | portBased | 4095 |
| main | ethernet | ethernetTagged | 4095 | addVlan | 0 or requested VLAN |
| sub | vlan | ethernet | vlan dot1q | removeVlan | 4095 |
| sub | vlan | ethernetTagged | vlan dot1q | changeVlan | requested VLAN |
| sub | vlan | ethernetTagged | vlan dot1q | noChange | vlan dot1q |
| vlan | vlan | ethernet | vlan ID | removeVlan | 4095 |
| vlan | vlan | ethernetTagged | vlan ID | changeVlan | requested VLAN |
| vlan | vlan | ethernetTagged | vlan ID | noChange | vlan ID |

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PW-MPLS-STD-MIB

About this MIB

Use this MIB to configure PWs.

MIB file name

rfc5602-pw-mpls-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).pwMplsStdMIB(181)

Tabular objects

pwMplsTable

About this table

Use this table to configure and obtain settings of the MPLS public tunnel that carries a PW.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is pwIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------------|--|-----------------------------|---|
| pwMplsMplsType (1.3.6.1.2.1.181.1.1.1) | read-write | BITS | mplsTe(0), mplsNonTe(1), pwOnly(2) | Type of the public tunnel. | Supports only the read operation. |
| pwMplsLocalLdpID (1.3.6.1.2.1.181.1.1.5) | read-write | MplsLdpIdentifier | OCTET STRING (6) | Local LDP ID. | Supports only the read operation. |
| pwMplsStorageType (1.3.6.1.2.1.181.1.1.8) | read-write | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this role. | Supports only the read operation. This value is always nonVolatile(3). |

pwMplsOutboundTable

About this table

Use this table to configure and obtain detailed information about the MPLS public tunnel that carries the PW traffic toward the public network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is pwIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------------------|--|--|-----------------------------------|
| pwMplsOutboundLsrXcIndex (1.3.6.1.2.1.181.1.2.1.1) | read-write | MplsIndexType | OCTET STRING (1..24) | XC index of the public tunnel. | Supports only the read operation. |
| pwMplsOutboundTunnelIndex (1.3.6.1.2.1.181.1.2.1.2) | read-write | MplsIndexIndex | OCTET STRING (1..24) | ID of the public tunnel. | Supports only the read operation. |
| pwMplsOutboundTunnelInstance (1.3.6.1.2.1.181.1.2.1.3) | read-only | MplsTunnelInstanceIndex | Unsigned32 (0 1..65535 65536..2147483647) | CRLSP ID of the public tunnel. | As per the MIB. |
| pwMplsOutboundTunnelLclLSR (1.3.6.1.2.1.181.1.2.1.4) | read-write | MplsLsrIdentifier | OCTET STRING (4) | Ingress LSR ID of the public tunnel. | Supports only the read operation. |
| pwMplsOutboundTunnelPeerLSR (1.3.6.1.2.1.181.1.2.1.5) | read-write | MplsLsrIdentifier | OCTET STRING (4) | Egress LSR ID of the public tunnel. | Supports only the read operation. |
| pwMplsOutboundInterfaceIndex (1.3.6.1.2.1.181.1.2.1.6) | read-write | InterfaceIndexOrZero | Integer32 (0..2147483647) | Index of the outgoing interface of the public tunnel. | Supports only the read operation. |
| pwMplsOutboundTunnelTypeInUse (1.3.6.1.2.1.181.1.2.1.7) | read-only | INTEGER | notYetKnown(1), mplsTe(2), mplsNonTe(3), pwOnly(4) | Type of the public tunnel that is carrying the PW traffic. | As per the MIB. |

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PW-STD-MIB

About this MIB

Use this MIB to configure PW related settings.

MIB file name

rfc5601-pw-std.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).pwStdMIB(246)

Scalar objects

pwIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------------------|---|-----------------|
| pwIndexNext (1.3.6.1.2.1.10.24 6.1.1) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Next available index for creating a PW entry. | As per the MIB. |

pwPerfTotalErrorPackets

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|----------------|
| pwPerfTotalErrorP ackets (1.3.6.1.2.1.10.24 6.1.6) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of error at the PW processing level. | Not supported |

pwUpDownNotifEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|-----------------|
| pwUpDownNotifE nable (1.3.6.1.2.1.10.24 6.1.9) | read-write | TruthValue | true(1), false(2) | The capability of sending PW up and PW down notifications. | As per the MIB. |

pwDeletedNotifEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------|
| pwDeletedNotifEnable (1.3.6.1.2.1.10.24.6.1.10) | read-write | TruthValue | true(1), false(2) | The capability of sending PW-deleted notifications. | As per the MIB. |

pwNotifRate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------------|---|----------------|
| pwNotifRate (1.3.6.1.2.1.10.24.6.1.11) | read-write | Unsigned32 | Unsigned32 (1..2147483647) | The maximum number of PW notifications that can be sent per second. | Not supported |

Tabular objects

pwTable

About this table

Use this table to configure PWs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is pwIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|---|---------------------|--|
| pwIndex (1.3.6.1.2.1.10.24.6.1.2.1.1) | not-accessible | PwIndexType | Unsigned32 (1..2147483647) | Index of a PW. | As per the MIB. |
| pwType (1.3.6.1.2.1.10.24.6.1.2.1.2) | read-create | IANA PwType TC | other(0), frameRelayDlciMartiniMode(1), atmAal5SduVcc(2), atmTransparent(3), ethernetTagged(4), ethernet(5), hdlc(6), ppp(7), cem(8), atmCellNto1Vcc(9), | Encapsulation type. | The set operation supports only ethernetTagged(4) and ethernet(5). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------------------|---|---|---|
| | | | atmCellNto1Vpc(10), ipLayer2Transport(11), atmCell1to1Vcc(12), atmCell1to1Vpc(13), atmAal5PduVcc(14), frameRelayPortMode(15), cep(16), e1Satop(17), t1Satop(18), e3Satop(19), t3Satop(20), basicCesPsn(21), basicTdmlp(22), tdmCasCesPsn(23), tdmCasTdmlp(24), frDlci(25), wildcard(32767) | | |
| pwOwner (1.3.6.1.2.1.10.24 6.1.2.1.3) | read-create | INTEGER | manual(1), pwldFecSignaling(2), genFecSignaling(3), l2tpControlProtocol(4), other(5) | PW owner, the protocol used for establishing the PW. | The set operation supports only manual(1), pwldFecSignaling(2), and genFecSignaling(3). |
| pwPsnType (1.3.6.1.2.1.10.24 6.1.2.1.4) | read-create | IANA PwPsnType | mpls(1), l2tp(2), udpOverlP(3), mplsOverlP(4), mplsOverGre(5), other(6) | PSN type for the PW. | Supports only the read operation. Supports only mpls(1), mplsOverGre (5), and other (6). |
| pwPeerAddrType (1.3.6.1.2.1.10.24 6.1.2.1.8) | read-create | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | Type of the peer IP address of the PW. | Supports only ipv4(1). |
| pwPeerAddr (1.3.6.1.2.1.10.24 6.1.2.1.9) | read-create | InetAddress | OCTET STRING (0..255) | Peer IP address of the PW. | Supports only an IPv4 address. |
| pwAttachedPwIndex (1.3.6.1.2.1.10.24 6.1.2.1.10) | read-create | PwIndexOrZeroType | Unsigned32 (0..2147483647) | Index of the attached PW. | Supports only the read operation. |
| pwIfIndex (1.3.6.1.2.1.10.24 6.1.2.1.11) | read-create | InterfaceIndexOrZero | Integer32 (0..2147483647) | Interface index of the PW when the PW is modeled as an interface. | Supports only the read operation. |
| pwID (1.3.6.1.2.1.10.24) | read-create | PwIDType | Unsigned32 (0..4294967295) | PW ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------------|--|---|---|
| 6.1.2.1.12) | | | | | |
| pwLocalGroupID (1.3.6.1.2.1.10.24 6.1.2.1.13) | read-create | PwGroupID | Unsigned32 (0..4294967295) | Local group ID of the PW. | Supports only the read operation. |
| pwGroupAttachmentID (1.3.6.1.2.1.10.24 6.1.2.1.14) | read-create | PwAttachmentIdentifierType | OCTET STRING (0..255) | Local AGI of the PW. | Supports only the read operation. |
| pwLocalAttachmentID (1.3.6.1.2.1.10.24 6.1.2.1.15) | read-create | PwAttachmentIdentifierType | OCTET STRING (0..255) | Local All of the PW. | Supports only the read operation. |
| pwRemoteAttachmentID (1.3.6.1.2.1.10.24 6.1.2.1.16) | read-create | PwAttachmentIdentifierType | OCTET STRING (0..255) | Remote All of the PW. | Supports only the read operation. |
| pwCwPreference (1.3.6.1.2.1.10.24 6.1.2.1.17) | read-create | TruthValue | true(1), false(2) | Indicates whether the control word is set on the local node. | As per the MIB. |
| pwLocalIfMTU (1.3.6.1.2.1.10.24 6.1.2.1.18) | read-create | Unsigned32 | Unsigned32 (0..65535) | Local interface MTU. | Supports the set operation only on VPWS PWs. For a VPLS PW, the set operation will be ignored. Implementation varies by product. |
| pwLocalCapabilities (1.3.6.1.2.1.10.24 6.1.2.1.20) | read-create | IANA PW Capabilities | pwStatusIndication(0) , pwVCCV(1) | Capabilities the local node will advertise to the peer. | The set operation supports only pwStatusIndication(0). |
| pwRemoteGroupID (1.3.6.1.2.1.10.24 6.1.2.1.21) | read-only | PwGroupID | Unsigned32 (0..4294967295) | Remote group ID of the PW. | The value is always 0. |
| pwCwStatus (1.3.6.1.2.1.10.24 6.1.2.1.22) | read-only | PwCwStatusTC | waitingForNextMsg(1) , sentWrongBitErrorCo de(2), rxWithdrawWithWron gBitErrorCode(3), illegalReceivedBit(4), cwPresent(5), cwNotPresent(6), notYetKnown(7) | Status of the control word negotiation, indicating whether the control word is to be present for the PW. | Supports only cwPresent(5) and cwNotPresent(6). |
| pwRemoteIfMTU (1.3.6.1.2.1.10.24 6.1.2.1.23) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Remote interface MTU for the PW. | As per the MIB. |
| pwRemoteCapabilities (1.3.6.1.2.1.10.24 6.1.2.1.25) | read-only | IANA PW Capabilities | pwStatusIndication(0) , pwVCCV(1) | Capabilities received from the peer node of the PW. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------------------|--|---|---|
| pwOutboundLabel (1.3.6.1.2.1.10.24 6.1.2.1.30) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | PW label used in the outbound direction. | Implementation varies by product. |
| pwInboundLabel (1.3.6.1.2.1.10.24 6.1.2.1.31) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | PW label used in the inbound direction. | Implementation varies by product. |
| pwAdminStatus (1.3.6.1.2.1.10.24 6.1.2.1.37) | read-create | INTEGER | up(1), down(2), testing(3) | Administrative status of the PW. | Supports the set operation only on VPWS PWs. For a VPLS PW, the set operation will be ignored. Supports only up(1) and down(2). |
| pwOperStatus (1.3.6.1.2.1.10.24 6.1.2.1.38) | read-only | PwOperStatusT C | up(1), down(2), testing(3), dormant(4), notPresent(5), lowerLayerDown(6) | Operational status of the PW. | Supports up(1), down(2), dormant(4), notPresent(5), and lowerLayerDown(6). |
| pwLocalStatus (1.3.6.1.2.1.10.24 6.1.2.1.39) | read-only | PwStatus | pwNotForwarding(0), servicePwRxFault(1), servicePwTxFault(2), psnPwRxFault(3), psnPwTxFault(4) | Status of the PW on the local node. | Supports only zero and BITS {pwNotForwarding (0)}. |
| pwRemoteStatus Capable (1.3.6.1.2.1.10.24 6.1.2.1.40) | read-only | INTEGER | notApplicable(1), notYetKnown(2), remoteCapable(3), remoteNotCapable(4) | Remote node capability to advertise the PW status notification. | As per the MIB. |
| pwRemoteStatus (1.3.6.1.2.1.10.24 6.1.2.1.41) | read-only | PwStatus | pwNotForwarding(0), servicePwRxFault(1), servicePwTxFault(2), psnPwRxFault(3), psnPwTxFault(4) | Status of the PW as was advertised by the remote. | As per the MIB. |
| pwTimeElapsed (1.3.6.1.2.1.10.24 6.1.2.1.42) | read-only | Integer32 | Integer32 (0..86399) | Number of seconds that have elapsed since the beginning of the current interval measurement period. | As per the MIB. |
| pwValidIntervals (1.3.6.1.2.1.10.24 6.1.2.1.43) | read-only | HCPwValidInt ervals | Integer32 (0..96) | Number of valid time intervals for which data was collection. | Value range: 0 to 4. |
| pwRowStatus (1.3.6.1.2.1.10.24 6.1.2.1.44) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), | Row status. | Supports active(1), notInService(2), createAndGo(4), and destroy(6). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|--|--|--|
| | | | destroy(6) | | |
| pwStorageType (1.3.6.1.2.1.10.24 6.1.2.1.45) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for the PW. | Supports only the read operation. The value is always nonVolatile(3). |
| pwOamEnable (1.3.6.1.2.1.10.24 6.1.2.1.46) | read-create | TruthValue | "true(1), false(2)" | Indicates whether OAM is enabled for the PW. | As per the MIB. |
| pwGenAGIType (1.3.6.1.2.1.10.24 6.1.2.1.47) | read-create | PwGenIdType | Unsigned32 (0..254) | AGI type of the PW. | Supports only the read operation. |
| pwGenLocalAllType (1.3.6.1.2.1.10.24 6.1.2.1.48) | read-create | PwGenIdType | Unsigned32 (0..254) | Local All type of the PW. | Supports only the read operation. |
| pwGenRemoteAllType (1.3.6.1.2.1.10.24 6.1.2.1.49) | read-create | PwGenIdType | Unsigned32 (0..254) | Remote All type of the PW. | Supports only the read operation. |

pwPerfCurrentTable

About this table

This table provides per-PW performance information for the current interval.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is pwIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|--|--|-----------------|
| pwPerfCurrentInHCPackets (1.3.6.1.2.1.10.24 6.1.3.1.1) | read-only | HCPperfCurrentCount | Counter64 (0..184467440737 09551615) | High-capacity counter for number of packets received by the PW. | As per the MIB. |
| pwPerfCurrentInHBytes (1.3.6.1.2.1.10.24 6.1.3.1.2) | read-only | HCPperfCurrentCount | Counter64 (0..184467440737 09551615) | High-capacity counter for number of bytes received by the PW. | As per the MIB. |
| pwPerfCurrentOutHCPackets (1.3.6.1.2.1.10.24 6.1.3.1.3) | read-only | HCPperfCurrentCount | Counter64 (0..184467440737 09551615) | High-capacity counter for number of packets forwarded by the PW. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------|--|--|-----------------|
| pwPerfCurrentOutHCBytes (1.3.6.1.2.1.10.24.6.1.3.1.4) | read-only | HCPperfCurrentCount | Counter64 (0..18446744073709551615) | High-capacity counter for number of bytes forwarded by the PW. | As per the MIB. |
| pwPerfCurrentInPackets (1.3.6.1.2.1.10.24.6.1.3.1.5) | read-only | PerfCurrentCount | Gauge32 (0..4294967295) | Counter for number of packets received by the PW. | As per the MIB. |
| pwPerfCurrentInBytes (1.3.6.1.2.1.10.24.6.1.3.1.6) | read-only | PerfCurrentCount | Gauge32 (0..4294967295) | Counter for number of bytes received by the PW. | As per the MIB. |
| pwPerfCurrentOutPackets (1.3.6.1.2.1.10.24.6.1.3.1.7) | read-only | PerfCurrentCount | Gauge32 (0..4294967295) | Counter for number of packets forwarded by the PW. | As per the MIB. |
| pwPerfCurrentOutBytes (1.3.6.1.2.1.10.24.6.1.3.1.8) | read-only | PerfCurrentCount | Gauge32 (0..4294967295) | Counter for number of bytes forwarded by the PW. | As per the MIB. |

pwPerfIntervalTable

About this table

This table provides per-PW performance information for the latest four intervals.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pwIndex and pwPerfIntervalNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------|--|---|-----------------|
| pwPerfIntervalNumber (1.3.6.1.2.1.10.24.6.1.4.1.1) | not-accessible | Integer32 | Integer32 (1..96) | Number of a time interval. | As per the MIB. |
| pwPerfIntervalValidData (1.3.6.1.2.1.10.24.6.1.4.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the data for this interval is valid. | As per the MIB. |
| pwPerfIntervalTimeElapsed (1.3.6.1.2.1.10.24.6.1.4.1.3) | read-only | HCPperfTimeElapsed | Integer32 (0..86399) | Duration of this interval in seconds. | As per the MIB. |
| pwPerfIntervalInHCPackets (1.3.6.1.2.1.10.24.6.1.4.1.4) | read-only | HCPperfIntervalCount | Counter64 (0..18446744073709551615) | High-capacity counter for number of packets received by the PW. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------------------|--|--|-----------------|
| 6.1.4.1.4) | | | | PW. | |
| pwPerfIntervalInH CBytes (1.3.6.1.2.1.10.24 6.1.4.1.5) | read-only | HCPperfIntervalCo unt | Counter64 (0..184467440737 09551615) | High-capacity counter for number of bytes received by the PW. | As per the MIB. |
| pwPerfIntervalOut HCPackets (1.3.6.1.2.1.10.24 6.1.4.1.6) | read-only | HCPperfIntervalCo unt | Counter64 (0..184467440737 09551615) | High-capacity counter for number of packets forwarded by the PW. | As per the MIB. |
| pwPerfIntervalOut HCPackets (1.3.6.1.2.1.10.24 6.1.4.1.7) | read-only | HCPperfIntervalCo unt | Counter64 (0..184467440737 09551615) | High-capacity counter for number of bytes forwarded by the PW. | As per the MIB. |
| pwPerfIntervalInP ackets (1.3.6.1.2.1.10.24 6.1.4.1.8) | read-only | PerfIntervalCount | Gauge32 (0..4294967295) | Counter for number of packets received by the PW. | As per the MIB. |
| pwPerfIntervalInB ytes (1.3.6.1.2.1.10.24 6.1.4.1.9) | read-only | PerfIntervalCount | Gauge32 (0..4294967295) | Counter for number of bytes received by the PW. | As per the MIB. |
| pwPerfIntervalOut Packets (1.3.6.1.2.1.10.24 6.1.4.1.10) | read-only | PerfIntervalCount | Gauge32 (0..4294967295) | Counter for number of packets forwarded by the PW. | As per the MIB. |
| pwPerfIntervalOut Bytes (1.3.6.1.2.1.10.24 6.1.4.1.11) | read-only | PerfIntervalCount | Gauge32 (0..4294967295) | Counter for number of bytes forwarded by the PW. | As per the MIB. |

pwPerf1DayIntervalTable

About this table

This table provides per-PW performance information for the current day's interval and the previous day's interval.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pwIndex and pwPerf1DayIntervalNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-----------------------|-------------------------------|-----------------|
| pwPerf1DayInterv alNumber (1.3.6.1.2.1.10.24 6.1.5.1.1) | read-only | Unsigned32 | Unsigned32 (1..31) | Number of a time interval. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|--|--|-----------------|
| pwPerf1DayIntervalValidData (1.3.6.1.2.1.10.24.6.1.5.1.2) | read-only | TruthValue | true(1), false(2) | Indicates whether the data for this interval is valid. | As per the MIB. |
| pwPerf1DayIntervalTimeElapsed (1.3.6.1.2.1.10.24.6.1.5.1.3) | read-only | HCP PerfTimeElapsed | Integer32 (0..86399) | Duration of this interval in seconds. | As per the MIB. |
| pwPerf1DayIntervalInHCPackets (1.3.6.1.2.1.10.24.6.1.5.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | High-capacity counter for number of packets received by the PW. | As per the MIB. |
| pwPerf1DayIntervalInHCBytes (1.3.6.1.2.1.10.24.6.1.5.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | High-capacity counter for number of bytes received by the PW. | As per the MIB. |
| pwPerf1DayIntervalOutHCPackets (1.3.6.1.2.1.10.24.6.1.5.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | High-capacity counter for number of packets forwarded by the PW. | As per the MIB. |
| pwPerf1DayIntervalOutHCBytes (1.3.6.1.2.1.10.24.6.1.5.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | High-capacity counter for number of bytes forwarded by the PW. | As per the MIB. |

pwIndexMappingTable

About this table

This table enables the reverse mapping of the unique PWid parameters [peer IP, PW type, and PW ID] and the pwIndex.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pwIndexMappingPwType, pwIndexMappingPwID, pwIndexMappingPeerAddrType, and pwIndexMappingPeerAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|------------------------|-----------------|
| pwIndexMappingPwType (1.3.6.1.2.1.10.24.6.1.7.1.1) | not-accessible | IANA PwTypeTC | other(0), frameRelayDlciMartiniMode(1), atmAal5SduVcc(2), atmTransparent(3), ethernetTagged(4), | PW encapsulation type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|-----------------------------------|-----------------|
| | | | ethernet(5), hdlc(6), ppp(7), cem(8), atmCellNto1Vcc(9), atmCellNto1Vpc(10), ipLayer2Transport(11), atmCell1to1Vcc(12), atmCell1to1Vpc(13), atmAal5PduVcc(14), frameRelayPortMode(15), , cep(16), e1Satop(17), t1Satop(18), e3Satop(19), t3Satop(20), basicCesPsn(21), basicTdmlp(22), tdmCasCesPsn(23), tdmCasTdmlp(24), frDlci(25), wildcard(32767) | | |
| pwIndexMappingPwID (1.3.6.1.2.1.10.24 6.1.7.1.2) | not-accessible | PwIDType | Unsigned32 | PW ID. | As per the MIB. |
| pwIndexMappingPeerAddrType (1.3.6.1.2.1.10.24 6.1.7.1.3) | not-accessible | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | IP address type of the peer node. | As per the MIB. |
| pwIndexMappingPeerAddr (1.3.6.1.2.1.10.24 6.1.7.1.4) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the peer node. | As per the MIB. |
| pwIndexMappingPwIndex (1.3.6.1.2.1.10.24 6.1.7.1.5) | read-only | PwIndexType | Unsigned32 (1..2147483647) | Index of the PW in the pwTable. | As per the MIB. |

pwPeerMappingTable

About this table

This table provides information about mappings between the PW parameters and pwIndex.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pwPeerMappingPeerAddrType, pwPeerMappingPeerAddr, pwPeerMappingPwType, and pwPeerMappingPwID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|-----------------------------------|-----------------|
| pwPeerMappingPeerAddrType (1.3.6.1.2.1.10.24.6.1.8.1.1) | not-accessible | InetAddressType | unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) | IP address type of the peer node. | As per the MIB. |
| pwPeerMappingPeerAddr (1.3.6.1.2.1.10.24.6.1.8.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the peer node. | As per the MIB. |
| pwPeerMappingPwType (1.3.6.1.2.1.10.24.6.1.8.1.3) | not-accessible | IANA PwTypeTC | other(0), frameRelayDlciMartiniMode(1), atmAal5SduVcc(2), atmTransparent(3), ethernetTagged(4), ethernet(5), hdlc(6), ppp(7), cem(8), atmCellNto1Vcc(9), atmCellNto1Vpc(10), ipLayer2Transport(11), atmCell1to1Vcc(12), atmCell1to1Vpc(13), atmAal5PduVcc(14), frameRelayPortMode(15), , cep(16), e1Satop(17), t1Satop(18), e3Satop(19), t3Satop(20), basicCesPsn(21), basicTdmlp(22), tdmCasCesPsn(23), tdmCasTdmlp(24), frDlci(25), wildcard(32767) | PW encapsulation type. | As per the MIB. |
| pwPeerMappingPwID | not-accessible | PwIDType | Unsigned32(0..4294967295) | PW ID | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|-------------------------------|---------------------------------|-----------------|
| (1.3.6.1.2.1.10.24 6.1.8.1.4) | | | | | |
| pwPeerMappingPwIndex (1.3.6.1.2.1.10.24 6.1.8.1.5) | read-only | PwIndexType | Unsigned32 (1..2147483647) | Index of the PW in the pwTable. | As per the MIB. |

pwGenFecIndexMappingTable

About this table

This table provides information about mappings between the GenFec PW parameters and pwIndex.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pwGenFecIndexMappingAGIType, pwGenFecIndexMappingAGI, pwGenFecIndexMappingLocalAllType, pwGenFecIndexMappingLocalAll, pwGenFecIndexMappingRemoteAllType, and pwGenFecIndexMappingRemoteAll.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------------|-------------------------------|---------------------------------|-----------------|
| pwGenFecIndexMappingAGIType (1.3.6.1.2.1.10.24 6.1.12.1.1) | not-accessible | PwGenIdType | Unsigned32 (0..254) | AGI type of the PW. | As per the MIB. |
| pwGenFecIndexMappingAGI (1.3.6.1.2.1.10.24 6.1.12.1.2) | not-accessible | PwAttachmentIdentifierType | OCTET STRING (0..255) | AGI value of the PW. | As per the MIB. |
| pwGenFecIndexMappingLocalAllType (1.3.6.1.2.1.10.24 6.1.12.1.3) | not-accessible | PwGenIdType | Unsigned32 (0..254) | Local All type of the PW. | As per the MIB. |
| pwGenFecIndexMappingLocalAll (1.3.6.1.2.1.10.24 6.1.12.1.4) | not-accessible | PwAttachmentIdentifierType | OCTET STRING (0..255) | Local All value of the PW. | As per the MIB. |
| pwGenFecIndexMappingRemoteAllType (1.3.6.1.2.1.10.24 6.1.12.1.5) | not-accessible | PwGenIdType | Unsigned32 (0..254) | Remote All type of the PW. | As per the MIB. |
| pwGenFecIndexMappingRemoteAll (1.3.6.1.2.1.10.24 6.1.12.1.6) | not-accessible | PwAttachmentIdentifierType | OCTET STRING (0..255) | Remote All value of the PW. | As per the MIB. |
| pwGenFecIndexMappingPwIndex (1.3.6.1.2.1.10.24) | read-only | PwIndexType | Unsigned32 (1..2147483647) | Index of the PW in the pwTable. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
| 6.1.12.1.7) | | | | | |

Notifications

pwDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|---------|-------|----------|-------------------------------|----------------|
| 1.3.6.1.2.1.10.246.0.1 | PW down | Error | Major | 1.3.6.1.2.1.10.246.0.2 (pwUp) | OFF |

Description

This notification is generated when the pwOperStatus object for one or more contiguous entries in the pwTable are about to enter the down(2) or lowerLayerDown(6) state from any other state, except for transition from the notPresent(5) state.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn pw-up-down` command.

OFF

CLI: `undo snmp-agent trap enable l2vpn pw-up-down` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|----------------|--|
| 1.3.6.1.2.1.10.246.1.2.1.38 (pwOperStatus) | PW operational status. | No | PwOperStatusTC | up(1) down(2) testing(3) dormant(4) notPresent(5) lowerLayerDown(6) |
| 1.3.6.1.2.1.10.246.1.2.1.38 (pwOperStatus) | PW operational status. | No | PwOperStatusTC | up(1) down(2) testing(3) dormant(4) notPresent(5) lowerLayerDown(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

pwUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|-------|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.246.0.2 | PW up | Recovery | - | - | OFF |

Description

This notification is generated when the pwOperStatus object for one or more contiguous entries in the pwTable are about to enter the up(1) state from some other state except the notPresent(5) state and given that the pwDown notification been issued for these entries.

Status control

ON

CLI: Use the `snmp-agent trap enable l2vpn pw-up-down` command.

OFF

CLI: `undo snmp-agent trap enable l2vpn pw-up-down` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|----------------|--|
| 1.3.6.1.2.1.10.246.1.2.1.38 (pwOperStatus) | PW operational status. | No | PwOperStatusTC | up(1) down(2) testing(3) dormant(4) notPresent(5) lowerLayerDown(6) |
| 1.3.6.1.2.1.10.246.1.2.1.38 (pwOperStatus) | PW operational status. | No | PwOperStatusTC | up(1) down(2) testing(3) dormant(4) notPresent(5) lowerLayerDown(6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

pwDeleted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------|------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.10.246.0.3 | PW deleted | Error | Major | - | OFF |

Description

This notification is generated when the PW has been deleted.

Status control

ON

CLI: Use the `snmp-agent trap enable 12vpn pw-delete` command.

OFF

CLI: Use the `undo snmp-agent trap enable 12vpn pw-delete` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|--|
| 1.3.6.1.2.1.10.246.1.2.1.2 (pwType) | PW data encapsulation type. | No | IANA PwTypeTC | other(0) frameRelayDlciMartiniMode(1) atmAal5SduVcc(2) atmTransparent(3) ethernetTagged(4) ethernet(5) hdlc(6) ppp(7) cem(8) -- Historic type atmCellNto1Vcc(9) atmCellNto1Vpc(10) ipLayer2Transport(11) atmCell1to1Vcc(12) atmCell1to1Vpc(13) atmAal5PduVcc(14) frameRelayPortMode(15) cep(16), e1Satop(17) t1Satop(18) e3Satop(19) t3Satop(20) basicCesPsn(21) basicTdmIp(22) tdmCasCesPsn(23) tdmCasTdmIp(24) frDlci(25) wildcard (32767) |
| 1.3.6.1.2.1.10.246.1.2.1.12 (pwID) | PW ID. | No | PwIDType | Unsigned32(1..4294967295) |
| 1.3.6.1.2.1.10.246.1.2.1.8 (pwPeerAddrType) | Type of the peer IP address of the PW. | No | InetAddressType | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) |
| 1.3.6.1.2.1.10.246.1.2.1.9 (pwPeerAddr) | Peer IP address of the PW. | No | InetAddress | OCTET STRING (SIZE (0..255)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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TE-MIB

About this MIB

Use this MIB to manage TE tunnel interface and explicit path settings.

MIB file name

rfc3970-te.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).teMIB(122)

Scalar objects

teDistProtocol

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------|----------------------------------|--------------------------------|-----------------|
| teDistProtocol (1.3.6.1.2.1.122.1.1) | read-only | BITS | other(0), isis(1), ospf(2) | TE distribution protocol type. | As per the MIB. |

teSignalingProto

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------|---|-----------------------------|-----------------|
| teSignalingProto (1.3.6.1.2.1.122.1.2) | read-only | BITS | other(0), rsvpte(1), crldp(2), static(3) | TE signaling protocol type. | As per the MIB. |

teNotificationEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|-----------------------|-----------------|
| teNotificationEnable (1.3.6.1.2.1.122.1.3) | read-write | TruthValue | true(1), false(2) | Enable notifications. | As per the MIB. |

teNextTunnelIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------|-----------|------------|-------------|--------------------|-----------------|
| teNextTunnelIndex | read-only | Unsigned32 | Unsigned32 | Next tunnel index. | As per the MIB. |

| | | | | | |
|------------------------------|--|--|-----------------|--|--|
| x (1.3.6.1.2.1.122.1.1.4) | | | (1..4294967295) | | |
|------------------------------|--|--|-----------------|--|--|

teNextPathHopIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------------------|------------------|-----------------|
| teNextPathHopIndex (1.3.6.1.2.1.122.1.1.5) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | Next path index. | As per the MIB. |

teConfiguredTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------------|-------------------------------|-----------------|
| teConfiguredTunnels (1.3.6.1.2.1.122.1.1.6) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of configured tunnels. | As per the MIB. |

teActiveTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------------|---------------------------|-----------------|
| teActiveTunnels (1.3.6.1.2.1.122.1.1.7) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of active tunnels. | As per the MIB. |

tePrimaryTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------------|---|-----------------|
| tePrimaryTunnels (1.3.6.1.2.1.122.1.1.8) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of tunnels running on their primary paths. | As per the MIB. |

Tabular objects

teTunnelTable

About this table

This table is used to query, create, and delete the configuration, traffic, and status information of a tunnel interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|---------------|-----------|
| <p>Supported.</p> <p>When you create a tunnel interface, you can leave teTunnelDestinationAddress empty.</p> <p>If you need to assign a tunnel interface an IP address, you need to specify teTunnelDestinationAddress when you create the tunnel interface.</p> | Not supported | Not supported | Supported |

Columns

The table index is teTunnelIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|--|-----------------------------|--|
| teTunnelIndex (1.3.6.1.2.1.122.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index of a tunnel. | As per the MIB. |
| teTunnelName (1.3.6.1.2.1.122.1.2.1.2) | read-create | SnmpAdminString | OCTET STRING (1..32) | Name of the tunnel. | As per the MIB. |
| teTunnelNextPath Index (1.3.6.1.2.1.122.1.2.1.3) | read-only | Unsigned32 | Unsigned32 (1..2147483647) | Next path index. | As per the MIB. |
| teTunnelRowStatus (1.3.6.1.2.1.122.1.2.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| teTunnelStorageType (1.3.6.1.2.1.122.1.2.1.5) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | Not supported. The value is always nonvolatile(3). |
| teTunnelSourceAddressType (1.3.6.1.2.1.122.1.2.1.6) | read-only | TeHopAddressType | unknown(0), ipv4(1), ipv6(2), asnumber(3), unnum(4), lspid(5) | Type of the source address. | Supports only ipv4(1). |
| teTunnelSourceAddress (1.3.6.1.2.1.122.1.2.1.7) | read-create | TeHopAddress | 0..32 | Source address. | Supports only the read operation. |
| teTunnelDestination | read-create | TeHopAddressTy | unknown(0), | Type of the | Supports only |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|---|--|---------------------------------------|
| onAddressType (1.3.6.1.2.1.122.1.2.1.8) | | pe | ipv4(1), ipv6(2), asnumber(3), unnum(4), lspid(5) | destination address. | ipv4(1). |
| teTunnelDestinationAddress (1.3.6.1.2.1.122.1.2.1.9) | read-create | TeHopAddress | OCTET STRING (0..32) | Destination address. | As per the MIB. |
| teTunnelState (1.3.6.1.2.1.122.1.2.1.10) | read-only | INTEGER | unknown(1), up(2), down(3), testing(4) | Tunnel status. | Supports only up(2) and down(3). |
| teTunnelDiscontinuityTimer (1.3.6.1.2.1.122.1.2.1.11) | read-only | TimeStamp | Standard MIB values. | Time when traffic was interrupted. | Not supported. The value is always 0. |
| teTunnelOctets (1.3.6.1.2.1.122.1.2.1.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of octets that have been forwarded over the tunnel. | Not supported. The value is always 0. |
| teTunnelPackets (1.3.6.1.2.1.122.1.2.1.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Number of packets that have been forwarded over the tunnel. | Not supported. The value is always 0. |
| teTunnelLPOctets (1.3.6.1.2.1.122.1.2.1.14) | read-only | Counter32 | Counter32 (0..4294967295) | Number of octets that have been forwarded over the tunnel. | Not supported. The value is always 0. |
| teTunnelLPPackets (1.3.6.1.2.1.122.1.2.1.15) | read-only | Counter32 | Counter32 (0..4294967295) | Number of packets that have been forwarded over the tunnel. | Not supported. The value is always 0. |
| teTunnelAge (1.3.6.1.2.1.122.1.2.1.16) | read-only | TimeTicks | Standard MIB values. | The age of this tunnel in hundredths of a second. | As per the MIB. |
| teTunnelTimeUp (1.3.6.1.2.1.122.1.2.1.17) | read-only | TimeTicks | Standard MIB values. | Total time in hundredths of a second that this tunnel has been operational (in up state). | As per the MIB. |
| teTunnelPrimaryTimeUp (1.3.6.1.2.1.122.1.2.1.18) | read-only | TimeTicks | Standard MIB values. | Total time in hundredths of a second that this tunnel's primary path has been operational. | As per the MIB. |
| teTunnelTransitions (1.3.6.1.2.1.122.1.2.1.19) | read-only | Counter32 | Counter32 (0..4294967295) | Number of operational state transitions (up-to-down or down-to-up) this | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------|
| | | | | tunnel has undergone. | |
| teTunnelLastTransition (1.3.6.1.2.1.122.1.2.1.20) | read-only | TimeTicks | Standard MIB values. | The time in hundredths of a second since the last operational state transition occurred on this tunnel. | As per the MIB. |
| teTunnelPathChanges (1.3.6.1.2.1.122.1.2.1.21) | read-only | Counter32 | Counter32 (0..4294967295) | Number of path changes this tunnel has had. | As per the MIB. |
| teTunnelLastPathChange (1.3.6.1.2.1.122.1.2.1.22) | read-only | TimeTicks | Standard MIB values. | The time in hundredths of a second since the last path change occurred on this tunnel. | As per the MIB. |
| teTunnelConfiguredPaths (1.3.6.1.2.1.122.1.2.1.23) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of paths configured for this tunnel. | As per the MIB. |
| teTunnelStandbyPaths (1.3.6.1.2.1.122.1.2.1.24) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of standby paths configured for this tunnel. | As per the MIB. |
| teTunnelOperationalPaths (1.3.6.1.2.1.122.1.2.1.25) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of operational paths for this tunnel. | As per the MIB. |

tePathTable

About this table

This table is used to create and delete the explicit paths on a tunnel interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|---|
| <p>You must specify tePathName, tePathConfiguredRoute, or both. An error will be returned if you specify both objects but the values conflict, for example, the explicit path name specified by tePathConfiguredRoute is not consistent with the path name specified by tePathName.</p> <p>If you set the value of tePathConfiguredRoute to 0, the tunnel will use a dynamically calculated path. If you set tePathConfiguredRoute to a non-zero value, you must also specify tePathName and the value of tePathName cannot be null. If you set tePathIndex to a value between 101 and 110,</p> | Not supported | Supported | The value of NULL for tePathName indicates that the explicit path is dynamically calculated. In this case, the value for tePathConfiguredRoute is also 0. |

| | | | |
|--|--|--|--|
| you must specify the tePathType and set its value to standby(3). | | | |
|--|--|--|--|

Columns

The table index is tePathIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|---|--|
| tePathIndex (1.3.6.1.2.1.122.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Preference value of an explicit path, an index that uniquely identifies the path within a tunnel. | As per the MIB. |
| tePathName (1.3.6.1.2.1.122.1.3.1.2) | read-create | SnmpAdminString | OCTET STRING (0..32) | Name of the path. | Supports only the read operation. |
| tePathRowStatus (1.3.6.1.2.1.122.1.3.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| tePathStorageType (1.3.6.1.2.1.122.1.3.1.4) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | Not supported. The value is always nonvolatile(3). |
| tePathType (1.3.6.1.2.1.122.1.3.1.5) | read-create | INTEGER | other(1), primary(2), standby(3), secondary(4) | Type the path. | Supports only primary(2) and standby(3). |
| tePathConfiguredRoute (1.3.6.1.2.1.122.1.3.1.6) | read-create | Unsigned32 | Unsigned32 (1..4294967295) | Index of the route that the path is configured to follow. | As per the MIB. |
| tePathBandwidth (1.3.6.1.2.1.122.1.3.1.7) | read-create | MplsBitRate | Unsigned32 (0..2147483647) | Bandwidth for the path. | Supports only the read operation. |
| tePathOperStatus (1.3.6.1.2.1.122.1.3.1.14) | read-only | INTEGER | unknown(0), down(1), testing(2), dormant(3), ready(4), operational(5) | Operational state of the path. | Supports only down(1), dormant(3), and operational(5). |
| tePathAdminStatus (1.3.6.1.2.1.122.1.3.1.15) | read-create | INTEGER | normal(1), testing(2) | Administrative state of the path. | Not supported. The value is always normal(1). |
| tePathComputedRoute (1.3.6.1.2.1.122.1.3.1.16) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | Index of the route computed for the path. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------------------------|--|-----------------|
| 3.1.16) | | | | | |
| tePathRecordedRoute (1.3.6.1.2.1.122.1.3.1.17) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | Index of the route actually used for the path. | As per the MIB. |

tePathHopTable

About this table

This table contains information about the path hop table, path computed route table, and path recorded route table.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|-----------|---|
| The tePathHopAddress object must be specified, and the value for teHopListIndex must be in the range of 0x1 to 0xffff. | Not supported | Supported | <p>If the value for teHopListIndex is between 1 and 1048575, the information is about a path hop table.</p> <p>If the value for teHopListIndex is between 1048577 and 2097151, the information is about a path computed route table.</p> <p>If the value for teHopListIndex is between 2097153 and 3145727, the information is about a path recorded route table.</p> <p>The computed route table and the recorded route table do not contain tePathHopStorageType and tePathHopType.</p> |

Columns

The table indexes are teHopListIndex and tePathHopIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|--|---|--|
| teHopListIndex (1.3.6.1.2.1.122.1.4.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index that identifies a list of hops. | As per the MIB. |
| tePathHopIndex (1.3.6.1.2.1.122.1.4.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Index that identifies a particular hop among the list of hops for a path. | As per the MIB. |
| tePathHopRowStatus (1.3.6.1.2.1.122.1.4.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| tePathHopStorageType (1.3.6.1.2.1.122.1.4.1.4) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type. | Not supported. The value is always nonvolatile(3). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------|--|--------------------------|------------------------|
| tePathHopAddrType (1.3.6.1.2.1.122.1.4.1.5) | read-create | TeHopAddressType | unknown(0), ipv4(1), ipv6(2), asnumber(3), unnum(4), lspid(5) | Address type of the hop. | Supports only ipv4(1). |
| tePathHopAddresses (1.3.6.1.2.1.122.1.4.1.6) | read-create | TeHopAddress | OCTET STRING (0..32) | Address of the hop. | As per the MIB. |
| tePathHopType (1.3.6.1.2.1.122.1.4.1.7) | read-only | INTEGER | unknown(0), loose(1), strict(2) | Type of the hop. | As per the MIB. |

Notifications

teTunnelUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|--------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.122.0.1 | TE tunnel up | Recovery | - | - | ON |

Description

This notification is generated when the tunnel specified by teTunnelName transitions to the up state.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|-----------------|--------------------------------|
| 1.3.6.1.2.1.122.1.2.1.2 (teTunnelName) | TE tunnel name | No | SnmpAdminString | OCTET STRING (SIZE (1..32)) |
| 1.3.6.1.2.1.122.1.3.1.2 (tePathName) | Name of the TE tunnel's path | No | SnmpAdminString | OCTET STRING (SIZE (0..32)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

teTunnelDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.122.0.2 | TE tunnel down | Error | Major | - | ON |

Description

This notification is generated when the tunnel specified by teTunnelName transitions to the down state.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|-----------------|--------------------------------|
| 1.3.6.1.2.1.122.1.2.1.2 (teTunnelName) | TE tunnel name | No | SnmpAdminString | OCTET STRING (SIZE (1..32)) |
| 1.3.6.1.2.1.122.1.3.1.2 (tePathName) | Name of the TE tunnel's path | No | SnmpAdminString | OCTET STRING (SIZE (0..32)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

teTunnelChanged

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.122.0.3 | TE tunnel path change | Informational | - | - | ON |

Description

This notification is generated when the active path on the tunnel specified by `teTunnelName` changes or a new path becomes active. The value of `tePathName` is the new active path.

Status control

ON

CLI: Use the `snmp-agent trap enable te` command.

OFF

CLI: Use the `undo snmp-agent trap enable te` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|-----------------|--------------------------------|
| 1.3.6.1.2.1.122.1.2.1.2 (<code>teTunnelName</code>) | TE tunnel name | No | SnmpAdminString | OCTET STRING (SIZE (1..32)) |
| 1.3.6.1.2.1.122.1.3.1.2 (<code>tePathName</code>) | Name of the TE tunnel's path | No | SnmpAdminString | OCTET STRING (SIZE (0..32)) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-VXLAN-MIB

About this MIB

Use this table to manage VXLAN configuration.

MIB file name

hh3c-vxlan.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cVxlan(150)

Tabular objects

hh3cVxlanScalarGroup

About this table

Use this table to configure global VXLAN settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

This table does not has an index.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------------------|--|-----------------|
| hh3cVxlanLocalMacNotify (1.3.6.1.4.1.25506.2.150.1.1.1) | read-write | TruthValue | true(1) false(2) | Status of local-MAC logging. | As per the MIB. |
| hh3cVxlanRemoteMacLearn (1.3.6.1.4.1.25506.2.150.1.1.2) | read-write | TruthValue | true(1) false(2) | Status of remote MAC address learning. | As per the MIB. |
| hh3cVxlanNextVxlanID (1.3.6.1.4.1.25506.2.150.1.1.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Next available VNI. | As per the MIB. |
| hh3cVxlanConfigured (1.3.6.1.4.1.25506.2.150.1.1.4) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Total number of VXLANs configured on the device. | As per the MIB. |

hh3cVxlanTable

About this table

Use this table to configure VXLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cVxlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|---|---------------------------|--|
| hh3cVxlanID (1.3.6.1.4.1.25506.2.150.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | VNI. | As per the MIB. |
| hh3cVxlanAddrType (1.3.6.1.4.1.25506.2.150.1.2.1.2) | read-create | InetAddressType. | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) | Address type. | Supports only ipv4(1). |
| hh3cVxlanGroupAddr (1.3.6.1.4.1.25506.2.150.1.2.1.3) | read-create | InetAddress | OCTET STRING (0..255) | Destination address. | As per the MIB. |
| hh3cVxlanSourceAddr (1.3.6.1.4.1.25506.2.150.1.2.1.4) | read-create | InetAddress | OCTET STRING (0..255) | Source address. | As per the MIB. |
| hh3cVxlanVsiIndex (1.3.6.1.4.1.25506.2.150.1.2.1.5) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | VSI index. | Does not support modification after object creation. |
| hh3cVxlanRemoteMacCount (1.3.6.1.4.1.25506.2.150.1.2.1.6) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Remote MAC address count. | As per the MIB. |
| hh3cVxlanRowStatus (1.3.6.1.4.1.25506.2.150.1.2.1.7) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). You can use active(1) to modify only the hh3cVxlanGroupAddr and hh3cVxlanSourceAddr objects. |

hh3cVxlanTunnelTable

About this table

Use this table to configure tunnels for VXLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cVxlanID and hh3cVxlanTunnelID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|---|--|--|
| hh3cVxlanTunnelID (1.3.6.1.4.1.25506.2.150.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (0..4294967295) | Tunnel ID. | As per the MIB. |
| hh3cVxlanTunnelRowStatus (1.3.6.1.4.1.25506.2.150.1.3.1.2) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |
| hh3cVxlanTunnelOctets (1.3.6.1.4.1.25506.2.150.1.3.1.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Byte count on the VXLAN tunnel. | Not supported |
| hh3cVxlanTunnelPackets (1.3.6.1.4.1.25506.2.150.1.3.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Packet count on the VXLAN tunnel. | Not supported |
| hh3cVxlanTunnelInputOctets (1.3.6.1.4.1.25506.2.150.1.3.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Incoming byte count on the VXLAN tunnel. | Not supported |
| hh3cVxlanTunnelOutputOctets (1.3.6.1.4.1.25506.2.150.1.3.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Outgoing byte count on the VXLAN tunnel. | Not supported |
| hh3cVxlanTunnelInputPackets (1.3.6.1.4.1.25506.2.150.1.3.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Incoming packet count on the VXLAN tunnel. | Not supported |
| hh3cVxlanTunnelOutputPackets (1.3.6.1.4.1.25506.2.150.1.3.1.8) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Outgoing packet count on the VXLAN tunnel. | Not supported |

| | | | | | |
|--|-----------|-----------|-------------------------------------|--|---------------|
| 506.2.150.1.3.1.8) | | | | | |
| hh3cVxlanTunnelInputDiscards (1.3.6.1.4.1.25506.2.150.1.3.1.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Dropped incoming packet count on the VXLAN tunnel. | Not supported |
| hh3cVxlanTunnelOutputDiscards (1.3.6.1.4.1.25506.2.150.1.3.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Dropped outgoing packet count on the VXLAN tunnel. | Not supported |

hh3cVxlanTunnelBoundTable

About this table

Use this table to display the number of VXLANs bound to a VXLAN tunnel.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|-----------|-----------|
| Not supported | Not supported | Supported | Supported |

Columns

The table index is hh3cVxlanTunnelID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------------|---|-----------------|
| hh3cVxlanTunnelBoundVxlanNum (1.3.6.1.4.1.25506.2.150.1.4.1.1) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | The number of VXLANs bound to a VXLAN tunnel. | As per the MIB. |

hh3cVxlanMacTable

About this table

Use this table to display remote MAC address information about VXLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cVxlanVsiIndex and hh3cVxlanMacAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------|----------------|------------|--------------|--------------|-----------------|
| hh3cVxlanMacAddr | not-accessible | MacAddress | OCTET STRING | MAC address. | As per the MIB. |

| | | | | | |
|--|-----------|------------|--|-------------------|-----------------|
| (1.3.6.1.4.1.25506.2.150.1.5.1.1) | | | (6) | | |
| hh3cVxlanTunnelID (1.3.6.1.4.1.25506.2.150.1.5.1.2) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | VXLAN tunnel ID. | As per the MIB. |
| hh3cVxlanMacType (1.3.6.1.4.1.25506.2.150.1.5.1.3) | read-only | INTEGER | unknown (0) selfLearned (1) staticConfigured (2) protocolLearned (3) openflow (4) ovsdb (5) | MAC address type. | As per the MIB. |

hh3cVxlanStaticMacTable

About this table

Use this table to display static remote MAC address information about VXLANs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cVxlanVsiIndex and hh3cVxlanStaticMacAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|---|------------------|--|
| hh3cVxlanStaticMacAddr (1.3.6.1.4.1.25506.2.150.1.6.1.1) | not-accessible | MacAddress | OCTET STRING (6) | MAC address. | As per the MIB. |
| hh3cVxlanStaticMacTunnelID (1.3.6.1.4.1.25506.2.150.1.6.1.2) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | VXLAN tunnel ID. | Does not support modification after object creation. |
| hh3cVxlanStaticMacRowStatus (1.3.6.1.4.1.25506.2.150.1.6.1.3) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

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HH3C-BGP-EVPN-MIB

About this MIB

Use this MIB to manage BGP EVPN configuration.

MIB file name

hh3c-bgp-evpn.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cBgpEvpn(172)

Tabular objects

hh3cBgpEvpnNbrAddrTable

About this table

Use this table to configure the address and AS number of each BGP peer.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cBgpEvpnNbrAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|-----------------------|-----------------|
| hh3cBgpEvpnNbrAddr (1.3.6.1.4.1.25506.2.172.1.1.1.1) | not-accessible | IpAddress | OCTET STRING (4) | BGP peer address. | As per the MIB. |
| hh3cBgpEvpnNbrAsNumber (1.3.6.1.4.1.25506.2.172.1.1.1.2) | read-only | Unsigned32 | Standard MIB values. | BGP peer AS neighbor. | As per the MIB. |

hh3cBgpEvpnNbrPrefixTable

About this table

Use this table to configure address prefix parameters for BGP EVPN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cBgpEvpnPAtrRD, hh3cBgpEvpnPAtrIpAddrPrefix, hh3cBgpEvpnPAtrIpAddrPrefixLen, and hh3cBgpEvpnPAtrPeer.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|-----------------------------------|--|-----------------|
| hh3cBgpEvpnPAtrRD (1.3.6.1.4.1.25506.2.172.1.1.2.1) | not-accessible | OCTET STRING | OCTET STRING (3..21) | Route distinguisher. | As per the MIB. |
| hh3cBgpEvpnPAtrAddrPrefix (1.3.6.1.4.1.25506.2.172.1.1.2.2) | not-accessible | IpAddress | OCTET STRING (4) | Address prefix. | As per the MIB. |
| hh3cBgpEvpnPAtrAddrPrefixLen (1.3.6.1.4.1.25506.2.172.1.1.2.3) | not-accessible | Integer32 | Integer32(0..300) | Address prefix length. | As per the MIB. |
| hh3cBgpEvpnPAtrPeer (1.3.6.1.4.1.25506.2.172.1.1.2.4) | not-accessible | IpAddress | OCTET STRING (4) | BGP EVPN peer address. | As per the MIB. |
| hh3cBgpEvpnPAtrRouteType (1.3.6.1.4.1.25506.2.172.1.1.2.5) | read-only | Unsigned32 | Standard MIB values. | Route type. | As per the MIB. |
| hh3cBgpEvpnPAtrOrigin (1.3.6.1.4.1.25506.2.172.1.1.2.6) | read-only | INTEGER | igp(1) egp(2) incomplete(3) | Ultimate origin of the path information. | As per the MIB. |
| hh3cBgpEvpnPAtrASPathSegment (1.3.6.1.4.1.25506.2.172.1.1.2.7) | read-only | OCTET STRING | OCTET STRING (2..255) | Sequence of AS path segments. | As per the MIB. |
| hh3cBgpEvpnPAtrNextHop (1.3.6.1.4.1.25506.2.172.1.1.2.8) | read-only | IpAddress | OCTET STRING (4) | Address of the border router. | As per the MIB. |
| hh3cBgpEvpnPAtrMultiExitDisc (1.3.6.1.4.1.25506.2.172.1.1.2.9) | read-only | Integer32 | Integer32(-1..2147483647) | Metric used to discriminate between multiple exit points to an adjacent autonomous system. | As per the MIB. |
| hh3cBgpEvpnPAtrLocalPref (1.3.6.1.4.1.25506.2.172.1.1.2.10) | read-only | Integer32 | Integer32(-1..2147483647) | Originating BGP4 speaker's degree of preference for an advertised route. | As per the MIB. |
| hh3cBgpEvpnPAtrIGMPFlags | read-only | INTEGER | igmpv1(1) | IGMP version. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|------------------------|--|-----------------|
| (1.3.6.1.4.1.25506.2.172.1.1.2.11) | | | igmpv2(2) igmpv3(3) | | |
| hh3cBgpEvpnPAtr MaxRespTime (1.3.6.1.4.1.25506.2.172.1.1.2.12) | read-only | Unsigned32 | Standard MIB values. | Maximum response time, the duration of (x, G) leave group synchronization procedure. | As per the MIB. |
| hh3cBgpEvpnPAtr PMSITunnel (1.3.6.1.4.1.25506.2.172.1.1.2.13) | read-only | OCTET STRING | OCTET STRING (9..21) | P-tunnel used for sending broadcast. | As per the MIB. |
| hh3cBgpEvpnPAtr L2VNI (1.3.6.1.4.1.25506.2.172.1.1.2.14) | read-only | Unsigned32 | Standard MIB values. | L2 VNI. | As per the MIB. |
| hh3cBgpEvpnPAtr L3VNI (1.3.6.1.4.1.25506.2.172.1.1.2.15) | read-only | Unsigned32 | Standard MIB values. | L3 VNI. | As per the MIB. |
| hh3cBgpEvpnPAtr Best (1.3.6.1.4.1.25506.2.172.1.1.2.16) | read-only | TruthValue | true(1) false(2) | BGP4 best path flag. | As per the MIB. |
| hh3cBgpEvpnPAtr Unknown (1.3.6.1.4.1.25506.2.172.1.1.2.17) | read-only | OCTET STRING | OCTET STRING (0..255) | One or more path attributes not understood by this BGP4 speaker. | As per the MIB. |

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HH3C-ACL-MIB

About this MIB

This MIB provides some basic table for managing ACLs on a switch.

MIB file name

hh3c-acl.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cAcl(8)

Global objects

hh3cAclMib2Mode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|-----------------------------------|----------------|
| hh3cAclMib2Mode (1.3.6.1.4.1.25506 .2.8.2.1.1.1) | read-write | INTEGER | <ul style="list-style-type: none">linkBased(1)ipBased(2) | Mode in which the ACL is applied. | Not supported. |

hh3cAclMib2Version

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---|--|----------------|
| hh3cAclMib2Version (1.3.6.1.4.1.25506 .2.8.2.1.1.2) | read-only | Integer32 | <ul style="list-style-type: none">0..2147483647 | Version of the ACL MIB file supported. | Not supported. |

hh3cAclMib2ObjectsCapabilities

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------|----------------------|---|-----------------|
| hh3cAclMib2ObjectsCapabilities (1.3.6.1.4.1.25506 .2.8.2.1.1.3) | read-only | BITS | Standard MIB values. | Non-tabular objects and tables supported. | As per the MIB. |

hh3cAclMib2ProcessingStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|------------------------|-----------------|
| hh3cAclMib2ProcessingStatus (1.3.6.1.4.1.25506) | read-only | INTEGER | <ul style="list-style-type: none">processing(1)done(2) | ACL processing status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------|--------|--------|----------------|-------------|----------------|
| .2.8.2.1.1.4) | | | Default: done. | | |

hh3cAclMib2ResourceThreshold

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|-----------------------|--------------------------------------|-----------------|
| hh3cAclMib2ResourceThreshold (1.3.6.1.4.1.25506.2.8.2.1.1.5) | read-write | Integer32 | 0..100 Default: 0. | Sets the TCAM usage alarm threshold. | As per the MIB. |

hh3cAclMib2ResourceLogInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|--|-----------------|
| hh3cAclMib2ResourceLogInterval (1.3.6.1.4.1.25506.2.8.2.1.1.6) | read-write | Integer32 | 1..60 Default: 5. | Sets the interval for checking the TCAM usage. | As per the MIB. |

hh3cPfilterDefaultAction

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---|---|-----------------|
| hh3cPfilterDefaultAction (1.3.6.1.4.1.25506.2.8.3.1.1) | read-write | INTEGER | <ul style="list-style-type: none"> permit(1) deny(2) Default: permit. | Sets the packet filtering default action. | As per the MIB. |

hh3cPfilterProcessingStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|----------------------------------|-----------------|
| hh3cPfilterProcessingStatus (1.3.6.1.4.1.25506.2.8.3.1.2) | read-only | INTEGER | <ul style="list-style-type: none"> processing(1) done(2) Default: done. | Packet filter processing status. | As per the MIB. |

Tabular objects

hh3cAclMib2CapabilityTable

About this table

ACL capability set. Use this table to obtain product-supported ACL information for only user-defined ACLs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cAcIb2EntityType, h3cAcIb2EntityIndex, h3cAcIb2ModuleIndex, and h3cAcIb2CharacteristicsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--|---|-----------------|
| h3cAcIb2EntityType (1.3.6.1.4.1.25506.2.8.2.1.2.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none">system(1)interface(2) | Type of the entity where the ACL is configured and applied. | As per the MIB. |
| h3cAcIb2EntityIndex (1.3.6.1.4.1.25506.2.8.2.1.2.1.2) | not-accessible | Integer32 | 0..2147483647 | Index of the entity type. | As per the MIB. |
| h3cAcIb2ModuleIndex (1.3.6.1.4.1.25506.2.8.2.1.2.1.3) | not-accessible | INTEGER | <ul style="list-style-type: none">layer3(1)layer2(2)userDefined(3) | Index of the ACL type. | As per the MIB. |
| h3cAcIb2CharacteristicsIndex (1.3.6.1.4.1.25506.2.8.2.1.2.1.4) | not-accessible | Integer32 | 0..2147483647 | Index of the ACL attribute. | As per the MIB. |
| h3cAcIb2CharacteristicsDesc (1.3.6.1.4.1.25506.2.8.2.1.2.1.5) | read-only | OCTET STRING | SIZE (0..255) | Description of the ACL attribute. | Not supported. |
| h3cAcIb2CharacteristicsValue (1.3.6.1.4.1.25506.2.8.2.1.2.1.6) | read-only | Unsigned32 | Standard MIB values. | Value of the ACL attribute. | Not supported. |

hh3cAcIb2NumberGroupTable

About this table

This table records numbered ACL configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcIb2NumberGroupType, and h3cAcIb2NumberGroupIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|------------------------------------|---|
| hh3cAcINumberGroupType (1.3.6.1.4.1.25506.2.8.2.1.3.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> • ipv4(1) • ipv6(2) • mac(3) • user(4) | ACL type. | Implementation varies by product |
| hh3cAcINumberGroupIndex (1.3.6.1.4.1.25506.2.8.2.1.3.1.2) | not-accessible | Integer32 | <ul style="list-style-type: none"> • 2000..5999 • 10000..42767 | ACL number index. | Implementation varies by product |
| hh3cAcINumberGroupRowStatus (1.3.6.1.4.1.25506.2.8.2.1.3.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |
| hh3cAcINumberGroupMatchOrder (1.3.6.1.4.1.25506.2.8.2.1.3.1.4) | read-create | INTEGER | <ul style="list-style-type: none"> • config(1) • auto(2) | Rule match order. | As per the MIB. |
| hh3cAcINumberGroupStep (1.3.6.1.4.1.25506.2.8.2.1.3.1.5) | read-create | Integerd32 | 1..20 | Rule numbering step. | As per the MIB. |
| hh3cAcINumberGroupDescription (1.3.6.1.4.1.25506.2.8.2.1.3.1.6) | read-create | OCTET STRING | SIZE (0..127) | ACL description. | As per the MIB. |
| hh3cAcINumberGroupCountClear (1.3.6.1.4.1.25506.2.8.2.1.3.1.7) | read-write | CounterClear | Standard MIB values. | Clear rule statistics for the ACL. | As per the MIB. |
| hh3cAcINumberGroupRuleCounter (1.3.6.1.4.1.25506.2.8.2.1.3.1.8) | read-only | Counter32 | Standard MIB values. | Number of rules in the ACL. | As per the MIB. |
| hh3cAcINumberGroupName (1.3.6.1.4.1.25506.2.8.2.1.3.1.9) | read-create | OCTET STRING | SIZE (0..63) | ACL name. | As per the MIB. |

hh3cAcINamedGroupTable

About this table

This table records named ACL configuration information. Use this table to add or delete a named ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINamedGroupCategory, and h3cAcINamedGroupName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|------------------------------------|---|
| h3cAcINamedGroupCategory (1.3.6.1.4.1.25506.2.8.2.1.4.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> invalid(0) basic(1) advanced(2) | ACL category. | As per the MIB. |
| hh3cAcINamedGroupName (1.3.6.1.4.1.25506.2.8.2.1.4.1.2) | not-accessible | OCTET STRING | SIZE (1..63) | ACL name. | As per the MIB. |
| hh3cAcINamedGroupRowStatus (1.3.6.1.4.1.25506.2.8.2.1.4.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcINamedGroupMatchOrder (1.3.6.1.4.1.25506.2.8.2.1.4.1.4) | read-create | INTERGER | <ul style="list-style-type: none"> config(1) auto(2) | Rule match order. | As per the MIB. |
| hh3cAcINamedGroupStep (1.3.6.1.4.1.25506.2.8.2.1.4.1.5) | read-create | Integer32 | 1..20 | Rule numbering step. | As per the MIB. |
| hh3cAcINamedGroupDescription (1.3.6.1.4.1.25506.2.8.2.1.4.1.6) | read-create | OCTET STRING | SIZE (0..127) | ACL description. | As per the MIB. |
| hh3cAcINamedGroupCountClear (1.3.6.1.4.1.25506.2.8.2.1.4.1.7) | read-write | CounterClear | Standard MIB values. | Clear rule statistics for the ACL. | As per the MIB. |
| hh3cAcINamedGroupRuleCounter (1.3.6.1.4.1.25506.2.8.2.1.4.1.8) | read-only | Counter32 | Standard MIB values. | Number of rules in the ACL. | As per the MIB. |

hh3cAcIIPAcIBasicTable

About this table

This table records basic ACL configuration information. Use this table to add or delete a basic ACL rule.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINumberGroupIndex, and h3cAcIIPAcIBasicRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|-------------|--------------|-----------------|
| hh3cAcIIPAcIBasicRuleIndex (1.3.6.1.4.1.25506) | not-accessible | Integer32 | 0..65534 | ACL rule ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------------------|---|---|---|
| .2.8.2.2.2.1.1) | | | | | |
| hh3cAclIPAcIBasicRowStatus (1.3.6.1.4.1.25506.2.8.2.2.2.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |
| hh3cAclIPAcIBasicAct (1.3.6.1.4.1.25506.2.8.2.2.2.1.3) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> • permit(2) • deny(3) |
| hh3cAclIPAcIBasicSrcAddrType (1.3.6.1.4.1.25506.2.8.2.2.2.1.4) | read-create | InetAddressType | Standard MIB values. | Source address type. | As per the MIB. |
| hh3cAclIPAcIBasicSrcAddr (1.3.6.1.4.1.25506.2.8.2.2.2.1.5) | read-create | InetAddress | Standard MIB values. | Source IP address. | As per the MIB. |
| hh3cAclIPAcIBasicSrcPrefix (1.3.6.1.4.1.25506.2.8.2.2.2.1.6) | read-create | InetAddressPrefix Length | Standard MIB values. | Source IP address prefix. | As per the MIB. |
| hh3cAclIPAcIBasicSrcAny (1.3.6.1.4.1.25506.2.8.2.2.2.1.7) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Whether the source IP address can be any. | Default: true(1). |
| hh3cAclIPAcIBasicSrcWild (1.3.6.1.4.1.25506.2.8.2.2.2.1.8) | read-create | IpAddress | Standard MIB values. | Source IP address wildcard mask. | As per the MIB. |
| hh3cAclIPAcIBasicTimeRangeName (1.3.6.1.4.1.25506.2.8.2.2.2.1.9) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAclIPAcIBasicFragmentFlag (1.3.6.1.4.1.25506.2.8.2.2.2.1.10) | read-create | FragmentFlag | Standard MIB values. | Fragment flag. | Support 0 and 2. |
| hh3cAclIPAcIBasicLog (1.3.6.1.4.1.25506.2.8.2.2.2.1.11) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Enabling status of the logging feature. | As per the MIB. |
| hh3cAclIPAcIBasicCount (1.3.6.1.4.1.25506.2.8.2.2.2.1.12) | read-only | Unsigned32 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cAclIPAcIBasicCountClear (1.3.6.1.4.1.25506.2.8.2.2.2.1.13) | read-write | INTEGER | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAclIPAcIBasicEnable (1.3.6.1.4.1.25506.2.8.2.2.2.1.14) | read-only | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Enabling status of the rule. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|---|---|----------------------------------|
| hh3cAcIIPAcIBasicVpnInstanceName (1.3.6.1.4.1.25506.2.8.2.2.2.1.15) | read-create | OCTET STRING | SIZE (0..32) | VPN instance name. | Implementation varies by product |
| hh3cAcIIPAcIBasicComment (1.3.6.1.4.1.25506.2.8.2.2.2.1.16) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcIIPAcIBasicCounting (1.3.6.1.4.1.25506.2.8.2.2.2.1.17) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |
| hh3cAcIIPAcIBasicRouteTypeAny (1.3.6.1.4.1.25506.2.8.2.2.2.1.18) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether the rule matches all types of IPv6 routing headers. | As per the MIB. |
| hh3cAcIIPAcIBasicRouteTypeValue (1.3.6.1.4.1.25506.2.8.2.2.2.1.19) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | Type of IPv6 routing header. | As per the MIB. |

hh3cAcIIPAcIAdvancedTable

About this table

This table records advanced ACL configuration information. Use this table to add or delete an advanced ACL rule.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINumberGroupIndex, and h3cAcIIPAcIAdvancedRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|--|---|
| hh3cAcIIPAcIAdvancedRuleIndex (1.3.6.1.4.1.25506.2.8.2.2.3.1.1) | not-accessible | Integer32 | 0..65534 | ACL rule ID. | As per the MIB. |
| hh3cAcIIPAcIAdvancedRowStatus (1.3.6.1.4.1.25506.2.8.2.2.3.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcIIPAcIAdvancedAct (1.3.6.1.4.1.25506.2.8.2.2.3.1.3) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> permit(2) deny(3) |
| hh3cAcIIPAcIAdvancedProtocol (1.3.6.1.4.1.25506.2.8.2.2.3.1.4) | read-create | INTEGER | 0..255 | Number of a Layer 3 protocol or a protocol above | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------------------|---|---|-------------------|
| .2.8.2.2.3.1.4) | | | | Layer 3. | |
| hh3cAcIIPAcIAdvancedAddrFlag (1.3.6.1.4.1.25506.2.8.2.2.3.1.5) | read-create | AddressFlag | Standard MIB values. | Address flag for the IPv6 source address and destination address. | Not supported |
| hh3cAcIIPAcIAdvancedSrcAddrType (1.3.6.1.4.1.25506.2.8.2.2.3.1.6) | read-create | InetAddressType | Standard MIB values. | Source IP address type. | As per the MIB. |
| hh3cAcIIPAcIAdvancedSrcAddr (1.3.6.1.4.1.25506.2.8.2.2.3.1.7) | read-create | InetAddress | Standard MIB values. | Source IP address. | As per the MIB. |
| hh3cAcIIPAcIAdvancedSrcPrefix (1.3.6.1.4.1.25506.2.8.2.2.3.1.8) | read-create | InetAddressPrefix Length | Standard MIB values. | Source IP address prefix. | As per the MIB. |
| hh3cAcIIPAcIAdvancedSrcAny (1.3.6.1.4.1.25506.2.8.2.2.3.1.9) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Whether the source IP address can be any value. | Default: true(1). |
| hh3cAcIIPAcIAdvancedSrcWild (1.3.6.1.4.1.25506.2.8.2.2.3.1.10) | read-create | IpAddress | Standard MIB values. | Source IP address wildcard mask. | As per the MIB. |
| hh3cAcIIPAcIAdvancedSrcOp (1.3.6.1.4.1.25506.2.8.2.2.3.1.11) | read-create | PortOp | Standard MIB values. | Port operator. | As per the MIB. |
| hh3cAcIIPAcIAdvancedSrcPort1 (1.3.6.1.4.1.25506.2.8.2.2.3.1.12) | read-create | Integer32 | 0..65535 | Source UDP or TCP port 1. | As per the MIB. |
| hh3cAcIIPAcIAdvancedSrcPort2 (1.3.6.1.4.1.25506.2.8.2.2.3.1.13) | read-create | Integer32 | 0..65535 | Source UDP or TCP port 2. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestAddrType (1.3.6.1.4.1.25506.2.8.2.2.3.1.14) | read-create | InetAddressType | Standard MIB values. | Destination address type. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestAddr (1.3.6.1.4.1.25506.2.8.2.2.3.1.15) | read-create | InetAddress | Standard MIB values. | Destination IP address. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestPrefix (1.3.6.1.4.1.25506.2.8.2.2.3.1.16) | read-create | InetAddressPrefix Length | Standard MIB values. | Destination address prefix. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestAny (1.3.6.1.4.1.25506.2.8.2.2.3.1.17) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Whether the destination IP address can be any value. | Default: true(1). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|---|------------------|
| hh3cAcIIPAcIAdvancedDestWild (1.3.6.1.4.1.25506.2.8.2.2.3.1.18) | read-create | IpAddress | Standard MIB values. | Destination IP address wildcard mask. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestOp (1.3.6.1.4.1.25506.2.8.2.2.3.1.19) | read-create | PortOp | Standard MIB values. | Port operator. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestPort1 (1.3.6.1.4.1.25506.2.8.2.2.3.1.20) | read-create | Integer32 | 0..65535 | Destination UDP or TCP port 1. | As per the MIB. |
| hh3cAcIIPAcIAdvancedDestPort2 (1.3.6.1.4.1.25506.2.8.2.2.3.1.21) | read-create | Integer32 | 0..65535 | Destination UDP or TCP port 2. | As per the MIB. |
| hh3cAcIIPAcIAdvancedIcmpType (1.3.6.1.4.1.25506.2.8.2.2.3.1.22) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | ICMP message type. | As per the MIB. |
| hh3cAcIIPAcIAdvancedIcmpCode (1.3.6.1.4.1.25506.2.8.2.2.3.1.23) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | ICMP message code. | As per the MIB. |
| hh3cAcIIPAcIAdvancedPrecedence (1.3.6.1.4.1.25506.2.8.2.2.3.1.24) | read-create | Integer32 | <ul style="list-style-type: none"> 0..7 255 | IP precedence. | As per the MIB. |
| hh3cAcIIPAcIAdvancedTos (1.3.6.1.4.1.25506.2.8.2.2.3.1.25) | read-create | Integer32 | <ul style="list-style-type: none"> 0..15 255 | ToS type | As per the MIB. |
| hh3cAcIIPAcIAdvancedDscp (1.3.6.1.4.1.25506.2.8.2.2.3.1.26) | read-create | DSCPValue | <ul style="list-style-type: none"> 0..63 255 | DSCP value. | As per the MIB. |
| hh3cAcIIPAcIAdvancedTimeRangeName (1.3.6.1.4.1.25506.2.8.2.2.3.1.27) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAcIIPAcIAdvancedTCPFlag (1.3.6.1.4.1.25506.2.8.2.2.3.1.28) | read-create | TCPFlag | Standard MIB values. | TCP flag. | As per the MIB. |
| hh3cAcIIPAcIAdvancedFragmentFlag (1.3.6.1.4.1.25506.2.8.2.2.3.1.29) | read-create | FragmentFlag | Standard MIB values. | Fragments flag. | Support 0 and 2. |
| hh3cAcIIPAcIAdvancedLog (1.3.6.1.4.1.25506.2.8.2.2.3.1.30) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the logging feature. | As per the MIB. |
| hh3cAcIIPAcIAdvancedCount | read-only | Unsigned32 | Standard MIB | Number of packets matching | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|--|---|-----------------------------------|
| (1.3.6.1.4.1.25506.2.8.2.2.3.1.31) | | | values. | the ACL rule. | |
| hh3cAcIIPAcIAdvancedCountClear (1.3.6.1.4.1.25506.2.8.2.2.3.1.32) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcIIPAcIAdvancedEnable (1.3.6.1.4.1.25506.2.8.2.2.3.1.33) | read-only | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcIIPAcIAdvancedVpnInstanceName (1.3.6.1.4.1.25506.2.8.2.2.3.1.34) | read-create | OCTET STRING | SIZE (0..32) | VPN instance name. | Implementation varies by product. |
| hh3cAcIIPAcIAdvancedComment (1.3.6.1.4.1.25506.2.8.2.2.3.1.35) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcIIPAcIAdvancedReflective (1.3.6.1.4.1.25506.2.8.2.2.3.1.36) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether it is a reflective rule. | Not supported |
| hh3cAcIIPAcIAdvancedCounting (1.3.6.1.4.1.25506.2.8.2.2.3.1.37) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |
| hh3cAcIIPAcIAdvancedTCPFlagMask (1.3.6.1.4.1.25506.2.8.2.2.3.1.38) | read-create | Hh3cAlarmStatus | <ul style="list-style-type: none"> tcpack(0) tcpfin(1) tcppsh(2) tcprst(3) tcpsyn(4) tcpurg(5) | TCP flag bit mask. | As per the MIB. |
| hh3cAcIIPAcIAdvancedTCPFlagValue (1.3.6.1.4.1.25506.2.8.2.2.3.1.39) | read-create | Hh3cAlarmStatus | <ul style="list-style-type: none"> tcpack(0) tcpfin(1) tcppsh(2) tcprst(3) tcpsyn(4) tcpurg(5) | TCP flag bit set. | As per the MIB. |
| hh3cAcIIPAcIAdvancedRouteTypeAny (1.3.6.1.4.1.25506.2.8.2.2.3.1.40) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether the rule matches all types of IPv6 routing headers. | As per the MIB. |
| hh3cAcIIPAcIAdvancedRouteTypeValue (1.3.6.1.4.1.25506.2.8.2.2.3.1.41) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | Type of the IPv6 routing header. | As per the MIB. |
| hh3cAcIIPAcIAdvancedFlowLabel (1.3.6.1.4.1.25506.2.8.2.2.3.1.42) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..1048575 4294967295 | Flow label. | Default: 0. |
| h3cAcIIPAcIAdvan | read-create | Unsigned32 | Standard MIB | Source address | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|-------------|------------|-------------------------|--------------------------------|----------------|
| cedSrcSuffix | | | values. | suffix. | |
| h3cAcIIPAcIAdvan cedDestSuffix | read-create | Unsigned32 | Standard MIB values. | Destination address suffix. | Not supported. |

hh3cAcIIPAcINamedBscTable

About this table

This table records basic ACL configuration information. Use this table to add or delete a basic named ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINamedGroupName, and h3cAcIIPAcIBasicRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------------------|---|---|---|
| hh3cAcIIPAcINam edBscRowStatus (1.3.6.1.4.1.25506 .2.8.2.2.4.1.1) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcIIPAcINam edBscAct (1.3.6.1.4.1.25506 .2.8.2.2.4.1.2) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> permit(2) deny(3) |
| hh3cAcIIPAcINam edBscSrcAddrTyp e (1.3.6.1.4.1.25506 .2.8.2.2.4.1.3) | read-create | InetAddressType | Standard MIB values. | Source address type. | As per the MIB. |
| hh3cAcIIPAcINam edBscSrcAddr (1.3.6.1.4.1.25506 .2.8.2.2.4.1.4) | read-create | InetAddress | Standard MIB values. | Source IP address. | As per the MIB. |
| hh3cAcIIPAcINam edBscSrcPrefix (1.3.6.1.4.1.25506 .2.8.2.2.4.1.5) | read-create | InetAddressPrefix Length | Standard MIB values. | Source IP address prefix. | As per the MIB. |
| hh3cAcIIPAcINam edBscSrcAny (1.3.6.1.4.1.25506 .2.8.2.2.4.1.6) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether the source IP address can be any value. | Default: true(1) |
| hh3cAcIIPAcINam edBscSrcWild (1.3.6.1.4.1.25506 .2.8.2.2.4.1.7) | read-create | IpAddress | Standard MIB values. | Source IP address wildcard mask. | As per the MIB. |
| hh3cAcIIPAcINam edBscTimeRange Name (1.3.6.1.4.1.25506 | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|---|----------------------------------|
| .2.8.2.2.4.1.8) | | | | | |
| hh3cAcIIPAcIName edBscFragmentFlag (1.3.6.1.4.1.25506 .2.8.2.2.4.1.9) | read-create | FragmentFlag | Standard MIB values. | Fragments flag. | Support 0 and 2. |
| hh3cAcIIPAcIName edBscLog (1.3.6.1.4.1.25506 .2.8.2.2.4.1.10) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the logging feature. | As per the MIB. |
| hh3cAcIIPAcIName edBscCount (1.3.6.1.4.1.25506 .2.8.2.2.4.1.11) | read-only | Unsigned32 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cAcIIPAcIName edBscCountClear (1.3.6.1.4.1.25506 .2.8.2.2.4.1.12) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcIIPAcIName edBscEnable (1.3.6.1.4.1.25506 .2.8.2.2.4.1.13) | read-only | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcIIPAcIName edBscVpnInstName (1.3.6.1.4.1.25506 .2.8.2.2.4.1.14) | read-create | OCTET STRING | SIZE(0..32) | VPN instance name. | Implementation varies by product |
| hh3cAcIIPAcIName edBscComment (1.3.6.1.4.1.25506 .2.8.2.2.4.1.15) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcIIPAcIName edBscCounting (1.3.6.1.4.1.25506 .2.8.2.2.4.1.16) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |
| hh3cAcIIPAcIName edBscRouteTypeAny (1.3.6.1.4.1.25506 .2.8.2.2.4.1.17) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether the rule matches all types of IPv6 routing headers. | As per the MIB. |
| hh3cAcIIPAcIName edBscRouteTypeValue (1.3.6.1.4.1.25506 .2.8.2.2.4.1.18) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | Type of IPv6 routing header. | As per the MIB. |

hh3cAcIIPAcINamedAdvTable

About this table

This table records advanced ACL configuration information. Use this table to add or delete an advanced named ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINamedGroupName, and h3cAcIIPAcIAdvancedRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------------------|---|---|---|
| hh3cAcIIPAcINamedAdvRowStatus (1.3.6.1.4.1.25506.2.8.2.2.5.1.1) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcIIPAcINamedAdvAct (1.3.6.1.4.1.25506.2.8.2.2.5.1.2) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> permit(2) deny(3) |
| hh3cAcIIPAcINamedAdvProtocol (1.3.6.1.4.1.25506.2.8.2.2.5.1.3) | read-create | Integer32 | 0..255 | Number of a Layer 3 protocol or a protocol above Layer 3. | As per the MIB. |
| hh3cAcIIPAcINamedAdvAddrFlag (1.3.6.1.4.1.25506.2.8.2.2.5.1.4) | read-create | AddressFlag | Standard MIB values. | Address flag for the IPv6 source address and destination address. | Not supported |
| hh3cAcIIPAcINamedAdvSrcAddrType (1.3.6.1.4.1.25506.2.8.2.2.5.1.5) | read-create | InetAddressType | Standard MIB values. | Source IP address type. | As per the MIB. |
| hh3cAcIIPAcINamedAdvSrcAddr (1.3.6.1.4.1.25506.2.8.2.2.5.1.6) | read-create | InetAddress | Standard MIB values. | Source IP address. | As per the MIB. |
| hh3cAcIIPAcINamedAdvSrcPrefix (1.3.6.1.4.1.25506.2.8.2.2.5.1.7) | read-create | InetAddressPrefix Length | Standard MIB values. | Source IP address prefix. | As per the MIB. |
| hh3cAcIIPAcINamedAdvSrcAny (1.3.6.1.4.1.25506.2.8.2.2.5.1.8) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether the source IP address can be any value. | Default: true(1) |
| hh3cAcIIPAcINamedAdvSrcWild (1.3.6.1.4.1.25506.2.8.2.2.5.1.9) | read-create | IpAddress | Standard MIB values. | Source IP address wildcard mask. | As per the MIB. |
| hh3cAcIIPAcINamedAdvSrcOp (1.3.6.1.4.1.25506.2.8.2.2.5.1.10) | read-create | PortOp | Standard MIB values. | Port operator. | As per the MIB. |
| hh3cAcIIPAcINamedAdvSrcPort1 (1.3.6.1.4.1.25506.2.8.2.2.5.1.11) | read-create | Integer32 | 0..65535 | Source UDP or TCP port 1 | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------------------|---|--|------------------|
| hh3cAcIIPAcINameAdvSrcPort2 (1.3.6.1.4.1.25506.2.8.2.2.5.1.12) | read-create | Integer32 | 0..65535 | Source UDP or TCP port 2 | As per the MIB. |
| hh3cAcIIPAcINameAdvDstAddrType (1.3.6.1.4.1.25506.2.8.2.2.5.1.13) | read-create | InetAddressType | Standard MIB values. | Destination address type. | As per the MIB. |
| hh3cAcIIPAcINameAdvDstAddr (1.3.6.1.4.1.25506.2.8.2.2.5.1.14) | read-create | InetAddress | Standard MIB values. | Destination IP address. | As per the MIB. |
| hh3cAcIIPAcINameAdvDstPrefix (1.3.6.1.4.1.25506.2.8.2.2.5.1.15) | read-create | InetAddressPrefix Length | Standard MIB values. | Destination address prefix. | As per the MIB. |
| hh3cAcIIPAcINameAdvDstAny (1.3.6.1.4.1.25506.2.8.2.2.5.1.16) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Whether the destination IP address can be any value. | Default: true(1) |
| hh3cAcIIPAcINameAdvDstWild (1.3.6.1.4.1.25506.2.8.2.2.5.1.17) | read-create | IpAddress | Standard MIB values. | Destination IP address wildcard mask. | As per the MIB. |
| hh3cAcIIPAcINameAdvDstOp (1.3.6.1.4.1.25506.2.8.2.2.5.1.18) | read-create | PortOp | Standard MIB values. | Port operator. | As per the MIB. |
| hh3cAcIIPAcINameAdvDstPort1 (1.3.6.1.4.1.25506.2.8.2.2.5.1.19) | read-create | Integer32 | 0..65535 | Destination UDP or TCP port 1. | As per the MIB. |
| hh3cAcIIPAcINameAdvDstPort2 (1.3.6.1.4.1.25506.2.8.2.2.5.1.20) | read-create | Integer32 | 0..65535 | Destination UDP or TCP port 2. | As per the MIB. |
| hh3cAcIIPAcINameAdvIcmpType (1.3.6.1.4.1.25506.2.8.2.2.5.1.21) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | ICMP message type. | As per the MIB. |
| hh3cAcIIPAcINameAdvIcmpCode (1.3.6.1.4.1.25506.2.8.2.2.5.1.22) | read-create | Integer32 | <ul style="list-style-type: none"> 0..255 65535 | ICMP message code. | As per the MIB. |
| hh3cAcIIPAcINameAdvPrecedence (1.3.6.1.4.1.25506.2.8.2.2.5.1.23) | read-create | Integer32 | <ul style="list-style-type: none"> 0..7 255 | IP precedence. | As per the MIB. |
| hh3cAcIIPAcINameAdvTos (1.3.6.1.4.1.25506.2.8.2.2.5.1.24) | read-create | Integer32 | <ul style="list-style-type: none"> 0..15 255 | ToS. | As per the MIB. |
| hh3cAcIIPAcINameAdvDscp (1.3.6.1.4.1.25506.2.8.2.2.5.1.25) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | DSCP. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|--|--|-------------------------------------|
| .2.8.2.2.5.1.25) | | | | | |
| hh3cAcIIPAcINam edAdvTRangeNa me (1.3.6.1.4.1.25506 .2.8.2.2.5.1.26) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAcIIPAcINam edAdvTCPFlag (1.3.6.1.4.1.25506 .2.8.2.2.5.1.27) | read-create | TCPFlag | Standard MIB values. | TCP flag. | As per the MIB. |
| hh3cAcIIPAcINam edAdvFragmentFl ag (1.3.6.1.4.1.25506 .2.8.2.2.5.1.28) | read-create | FragmentFlag | Standard MIB values. | Fragments flag. | Support 0 and 2. |
| hh3cAcIIPAcINam edAdvLog (1.3.6.1.4.1.25506 .2.8.2.2.5.1.29) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Enabling status of the logging feature. | As per the MIB. |
| hh3cAcIIPAcINam edAdvCount (1.3.6.1.4.1.25506 .2.8.2.2.5.1.30) | read-only | Unsigned32 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cAcIIPAcINam edAdvCountClear (1.3.6.1.4.1.25506 .2.8.2.2.5.1.31) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcIIPAcINam edAdvEnable (1.3.6.1.4.1.25506 .2.8.2.2.5.1.32) | read-only | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcIIPAcINam edAdvVpnInstNa me (1.3.6.1.4.1.25506 .2.8.2.2.5.1.33) | read-create | OCTET STRING | SIZE (0..32) | VPN instance name. | Implementation varies by product |
| hh3cAcIIPAcINam edAdvComment (1.3.6.1.4.1.25506 .2.8.2.2.5.1.34) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcIIPAcINam edAdvReflective (1.3.6.1.4.1.25506 .2.8.2.2.5.1.35) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Whether it is a reflective rule. | Not supported |
| hh3cAcIIPAcINam edAdvCounting (1.3.6.1.4.1.25506 .2.8.2.2.5.1.36) | read-only | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |
| hh3cAcIIPAcINam edAdvTCPFlagMa sk (1.3.6.1.4.1.25506 .2.8.2.2.5.1.37) | read-create | Hh3cAlarmStatus | <ul style="list-style-type: none"> • tcpack(0) • tcpfin(1) • tcppsh(2) • tcprst(3) • tcpsyn(4) • tcpurg(5) | TCP flag bit mask. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|--|---|-----------------|
| hh3cAcIPAcINameAdvTCPFlagValue (1.3.6.1.4.1.25506.2.8.2.2.5.1.38) | read-create | Hh3cAlarmStatus | <ul style="list-style-type: none"> • tcpack(0) • tcpfin(1) • tcppsh(2) • tcprst(3) • tcpsyn(4) • tcpurg(5) | TCP flag bit set. | As per the MIB. |
| hh3cAcIPAcINameAdvRouteTypeAny (1.3.6.1.4.1.25506.2.8.2.2.5.1.39) | read-create | TruthValue | <ul style="list-style-type: none"> • true(1) • false(2) | Whether the rule matches all types of IPv6 routing headers. | As per the MIB. |
| hh3cAcIPAcINameAdvRouteTypeValue (1.3.6.1.4.1.25506.2.8.2.2.5.1.40) | read-create | Integer32 | <ul style="list-style-type: none"> • 0..255 • 65535 | Type of IPv6 routing header. | As per the MIB. |
| hh3cAcIPAcINameAdvFlowLabel (1.3.6.1.4.1.25506.2.8.2.2.5.1.41) | read-create | Unsigned32 | <ul style="list-style-type: none"> • 0..1048575 • 4294967295 | Flow label. | Default: 0. |
| h3cAcIPAcINameAdvSrcSuffix | read-create | Unsigned32 | Standard MIB values. | Source address suffix. | Not supported. |
| h3cAcIPAcINameAdvDstSuffix | read-create | Unsigned32 | Standard MIB values. | Destination address suffix. | Not supported. |

hh3cAcIMACTable

About this table

This table records MAC ACL (also called Layer 2 ACL) configuration information. Use this table to add or delete a MAC ACL rule.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINumberGroupIndex, and h3cAcIMACRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|--------------|---|
| hh3cAcIMACRuleIndex (1.3.6.1.4.1.25506.2.8.2.3.1.1.1) | not-accessible | Integer32 | 0..65534 | ACL rule ID. | As per the MIB. |
| hh3cAcIMACRowStatus (1.3.6.1.4.1.25506.2.8.2.3.1.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |
| hh3cAcIMACAct | read-create | RuleAction | Standard MIB | Action type. | <ul style="list-style-type: none"> • permit(2) |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|--|---|
| (1.3.6.1.4.1.25506.2.8.2.3.1.1.3) | | | values. | | <ul style="list-style-type: none"> deny(3) |
| hh3cAcIMACTypeCode (1.3.6.1.4.1.25506.2.8.2.3.1.1.4) | read-create | OCTET STRING | SIZE (0..32) | Layer 2 protocol type. | As per the MIB. |
| hh3cAcIMACTypeMask (1.3.6.1.4.1.25506.2.8.2.3.1.1.5) | read-create | OCTET STRING | SIZE (0..32) | Mask of the Layer 2 protocol type. | As per the MIB. |
| hh3cAcIMACSrcMac (1.3.6.1.4.1.25506.2.8.2.3.1.1.6) | read-create | MacAddress | Standard MIB values. | Source MAC address. | As per the MIB. |
| hh3cAcIMACSrcMacWild (1.3.6.1.4.1.25506.2.8.2.3.1.1.7) | read-create | MacAddress | Standard MIB values. | Mask of the source MAC address. | As per the MIB. |
| hh3cAcIMACDestMac (1.3.6.1.4.1.25506.2.8.2.3.1.1.8) | read-create | MacAddress | Standard MIB values. | Destination MAC address. | As per the MIB. |
| hh3cAcIMACDestMacWild (1.3.6.1.4.1.25506.2.8.2.3.1.1.9) | read-create | MacAddress | Standard MIB values. | Destination MAC address mask. | As per the MIB. |
| hh3cAcIMACLSapCode (1.3.6.1.4.1.25506.2.8.2.3.1.1.10) | read-create | OCTET STRING | SIZE (0..32) | Encapsulation format of the frame. | As per the MIB. |
| hh3cAcIMACLSapMask (1.3.6.1.4.1.25506.2.8.2.3.1.1.11) | read-create | OCTET STRING | SIZE (0..32) | LSAP mask. | As per the MIB. |
| hh3cAcIMACCos (1.3.6.1.4.1.25506.2.8.2.3.1.1.12) | read-create | Integer32 | <ul style="list-style-type: none"> 0..7 255 | 802.1p priority in VLAN tags. | As per the MIB. |
| hh3cAcIMACTimeRangeName (1.3.6.1.4.1.25506.2.8.2.3.1.1.13) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAcIMACCount (1.3.6.1.4.1.25506.2.8.2.3.1.1.14) | read-only | Unsigned32 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cAcIMACCountClear (1.3.6.1.4.1.25506.2.8.2.3.1.1.15) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcIMACEnable (1.3.6.1.4.1.25506.2.8.2.3.1.1.16) | read-only | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcIMACComment | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|---|--|-----------------|
| (1.3.6.1.4.1.25506.2.8.2.3.1.1.17) | | | | | |
| hh3cAcI MACLog (1.3.6.1.4.1.25506.2.8.2.3.1.1.18) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the logging feature. | Not supported |
| hh3cAcI MACCounting (1.3.6.1.4.1.25506.2.8.2.3.1.1.19) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |

hh3cAcI NamedMACTable

About this table

This table records MAC ACL configuration information. Use this table to add or delete a rule for a named MAC ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcI NumberGroupType, h3cAcI NamedGroupName, and h3cAcI MACRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|----------------------|------------------------------------|---|
| hh3cAcI NamedM ACRowStatus (1.3.6.1.4.1.25506.2.8.2.3.2.1.1) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcI NamedM ACAct (1.3.6.1.4.1.25506.2.8.2.3.2.1.2) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> permit(2) deny(3) |
| hh3cAcI NamedM ACTypeCode (1.3.6.1.4.1.25506.2.8.2.3.2.1.3) | read-create | OCTET STRING | SIZE(0..32) | Layer 2 protocol type. | As per the MIB. |
| hh3cAcI NamedM ACTypeMask (1.3.6.1.4.1.25506.2.8.2.3.2.1.4) | read-create | OCTET STRING | SIZE (0..32) | Mask of the Layer 2 protocol type. | As per the MIB. |
| hh3cAcI NamedM ACSrcMac (1.3.6.1.4.1.25506.2.8.2.3.2.1.5) | read-create | MacAddress | Standard MIB values. | Source MAC address. | As per the MIB. |
| hh3cAcI NamedM ACSrcMacWild (1.3.6.1.4.1.25506.2.8.2.3.2.1.6) | read-create | MacAddress | Standard MIB values. | Source MAC address mask. | As per the MIB. |
| hh3cAcI NamedM ACDstMac (1.3.6.1.4.1.25506.2.8.2.3.2.1.7) | read-create | MacAddress | Standard MIB values. | Destination MAC address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|---|--|-----------------|
| .2.8.2.3.2.1.7) | | | | | |
| hh3cAcINamedM ACDStMacWild (1.3.6.1.4.1.25506 .2.8.2.3.2.1.8) | read-create | MacAddress | Standard MIB values. | Destination MAC address mask. | As per the MIB. |
| hh3cAcINamedM ACLSapCode (1.3.6.1.4.1.25506 .2.8.2.3.2.1.9) | read-create | OCTET STRING | SIZE (0..32) | Encapsulation format of the frame. | As per the MIB. |
| hh3cAcINamedM ACLSapMask (1.3.6.1.4.1.25506 .2.8.2.3.2.1.10) | read-create | OCTET STRING | SIZE (0..32) | LSAP mask. | As per the MIB. |
| hh3cAcINamedM ACCos (1.3.6.1.4.1.25506 .2.8.2.3.2.1.11) | read-create | Integer32 | <ul style="list-style-type: none"> 0..7 255 | 802.1p priority in VLAN tags. | As per the MIB. |
| hh3cAcINamedM ACTimeRangeNa me (1.3.6.1.4.1.25506 .2.8.2.3.2.1.12) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAcINamedM ACCount (1.3.6.1.4.1.25506 .2.8.2.3.2.1.13) | read-only | Unsigned32 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cAcINamedM ACCountClear (1.3.6.1.4.1.25506 .2.8.2.3.2.1.14) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcINamedM ACEnable (1.3.6.1.4.1.25506 .2.8.2.3.2.1.15) | read-only | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcINamedM ACComment (1.3.6.1.4.1.25506 .2.8.2.3.2.1.16) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcINamedM ACLog (1.3.6.1.4.1.25506 .2.8.2.3.2.1.17) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the logging feature. | Not supported |
| hh3cAcINamedM ACCounting (1.3.6.1.4.1.25506 .2.8.2.3.2.1.18) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |

hh3cAcIEnUserTable

About this table

This table records user-defined ACL configuration information. Use this table to add or delete a user-defined ACL rule.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINumberGroupIndex, and h3cAcIEnUserRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|----------------------|-------------------------------------|---|
| hh3cAcIEnUserRuleIndex (1.3.6.1.4.1.25506.2.8.2.4.3.1.1) | not-accessible | Integer32 | 0..65534 | ACL rule ID. | As per the MIB. |
| hh3cAcIEnUserRowStatus (1.3.6.1.4.1.25506.2.8.2.4.3.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcIEnUserAction (1.3.6.1.4.1.25506.2.8.2.4.3.1.3) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> permit(2) deny(3) |
| hh3cAcIEnUserStartString (1.3.6.1.4.1.25506.2.8.2.4.3.1.4) | read-create | OCTET STRING | SIZE (0..255) | String for packet matching. | Not supported |
| hh3cAcIEnUserL2String (1.3.6.1.4.1.25506.2.8.2.4.3.1.5) | read-create | OCTET STRING | SIZE (0..255) | String for Layer 2 packet matching. | Default: "0,(null),(null)" |
| hh3cAcIEnUserMplsString (1.3.6.1.4.1.25506.2.8.2.4.3.1.6) | read-create | OCTET STRING | SIZE (0..255) | String for MPLS packet matching. | Not supported |
| hh3cAcIEnUserIPv4String (1.3.6.1.4.1.25506.2.8.2.4.3.1.7) | read-create | OCTET STRING | SIZE (0..255) | String for IPv4 packet matching. | Default: "0,(null),(null)" |
| hh3cAcIEnUserIPv6String (1.3.6.1.4.1.25506.2.8.2.4.3.1.8) | read-create | OCTET STRING | SIZE (0..255) | String for IPv6 packet matching. | Default: "0,(null),(null)" |
| hh3cAcIEnUserL4String (1.3.6.1.4.1.25506.2.8.2.4.3.1.9) | read-create | OCTET STRING | SIZE (0..255) | String for Layer 4 packet matching. | Default: "0,(null),(null)" |
| hh3cAcIEnUserL5String (1.3.6.1.4.1.25506.2.8.2.4.3.1.10) | read-create | OCTET STRING | SIZE (0..255) | String for Layer 5 packet matching. | Not supported |
| hh3cAcIEnUserTimeRangeName (1.3.6.1.4.1.25506.2.8.2.4.3.1.11) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAcIEnUserCount | read-only | Unsigned32 | Standard MIB | Number of packets matching | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|--|-----------------|
| (1.3.6.1.4.1.25506.2.8.2.4.3.1.12) | | | values. | the ACL rule. | |
| hh3cAcIEnUserCountClear (1.3.6.1.4.1.25506.2.8.2.4.3.1.13) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcIEnUserEnable (1.3.6.1.4.1.25506.2.8.2.4.3.1.14) | read-only | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcIEnUserComment (1.3.6.1.4.1.25506.2.8.2.4.3.1.15) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcIEnUserLogging (1.3.6.1.4.1.25506.2.8.2.4.3.1.16) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the logging feature. | Not supported |
| hh3cAcIEnUserCounting (1.3.6.1.4.1.25506.2.8.2.4.3.1.17) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |

hh3cAcINamedUserTable

About this table

This table records named user-defined ACL configuration information. Use this table to add or delete a rule for a named user-defined ACL rule.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cAcINumberGroupType, h3cAcINamedGroupName, and h3cAcIEnUserRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|----------------------|-----------------------------|---|
| hh3cAcINamedUserRowStatus (1.3.6.1.4.1.25506.2.8.2.4.4.1.1) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cAcINamedUserAct (1.3.6.1.4.1.25506.2.8.2.4.4.1.2) | read-create | RuleAction | Standard MIB values. | Action type. | <ul style="list-style-type: none"> permit(2) deny(3) |
| hh3cAcINamedUserStartString (1.3.6.1.4.1.25506.2.8.2.4.4.1.3) | read-create | OCTET STRING | SIZE (0..255) | String for packet matching. | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|--|----------------------------|
| hh3cAcINamedUserL2String (1.3.6.1.4.1.25506.2.8.2.4.4.1.4) | read-create | OCTET STRING | SIZE (0..255) | String for Layer 2 packet matching. | Default: "0,(null),(null)" |
| hh3cAcINamedUserMplsString (1.3.6.1.4.1.25506.2.8.2.4.4.1.5) | read-create | OCTET STRING | SIZE (0..255) | String for MPLS packet matching. | Not supported |
| hh3cAcINamedUserIPv4String (1.3.6.1.4.1.25506.2.8.2.4.4.1.6) | read-create | OCTET STRING | SIZE (0..255) | String for IPv4 packet matching. | Default: "0,(null),(null)" |
| hh3cAcINamedUserIPv6String (1.3.6.1.4.1.25506.2.8.2.4.4.1.7) | read-create | OCTET STRING | SIZE (0..255) | String for IPv6 packet matching. | Default: "0,(null),(null)" |
| hh3cAcINamedUserL4String (1.3.6.1.4.1.25506.2.8.2.4.4.1.8) | read-create | OCTET STRING | SIZE (0..255) | String for Layer 4 packet matching. | Default: "0,(null),(null)" |
| hh3cAcINamedUserL5String (1.3.6.1.4.1.25506.2.8.2.4.4.1.9) | read-create | OCTET STRING | SIZE (0..255) | String for Layer 5 packet matching. | Not supported |
| hh3cAcINamedUserTimeRangeName (1.3.6.1.4.1.25506.2.8.2.4.4.1.10) | read-create | OCTET STRING | SIZE (0..32) | Time range name. | As per the MIB. |
| hh3cAcINamedUserCount (1.3.6.1.4.1.25506.2.8.2.4.4.1.11) | read-only | Unsigned32 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cAcINamedUserCountClear (1.3.6.1.4.1.25506.2.8.2.4.4.1.12) | read-write | CounterClear | Standard MIB values. | Clear the rule match count. | Not supported |
| hh3cAcINamedUserEnable (1.3.6.1.4.1.25506.2.8.2.4.4.1.13) | read-only | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the rule. | As per the MIB. |
| hh3cAcINamedUserComment (1.3.6.1.4.1.25506.2.8.2.4.4.1.14) | read-create | OCTET STRING | SIZE (0..127) | Rule description. | Read and write. |
| hh3cAcINamedUserLog (1.3.6.1.4.1.25506.2.8.2.4.4.1.15) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of the logging feature. | Not supported |
| hh3cAcINamedUserCounting (1.3.6.1.4.1.25506.2.8.2.4.4.1.16) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of counting packets matching the rule. | As per the MIB. |

hh3cAclResourceUsageTable

About this table

This table obtains the ACL TCAM resource usage information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cAclResourceChassis, hh3cAclResourceSlot, hh3cAclResourceChip, and hh3cAclResourceType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|----------------------|--|-----------------|
| hh3cAclResourceChassis (1.3.6.1.4.1.25506.2.8.2.5.1.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Chassis number. | As per the MIB. |
| hh3cAclResourceSlot (1.3.6.1.4.1.25506.2.8.2.5.1.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Slot number. | As per the MIB. |
| hh3cAclResourceChip (1.3.6.1.4.1.25506.2.8.2.5.1.1.3) | not-accessible | Unsigned32 | Standard MIB values. | Chip number that the ACL TCAM resource maps to. | As per the MIB. |
| hh3cAclResourceType (1.3.6.1.4.1.25506.2.8.2.5.1.1.4) | not-accessible | Integer32 | 1..255 | Type of the ACL TCAM resources. | As per the MIB. |
| hh3cAclPortRange (1.3.6.1.4.1.25506.2.8.2.5.1.1.5) | read-only | OCTET STRING | SIZE (0..255) | Port range of the ACL TCAM resources. | As per the MIB. |
| hh3cAclResourceTotal (1.3.6.1.4.1.25506.2.8.2.5.1.1.6) | read-only | Unsigned32 | Standard MIB values. | Total number of the resources of the current type. | As per the MIB. |
| hh3cAclResourceReserved (1.3.6.1.4.1.25506.2.8.2.5.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Number of reserved resources of the current type. | As per the MIB. |
| hh3cAclResourceConfigured (1.3.6.1.4.1.25506.2.8.2.5.1.1.8) | read-only | Unsigned32 | Standard MIB values. | Number of allocated resources of the current type. | As per the MIB. |
| hh3cAclResourceUsagePercent (1.3.6.1.4.1.25506.2.8.2.5.1.1.9) | read-only | Unsigned32 | Standard MIB values. | Usage of the resources of the current type. | As per the MIB. |
| hh3cAclResourceTypeDescription (1.3.6.1.4.1.25506.2.8.2.5.1.1.10) | read-only | OCTET STRING | SIZE (0..31) | Description of the ACL resource type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------|--------|--------|-------------|-------------|----------------|
| .2.8.2.5.1.1.10) | | | | | |

hh3cAclIntervalTable

About this table

This table records ACL logging and notification configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is h3cAclIntervalType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|---|------------------------------|-----------------|
| hh3cAclIntervalType (1.3.6.1.4.1.25506.2.8.2.6.1.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> logging(1) trap(2) | Object type of the interval. | As per the MIB. |
| hh3cAclIntervalValue (1.3.6.1.4.1.25506.2.8.2.6.1.1.2) | read-create | Integer32 | 5..1440 | Interval value. | As per the MIB. |
| hh3cAclIntervalRowStatus (1.3.6.1.4.1.25506.2.8.2.6.1.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3cPfilterApplyTable

About this table

This MIB records packet filter application configuration. You can apply or cancel the packet filter configuration on a specified entity.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cPfilterApplyObjType, h3cPfilterApplyObjIndex, h3cPfilterApplyDirection, h3cPfilterApplyAclType, and h3cPfilterApplyAclIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------|----------------|---------|--|----------------------------------|----------------------------------|
| hh3cPfilterApplyObjType | not-accessible | INTEGER | <ul style="list-style-type: none"> interface (1) vlan(2) | Entity type of the packet filter | Implementation varies by product |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---|---|---|
| (1.3.6.1.4.1.25506.2.8.3.2.1.1) | | | <ul style="list-style-type: none"> global(3) | application. | |
| hh3cPfilterApplyObjIndex (1.3.6.1.4.1.25506.2.8.3.2.1.2) | not-accessible | Integer32 | 0..2147483647 | Packet filter application index. | As per the MIB. |
| hh3cPfilterApplyDirection (1.3.6.1.4.1.25506.2.8.3.2.1.3) | not-accessible | DirectionType | Standard MIB values. | Packet filter application direction. | As per the MIB. |
| hh3cPfilterApplyAcclType (1.3.6.1.4.1.25506.2.8.3.2.1.4) | not-accessible | INTEGER | <ul style="list-style-type: none"> ipv4(1) ipv6(2) default(3) mac(4) user(5) | Type of the ACL in the packet filter. | Implementation varies by product |
| hh3cPfilterApplyAcclIndex (1.3.6.1.4.1.25506.2.8.3.2.1.5) | not-accessible | Integer32 | 0 2000..5999 | Number of the ACL in the packet filter. | Implementation varies by product |
| hh3cPfilterApplyHardwareCount (1.3.6.1.4.1.25506.2.8.3.2.1.6) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of hardware counting. | Implementation varies by product |
| hh3cPfilterApplySequence (1.3.6.1.4.1.25506.2.8.3.2.1.7) | read-only | Unsigned32 | Standard MIB values. | Packet filtering application sequence number. | As per the MIB. |
| hh3cPfilterApplyCounterClear (1.3.6.1.4.1.25506.2.8.3.2.1.8) | read-write | CounterClear | Standard MIB values. | Clear statistics for the specified ACL. | As per the MIB. |
| hh3cPfilterApplyRowStatus (1.3.6.1.4.1.25506.2.8.3.2.1.9) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cPfilterAcclGroupRunInfoTable

About this table

This table records ACL running information in packet filter. Use this table to obtain the packet filter status and statistics from a specified entity.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cPfilterRunApplyObjType, hh3cPfilterRunApplyObjIndex, hh3cPfilterRunApplyDirection, hh3cPfilterRunApplyAcclType, and hh3cPfilterRunApplyAcclIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|--|----------------------------------|
| hh3cPfilterRunApplyObjType (1.3.6.1.4.1.25506.2.8.3.3.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> interface (1) vlan(2) global(3) | Type of the entity on which the packet filter running information is obtained. | Implementation varies by product |
| hh3cPfilterRunApplyObjIndex (1.3.6.1.4.1.25506.2.8.3.3.1.2) | not-accessible | Integer32 | 0..2147483647 | Packet filter application index. | As per the MIB. |
| hh3cPfilterRunApplyDirection (1.3.6.1.4.1.25506.2.8.3.3.1.3) | not-accessible | DirectionType | Standard MIB values. | Direction of the packet filter application. | As per the MIB. |
| hh3cPfilterRunApplyAclType (1.3.6.1.4.1.25506.2.8.3.3.1.4) | not-accessible | INTEGER | <ul style="list-style-type: none"> ipv4(1) ipv6(2) default(3) mac(4) user(5) | Type of the ACL used in the packet filter application. | Implementation varies by product |
| hh3cPfilterRunApplyAclIndex (1.3.6.1.4.1.25506.2.8.3.3.1.5) | not-accessible | Integer32 | <ul style="list-style-type: none"> 1..3 2000..5999 | Number of the ACL used in the packet filter application. | Implementation varies by product |
| hh3cPfilterAclGroupStatus (1.3.6.1.4.1.25506.2.8.3.3.1.6) | read-only | INTEGER | <ul style="list-style-type: none"> success(1) failed(2) partialSuccess(3) | Application status of the ACL for the packet filter. | As per the MIB. |
| hh3cPfilterAclGroupCountStatus (1.3.6.1.4.1.25506.2.8.3.3.1.7) | read-only | INTEGER | <ul style="list-style-type: none"> success(1) failed(2) partialSuccess(3) | Enabling status of the hardware count for the ACL used by the packet filter. | Implementation varies by product |
| hh3cPfilterAclGroupPermitPkts (1.3.6.1.4.1.25506.2.8.3.3.1.8) | read-only | Counter64 | Standard MIB values. | Number of packets permitted by the ACL. | Implementation varies by product |
| hh3cPfilterAclGroupPermitBytes (1.3.6.1.4.1.25506.2.8.3.3.1.9) | read-only | Counter64 | Standard MIB values. | Number of bytes permitted by the ACL. | Implementation varies by product |
| hh3cPfilterAclGroupDenyPkts (1.3.6.1.4.1.25506.2.8.3.3.1.10) | read-only | Counter64 | Standard MIB values. | Number of packets dropped by the ACL. | Implementation varies by product |
| hh3cPfilterAclGroupDenyBytes (1.3.6.1.4.1.25506.2.8.3.3.1.11) | read-only | Counter64 | Standard MIB values. | Number of bytes dropped by the ACL. | Implementation varies by product |

hh3cPfilterAclRuleRunInfoTable

About this table

This table records the ACL rule running information for the packet filter. Use this table to obtain the packet filter status and statistics on an entity.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cPfilterRunApplyObjType, h3cPfilterRunApplyObjIndex, h3cPfilterRunApplyDirection, h3cPfilterRunApplyAclType, h3cPfilterRunApplyAclIndex, and h3cPfilterAclRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--|--|----------------------------------|
| hh3cPfilterAclRuleIndex (1.3.6.1.4.1.25506.2.8.3.4.1.1) | not-accessible | Integer32 | 0..65534 | ACL rule ID. | As per the MIB. |
| hh3cPfilterAclRuleStatus (1.3.6.1.4.1.25506.2.8.3.4.1.2) | read-only | INTEGER | <ul style="list-style-type: none">• success(1)• failed(2)• partialSuccess(3) | Application status of the ACL rule. | As per the MIB. |
| hh3cPfilterAclRuleCountStatus (1.3.6.1.4.1.25506.2.8.3.4.1.3) | read-only | INTEGER | <ul style="list-style-type: none">• success(1)• failed(2)• partialSuccess(3) | Enabling status of the rule match count. | Implementation varies by product |
| hh3cPfilterAclRuleMatchPackets (1.3.6.1.4.1.25506.2.8.3.4.1.4) | read-only | Counter64 | Standard MIB values. | Number of packets matching the ACL rule. | Implementation varies by product |
| hh3cPfilterAclRuleMatchBytes (1.3.6.1.4.1.25506.2.8.3.4.1.5) | read-only | Counter64 | Standard MIB values. | Number of bytes matching the ACL rule. | Implementation varies by product |

hh3cPfilterStatisticSumTable

About this table

Use this table to obtain the accumulated packet filter statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cPfilterSumDirection, h3cPfilterSumAcIType, h3cPfilterSumAcIIndex, and h3cPfilterSumRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|--|---|-------------------------------------|
| hh3cPfilterSumDir ection (1.3.6.1.4.1.25506 .2.8.3.5.1.1) | not-accessible | DirectionType | Standard MIB values. | Direction of the application for which the accumulated statistics is obtained. | As per the MIB. |
| hh3cPfilterSumAcI Type (1.3.6.1.4.1.25506 .2.8.3.5.1.2) | not-accessible | INTEGER | <ul style="list-style-type: none">• ipv4(1)• ipv6(2)• mac(3)• user(4) | Type of the ACL for which the accumulated statistics is obtained. | Implementation varies by product |
| hh3cPfilterSumAcI Index (1.3.6.1.4.1.25506 .2.8.3.5.1.3) | not-accessible | Integer32 | 2000..5999 | Number of the ACL for which the accumulated statistics is obtained. | Implementation varies by product |
| hh3cPfilterSumRu leIndex (1.3.6.1.4.1.25506 .2.8.3.5.1.4) | not-accessible | Integer32 | 0..65534 | Number of the ACL rule for which the accumulated statistics is obtained. | As per the MIB. |
| hh3cPfilterSumRu leMatchPackets (1.3.6.1.4.1.25506 .2.8.3.5.1.5) | read-only | Counter64 | Standard MIB values. | Number of packets matching the rule in the packet filter. | Implementation varies by product |
| hh3cPfilterSumRu leMatchBytes (1.3.6.1.4.1.25506 .2.8.3.5.1.6) | read-only | Counter64 | Standard MIB values. | Number of bytes matching the rule in the packet filter. | Implementation varies by product |

hh3cPfilter2ApplyTable

About this table

This table records the packet filter application configuration. Use this table to apply or cancel the packet filter configuration on an entity.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cPfilter2ApplyObjType, h3cPfilter2ApplyObjIndex, h3cPfilter2ApplyDirection, h3cPfilter2ApplyAcIType, and h3cPfilter2ApplyAcIIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------|---------------------------|---------|---|------------------------------------|-------------------------------------|
| hh3cPfilter2Apply ObjType | accessible-for-noti fy | INTEGER | <ul style="list-style-type: none">• interface (1) | Type of the application object. | Implementation varies by product |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------------|---|--|----------------------------------|
| (1.3.6.1.4.1.25506.2.8.3.6.1.1) | | | <ul style="list-style-type: none"> vlan(2) global(3) | | |
| hh3cPfilter2ApplyObjIndex (1.3.6.1.4.1.25506.2.8.3.6.1.2) | accessible-for-notify | Integer32 | 0..2147483647 | Index of the application object. | As per the MIB. |
| hh3cPfilter2ApplyDirection (1.3.6.1.4.1.25506.2.8.3.6.1.3) | accessible-for-notify | DirectionType | Standard MIB values. | Packet filter application direction. | As per the MIB. |
| hh3cPfilter2ApplyAclType (1.3.6.1.4.1.25506.2.8.3.6.1.4) | accessible-for-notify | INTEGER | <ul style="list-style-type: none"> ipv4(1) ipv6(2) default(3) mac(4) user(5) | Type of the ACL used by the packet filter. | Implementation varies by product |
| hh3cPfilter2ApplyAclIndex (1.3.6.1.4.1.25506.2.8.3.6.1.5) | accessible-for-notify | OCTET STRING | SIZE (1..63) | Number or name of the ACL used by the packet filter. | Implementation varies by product |
| hh3cPfilter2ApplyHardCount (1.3.6.1.4.1.25506.2.8.3.6.1.6) | read-create | TruthValue | <ul style="list-style-type: none"> true(1) false(2) | Enabling status of hardware counting. | Implementation varies by product |
| hh3cPfilter2ApplySequence (1.3.6.1.4.1.25506.2.8.3.6.1.7) | read-only | Unsigned32 | Standard MIB values. | Packet filter application sequence number. | As per the MIB. |
| hh3cPfilter2ApplyCountClear (1.3.6.1.4.1.25506.2.8.3.6.1.8) | read-write | CounterClear | Standard MIB values. | Clear statistics for the specified ACL. | As per the MIB. |

hh3cPfilter2AclGroupRunInfoTable

About this table

This table records the ACL running information for the packet filter. Use this table to obtain the packet filter status and statistics from an entity. Different from h3cPfilterAclGroupRunInfoTable, hh3cPfilter2RunApplyAclIndex in this table supports obtaining statistics for numbered and named ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cPfilter2RunApplyObjType, h3cPfilter2RunApplyObjIndex, h3cPfilter2RunApplyDirection, h3cPfilter2RunApplyAclType, and h3cPfilter2RunApplyAclIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---|--|----------------------------------|
| hh3cPfilter2RunA pplyObjType (1.3.6.1.4.1.25506 .2.8.3.7.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> • interface (1) • vlan(2) • global(3) | Type of the entity on which the ACL running information is obtained. | Implementation varies by product |
| hh3cPfilter2RunA pplyObjIndex (1.3.6.1.4.1.25506 .2.8.3.7.1.2) | not-accessible | Integer32 | 0..2147483647 | Packet filter application index. | As per the MIB. |
| hh3cPfilter2RunA pplyDirection (1.3.6.1.4.1.25506 .2.8.3.7.1.3) | not-accessible | DirectionType | Standard MIB values. | Packet filter application direction. | As per the MIB. |
| hh3cPfilter2RunA pplyAcIType (1.3.6.1.4.1.25506 .2.8.3.7.1.4) | not-accessible | INTEGER | <ul style="list-style-type: none"> • ipv4(1) • ipv6(2) • default(3) • mac(4) • user(5) | Type of the ACL used in the packet filter. | Implementation varies by product |
| hh3cPfilter2RunA pplyAcIIndex (1.3.6.1.4.1.25506 .2.8.3.7.1.5) | not-accessible | OCTET STRING | SIZE (1..63) | Number of name of the ACL. | Implementation varies by product |
| hh3cPfilter2AcIGr oupStatus (1.3.6.1.4.1.25506 .2.8.3.7.1.6) | read-only | INTEGER | <ul style="list-style-type: none"> • success(1) • failed(2) • partialSuccess (3) | Application status of the ACL. | As per the MIB. |
| hh3cPfilter2AcIGr oupCountStatus (1.3.6.1.4.1.25506 .2.8.3.7.1.7) | read-only | INTEGER | <ul style="list-style-type: none"> • success(1) • failed(2) • partialSuccess (3) | Enabling status of the hardware count for the ACL used by the packet filter. | Implementation varies by product |
| hh3cPfilter2AcIGr oupPermitPkts (1.3.6.1.4.1.25506 .2.8.3.7.1.8) | read-only | Counter64 | Standard MIB values. | Number of packets permitted by the ACL. | Implementation varies by product |
| hh3cPfilter2AcIGr oupPermitBytes (1.3.6.1.4.1.25506 .2.8.3.7.1.9) | read-only | Counter64 | Standard MIB values. | Number of bytes permitted by the ACL. | Implementation varies by product |
| hh3cPfilter2AcIGr oupDenyPkts (1.3.6.1.4.1.25506 .2.8.3.7.1.10) | read-only | Counter64 | Standard MIB values. | Number of packets dropped by the ACL. | Implementation varies by product |
| hh3cPfilter2AcIGr oupDenyBytes (1.3.6.1.4.1.25506 .2.8.3.7.1.11) | read-only | Counter64 | Standard MIB values. | Number of bytes dropped by the ACL. | Implementation varies by product |

hh3cPfilter2AclRuleRunInfoTable

About this table

This table records the ACL rule running information for the packet filter. Use this table to obtain the packet filter status and statistics from an entity. Different from the tableh3cPfilterAclRuleRunInfoTable, the index in this table supports obtaining statistics for numbered and named ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cPfilter2RunApplyObjType, h3cPfilter2RunApplyObjIndex, h3cPfilter2RunApplyDirection, h3cPfilter2RunApplyAclType, h3cPfilter2RunApplyAclIndex, and h3cPfilter2AclRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|--|--|-----------------|
| hh3cPfilter2AclRuleIndex (1.3.6.1.4.1.25506.2.8.3.8.1.1) | accessible-for-notify | Integer32 | 0..65534 | ACL rule ID. | As per the MIB. |
| hh3cPfilter2AclRuleStatus (1.3.6.1.4.1.25506.2.8.3.8.1.2) | read-only | INTEGER | <ul style="list-style-type: none">• success(1)• failed(2)• partialSuccess(3) | Application status of the ACL rule. | As per the MIB. |
| hh3cPfilter2AclRuleCountStatus (1.3.6.1.4.1.25506.2.8.3.8.1.3) | read-only | INTEGER | <ul style="list-style-type: none">• success(1)• failed(2)• partialSuccess(3) | Enabling status of the rule match count. | As per the MIB. |
| hh3cPfilter2AclRuleMatchPkts (1.3.6.1.4.1.25506.2.8.3.8.1.4) | read-only | Counter64 | Standard MIB values. | Number of packets matching the ACL rule. | As per the MIB. |
| hh3cPfilterAclNameRuleMatchBytes (1.3.6.1.4.1.25506.2.8.3.8.1.5) | read-only | Counter64 | Standard MIB values. | Number of bytes matching the ACL rule. | Not support |

hh3cPfilter2StatisticSumTable

About this table

This table records the accumulated ACL rule statistics for the packet filter. Different from the h3cPfilterStatisticSumTable, the h3cPfilter2SumAclIndex in this table supports numbered and named ACL.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cPfilter2SumDirection, hh3cPfilter2SumAcIType, hh3cPfilter2SumAcIIndex, and hh3cPfilter2SumRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|--|----------------------------------|
| hh3cPfilter2SumDirection (1.3.6.1.4.1.25506.2.8.3.9.1.1) | not-accessible | DirectionType | Standard MIB values. | Direction of packet filter. | As per the MIB. |
| hh3cPfilter2SumAcIType (1.3.6.1.4.1.25506.2.8.3.9.1.2) | not-accessible | INTEGER | <ul style="list-style-type: none">• ipv4(1)• ipv6(2)• mac(3)• user(4) | Type of the ACL in the packet filter. | Implementation varies by product |
| hh3cPfilter2SumAcIIndex (1.3.6.1.4.1.25506.2.8.3.9.1.3) | not-accessible | OCTET STRING | SIZE (1..63) | Number or name of the ACL. | Implementation varies by product |
| hh3cPfilter2SumRuleIndex (1.3.6.1.4.1.25506.2.8.3.9.1.4) | not-accessible | INTEGER | 0..65534 | ACL rule ID. | As per the MIB. |
| hh3cPfilter2SumRuleMatchPackets (1.3.6.1.4.1.25506.2.8.3.9.1.5) | read-only | Counter64 | Standard MIB values. | Number of packets matching the ACL rule. | Implementation varies by product |

Notifications

This section describes the HH3C-ACL-MIB notifications.

hh3cAcIRuleMatchCount

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.8.5.0.2 | Notification for the ACL rule matches. | Informational | - | - | OFF |

Description

When a trap interval is set through the table hh3cAcIIntervalTable, notifications will be generated at intervals. The notification information includes the number of rule matches in the interval.

Status control

ON

- CLI: Use the `acl trap interval interval` command.
- MIB: Set hh3cAcIIntervalType to trap(2), set the hh3cAcIIntervalValue to a value in the range of 5 to 1440, and use the table hh3cAcIIntervalTable to perform a create operation.

OFF

- MIB: Use the table hh3cAcIIntervalTable to perform a destroy operation.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|--------------|---|
| 1.3.6.1.4.1.25506.2.8.3.6.1.1 (hh3cPfilter2ApplyObjType) | Object to which the ACL is applied. | Yes | INTEGER | <ul style="list-style-type: none">• interface(1)• vlan(2)• global(3) |
| 1.3.6.1.4.1.25506.2.8.3.6.1.2 (hh3cPfilter2ApplyObjIndex) | Object index. | Yes | Integer32 | 0 to 2147483647 |
| 1.3.6.1.4.1.25506.2.8.3.6.1.3 (hh3cPfilter2ApplyDirection) | Direction of the packet filter. | Yes | INTEGER | <ul style="list-style-type: none">• inbound(1)• outbound(2) |
| 1.3.6.1.4.1.25506.2.8.3.6.1.4 (hh3cPfilter2ApplyAclType) | Type of the ACL. | No | INTEGER | <ul style="list-style-type: none">• ipv4(1)• ipv6(2)• default(3)• mac(4)• user(5) |
| 1.3.6.1.4.1.25506.2.8.3.6.1.5 (hh3cPfilter2ApplyAclIndex) | ACL index. | Yes | OCTET STRING | SIZE (1 to 63) |
| 1.3.6.1.4.1.25506.2.8.3.8.1.1 (hh3cPfilter2AclRuleIndex) | ACL rule index | Yes | Integer32 | 0 to 65534. |
| 1.3.6.1.4.1.25506.2.8.3.8.1.4 (hh3cPfilter2AclRuleMatchPackets) | ACL rule match count. | No | Counter64 | 0 to 18446744073709551615. |

Recommended action

No action is required.

hh3cAclFirstIPv4PktCaptured

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.8.5.0.3 | Notification for the first IPv4 packet of a flow that match the ACL. | Informational | - | - | OFF |

Description

After a trap interval is set through hh3cAclIntervalTable, a notification is generated when the first packet of a flow matches an ACL rule in the packet filter. The notification information includes the first packet information.

Status control

ON

- CLI: Use the `acl trap interval interval` command.
- MIB: Set hh3cAclIntervalType to trap(2), set hh3cAclIntervalValue to a value in the range of 5 to 1440, and use the table hh3cAclIntervalTable to perform a create operation.

OFF

- MIB: Use the table hh3cAclIntervalTable to perform a destroy operation.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|--------------|--|
| 1.3.6.1.4.1.25506.2.8.3.6.1.5 (hh3cPfilter2ApplyAclIndex) | ACL index. | Yes | OCTET STRING | SIZE (1 to 63) |
| 1.3.6.1.4.1.25506.2.8.3.8.1.1 (hh3cPfilter2AclRuleIndex) | ACL rule index. | Yes | Integer32 | 0 to 65534 |
| 1.3.6.1.4.1.25506.2.8.4.9 (hh3cAclPacketIfName) | Interface name. | Yes | OCTET STRING | SIZE (0 to 255) |
| 1.3.6.1.4.1.25506.2.8.4.10 (hh3cAclPacketDirection) | Application direction. | Yes | INTEGER | <ul style="list-style-type: none"> inbound(1) outbound(2) |
| 1.3.6.1.4.1.25506.2.8.4.11 (hh3cAclPacketBAGG) | Aggregation group ID. | No | Integer32 | 0 to 2048 |
| 1.3.6.1.4.1.25506.2.8.4.12 (hh3cAclPacketVlanID) | VLAN ID | No | Integer32 | 0 to 4094 |
| 1.3.6.1.4.1.25506.2.8.4.13 (hh3cAclPacketSrcIP) | Packet source IP address. | No | OCTET STRING | SIZE (1 to 255) |
| 1.3.6.1.4.1.25506.2.8.4.14 (hh3cAclPacketDstIP) | Packet destination IP address. | No | OCTET STRING | SIZE (1 to 255) |
| 1.3.6.1.4.1.25506.2.8.4.15 (hh3cAclPacketProtocol) | Protocol. | No | Integer32 | 0 to 255 |
| 1.3.6.1.4.1.25506.2.8.4.16 (hh3cAclPacketDscp) | DSCP priority. | No | Integer32 | 0 to 2147483647 |
| 1.3.6.1.4.1.25506.2.8.4.18 (hh3cAclPacketIcmpIcmpType) | ICMP message type. | No | Integer32 | 0 to 255 |
| 1.3.6.1.4.1.25506.2.8.4.19 (hh3cAclPacketIcmpIcmpCode) | ICMP message code. | No | Integer32 | 0 to 255 |
| 1.3.6.1.4.1.25506.2.8.4.20 (hh3cAclPacketTcpFlags) | Packet TCP flag. | No | INTEGER | <ul style="list-style-type: none"> tcpack(1) tcpfin(2) tcppsh(3) tcprst(4) tcpsyn(5) tcpurg(6) invalid(255) |
| 1.3.6.1.4.1.25506.2.8.4.21 (hh3cAclPacketSrcPort) | Source port number of the packet. | No | Integer32 | 0 to 65535 |
| 1.3.6.1.4.1.25506.2.8.4.22 (hh3cAclPacketDstPort) | Destination port number of the packet. | No | Integer32 | 0 to 65535 |

Recommended action

No action is required.

hh3cAcIFirstIPv6PktCaptured

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.8.5.0.4 | Notification for the first IPv6 packet of a flow that match the ACL. | Informational | - | - | OFF |

Description

When a trap interval is set through the table hh3cAcIIntervalTable, notifications will be generated at intervals. The notification information includes the number of rule matches in the interval.

Status control

ON

- CLI: Use the `acl trap interval interval` command.
- MIB: Set hh3cAcIIntervalType to trap(2), set hh3cAcIIntervalValue to a value in the range of 5 to 1440, and use the table hh3cAcIIntervalTable to perform a create operation.

OFF

- MIB: Use the table hh3cAcIIntervalTable to perform a destroy action.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|--------------|---|
| 1.3.6.1.4.1.25506.2.8.3.6.1.5 (hh3cPfilter2ApplyAcIIndex) | ACL index. | Yes | OCTET STRING | SIZE (1 to 63) |
| 1.3.6.1.4.1.25506.2.8.3.8.1.1 (hh3cPfilter2AcIRuleIndex) | ACL rule index. | Yes | Integer32 | 0 to 65534 |
| 1.3.6.1.4.1.25506.2.8.4.9 (hh3cAcIPacketIfName) | Interface name. | Yes | OCTET STRING | SIZE (0 to 255) |
| 1.3.6.1.4.1.25506.2.8.4.10 (hh3cAcIPacketDirection) | Application direction. | Yes | INTEGER | <ul style="list-style-type: none">inbound(1)outbound(2) |
| 1.3.6.1.4.1.25506.2.8.4.11 (hh3cAcIPacketBAGG) | Aggregation group ID. | No | Integer32 | 0 to 2048 |
| 1.3.6.1.4.1.25506.2.8.4.12 (hh3cAcIPacketVlanID) | VLAN ID | No | Integer32 | 0 to 4094 |
| 1.3.6.1.4.1.25506.2.8.4.13 (hh3cAcIPacketSrcIP) | Packet source IP address. | No | OCTET STRING | SIZE (1 to 255) |
| 1.3.6.1.4.1.25506.2.8.4.14 (hh3cAcIPacketDstIP) | Packet Destination IP address. | No | OCTET STRING | SIZE (1 to 255) |
| 1.3.6.1.4.1.25506.2.8.4.15 (hh3cAcIPacketProtocol) | Packet protocol. | No | Integer32 | 0 to 255 |
| 1.3.6.1.4.1.25506.2.8.4.16 (hh3cAcIPacketDscp) | Packet DSCP value. | No | Integer32 | 0 to 2147483647 |
| 1.3.6.1.4.1.25506.2.8.4.17 (hh3cAcIPacketFlowLabel) | Packet flow label. | No | Unsigned32 | <ul style="list-style-type: none">0 to 10485754294967295 |
| 1.3.6.1.4.1.25506.2.8.4.18 (hh3cAcIPacketIcmpIcmpType) | IGMP message type. | No | Integer32 | 0 to 255 |

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|-----------|--|
| 1.3.6.1.4.1.25506.2.8.4.19 (hh3cAcIPLcmplgmpCode) | IGMP message code. | No | Integer32 | 0 to 255 |
| 1.3.6.1.4.1.25506.2.8.4.20 (hh3cAcIPacketTcpFlags) | TCP flag. | No | INTEGER | <ul style="list-style-type: none"> • tcpack(1) • tcpfin(2) • tcppsh(3) • tcprst(4) • tcpsyn(5) • tcpurg(6) • invalid(255) |
| 1.3.6.1.4.1.25506.2.8.4.21 (hh3cAcIPacketSrcPort) | Packet source port number. | No | Integer32 | 0 to 65535 |
| 1.3.6.1.4.1.25506.2.8.4.22 (hh3cAcIPacketDstPort) | Packet destination port number. | No | Integer32 | 0 to 65535 |

Recommended action

No action is required.

hh3cAcIFirstEthernetPktCaptured

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.8.5.0.5 | Notification for the first Layer 2 packet of a flow that match the ACL. | Informational | - | - | OFF |

Description

When a trap interval is set through the table hh3cAcIIntervalTable, notifications will be generated at intervals. The notification information includes the number of rule matches in the interval.

Status control

ON

- CLI: Use the `acl trap interval interval` command.
- MIB: Set hh3cAcIIntervalType to trap(2), set hh3cAcIIntervalValue to a value range of 5 to 1440, and use the table hh3cAcIIntervalTable to perform a create operation.

OFF

- MIB: Use the table hh3cAcIIntervalTable to perform a destroy operation.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-----------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.8.3.6.1.5 (hh3cPfilter2ApplyAcIIndex) | ACL index. | Yes | OCTET STRING | SIZE (1 to 63) |
| 1.3.6.1.4.1.25506.2.8.3.8.1.1 (hh3cPfilter2AcIRuleIndex) | ACL rule index. | Yes | Integer32 | 0 to 65534 |
| 1.3.6.1.4.1.25506.2.8.4.9 | Interface name. | Yes | OCTET STRING | SIZE (0 to 255) |

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|------------|---|
| (hh3cAclPacketIfName) | | | | |
| 1.3.6.1.4.1.25506.2.8.4.10 (hh3cAclPacketDirection) | Application direction. | Yes | INTEGER | <ul style="list-style-type: none"> inbound(1) outbound(2) |
| 1.3.6.1.4.1.25506.2.8.4.11 (hh3cAclPacketBAGG) | Aggregation group ID. | No | Integer32 | 0 to 2048 |
| 1.3.6.1.4.1.25506.2.8.4.12 (hh3cAclPacketVlanID) | VLAN ID | No | Integer32 | 0 to 4094 |
| 1.3.6.1.4.1.25506.2.8.4.23 (hh3cAclPacketSrcMacAddr) | Packet source MAC address. | No | MacAddress | OCTET STRING (SIZE (6)) |
| 1.3.6.1.4.1.25506.2.8.4.24 (hh3cAclPacketDstMacAddr) | Packet destination MAC address. | No | MacAddress | OCTET STRING (SIZE (6)) |
| 1.3.6.1.4.1.25506.2.8.4.25 (hh3cAclPacketMacTypeLen) | Link layer protocol type. | No | Integer32 | 0 to 65535 |
| 1.3.6.1.4.1.25506.2.8.4.26 (hh3cAclPacketVlanPCP) | VLAN priority. | No | Integer32 | <ul style="list-style-type: none"> 0 to 7 255 |

Recommended action

No action is required.

hh3cAclResourceTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.8.7.0.1 | TCAM resource usage notification. | Informational | - | - | OFF |

Description

Notifications will be generated for violations of threshold set by hh3cAclMib2ResourceThreshold at intervals set by hh3cAclMib2ResourceLogInterval. The notification information includes the Ternary Content Addressable Memory (TCAM) resource usage for each card.

Status control

ON

- CLI: Use the commands:
 - `acl resource threshold percent percent`
 - `acl resource log interval interval`
- MIB: Set hh3cAclMib2ResourceThreshold to a value in the range of 1 to 100, and set hh3cAclMib2ResourceLogInterval to a value in the range of 1 to 60.

OFF

- CLI: Use the commands:
 - `undo acl resource threshold percent`
 - `undo acl log threshold interval`
- MIB: Set hh3cAclMib2ResourceThreshold to 0, and set hh3cAclMib2ResourceLogInterval to 0.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|--------------|-----------------|
| 1.3.6.1.4.1.25506.2.8.6.1 (hh3cAcIResourceTypeName) | Resource type. | No | OCTET STRING | SIZE (1 to 255) |
| 1.3.6.1.4.1.25506.2.8.6.2 (hh3cAcIResourceUsage) | Resource usage. | No | Integer32 | 0 to 100 |
| 1.3.6.1.4.1.25506.2.8.6.3 (hh3cAcIResourceUsedEntries) | Number of used resources. | No | Integer32 | - |
| 1.3.6.1.4.1.25506.2.8.6.4 (hh3cAcIResourceTotalEntries) | Total number of resources. | No | INTEGER | - |
| 1.3.6.1.4.1.25506.2.8.2.1.1.5 (hh3cAcIMib2ResourceThreshold) | Resource usage alarm threshold. | No | Integer32 | 0 to 100 |
| 1.3.6.1.4.1.25506.2.8.6.5 (hh3cAcIResourceChassisID) | Chassis number. | Yes | Integer32 | - |
| 1.3.6.1.4.1.25506.2.8.6.6 (hh3cAcIResourceSlotID) | Slot number. | Yes | Integer32 | - |

Recommended action

No action is required.

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HH3C-CBQOS2-MIB

About this MIB

Use this MIB to configure class-based QoS (CBQoS).

CBQoS applies different service quality levels to different classes of packets, enabling multiple service support on the network.

MIB file name

hh3c-cbqos2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cQos2(65)

Scalar objects

h3cCBQoSClassifierIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| hh3cCBQoSClassifierIndexNext (1.3.6.1.4.1.25506.2.65.2.1.1.1) | read-only | Integer32 | Standard MIB values. | Index of the next available traffic class. | As per the MIB. |

h3cCBQoSBehaviorIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| hh3cCBQoSBehaviorIndexNext (1.3.6.1.4.1.25506.2.65.2.1.2.1) | read-only | Integer32 | Standard MIB values. | Index of the next available traffic behavior. | As per the MIB. |

h3cCBQoSPolicyIndexNext

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| hh3cCBQoSPolicyIndexNext (1.3.6.1.4.1.25506.2.65.2.1.3.1) | read-only | Integer32 | Standard MIB values. | Index of the next available QoS policy. | As per the MIB. |

h3cCBQoSApplyingStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|--------------------------------|-----------------|
| hh3cCBQoSApplyingStatus (1.3.6.1.4.1.25506.2.65.2.1.6.1) | read-only | INTEGER | <ul style="list-style-type: none">idle(1)busy(2) | QoS policy application status. | As per the MIB. |

Tabular objects

hh3cCBQoSClassifierCfgInfoTable

About this table

This table configures a traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cCBQoSClassifierIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|---------------------------------------|---|
| hh3cCBQoSClassifierIndex (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.1) | not-accessible | Integer32 | Standard MIB values. | Traffic class index. | As per the MIB. |
| hh3cCBQoSClassifierName (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.2) | read-create | OCTET STRING | SIZE (1..31) | Traffic class name. | As per the MIB. |
| hh3cCBQoSClassifierRuleCount (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.3) | read-only | Integer32 | Standard MIB values. | Number of match criteria. | As per the MIB. |
| hh3cCBQoSClassifierOperator (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.4) | read-create | INTEGER | <ul style="list-style-type: none">and(1)or(2) | Relationship among match criteria. | As per the MIB. |
| hh3cCBQoSClassifierLayer (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.5) | read-create | INTEGER | <ul style="list-style-type: none">unavailable(1)I2(2)I3(3)both(4) | Protocol layer for the traffic class. | This object is not configurable and is fixed at unavailable(1). |
| hh3cCBQoSClassifierType (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.6) | read-only | INTEGER | <ul style="list-style-type: none">systemDefined(1)userDefined(2) | Traffic class type. | Implementation varies by product. |
| hh3cCBQoSClassifierMatchRuleNextIndex | read-only | Integer32 | Standard MIB values. | Index used to create a match | If the value is 2147483647, the a match criterion |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|----------------------|-------------|---|
| (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.7) | | | | criterion. | cannot be created. |
| hh3cCBQoSClassifierRowStatus (1.3.6.1.4.1.25506.2.65.2.1.1.2.1.8) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |

hh3cCBQoSMatchRuleCfgInfoTable

About this table

This table configures match criteria for a traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSClassifierIndex and h3cCBQoSMatchRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|--|------------------------|-----------------------------------|
| hh3cCBQoSMatchRuleIndex (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.1) | not-accessible | Integer32 | Standard MIB values. | Match criterion index. | As per the MIB. |
| hh3cCBQoSMatchRuleIfNot (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.2) | read-create | INTEGER | <ul style="list-style-type: none"> • match(1) • notMatch (2) | Match attribute. | Implementation varies by product. |
| hh3cCBQoSMatchRuleType (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.3) | read-create | MatchRuleType | Standard MIB values. | Match criterion type. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|----------------------|--|-----------------|
| hh3cCBQoSMatchRuleStringValue (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.4) | read-create | OCTET STRING | SIZE (1..255) | Match criterion type string value. The corresponding match criterion types include: <ul style="list-style-type: none"> • IPv4acl • MACACL • UserACL • IPv6acl • Source-MAC • Destination-MAC • Classifier • Inbound-interface • VlanID • SourceIp • MplsLabel • SecondMplsLabel | As per the MIB. |
| hh3cCBQoSMatchRuleIntValue1 (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.5) | read-create | Unsigned32 | Standard MIB values. | Match criterion type integer value. The corresponding match criterion types include: <ul style="list-style-type: none"> • IPv4acl • MACACL • UserACL • IPv6acl • Software QoS • Hardware QoS • RtpPort • IpPrec • Dscp • Vlan8021p • MplsExp • SourceIp • QoSLocalID • AtmClp • FrDe • LocalPrecedence • DropPriority • ServiceDot1p • SecondMplsExp • PacketLength • ForwardingLayer | As per the MIB. |
| hh3cCBQoSMatchRuleIntValue2 | read-create | Unsigned32 | Standard MIB values. | Match criterion type integer value. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|----------------------|---|---|
| (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.6) | | | | The corresponding match criterion types include: <ul style="list-style-type: none"> RTP-PORT DSCP PacketLength | |
| hh3cCBQoSMatchhlpAddressType (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.7) | read-create | InetAddressType | Standard MIB values. | Match criterion type integer value. The corresponding match criterion type is SourceIP. | Not supported. The value is fixed at unknown(0). |
| hh3cCBQoSMatchhlpAddress (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.8) | read-create | InetAddress | Standard MIB values. | Match criterion type integer value. The corresponding integer value is a source IP address. | Not supported. The value is fixed at zero length. |
| hh3cCBQoSMatchhRuleRowStatus (1.3.6.1.4.1.25506.2.65.2.1.1.3.1.9) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSMatchCpProtoCfgTable

About this table

Use this MIB to configure a match criterion to match protocol traffic to a control plane.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSClassifierIndex and h3cCBQoSMatchRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|-------------------------|---|
| hh3cCBQoSMatchhCpProtoIfNot (1.3.6.1.4.1.25506.2.65.2.1.1.4.1.1) | read-create | INTEGER | <ul style="list-style-type: none"> match(1) matchNot(2) | Match attribute. | Implementation varies by product. |
| hh3cCBQoSMatchhCpProtoValue (1.3.6.1.4.1.25506.2.65.2.1.1.4.1.2) | read-create | OCTET STRING | SIZE (0..255) | Control plane protocol. | Implementation varies by product. |
| hh3cCBQoSMatchhCpProtoRowStatus (1.3.6.1.4.1.25506.2.65.2.1.1.4.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSMatchCpGroupCfgTable

About this table

Use this MIB to configure a match criterion to match protocol group traffic to a control plane.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSClassifierIndex and h3cCBQoSMatchRuleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|-------------------------------|---|
| hh3cCBQoSMatchCpGroupIfNot (1.3.6.1.4.1.25506.2.65.2.1.1.5.1.1) | read-create | INTEGER | <ul style="list-style-type: none">match(1)matchNot(2) | Match attribute. | Implementation varies by product. |
| hh3cCBQoSMatchCpGroupValue (1.3.6.1.4.1.25506.2.65.2.1.1.5.1.2) | read-create | INTEGER | <ul style="list-style-type: none">critical(1)important(2)management(3)normal(4)redirect(5)monitor(6)exception(7) | Control plane protocol group. | Implementation varies by product. |
| hh3cCBQoSMatchCpGroupRowStatus (1.3.6.1.4.1.25506.2.65.2.1.1.5.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">active(1)createAndGo(4)destroy(6) |

hh3cCBQoSBehaviorCfgInfoTable

About this table

This table configures match criteria for a traffic behavior.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------|----------------|-----------|--------------|------------------|-----------------|
| hh3cCBQoSBeha | not-accessible | Integer32 | Standard MIB | Traffic behavior | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|--|------------------------|---|
| vh3cCBQoSBehaviorIndex (1.3.6.1.4.1.25506.2.65.2.1.2.2.1.1) | | | values. | index. | |
| hh3cCBQoSBehaviorName (1.3.6.1.4.1.25506.2.65.2.1.2.2.1.2) | read-create | OCTET STRING | SIZE (1..31) | Traffic behavior name. | As per the MIB. |
| hh3cCBQoSBehaviorType (1.3.6.1.4.1.25506.2.65.2.1.2.2.1.3) | read-only | INTEGER | <ul style="list-style-type: none"> systemDefined(1) userDefined(2) | Traffic behavior type. | Implementation varies by product. |
| hh3cCBQoSBehaviorRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.2.1.4) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSBehaviorTable

About this table

This table configures a CAR action for a traffic behavior.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|----------------------|-------------|---|
| hh3cCBQoSBehaviorCir (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.1) | read-create | Unsigned32 | Standard MIB values. | CIR. | Implementation varies by product. |
| hh3cCBQoSBehaviorCbs (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.2) | read-create | Unsigned32 | Standard MIB values. | CBS. | Implementation varies by product. |
| hh3cCBQoSBehaviorEbs (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.3) | read-create | Unsigned32 | Standard MIB values. | EBS. | Implementation varies by product. |
| hh3cCBQoSBehaviorPir (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.4) | read-create | Unsigned32 | Standard MIB values. | PIR. | Implementation varies by product. |
| hh3cCBQoSBehaviorPbs (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.5) | read-create | Unsigned32 | Standard MIB values. | PBS. | Not supported. The value is fixed at 4294967295. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|--|---|
| hh3cCBQoSCarGreenAction (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.6) | read-create | CarAction | Standard MIB values. | Action to take on green packets. | Implementation varies by product. |
| hh3cCBQoSCarGreenRemarkValue (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.7) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for green packets. | As per the MIB. |
| hh3cCBQoSCarYellowAction (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.8) | read-create | CarAction | Standard MIB values. | Action to take on yellow packets. | Implementation varies by product. |
| hh3cCBQoSCarYellowRemarkValue (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.9) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for yellow packets. | As per the MIB. |
| hh3cCBQoSCarRedAction (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.10) | read-create | CarAction | Standard MIB values. | <ul style="list-style-type: none"> For VRP: Action to take on packets exceeding the CIR. For 10G: Action to take on packets exceeding the PIR. | Implementation varies by product. |
| hh3cCBQoSCarRedRemarkValue (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.11) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for red packets. | As per the MIB. |
| hh3cCBQoSCarPolicedPriorityMapType (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.12) | read-create | INTEGER | <ul style="list-style-type: none"> none (0) policed-service-map (1) local-precedence-dot1p-map (2) drop-precedence-map (3) | Priority map type. | Not supported. The value is fixed at none(0). |
| hh3cCBQoSCarRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.3.1.13) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSGtsCfgInfoTable

About this table

This table contains GTS configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|----------------------|---------------|---|
| hh3cCBQoSGTsCir (1.3.6.1.4.1.25506.2.65.2.1.2.5.1.1) | read-create | Unsigned32 | Standard MIB values. | CIR. | Implementation varies by product. |
| hh3cCBQoSGTsCbs (1.3.6.1.4.1.25506.2.65.2.1.2.5.1.2) | read-create | Unsigned32 | Standard MIB values. | CBS. | Implementation varies by product. |
| hh3cCBQoSGTsEbs (1.3.6.1.4.1.25506.2.65.2.1.2.5.1.3) | read-create | Unsigned32 | Standard MIB values. | EBS. | Implementation varies by product. |
| hh3cCBQoSGTsQueueLength (1.3.6.1.4.1.25506.2.65.2.1.2.5.1.4) | read-create | Integer32 | 1..1024 | Queue length. | As per the MIB. |
| hh3cCBQoSGTsRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.5.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">• active(1)• createAndGo(4)• destroy(6) |
| hh3cCBQoSGTsPir (1.3.6.1.4.1.25506.2.65.2.1.2.5.1.6) | read-create | Unsigned32 | Standard MIB values. | PIR. | Implementation varies by product. |

hh3cCBQoSRemarkCfgInfoTable

About this table

This table contains marking configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSBehaviorIndex and h3cCBQoSRemarkType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|----------------------------------|--|
| hh3cCBQoSRemarkType (1.3.6.1.4.1.25506.2.65.2.1.2.6.1.1) | not-accessible | RemarkType | Standard MIB values. | Marking type. | Implementation varies by product. |
| hh3cCBQoSRemarkValue (1.3.6.1.4.1.25506.2.65.2.1.2.6.1.2) | read-create | Integer32 | 0..4095 | Value to mark for green packets. | As per the MIB. |
| hh3cCBQoSRemarkRowStatus | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">• active(1)• createAndGo(|

| | | | | | |
|--------------------------------------|--|--|--|--|--------------------|
| (1.3.6.1.4.1.25506.2.65.2.1.2.6.1.3) | | | | | 4) • destroy(6) |
|--------------------------------------|--|--|--|--|--------------------|

hh3cCBQoSQueueCfgInfoTable

About this table

This table contains queuing configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------------|---|---------------------------|-----------------------------------|
| hh3cCBQoSQueueType (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.1) | read-create | QueueType | Standard MIB values. | Queuing type. | Implementation varies by product. |
| hh3cCBQoSQueueDropType (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.2) | read-create | INTEGER | <ul style="list-style-type: none"> unavailable(0) tail-drop(1) wred(2) | Packet drop type. | Not supported. |
| hh3cCBQoSQueueLength (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.3) | read-create | Integer32 | 1..2147483647 | Queue length. | Implementation varies by product. |
| hh3cCBQoSQueueBandwidthUnit (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.4) | read-create | QueueBandwidth Unit | Standard MIB values. | Bandwidth unit. | Implementation varies by product. |
| hh3cCBQoSQueueBandwidthValue (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.5) | read-create | Integer32 | <ul style="list-style-type: none"> 1..100000000 2147483647 | Bandwidth value. | Implementation varies by product. |
| hh3cCBQoSQueueCbs (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.6) | read-create | Integer32 | <ul style="list-style-type: none"> 32..1000000000 2147483647 | CBS. | Implementation varies by product. |
| hh3cCBQoSQueueQueueNumber (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.7) | read-create | INTEGER | <ul style="list-style-type: none"> unavailable(0) a16(16) a32(32) a64(64) a128(128) a256(256) a512(512) a1024(1024) a2048(2048) a4096(4096) | Maximum number of queues. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|----------------------|---|
| hh3cCBQoSQueueCbsRatio (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.8) | read-create | Integer32 | <ul style="list-style-type: none"> 25..500 2147483647 | Allowed burst ratio. | Implementation varies by product. |
| hh3cCBQoSQueueRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.7.1.9) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSFirewallCfgInfoTable

About this table

This table contains firewall configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|--------------------|-----------------|
| hh3cCBQoSFirewallAction (1.3.6.1.4.1.25506.2.65.2.1.2.12.1.1) | read-create | INTEGER | <ul style="list-style-type: none"> permit(1) deny(2) | Firewall behavior. | As per the MIB. |
| hh3cCBQoSFirewallRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.12.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3cCBQoSAccountCfgInfoTable

About this table

This table contains accounting configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|------------------|---|
| hh3cCBQoSAccounting (1.3.6.1.4.1.25506.2.65.2.1.2.14.1.1) | read-create | INTEGER | <ul style="list-style-type: none"> • true(1) • false(2) | Accounting. | Not supported. The value is fixed at true(1). |
| hh3cCBQoSAccountRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.14.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |
| hh3cCBQoSAccountingMode (1.3.6.1.4.1.25506.2.65.2.1.2.14.1.3) | read-create | INTEGER | <ul style="list-style-type: none"> • auto(1) • packet(2) • byte(3) • both(4) | Accounting mode. | Implementation varies by product. |

hh3cCBQoSRedirectCfgInfoTable

About this table

This table configures a redirecting action for a traffic behavior.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|--|--------------------------|---|
| hh3cCBQoSRedirectType (1.3.6.1.4.1.25506.2.65.2.1.2.15.1.1) | read-create | INTEGER | <ul style="list-style-type: none"> • cpu(1) • interface(2) • nextHop(3) | Redirecting destination. | Implementation varies by product. |
| hh3cCBQoSRedirectIfIndex (1.3.6.1.4.1.25506.2.65.2.1.2.15.1.2) | read-create | Integer32 | Standard MIB values. | Interface index. | As per the MIB. |
| hh3cCBQoSRedirectIpAddressType | read-create | InetAddressType | Standard MIB values. | Next-hop address type. | Not supported. The value is fixed at unknown(0). |
| hh3cCBQoSRedirectIpAddress1 | read-create | InetAddress | Standard MIB values. | First next-hop address. | Not supported. The value is fixed at zero-length. |
| hh3cCBQoSRedirectIpAddress2 | read-create | InetAddress | Standard MIB values. | Second next-hop address. | Not supported. The value is fixed at zero-length. |
| hh3cCBQoSRedirectRowStatus (1.3.6.1.4.1.25506) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|-------------------------|---|---|
| .2.65.2.1.2.15.1.6) | | | | | 4) • destroy(6) |
| hh3cCBQoSRedir ectIpv6Interface1 | read-create | Integer32 | Standard MIB values. | Outgoing interface for the first next-hop IPv6 address. | Not supported. The value is fixed at 0. |
| hh3cCBQoSRedir ectIpv6Interface2 | read-create | Integer32 | Standard MIB values. | Outgoing interface for the second next-hop IPv6 address. | Not supported. The value is fixed at 0. |
| hh3cCBQoSRedir ectIfVlanID (1.3.6.1.4.1.25506 .2.65.2.1.2.15.1.9) | read-create | Integer32 | 0..4094 65535 | VLAN ID. | Implementation varies by product. |

hh3cCBQoSMirrorCfgInfoTable

About this table

This table contains flow mirroring configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|---------------------------------|---|
| hh3cCBQoSMirror Type (1.3.6.1.4.1.25506 .2.65.2.1.2.17.1.1) | read-create | INTEGER | <ul style="list-style-type: none"> interface(1) cpu(2) vlan(3) | Mirroring destination. | Implementation varies by product. |
| hh3cCBQoSMirror IfIndex (1.3.6.1.4.1.25506 .2.65.2.1.2.17.1.2) | read-create | OCTET STRING | SIZE (1..255) | Destination interface index. | Not supported. The value is fixed at zero-length. |
| hh3cCBQoSMirror VlanID (1.3.6.1.4.1.25506 .2.65.2.1.2.17.1.3) | read-create | Integer32 | 0..4094 | Destination VLAN ID. | Implementation varies by product. |
| hh3cCBQoSMirror RowStatus (1.3.6.1.4.1.25506 .2.65.2.1.2.17.1.4) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSNEstCfgInfoTable

About this table

This table configures nesting for VLAN mapping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|------------------------------|---|
| hh3cCBQoSNEstServiceVlanID (1.3.6.1.4.1.25506.2.65.2.1.2.18.1.1) | read-create | Integer32 | <ul style="list-style-type: none">1..409465535 | Service provider VLAN ID. | As per the MIB. |
| hh3cCBQoSNEstServiceDot1pValue (1.3.6.1.4.1.25506.2.65.2.1.2.18.1.2) | read-create | Integer32 | <ul style="list-style-type: none">0..765535 | Outer 802.1p priority value. | Implementation varies by product. |
| hh3cCBQoSNEstCustomerVlanID | read-create | Integer32 | <ul style="list-style-type: none">1..409465535 | Customer VLAN ID. | Not supported. The value is fixed at 65535. |
| hh3cCBQoSNEstCustomerDot1pValue | read-create | Integer32 | <ul style="list-style-type: none">0..765535 | Inner 802.1p priority value. | Not supported. The value is fixed at 65535. |
| hh3cCBQoSNEstRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.18.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">active(1)createAndGo(4)destroy(6) |

hh3cCBQoSNEstPolicyCfgInfoTable

About this table

This table nests a QoS policy.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------|-------------|--------------|--------------|---------------|-----------------|
| hh3cCBQoSNEst | read-create | OCTET STRING | SIZE (1..31) | Nested policy | As per the MIB. |

| | | | | | |
|---|-------------|-----------|----------------------|-------------|---|
| PolicyName (1.3.6.1.4.1.25506.2.65.2.1.2.19.1.1) | | | | name. | |
| hh3cCBQoSRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.19.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |

hh3cCBQoSMirrorIfCfgInfoTable

About this table

This table contains information about flow mirroring to an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|--|--------------------------------------|---|
| hh3cCBQoSMirrorIfMainIfIndex (1.3.6.1.4.1.25506.2.65.2.1.2.20.1.1) | not-accessible | Integer32 | Standard MIB values. | Destination interface index. | As per the MIB. |
| hh3cCBQoSMirrorIfMainIfStatus (1.3.6.1.4.1.25506.2.65.2.1.2.20.1.2) | read-only | INTEGER | <ul style="list-style-type: none"> • inactive(1) • active(2) | Destination interface status. | As per the MIB. |
| hh3cCBQoSMirrorIfBackupIfIndex (1.3.6.1.4.1.25506.2.65.2.1.2.20.1.3) | read-create | Integer32 | Standard MIB values. | Backup destination interface index. | Implementation varies by product. |
| hh3cCBQoSMirrorIfBackupIfStatus (1.3.6.1.4.1.25506.2.65.2.1.2.20.1.4) | read-only | INTEGER | <ul style="list-style-type: none"> • inactive(1) • active(2) | Backup destination interface status. | As per the MIB. |
| hh3cCBQoSMirrorIfRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.20.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |

hh3cCBQoSColoredRemarkCfgTable

About this table

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSBehaviorIndex, h3cCBQoSColoredRemarkType, and h3cCBQoSColoredRemarkColor.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|---|-------------------------------|---|
| hh3cCBQoSColor edRemarkType (1.3.6.1.4.1.25506 .2.65.2.1.2.21.1.1) | not-accessible | RemarkType | Standard MIB values. | Marking type. | Implementation varies by product. |
| hh3cCBQoSColor edRemarkColor (1.3.6.1.4.1.25506 .2.65.2.1.2.21.1.2) | not-accessible | INTEGER | <ul style="list-style-type: none"> green(1) yellow(2) red(3) | Marking color. | Implementation varies by product. |
| hh3cCBQoSColor edRemarkValue (1.3.6.1.4.1.25506 .2.65.2.1.2.21.1.3) | read-create | Integer32 | 0..4095 | Value to mark for packets. | As per the MIB. |
| hh3cCBQoSColor edRemarkRowSta tus (1.3.6.1.4.1.25506 .2.65.2.1.2.21.1.4) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSPrimapCfgInfoTable

About this table

This table contains information about predefined priority maps. The system modifies the priority of matching packets according to the predefined priority map.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------|--|--|--------------------------------------|
| hh3cCBQoSPrima pColorType (1.3.6.1.4.1.25506 .2.65.2.1.2.22.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> noColorMap(1) colorMap(2) | Predefined priority map color attribute. | Implementation varies by product. |
| h3cCBQoSPrePri MapTableType(1. 3.6.1.4.1.25506.2. 65.2.1.2.22.1.2) | not-accessible | INTEGER | <ul style="list-style-type: none"> invalid(0) dot1pToLp(1) dot1pToDp(2) expToLp(3) dscpToLp(4) expToDp(5) dscpToDp(6) dscpToDot1p(| Predefined priority map type. | Implementation varies by product. |

| | | | | | |
|---|-------------|-----------|---|-------------|---|
| | | | <ul style="list-style-type: none"> 7) • dot1pToDscp(8) • dscpToDscp(9) • dscpToExp(10) • expToDscp(11) • expToDot1p(12) • expToExp(13) • lpToDot1p(14) • dot1pToRpr(15) • dscpToRpr(16) • expToRpr(17) • ippToRpr(18) • upToDot1p(19) • upToDscp(20) • upToExp(21) • upToDp(22) • upToLp(23) • upToRpr(24) • upToFc(25) • lpToDscp(26) • dot11eToLp(27) • lpToDot11e(28) • lpToLp(29) • dot1pToExp(30) • lpToExp(31) • lpToDp(32) • upToUp(33) • dot1pToDot1p(34) | | |
| hh3cCBQoSPrimapRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.22.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |

hh3cCBQoSColorMapDpCfgInfoTable

About this table

This table contains information about packet color-to-drop priority mappings. The system assigns drop priority to packets according to the packet color.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|---|---|
| hh3cCBQoSColorMapDpEnable (1.3.6.1.4.1.25506.2.65.2.1.2.23.1.1) | read-create | INTEGER | <ul style="list-style-type: none">true(1)false(2) | Color-to-drop priority mapping enable status. | As per the MIB. |
| hh3cCBQoSColorMapDpRowStatus (1.3.6.1.4.1.25506.2.65.2.1.2.23.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">active(1)createAndGo(4)destroy(6) |

hh3cCBQoSPolicyCfgInfoTable

About this table

This table configures a QoS policy.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cCBQoSBehaviorIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--|--|--|
| hh3cCBQoSPolicyIndex (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.1) | not-accessible | Integer32 | Standard MIB values. | Policy index. | As per the MIB. |
| hh3cCBQoSPolicyName (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.2) | read-create | OCTET STRING | SIZE (1..31) | Policy name. | As per the MIB. |
| hh3cCBQoSPolicyClassCount (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.3) | read-only | Integer32 | Standard MIB values. | Number of traffic classes in the QoS policy. | As per the MIB. |
| hh3cCBQoSPolicyConfigMode (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.4) | read-create | INTEGER | <ul style="list-style-type: none">unavailable(0)config(1)auto(2) | Policy mode. | Not supported. The value is fixed at unavailable(0). |
| hh3cCBQoSPolicyType (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.5) | read-only | INTEGER | <ul style="list-style-type: none">systemDefined(1) | Policy type. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--|---|---|
| .2.65.2.1.3.2.1.5) | | | <ul style="list-style-type: none"> userDefined(2) | | |
| hh3cCBQoSPPolicyClassNextIndex (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.6) | read-only | Integer32 | Standard MIB values. | Traffic class index used to create a traffic class. | If the value is 2147483647, no traffic class can be created for hh3cCBQoSPPolicyClassCfInfoTable. |
| hh3cCBQoSPPolicyRowStatus (1.3.6.1.4.1.25506.2.65.2.1.3.2.1.7) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSPPolicyClassCfInfoTable

About this table

This table describes CB association information for a QoS policy.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSPPolicyIndex and h3cCBQoSPPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|-------------------------|--|
| hh3cCBQoSPPolicyClassIndex (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.1) | not-accessible | Integer32 | Standard MIB values. | Traffic class index. | As per the MIB. |
| hh3cCBQoSPPolicyClassClassifierIndex (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.2) | read-create | Integer32 | Standard MIB values. | Traffic class index. | As per the MIB. |
| hh3cCBQoSPPolicyClassClassifierName (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.3) | read-only | OCTET STRING | SIZE (1..31) | Traffic class name. | As per the MIB. |
| hh3cCBQoSPPolicyClassBehaviorIndex (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.4) | read-create | Integer32 | Standard MIB values. | Traffic behavior index. | As per the MIB. |
| hh3cCBQoSPPolicyClassBehaviorName (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.5) | read-only | OCTET STRING | SIZE (1..31) | Traffic behavior name. | As per the MIB. |
| hh3cCBQoSPPolicyClassPrecedence (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.6) | read-create | Integer32 | <ul style="list-style-type: none"> 0..16383 2147483647 | Traffic class priority. | Not supported. The value is fixed at 2147483647. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|-------------------------------------|---|
| hh3cCBQoSPolicyClassRowStatus (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.7) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |
| hh3cCBQoSPolicyClassMode (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.8) | read-create | INTEGER | <ul style="list-style-type: none"> • modeNo(1) • modeDot1q(2) • modeQppb(3) • modeIpSourceGuard(4) • modeVoiceVlan(5) • modeDcbx(6) | CB association mode. | |
| hh3cCBQoSPolicyClassCfgOrder (1.3.6.1.4.1.25506.2.65.2.1.3.3.1.9) | read-only | Integer32 | Standard MIB values. | CB association configuration order. | Not supported |

hh3cCBQoSIfApplyPolicyTable

About this table

.This table applies a QoS policy to an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cCBQoSIfApplyPolicyIfIndex and hh3cCBQoSIfApplyPolicyDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|---------------|---|--|---|
| hh3cCBQoSIfApplyPolicyIfIndex (1.3.6.1.4.1.25506.2.65.2.1.4.1.1.1) | accessible-for-notification | Integer32 | Standard MIB values. | Index of the interface to which a QoS policy is applied. | As per the MIB. |
| hh3cCBQoSIfApplyPolicyDirection (1.3.6.1.4.1.25506.2.65.2.1.4.1.1.2) | accessible-for-notification | DirectionType | Standard MIB values. | Application direction. | As per the MIB. |
| hh3cCBQoSIfApplyPolicyName (1.3.6.1.4.1.25506.2.65.2.1.4.1.1.3) | read-create | OCTET STRING | SIZE (1..31) | Policy name. | As per the MIB. |
| hh3cCBQoSIfApplyPolicyEnableDynamic (1.3.6.1.4.1.25506.2.65.2.1.4.1.1.4) | read-create | INTEGER | <ul style="list-style-type: none"> • unavailable(1) • true(2) • false(3) | Dynamic QoS | Not supported. The value is fixed at unavailable(1). |
| hh3cCBQoSIfApplyPolicyRowStatus | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) |

| | | | | | |
|--|-----------|---------|--|---------------------|--------------------|
| (1.3.6.1.4.1.25506.2.65.2.1.4.1.1.5) | | | | | 4) • destroy(6) |
| hh3cCBQoSIfApplyPolicyStatus (1.3.6.1.4.1.25506.2.65.2.1.4.1.1.6) | read-only | INTEGER | <ul style="list-style-type: none"> processing (0) success (1) partialItemFailed (2) | Application status. | As per the MIB. |

hh3cCBQoSvlanApplyPolicyTable

About this table

This table applies a QoS policy to a VLAN interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cCBQoSvlanApplyPolicyVlanid and hh3cCBQoSvlanApplyPolicyDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------------|--|------------------------|---|
| hh3cCBQoSvlanApplyPolicyVlanid (1.3.6.1.4.1.25506.2.65.2.1.4.3.1.1) | accessible-for-notify | Integer32 | Standard MIB values. | VLAN ID. | As per the MIB. |
| hh3cCBQoSvlanApplyPolicyDirection (1.3.6.1.4.1.25506.2.65.2.1.4.3.1.2) | accessible-for-notify | DirectionType | Standard MIB values. | Application direction. | As per the MIB. |
| hh3cCBQoSvlanApplyPolicyName (1.3.6.1.4.1.25506.2.65.2.1.4.3.1.3) | read-create | OCTET STRING | SIZE (1..31) | Policy name. | As per the MIB. |
| hh3cCBQoSvlanApplyPriority (1.3.6.1.4.1.25506.2.65.2.1.4.3.1.4) | read-create | Integer32 | 0..4095 | Policy priority. | Not supported. The value is fixed at 0. |
| hh3cCBQoSvlanApplyPolicyRowStatus (1.3.6.1.4.1.25506.2.65.2.1.4.3.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3cCBQoSvlanApplyPolicyStatus (1.3.6.1.4.1.25506.2.65.2.1.4.3.1.6) | read-create | INTEGER | <ul style="list-style-type: none"> processing (1) success (2) partialItemFailed (3) | Application status. | As per the MIB. |

hh3cCBQoSGlobalApplyTable

About this table

This table applies a QoS policy globally.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cCBQoSGlobalApplyDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|--|------------------------|---|
| hh3cCBQoSGlobalApplyDirection (1.3.6.1.4.1.25506.2.65.2.1.4.6.1.1) | not-accessible | DirectionType | Standard MIB values. | Application direction. | As per the MIB. |
| hh3cCBQoSGlobalApplyName (1.3.6.1.4.1.25506.2.65.2.1.4.6.1.2) | read-create | OCTET STRING | SIZE (1..31) | Policy name. | As per the MIB. |
| hh3cCBQoSGlobalApplyRowStatus (1.3.6.1.4.1.25506.2.65.2.1.4.6.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">• active(1)• createAndGo(4)• destroy(6) |
| hh3cCBQoSGlobalApplyStatus (1.3.6.1.4.1.25506.2.65.2.1.4.6.1.4) | read-only | INTEGER | <ul style="list-style-type: none">• processing (1)• success (2)• partialItemFailed (3) | Application status. | As per the MIB. |

hh3cCBQoS CpApplyPolicyTable

About this table

This table describes application information for a QoS policy applied to a control plane.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cCBQoS CpApplyPolicyChassis, hh3cCBQoS CpApplyPolicySlot, and hh3cCBQoS CpApplyPolicyDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|---------------------------------------|-----------------|
| hh3cCBQoS CpApplyPolicyChassis (1.3.6.1.4.1.25506.2.65.2.1.4.7.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Chassis number for the control plane. | As per the MIB. |
| hh3cCBQoS CpApplyPolicySlot (1.3.6.1.4.1.25506.2.65.2.1.4.7.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Slot number for the control plane. | As per the MIB. |

| | | | | | |
|---|----------------|---------------|--|------------------------|---|
| hh3cCBQoSApplyPolicyDirection (1.3.6.1.4.1.25506.2.65.2.1.4.7.1.3) | not-accessible | DirectionType | Standard MIB values. | Application direction. | As per the MIB. |
| hh3cCBQoSApplyPolicyName (1.3.6.1.4.1.25506.2.65.2.1.4.7.1.4) | read-create | OCTET STRING | SIZE (1..31) | Policy name. | As per the MIB. |
| hh3cCBQoSApplyPolicyStatus (1.3.6.1.4.1.25506.2.65.2.1.4.7.1.5) | read-only | INTEGER | <ul style="list-style-type: none"> processing (0) success (1) partialItemFailed (2) | Application status. | As per the MIB. |
| hh3cCBQoSApplyRowStatus (1.3.6.1.4.1.25506.2.65.2.1.4.7.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cCBQoSApplyObjectTable

About this table

This table obtains the application entity information for a QoS policy.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cCBQoSApplyObjectIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|--|--|
| hh3cCBQoSApplyObjectIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Application entity index. | As per the MIB. |
| hh3cCBQoSApplyObjectType (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.2) | read-only | ApplyObjectType | Standard MIB values. | Application entity type. | <ul style="list-style-type: none"> interface(1) vlan(2) controlPlane(5) |
| hh3cCBQoSApplyObjectDirection (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.3) | read-only | DirectionType | Standard MIB values. | Application entity direction. | As per the MIB. |
| hh3cCBQoSApplyObjectMainSite (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.4) | read-only | Unsigned32 | Standard MIB values. | Main index of the application entity. | As per the MIB. |
| hh3cCBQoSApplyObjectSubChannel (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Subchannel ID of the application entity. | As per the MIB. |

| | | | | | |
|---|-----------|------------|----------------------|--|-----------------|
| .65.2.1.5.5.1.1.5) | | | | | |
| hh3cCBQoSApplyObjectSubClass (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.6) | read-only | Unsigned32 | Standard MIB values. | Level-1 subclass number for level-2 nesting. | As per the MIB. |
| hh3cCBQoSApplyObjectSubClassSec (1.3.6.1.4.1.25506.2.65.2.1.5.5.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Level-2 subclass number for level-3 nesting. | As per the MIB. |

hh3cCBQoSIntApplyObjectTable

About this table

This table obtains the application entity index for a QoS policy applied to an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cCBQoSIntApplyObjectIfIndex and h3cCBQoSApplyObjectDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|--|-----------------|
| hh3cCBQoSIntApplyObjectIfIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.2.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Index of the interface to which a QoS policy is applied. | As per the MIB. |
| hh3cCBQoSIntApplyObjectIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.2.1.2) | read-only | Unsigned32 | Standard MIB values. | Application entity index. | As per the MIB. |

hh3cCBQoSVlanApplyObjectTable

About this table

This table obtains the application entity index for a QoS policy applied to a VLAN or globally.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSVlanApplyObjectVlanID and h3cCBQoSApplyObjectDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|--|--|
| hh3cCBQoSvlanApplyObjectVlanID (1.3.6.1.4.1.25506.2.65.2.1.5.5.3.1.1) | not-accessible | Unsigned32 | 0..4094 | ID of the VLAN to which a QoS policy is applied. | When the value is 0, the QoS policy is applied globally. |
| hh3cCBQoSvlanApplyObjectIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.3.1.2) | read-only | Unsigned32 | Standard MIB values. | Application entity index. | As per the MIB. |

hh3cCBQoSNEstPolicyApplyObjectTable

About this table

This table obtains the application entity index for a child QoS policy.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSNEstPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|---------------------------|-----------------|
| hh3cCBQoSNEstPolicyClassIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.5.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Policy class index. | As per the MIB. |
| hh3cCBQoSNEstPolicyApplyObjectIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.5.1.2) | read-only | Unsigned32 | Standard MIB values. | Application entity index. | As per the MIB. |

hh3cCBQoSCpApplyObjectTable

About this table

This table obtains QoS policy application information for a control plane.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSCpApplyObjectChassis, h3cCBQoSCpApplyObjectSlot, and h3cCBQoSApplyObjectDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|---------------------------------------|-----------------|
| hh3cCBQoS CpApplyObjectChassis (1.3.6.1.4.1.25506.2.65.2.1.5.5.6.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Chassis number for the control plane. | As per the MIB. |
| hh3cCBQoS CpApplyObjectSlot (1.3.6.1.4.1.25506.2.65.2.1.5.5.6.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Slot number for the control plane. | As per the MIB. |
| hh3cCBQoS CpApplyObjectIndex (1.3.6.1.4.1.25506.2.65.2.1.5.5.6.1.3) | read-only | Unsigned32 | Standard MIB values. | Application entity index. | As per the MIB. |

hh3cCBQoS CbqRunInfoTable

About this table

This table obtains CBQ queue statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is h3cCBQoS ApplyObjectIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3cCBQoS CbqQueueSize (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.1) | read-only | Integer32 | Standard MIB values. | Current CBQ queue size. | As per the MIB. |
| hh3cCBQoS CbqDiscard (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.2) | read-only | Counter64 | Standard MIB values. | Number of packets dropped by the CBQ queue. | As per the MIB. |
| hh3cCBQoS CbqEfQueueSize (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.3) | read-only | Integer32 | Standard MIB values. | EF queue size. | As per the MIB. |
| hh3cCBQoS CbqAfQueueSize (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.4) | read-only | Integer32 | Standard MIB values. | AF queue size. | As per the MIB. |
| hh3cCBQoS CbqBeQueueSize (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.5) | read-only | Integer32 | Standard MIB values. | BE queue size. | As per the MIB. |
| hh3cCBQoS CbqBeActiveQueueNum (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.6) | read-only | Integer32 | Standard MIB values. | Number of active BE queues. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3cCBQoSClassMaxActiveQueueNum (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.7) | read-only | Integer32 | Standard MIB values. | Maximum number of active BE queues that have existed. | As per the MIB. |
| hh3cCBQoSClassTotalQueueNum (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.8) | read-only | Integer32 | Standard MIB values. | Total number of BE queues. | As per the MIB. |
| hh3cCBQoSClassAllocatedQueueNum (1.3.6.1.4.1.25506.2.65.2.1.5.6.1.1.9) | read-only | Integer32 | Standard MIB values. | Number of AF queues that have been allocated. | As per the MIB. |

hh3cCBQoSClassMatchRunInfoTable

About this table

This table obtains matching statistics about a traffic class.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---|-----------------|
| hh3cCBQoSClassMatchedPackets (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.1) | read-only | Counter64 | Standard MIB values. | Number of matching packets. | As per the MIB. |
| hh3cCBQoSClassMatchedBytes (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.2) | read-only | Counter64 | Standard MIB values. | Number of matching bytes. | As per the MIB. |
| hh3cCBQoSClassFwdPktps (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.3) | read-only | Unsigned32 | Standard MIB values. | Number of packets sent per second during the last collection interval. | Not supported |
| hh3cCBQoSClassFwdPktbps (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.4) | read-only | Unsigned32 | Standard MIB values. | Number of bits sent per second during the last collection interval. | Not supported |
| hh3cCBQoSClassDropPktps (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.5) | read-only | Unsigned32 | Standard MIB values. | Number of packets dropped per second during the last collection interval. | Not supported |
| hh3cCBQoSClassDropPktbps (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.6) | read-only | Unsigned32 | Standard MIB | Number of bits dropped per | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|---|---|-----------------|
| (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.6) | | | values. | second during the last collection interval. | |
| hh3cCBQoSClassFlowStatInterval (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.7) | read-only | Unsigned32 | Standard MIB values. | Statistics collection interval. | Not supported |
| hh3cCBQoSClassBehaviorStatus (1.3.6.1.4.1.25506.2.65.2.1.5.6.2.1.8) | read-only | INTEGER | <ul style="list-style-type: none"> • success(1) • failure(2) • partialSuccess(3) | CB association application status. | As per the MIB. |

hh3cCBQoSCarRunInfoTable

About this table

This table obtains CAR statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| hh3cCBQoSCarGreenPackets (1.3.6.1.4.1.25506.2.65.2.1.5.6.3.1.1) | read-only | Counter64 | Standard MIB values. | Number of packets matching the CAR configuration | As per the MIB. |
| hh3cCBQoSCarGreenBytes (1.3.6.1.4.1.25506.2.65.2.1.5.6.3.1.2) | read-only | Counter64 | Standard MIB values. | Number of bytes matching the CAR configuration | As per the MIB. |
| hh3cCBQoSCarRedPackets (1.3.6.1.4.1.25506.2.65.2.1.5.6.3.1.3) | read-only | Counter64 | Standard MIB values. | Number of red packets. | As per the MIB. |
| hh3cCBQoSCarRedBytes (1.3.6.1.4.1.25506.2.65.2.1.5.6.3.1.4) | read-only | Counter64 | Standard MIB values. | Number of red bytes. | As per the MIB. |
| hh3cCBQoSCarYellowPackets (1.3.6.1.4.1.25506.2.65.2.1.5.6.3.1.5) | read-only | Counter64 | Standard MIB values. | Number of yellow packets. | As per the MIB. |
| hh3cCBQoSCarYellowBytes (1.3.6.1.4.1.25506.2.65.2.1.5.6.3.1.6) | read-only | Counter64 | Standard MIB values. | Number of yellow bytes. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--------------|------------------------|-----------------|
| hh3cCBQoSClass ssName (1.3.6.1.4.1.25506.2 .65.2.1.5.6.3.1.7) | read-only | OCTET STRING | SIZE (1..31) | Traffic class name. | As per the MIB. |

hh3cCBQoSRemarkRunInfoTable

About this table

This table obtains marking statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|-------------------------|------------------------------|-----------------|
| hh3cCBQoSRemark edPackets (1.3.6.1.4.1.25506.2 .65.2.1.5.6.5.1.1) | read-only | Counter64 | Standard MIB values. | Number of packets marked. | As per the MIB. |

hh3cCBQoSQueueRunInfoTable

About this table

.This table obtains queue-related traffic statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|-------------------------|---|-----------------|
| hh3cCBQoSQueue MatchedPackets (1.3.6.1.4.1.25506.2 .65.2.1.5.6.6.1.1) | read-only | Counter64 | Standard MIB values. | Number of packets matching a queue. | As per the MIB. |
| hh3cCBQoSQueue MatchedBytes (1.3.6.1.4.1.25506.2 .65.2.1.5.6.6.1.2) | read-only | Counter64 | Standard MIB values. | Number of bytes matching the queue. | As per the MIB. |

| | | | | | |
|--|-----------|-----------|-------------------------|---|-----------------|
| hh3cCBQoSQueue EnqueuedPackets (1.3.6.1.4.1.25506.2 .65.2.1.5.6.6.1.3) | read-only | Counter64 | Standard MIB values. | Number of packets enqueued. | As per the MIB. |
| hh3cCBQoSQueue EnqueuedBytes (1.3.6.1.4.1.25506.2 .65.2.1.5.6.6.1.4) | read-only | Counter64 | Standard MIB values. | Number of bytes enqueued. | As per the MIB. |
| hh3cCBQoSQueue DiscardedPackets (1.3.6.1.4.1.25506.2 .65.2.1.5.6.6.1.5) | read-only | Counter64 | Standard MIB values. | Number of packets dropped by the queue. | As per the MIB. |
| hh3cCBQoSQueue DiscardedBytes (1.3.6.1.4.1.25506.2 .65.2.1.5.6.6.1.6) | read-only | Counter64 | Standard MIB values. | Number of bytes dropped by the queue. | As per the MIB. |

hh3cCBQoSAccountingRunInfoTable

About this table

This table obtains traffic statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|-------------------------|-----------------------|-----------------|
| hh3cCBQoSAccountingPackets (1.3.6.1.4.1.25506.2 .65.2.1.5.6.8.1.1) | read-only | Counter64 | Standard MIB values. | Number of packets. | As per the MIB. |
| hh3cCBQoSAccountingBytes (1.3.6.1.4.1.25506.2 .65.2.1.5.6.8.1.2) | read-only | Counter64 | Standard MIB values. | Number of bytes. | As per the MIB. |
| hh3cCBQoSAccountingPktpps (1.3.6.1.4.1.25506.2 .65.2.1.5.6.8.1.3) | read-only | Counter64 | Standard MIB values. | Traffic rate in pps. | As per the MIB. |
| hh3cCBQoSAccountingPktbps (1.3.6.1.4.1.25506.2 .65.2.1.5.6.8.1.4) | read-only | Counter64 | Standard MIB values. | Traffic rate in bps. | As per the MIB. |

hh3cCBQoSPolicyAccRunInfoTable

About this table

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are h3cCBQoSApplyObjectIndex and h3cCBQoSPolicyClassIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------|-----------|-----------|----------------------|--------------------|-----------------|
| hh3cCBQoSPolicyAccPackets | read-only | Counter64 | Standard MIB values. | Number of packets. | As per the MIB. |
| hh3cCBQoSPolicyAccBytes | read-only | Counter64 | Standard MIB values. | Number of bytes. | As per the MIB. |

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HH3C-IFQOS2-MIB

About this MIB

Use this MIB to configure or obtain settings for the following modules:

- Hardware queuing.
- Software queuing.
- Rate limit.
- CAR.
- GTS.
- WRED.
- Port priority and priority trust mode.
- Priority map.

CAR includes aggregate CAR and three-color CAR. WRED includes table-based WRED and interface WRED.

WRED

WRED avoids global TCP synchronization by randomly dropping packets before a queue is full. WRED sets an upper threshold and lower threshold for each queue, and processes the packets in a queue as follows:

- When the queue size is shorter than the lower threshold, no packet is dropped.
- When the queue size reaches the upper threshold, all subsequent packets are dropped.
- When the queue size is between the lower threshold and the upper threshold, the received packets are dropped at random. The drop probability in a queue increases along with the queue size under the maximum drop probability.

WRED can discard packets based on the IP precedence, DSCP, or MPLS EXP value and selectively discard low-priority packets.

Through combining WRED with WFQ, the flow-based WRED can be realized.

WRED has the following types:

- Port-based WRED: Applies WRED to all packets on a port.
- Queue-based WRED: Applies WRED to only packets on WRED-enabled queues.
- Drop level-based WRED: Applies different WRED parameters to packets with different WRED parameters.
- ACL-based WRED: Applies different WRED parameters to packets matching different ACLs.
- 802.1p-based WRED: Applies different WRED parameters to packets with different 802.1p priorities.
- EXP-based WRED: Applies different WRED parameters to packets with different EXP priorities.
- ATM CLP-based WRED: Applies different WRED parameters to packets with different CLP priorities.
- DSCP-based WRED: Applies different WRED parameters to packets with different DSCP values.
- IP precedence-based WRED: Applies different WRED parameters to packets with different IP precedences.
- FR DE-based WRED: Applies different WRED parameters to packets with different DE bit settings.

ComwareV500R002 supports two WRED configuration approaches:

- **Interface configuration**—Configure WRED parameters on an interface or PVC and enable WRED.
- **WRED table configuration**—Configure a WRED table in system view and then apply the WRED table to an interface. A maximum number of 64 WRED tables is supported.

Aggregate CAR

Some switch models support aggregate CAR.

An aggregate CAR action is created globally. It can be directly applied to interfaces or used in the traffic behaviors associated with different traffic classes to police multiple traffic flows as a whole. The total rate of the traffic flows must conform to the traffic policing specifications set in the aggregate CAR action.

MIB file name

hh3c-ifqos2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).huawei(2011).h3c(10).h3cCommon(2).h3cQos2(65).h3clfQos2(1)

Tabular objects

hh3clfQoSModeTable

About this table

This table specifies the queuing mode. This table and hh3clfQoSWeightTable together configure the queuing settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---|---------------|-----------------------------------|
| hh3clfQoSMode (1.3.6.1.4.1.25506 .2.65.1.1.1.1.1.1) | read-write | INTEGER | <ul style="list-style-type: none">sp(1)sp0(2)sp1(3)sp2(4)wrr(5)hwfq(6)wrr-sp(7)byteCountWrr(8)byteCountWfq(9)gmb(10) | Queuing mode. | Implementation varies by product. |

hh3clfQoSWeightTable

About this table

This table configures attributes for non-SP queues. This table and h3clfQoSModeTable together configure the queuing settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3clfQoSQueueID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|---|--|--|
| hh3clfQoSQueueID (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.1) | not-accessible | Integer32 | Standard MIB values. | Queue ID. | As per the MIB. |
| hh3clfQoSQueueGroupType (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.2) | read-write | INTEGER | <ul style="list-style-type: none">group0(1)group1(2)group2(3)group3(4)group4(5) | WRR group. | Implementation varies by product. |
| hh3clfQoSQueueType (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.3) | read-write | INTEGER | <ul style="list-style-type: none">weight(1)byte-count(2) | Queuing type. | As per the MIB. |
| hh3clfQoSQueueSchedulingWeight (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.4) | read-write | Integer32 | Standard MIB values. | Scheduling weight. | As per the MIB. |
| hh3clfQoSQueueMaxDelay (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.5) | read-write | Integer32 | Standard MIB values. | Maximum delay. | Not supported. The value is fixed at 9. |
| hh3clfQoSQueueMinBandwidth (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.6) | read-write | Integer32 | Standard MIB values. | Minimum guaranteed bandwidth. | Implementation varies by product. |
| hh3clfQoSQueueMinBandwidthPercent (1.3.6.1.4.1.25506.2.65.1.1.1.2.1.7) | read-write | Unsigned32 | <ul style="list-style-type: none">0..100255 | Percentage of the minimum guaranteed bandwidth to the available bandwidth. | Implementation varies by product. |

hh3clfQoSHardwareQueueRunInfoTable

About this table

This table contains queue-based traffic statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3clfQoSQueueID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| hh3clfQoSPassPackets (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.1) | read-only | Counter64 | Standard MIB values. | Number of forwarded packets. | As per the MIB. |
| hh3clfQoSDropPackets (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.2) | read-only | Counter64 | Standard MIB values. | Number of dropped packets. | As per the MIB. |
| hh3clfQoSPassBytes (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.3) | read-only | Counter64 | Standard MIB values. | Number of forwarded bytes. | As per the MIB. |
| hh3clfQoSPassPPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.4) | read-only | Unsigned32 | Standard MIB values. | Packet forwarding rate in packets per second. | As per the MIB. |
| hh3clfQoSPassBPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Packet forwarding rate in bytes per second. | As per the MIB. |
| hh3clfQoSDropBytes (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.6) | read-only | Counter64 | Standard MIB values. | Number of dropped bytes. | As per the MIB. |
| hh3clfQoSQueueLengthInPkts (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Maximum queue length in packets. | As per the MIB. |
| hh3clfQoSQueueLengthInBytes (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.8) | read-only | Unsigned32 | Standard MIB values. | Maximum queue length in bytes. | Not supported |
| hh3clfQoSCurQueuePkts (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.9) | read-only | Unsigned32 | Standard MIB values. | Current queue length in packets. | Not supported |
| hh3clfQoSCurQueueBytes (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.10) | read-only | Unsigned32 | Standard MIB values. | Current queue length in bytes. | Not supported |
| hh3clfQoSCurQueuePPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.11) | read-only | Unsigned32 | Standard MIB values. | Number of packets enqueued per second. | Not supported |
| hh3clfQoSCurQueueBPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.12) | read-only | Unsigned32 | Standard MIB values. | Number of bytes enqueued per second. | Not supported |
| hh3clfQoSTailDropPkts (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.13) | read-only | Counter64 | Standard MIB values. | Number of packets dropped by tail drop. | Not supported |
| hh3clfQoSTailDropBytes | read-only | Counter64 | Standard MIB values. | Number of bytes dropped by tail | Not supported |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|-----------------|
| (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.14) | | | | drop. | |
| hh3clfQoSSTailDrop PPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.15) | read-only | Unsigned32 | Standard MIB values. | Number of packets dropped per second by tail drop. | Not supported |
| hh3clfQoSSTailDrop BPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.16) | read-only | Unsigned32 | Standard MIB values. | Number of bytes dropped per second by tail drop. | Not supported |
| hh3clfQoSWredDropPkts (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.17) | read-only | Counter64 | Standard MIB values. | Number of packets dropped by WRED. | Not supported |
| hh3clfQoSWredDropBytes (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.18) | read-only | Counter64 | Standard MIB values. | Number of bytes dropped by WRED. | Not supported |
| hh3clfQoSWredDropPPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.19) | read-only | Unsigned32 | Standard MIB values. | Number of packets dropped per second by WRED. | Not supported |
| hh3clfQoSWredDropBPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.20) | read-only | Unsigned32 | Standard MIB values. | Number of bytes dropped per second by WRED. | Not supported |
| hh3clfQoSPEakPassPPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.24) | read-only | Unsigned32 | Standard MIB values. | Peak number of packets forwarded. | As per the MIB. |
| hh3clfQoSPEakPassBPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.25) | read-only | Unsigned32 | Standard MIB values. | Peak number of bytes forwarded. | As per the MIB. |

hh3clfQoSHQueueTcpRunInfoTable

About this table

This table contains queue-based traffic statistics on TCP packets and non-TCP packets.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and h3clfQoSQueueID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------|-----------|-----------|----------------------|------------------------|-----------------|
| hh3clfQoSWredDropLPPreNTcpPkts | read-only | Counter64 | Standard MIB values. | Number of low-priority | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---|-----------------|
| (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.1) | | | | non-TCP packets dropped by WRED. | |
| hh3clfQoSredDr opLPreNTcpBytes (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.2) | read-only | Counter64 | Standard MIB values. | Number of low-priority non-TCP bytes dropped by WRED. | As per the MIB. |
| hh3clfQoSredDr opLPreNTcpPPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.3) | read-only | Unsigned32 | Standard MIB values. | Number of low-priority non-TCP packets dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr opLPreNTcpBPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.4) | read-only | Unsigned32 | Standard MIB values. | Number of low-priority non-TCP bytes dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr opLPreTcpPkts (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.5) | read-only | Counter64 | Standard MIB values. | Number of low-priority TCP packets dropped by WRED. | As per the MIB. |
| hh3clfQoSredDr opLPreTcpBytes (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.6) | read-only | Counter64 | Standard MIB values. | Number of low-priority TCP bytes dropped by WRED. | As per the MIB. |
| hh3clfQoSredDr opLPreTcpPPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.7) | read-only | Unsigned32 | Standard MIB values. | Number of low-priority TCP packets dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr opLPreTcpBPS (1.3.6.1.4.1.25506.2.65.1.1.2.1.1.8) | read-only | Unsigned32 | Standard MIB values. | Number of low-priority TCP bytes dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr opHPreNTcpPkts (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.9) | read-only | Counter64 | Standard MIB values. | Number of high-priority non-TCP packets dropped by WRED. | As per the MIB. |
| hh3clfQoSredDr opHPreNTcpBytes (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.10) | read-only | Counter64 | Standard MIB values. | Number of high-priority non-TCP bytes dropped by WRED. | As per the MIB. |
| hh3clfQoSredDr opHPreNTcpPPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.11) | read-only | Unsigned32 | Standard MIB values. | Number of high-priority non-TCP packets dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr opHPreNTcpBPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.12) | read-only | Unsigned32 | Standard MIB values. | Number of high-priority non-TCP bytes dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr | read-only | Counter64 | Standard MIB | Number of | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---|-----------------|
| opHPPreTcpPkts (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.13) | | | values. | high-priority TCP packets dropped by WRED. | |
| hh3clfQoSredDr opHPPreTcpBytes (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.14) | read-only | Counter64 | Standard MIB values. | Number of high-priority TCP bytes dropped by WRED. | As per the MIB. |
| hh3clfQoSredDr opHPPreTcpPPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.15) | read-only | Unsigned32 | Standard MIB values. | Number of high-priority TCP packets dropped by WRED per second. | As per the MIB. |
| hh3clfQoSredDr opHPPreTcpBPS (1.3.6.1.4.1.25506.2.65.1.1.2.2.1.16) | read-only | Unsigned32 | Standard MIB values. | Number of high-priority TCP bytes dropped by WRED per second. | As per the MIB. |

hh3clfQoSLRConfigTable

About this table

This table configures the inbound or outbound rate limit on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and h3clfQoSLRDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|-----------------------|---|
| hh3clfQoSLRDirection (1.3.6.1.4.1.25506.2.65.1.3.1.1.1) | not-accessible | Direction | Standard MIB values. | Rate limit direction. | Implementation varies by product. |
| hh3clfQoSLRCir (1.3.6.1.4.1.25506.2.65.1.3.1.1.2) | read-create | Unsigned32 | Standard MIB values. | CIR. | Implementation varies by product. |
| hh3clfQoSLRCbs (1.3.6.1.4.1.25506.2.65.1.3.1.1.3) | read-create | Unsigned32 | Standard MIB values. | CBS. | Implementation varies by product. |
| hh3clfQoSLREbs (1.3.6.1.4.1.25506.2.65.1.3.1.1.4) | read-create | Unsigned32 | Standard MIB values. | EBS. | Implementation varies by product. |
| hh3clfQoSRowStatus (1.3.6.1.4.1.25506.2.65.1.3.1.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3clfQoSLRPir (1.3.6.1.4.1.25506.2.65.1.3.1.1.6) | read-create | Unsigned32 | Standard MIB | PIR. | Implementation |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|---------|---|------------------|-----------------------------------|
| .2.65.1.3.1.1.6) | | | values. | | varies by product. |
| hh3clfQoSLRUnit (1.3.6.1.4.1.25506 .2.65.1.3.1.1.7) | read-create | INTEGER | <ul style="list-style-type: none"> unitAbsolute(1) unitPercent(2) | Rate limit unit. | Implementation varies by product. |

hh3clfQoSLRRunInfoTable

About this table

This table contains rate limit statistics on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3clfQoSLRDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|----------------------------------|-----------------|
| hh3clfQoSLRRunInfoPassedPackets (1.3.6.1.4.1.25506 .2.65.1.3.2.1.1) | read-only | Counter64 | Standard MIB values. | Number of forwarded packets. | As per the MIB. |
| hh3clfQoSLRRunInfoPassedBytes (1.3.6.1.4.1.25506 .2.65.1.3.2.1.2) | read-only | Counter64 | Standard MIB values. | Number of forwarded bytes. | As per the MIB. |
| hh3clfQoSLRRunInfoDelayedPackets (1.3.6.1.4.1.25506 .2.65.1.3.2.1.3) | read-only | Counter64 | Standard MIB values. | Number of delayed packets. | As per the MIB. |
| hh3clfQoSLRRunInfoDelayedBytes (1.3.6.1.4.1.25506 .2.65.1.3.2.1.4) | read-only | Counter64 | Standard MIB values. | Number of delayed bytes. | As per the MIB. |
| hh3clfQoSLRRunInfoActiveShaping (1.3.6.1.4.1.25506 .2.65.1.3.2.1.5) | read-only | INTEGER | <ul style="list-style-type: none"> active(1) inactive(2) | Rate limit configuration status. | As per the MIB. |

hh3clfQoSAggregateCarConfigTable

About this table

This table contains aggregate CAR configuration, which can police the traffic on multiple ports. Routers do not support aggregate CAR. Some switch models support aggregate CAR.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is h3clfQoSAggregateCarIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|-----------------------------------|-----------------------------------|
| hh3clfQoSAggregateCarIndex (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.1) | not-accessible | Integer32 | 1..65534 | Aggregate CAR index. | As per the MIB. |
| h3clfQoSAggregateCarName (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.2) | read-create | OCTET STRING | SIZE (1..31) | Aggregate CAR name. | As per the MIB. |
| h3clfQoSAggregateCarCir (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.3) | read-create | Unsigned32 | Standard MIB values. | CIR. | As per the MIB. |
| h3clfQoSAggregateCarCbs (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.4) | read-create | Unsigned32 | Standard MIB values. | CBS. | Implementation varies by product. |
| h3clfQoSAggregateCarEbs (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.5) | read-create | Unsigned32 | Standard MIB values. | EBS. | Implementation varies by product. |
| h3clfQoSAggregateCarPir (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.6) | read-create | Unsigned32 | Standard MIB values. | PIR. | Implementation varies by product. |
| h3clfQoSAggregateCarGreenActionType (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.7) | read-create | Hh3clfCarAction | Standard MIB values. | Action to take on green packets. | Implementation varies by product. |
| h3clfQoSAggregateCarGreenActionValue (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.8) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for green packets. | Implementation varies by product. |
| h3clfQoSAggregateCarYellowActionType (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.9) | read-create | Hh3clfCarAction | Standard MIB values. | Action to take on yellow packets. | Implementation varies by product. |
| h3clfQoSAggregateCarYellowActionValue (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.10) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for yellow packets. | Implementation varies by product. |
| h3clfQoSAggregateCarRedActionType | read-create | Hh3clfCarAction | Standard MIB values. | Action to take on red packets. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|--------------------------------|-----------------------------------|
| (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.11) | | | | | |
| h3clfQoSAggregateCarRedActionValue (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.12) | read-create | Integer | <ul style="list-style-type: none"> 0..63 255 | Value to mark for red packets. | Implementation varies by product. |
| h3clfQoSAggregateCarType (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.13) | read-create | INTEGER | <ul style="list-style-type: none"> aggregate(1) NotAggregate(2) hierarchy(3) | Aggregate CAR type. | Implementation varies by product. |
| h3clfQoSAggregateCarRowStatus (1.3.6.1.4.1.25506.2.65.1.4.1.2.1.14) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3clfQoSAggregateCarApplyTable

About this table

This table contains aggregate CAR application information for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex, h3clfQoSAggregateCarApplyDirection, h3clfQoSAggregateCarApplyRuleType, and h3clfQoSAggregateCarApplyRuleValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|---|----------------------|-----------------------------------|
| hh3clfQoSAggregateCarApplyDirection (1.3.6.1.4.1.25506.2.65.1.4.1.3.1.1) | not-accessible | Direction | Standard MIB values. | CAR direction. | Implementation varies by product. |
| hh3clfQoSAggregateCarApplyRuleType (1.3.6.1.4.1.25506.2.65.1.4.1.3.1.2) | read-create | INTEGER | <ul style="list-style-type: none"> ipv4acl(1) ipv6acl(2) carl(3) any(4) | CAR type. | Implementation varies by product. |
| hh3clfQoSAggregateCarApplyRuleValue (1.3.6.1.4.1.25506.2.65.1.4.1.3.1.3) | read-create | Integer32 | 0..2147483647 | CAR type value. | Implementation varies by product. |
| hh3clfQoSAggregateCarApplyCarIndex (1.3.6.1.4.1.25506.2.65.1.4.1.3.1.4) | read-create | Integer32 | 1..65534 | Aggregate CAR index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|----------------------|-------------|-----------------|
| hh3clfQoSAggregateCarApplyRowStatus (1.3.6.1.4.1.25506.2.65.1.4.1.3.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3clfQoSAggregateCarRunInfoTable

About this table

This table contains aggregate CAR statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is h3clfQoSAggregateCarIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---------------------------|-----------------------------------|
| h3clfQoSAggregateCarGreenPackets (1.3.6.1.4.1.25506.2.65.1.4.1.4.1.1) | read-only | Counter64 | Standard MIB values. | Number of green packets. | Implementation varies by product. |
| h3clfQoSAggregateCarGreenBytes (1.3.6.1.4.1.25506.2.65.1.4.1.4.1.2) | read-only | Counter64 | Standard MIB values. | Number of green bytes. | Implementation varies by product. |
| h3clfQoSAggregateCarYellowPackets (1.3.6.1.4.1.25506.2.65.1.4.1.4.1.3) | read-only | Counter64 | Standard MIB values. | Number of yellow packets. | Implementation varies by product. |
| h3clfQoSAggregateCarYellowBytes (1.3.6.1.4.1.25506.2.65.1.4.1.4.1.4) | read-only | Counter64 | Standard MIB values. | Number of yellow bytes. | Implementation varies by product. |
| h3clfQoSAggregateCarRedPackets (1.3.6.1.4.1.25506.2.65.1.4.1.4.1.5) | read-only | Counter64 | Standard MIB values. | Number of red packets. | Implementation varies by product. |
| h3clfQoSAggregateCarRedBytes (1.3.6.1.4.1.25506.2.65.1.4.1.4.1.6) | read-only | Counter64 | Standard MIB values. | Number of red bytes. | Implementation varies by product. |

hh3clfQoSTricolorCarConfigTable

About this table

This table contains three-color CAR configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is h3clfQoSAggregativeCarIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|----------------------------------|-----------------------------------|
| hh3clfQoSTricolorCarDirection (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.1) | not-accessible | Direction | Standard MIB values. | Aggregate CAR index. | Implementation varies by product. |
| hh3clfQoSTricolorCarType (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.2) | not-accessible | INTEGER | <ul style="list-style-type: none">ipv4acl(1)ipv6acl(2)carl(3)any(4) | Aggregate CAR name. | Implementation varies by product. |
| hh3clfQoSTricolorCarValue (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.3) | not-accessible | Integer32 | 0..2147483647 | CAR. | Implementation varies by product. |
| hh3clfQoSTricolorCarCir (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.4) | read-create | Unsigned32 | Standard MIB values. | CIR. | Implementation varies by product. |
| hh3clfQoSTricolorCarCbs (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.5) | read-create | Unsigned32 | Standard MIB values. | CBS. | Implementation varies by product. |
| hh3clfQoSTricolorCarEbs (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.6) | read-create | Unsigned32 | Standard MIB values. | EBS. | Implementation varies by product. |
| hh3clfQoSTricolorCarPir (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.7) | read-create | Unsigned32 | Standard MIB values. | PIR. | Implementation varies by product. |
| hh3clfQoSTricolorCarGreenActionType (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.8) | read-create | Hh3clfCarAction | Standard MIB values. | Action to take on green packets. | Implementation varies by product. |
| hh3clfQoSTricolorCarGreenActionValue (1.3.6.1.4.1.25506.2.65.1.4.2.1.1.9) | read-create | Integer32 | <ul style="list-style-type: none">0..63255 | Value to mark for green packets. | Implementation varies by product. |
| hh3clfQoSTricolorCarYellowActionType | read-create | Hh3clfCarAction | Standard MIB | Action to take on | Implementation |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|---|-----------------------------------|------------------------------------|
| ype (1.3.6.1.4.1.25506 .2.65.1.4.2.1.1.10) | | | values. | yellow packets. | varies by product. |
| hh3clfQoSTricolor CarYellowActionV alue (1.3.6.1.4.1.25506 .2.65.1.4.2.1.1.11) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for yellow packets. | Implementation varies by product. |
| hh3clfQoSTricolor CarRedActionTyp e (1.3.6.1.4.1.25506 .2.65.1.4.2.1.1.12) | read-create | Hh3clfCarAction | Standard MIB values. | Action to take on red packets. | Implementation varies by product. |
| hh3clfQoSTricolor CarRedActionValu e (1.3.6.1.4.1.25506 .2.65.1.4.2.1.1.13) | read-create | Integer32 | <ul style="list-style-type: none"> 0..63 255 | Value to mark for red packets. | Implementation varies by product. |
| hh3clfQoSTricolor CarRowStatus (1.3.6.1.4.1.25506 .2.65.1.4.2.1.1.14) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |
| hh3clfQoSTricolor CarUnitType (1.3.6.1.4.1.25506 .2.65.1.4.2.1.1.15) | read-create | INTEGER | <ul style="list-style-type: none"> unitAbsolute(1) unitPercent(2) | Unit. | .Implementation varies by product. |

hh3clfQoSTricolorCarRunInfoTable

About this table

This table contains three-color CAR statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3clfQoSTricolorCarDirection, hh3clfQoSTricolorCarType, and hh3clfQoSTricolorCarValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--------------------------|-----------------------------------|
| hh3clfQoSTricolor CarGreenPackets (1.3.6.1.4.1.25506 .2.65.1.4.2.2.1.1) | read-only | Counter64 | Standard MIB values. | Number of green packets. | Implementation varies by product. |
| hh3clfQoSTricolor CarGreenBytes (1.3.6.1.4.1.25506 .2.65.1.4.2.2.1.2) | read-only | Counter64 | Standard MIB values. | Number of green bytes. | Implementation varies by product. |
| hh3clfQoSTricolor CarYellowPackets | read-only | Counter64 | Standard MIB | Number of yellow | Implementation |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|-------------------------|-----------------------------------|
| (1.3.6.1.4.1.25506.2.65.1.4.2.2.1.3) | | | values. | packets. | varies by product. |
| hh3clfQoSSTricolorCarYellowBytes (1.3.6.1.4.1.25506.2.65.1.4.2.2.1.4) | read-only | Counter64 | Standard MIB values. | Number of yellow bytes. | Implementation varies by product. |
| hh3clfQoSSTricolorCarRedPackets (1.3.6.1.4.1.25506.2.65.1.4.2.2.1.5) | read-only | Counter64 | Standard MIB values. | Number of red packets. | Implementation varies by product. |
| hh3clfQoSSTricolorCarRedBytes (1.3.6.1.4.1.25506.2.65.1.4.2.2.1.6) | read-only | Counter64 | Standard MIB values. | Number of red bytes. | Implementation varies by product. |

hh3clfQoSGTSTConfigTable

About this table

This table contains GTS configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex, hh3clfQoSGTSTClassRuleType, and hh3clfQoSGTSTClassRuleValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|-----------------|---|
| hh3clfQoSGTSTClassRuleType (1.3.6.1.4.1.25506.2.65.1.5.1.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> any(1) ipv4acl(2) ipv6acl(3) queue(4) | GTS type. | Supports only queue(4). |
| hh3clfQoSGTSTClassRuleValue (1.3.6.1.4.1.25506.2.65.1.5.1.1.2) | not-accessible | Integer32 | 0..2147483647 | GTS type value. | The value range is 0 to 7. |
| hh3clfQoSGTSTCIR (1.3.6.1.4.1.25506.2.65.1.5.1.1.3) | read-create | Unsigned32 | Standard MIB values. | CIR. | <ul style="list-style-type: none"> The value range is 300 to 1000000 for GE interfaces. The value range is 300 to 10000000 for 10-GE interfaces. The value range is 300 to 40000000 for 40-GE interfaces. The value |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|---|---------------|---|
| | | | | | range is 300 to 100000000 for 100-GE interfaces. |
| hh3clfQoSGTSCbs (1.3.6.1.4.1.25506.2.65.1.5.1.1.4) | read-create | Unsigned32 | Standard MIB values. | CBS. | <ul style="list-style-type: none"> The value range is 4096 to 133169152 for GE interfaces. The value range is 4096 to 133169152 for 10-GE interfaces. The value range is 4096 to 535822336 for 40-GE interfaces. The value range is 4096 to 1341128704 for 100-GE interfaces. |
| hh3clfQoSGTSEbs (1.3.6.1.4.1.25506.2.65.1.5.1.1.5) | read-create | Unsigned32 | Standard MIB values. | EBS in bytes. | Not supported. |
| hh3clfQoSGTSCQueueLength (1.3.6.1.4.1.25506.2.65.1.5.1.1.6) | read-create | Integer32 | Standard MIB values. | Queue length. | Not supported. |
| hh3clfQoSGTSCConfigRowStatus (1.3.6.1.4.1.25506.2.65.1.5.1.1.7) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |
| hh3clfQoSGTSPir (1.3.6.1.4.1.25506.2.65.1.5.1.1.8) | read-create | Unsigned32 | Standard MIB values. | PIR. | Not supported. |
| hh3clfQoSGTSUnitType (1.3.6.1.4.1.25506.2.65.1.5.1.1.9) | read-create | INTEGER | <ul style="list-style-type: none"> unitAbsolute(1) unitPercent(2) | GTS unit. | Supports only unitAbsolute(1). |

hh3clfQoSGTSRunInfoTable

About this table

This table contains GTS statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3clfqoSGTSClassRuleType, and hh3clfqoSGTSClassRuleValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| hh3clfqoSGTSQueueSize (1.3.6.1.4.1.25506.2.65.1.5.2.1.1) | read-only | Integer32 | Standard MIB values. | Current number of packets in the queue. | As per the MIB. |
| hh3clfqoSGTSPassdPackets (1.3.6.1.4.1.25506.2.65.1.5.2.1.2) | read-only | Counter64 | Standard MIB values. | Number of forwarded packets. | As per the MIB. |
| hh3clfqoSGTSPassdBytes (1.3.6.1.4.1.25506.2.65.1.5.2.1.3) | read-only | Counter64 | Standard MIB values. | Number of forwarded bytes. | As per the MIB. |
| hh3clfqoSGTSDiscardPackets (1.3.6.1.4.1.25506.2.65.1.5.2.1.4) | read-only | Counter64 | Standard MIB values. | Number of dropped packets. | As per the MIB. |
| hh3clfqoSGTSDiscardBytes (1.3.6.1.4.1.25506.2.65.1.5.2.1.5) | read-only | Counter64 | Standard MIB values. | Number of dropped bytes. | As per the MIB. |
| hh3clfqoSGTSDelayedPackets (1.3.6.1.4.1.25506.2.65.1.5.2.1.6) | read-only | Counter64 | Standard MIB values. | Number of delayed packets. | As per the MIB. |
| hh3clfqoSGTSDelayedBytes (1.3.6.1.4.1.25506.2.65.1.5.2.1.7) | read-only | Counter64 | Standard MIB values. | Number of delayed bytes. | As per the MIB. |

hh3clfqoSWredGroupTable

About this table

This table creates a WRED table.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3clfqoSWredGroupIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|-------------|-------------------|-----------------------------------|
| hh3clfqoSWredGroupIndex (1.3.6.1.4.1.25506.2.65.1.6.1.2.1.1) | not-accessible | Integer32 | 0..256 | WRED table index. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|--|---|---------------------------------------|
| hh3clfQoSredGroup Name (1.3.6.1.4.1.25506 .2.65.1.6.1.2.1.2) | read-create | OCTET STRING | SIZE (1..32) | WRED table name. | As per the MIB. |
| hh3clfQoSredGroup Type (1.3.6.1.4.1.25506 .2.65.1.6.1.2.1.3) | read-create | INTEGER | <ul style="list-style-type: none"> • userdefined(0) • dot1p(1) • ippre(2) • dscp(3) • localpre(4) • atmclp(5) • frde(6) • exp(7) • queue(8) • dropLevel(9) | WRED table type. | .Implementation varies by product. |
| hh3clfQoSredGroup WeightingCon stant (1.3.6.1.4.1.25506 .2.65.1.6.1.2.1.4) | read-create | Integer32 | 1..15 | WRED exponent for average queue size calculation. | The default value is 9. |
| hh3clfQoSredGroup RowStatus (1.3.6.1.4.1.25506 .2.65.1.6.1.2.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3clfQoSredGroupContentTable

About this table

This table configures a WRED table.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are h3clfQoSredGroupIndex, h3clfQoSredGroupContentIndex, and h3clfQoSredGroupContentSubIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------------------|---------------|--------------------------------------|
| hh3clfQoSredGroup ContentIndex (1.3.6.1.4.1.25506 .2.65.1.6.1.3.1.1) | not-accessible | Integer32 | 0..63 | Second index. | Implementation varies by product. |
| hh3clfQoSredGroup ContentSubIn dex (1.3.6.1.4.1.25506 .2.65.1.6.1.3.1.2) | not-accessible | Integer32 | 0..63 | Third index. | Implementation varies by product. |
| hh3clfQoSredLow Limit | read-create | Integer32 | Standard MIB values. | Lower limit. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|----------------------|---|-----------------------------------|
| (1.3.6.1.4.1.25506.2.65.1.6.1.3.1.3) | | | | | |
| hh3clfQoSredHighLimit (1.3.6.1.4.1.25506.2.65.1.6.1.3.1.4) | read-create | Integer32 | Standard MIB values. | Higher limit. | Implementation varies by product. |
| hh3clfQoSredDiscardProb (1.3.6.1.4.1.25506.2.65.1.6.1.3.1.5) | read-create | Integer32 | Standard MIB values. | Drop probability. | Implementation varies by product. |
| hh3clfQoSredGroupExponent (1.3.6.1.4.1.25506.2.65.1.6.1.3.1.6) | read-create | Integer32 | 0..15 | WRED exponent for average queue size calculation. | The default value is 9. |
| hh3clfQoSredRowStatus (1.3.6.1.4.1.25506.2.65.1.6.1.3.1.7) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3clfQoSredGroupApplyIfTable

About this table

This table contains WRED table application information for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|----------------------|-------------------|-----------------|
| hh3clfQoSredGroupApplyIndex (1.3.6.1.4.1.25506.2.65.1.6.1.4.1.1) | read-create | Integer32 | 0..256 | WRED table index. | As per the MIB. |
| hh3clfQoSredGroupApplyName (1.3.6.1.4.1.25506.2.65.1.6.1.4.1.2) | read-only | OCTET STRING | SIZE (1..32) | WRED table name. | As per the MIB. |
| hh3clfQoSredGroupIfRowStatus (1.3.6.1.4.1.25506.2.65.1.6.1.4.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | As per the MIB. |

hh3clfQoSPortPriorityTable

About this table

This table contains the port priority. After the switch receives a packet, it performs priority mapping according to the configured priority trust mode. If no local precedence is successfully assigned or no packet priority is trusted, the switch uses the priority of the input interface as the local precedence or 802.1p priority for priority mapping. Routers do not support this table.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------|----------------|-----------------------------------|
| hh3clfQoSPortPriorityValue (1.3.6.1.4.1.25506.2.65.1.7.1.1.1.1) | read-write | Integer32 | 0..7 | Port priority. | Implementation varies by product. |

hh3clfQoSPortPriorityTrustTable

About this table

This table contains the priority trust mode.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|----------------------|-----------------------------------|
| hh3clfQoSPortPriorityTrustTrustType (1.3.6.1.4.1.25506.2.65.1.7.1.2.1.1) | read-write | INTEGER | <ul style="list-style-type: none">• untrust(1)• dot1p(2)• dscp(3)• exp(4)• ipPrecedence(5)• dot11e(6)• auto(7) | Priority trust mode. | Implementation varies by product. |
| hh3clfQoSPortPriorityTrustOvercastType (1.3.6.1.4.1.25506.2.65.1.7.1.2.1.2) | read-write | INTEGER | <ul style="list-style-type: none">• noOvercast(1)• overcastDSCP(2)• overcastCOS(3) | Overwrite mode. | Implementation varies by product. |

| | | | | | |
|--|--|--|---------------|--|--|
| | | | • overcast(4) | | |
|--|--|--|---------------|--|--|

hh3clfQoSPrePriMapTable

About this table

This table configures a priority map.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3clfQoSPrePriMapTableType, hh3clfQoSPrePriMapTableColor, hh3clfQoSPrePriMapTableDirection, and hh3clfQoSPrePriMapTableImportValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------|--|--------------------|-----------------------------------|
| hh3clfQoSPrePriMapTableType (1.3.6.1.4.1.25506.2.65.1.9.1.4.1.1) | not-accessible | INTEGER | <ul style="list-style-type: none"> • dot1pToLp(1) • dot1pToDp(2) • expToLp(3) • dscpToLp(4) • expToDp(5) • dscpToDp(6) • dscpToDot1p(7) • dot1pToDscp(8) • dscpToDscp(9) • dscpToExp(10) • expToDscp(11) • expToDot1p(12) • expToExp(13) • lpToDot1p(14) • dot1pToRpr(15) • dscpToRpr(16) • expToRpr(17) • ippreToRpr(18) • upToDot1p(19) • upToDscp(20) • upToExp(21) • upToDp(22) • upToLp(23) • upToRpr(24) • upToFc(25) • lpTodscp(26) | Priority map type. | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---|------------------------------------|-----------------------------------|
| | | | <ul style="list-style-type: none"> dot11eToLp(27) IpToDot11e(28) IpToLp(29) dot1pToExp(30) IpToExp(31) IpToDp(32) upToUp(33) dot1pToDot1p(34) | | |
| hh3clfQoSPrePriMapTableColor (1.3.6.1.4.1.25506.2.65.1.9.1.4.1.2) | not-accessible | INTEGER | <ul style="list-style-type: none"> nocolor(1) green(2) yellow(3) red(4) | Priority map color. | Implementation varies by product. |
| hh3clfQoSPrePriMapTableDirection (1.3.6.1.4.1.25506.2.65.1.9.1.4.1.3) | not-accessible | INTEGER | <ul style="list-style-type: none"> nodirection(1) inbound(2) outbound(3) | Priority map direction. | Implementation varies by product. |
| hh3clfQoSPrePriMapTableImportValue (1.3.6.1.4.1.25506.2.65.1.9.1.4.1.4) | not-accessible | Integer32 | 0..63 | Input values of the priority map. | As per the MIB. |
| hh3clfQoSPrePriMapTableExportValue (1.3.6.1.4.1.25506.2.65.1.9.1.4.1.5) | read-write | Integer32 | 0..63 | Output values of the priority map. | As per the MIB. |

hh3cQoSRemarkTcpPortPriTable

About this table

This table contains TCP port-based priority information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cQoSRemarkTcpPortStart.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------|--|-----------------|
| hh3cQoSRemarkTcpPortStart(1.3.6.1.4.1.25506.2.65.1.12.1.1.1) | not-accessible | Integer32 | 0..65535 | Start port number of a TCP port range. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|--|--|---|
| hh3cQoSRemarkTcpPortEnd (1.3.6.1.4.1.25506.2.65.1.12.1.1.2) | read-create | Integer32 | 0..65535 | End port number of a TCP port range. | As per the MIB. |
| hh3cQoSRemarkTcpPortType (1.3.6.1.4.1.25506.2.65.1.12.1.1.3) | read-create | INTEGER | <ul style="list-style-type: none"> ipAll(1) ipv4(2) ipv6(3) | IP type of matching packets. | As per the MIB. |
| hh3cQoSRemarkTcpPortDot1p (1.3.6.1.4.1.25506.2.65.1.12.1.1.4) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..7 255 | 802.1p priority value of matching packets. | As per the MIB. |
| hh3cQoSRemarkTcpPortDscp (1.3.6.1.4.1.25506.2.65.1.12.1.1.5) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..63 255 | DSCP value of matching packets. | As per the MIB. |
| hh3cQoSRemarkTcpPortRowStatus (1.3.6.1.4.1.25506.2.65.1.12.1.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cQoSRemarkUdpPortPriTable

About this table

This table contains UDP port-based priority information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|------|
| Supported | Supported | Supported | |

Columns

The table index is h3cQoSRemarkUdpPortStart.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--|--|-----------------|
| hh3cQoSRemarkUdpPortStart (1.3.6.1.4.1.25506.2.65.1.12.2.1.1) | not-accessible | Integer32 | 0..65535 | Start port number of a UDP port range. | As per the MIB. |
| hh3cQoSRemarkUdpPortEnd (1.3.6.1.4.1.25506.2.65.1.12.2.1.2) | read-create | Integer32 | 0..65535 | End port number of the UDP port range. | As per the MIB. |
| hh3cQoSRemarkUdpPortType (1.3.6.1.4.1.25506.2.65.1.12.2.1.3) | read-create | INTEGER | <ul style="list-style-type: none"> ipAll(1) ipv4(2) ipv6(3) | IP type of matching packets. | As per the MIB. |
| hh3cQoSRemarkUdpPortDot1p (1.3.6.1.4.1.25506.2.65.1.12.2.1.4) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..7 255 | 802.1p priority value of matching packets. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|--|---------------------------------|---|
| .2.65.1.12.2.1.4) | | | | | |
| hh3cQoSRemarkUdpPortDscp (1.3.6.1.4.1.25506.2.65.1.12.2.1.5) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..63 255 | DSCP value of matching packets. | As per the MIB. |
| hh3cQoSRemarkUdpPortRowStatus (1.3.6.1.4.1.25506.2.65.1.12.2.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cQoSRemarkIPv4AddrPriTable

About this table

This table contains IPv4 address-based priority information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cQoSRemarkIPv4AddrValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|---|--|---|
| hh3cQoSRemarkIPv4AddrValue (1.3.6.1.4.1.25506.2.65.1.12.3.1.1) | not-accessible | IpAddress | Standard MIB values. | IPv4 address. | As per the MIB. |
| hh3cQoSRemarkIPv4AddrMask (1.3.6.1.4.1.25506.2.65.1.12.3.1.2) | read-create | IpAddress | Standard MIB values. | Mask for the IPv4 address. | As per the MIB. |
| hh3cQoSRemarkIPv4AddrMaskLength (1.3.6.1.4.1.25506.2.65.1.12.3.1.3) | read-create | Unsigned32 | <ul style="list-style-type: none"> 1..32 4294967295 | Mask length for the IPv4 address | As per the MIB. |
| hh3cQoSRemarkIPv4AddrDot1p (1.3.6.1.4.1.25506.2.65.1.12.3.1.4) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..7 255 | 802.1p priority value of matching packets. | As per the MIB. |
| hh3cQoSRemarkIPv4AddrDscp (1.3.6.1.4.1.25506.2.65.1.12.3.1.5) | read-create | Unsigned32 | <ul style="list-style-type: none"> 0..63 255 | DSCP value of matching packets. | As per the MIB. |
| hh3cQoSRemarkIPv4AddrRowStatus (1.3.6.1.4.1.25506.2.65.1.12.3.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

hh3cQoSRemarkIPv6AddrPriTable

About this table

This table contains IPv6 address-based priority information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is h3cQoSRemarkIPv6AddrValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|---|--|---|
| hh3cQoSRemarkIPv6AddrValue (1.3.6.1.4.1.25506.2.65.1.12.4.1.1) | not-accessible | InetAddressIPv6 | Standard MIB values. | IPv6 address. | As per the MIB. |
| hh3cQoSRemarkIPv6AddrPrefixLength (1.3.6.1.4.1.25506.2.65.1.12.4.1.2) | read-create | InetAddressPrefixLength | Standard MIB values. | Prefix length for the IPv6 address. | As per the MIB. |
| hh3cQoSRemarkIPv6AddrDot1p (1.3.6.1.4.1.25506.2.65.1.12.4.1.3) | read-create | Unsigned32 | <ul style="list-style-type: none">0..7255 | 802.1p priority value of matching packets. | As per the MIB. |
| hh3cQoSRemarkIPv6AddrDscp (1.3.6.1.4.1.25506.2.65.1.12.4.1.4) | read-create | Unsigned32 | <ul style="list-style-type: none">0..63255 | DSCP value of matching packets. | As per the MIB. |
| hh3cQoSRemarkIPv6AddrRowStatus (1.3.6.1.4.1.25506.2.65.1.12.4.1.5) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">active(1)createAndGo(4)destroy(6) |

hh3cQoSRemarkProtocolPriTable

About this table

This table contains Layer 3 protocol-based priority information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cQoSRemarkProtocolValue.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|--|---|
| hh3cQoSRemarkProtocolValue (1.3.6.1.4.1.25506.2.65.1.12.5.1.1) | not-accessible | Integer32 | <ul style="list-style-type: none">ip(1)ipx(2)arp(3)appletalk(4)sna(5)netbeui(6) | Layer 3 protocol type. | As per the MIB. |
| hh3cQoSRemarkProtocolDot1p (1.3.6.1.4.1.25506.2.65.1.12.5.1.2) | read-create | Unsigned32 | <ul style="list-style-type: none">0..7255 | 802.1p priority value of matching packets. | As per the MIB. |
| hh3cQoSRemarkProtocolRowStatus (1.3.6.1.4.1.25506.2.65.1.12.5.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none">active(1)createAndGo(4)destroy(6) |

hh3cQoSRemarkVlanPriTable

About this table

This table contains VLAN-based priority information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cQoSRemarkVlanStart.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|---|--|---|
| hh3cQoSRemarkVlanStart (1.3.6.1.4.1.25506.2.65.1.12.6.1.1) | not-accessible | Integer32 | 1..4094 | Start VLAN of a VLAN range. | As per the MIB. |
| hh3cQoSRemarkVlanEnd (1.3.6.1.4.1.25506.2.65.1.12.6.1.2) | read-create | Integer32 | 1..4094 | End VLAN of the VLAN range. | As per the MIB. |
| hh3cQoSRemarkVlanDot1p (1.3.6.1.4.1.25506.2.65.1.12.6.1.3) | read-create | Unsigned32 | <ul style="list-style-type: none">0..7255 | 802.1p priority value of matching packets. | As per the MIB. |
| hh3cQoSRemarkVlanDscp (1.3.6.1.4.1.25506.2.65.1.12.6.1.4) | read-create | Unsigned32 | <ul style="list-style-type: none">0..63255 | DSCP value of matching packets. | As per the MIB. |
| hh3cQoSRemark | read-create | RowStatus | Standard MIB | Row status. | <ul style="list-style-type: none">active(1) |

| | | | | | |
|--|--|--|---------|--|--|
| VlanRowStatus (1.3.6.1.4.1.25506 .2.65.1.12.6.1.6) | | | values. | | <ul style="list-style-type: none"> • createAndGo(4) • destroy(6) |
|--|--|--|---------|--|--|

hh3clfQoSFlowStatTable

About this table

This table contains protocol traffic statistics for a control plane.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3clfQoSFlowStatChassis, hh3clfQoSFlowStatSlot, and hh3clfQoSFlowStatProType.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|---------------------------------------|-----------------|
| hh3clfQoSFlowStatChassis (1.3.6.1.4.1.25506 .2.65.1.14.1.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Chassis number for the control plane. | As per the MIB. |
| hh3clfQoSFlowStatSlot (1.3.6.1.4.1.25506 .2.65.1.14.1.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Slot number for the control plane. | As per the MIB. |
| hh3clfQoSFlowStatProType (1.3.6.1.4.1.25506 .2.65.1.14.1.1.3) | not-accessible | Unsigned32 | 1..65 | Protocol type. | As per the MIB. |
| hh3clfQoSFlowPassPackets (1.3.6.1.4.1.25506 .2.65.1.14.1.1.4) | read-only | Counter64 | Standard MIB values. | Number of forwarded packets. | As per the MIB. |
| hh3clfQoSFlowPassBytes (1.3.6.1.4.1.25506 .2.65.1.14.1.1.5) | read-only | Counter64 | Standard MIB values. | Number of forwarded bytes. | As per the MIB. |
| hh3clfQoSFlowDropPackets (1.3.6.1.4.1.25506 .2.65.1.14.1.1.6) | read-only | Counter64 | Standard MIB values. | Number of dropped packets. | As per the MIB. |
| hh3clfQoSFlowDropBytes (1.3.6.1.4.1.25506 .2.65.1.14.1.1.7) | read-only | Counter64 | Standard MIB values. | Number of dropped bytes. | As per the MIB. |

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HH3C-QOS-CAPABILITY-MIB

About this MIB

Use this MIB to obtain QoS capabilities.

MIB file name

hh3c-qos-capability.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).huawei(2011).h3c(10).h3cSNMPAgCpb(7).h3cQosCapability(1)

Tabular objects

hh3cQoSSysCapabilityTable

About this table

This table obtains global QoS feature values.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are h3cQoSSysCapModuleIndex and h3cQoSSysCapCharacteristicsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|---------------------------|-----------------|
| hh3cQoSSysCapModuleIndex (1.3.6.1.4.1.25506.7.1.1.1.2.1.1) | not-accessible | Integer32 | 1..2147483647 | QoS module index. | As per the MIB. |
| hh3cQoSSysCapCharacteristicsIndex (1.3.6.1.4.1.25506.7.1.1.1.2.1.2) | not-accessible | Integer32 | 1..2147483647 | QoS system feature index. | As per the MIB. |
| hh3cQoSSysCapCharacteristicsValue (1.3.6.1.4.1.25506.7.1.1.1.2.1.3) | read-only | Unsigned32 | Standard MIB values. | QoS feature value. | As per the MIB. |

hh3cQoSIfCapabilityTable

About this table

This table obtains interface QoS feature values.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are h3cQoSIfCapIfIndex, h3cQoSIfCapModuleIndex, and h3cQoSIfCapCharacteristicsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|------------------------------|-----------------|
| hh3cQoSIfCapIfIndex (1.3.6.1.4.1.25506.7.1.1.1.3.1.1) | not-accessible | Integer32 | 0..2147483647 | Interface index. | As per the MIB. |
| hh3cQoSIfCapModuleIndex (1.3.6.1.4.1.25506.7.1.1.1.3.1.2) | not-accessible | Integer32 | 0..2147483647 | QoS module index. | As per the MIB. |
| hh3cQoSIfCapCharacteristicsIndex (1.3.6.1.4.1.25506.7.1.1.1.3.1.3) | not-accessible | Integer32 | 0..2147483647 | QoS interface feature index. | As per the MIB. |
| hh3cQoSIfCapCharacteristicsValue (1.3.6.1.4.1.25506.7.1.1.1.3.1.4) | read-only | Unsigned32 | Standard MIB values. | QoS feature value. | As per the MIB. |

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HH3C-TRNG2-MIB

About this MIB

Use this MIB to configure a time range.

MIB file name

hh3c-trng2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cTRNG2(121)

Tabular objects

hh3cTrangeCreateTimeRangeTable

About this table

This table creates a time range.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cTrangeIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|----------------------|-------------------|---|
| hh3cTrangeIndex (1.3.6.1.4.1.25506 .2.121.1.1.1.1) | not-accessible | Integer32 | 0..2147483647 | Time range index. | The value range is 1 to 1024. |
| hh3cTrangeName (1.3.6.1.4.1.25506 .2.121.1.1.1.2) | read-create | OCTET STRING | 1..32 | Time range name. | As per the MIB. |
| hh3cTrangeValidFlag (1.3.6.1.4.1.25506 .2.121.1.1.1.3) | read-only | TruthValue | Standard values. MIB | Validity flag. | As per the MIB. |
| hh3cTrangeCreateRowStatus (1.3.6.1.4.1.25506 .2.121.1.1.1.4) | read-create | RowStatus | Standard values. MIB | Row status. | <ul style="list-style-type: none">• active(1)• createAndGo(4)• destroy(6) |

hh3cTrangeAbsoluteTable

About this table

This table configures an absolute time range.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cTrangeAbsoluteNameIndex and hh3cTrangeAbsoluteSubIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|----------------------|--|---|
| hh3cTrangeAbsoluteNameIndex (1.3.6.1.4.1.25506.2.121.1.2.1.1) | not-accessible | Integer32 | 0..2147483647 | Time range index. | The value range is 1 to 1024. |
| hh3cTrangeAbsoluteSubIndex (1.3.6.1.4.1.25506.2.121.1.2.1.2) | not-accessible | Integer32 | 1..12 | Subitem index. | The value range is 1 to 12. |
| hh3cTrangeAbsoluteStartTime (1.3.6.1.4.1.25506.2.121.1.2.1.3) | read-create | DateAndTime | Standard values. MIB | Start date and time of the time range, in the format YYYY-MM-DD,hh:mm:0,0. | As per the MIB. |
| hh3cTrangeAbsoluteEndTime (1.3.6.1.4.1.25506.2.121.1.2.1.4) | read-create | DateAndTime | Standard values. MIB | End date and time of the time range, in the format YYYY-MM-DD,hh:mm:0,0. | As per the MIB. |
| hh3cTrangeAbsoluteRowStatus (1.3.6.1.4.1.25506.2.121.1.2.1.5) | read-create | RowStatus | Standard values. MIB | Row status. | <ul style="list-style-type: none">• active(1)• createAndGo(4)• destroy(6) |

hh3cTrangePeriodicTable

About this table

This table configures a periodic time range.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cTrangePeriodicNameIndex and h3cTrangePeriodicSubIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|---|---|---|
| hh3cTrangePeriodicNameIndex (1.3.6.1.4.1.25506.2.121.1.3.1.1) | not-accessible | Integer32 | 0..2147483647 | Time range index. | The value range is 1 to 1024. |
| hh3cTrangePeriodicSubIndex (1.3.6.1.4.1.25506.2.121.1.3.1.2) | not-accessible | Integer32 | 1..32 | Subitem index. | The value range is 1 to 32. |
| hh3cTrangePeriodicDayOfWeek (1.3.6.1.4.1.25506.2.121.1.3.1.3) | read-create | BITS | <ul style="list-style-type: none"> • sunday(0) • monday(1) • tuesday(2) • wednesday(3) • thursday(4) • friday(5) • saturday(6) | Day of the week. | As per the MIB. |
| hh3cTrangePeriodicStartTime (1.3.6.1.4.1.25506.2.121.1.3.1.4) | read-create | DateAndTime | Standard values. MIB | Start date and time of the time range, in the format hh:mm:0,0. | As per the MIB. |
| hh3cTrangePeriodicEndTime (1.3.6.1.4.1.25506.2.121.1.3.1.5) | read-create | DateAndTime | Standard values. MIB | End date and time of the time range, in the format hh:mm:0,0. | As per the MIB. |
| hh3cTrangePeriodicRowStatus (1.3.6.1.4.1.25506.2.121.1.3.1.6) | read-create | RowStatus | Standard values. MIB | Row status. | <ul style="list-style-type: none"> • active(1) • createAndGo(4) • destroy(6) |

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IEEE8021-CN-MIB

About this MIB

Use this MIB to configure QCN to control congestion on a CP, including CND settings and congestion detection settings

MIB file name

ieee8021-cn.mib

Root object

iso(1).org(3).oid_ieee(111).oid_standards-association-numbered-series-standards(2).oid_lan-man-stds(802).oid_ieee802dot1(1).oid_ieee802dot1mibs(1).ieee8021CnMib(18)

Tabular objects

ieee8021CnGlobalTable

About this table

This table configures global QCN settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ieee8021CnGlobalComponentId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------------|--|---|--------------------------|
| ieee8021CnGlobalComponentId (1.3.111.2.802.1.1.18.1.1.1.1) | not-accessible | IEEE8021PbbComponentIdentifier | Standard MIB values. | Component ID. | The value is fixed at 1. |
| ieee8021CnGlobalMasterEnable (1.3.111.2.802.1.1.18.1.1.1.2) | read-write | TruthValue | <ul style="list-style-type: none">true(1)false(2) | Global QCN state. | As per the MIB. |
| ieee8021CnGlobalCnmTransmitPriority (1.3.111.2.802.1.1.18.1.1.1.3) | read-write | IEEE8021PriorityValue | Standard MIB values. | Priority of outgoing CNMs. | Not supported.. |
| ieee8021CnGlobalDiscardedFrames (1.3.111.2.802.1.1.18.1.1.1.4) | read-only | Counter64 | Standard MIB values. | Number of frames discarded from full CP queues. | Not supported.. |

ieee8021CnErroredPortTable

About this table

This table obtains the index of the interface on which a CNPV is configured as an alternate priority.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021CnEpComponentId, ieee8021CnEpPriority, and ieee8021CnEpIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------------|----------------------|---------------------|--------------------------|
| ieee8021CnEpComponentId (1.3.111.2.802.1.1.18.1.2.1.1) | not-accessible | IEEE8021PbbComponentIdentifier | Standard MIB values. | Component ID. | The value is fixed at 1. |
| ieee8021CnEpPriority (1.3.111.2.802.1.1.18.1.2.1.2) | not-accessible | IEEE8021PriorityValue | Standard MIB values. | Alternate priority. | As per the MIB. |
| ieee8021CnEpIfIndex (1.3.111.2.802.1.1.18.1.2.1.3) | read-only | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |

ieee8021CnCompntPriTable

About this table

This table configures global CND settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ieee8021CnComPriComponentId and ieee8021CnComPriPriority.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------------|----------------------|---------------|--------------------------|
| ieee8021CnComPriComponentId (1.3.111.2.802.1.1.18.1.3.1.1) | not-accessible | IEEE8021PbbComponentIdentifier | Standard MIB values. | Component ID. | The value is fixed at 1. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------------|---|-----------------------------------|---|
| ieee8021CnComPriPriority (1.3.111.2.802.1.1.18.1.3.1.2) | not-accessible | IEEE8021Priority Value | Standard MIB values. | 802.1p priority. | As per the MIB. |
| ieee8021CnComPriDefModeChoice (1.3.111.2.802.1.1.18.1.3.1.3) | read-create | ieee8021CnControlChoice | Standard MIB values. | Defense mode choosing mode. | As per the MIB. |
| ieee8021CnComPriAlternatePriority (1.3.111.2.802.1.1.18.1.3.1.4) | read-create | IEEE8021Priority Value | Standard MIB values. | Alternate priority in Admin mode. | As per the MIB. |
| ieee8021CnComPriAutoAltPri (1.3.111.2.802.1.1.18.1.3.1.5) | read-only | IEEE8021Priority Value | Standard MIB values. | Alternate priority in Auto mode. | As per the MIB. |
| ieee8021CnComPriAdminDefenseMode (1.3.111.2.802.1.1.18.1.3.1.6) | read-create | ieee8021CnDefenseMode | Standard MIB values. | Defense mode in Admin mode. | As per the MIB. |
| ieee8021CnComPriCreation (1.3.111.2.802.1.1.18.1.3.1.7) | read-create | INTEGER | <ul style="list-style-type: none"> cncpAutoEnable(1) cncpAutoDisable(2) | Creation method. | Not supported. |
| ieee8021CnComPriLldpInstanceChoice (1.3.111.2.802.1.1.18.1.3.1.8) | read-create | ieee8021CnLldpChoice | Standard MIB values. | LLDP instance choosing mode. | Not supported. |
| ieee8021CnComPriLldpInstanceSelector (1.3.111.2.802.1.1.18.1.3.1.9) | read-create | LldpV2DestAddressTableIndex | Standard MIB values. | LLDP instance index. | Not supported. |
| ieee8021CnComPriRowStatus (1.3.111.2.802.1.1.18.1.3.1.10) | read-create | RowStatus | Standard MIB values. | Row status. | <ul style="list-style-type: none"> active(1) createAndGo(4) destroy(6) |

ieee8021CnPortPriTable

About this table

This table configures CND settings on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ieee8021CnPortPriComponentId, ieee8021CnPortPriority, and ieee8021CnPortPriIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------------|----------------------|---------------------------------------|--------------------------|
| ieee8021CnPortPriComponentId (1.3.111.2.802.1.1.18.1.4.1.1) | not-accessible | IEEE8021PbbComponentIdentifier | Standard MIB values. | Component ID. | The value is fixed at 1. |
| ieee8021CnPortPriority (1.3.111.2.802.1.1.18.1.4.1.2) | not-accessible | IEEE8021PriorityValue | Standard MIB values. | 802.1p priority. | As per the MIB. |
| ieee8021CnPortPriIfIndex (1.3.111.2.802.1.1.18.1.4.1.3) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| ieee8021CnPortPriDefModeChoice (1.3.111.2.802.1.1.18.1.4.1.4) | read-write | ieee8021CnControlChoice | Standard MIB values. | Priority value choosing mode. | As per the MIB. |
| ieee8021CnPortPriAdminDefenseMode (1.3.111.2.802.1.1.18.1.4.1.5) | read-write | ieee8021CnDefenseMode | Standard MIB values. | Defense mode in Admin mode. | As per the MIB. |
| ieee8021CnPortPriAutoDefenseMode (1.3.111.2.802.1.1.18.1.4.1.6) | read-only | ieee8021CnDefenseMode | Standard MIB values. | Negotiated defense mode in Auto mode. | As per the MIB. |
| ieee8021CnPortPriLldpInstanceChoice (1.3.111.2.802.1.1.18.1.4.1.7) | read-write | ieee8021CnLldpChoice | Standard MIB values. | LLDP instance choosing mode. | Not supported. |
| ieee8021CnPortPriLldpInstanceSelector (1.3.111.2.802.1.1.18.1.4.1.8) | read-write | LldpV2DestAddressTableIndex | Standard MIB values. | Selected LLDP instance. | Not supported. |
| ieee8021CnPortPriAlternatePriority (1.3.111.2.802.1.1.18.1.4.1.9) | read-write | IEEE8021PriorityValue | Standard MIB values. | Alternate priority in Admin mode. | As per the MIB. |

ieee8021CnCpTable

About this table

This table obtains congestion detection settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021CnCpComponentId, ieee8021CnCpIfIndex, and ieee8021CnCpIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------------|----------------------|--|-----------------------------------|
| ieee8021CnCpComponentId (1.3.111.2.802.1.1.18.1.5.1.1)) | not-accessible | IEEE8021PbbComponentIdentifier | Standard MIB values. | Component ID. | The value is fixed at 1. |
| ieee8021CnCpIfIndex (1.3.111.2.802.1.1.18.1.5.1.2)) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| ieee8021CnCpIndex (1.3.111.2.802.1.1.18.1.5.1.3)) | not-accessible | Unsigned32 | 1..4096 | CP index. | As per the MIB. |
| ieee8021CnCpPriority (1.3.111.2.802.1.1.18.1.5.1.4)) | read-only | IEEE8021Priority Value | Standard MIB values. | 802.1p priority. | As per the MIB. |
| ieee8021CnCpMacAddress (1.3.111.2.802.1.1.18.1.5.1.5)) | read-only | MacAddress | Standard MIB values. | Source MAC address of outgoing CNMs. | Not supported. |
| ieee8021CnCpIdentifier (1.3.111.2.802.1.1.18.1.5.1.6)) | read-only | OCTET STRING | SIZE(8) | CPID in CNMs. | Not supported. |
| ieee8021CnCpQueueSizeSetPoint (1.3.111.2.802.1.1.18.1.5.1.7)) | read-write | Unsigned32 | 100..4294967295 | Desired queue length. | Supports only the read operation. |
| ieee8021CnCpFeedbackWeight (1.3.111.2.802.1.1.18.1.5.1.8)) | read-write | Integer32 | -10..10 | Weight value. | Supports only the read operation. |
| ieee8021CnCpMinSampleBase (1.3.111.2.802.1.1.18.1.5.1.9)) | read-write | Unsigned32 | 10000..4294967295 | Minimum number of octets to enqueue in the CP's queue between transmissions of CNMs. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|-----------------|
| ieee8021CnCpDiscardedFrames (1.3.111.2.802.1.1.18.1.5.1.10) | read-only | Counter64 | Standard MIB values. | Number of data frames discarded. | As per the MIB. |
| ieee8021CnCpTransmittedFrames (1.3.111.2.802.1.1.18.1.5.1.11) | read-only | Counter64 | Standard MIB values. | Number of data frames passed on to the queue. | As per the MIB. |
| ieee8021CnCpTransmittedCnms (1.3.111.2.802.1.1.18.1.5.1.12) | read-only | Counter64 | Standard MIB values. | Number of CNMs transmitted. | As per the MIB. |
| ieee8021CnCpMinHeaderOctets (1.3.111.2.802.1.1.18.1.5.1.13) | read-write | Unsigned32 | 0..64 | Minimum number of octets to be returned in a CNM | Not supported. |

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HH3C-TUNNEL-MIB

About this MIB

Use this MIB to configure and obtain tunnel settings for various encapsulation protocols.

MIB file name

hh3c-tunnel.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cTunnel (53)

Scalar objects

hh3cTunnelVxlanUdpPort

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|------------------------------------|-----------------|
| hh3cTunnelVxlanUdpPort (1.3.6.1.4.1.25506.2.53.1.1.8.1) | read-write | Integer32 | Unsigned32(1..65535) | UDP port number for VXLAN tunnels. | As per the MIB. |

hh3cTunnelVxlanDropWrongCksmPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------|---|-----------------|
| hh3cTunnelVxlanDropWrongCksmPkt (1.3.6.1.4.1.25506.2.53.1.1.8.2) | read-write | TruthValue | true(1), false(2) | Whether to drop the VXLAN packets with checksum errors. | As per the MIB. |

hh3cTunnelVxlanDropVlanTagPkt

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------|---|-----------------|
| hh3cTunnelVxlanDropVlanTagPkt (1.3.6.1.4.1.25506.2.53.1.1.8.3) | read-write | TruthValue | true(1), false(2) | Whether to drop VXLAN packets with inner VLAN tags. | As per the MIB. |

Tabular objects

hh3cTunnelEviTable

About this table

This table contains EVI tunnel configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cTunnelEviTunnNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|---|--|---------------------|
| hh3cTunnelEviTunnNum (1.3.6.1.4.1.25506.2.53.1.1.4.1.1) | not-accessible | Integer32 | 1..2147483647 | Tunnel number. | As per the MIB. |
| hh3cTunnelEviIndex (1.3.6.1.4.1.25506.2.53.1.1.4.1.2) | read-only | Integer32 | (1..2147483647) | Tunnel interface index. | As per the MIB. |
| hh3cTunnelEviStatus (1.3.6.1.4.1.25506.2.53.1.1.4.1.3) | read-create | INTEGER | active(1), createAndGo(4), destroy(6) | Row status. | As per the MIB. |
| hh3cTunnelEviAddressType (1.3.6.1.4.1.25506.2.53.1.1.4.1.4) | read-create | INTEGER | ipv4(1), ipv6(2) | IP address type. | Only supports IPv4. |
| hh3cTunnelEviLocalAddr (1.3.6.1.4.1.25506.2.53.1.1.4.1.5) | read-create | InetAddress | OCTET STRING (0..255) | Address of the local end of the tunnel. | As per the MIB. |
| hh3cTunnelEviNetworkID (1.3.6.1.4.1.25506.2.53.1.1.4.1.6) | read-create | Integer32 | Integer32 (0..16777215) | Network ID of the tunnel. | As per the MIB. |
| hh3cTunnelEviKeepaliveInterval ((1.3.6.1.4.1.25506.2.53.1.1.4.1.7) | read-create | Integer32 | Integer32 (1..32767) | Keepalive interval of the tunnel. | As per the MIB. |
| hh3cTunnelEviKeepaliveTimes ((1.3.6.1.4.1.25506.2.53.1.1.4.1.8) | read-create | Integer32 | Integer32(1..255) | Maximum number of consecutive keepalive failures that are allowed. | As per the MIB. |

hh3cTunnelEviLinkTable

About this table

This table provides EVI-link interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cTunnelEviTunnNum and hh3cTunnelEviLinkNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|---------------------------|--|-----------------|
| hh3cTunnelEviLinkNum (1.3.6.1.4.1.25506.2.53.1.1.5.1.1) | not-accessible | Integer32 | Unsigned32(1..2147483647) | EVI-Link number. | As per the MIB. |
| hh3cTunnelEviLinkIfIndex (1.3.6.1.4.1.25506.2.53.1.1.5.1.2) | read-only | Integer32 | Integer32(1..2147483647) | EVI-Link interface index. | As per the MIB. |
| hh3cTunnelEviLinkAddressType (1.3.6.1.4.1.25506.2.53.1.1.5.1.3) | read-only | Integer32 | ipv4(1), ipv6(2) | IP address type. | As per the MIB. |
| hh3cTunnelEviLinkRemoteAddr (1.3.6.1.4.1.25506.2.53.1.1.5.1.4) | read-only | InetAddress | OCTET STRING (0..255) | Address of the remote end of the tunnel. | As per the MIB. |

hh3cTunnelVxlanIfTable

About this table

This table contains VXLAN tunnel interface configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cTunnelVxlanIfTunnNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|----------------------------|---|-----------------|
| hh3cTunnelVxlanIfTunnNum (1.3.6.1.4.1.25506.2.53.1.1.7.1.1) | not-accessible | INTEGER | INTEGER (1..2147483647) | Tunnel number. | As per the MIB. |
| hh3cTunnelVxlanTunnIfIndex (1.3.6.1.4.1.25506.2.53.1.1.7.1.2) | read-only | Integer32 | Integer32(1..2147483647) | Tunnel interface index. | As per the MIB. |
| hh3cTunnelVxlanIfAddressType (1.3.6.1.4.1.25506.2.53.1.1.7.1.3) | read-create | INTEGER | ipv4(1), ipv6(2) | IP address type. | As per the MIB. |
| hh3cTunnelVxlanIfLocalAddr (1.3.6.1.4.1.25506.2.53.1.1.7.1.4) | read-create | OCTET STRING | OCTET STRING (0..255) | Address of the local end of the tunnel. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|---|--|-----------------|
| hh3cTunnelVxlanIfRemoteAddr (1.3.6.1.4.1.25506.2.53.1.1.7.1.5) | read-create | OCTET STRING | OCTET STRING (0..255) | Address of the remote end of the tunnel. | As per the MIB. |
| hh3cTunnelVxlanIfStatus (1.3.6.1.4.1.25506.2.53.1.1.7.1.6) | read-create | INTEGER | active(1), createAndGo(4), destroy(6) | Row status. | As per the MIB. |

hh3cTunnelTotalNumTable

About this table

Use this table to get the total number of tunnels of a specific tunnel mode.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is hh3cTunnelEncapsMethod.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|----------------------|--|-----------------|
| hh3cTunnelEncapsMethod (1.3.6.1.4.1.25506.2.53.1.1.10.1.1) | not-accessible | Hh3cTunnelType | Standard MIB values. | Tunnel mode (encapsulation method used by the tunnel). | As per the MIB. |
| hh3cTunnelTotalNum (1.3.6.1.4.1.25506.2.53.1.1.10.1.2) | read-only | Unsigned32 | Standard MIB values. | Total number of tunnels of this tunnel mode. | As per the MIB. |

hh3cTunnelNvgrelfTable

About this table

This table contains the NVGRE tunnel interface configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cTunnelNvgrelfTunnNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|---------------------------|----------------|-----------------|
| hh3cTunnelNvgrelfTunnNum (1.3.6.1.4.1.25506) | not-accessible | Integer32 | Unsigned32(1..2147483647) | Tunnel number. | As per the MIB. |

| | | | | | |
|---|-------------|-----------------|---|--|-----------------|
| .2.53.1.1.11.1.1) | | | | | |
| hh3cTunnelNvgreTunnelIndex (1.3.6.1.4.1.25506.2.53.1.1.11.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Tunnel interface index. | As per the MIB. |
| hh3cTunnelNvgrelfAddressType (1.3.6.1.4.1.25506.2.53.1.1.11.1.3) | read-create | InetAddressType | ipv4(1), ipv6(2) | IP address type. | As per the MIB. |
| hh3cTunnelNvgrelfLocalAddr (1.3.6.1.4.1.25506.2.53.1.1.11.1.4) | read-create | InetAddressType | OCTET STRING (SIZE (0..255)) | Address of the local end of the tunnel. | As per the MIB. |
| hh3cTunnelNvgrelfRemoteAddr (1.3.6.1.4.1.25506.2.53.1.1.11.1.5) | read-create | OCTET STRING | OCTET STRING (0..255) | Address of the remote end of the tunnel. | As per the MIB. |
| hh3cTunnelNvgrelfStatus (1.3.6.1.4.1.25506.2.53.1.1.11.1.6) | read-create | INTEGER | active(1), createAndGo(4), destroy(6) | Row status. | As per the MIB. |

hh3cTunnelDestinationTable

About this table

This table contains tunnel destination address information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are hh3cTunnelDestinationDstAddr, hh3cTunnelDestinationDstType, and hh3cTunnelDestinationTunNum.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---------------------------|----------------------------------|------------------------------------|
| hh3cTunnelDestinationDstAddr (1.3.6.1.4.1.25506.2.53.1.1.12.1) | not-accessible | OCTET STRING | (0..255) | Destination address of a tunnel. | As per the MIB. |
| hh3cTunnelDestinationDstAddrType (1.3.6.1.4.1.25506.2.53.1.1.12.2) | not-accessible | INTEGER | ipv4(1), ipv6(2) | Destination address type. | As per the MIB. |
| hh3cTunnelDestinationTunNum (1.3.6.1.4.1.25506.2.53.1.1.12.3) | not-accessible | Unsigned32 | Unsigned32(1..2147483647) | Tunnel number. | The value range varies by product. |
| hh3cTunnelDestinationTunIndex (1.3.6.1.4.1.25506.2.53.1.1.12.4) | read-only | OCTET STRING | OCTET STRING (0..255) | Tunnel interface index. | As per the MIB. |

| | | | | | |
|-----------------|--|--|--|--|--|
| .2.53.1.1.12.4) | | | | | |
|-----------------|--|--|--|--|--|

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HH3C-8021X-EXT2-MIB

About this MIB

Use this MIB to configure 802.1X parameters.

MIB file name

hh3c-8021x-ext2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3c8021XExt2(153)

Scalar objects

hh3c8021XExt2System

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------------|---|------------------------------|
| hh3c8021XExt2A uthQuietPeriod (1.3.6.1.4.1.25506 .2.153.1.1.1) | read-write | Unsigned32 | Unsigned32 (10..120) | Quiet time after authentication failure. | As per the MIB. |
| hh3c8021XExt2A uthTxPeriod (1.3.6.1.4.1.25506 .2.153.1.1.2) | read-write | Unsigned32 | Unsigned32 (1..120) | Username request timeout time. | As per the MIB. |
| hh3c8021XExt2A uthSuppTimeout (1.3.6.1.4.1.25506 .2.153.1.1.3) | read-write | Unsigned32 | Unsigned32 (1..120) | Client response timeout time. | As per the MIB. |
| hh3c8021XExt2A uthServerTimeout (1.3.6.1.4.1.25506 .2.153.1.1.4) | read-write | Unsigned32 | Unsigned32 (100..300) | Server response timeout time. | As per the MIB. |
| hh3c8021XExt2A uthMaxReq (1.3.6.1.4.1.25506 .2.153.1.1.5) | read-write | Unsigned32 | Unsigned32 (1..10) | Maximum number of attempts to send an authentication request to the same client. | As per the MIB. |
| hh3c8021XExt2A uthReAuthPeriod (1.3.6.1.4.1.25506 .2.153.1.1.6) | read-write | Unsigned32 | Unsigned32 (60..86400) | Periodic reauthentication interval on the access device. | Value range: 60 to 86400. |
| hh3c8021XExt2A uthMethod (1.3.6.1.4.1.25506 .2.153.1.1.7) | read-write | INTEGER | chap(1), pap(2), eap(3) | EAP message handling method used by the access device. | As per the MIB. |

Tabular objects

hh3c8021XExt2AuthConfigExtTable

About this table

Use this table to configure port-specific extended 802.1X features.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is dot1xPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------------------|---|--|
| hh3c8021XExt2PaePortAuthAdminStatus (1.3.6.1.4.1.25506.2.153.1.2.1.1.1) | read-write | TruthValue | true(1), false(2) | Whether 802.1X is enabled on a port. | As per the MIB. |
| hh3c8021XExt2PaePortControlledType (1.3.6.1.4.1.25506.2.153.1.2.1.1.2) | read-write | INTEGER | portbased(1), macbased(2) | Port access control method. | As per the MIB. |
| hh3c8021XExt2PaePortMaxUserNum (1.3.6.1.4.1.25506.2.153.1.2.1.1.3) | read-write | Unsigned32 | Unsigned32 (1..4294967295) | Maximum number of concurrent users on the port. | As per the MIB. |
| hh3c8021XExt2PaePortUserNumNow (1.3.6.1.4.1.25506.2.153.1.2.1.1.4) | read-only | Unsigned32 | Standard MIB values | Number of current online users on the port. | As per the MIB. |
| hh3c8021XExt2PaePortClearStatistics (1.3.6.1.4.1.25506.2.153.1.2.1.1.5) | read-write | INTEGER | noClear(0), clear(1) | Clears 802.1X statistics. | As per the MIB. You can set the value only to clear(1). |
| hh3c8021XExt2PaePortMcastTrigStatus (1.3.6.1.4.1.25506.2.153.1.2.1.1.6) | read-write | TruthValue | true(1), false(2) | Whether to enable the multicast trigger. | As per the MIB. |
| hh3c8021XExt2PaePortHandshakeStatus (1.3.6.1.4.1.25506.2.153.1.2.1.1.7) | read-write | TruthValue | true(1), false(2) | Whether to send handshake packets. | As per the MIB. |

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HH3C-DOMAIN-MIB

About this MIB

Use this MIB to manage domains.

MIB file name

hh3c-domain.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cDomain(46)

Scalar objects

hh3cDomainControl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------|---------------|-----------------------------|---|
| hh3cDomainDefault (1.3.6.1.4.1.25506.2.46.1.1) | read-write | OCTET STRING | SIZE (1..255) | Name of the default domain. | Default: system. (Comware 5) Default: 24. |

hh3cDomainGlobalStat

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
|--------------|--------|--------|-------------|-------------|----------------|

Tabular objects

hh3cDomainInfoTable

About this table

Use this table to configure or obtain ISP domain settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cDomainName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------|-----------|--------------|---------------|-------------------|-------------------------------|
| hh3cDomainName | read-only | OCTET STRING | SIZE (0..255) | Name of a domain. | String of 1 to 64 characters. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|-----------------------|-----------------------|--|
| (1.3.6.1.4.1.25506.2.46.2.1.1.1) | | | | | |
| hh3cDomainState (1.3.6.1.4.1.25506.2.46.2.1.1.2) | read-create | INTEGER | active(1) block(2) | Status of the domain. | As per the MIB. |
| hh3cDomainRowStatus (1.3.6.1.4.1.25506.2.46.2.1.1.14) | read-create | RowStatus | Standard MIB values. | Row status. | The following values are supported: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cDomainSchemeTable

About this table

This table contains AAA schemes for a domain. By default, a domain has only a local scheme.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cDomainName and hh3cDomainSchemeIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------|---|------------------------------------|--|
| hh3cDomainSchemeIndex (1.3.6.1.4.1.25506.2.46.2.2.1.1) | not-accessible | Integer32 | Standard MIB values. | Index of an AAA scheme. | As per the MIB. |
| hh3cDomainSchemeMode (1.3.6.1.4.1.25506.2.46.2.2.1.2) | read-create | H3cModeOfDomainScheme | INTEGER{ none(1) local(2) radius(3) tacacs(4) ldap(5) } | Mode of the AAA scheme. | As per the MIB. |
| hh3cDomainAuthSchemeName (1.3.6.1.4.1.25506.2.46.2.2.1.3) | read-create | OCTET STRING | OCTET STRING (SIZE (0..32)) | Name of the authentication scheme. | This object has been replaced by hh3cDomainSchemeAAAName. Its value will be ignored. |
| hh3cDomainAcctSchemeName (1.3.6.1.4.1.25506.2.46.2.2.1.4) | read-create | OCTET STRING | OCTET STRING (SIZE (0..32)) | Name of the accounting scheme. | This object has been replaced by hh3cDomainSchemeAAAName. Its value will be ignored. |
| hh3cDomainScheme | read-create | RowStatus | Standard MIB | Row status. | The following |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------------------------|--|---|---|
| meRowStatus (1.3.6.1.4.1.25506.2.46.2.2.1.5) | | | values. | | values are supported: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |
| hh3cDomainSchemeAAAType (1.3.6.1.4.1.25506.2.46.2.2.1.6) | read-create | Hh3cAAATypeDomainScheme | INTEGER{ accounting(1) authentication(2) authorization(3) none(4) } | Service type of the server, accounting, authentication, or authorization. | As per the MIB. |
| hh3cDomainSchemeAAAName (1.3.6.1.4.1.25506.2.46.2.2.1.7) | read-create | OCTET STRING | OCTET STRING (SIZE (0..32)) | Scheme name of the domain. | If the hh3cDomainSchemeMode is RADIUS, TACACS, or LDAP scheme mode, you must specify a valid scheme name. If the hh3cDomainSchemeMode is none or local, the object will be ignored. When read, this object returns a zero-length string. |
| hh3cDomainSchemeAccessMode (1.3.6.1.4.1.25506.2.46.2.2.1.8) | read-create | Hh3cAccessModeofDomainScheme | INTEGER{ default(1) login(2) lanAccess(3) portal(4) ppp(5) gcm(6) dvpn(7) dhcp(8) voice(9) superauthen(10) command(11) reserved(12) } | Access mode of the scheme for the domain. | Supports only the value default. |

hh3cDomainStatTable

About this table

This table contains statistics for a domain.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cDomainName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| hh3cDomainOnlineIpoEUser (1.3.6.1.4.1.25506.2.46.2.4.1.4) | read-only | Unsigned32 | Standard MIB values. | Number of online IPoE users in the domain. | As per the MIB. |
| hh3cDomainOnlinePPPoEUser (1.3.6.1.4.1.25506.2.46.2.4.1.5) | read-only | Unsigned32 | Standard MIB values. | Number of online PPPoE users in the domain. | As per the MIB. |
| hh3cDomainOnlinePPPoAUser (1.3.6.1.4.1.25506.2.46.2.4.1.6) | read-only | Unsigned32 | Standard MIB values. | Number of online PPPoA users in the domain. | As per the MIB. |
| hh3cDomainOnlineLacUser (1.3.6.1.4.1.25506.2.46.2.4.1.8) | read-only | Unsigned32 | Standard MIB values. | Number of online LAC users in the domain. | As per the MIB. |

hh3cDomainIPPoolStatTable

About this table

This table contains IP pool statistics for a domain.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cDomainName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
|--------------|--------|--------|-------------|-------------|----------------|

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HH3C-PORT-SECURITY-MIB

About this MIB

Use this MIB to implement port security.

MIB file name

hh3c-port-security.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cPortSecurity(26).hh3cPortSecurityMIB(1)

Scalar objects

hh3cSecurePortSecurity

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|---------------|----------------------------|--|-----------------|
| hh3cSecurePortSecurityControl (1.3.6.1.4.1.25506.2.26.1.1.1) | read-write | INTEGER | enabled(1), disabled(2) | Whether to enable port security. | As per the MIB. |
| hh3cSecurePortVlanMembershipList (1.3.6.1.4.1.25506.2.26.1.1.2) | accessible-for-notification | DisplayString | OCTET STRING (0..255) | VLAN IDs assigned to each port, which are used by notifications. | As per the MIB. |

hh3cSecureRalmObjects

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------------|---|-----------------|
| hh3cSecureRalmDefaultSessionTime (1.3.6.1.4.1.25506.2.26.1.1.4.1) | read-write | INTEGER | INTEGER (1..1000000) | Periodic MAC reauthentication interval. | Not supported. |
| hh3cSecureRalmHoldoffTime (1.3.6.1.4.1.25506.2.26.1.1.4.2) | read-write | INTEGER | INTEGER (1..1000000) | Quiet timer before a blocked (denied) MAC address can be reauthenticated. | As per the MIB. |
| hh3cSecureRalmReauthenticate (1.3.6.1.4.1.25506.2.26.1.1.4.3) | read-write | MacAddress | OCTET STRING (6) | Writing a MAC address to this object causes an immediate RALM reauthentication of this address. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|--|--|---|
| hh3cSecureRalmAuthMode (1.3.6.1.4.1.25506.2.26.1.1.4.4) | read-write | INTEGER | papUsernameAs MacAddress(1), papUsernameFixed(2) | MAC authentication user account policy. | <p>If the value is set to papUsernameAsMacAddress(1), the MAC address of each user is used as both the username and password.</p> <p>If the value is set to papUsernameFixed(2), the username and password are from the hh3cSecureRalmAuthUsername and hh3cSecureRalmAuthPassword objects. In this mode, the MAC address of each user can be carried in the Calling-Station-Id attribute of RADIUS packets.</p> <p>The hh3cSecureRalmAuthMode object supports the get and set operations.</p> |
| hh3cSecureRalmAuthUsername (1.3.6.1.4.1.25506.2.26.1.1.4.5) | read-write | DisplayString | OCTET STRING (1..80) | Username. | <p>Length: 1 to 55 characters.</p> <p>The username cannot contain a space or an at sign (@).</p> |
| hh3cSecureRalmAuthPassword (1.3.6.1.4.1.25506.2.26.1.1.4.6) | read-write | DisplayString | OCTET STRING (1..63) | Password. | Supports only the plaintext form. |
| hh3cSecureRalmAuthDomain (1.3.6.1.4.1.25506.2.26.1.1.4.7) | read-write | DisplayString | OCTET STRING (1..255) | Domain used only by MAC authentication users. | As per the MIB. |
| hh3cSecureRalmAuthOfflineTime (1.3.6.1.4.1.25506.2.26.1.1.4.8) | read-write | Integer32 | Integer32 (60..2147483647) | <p>MAC authentication offline detect timer.</p> <p>This timer sets the interval that the device must wait for traffic from a user before the device determines that the user is idle. If the device has not received traffic from a user</p> | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------|---|----------------------------------|
| | | | | before the timer expires, the device logs off that user and requests the accounting server to stop accounting for the user. | |
| hh3cSecureRalmAuthServerTimeoutTime (1.3.6.1.4.1.25506.2.26.1.1.4.9) | read-write | INTEGER | INTEGER (1..65535) | Server timeout timer. This timer sets the interval that the device waits for a response from a RADIUS server before the device determines that the RADIUS server is unavailable. | Value range: 100 to 300 seconds. |
| hh3cSecureMacControl (1.3.6.1.4.1.25506.2.26.1.1.4.10) | read-write | TruthValue | enabled(1), disabled(2) | Whether to enable MAC authentication globally. | As per the MIB. |

Tabular objects

hh3cSecurePortTable

About this table

Use this table to configure or obtain security attributes on each port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cDomainName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|-------------------------------|---|
| hh3cSecurePortMode (1.3.6.1.4.1.25506.2.26.1.2.1.1.1) | read-write | INTEGER | noRestrictions(1), continuousLearning(2), autoLearn(3), secure(4), userLogin(5), userLoginSecure(6), userLoginWithOUI(7), | Port security mode of a port. | The continuousLearning mode is not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|--|---|---|
| | | | macAddressWithRadius(8), macAddressOrUserLoginSecure(9), macAddressElseUserLoginSecure(10), userLoginSecureExt(11), macAddressOrUserLoginSecureExt(12), macAddressElseUserLoginSecureExt(13), macAddressAndUserLoginSecure(14), macAddressAndUserLoginSecureExt(15) | | |
| hh3cSecureNeedToKnowMode (1.3.6.1.4.1.25506.2.26.1.2.1.1.2) | read-write | INTEGER | notAvailable(1), disabled(2), needToKnowOnly(3), needToKnowWithBroadcastsAllowed(4), needToKnowWithMulticastsAllowed(5), permanentNeedToKnowOnly(6), permanentNeedToKnowWithBroadcastsAllowed(7), permanentNeedToKnowWithMulticastsAllowed(8) | This object determines which frames are allowed to pass through the port by detecting the destination MAC addresses of the frames. | As per the MIB. |
| hh3cSecureIntrusionAction (1.3.6.1.4.1.25506.2.26.1.2.1.1.3) | read-write | INTEGER | notAvailable(1), noAction(2), disablePort(3), disablePortTemporarily(4), allowDefaultAccesses(5), blockMacAddress(6) | Intrusion protection action to take when intrusion protection detects illegal frames on the port by detecting the source MAC addresses of the frames. | The allowDefaultAccess action is not supported. |
| hh3cSecureNumberOfAddresses (1.3.6.1.4.1.25506.2.26.1.2.1.1.4) | read-write | Integer32 | Standard MIB values. | Maximum number of MAC addresses that the port can learn or store. | As per the MIB. |
| hh3cSecureNumberOfAddressesStored (1.3.6.1.4.1.25506.2.26.1.2.1.1.5) | read-only | INTEGER | Standard MIB values. | Number of MAC addresses that the port has learned or stored. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|---|-----------------|
| .2.26.1.2.1.1.5) | | | | | |
| hh3cSecureMaximumAddresses (1.3.6.1.4.1.25506.2.26.1.2.1.1.6) | read-only | INTEGER | Standard MIB values. | Maximum value that the hh3cSecureNumberAddresses object supports. | As per the MIB. |

hh3cSecureAddressTable

About this table

Use this table to configure or obtain information about MAC addresses on each port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3cSecureAddrMAC, and hh3cSecureAddrVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|------------|--|-----------------------------|-----------------|
| hh3cSecureAddrMAC (1.3.6.1.4.1.25506.2.26.1.2.2.1.1) | accessible-for-notify | MacAddress | Standard MIB values. | MAC address on a port. | Not supported. |
| hh3cSecureAddrVlanID (1.3.6.1.4.1.25506.2.26.1.2.2.1.2) | not-accessible | Integer32 | Standard MIB values. | VLAN ID of the MAC address. | Not supported. |
| hh3cSecureAddrMACStatus (1.3.6.1.4.1.25506.2.26.1.2.2.1.3) | read-create | INTEGER | addressBlackhole(1), addressUserConfig(2), addressDot1xAuth(3), addressRALM(4) | MAC address attribute. | Not supported. |
| hh3cSecureAddrRowStatus (1.3.6.1.4.1.25506.2.26.1.2.2.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cSecureOUItable

About this table

Use this table to configure or obtain Organizationally Unique Identifier (OUI) values.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cSecureOUIIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|-------------|-----------------|
| hh3cSecureOUIIndex (1.3.6.1.4.1.25506.2.26.1.2.3.1.1) | not-accessible | INTEGER | INTEGER (1..1024) | OUI index | 1..16 |
| hh3cSecureOUI (1.3.6.1.4.1.25506.2.26.1.2.3.1.2) | read-create | OCTET STRING | OCTET STRING (3) | OUI value. | As per the MIB. |
| hh3cSecureOUIRowStatus (1.3.6.1.4.1.25506.2.26.1.2.3.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cSecureBindingTable

About this table

Use this table to configure or obtain information about port, IP address, and MAC address binding entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cSecureBindingIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------------------|------------------------------|----------------|
| hh3cSecureBindingIndex (1.3.6.1.4.1.25506 | not-accessible | Integer32 | Standard MIB values. | Index of a binding entry. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|------------|--|-----------------------------------|----------------|
| .2.26.1.2.4.1.1) | | | | | |
| hh3cSecureBindingPort (1.3.6.1.4.1.25506.2.26.1.2.4.1.2) | read-create | Integer32 | Standard MIB values. | Port index in the binding entry. | Not supported. |
| hh3cSecureBindingAddrMAC (1.3.6.1.4.1.25506.2.26.1.2.4.1.3) | read-create | MacAddress | Standard MIB values. | MAC address in the binding entry. | Not supported. |
| hh3cSecureBindingAddrIp (1.3.6.1.4.1.25506.2.26.1.2.4.1.4) | read-create | IpAddress | Standard MIB values. | IP address in the binding entry. | Not supported. |
| hh3cSecureBindingRowStatus (1.3.6.1.4.1.25506.2.26.1.2.4.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Not supported. |

hh3cSecureAssignTable

About this table

Use this table to configure or obtain information about port assignment.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|--------------------------|--|-----------------|
| hh3cSecureAssignEnable (1.3.6.1.4.1.25506.2.26.1.2.5.1.1) | read-write | TruthValue | true(1), false(2) | Whether to apply the authorization attributes received from the server to a port. | As per the MIB. |
| hh3cSecureVlanAssignment (1.3.6.1.4.1.25506.2.26.1.2.5.1.2) | read-only | OCTET STRING | OCTET STRING (0..255) | Authorization VLAN information (including VLAN IDs and the tagged or untagged attribute) assigned by the server to the port. | As per the MIB. |

Notifications

hh3cSecureAddressLearned

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.1 | A new secure MAC address was learned. | Informational | N/A | N/A | ON |

Description

This notification is generated when a new secure MAC address is learned.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security address-learned` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security address-learned` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|----------------------|-------|------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | INTEGER | 1.. 2147483647 |
| 1.3.6.1.4.1.25506.2.26.1.2.2.1.1(hh3cSecureAddrMAC) | Learned MAC address. | Yes | MacAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cSecureViolation

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.2 | Intrusion protection event occurred. | Informational | N/A | N/A | ON |

Description

This notification is generated when an intrusion protection event occurs.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security intrusion` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security intrusion` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------|-------|------------|--------------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | Integer32 | 1.. 2147483647 |
| 1.3.6.1.4.1.25506.2.26.1.2.2.1.1 (hh3cSecureAddrMAC) | MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.3.6.1.2.1.2.2.1.7 (ifAdminStatus) | Link layer status. | No | INTEGER | up(1) down(2) testing(3) |

Recommended action

No action is required.

hh3cSecureLoginFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.3 | An 802.1X user failed authentication. | Informational | N/A | N/A | ON |

Description

This notification is generated when an 802.1X user fails authentication.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security dot1x-failure` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security dot1x-failure` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|-----------------|-----------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.26.1.2.2.1.1 (hh3cSecureAddrMAC) | User MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.0.8802.1.1.1.2.4.1.9 (dot1xAuthSessionUserName) | Authentication user name. | Yes | SnmpAdminString | OCTET STRING(SIZE (0..255)) |

Recommended action

No action is required.

hh3cSecureLogon

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.4 | An 802.1X user logged on. | Informational | N/A | N/A | ON |

Description

A notification is generated when an 802.1X user logs on.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security dot1x-logon` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security dot1x-logon` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|---|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | Integer32 | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.26.1.2.2.1.1 (hh3cSecureAddrMAC) | User MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.0.8802.1.1.1.1.2.4.1.9 (dot1xAuthSessionUserName) | Username. | Yes | SnmpAdminString | OCTET STRING(SIZE (0..255)) |
| 1.0.8802.1.1.1.1.2.4.1.6 (dot1xAuthSessionAuthenticationMethod) | Authentication method. | No | INTEGER | remoteAuthServer(1) localAuthServer(2) |
| 1.3.6.1.4.1.25506.2.26.1.1.2(hh3cSecurePortVlanMembershipList) | VLAN membership assigned to the port on session activation. | No | DisplayString | OCTET STRING (0..255) |

Recommended action

No action is required.

hh3cSecureLogoff

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.5 | An 802.1X user logged off. | Informational | N/A | N/A | ON |

Description

This notification is generated when an 802.1X user logs off.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security dot1x-logoff` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security dot1x-logoff` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|--|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index | Yes | Integer32 | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.26 .1.2.2.1.1 (hh3cSecureAddrMAC) | User MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.0.8802.1.1.1.1.2.4.1. 9 (dot1xAuthSessionUs erName) | Username. | Yes | SnmpAdminString | OCTET STRING(SIZE (0.. 255)) |
| 1.0.8802.1.1.1.1.2.4.1. 8(dot1xAuthSessionTe rminateCause) | 802.1X session termination cause. | No | INTEGER | supplicantLogoff(1) portFailure(2) supplicantRestart(3) reauthFailed(4) authControlForceUnau th(5) portReInit(6) portAdminDisabled(7) notTerminatedYet(999) |
| 1.3.6.1.4.1.25506.2.26 .1.1.2(hh3cSecurePort VlanMembershipList) | VLAN membership assigned to the port on session termination. | No | DisplayString | OCTET STRING (0..255) |

Recommended action

No action is required.

hh3cSecureRalmLoginFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|---|---------------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.26.1.3.6 | A MAC authentication user failed authentication. | Informational | N/A | N/A | ON |

Description

This notification is generated when a MAC authentication user fails authentication.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security mac-auth-failure` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security mac-auth-failure` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|---------------|---|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | Integer32 | 1.. 2147483647 |
| 1.3.6.1.4.1.25506.2.26.1.2.2.1.1(hh3cSecureAddrMAC) | User MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.26.1.1.4.4(hh3cSecureRalmAuthMode) | User account policy. | No | INTEGER | papUsernameAsMacAddress(1) papUsernameFixed(2) |
| 1.3.6.1.4.1.25506.2.26.1.1.4.5(hh3cSecureRalmAuthUsername) | Authentication user name. | No | DisplayString | OCTET STRING (1..80) |

Recommended action

No action is required.

hh3cSecureRalmLogon

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.7 | A MAC authentication user logged on. | Informational | N/A | N/A | ON |

Description

This notification is generated when a MAC authentication user logs on.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security mac-auth-logon` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security mac-auth-logon` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------|-------|------------|----------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | Integer32 | 1.. 2147483647 |
| 1.3.6.1.4.1.25506.2.26.1.2.2.1.1 (hh3cSecureAddrMAC) | User MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.26 | User account policy. | No | INTEGER | papUsernameAsMacA |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------------|----------------------------------|
| .1.1.4.4(hh3cSecureRalmAuthMode) | | | | ddress(1) papUsernameFixed(2) |
| 1.3.6.1.4.1.25506.2.26 .1.1.4.5(hh3cSecureRalmAuthUsername) | Authentication user name. | No | DisplayString | OCTET STRING (1..80) |
| 1.3.6.1.4.1.25506.2.26 .1.1.2(hh3cSecurePortVlanMembershipList) | VLAN membership assigned to the port on session activation. | No | DisplayString | OCTET STRING (0..255) |

Recommended action

No action is required.

hh3cSecureRalmLogoff

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.26.1.3.8 | A MAC authentication user logged off. | Informational | N/A | N/A | ON |

Description

This notification is generated when a MAC authentication user logs off.

Status control

ON

CLI: Use the `snmp-agent trap enable port-security mac-auth-logoff` command.

OFF

CLI: Use the `undo snmp-agent trap enable port-security mac-auth-logoff` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|---------------|---|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Port index. | Yes | Integer32 | 0..2147483647 |
| 1.3.6.1.4.1.25506.2.26 .1.2.2.1.1 (hh3cSecureAddrMAC) | Secure MAC address. | Yes | MacAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.26 .1.1.4.4(hh3cSecureRalmAuthMode) | User account policy. | No | INTEGER | papUsernameAsMacA ddress(1) papUsernameFixed(2) |
| 1.3.6.1.4.1.25506.2.26 .1.1.4.5(hh3cSecureRalmAuthUsername) | Authentication user name. | No | DisplayString | OCTET STRING (1..80) |
| 1.3.6.1.4.1.25506.2.26 .1.1.2(hh3cSecurePortVlanMembershipList) | VLAN membership assigned to the port on session termination. | No | DisplayString | OCTET STRING (0..255) |

Recommended action

No action is required.

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HH3C-RADIUS-MIB

About this MIB

Use this MIB to obtain and configure RADIUS server settings.

MIB file name

hh3c-radius.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cRadius(13)

Scalar objects

hh3cRadiusAuthErrThreshold

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|------------------------|---|-----------------|
| hh3cRadiusAuthErrThreshold (1.3.6.1.4.1.25506.2.13.1.3.1) | read-write | Unsigned32 | Unsigned32 (1..100) | Authentication failure alarm threshold. | As per the MIB. |

hh3cRadiusStatistic

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| hh3cRadiusStatAccReq (1.3.6.1.4.1.25506.2.13.6.1) | read-only | Counter64 | Standard MIB values. | Number of RADIUS accounting requests sent to the RADIUS server, including start-accounting requests and real-time accounting requests. | As per the MIB. |
| hh3cRadiusStatAccAck (1.3.6.1.4.1.25506.2.13.6.2) | read-only | Counter64 | Standard MIB values. | Number of RADIUS accounting responses received from the RADIUS server. | As per the MIB. |
| hh3cRadiusStatLogoutReq (1.3.6.1.4.1.25506.2.13.6.3) | read-only | Counter64 | Standard MIB values. | Number of logout requests sent to the RADIUS server. | As per the MIB. |
| hh3cRadiusStatLogoutAck (1.3.6.1.4.1.25506.2.13.6.4) | read-only | Counter64 | Standard MIB values. | Number of logout responses received from the RADIUS server. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|----------------|----------------|
| .2.13.6.4) | | | | RADIUS server. | |

Tabular objects

hh3cRdInfoTable

About this table

Use this table to configure or obtain RADIUS authentication scheme settings. Each RADIUS scheme contains a primary authentication server, a secondary authentication server, and other settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cRdGroupName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|-------------------------|--|---|
| hh3cRdGroupNa me (1.3.6.1.4.1.25506 .2.13.1.1.1.1) | not-accessible | DisplayString | OCTET STRING (1..32) | Name of a RADIUS scheme. | The access privilege is not-accessible. |
| hh3cRdPrimUdpP ort (1.3.6.1.4.1.25506 .2.13.1.1.1.3) | read-create | Integer32 | Standard MIB values. | Port number of the primary authentication server. | Value range: 1 to 65535. |
| hh3cRdPrimState (1.3.6.1.4.1.25506 .2.13.1.1.1.4) | read-create | INTEGER | active(1), block(2) | Status of the primary authentication server. | As per the MIB. |
| hh3cRdSecUdpPo rt (1.3.6.1.4.1.25506 .2.13.1.1.1.6) | read-create | Integer32 | Standard MIB values. | Port number of the secondary authentication server. | Value range: 1 to 65535. |
| hh3cRdSecState (1.3.6.1.4.1.25506 .2.13.1.1.1.7) | read-create | INTEGER | active(1), block(2) | Status of the secondary authentication server. | As per the MIB. |
| hh3cRdKey (1.3.6.1.4.1.25506 .2.13.1.1.1.8) | read-create | DisplayString | OCTET STRING (1..32) | Shared key for communication with the authentication server. | The shared key is a string of 0 to 64 characters. In dayou OEM version, the shared key string must be nine characters long or longer and must contain digits, uppercase letters, lowercase letters, and special |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|--|--|--|
| | | | | | characters. When read, this object returns a zero-length string. |
| hh3cRdRetry (1.3.6.1.4.1.25506.2.13.1.1.1.9) | read-create | Integer32 | Standard MIB values. | Maximum number of attempts for transmitting an authentication packet to the authentication server. | Value range: 1 to 20. |
| hh3cRdTimeout (1.3.6.1.4.1.25506.2.13.1.1.1.10) | read-create | Integer32 | Standard MIB values. | Response timeout time for the RADIUS authentication server, in seconds. | Value range: 1 to 10. |
| hh3cRdPrimAuthIpAddrType (1.3.6.1.4.1.25506.2.13.1.1.1.11) | read-create | InetAddressType | Standard MIB values. | Type of the IP address for the primary authentication server. | You must specify hh3cRdPrimAuthIpAddrType and hh3cRdPrimAuthIpAddr in pairs in an SNMP request. |
| hh3cRdPrimAuthIpAddr (1.3.6.1.4.1.25506.2.13.1.1.1.12) | read-create | InetAddress | OCTET STRING (0..255) | IP address of the primary authentication server. | As per the MIB. |
| hh3cRdSecAuthIpAddrType (1.3.6.1.4.1.25506.2.13.1.1.1.13) | read-create | InetAddressType | Standard MIB values. | Type of the IP address for the secondary authentication server. | You must specify hh3cRdSecAuthIpAddrType and hh3cRdSecAuthIpAddr in pairs in an SNMP request. |
| hh3cRdSecAuthIpAddr (1.3.6.1.4.1.25506.2.13.1.1.1.14) | read-create | InetAddress | OCTET STRING (0..255) | IP address of the secondary authentication server. | As per the MIB. |
| hh3cRdQuietTime (1.3.6.1.4.1.25506.2.13.1.1.1.16) | read-create | Integer32 | Integer32 (0..255) | Quiet time for the authentication server to restore to the active status, in minutes. | Value range: 0 to 255. |
| hh3cRdUserNameFormat (1.3.6.1.4.1.25506.2.13.1.1.1.17) | read-create | INTEGER | withoutdomain(1), withdomain(2), keeporiginal(3) | Format of usernames sent to the RADIUS server. | As per the MIB. |
| hh3cRdRowStatus (1.3.6.1.4.1.25506.2.13.1.1.1.18) | read-create | RowStatus | Standard MIB values. | Row status. | The following values are supported: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |
| hh3cRdSecKey (1.3.6.1.4.1.25506.2.13.1.1.1.19) | read-create | DisplayString | OCTET STRING (0..64) | Shared key for communication with the secondary authentication | The shared key is a string of 0 to 64 characters. In dayou OEM |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|----------------------|---|--|
| | | | | server. | version, the shared key string must be nine characters long or longer and must contain digits, uppercase letters, lowercase letters, and special characters. When read, this object returns a zero-length string. |
| hh3cRdPrimVpnName (1.3.6.1.4.1.25506.2.13.1.1.1.20) | read-create | DisplayString | OCTET STRING (0..31) | Name of the VPN to which the primary authentication server belongs. | As per the MIB. |
| hh3cRdSecVpnName (1.3.6.1.4.1.25506.2.13.1.1.1.21) | read-create | DisplayString | OCTET STRING (0..31) | Name of the VPN to which the secondary authentication server belongs. | As per the MIB. |
| hh3cRdAuthNasIpAddrType (1.3.6.1.4.1.25506.2.13.1.1.1.22) | read-create | InetAddressType | Standard MIB values. | Type of the NAS IP addresses for RADIUS authentication packets sent to the authentication server. | Not supported. |
| hh3cRdAuthNasIpAddr (1.3.6.1.4.1.25506.2.13.1.1.1.23) | read-create | IpAddress | Standard MIB values. | NAS IPv4 address. | As per the MIB. |
| hh3cRdAuthNasIPv6Addr (1.3.6.1.4.1.25506.2.13.1.1.1.24) | read-create | Ipv6Address | Standard MIB values. | NAS IPv6 address. | As per the MIB. |

hh3cRdAccInfoTable

About this table

Use this table to configure or obtain RADIUS accounting scheme settings. Each RADIUS scheme contains a primary accounting server, a secondary accounting server, and other settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

You must specify hh3cRdAccRealTime and hh3cRdAccRealTimeUnit in pairs in an SNMP request.

Columns

The table index is hh3cRdAccGroupName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--------------------------|--|--|
| hh3cRdAccGroup Name (1.3.6.1.4.1.25506 .2.13.1.2.1.1) | not-accessible | DisplayString | OCTET STRING (1..32) | Name of a RADIUS accounting scheme. | The access privilege is not-accessible. |
| hh3cRdPrimAccIp AddrType (1.3.6.1.4.1.25506 .2.13.1.2.1.2) | read-create | InetAddressType | Standard MIB values. | Type of the IP address for the primary accounting server. | You must specify hh3cRdPrimAccIp AddrType and hh3cRdPrimAccIp Addr in pairs in an SNMP request. |
| hh3cRdPrimAccIp Addr (1.3.6.1.4.1.25506 .2.13.1.2.1.3) | read-create | InetAddress | OCTET STRING (0..255) | IP address of the primary accounting server. | As per the MIB. |
| hh3cRdPrimAccU dpPort (1.3.6.1.4.1.25506 .2.13.1.2.1.4) | read-create | Integer32 | Standard MIB values. | Port number of the primary accounting server. | Value range: 1 to 65535. |
| hh3cRdPrimAccSt ate (1.3.6.1.4.1.25506 .2.13.1.2.1.5) | read-create | INTEGER | active(1), block(2) | Status of the primary accounting server. | As per the MIB. |
| hh3cRdSecAccIp AddrType (1.3.6.1.4.1.25506 .2.13.1.2.1.6) | read-create | InetAddressType | Standard MIB values. | Type of the IP address for the secondary accounting server. | You must specify hh3cRdSecAccIp AddrType and hh3cRdSecAccIp Addr in pairs in an SNMP request. |
| hh3cRdSecAccIp Addr (1.3.6.1.4.1.25506 .2.13.1.2.1.7) | read-create | InetAddress | OCTET STRING (0..255) | IP address of the secondary accounting server. | As per the MIB. |
| hh3cRdSecAccUd pPort (1.3.6.1.4.1.25506 .2.13.1.2.1.8) | read-create | Integer32 | Standard MIB values. | Port number of the secondary accounting server. | Value range: 1 to 65535. |
| hh3cRdSecAccSt ate (1.3.6.1.4.1.25506 .2.13.1.2.1.9) | read-create | INTEGER | active(1), block(2) | Status of the primary accounting server. | As per the MIB. |
| hh3cRdAccKey (1.3.6.1.4.1.25506 .2.13.1.2.1.10) | read-create | DisplayString | OCTET STRING (0..64) | Shared key for communication with the accounting server. | The shared key is a string of 0 to 64 characters. In dayou OEM version, the shared key string must be nine characters long or longer and must contain digits, uppercase letters, lowercase letters, and special characters. When read, this object returns a zero-length string. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|--|---|--|
| hh3cRdAccRetry (1.3.6.1.4.1.25506.2.13.1.2.1.11) | read-create | Integer32 | Standard MIB values. | Maximum number of attempts for transmitting an accounting packet to the accounting server. | Value range: 1 to 20. |
| hh3cRdAccTimeout (1.3.6.1.4.1.25506.2.13.1.2.1.12) | read-create | Integer32 | Standard MIB values. | Response timeout time for the accounting server, in seconds. | Value range: 1 to 10. |
| hh3cRdAccServerType (1.3.6.1.4.1.25506.2.13.1.2.1.13) | read-create | INTEGER | standard(1), iphotel(2), portal(3), extended(4) | Service type provided by the accounting server. | Only standard RADIUS attributes (value 1) are supported. |
| hh3cRdAccQuietTime (1.3.6.1.4.1.25506.2.13.1.2.1.14) | read-create | Integer32 | Integer32 (0..255) | Quiet time for the accounting server to restore to the active status, in minutes. | Value range: 0 to 255. |
| hh3cRdAccFailureAction (1.3.6.1.4.1.25506.2.13.1.2.1.15) | read-create | INTEGER | ignore (1), reject(2) | Action to take on accounting failure. | Not supported |
| hh3cRdAccRealTime (1.3.6.1.4.1.25506.2.13.1.2.1.16) | read-create | Integer32 | Integer32 (0..71582) | Interval for sending real-time accounting packets (in minutes by default). | As per the MIB. |
| hh3cRdAccRealTimeRetry (1.3.6.1.4.1.25506.2.13.1.2.1.17) | read-create | Integer32 | Integer32 (1..255) | Maximum number of accounting attempts. | As per the MIB. |
| hh3cRdAccSaveStopPktEnable (1.3.6.1.4.1.25506.2.13.1.2.1.18) | read-create | TruthValue | true(1), false(2) | Whether to buffer RADIUS stop-accounting requests to which no responses have been received. | Not supported. |
| hh3cRdAccStopRetry (1.3.6.1.4.1.25506.2.13.1.2.1.19) | read-create | Integer32 | Integer32 (10..65535) | Maximum number of transmission attempts for individual RADIUS stop-accounting requests. | Not supported. |
| hh3cRdAccDataFlowUnit (1.3.6.1.4.1.25506.2.13.1.2.1.20) | read-create | INTEGER | byte(1), kiloByte(2), megaByte(3), gigaByte(4) | Data flow measurement unit for traffic statistics. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|---|---|--|
| hh3cRdAccPacketUnit (1.3.6.1.4.1.25506.2.13.1.2.1.21) | read-create | INTEGER | onePacket(1), kiloPacket (2), megaPacket (3), gigaPacket (4) | Packet measurement unit for traffic statistics. | As per the MIB. |
| hh3cRdAccRowStatus (1.3.6.1.4.1.25506.2.13.1.2.1.22) | read-create | RowStatus | Standard MIB values. | Row status. | The following values are supported: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |
| hh3cRdAcctOnEnable (1.3.6.1.4.1.25506.2.13.1.2.1.23) | read-create | TruthValue | true(1), false(2) | Enabling status of the accounting-on feature. | As per the MIB. |
| hh3cRdAcctOnSendTimes (1.3.6.1.4.1.25506.2.13.1.2.1.24) | read-create | Integer32 | Standard MIB values. | Maximum number of accounting-on packet transmission attempts. | As per the MIB. |
| hh3cRdAcctOnSendInterval (1.3.6.1.4.1.25506.2.13.1.2.1.25) | read-create | Integer32 | Standard MIB values. | Interval for retransmitting an accounting-on packet. | As per the MIB. |
| hh3cRdSecAccKey (1.3.6.1.4.1.25506.2.13.1.2.1.26) | read-create | DisplayString | OCTET STRING (0..64) | Shared key for communication with the secondary accounting server. | The shared key is a string of 0 to 64 characters. In dayou OEM version, the shared key string must be nine characters long or longer and must contain digits, uppercase letters, lowercase letters, and special characters. When read, this object returns a zero-length string. |
| hh3cRdPrimAccVpnName (1.3.6.1.4.1.25506.2.13.1.2.1.27) | read-create | DisplayString | OCTET STRING (0..31) | Name of the VPN to which the primary accounting server belongs. | As per the MIB. |
| hh3cRdSecAccVpnName (1.3.6.1.4.1.25506.2.13.1.2.1.28) | read-create | DisplayString | OCTET STRING (0..31) | Name of the VPN to which the secondary accounting server belongs. | As per the MIB. |
| hh3cRdAccNasIpAddrType (1.3.6.1.4.1.25506.2.13.1.2.1.29) | read-create | InetAddressType | Standard MIB values. | Type of the NAS IP addresses for RADIUS accounting packets sent to the RADIUS | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|-------------------------|--|-----------------|
| | | | | accounting server. | |
| hh3cRdAccNasIpAddr (1.3.6.1.4.1.25506.2.13.1.2.1.30) | read-create | IpAddress | Standard MIB values. | NAS IPv4 address. | As per the MIB. |
| hh3cRdAccNasIpv6Addr (1.3.6.1.4.1.25506.2.13.1.2.1.31) | read-create | Ipv6Address | Standard MIB values. | NAS IPv6 address. | As per the MIB. |
| hh3cRdAccRealTimeUnit (1.3.6.1.4.1.25506.2.13.1.2.1.32) | read-create | INTEGER | minute(0), second(1) | Interval for sending real-time accounting packets. | As per the MIB. |

hh3cRdSecondaryAuthServerTable

About this table

Use this table to configure or obtain secondary RADIUS authentication server settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cRdGroupName, hh3cRdSecondaryAuthIpAddrType, hh3cRdSecondaryAuthIpAddr, hh3cRdSecondaryAuthVpnName, and hh3cRdSecondaryAuthUdpPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|------------------------|---|-----------------|
| hh3cRdSecondaryAuthIpAddrType (1.3.6.1.4.1.25506.2.13.1.4.1.1) | not-accessible | InetAddressType | Standard MIB values. | Type of the IP address for a secondary authentication server. | As per the MIB. |
| hh3cRdSecondaryAuthIpAddr (1.3.6.1.4.1.25506.2.13.1.4.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the secondary authentication server. | As per the MIB. |
| hh3cRdSecondaryAuthVpnName (1.3.6.1.4.1.25506.2.13.1.4.1.3) | not-accessible | DisplayString | OCTET STRING (0..31) | Name of the VPN to which the secondary authentication server belongs. | As per the MIB. |
| hh3cRdSecondaryAuthUdpPort (1.3.6.1.4.1.25506.2.13.1.4.1.4) | not-accessible | Integer32 | Integer32 (1..65535) | Port number of the secondary authentication server. | As per the MIB. |
| hh3cRdSecondaryAuthState (1.3.6.1.4.1.25506.2.13.1.4.1.5) | read-create | INTEGER | active(1), block(2) | Status of the secondary authentication | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|----------------------|--|--|
| .2.13.1.4.1.5) | | | | server. | |
| hh3cRdSecondaryAuthKey (1.3.6.1.4.1.25506.2.13.1.4.1.6) | read-create | DisplayString | OCTET STRING (0..64) | Shared key for communication with the secondary authentication server. | The shared key is a string of 0 to 64 characters. In dayou OEM version, the shared key string must be nine characters long or longer and must contain digits, uppercase letters, lowercase letters, and special characters. When read, this object returns a zero-length string. |
| hh3cRdSecondaryAuthRowStatus (1.3.6.1.4.1.25506.2.13.1.4.1.7) | read-create | RowStatus | Standard MIB values. | Row status. | The following values are supported: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cRdSecondaryAccServerTable

About this table

Use this table to configure or obtain secondary RADIUS accounting server settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cRdAccGroupName, hh3cRdSecondaryAccIpAddrType, hh3cRdSecondaryAccIpAddr, hh3cRdSecondaryAccVpnName, and hh3cRdSecondaryAccUdpPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-----------------------|---|-----------------|
| hh3cRdSecondaryAccIpAddrType (1.3.6.1.4.1.25506.2.13.1.5.1.1) | not-accessible | InetAddressType | Standard MIB values. | Type of the IP address for a secondary accounting server. | As per the MIB. |
| hh3cRdSecondaryAccIpAddr (1.3.6.1.4.1.25506.2.13.1.5.1.2) | not-accessible | InetAddress | OCTET STRING (0..255) | IP address of the secondary accounting server. | As per the MIB. |
| hh3cRdSecondaryAccVpnName | not-accessible | DisplayString | OCTET STRING | Name of the VPN to which the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|-------------------------|--|--|
| (1.3.6.1.4.1.25506.2.13.1.5.1.3) | | | (0..31) | secondary accounting server belongs. | |
| hh3cRdSecondaryAccUdpPort (1.3.6.1.4.1.25506.2.13.1.5.1.4) | not-accessible | Integer32 | Integer32 (1..65535) | Port number of the secondary accounting server. | As per the MIB. |
| hh3cRdSecondaryAccState (1.3.6.1.4.1.25506.2.13.1.5.1.5) | read-create | INTEGER | active(1), block(2) | Status of the secondary accounting server. | As per the MIB. |
| hh3cRdSecondaryAccKey (1.3.6.1.4.1.25506.2.13.1.5.1.6) | read-create | DisplayString | OCTET STRING (0..64) | Shared key for communication with the secondary accounting server. | The shared key is a string of 0 to 64 characters. In dayou OEM version, the shared key string must be nine characters long or longer and must contain digits, uppercase letters, lowercase letters, and special characters. When read, this object returns a zero-length string. |
| hh3cRdSecondaryAccRowStatus (1.3.6.1.4.1.25506.2.13.1.5.1.7) | read-create | RowStatus | Standard MIB values. | Row status. | The following values are supported: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cRadiusAccServerTable

About this table

This table collects packet statistics by RADIUS accounting server, which is not implemented by standard MIBs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is radiusAccServerIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| hh3cRadiusAccClientStartRequests (1.3.6.1.4.1.25506) | read-only | Counter32 | Standard MIB values. | Number of start-accounting requests sent to | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| .2.13.2.1.1.1.1) | | | | the RADIUS server. | |
| hh3cRadiusAccClientStartResponses (1.3.6.1.4.1.25506.2.13.2.1.1.1.2) | read-only | Counter32 | Standard MIB values. | Number of start-accounting requests received from the RADIUS server. | As per the MIB. |
| hh3cRadiusAccClientInterimRequests (1.3.6.1.4.1.25506.2.13.2.1.1.1.3) | read-only | Counter32 | Standard MIB values. | Number of real-time accounting request sent to the RADIUS server. | As per the MIB. |
| hh3cRadiusAccClientInterimResponses (1.3.6.1.4.1.25506.2.13.2.1.1.1.4) | read-only | Counter32 | Standard MIB values. | Number of real-time accounting requests received from the RADIUS server. | As per the MIB. |
| hh3cRadiusAccClientStopRequests (1.3.6.1.4.1.25506.2.13.2.1.1.1.5) | read-only | Counter32 | Standard MIB values. | Number of stop-accounting request sent to the RADIUS server. | As per the MIB. |
| hh3cRadiusAccClientStopResponses (1.3.6.1.4.1.25506.2.13.2.1.1.1.6) | read-only | Counter32 | Standard MIB values. | Number of stop-accounting requests received from the RADIUS server. | As per the MIB. |

hh3cRadiusAuthServerTable

About this table

This table collects authentication failure statistics by RADIUS authentication server, which is not implemented by standard MIBs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is radiusAuthServerIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|------------------------------------|-----------------|
| hh3cRadiusAuthFailureTimes (1.3.6.1.4.1.25506.2.13.4.1.1.1.1) | read-only | Counter32 | Standard MIB values. | Number of authentication failures. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--------------------------------------|-----------------|
| hh3cRadiusAuthTimeoutTimes (1.3.6.1.4.1.25506.2.13.4.1.1.1.2) | read-only | Counter32 | Standard MIB values. | Number of authentication timeouts. | As per the MIB. |
| hh3cRadiusAuthRejectTimes (1.3.6.1.4.1.25506.2.13.4.1.1.1.3) | read-only | Counter32 | Standard MIB values. | Number of authentication rejections. | As per the MIB. |

Notifications

hh3cRadiusAuthServerUpTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.1 | Authentication server up | Informational | N/A | N/A | OFF |

Description

This notification is generated when the status of an authentication server changes from blocked to active.

This notification cannot function correctly with SNMPv2 and later versions. It has been replaced with hh3cRadiusAuthenticationServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.4) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS authentication server up event (if enabled) depends on the SNMP version for the event:

- If SNMPv1 is specified for this event by using the **radius trap-version v1** command, the device generates the hh3cRadiusAuthServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.1) notification.
- If SNMPv2 is specified for this event by using the **radius trap-version v2** command, the device generates the hh3cRadiusAuthenticationServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.4) notification.

Status control

ON

CLI: Use both the **snmp-agent trap enable radius authentication-server-up** and **radius trap-version v1** commands.

OFF

CLI: Use either the **undo snmp-agent trap enable radius authentication-server-up** command or the **radius trap-version v2** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.2.1.67.1.2.1.1.3.1.2 (radiusAuthServerAddress) | IP address of an authentication server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.1.2.1.1.3.1.3 (radiusAuthClientServerPortNumber) | Port number of the authentication server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAccServerUpTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.2 | Accounting server up | Informational | N/A | N/A | OFF |

Description

This notification is generated when the status of an accounting server changes from blocked to active.

This notification cannot function correctly with SNMPv2 and later versions. It has been replaced with hh3cRadiusAccountingServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.5) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS accounting server up event (if enabled) depends on the SNMP version for the event:

- If SNMPv1 is specified for this event by using the **radius trap-version v1** command, the device generates the hh3cRadiusAccServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.2) notification.
- If SNMPv2 is specified for this event by using the **radius trap-version v2** command, the device generates the hh3cRadiusAccountingServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.5) notification.

Status control

ON

CLI: Use both the **snmp-agent trap enable radius accounting-server-up** and **radius trap-version v1** commands.

OFF

CLI: Use either the **undo snmp-agent trap enable radius accounting-server-up** command or the **radius trap-version v2** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------------|-------|------------|----------------------|
| 1.3.6.1.2.1.67.2.2.1.1.3.1.2 (radiusAccServerAddress) | IP address of an accounting server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.2.2.1.1.3.1.3 (radiusAccClientServerPortNumber) | Port number of the accounting server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAuthErrTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.3 | Authentication failure alarm threshold | Informational | Major | N/A | OFF |

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----|-----------|------|----------|-----------------------|----------------|
| | crossing. | | | | |

Description

This notification is generated when the authentication failure ratio reaches the authentication failure alarm threshold.

Status control

ON

CLI: Use the `snmp-agent trap enable radius authentication-error-threshold` command.

OFF

CLI: Use the `undo snmp-agent trap enable radius authentication-error-threshold` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.2.1.67.1.2.1.1.3.1.2 (radiusAuthServerAddress) | IP address of an authentication server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.1.2.1.1.3.1.3 (radiusAuthClientServerPortNumber) | Port number of the authentication server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAuthenticationServerUpTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.4 | Authentication server up | Informational | N/A | N/A | OFF |

Description

This notification is generated when the status of an authentication server changes from blocked to active.

This notification replaces hh3cRadiusAuthServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.1) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS authentication server up event (if enabled) depends on the SNMP version for the event:

- If SNMPv2 is specified for this event by using the `radius trap-version v2` command, the device generates the hh3cRadiusAuthenticationServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.4) notification.
- If SNMPv1 is specified for this event by using the `radius trap-version v1` command, the device generates the hh3cRadiusAuthServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.1) notification.

Status control

ON

CLI: Use both the `snmp-agent trap enable radius authentication-server-up` and `radius trap-version v2` commands.

OFF

CLI: Use either the `undo snmp-agent trap enable radius authentication-server-up` command or the `radius trap-version v1` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.2.1.67.1.2.1.1.3.1.2 (radiusAuthServerAddress) | IP address of an authentication server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.1.2.1.1.3.1.3 (radiusAuthClientServerPortNumber) | Port number of the authentication server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAccountingServerUpTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.5 | Accounting server up | Informational | N/A | N/A | OFF |

Description

This notification is generated when the status of an accounting server changes from blocked to active.

This notification replaces hh3cRadiusAccServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.2) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS accounting server up event (if enabled) depends on the SNMP version for the event:

- If SNMPv2 is specified for this event by using the `radius trap-version v2` command, the device generates the hh3cRadiusAccountingServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.5) notification.
- If SNMPv1 is specified for this event by using the `radius trap-version v1` command, the device generates the hh3cRadiusAccServerUpTrap (1.3.6.1.4.1.25506.2.13.3.0.2) notification.

Status control

ON

CLI: Use both the `snmp-agent trap enable radius accounting-server-up` and `radius trap-version v2` commands.

OFF

CLI: Use either the `undo snmp-agent trap enable radius accounting-server-up` command or the `radius trap-version v1` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------------|-------|------------|----------------------|
| 1.3.6.1.2.1.67.2.2.1.1.3.1.2 (radiusAccServerAddress) | IP address of an accounting server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.2.2.1.1.3.1.3 (radiusAccClientServerPortNumber) | Port number of the accounting server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAuthenticationServerDownTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.6 | Authentication server down | Informational | Major | N/A | OFF |

Description

This notification is generated when the status of an authentication server changes from active to blocked.

This notification replaces hh3cRadiusAuthServerDownTrap (1.3.6.1.4.1.25506.2.13.3.1) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS authentication server down event (if enabled) depends on the SNMP version for the event:

- If SNMPv2 is specified for this event by using the **radius trap-version v2** command, the device generates the hh3cRadiusAuthenticationServerDownTrap (1.3.6.1.4.1.25506.2.13.3.0.6) notification.
- If SNMPv1 is specified for this event by using the **radius trap-version v1** command, the device generates the hh3cRadiusAuthServerDownTrap (1.3.6.1.4.1.25506.2.13.3.1) notification.

Status control

ON

CLI: Use both the **snmp-agent trap enable radius authentication-server-down** and **radius trap-version v2** commands.

OFF

CLI: Use either the **undo snmp-agent trap enable radius authentication-server-down** command or the **radius trap-version v1** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.2.1.67.1.2.1.1.3.1.2 (radiusAuthServerAddress) | IP address of an authentication server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.1.2.1.1.3.1.3 (radiusAuthClientServerPortNumber) | Port number of the authentication server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAccountingServerDownTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------|------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.0.7 | Accounting server down | Informational | Major | N/A | OFF |

Description

This notification is generated when the status of an accounting server changes from active to blocked.

This notification replaces hh3cRadiusAccServerDownTrap (1.3.6.1.4.1.25506.2.13.3.2) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS accounting server down event (if enabled) depends on the SNMP version for the event:

- If SNMPv2 is specified for this event by using the **radius trap-version v2** command, the device generates the hh3cRadiusAccountingServerDownTrap (1.3.6.1.4.1.25506.2.13.3.0.7) notification.
- If SNMPv1 is specified for this event by using the **radius trap-version v1** command, the device generates the hh3cRadiusAccServerDownTrap (1.3.6.1.4.1.25506.2.13.3.2) notification.

Status control

ON

CLI: Use both the **snmp-agent trap enable radius accounting-server-down** and **radius trap-version v2** commands.

OFF

CLI: Use either the **undo snmp-agent trap enable radius accounting-server-down** command or the **radius trap-version v1** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|------------|----------------------|
| 1.3.6.1.2.1.67.2.2.1.1.3.1.2 (radiusAccServerAddress) | IP address of an accounting server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.2.2.1.1.3.1.3 (radiusAccClientServerPortNumber) | Port number of an accounting server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAuthServerDownTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.1 | Authentication server down | Informational | Major | N/A | OFF |

Description

This notification is generated when the status of an authentication server changes from active to blocked.

This notification cannot function correctly with SNMPv2 and later versions. It has been replaced with hh3cRadiusAuthenticationServerDownTrap (1.3.6.1.4.1.25506.2.13.3.0.6) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS authentication server down event (if enabled) depends on the SNMP version for the event:

- If SNMPv1 is specified for this event by using the **radius trap-version v1** command, the device generates the hh3cRadiusAuthServerDownTrap (1.3.6.1.4.1.25506.2.13.3.1) notification.
- If SNMPv2 is specified for this event by using the **radius trap-version v2** command, the device generates the hh3cRadiusAuthenticationServerDownTrap (1.3.6.1.4.1.25506.2.13.3.0.6) notification.

Status control

ON

CLI: Use both the **snmp-agent trap enable radius authentication-server-down** and **radius trap-version v1** commands.

OFF

CLI: Use either the **undo snmp-agent trap enable radius authentication-server-down** command or the **radius trap-version v2** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|----------------------|
| 1.3.6.1.2.1.67.1.2.1.1.3.1.2 (radiusAuthServerAddress) | IP address of an authentication server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.1.2.1.1.3.1.3 (radiusAuthClientServerPortNumber) | Port number of the authentication server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

hh3cRadiusAccServerDownTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.13.3.2 | Accounting server down | Informational | Major | N/A | OFF |

Description

This notification is generated when the status of an accounting server changes from active to blocked.

This notification cannot function correctly with SNMPv2 and later versions. It has been replaced with hh3cRadiusAccountingServerDownTrap (1.3.6.1.4.1.25506.2.13.3.0.7) in SNMPv2 and later versions.

The notification generated by the device for the RADIUS accounting server down event (if enabled) depends on the SNMP version for the event:

- If SNMPv1 is specified for this event by using the **radius trap-version v1** command, the device generates the hh3cRadiusAccServerDownTrap (1.3.6.1.4.1.25506.2.13.3.2) notification.
- If SNMPv2 is specified for this event by using the **radius trap-version v2** command, the device generates the hh3cRadiusAccountingServerDownTrap (1.3.6.1.4.1.25506.2.13.3.0.7) notification.

Status control

ON

CLI: Use both the `snmp-agent trap enable radius accounting-server-down` and `radius trap-version v1` commands.

OFF

CLI: Use either the `undo snmp-agent trap enable radius accounting-server-down` command or the `radius trap-version v2` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------------|-------|------------|----------------------|
| 1.3.6.1.2.1.67.2.2.1.1.3.1.2 (radiusAccServerAddress) | IP address of an accounting server. | Yes | IP Address | Standard MIB values. |
| 1.3.6.1.2.1.67.2.2.1.1.3.1.3 (radiusAccClientServerPortNumber) | Port number of an accounting server. | Yes | INTEGER | 1.. 65535 |

Recommended action

No action is required.

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HH3C-USER-MIB

About this MIB

Use this MIB to manage local users.

MIB file name

hh3c-user.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cUser(12)

Scalar objects

hh3cUserObject

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------------------------|
| hh3cUserMaxNum (1.3.6.1.4.1.25506.2.12.1.3) | read-only | Integer32 | Standard MIB values. | Maximum number of local users can be created. | Implementation varies by product. |
| hh3cUserCurrNum (1.3.6.1.4.1.25506.2.12.1.4) | read-only | Integer32 | Standard MIB values. | Number of existing local users. | As per the MIB. |
| hh3cUserIndexIndicator (1.3.6.1.4.1.25506.2.12.1.5) | read-only | Integer32 | Standard MIB values. | Index to be used for the next local user. | As per the MIB. |

Tabular objects

hh3cUserInfoTable

About this table

Use this table to configure or obtain basic information of a local user.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

You must specify hh3cUserPassword and hh3cAuthMode in pairs in an SNMP request.

Columns

The table index is hh3cUserIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|--------------------------|---------------------------------------|---|
| hh3cUserName (1.3.6.1.4.1.25506 .2.12.1.1.1.1) | read-create | DisplayString | OCTET STRING (1..255) | Name of a local user. | <p>The username cannot contain any of the following characters: backslash (\), forward slash (/), colon (:), asterisk (*), question mark (?), quotation mark ("), left angle bracket (<), right angle bracket (>), or vertical bar (). It cannot be a, al, or all and cannot begin with or end with at sign (@).</p> <p>A username that contains a domain name is in the format of <i>localusername@domain</i>. The <i>localusername</i> part in the username cannot contain any of the following characters: backslash (\), forward slash (/), colon (:), asterisk (*), question mark (?), quotation mark ("), left angle bracket (<), right angle bracket (>), or vertical bar ().. The maximum length of this part varies by device model.</p> <p>The username of each local user is unique. You cannot edit an existing username.</p> |
| hh3cUserPassword (1.3.6.1.4.1.25506 .2.12.1.1.1.2) | read-create | DisplayString | OCTET STRING (0..255) | Password of the local user. | When read, this object returns a zero-length string. |
| hh3cAuthMode (1.3.6.1.4.1.25506 .2.12.1.1.1.3) | read-create | Integer32 | Standard MIB values. | Encryption type of the user password. | Value range: 0 or 7. |
| hh3cUserState (1.3.6.1.4.1.25506 .2.12.1.1.1.5) | read-create | INTEGER | active(0), block(1) | Status of the local user. | As per the MIB. |

| | | | | | |
|---|----------------|-----------|---|-----------------------------|----------------------------|
| hh3cUserInfoRow Status (1.3.6.1.4.1.25506 .2.12.1.1.1.6) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | As per the MIB. |
| hh3cUserIndex (1.3.6.1.4.1.25506 .2.12.1.1.1.7) | not-accessible | Integer32 | Integer32 (1..2147483646) | Index of the local user. | Value range: 1 to 1024. |

hh3cUserAttributeTable

About this table

This table contains attributes of a local user.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cUserIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------------|--|---|
| hh3cAccessLimit (1.3.6.1.4.1.25506 .2.12.1.2.1.1) | read-write | Integer32 | Standard MIB values. | Maximum number of concurrent users that can use a username to access the device. | Default: No limit is placed on the maximum number of concurrent users that can use a username to access the device. Value range: 0 to 1024. |
| hh3cIdleCut (1.3.6.1.4.1.25506 .2.12.1.2.1.2) | read-write | Integer32 | Standard MIB values. | Idle timeout period, in seconds. | This object will round the specified value to the nearest multiple of 60. |
| hh3cIPAddress (1.3.6.1.4.1.25506 .2.12.1.2.1.3) | read-write | IpAddress | Standard MIB values. | IP address of a user. | Default: 0.0.0.0. |
| hh3cNasIPAdress s (1.3.6.1.4.1.25506 .2.12.1.2.1.4) | read-write | IpAddress | Standard MIB values. | IP address of the NAS for the user. | Not supported. |
| hh3cSlotNum (1.3.6.1.4.1.25506 .2.12.1.2.1.5) | read-write | Integer32 | Standard MIB values. | Slot number of the user. | Not supported. |
| hh3cSubSlotNum (1.3.6.1.4.1.25506 .2.12.1.2.1.6) | read-write | Integer32 | Standard MIB values. | Subslot number of the user. | Not supported. |
| hh3cPortNum (1.3.6.1.4.1.25506 .2.12.1.2.1.7) | read-write | Integer32 | Standard MIB values. | Port number of the user. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|--------------------------|---|--|
| hh3cMacAddress (1.3.6.1.4.1.25506.2.12.1.2.1.8) | read-write | MacAddress | OCTET STRING (6) | MAC address of the user. | As per the MIB. |
| hh3cVlan (1.3.6.1.4.1.25506.2.12.1.2.1.9) | read-write | Integer32 | Integer32 (0..4094) | ID of the VLAN to which the user belongs. | As per the MIB. |
| hh3cFtpService (1.3.6.1.4.1.25506.2.12.1.2.1.10) | read-write | ServiceType | enable(1), disable(2) | FTP service. | Not supported. |
| hh3cFtpDirectory (1.3.6.1.4.1.25506.2.12.1.2.1.11) | read-write | OCTET STRING | Standard MIB values. | FTP directory. | Not supported. |
| hh3cLanAccessService (1.3.6.1.4.1.25506.2.12.1.2.1.12) | read-write | ServiceType | enable(1), disable(2) | LAN access service. | As per the MIB. |
| hh3cSshService (1.3.6.1.4.1.25506.2.12.1.2.1.13) | read-write | ServiceType | enable(1), disable(2) | SSH service. | Not supported. |
| hh3cTelnetService (1.3.6.1.4.1.25506.2.12.1.2.1.14) | read-write | ServiceType | enable(1), disable(2) | Telnet service. | Not supported. |
| hh3cTerminalService (1.3.6.1.4.1.25506.2.12.1.2.1.15) | read-write | ServiceType | enable(1), disable(2) | Terminal service. | Not supported. |
| hh3cExpirationDate (1.3.6.1.4.1.25506.2.12.1.2.1.16) | read-write | DateAndTime | OCTET STRING (8) | Expired date of the user. | Not supported. |
| hh3cUserGroup (1.3.6.1.4.1.25506.2.12.1.2.1.17) | read-write | DisplayString | OCTET STRING (0..255) | User group of the user. | A user group name cannot exceed 32 characters. |
| hh3cPortalService (1.3.6.1.4.1.25506.2.12.1.2.1.18) | read-write | ServiceType | enable(1), disable(2) | Portal service. | As per the MIB. |
| hh3cPPPSERVICE (1.3.6.1.4.1.25506.2.12.1.2.1.19) | read-write | ServiceType | enable(1), disable(2) | PPP service. | As per the MIB. |
| hh3cHttpService (1.3.6.1.4.1.25506.2.12.1.2.1.20) | read-write | ServiceType | enable(1), disable(2) | HTTP service. | Not supported |
| hh3cHttpsService (1.3.6.1.4.1.25506.2.12.1.2.1.21) | read-write | ServiceType | enable(1), disable(2) | HTTPS service. | Not supported |
| hh3cUserIfIndex (1.3.6.1.4.1.25506.2.12.1.2.1.22) | read-write | Integer32 | Standard MIB values. | Index of the user's access interface. | As per the MIB. |

hh3cUserRoleTable

About this table

Use this table to configure or obtain basis information of a local user.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cUserIndex and hh3cUserRole.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---|-------------|--|
| hh3cUserRole (1.3.6.1.4.1.25506 .2.12.1.6.1.1) | not-accessable | DisplayString | OCTET STRING (1..63)) | User role. | In MDCs, the default user role is mdc-operator. In non-MDCs, the default user role is network-operator. |
| hh3cUserRoleStat us (1.3.6.1.4.1.25506 .2.12.1.6.1.2) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | You must specify hh3cUserIndex when you create a local user. |

hh3cUserGroupInfoTable

About this table

Use this table to configure or obtain basic information of a user group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cUserGroupName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---|--------------------------|-----------------|
| hh3cUserGroupN ame (1.3.6.1.4.1.25506 .2.12.2.1.1.1) | not-accessible | DisplayString | OCTET STRING (1..255) | Name of a user group. | As per the MIB. |
| hh3cUserGroupInf oRowStatus (1.3.6.1.4.1.25506 .2.12.2.1.1.2) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | As per the MIB. |

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IEEE8021-PAE-MIB

About this MIB

Use this MIB to manage 802.1X basic settings.

MIB file name

ieee8021-pae.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021paeMIB(1)

Scalar objects

dot1xPaeSystemAuthControl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|----------------------------|------------------------------|-----------------|
| dot1xPaeSystemAuthControl (1.0.8802.1.1.1.1.1) | read-write | INTEGER | enabled(1), disabled(2) | Enabling status of 802.1X | As per the MIB. |

Tabular objects

dot1xPaePortTable

About this table

Use this table to configure or obtain information about 802.1X parameters on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is dot1xPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|------------------------------|-------------------|-----------------|
| dot1xPaePortNumber (1.0.8802.1.1.1.1.2.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | Port number. | As per the MIB. |
| dot1xPaePortProtocolVersion | read-only | Unsigned32 | Standard MIB | Protocol version. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|--|---|-----------------|
| (1.0.8802.1.1.1.1.1.2.1.2) | | | values. | | |
| dot1xPaePortCapabilities (1.0.8802.1.1.1.1.1.2.1.3) | read-only | BITS | dot1xPaePortAuthCapable(0), dot1xPaePortSupportCapable(1) | PAE capabilities supported by the port. | As per the MIB. |
| dot1xPaePortInitialize (1.0.8802.1.1.1.1.1.2.1.4) | read-write | TruthValue | true(1), false(2) | Port initialization control. | Not supported |
| dot1xPaePortReauthenticate (1.0.8802.1.1.1.1.1.2.1.5) | read-write | TruthValue | true(1), false(2) | Port reauthentication control. | As per the MIB. |

dot1xAuthConfigTable

About this table

Use this table to configure or obtain information about 802.1X authentication parameters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|-----------|-----------|
| Not supported | Supported | Supported | Supported |

Columns

The table index is dot1xPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|--|--|
| dot1xAuthPaeState (1.0.8802.1.1.1.1.1.2.1.1) | read-only | INTEGER | initialize(1), disconnected(2), connecting(3), authenticating(4), authenticated(5), aborting(6), held(7), forceAuth(8), forceUnauth(9) | Current value of the Authenticator PAE state machine. | Supports only initialize(1), forceAuth(8), and forceUnauth(9). |
| dot1xAuthBackendAuthState (1.0.8802.1.1.1.1.1.2.1.2) | read-only | INTEGER | request(1), response(2), success(3), fail(4), timeout(5), idle(6), initialize(7) | Current state of the Backend Authentication state machine. | As per the MIB. |
| dot1xAuthAdminC | read-write | INTEGER | both(0), | Current value of | Supports only the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------------------------|--|---|
| controlledDirections (1.0.8802.1.1.1.1.2.1.1.3) | | | in(1) | the administrative controlled directions parameter for the port. | read operation. |
| dot1xAuthOperControlledDirections (1.0.8802.1.1.1.1.2.1.1.4) | read-only | INTEGER | both(0), in(1) | Current value of the operational controlled directions parameter for the port. | As per the MIB. |
| dot1xAuthAuthControlledPortStatus (1.0.8802.1.1.1.1.2.1.1.5) | read-only | INTEGER | authorized(1), unauthorized(2) | Current value of the controlled port status parameter for the port. | Supports only for port-based access control. |
| dot1xAuthAuthControlledPortControl (1.0.8802.1.1.1.1.2.1.1.6) | read-write | INTEGER | unauthforce(1), auto(2), authforce(3) | Current value of the controlled port control parameter for the port. | As per the MIB. |
| dot1xAuthQuietPeriod (1.0.8802.1.1.1.1.2.1.1.7) | read-write | Unsigned32 | Standard MIB values. | Quiet period. | Supports only the read operation. The value is fixed at 0. To modify the quiet period, use the private MIB of 802.1X. |
| dot1xAuthTxPeriod (1.0.8802.1.1.1.1.2.1.1.8) | read-write | Unsigned32 | Standard MIB values. | Username request timeout timer. | Supports only the read operation. The value is fixed at 0. To modify the username request timeout timer, use the private MIB of 802.1X. |
| dot1xAuthSuppTimeout (1.0.8802.1.1.1.1.2.1.1.9) | read-write | Unsigned32 | Standard MIB values. | Client timeout timer. | Supports only the read operation. The value is fixed at 0. To modify the client timeout timer, use the private MIB of 802.1X. |
| dot1xAuthServerTimeout (1.0.8802.1.1.1.1.2.1.1.10) | read-write | Unsigned32 | Standard MIB values. | Server timeout timer. | Supports only the read operation. The value is fixed at 0. To modify the server timeout timer, use the private MIB of 802.1X. |
| dot1xAuthMaxReq (1.0.8802.1.1.1.1.2.1.1.11) | read-write | Unsigned32 | Standard MIB values. | Maximum number of attempts for | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|---|
| 2.1.1.11) | | | | sending an authentication request to a client. | The value is fixed at 0. To modify the value, use the private MIB of 802.1X. |
| dot1xAuthReAuth Period (1.0.8802.1.1.1.1.2.1.1.12) | read-write | Unsigned32 | Standard MIB values. | Reauthentication interval. | Value range: 0 and 60 to 86400, in seconds. Default: 0 seconds. |
| dot1xAuthReAuth Enabled (1.0.8802.1.1.1.1.2.1.1.13) | read-write | TruthValue | true(1), false(2) | Enabling status of periodic reauthentication. | As per the MIB. |
| dot1xAuthKeyTxEnabled (1.0.8802.1.1.1.1.2.1.1.14) | read-write | TruthValue | true(1), false(2) | Enabling status of key transmission. | Supports only the read operation. |

dot1xAuthStatsTable

About this table

This table contains 802.1X authentication statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is dot1xPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| dot1xAuthEapolFramesRx (1.0.8802.1.1.1.1.2.2.1.1) | read-only | Counter32 | Standard MIB values. | Number of received EAPOL frames. | As per the MIB. |
| dot1xAuthEapolFramesTx (1.0.8802.1.1.1.1.2.2.1.2) | read-only | Counter32 | Standard MIB values. | Number of sent EAPOL frames. | As per the MIB. |
| dot1xAuthEapolStartFramesRx (1.0.8802.1.1.1.1.2.2.1.3) | read-only | Counter32 | Standard MIB values. | Number of received EAPOL-Start frames. | As per the MIB. |
| dot1xAuthEapolLogoffFramesRx (1.0.8802.1.1.1.1.2.2.1.4) | read-only | Counter32 | Standard MIB values. | Number of received EAPOL-LogOff frames. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| dot1xAuthEapolRespIdFramesRx (1.0.8802.1.1.1.1.2.2.1.5) | read-only | Counter32 | Standard MIB values. | Number of received EAP-Response/Id entity frames. | As per the MIB. |
| dot1xAuthEapolRespFramesRx (1.0.8802.1.1.1.1.2.2.1.6) | read-only | Counter32 | Standard MIB values. | Number of received EAPOL-Response frames. | As per the MIB. |
| dot1xAuthEapolReqIdFramesTx (1.0.8802.1.1.1.1.2.2.1.7) | read-only | Counter32 | Standard MIB values. | Number of sent EAP-Request/Id entity frames. | As per the MIB. |
| dot1xAuthEapolReqFramesTx (1.0.8802.1.1.1.1.2.2.1.8) | read-only | Counter32 | Standard MIB values. | Number of sent EAPOL-Request frames. | As per the MIB. |
| dot1xAuthInvalidEapolFramesRx (1.0.8802.1.1.1.1.2.2.1.9) | read-only | Counter32 | Standard MIB values. | Number of received invalid EAPOL frames. | As per the MIB. |
| dot1xAuthEapLengthErrorFramesRx (1.0.8802.1.1.1.1.2.2.1.10) | read-only | Counter32 | Standard MIB values. | Number of received frames with invalid length. | Not supported. |
| dot1xAuthLastEapolFrameVersion (1.0.8802.1.1.1.1.2.2.1.11) | read-only | Unsigned32 | Standard MIB values. | Protocol version number carried in the most recently received EAPOL frame. | As per the MIB. |
| dot1xAuthLastEapolFrameSource (1.0.8802.1.1.1.1.2.2.1.12) | read-only | MacAddress | OCTET STRING (6) | Source MAC address carried in the most recently received EAPOL frame. | Not supported. |

dot1xAuthSessionStatsTable

About this table

Use this table to obtain 802.1X authentication session statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is dot1xAuthSessionUserName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|--|----------------------------|-----------------|
| dot1xAuthSessionOctetsRx (1.0.8802.1.1.1.1.2.4.1.1) | read-only | Counter64 | Standard MIB values. | Number of received octets. | As per the MIB. |
| dot1xAuthSessionOctetsTx (1.0.8802.1.1.1.1.2.4.1.2) | read-only | Counter64 | Standard MIB values. | Number of sent octets. | As per the MIB. |
| dot1xAuthSessionFramesRx (1.0.8802.1.1.1.1.2.4.1.3) | read-only | Counter64 | Standard MIB values. | Number of received frames. | As per the MIB. |
| dot1xAuthSessionFramesTx (1.0.8802.1.1.1.1.2.4.1.4) | read-only | Counter64 | Standard MIB values. | Number of sent frames. | As per the MIB. |
| dot1xAuthSessionId (1.0.8802.1.1.1.1.2.4.1.5) | read-only | SnmpAdminString | OCTET STRING (0..65535) | Session ID. | As per the MIB. |
| dot1xAuthSessionAuthenticMethod (1.0.8802.1.1.1.1.2.4.1.6) | read-only | INTEGER | remoteAuthServer(1), localAuthServer(2) | Authentication method. | Not supported |
| dot1xAuthSessionTime (1.0.8802.1.1.1.1.2.4.1.7) | read-only | TimeTicks | Standard MIB values. | Session duration. | As per the MIB. |
| dot1xAuthSessionTerminateCause (1.0.8802.1.1.1.1.2.4.1.8) | read-only | INTEGER | supplicantLogoff(1), portFailure(2), supplicantRestart(3), reauthFailed(4), authControlForceUnauth(5), portReInit(6), portAdminDisabled(7), notTerminatedYet(999) | Session termination cause. | Not supported |
| dot1xAuthSessionUserName (1.0.8802.1.1.1.1.2.4.1.9) | read-only | SnmpAdminString | OCTET STRING (0..65535) | Session user name. | As per the MIB. |

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IEEE8021-SECY-MIB

About this MIB

Use this MIB to manage MACsec.

MIB file name

ieee8021-secy.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021SecyMIB(3)

Tabular objects

secyIfTable

About this table

Use this table to configure or obtain information about MACsec-enabled interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is secyIfInterfaceIndex.

Table OID: 1.0.8802.1.1.3.1.1.1.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|------------------------------|--|-----------------|
| secyIfInterfaceIndex (1.0.8802.1.1.3.1.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | An interface index for a port with SecY management ability. | As per the MIB. |
| secyIfMaxPeerSCS (1.0.8802.1.1.3.1.1.2) | read-only | Unsigned32 | Standard MIB values. | Maximum number of peer SCs that this SecY can support. | Not supported. |
| secyIfRxMaxKeys (1.0.8802.1.1.3.1.1.3) | read-only | Unsigned32 | Standard MIB values. | Maximum number of keys in simultaneous use for reception that this SecY can support. | Not supported. |
| secyIfTxMaxKeys (1.0.8802.1.1.3.1.1.4) | read-only | Unsigned32 | Standard MIB values. | Maximum number of keys in simultaneous use for transmission that this SecY can | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|--|--|-----------------------------------|
| | | | | support. | |
| secyIfProtectFramesEnable (1.0.8802.1.1.3.1.1.1.5) | read-write | TruthValue | true(1), false(2) | An object to enable or disable the protection function for egress frames. | Supports only the read operation. |
| secyIfValidateFrames (1.0.8802.1.1.3.1.1.1.6) | read-write | INTEGER | disabled(1), check(2), strict(3) | An object to control the validation function for ingress frames. | Default: strict. |
| secyIfReplayProtectEnable (1.0.8802.1.1.3.1.1.1.7) | read-write | TruthValue | true(1), false(2) | An object to enable or disable the replay protection function. | Supports only the read operation. |
| secyIfReplayProtectWindow (1.0.8802.1.1.3.1.1.1.8) | read-write | Unsigned32 | Standard MIB values. | Replay protection window size, in frames. | Supports only the read operation. |
| secyIfCurrentCipherSuite (1.0.8802.1.1.3.1.1.1.9) | read-write | Unsigned32 | Standard MIB values. | An object that points to an entry of the secyCipherSuiteTable with active row status to indicate the cipher suite that this SecY is currently using. | Not supported. |
| secyIfAdminPt2PtMAC (1.0.8802.1.1.3.1.1.1.10) | read-only | INTEGER | forceTrue(1), forceFalse(2), auto(3) | An object to control the service connectivity to at most one other system. | Not supported. |
| secyIfOperPt2PtMAC (1.0.8802.1.1.3.1.1.1.11) | read-only | TruthValue | true(1), false(2) | An object to reflect the current service connectivity status. | Not supported. |
| secyIfIncludeSCIENABLE (1.0.8802.1.1.3.1.1.1.12) | read-write | TruthValue | true(1), false(2) | An object indicates whether to include the SCI information in security TAG (SecTAG) field while transmitting MACsec frames. | Not supported. |
| secyIfUseESEnable (1.0.8802.1.1.3.1.1.1.13) | read-write | TruthValue | true(1), false(2) | An object indicates whether to enable the ES bit in security TAG (SecTAG) field while transmitting MACsec frames. | Not supported. |
| secyIfUseSCBENABLE (1.0.8802.1.1.3.1.1.1.14) | read-write | TruthValue | true(1), false(2) | An object indicates whether to enable the SCB bit in security TAG (SecTAG) field | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-----------------------------------|----------------|
| | | | | while transmitting MACsec frames. | |

secyTxSCTable

About this table

Use this table to obtain information about transmitting SCs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is secyIfInterfaceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------------|--|--|
| secyTxSCI (1.0.8802.1.1.3.1.1.2.1.1) | read-only | SecySCI | OCTET STRING (0..65535) | SCI for transmitting MACsec frames of a transmitting SC in a SecY. | The read operation is returned a value only when MACsec is enabled on the port that holds the transmitting SC. |
| secyTxSCState (1.0.8802.1.1.3.1.1.2.1.2) | read-only | INTEGER | inUse(1), notInUse(2) | State of the current transmitting SC in the SecY. | Not supported. |
| secyTxSCEncodingSA (1.0.8802.1.1.3.1.1.2.1.3) | read-only | RowPointer | Standard MIB values. | Current transmitting SA in use. | The read operation is returned a value only when MACsec is enabled on the port that holds the transmitting SC. |
| secyTxSCEncipheringSA (1.0.8802.1.1.3.1.1.2.1.4) | read-only | RowPointer | Standard MIB values. | Previous transmitting SA in use. | The read operation is returned a value only when MACsec is enabled on the port that holds the transmitting SC. |
| secyTxSCCreatedTime (1.0.8802.1.1.3.1.1.2.1.5) | read-only | TimeStamp | Standard MIB values. | System time when the transmitting SC was created. | Not supported. |
| secyTxSCStartedTime (1.0.8802.1.1.3.1.1.2.1.6) | read-only | TimeStamp | Standard MIB values. | System time when the transmitting SC last started | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|----------------|
| 1.2.1.6) | | | | transmitting MACsec frames. | |
| secyTxSCStoppe dTime (1.0.8802.1.1.3.1. 1.2.1.7) | read-only | TimeStamp | Standard MIB values. | System time when the transmitting SC last stopped transmitting MACsec frames. | Not supported. |

secyTXSATable

About this table

Use this table to obtain information about transmitting SAs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are secyIfInterfaceIndex and secyTxSA.

Table OID:1.0.8802.1.1.3.1.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|-------------------------------|---|---|
| secyTxSA (1.0.8802.1.1.3.1. 1.3.1.1) | not-accessible | SecyAN | Unsigned32(0..42 94967295) | Association number (AN) for identifying a transmitting SA. | As per the MIB. |
| secyTxSAState (1.0.8802.1.1.3.1. 1.3.1.2) | read-only | INTEGER | inUse(1), notInUse(2) | Current status of the transmitting SA. | Not supported. |
| secyTxSANextPN (1.0.8802.1.1.3.1. 1.3.1.3) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Next packet number (PN) that will be used in transmitting MACsec frames in the SA. | Supports only the read operation. The read operation is returned a value only when MACsec is enabled on the port that holds the transmitting SA. |
| secyTxSAConfide ntiality (1.0.8802.1.1.3.1. 1.3.1.4) | read-only | TruthValue | true(1), false(2) | Whether the SA supports the confidentiality as well as integrity function in transmitting frames. | Not supported. |
| secyTxSASAKUn changed | read-only | TruthValue | true(1), | A reference to an SAK that is | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|----------------|
| (1.0.8802.1.1.3.1.1.3.1.5) | | | false(2) | unchanged for the life of the transmitting SA. | |
| secyTxSACreatedTime (1.0.8802.1.1.3.1.1.3.1.6) | read-only | TimeStamp | Standard MIB values. | System time when the transmitting SA was created. | Not supported. |
| secyTxSASStartedTime (1.0.8802.1.1.3.1.1.3.1.7) | read-only | TimeStamp | Standard MIB values. | System time when the transmitting SA last started transmitting MACsec frames. | Not supported. |
| SecyTxSASStoppedTime (1.0.8802.1.1.3.1.1.3.1.8) | read-only | TimeStamp | Standard MIB values. | System time when the transmitting SA last stopped transmitting MACsec frames. | Not supported. |

secyRxSCTable

About this table

Use this table to obtain information about receiving SCs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are secyIfInterfaceIndex and secyRxSCI.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|-------------------------|--|---|
| secyRxSCI (1.0.8802.1.1.3.1.1.4.1.1) | not-accessible | SecySCI | OCTET STRING (0..65535) | SCI for identifying a receiving SC in a SecY. | As per the MIB. |
| secyRxSCState (1.0.8802.1.1.3.1.1.4.1.2) | read-only | INTEGER | inUse(1), notInUse(2) | State of the receiving SC in the SecY. | Not supported. |
| secyRxSCCurrentSA (1.0.8802.1.1.3.1.1.4.1.3) | read-only | RowPointer | Standard MIB values. | Current receiving association number of the SC in use. | The read operation is returned a value only when MACsec is enabled on the port that holds the receiving SC. |
| secyRxSCCreatedTime (1.0.8802.1.1.3.1.1.4.1.4) | read-only | TimeStamp | Standard MIB values. | System time when the receiving SC was created. | Not supported. |
| secyRxSCStartedTime | read-only | TimeStamp | Standard MIB | System time when the receiving SC | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|----------------|
| (1.0.8802.1.1.3.1.1.4.1.5) | | | values. | last started receiving MACsec frames. | |
| secyRxSCStoppe dTime (1.0.8802.1.1.3.1.1.4.1.6) | read-only | TimeStamp | Standard MIB values. | System time when the receiving SC last stopped receiving MACsec frames. | Not supported. |

secyRxSATable

About this table

Use this table to obtain information about receiving SAs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are secyIfInterfaceIndex and secyRxSCI.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--------------------------|---|--|
| secyRxSA (1.0.8802.1.1.3.1.1.5.1.1) | not-accessible | SecyAN | Standard MIB values. | Association number (AN) for identifying a receiving SA. | As per the MIB. |
| secyRxSAState (1.0.8802.1.1.3.1.1.5.1.2) | read-only | INTEGER | inUse(1), notInUse(2) | Current state for the receiving SA. | Not supported. |
| secyRxSANextPN (1.0.8802.1.1.3.1.1.5.1.3) | read-write | Unsigned32 | Standard MIB values. | Stored packet number (PN) for replay protection in the SA. | Supports only the read operation. The read operation is returned a value only when MACsec is enabled on the port that holds the receiving SA. |
| secyRxSASAKUn changed (1.0.8802.1.1.3.1.1.5.1.4) | read-only | TruthValue | true(1), false(2) | A reference to an SAK that is unchanged for the life of the receiving SA. | Not supported. |
| secyRxSACreated Time (1.0.8802.1.1.3.1.1.5.1.5) | read-only | TimeStamp | Standard MIB values. | System time when the receiving SA was created. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|-------------------------|---|----------------|
| secyRxSASStarted Time (1.0.8802.1.1.3.1. 1.5.1.6) | read-only | TimeStamp | Standard MIB values. | System time when the receiving SA last started receiving MACsec frames. | Not supported. |
| SecyRxSASStoppe dTime (1.0.8802.1.1.3.1. 1.5.1.7) | read-only | TimeStamp | Standard MIB values. | System time when the receiving SA last stopped receiving MACsec frames. | Not supported. |

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IEEE8021X-PAE-MIB

About this MIB

This MIB manages the Port Access Entity (PAE) functions of IEEE 802.1X.

MIB file name

ieee8021x-pae.mib

Root object

iso(1).std(0).iso8802(8802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021XPaeMIB(15)

Tabular objects

ieee8021XPaePortTable

About this table

Use this table to configure or obtain system level information about each port supported by 802.1X PAE.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ieee8021XPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|--|-------------------------------|-----------------|
| ieee8021XPaePortNumber (1.3.111.2.802.1.1.15.1.1.5.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | Port number. | As per the MIB. |
| ieee8021XPaePortCapabilities (1.3.111.2.802.1.1.15.1.1.5.1.7) | read-only | BITS | suplImplemented(0), authImplemented(1), mkalImplemented(2), macsecImplemented(3), announcementsImplemented(4), listenerImplemented(5), virtualPortsImple | Capabilities of the PAE port. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------|
| | | | mented(6) | | |
| ieee8021XPaePortKayMkaEnable(1.3.111.2.802.1.1.5.1.1.5.1.16) | read-write | TruthValue | true(1), false(2) | Enables or disables the MACsec Key Agreement (MKA) protocol function in this PAE. | As per the MIB. |

ieee8021XKayMkaTable

About this table

Use this table to manage or obtain information about each port supported by the Key Agreement Entity (KaY), a PAE entity responsible for MKA.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ieee8021XPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|-------------------------|---|-----------------|
| ieee8021XKayMkaActive(1.3.111.2.802.1.1.15.1.6.1.1.1) | read-only | TruthValue | true(1), false(2) | Whether an MKA active actor exists to transmit MKPDUs. | As per the MIB. |
| ieee8021XKayMkaAuthenticated(1.3.111.2.802.1.1.15.1.6.1.1.2) | read-only | TruthValue | true(1), false(2) | Whether the principal actor has determined that Controlled Port communication should proceed with MACsec. | As per the MIB. |
| ieee8021XKayMkaSecured(1.3.111.2.802.1.1.15.1.6.1.1.3) | read-only | TruthValue | true(1), false(2) | Whether the principal actor has determined that communication should use MACsec. | As per the MIB. |
| ieee8021XKayMkaFailed(1.3.111.2.802.1.1.15.1.6.1.1.4) | read-only | TruthValue | true(1), false(2) | Whether the MKA lifetime has elapsed. | As per the MIB. |
| ieee8021XKayMkaActorSCI(1.3.111.2.802.1.1.15.1.6.1.1.5) | read-only | SecySCI | OCTET STRING (0..65535) | Secure channel identifier (SCI) assigned by the system to the port. | As per the MIB. |
| ieee8021XKayMkaKey | read-write | ieee8021XMkaKey | OCTET STRING | Key server priority | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------------------------|--|--|-----------------|
| aActorsPriority (1.3.111.2.802.1.1 .15.1.6.1.1.6) | | yServerPriority | (SIZE (1)) | for all MKA actors on the port. | |
| ieee8021XKayMk aKeyServerPriorit y (1.3.111.2.802.1.1 .15.1.6.1.1.7) | read-only | ieee8021XMkaKe yServerPriority | OCTET STRING (SIZE (1)) | Priority of the elected key server. | Not supported. |
| ieee8021XKayMk aKeyServerSCI (1.3.111.2.802.1.1 .15.1.6.1.1.8) | read-only | SecySCI | OCTET STRING (0..65535) | Key server SCI for the MKA principal actor. | As per the MIB. |
| ieee8021XKayAllo wedJoinGroup (1.3.111.2.802.1.1 .15.1.6.1.1.9) | read-only | TruthValue | true(1), false(2) | Whether the KaY accepts group connectivity association keys (CAKs) distributed by the MKA protocol. | Not supported. |
| ieee8021XKayAllo wedFormGroup (1.3.111.2.802.1.1 .15.1.6.1.1.10) | read-only | TruthValue | true(1), false(2) | Whether the KaY attempts to use point-to-point connectivity associations (CAs) to distribute a group CAK if the KaY's MKA principal actor is the key server for all the point-to-point CAs. | Not supported. |
| ieee8021XKayCre ateNewGroup (1.3.111.2.802.1.1 .15.1.6.1.1.11) | read-write | TruthValue | true(1), false(2) | Whether the KaY will distribute a new group CAK if the KaY's MKA principal actor is the key server for all the point-to-point CAs. | Not supported. |
| ieee8021XKayMa cSecCapability (1.3.111.2.802.1.1 .15.1.6.1.1.12) | read-only | INTEGER | noMACsec(0), macSecCapability 1(1), macSecCapability 2(2), macSecCapability 3(3) | Whether to implement MACsec and the MACsec capabilities. | As per the MIB. |
| ieee8021XKayMa cSecDesired (1.3.111.2.802.1.1 .15.1.6.1.1.13) | read-write | TruthValue | true(1), false(2) | Whether the MKA participants desire the use of MACsec to protect frames with this KaY. | As per the MIB. |
| ieee8021XKayMa cSecProtect (1.3.111.2.802.1.1 .15.1.6.1.1.14) | read-only | TruthValue | true(1), false(2) | Status of the MACsec protection function for this KaY. | Not supported. |
| ieee8021XKayMa cSecReplay Protec | read-only | TruthValue | true(1), false(2) | Status of the MACsec replay | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-------------------------------|---|----------------|
| t (1.3.111.2.802.1.1 .15.1.6.1.1.15) | | | | protection function for this KaY. | |
| ieee8021XKayMacSecValidate (1.3.111.2.802.1.1 .15.1.6.1.1.16) | read-only | TruthValue | true(1), false(2) | Status of the MACsec validation function for this KaY. | Not supported. |
| ieee8021XKayMacSecConfidentialityOffset (1.3.111.2.802.1.1 .15.1.6.1.1.17) | read-write | Integer32 | Integer32 (0 30 50) | Confidentiality protection offset options for the selected cipher suite in the MACsec. | Not supported. |
| ieee8021XKayMkaTxKN (1.3.111.2.802.1.1 .15.1.6.1.1.18) | read-only | ieee8021XMkaKN | Unsigned32 (1..2147483648) | Key number assigned by the key server to the secure association key (SAK) currently being used for transmission. | Not supported. |
| ieee8021XKayMkaTxAN (1.3.111.2.802.1.1 .15.1.6.1.1.19) | read-only | RowPointer | Standard MIB values. | Secure channel (SC) SA number (AN) assigned by the key server for use with the key number for transmission. | Not supported. |
| ieee8021XKayMkaRxKN (1.3.111.2.802.1.1 .15.1.6.1.1.20) | read-only | ieee8021XMkaKN | Unsigned32 (1..2147483648) | Key number assigned by the key server to the oldest SAK currently being used for reception. | Not supported. |
| ieee8021XKayMkaRxAN (1.3.111.2.802.1.1 .15.1.6.1.1.21) | read-only | RowPointer | Standard MIB values. | SC AN assigned by the key server for use with the key number for reception. | Not supported. |

ieee8021XKayMkaPeerListTable

About this table

Use this table to obtain information about the MKA peer list for a KaY.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ieee8021XPaePortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------|--|--|-----------------|
| ieee8021XKayMk aPeerListMI (1.3.111.2.802.1.1 .15.1.6.3.1.1) | not-accessible | ieee8021XMkaMI | OCTET STRING (SIZE (12)) | MI information of a peer entry in the peer list of this active participant in the MKA protocol. | As per the MIB. |
| ieee8021XKayMk aPeerListMN (1.3.111.2.802.1.1 .15.1.6.3.1.2) | read-only | ieee8021XMkaM N | Unsigned32 (1..2147483648) | Latest MN information of the peer entry in the peer list of this active participant in the MKA protocol. | As per the MIB. |
| ieee8021XKayMk aPeerListType (1.3.111.2.802.1.1 .15.1.6.3.1.3) | read-only | INTEGER | livePeerList(1), potentialPeerList(2) | Type of the peer entry in the peer list of this active participant in the MKA protocol. | As per the MIB. |
| ieee8021XKayMk aPeerListSCI (1.3.111.2.802.1.1 .15.1.6.3.1.4) | read-only | SecySCI | OCTET STRING (0..65535) | SCI information of the peer entry in the peer list of this active participant in the MKA protocol. | As per the MIB. |

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RADIUS-ACC-CLIENT-MIB

About this MIB

Use this MIB to collect statistics about accounting packets of different types that a RADIUS client receives from RADIUS servers.

MIB file name

radius-acc-client.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).radiusMIB(67).radiusAccounting(2).radiusAccClientMIB(2)

Scalar objects

radiusAccClient

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|------------------------------|--|-----------------|
| radiusAccClientInvalidServerAddresses (1.3.6.1.2.1.67.2.2.1.1.1) | read-only | Counter32 | Standard MIB values. | Number of unrecognizable IP addresses of accounting servers. | As per the MIB. |
| radiusAccClientIdentifier (1.3.6.1.2.1.67.2.2.1.1.2) | read-only | SnmpAdminString | OCTET STRING (SIZE (0..255)) | ID of a client. | As per the MIB. |

Tabular objects

radiusAccServerTable

About this table

This table contains the statistics about accounting packets that a RADIUS client receives from a RADIUS server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is radiusAccServerIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------|----------------|-----------|---------------|-------------|-----------------|
| radiusAccServerIndex | not-accessible | Integer32 | 1..2147483647 | Index of an | As per the MIB. |

| | | | | | |
|---|-----------|-----------|----------------------|--|-----------------|
| dex (1.3.6.1.2.1.67.2.2.1.1.3.1.1) | | | | accounting server. | |
| radiusAccServerAddress (1.3.6.1.2.1.67.2.2.1.1.3.1.2) | read-only | IpAddress | Standard MIB values. | IP address of the accounting server. | As per the MIB. |
| radiusAccClientServerPortNumber (1.3.6.1.2.1.67.2.2.1.1.3.1.3) | read-only | Integer32 | 0..65535 | Port number of the accounting server. | As per the MIB. |
| radiusAccClientRoundTripTime (1.3.6.1.2.1.67.2.2.1.1.3.1.4) | read-only | TimeTicks | TimeTick | Round trip time. | As per the MIB. |
| radiusAccClientRequests (1.3.6.1.2.1.67.2.2.1.1.3.1.5) | read-only | Counter32 | Standard MIB values. | Number of accounting requests sent to the server. | As per the MIB. |
| radiusAccClientRetransmissions (1.3.6.1.2.1.67.2.2.1.1.3.1.6) | read-only | Counter32 | Standard MIB values. | Number of accounting requests retransmitted. | As per the MIB. |
| radiusAccClientResponses (1.3.6.1.2.1.67.2.2.1.1.3.1.7) | read-only | Counter32 | Standard MIB values. | Number of accounting responses received. | As per the MIB. |
| radiusAccClientMalformedResponses (1.3.6.1.2.1.67.2.2.1.1.3.1.8) | read-only | Counter32 | Standard MIB values. | Number of malformed accounting responses received. | As per the MIB. |
| radiusAccClientBadAuthenticators (1.3.6.1.2.1.67.2.2.1.1.3.1.9) | read-only | Counter32 | Standard MIB values. | Number of Access-Reject packets received. | As per the MIB. |
| radiusAccClientPendingRequests (1.3.6.1.2.1.67.2.2.1.1.3.1.10) | read-only | Gauge32 | Standard MIB values. | Number of pending authentication requests. | As per the MIB. |
| radiusAccClientTimeouts (1.3.6.1.2.1.67.2.2.1.1.3.1.11) | read-only | Counter32 | Standard MIB values. | Number of timed out accounting requests. | As per the MIB. |
| radiusAccClientUnknownTypes (1.3.6.1.2.1.67.2.2.1.1.3.1.12) | read-only | Counter32 | Standard MIB values. | Number of packets with unknown types. | As per the MIB. |
| radiusAccClientPacketsDropped (1.3.6.1.2.1.67.2.2.1.1.3.1.13) | read-only | Counter32 | Standard MIB values. | Number of packets discarded. | As per the MIB. |

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RADIUS-AUTH-CLIENT-MIB

About this MIB

Use this MIB to collect statistics about authentication packets of different types that a RADIUS client receives from RADIUS servers.

MIB file name

radius-auth-client.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).radiusMIB(67).radiusAuthentication(1).radiusAuthClientMIB(2)

Scalar objects

radiusAuthClient

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|------------------------------|--|-----------------|
| radiusAuthClientInvalidServerAddresses (1.3.6.1.2.1.67.1.2.1.1.1) | read-only | Counter32 | Standard MIB values. | Number of unrecognizable IP addresses of authentication servers. | As per the MIB. |
| radiusAuthClientIdentifier (1.3.6.1.2.1.67.1.2.1.1.2) | read-only | SnmpAdminString | OCTET STRING (SIZE (0..255)) | ID of a client. | As per the MIB. |

Tabular objects

radiusAuthServerTable

About this table

This table contains the statistics about authentication packets that a RADIUS client receives from a RADIUS server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is radiusAuthServerIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|----------------------|--|-----------------|
| radiusAuthServerIndex (1.3.6.1.2.1.67.1.2.1.1.3.1.1) | not-accessible | Integer32 | 1..2147483647 | Index of an authentication server. | As per the MIB. |
| radiusAuthServerAddress (1.3.6.1.2.1.67.1.2.1.1.3.1.2) | read-only | IpAddress | Standard MIB values. | IP address of the authentication server. | As per the MIB. |
| radiusAuthServerPortNumber (1.3.6.1.2.1.67.1.2.1.1.3.1.3) | read-only | Integer32 | 0..65535 | Port number of the authentication server. | As per the MIB. |
| radiusAuthServerRoundTripTime (1.3.6.1.2.1.67.1.2.1.1.3.1.4) | read-only | TimeTicks | TimeTick | Round trip time. | As per the MIB. |
| radiusAuthServerAccessRequests (1.3.6.1.2.1.67.1.2.1.1.3.1.5) | read-only | Counter32 | Standard MIB values. | Number of access requests sent to the server. | As per the MIB. |
| radiusAuthServerAccessRetransmissions (1.3.6.1.2.1.67.1.2.1.1.3.1.6) | read-only | Counter32 | Standard MIB values. | Number of access requests retransmitted. | As per the MIB. |
| radiusAuthServerAccessAccepts (1.3.6.1.2.1.67.1.2.1.1.3.1.7) | read-only | Counter32 | Standard MIB values. | Number of Access-Accept packets received. | As per the MIB. |
| radiusAuthServerAccessRejects (1.3.6.1.2.1.67.1.2.1.1.3.1.8) | read-only | Counter32 | Standard MIB values. | Number of Access-Reject packets received. | As per the MIB. |
| radiusAuthServerAccessChallenges (1.3.6.1.2.1.67.1.2.1.1.3.1.9) | read-only | Counter32 | Standard MIB values. | Number of Access-Challenge packets received. | As per the MIB. |
| radiusAuthServerMalformedAccessResponses (1.3.6.1.2.1.67.1.2.1.1.3.1.10) | read-only | Counter32 | Standard MIB values. | Number of malformed access responses received. | As per the MIB. |
| radiusAuthServerBadAuthenticators (1.3.6.1.2.1.67.1.2.1.1.3.1.11) | read-only | Counter32 | Standard MIB values. | Number of bad authenticators. | As per the MIB. |
| radiusAuthServerPendingRequests (1.3.6.1.2.1.67.1.2.1.1.3.1.12) | read-only | Gauge32 | Standard MIB values. | Number of pending authentication requests. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---------------------------------------|-----------------|
| radiusAuthClientTimeouts (1.3.6.1.2.1.67.1.2.1.1.3.1.13) | read-only | Counter32 | Standard MIB values. | Number of timed out access requests. | As per the MIB. |
| radiusAuthClientUnknownTypes (1.3.6.1.2.1.67.1.2.1.1.3.1.14) | read-only | Counter32 | Standard MIB values. | Number of packets with unknown types. | As per the MIB. |
| radiusAuthClientPacketsDropped (1.3.6.1.2.1.67.1.2.1.1.3.1.15) | read-only | Counter32 | Standard MIB values. | Number of packets discarded. | As per the MIB. |

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HH3C-IKE-MONITOR-MIB

About this MIB

Use this MIB to obtain IKE monitor information, including IKE tunnel, IKE trap, and IKE MIB version information.

MIB file name

hh3c-ike-monitor.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cIKEMonitor(30)

Scalar objects

hh3cIKEGlobalActiveTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------------|---|-----------------|
| hh3cIKEGlobalActiveTunnels (1.3.6.1.4.1.25506.2.30.1.3.1) | read-only | Gauge32 | Gauge32 (0..4294967295) | Number of currently active Phase-1 IKE Tunnels. | As per the MIB. |

hh3cIKEGlobalInOctets

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalInOctets (1.3.6.1.4.1.25506.2.30.1.3.2) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets received by all currently and previously active Phase-1 IKE Tunnels. | As per the MIB. |

hh3cIKEGlobalInPkts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|-----------------|
| hh3cIKEGlobalInPkts (1.3.6.1.4.1.25506.2.30.1.3.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets received by all currently and previously active Phase-1 IKE Tunnels. | As per the MIB. |

hh3cIKEGlobalInDropPkts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalInDropPkts (1.3.6.1.4.1.25506.2.30.1.3.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound packets dropped by all currently and previously active Phase-1 IKE Tunnels. | As per the MIB. |

hh3cIKEGlobalInP2Exchgs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|-----------------|
| hh3cIKEGlobalInP2Exchgs (1.3.6.1.4.1.25506.2.30.1.3.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges received by all currently and previously active Phase-1 IKE Tunnels. | As per the MIB. |

hh3cIKEGlobalInP2ExchgRejects

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalInP2ExchgRejects (1.3.6.1.4.1.25506.2.30.1.3.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges received and rejected by all currently and previously active Phase-1 IKE Tunnels. | As per the MIB. |

hh3cIKEGlobalInP2SaDelRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalInP2SaDelRequests (1.3.6.1.4.1.25506.2.30.1.3.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 SA deletion requests received by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalInNotifys

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalInNotifys (1.3.6.1.4.1.25506.2.30.1.3.8) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of notifications received by all Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutOctets

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalOutOctets (1.3.6.1.4.1.25506.2.30.1.3.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets sent by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutPkts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|-----------------|
| hh3cIKEGlobalOutPkts (1.3.6.1.4.1.25506.2.30.1.3.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets sent by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutDropPkts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|-----------------|
| hh3cIKEGlobalOutDropPkts (1.3.6.1.4.1.25506.2.30.1.3.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outbound packets dropped by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutP2Exchgs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|-----------------|
| hh3cIKEGlobalOutP2Exchgs (1.3.6.1.4.1.25506.2.30.1.3.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges sent by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutP2ExchgRejects

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalOutP2ExchgRejects (1.3.6.1.4.1.25506.2.30.1.3.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges sent and rejected by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutP2SaDelRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIKEGlobalOutP2SaDelRequests (1.3.6.1.4.1.25506.2.30.1.3.14) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 SA deletion requests sent by all currently and previously active Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalOutNotifys

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalOutNotifys (1.3.6.1.4.1.25506.2.30.1.3.15) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of notifications sent by all Phase-1 IKE tunnels. | As per the MIB. |

hh3cIKEGlobalInitTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalInitTunnels (1.3.6.1.4.1.2550 6.2.30.1.3.16) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of locally initiated IKE tunnels. | As per the MIB. |

hh3cIKEGlobalInitTunnelFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalInitTunnelFails (1.3.6.1.4.1.2550 6.2.30.1.3.17) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of IKE tunnels that were locally initiated but failed to activate. | As per the MIB. |

hh3cIKEGlobalRespTunnels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalRespTunnels (1.3.6.1.4.1.2550 6.2.30.1.3.18) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of IKE tunnels that were remotely initiated. | As per the MIB. |

hh3cIKEGlobalRespTunnelFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalRespTunnelFails (1.3.6.1.4.1.2550 6.2.30.1.3.19) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of IKE tunnels that were remotely initiated but failed to activate. | As per the MIB. |

hh3cIKEGlobalAuthFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalAuthFails (1.3.6.1.4.1.2550 6.2.30.1.3.20) | read-only | Counter32 | Counter32 (0..4294967295) | Number of IKE authentication failures. | As per the MIB. |

hh3cIKEGlobalNoSaFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalNoSaFails (1.3.6.1.4.1.25506.2.30.1.3.21) | read-only | Counter32 | Counter32 (0..4294967295) | Number of Phase-2 SA deletion failures because of nonexistent Phase-1 SAs. | As per the MIB. |

hh3cIKEGlobalInvalidCookieFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalInvalidCookieFails (1.3.6.1.4.1.25506.2.30.1.3.22) | read-only | Counter32 | Counter32 (0..4294967295) | Number of invalid cookie failures occurred during packet header checking. | As per the MIB. |

hh3cIKEGlobalAttrNotSuppFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|----------------|
| hh3cIKEGlobalAttrNotSuppFails (1.3.6.1.4.1.25506.2.30.1.3.23) | read-only | Counter32 | Counter32 (0..4294967295) | Number of attributes-not-supported failures occurred during packet Transform payload checking. | Not supported |

hh3cIKEGlobalNoProposalChosenFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalNoProposalChosenFails (1.3.6.1.4.1.25506.2.30.1.3.24) | read-only | Counter32 | Counter32 (0..4294967295) | Number of no proposal chosen failures occurred during the packet Proposal payload checking. | As per the MIB. |

hh3cIKEGlobalUnsportExchTypeFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
|--------------|--------|--------|-------------|-------------|----------------|

| | | | | | |
|--|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalUnsportExchTypeFails (1.3.6.1.4.1.25506.2.30.1.3.25) | read-only | Counter32 | Counter32 (0..4294967295) | Number of packet drops caused by unsupported exchange type. | As per the MIB. |
|--|-----------|-----------|------------------------------|---|-----------------|

hh3cIKEGlobalInvalidIdFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalInvalidIdFails (1.3.6.1.4.1.25506.2.30.1.3.26) | read-only | Counter32 | Counter32 (0..4294967295) | Number of invalid ID failures occurred during the packet ID payload checking. | As per the MIB. |

hh3cIKEGlobalInvalidProFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalInvalidProFails (1.3.6.1.4.1.25506.2.30.1.3.27) | read-only | Counter32 | Counter32 (0..4294967295) | Number of invalid Protocol ID failures occurred during the packet Proposal payload checking. | As per the MIB. |

hh3cIKEGlobalCertTypeUnsuppFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|-----------------|
| hh3cIKEGlobalCertTypeUnsuppFails (1.3.6.1.4.1.25506.2.30.1.3.28) | read-only | Counter32 | Counter32 (0..4294967295) | Number of certificate type unsupported failures occurred during the packet ID payload checking. | As per the MIB. |

hh3cIKEGlobalInvalidCertAuthFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|----------------|
| hh3cIKEGlobalInvalidCertAuthFails (1.3.6.1.4.1.25506.2.30.1.3.29) | read-only | Counter32 | Counter32 (0..4294967295) | Number of invalid CA failures occurred during the packet ID payload | Not supported |

| | | | | | |
|--|--|--|--|-----------|--|
| | | | | checking. | |
|--|--|--|--|-----------|--|

hh3cIKEGlobalInvalidSignFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|----------------|
| hh3cIKEGlobalInvalidSignFails (1.3.6.1.4.1.25506.2.30.1.3.30) | read-only | Counter32 | Counter32 (0..4294967295) | Number of invalid signature failures occurred during the packet HASH payload checking. | Not supported |

hh3cIKEGlobalCertUnavailableFails

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|-----------------|
| hh3cIKEGlobalCertUnavailableFails (1.3.6.1.4.1.25506.2.30.1.3.31) | read-only | Counter32 | Counter32 (0..4294967295) | Number of certificate unavailable failures occurred during the packet ID payload checking. | As per the MIB. |

hh3cKETrapGlobalCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|---|-----------------|
| hh3cKETrapGlobalCntl (1.3.6.1.4.1.25506.2.30.1.5.1) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable trap notifications for IKE events globally. | As per the MIB. |

hh3cKETunnelStartTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|---|-----------------|
| hh3cKETunnelStartTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.2) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cKETunnelStart trap notifications. | As per the MIB. |

hh3cIKETunnelStopTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|---|-----------------|
| hh3cIKETunnelStopTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.3) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKETunnelStop trap notifications. | As per the MIB. |

hh3cIKENoSaTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|---|-----------------|
| hh3cIKENoSaTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.4) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKENoSa trap notifications. | As per the MIB. |

hh3cIKEEncryFailureTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|---|-----------------|
| hh3cIKEEncryFailureTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.5) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEEncryFailure trap notifications. | As per the MIB. |

hh3cIKEDecryFailureTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|---|-----------------|
| hh3cIKEDecryFailureTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.6) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEDecryFailure trap notifications. | As per the MIB. |

hh3cIKEInvalidProposalTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|--|-----------------|
| hh3cIKEInvalidProposalTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.7) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEInvalidProposal trap notifications. | As per the MIB. |

hh3cIKEAuthFailTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|---|-----------------|
| hh3cIKEAuthFailTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.8) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEAuthFail trap notifications. | As per the MIB. |

hh3cIKEInvalidCookieTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|--|-----------------|
| hh3cIKEInvalidCookieTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.9) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEInvalidCookie trap notifications. | As per the MIB. |

hh3cIKEInvalidSpiTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|---|-----------------|
| hh3cIKEInvalidSpiTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.10) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEInvalidSpi trap notifications. | As per the MIB. |

hh3cIKEAttrNotSuppTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|--|-----------------|
| hh3cIKEAttrNotSuppTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.11) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEAttrNotSupp trap notifications. | As per the MIB. |

hh3cIKEUnsportExchTypeTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|--|-----------------|
| hh3cIKEUnsportExchTypeTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.12) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEUnsportExchType trap notifications. | As per the MIB. |

| | | | | | |
|----------------|--|--|--|-------------------------|--|
| 6.2.30.1.5.12) | | | | ntl trap notifications. | |
|----------------|--|--|--|-------------------------|--|

hh3cIKEInvalidIdTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|--|-----------------|
| hh3cIKEInvalidIdTrapCntl (1.3.6.1.4.1.2550 6.2.30.1.5.13) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEInvalidId trap notifications. | As per the MIB. |

hh3cIKEInvalidProtocolTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|--|-----------------|
| hh3cIKEInvalidProtocolTrapCntl (1.3.6.1.4.1.2550 6.2.30.1.5.14) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEInvalidProtocol trap notifications. | As per the MIB. |

hh3cKECertTypeUnsuppTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|--|-----------------|
| hh3cKECertTypeUnsuppTrapCntl (1.3.6.1.4.1.2550 6.2.30.1.5.15) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cKECertTypeUnsupp trap notifications. | As per the MIB. |

hh3cIKEInvalidCertAuthTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|-----------------|--|-----------------|
| hh3cIKEInvalidCertAuthTrapCntl (1.3.6.1.4.1.2550 6.2.30.1.5.16) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIKEInvalidCertAuth trap notifications. | As per the MIB. |

hh3cIKEInvalidSignTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
|--------------|--------|--------|-------------|-------------|----------------|

| | | | | | |
|---|------------|----------------|-----------------|--|-----------------|
| hh3cIkeInvalidSignTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.17) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIkeInvalidSign trap notifications. | As per the MIB. |
|---|------------|----------------|-----------------|--|-----------------|

hh3cIkeCertUnavailableTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|--|-----------------|
| hh3cIkeCertUnavailableTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.18) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIkeCertUnavailable trap notifications. | As per the MIB. |

hh3cIkeProposalAddTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|--|-----------------|
| hh3cIkeProposalAddTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.19) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIkeProposalAdd trap notifications. | As per the MIB. |

hh3cIkeProposalDelTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|-----------------|--|-----------------|
| hh3cIkeProposalDelTrapCntl (1.3.6.1.4.1.25506.2.30.1.5.20) | read-write | Hh3cTrapStatus | Integer32 (1,2) | Whether to enable hh3cIkeProposalDel trap notifications. | As per the MIB. |

hh3cIkeProposalNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|-----------|---------------------------|---|-----------------|
| hh3cIkeProposalNumber (1.3.6.1.4.1.25506.2.30.1.4.1) | accessible-for-notification | Integer32 | Integer32 (0..2147483647) | Number of an IKE proposal in a trap notification. | As per the MIB. |

hh3cIkeProposalSize

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
|--------------|--------|--------|-------------|-------------|----------------|

| | | | | | |
|---|---------------------------|-----------|------------------------------|---|-----------------|
| hh3cIKEPropo lSize (1.3.6.1.4.1.2550 6.2.30.1.4.2) | accessible-for-no tify | Integer32 | Integer32 (0..2147483647) | Number of IKE proposals in a trap notification. | As per the MIB. |
|---|---------------------------|-----------|------------------------------|---|-----------------|

hh3cIKEIdInformation

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|---------------|--------------------------|--|-----------------|
| hh3cIKEIdInfor mation (1.3.6.1.4.1.2550 6.2.30.1.4.3) | accessible-for-no tify | DisplayString | OCTET STRING (1..255) | ID information in a trap notification. | As per the MIB. |

hh3cIKEProtocolNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|-----------|------------------------------|---|-----------------|
| hh3cIKEProtocol Num (1.3.6.1.4.1.2550 6.2.30.1.4.4) | accessible-for-no tify | Integer32 | Integer32 (0..2147483647) | Protocol number in a trap notification. | As per the MIB. |

hh3cIKECertInformation

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|---------------|--------------------------|---|-----------------|
| hh3cIKECertInfor mation (1.3.6.1.4.1.2550 6.2.30.1.4.5) | accessible-for-no tify | DisplayString | OCTET STRING (1..255) | Certificate information in a trap notification. | As per the MIB. |

hh3cIKEMIBVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|--------------------------|---|-----------------|
| hh3cIKEMIBVers ion (1.3.6.1.4.1.2550 6.2.30.1.7.1) | read-only | DisplayString | OCTET STRING (1..255) | Version information of the IKE MIB. | As per the MIB. |

Tabular objects

hh3clKETunnelTable

About this table

This table contains IKE tunnel information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clKETunIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|----------------|------------------------------|---|---|
| hh3clKETunIndex (1.3.6.1.4.1.25506.2.30.1.1.1.1) | accessible-for-notify | Integer32 | Integer32 (1..2147483647) | Index of a tunnel. | As per the MIB. |
| hh3clKETunLocalType (1.3.6.1.4.1.25506.2.30.1.1.1.2) | read-only | Hh3clKEIDType | Integer32 (0..11) | Type of the local ID of the tunnel. | As per the MIB. |
| hh3clKETunLocalValue1 (1.3.6.1.4.1.25506.2.30.1.1.1.3) | read-only | Display String | OCTET STRING (1..255) | Value of the local ID of the tunnel. | For a local ID that exceeds 255 bytes, this object displays only the first 255 bytes of information. The complete ID information is displayed by hh3clKETunLocalValue3. |
| hh3clKETunLocalValue2 (1.3.6.1.4.1.25506.2.30.1.1.1.4) | read-only | Display String | OCTET STRING (1..255) | The second specification of the local end's IP address. | Not supported |
| hh3clKETunLocalAddr (1.3.6.1.4.1.25506.2.30.1.1.1.5) | read-only | IP address | IP address | IP address of the tunnel local end. | Replaced by hh3clKETunLocalInetAddr. |
| hh3clKETunRemoteType (1.3.6.1.4.1.25506.2.30.1.1.1.6) | read-only | Hh3clKEIDType | Integer32 (0..11) | Type of the remote ID of the tunnel. | As per the MIB. |
| hh3clKETunRemoteValue1 (1.3.6.1.4.1.25506.2.30.1.1.1.7) | read-only | DisplayString | OCTET STRING (1..255) | Value of the remote ID of the tunnel. | For a remote ID that exceeds 255 bytes, this object displays only the |

| | | | | | |
|---|-----------|--------------------|---|--|---|
| | | | | | first 255 bytes of information. The complete ID information is displayed by hh3cIKETunRemoteValue3. |
| hh3cIKETunRemoteValue2 (1.3.6.1.4.1.25506.2.30.1.1.1.8) | read-only | DisplayString | OCTET STRING (1..255) | The second specification of the remote end's IP address. | Not supported |
| hh3cIKETunRemoteAddr (1.3.6.1.4.1.25506.2.30.1.1.1.9) | read-only | IpAddress | OCTET STRING (4) | IP address of the tunnel remote end. | Replaced by hh3cIKETunRemoteIpnAddr. |
| hh3cIKETunInitiator (1.3.6.1.4.1.25506.2.30.1.1.1.10) | read-only | INTEGER | Integer32 (1,2) | Initiator of the tunnel. | As per the MIB. |
| hh3cIKETunNegotMode (1.3.6.1.4.1.25506.2.30.1.1.1.11) | read-only | Hh3cIKENegotMode | Integer32 (2,4,32,128) | Negotiation mode of the IKE tunnel. | As per the MIB. |
| hh3cIKETunDiffHellmanGrp (1.3.6.1.4.1.25506.2.30.1.1.1.12) | read-only | Hh3cDiffHellmanGrp | Integer32 (0,1,2,5,14,24,2147483647) | DH group used in IKE Phase-1 negotiations. | As per the MIB. |
| hh3cIKETunEncryptAlgo (1.3.6.1.4.1.25506.2.30.1.1.1.13) | read-only | Hh3cEncryptAlgo | Integer32(0..14,128..131,2147483647) | Encryption algorithm used in IKE Phase-1 negotiations. | As per the MIB. |
| hh3cIKETunHashAlgo (1.3.6.1.4.1.25506.2.30.1.1.1.14) | read-only | Hh3cAuthAlgo | Integer32(0..5,128,2147483647) | Hash algorithm used in IKE Phase-1 negotiations. | As per the MIB. |
| hh3cIKETunAuthMethod (1.3.6.1.4.1.25506.2.30.1.1.1.15) | read-only | Hh3cIKEAuthMethod | Integer32(0..3,5,6) | Authentication method used in IKE Phase-1 negotiations. | As per the MIB. |
| hh3cIKETunLifetime (1.3.6.1.4.1.25506.2.30.1.1.1.16) | read-only | Integer32 | Integer32(1..2147483647) | Negotiated lifetime of the IKE tunnel. | Range from 1 to 2147483647 |
| hh3cIKETunActiveTime (1.3.6.1.4.1.25506.2.30.1.1.1.17) | read-only | Integer32 | Integer32(1..2147483648) | Active period of time of the IKE tunnel. | Range from 1 to 2147483647 |
| hh3cIKETunRemainTime (1.3.6.1.4.1.25506.2.30.1.1.1.18) | read-only | Integer32 | Integer32(1..2147483649) | Remaining lifetime of the IKE tunnel. | Range from 1 to 2147483647 |
| hh3cIKETunTotalRefreshes (1.3.6.1.4.1.25506.2.30.1.1.1.19) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of IKE SA | As per the MIB. |

| | | | | | |
|---|-----------|------------------------|------------------------------|---|-----------------|
| 6.2.30.1.1.1.19) | | | | refreshes. | |
| hh3clKETunStat e (1.3.6.1.4.1.2550 6.2.30.1.1.1.20) | read-only | Hh3clKETunnelS tate | Integer32(1,2) | State of the IKE tunnel. | As per the MIB. |
| hh3clKETunDpdI ntervalTime (1.3.6.1.4.1.2550 6.2.30.1.1.1.21) | read-only | Integer32 | Integer32(1..214 7483647) | Interval for sending DPD requests. | Not supported |
| hh3clKETunDpd TimeOut (1.3.6.1.4.1.2550 6.2.30.1.1.1.22) | read-only | Integer32 | Integer32(1..214 7483648) | Timeout time of a DPD request. | Not supported |
| hh3clKETunLoca lInetAddrType (1.3.6.1.4.1.2550 6.2.30.1.1.1.23) | read-only | InetAddressType | Integer32(1,2) | IP address type of the tunnel local end. | As per the MIB. |
| hh3clKETunLoca lInetAddr (1.3.6.1.4.1.2550 6.2.30.1.1.1.24) | read-only | InetAddress | OCTET STRING (4) | IP address of the tunnel local end. | As per the MIB. |
| hh3clKETunRem oteInetAddrType (1.3.6.1.4.1.2550 6.2.30.1.1.1.25) | read-only | InetAddressType | Integer32(1,2) | IP address type of the tunnel remote end. | As per the MIB. |
| hh3clKETunRem oteInetAddr (1.3.6.1.4.1.2550 6.2.30.1.1.1.26) | read-only | InetAddress | OCTET STRING (4) | IP address of the tunnel remote end. | As per the MIB. |

hh3clKETunnelStatTable

About this table

This table contains IKE tunnel packet statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3clKETunIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| hh3clKETunInOc tets (1.3.6.1.4.1.2550 6.2.30.1.2.1.1) | read-only | Counter64 | Counter64 (0..18446744073 709551615) | Total number of octets received by the tunnel. | As per the MIB. |
| hh3clKETunInPk ts | read-only | Counter64 | Counter64 (0..18446744073) | Total number of packets received | As per the MIB. |

| | | | | | |
|---|-----------|-----------|--|---|-----------------|
| (1.3.6.1.4.1.25506.2.30.1.2.1.2) | | | 709551615) | by the tunnel. | |
| hh3cIKETunInDropPkts (1.3.6.1.4.1.25506.2.30.1.2.1.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound packets dropped by the tunnel. | As per the MIB. |
| hh3cIKETunInP2Exchgs (1.3.6.1.4.1.25506.2.30.1.2.1.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges received by the tunnel. | As per the MIB. |
| hh3cIKETunInP2ExchgRejets (1.3.6.1.4.1.25506.2.30.1.2.1.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound Phase-2 exchanges dropped by the tunnel. | As per the MIB. |
| hh3cIKETunInP2SaDelRequests (1.3.6.1.4.1.25506.2.30.1.2.1.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of requests received by the tunnel for deleting Phase-2 exchanges. | As per the MIB. |
| hh3cIKETunInP1SaDelRequests (1.3.6.1.4.1.25506.2.30.1.2.1.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of requests received by the tunnel for deleting Phase-1 SAs. | As per the MIB. |
| hh3cIKETunInNotifys (1.3.6.1.4.1.25506.2.30.1.2.1.8) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of notifications received by the tunnel. | As per the MIB. |
| hh3cIKETunOutOctets (1.3.6.1.4.1.25506.2.30.1.2.1.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets sent by the tunnel. | As per the MIB. |
| hh3cIKETunOutPkts (1.3.6.1.4.1.25506.2.30.1.2.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets sent by the tunnel. | As per the MIB. |
| hh3cIKETunOutDropPkts (1.3.6.1.4.1.25506.2.30.1.2.1.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outbound packets dropped by the tunnel. | As per the MIB. |
| hh3cIKETunOutP2Exchgs (1.3.6.1.4.1.25506.2.30.1.2.1.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges sent by the tunnel. | As per the MIB. |
| hh3cIKETunOutP2ExchgRejets (1.3.6.1.4.1.25506.2.30.1.2.1.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of Phase-2 exchanges sent and rejected by the tunnel. | As per the MIB. |

| | | | | | |
|---|-----------|-----------|--|---|-----------------|
| hh3cIKETunOutP2SaDelRequests (1.3.6.1.4.1.25506.2.30.1.2.1.14) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of requests sent by the tunnel for deleting Phase-2 SAs. | As per the MIB. |
| hh3cIKETunOutP1SaDelRequests (1.3.6.1.4.1.25506.2.30.1.2.1.15) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of requests sent by the tunnel for deleting Phase-1 SAs. | As per the MIB. |
| hh3cIKETunOutNotifys (1.3.6.1.4.1.25506.2.30.1.2.1.16) | read-only | Counter32 | Counter32 (0..4294967295) | Total number of notifications sent by the tunnel. | As per the MIB. |

Notifications

The following information describes the notifications generated by HH3C-IKE-MONITOR-MIB.

hh3cIKETunnelStart

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.1 | IKE tunnel created. | Informational | - | - | OFF |

Description

This notification is generated when an IKE tunnel is created.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike tunnel-start` command.
- MIB: Set hh3cIKETunnelStartTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike tunnel-start` command
- MIB: Set hh3cIKETunnelStartTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote | No | IpAddress | Standard MIB values. |

| | | | | |
|---|---|-----|-----------------|----------------------|
| | end. | | | |
| 1.3.6.1.4.1.25506.2.30.1.1.1.16 (hh3cIKETunLifeTime) | Lifetime of the IKE tunnel. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKETunnelStop

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.2 | IKE tunnel deleted. | Informational | - | - | OFF |

Description

This notification is generated when an IKE tunnel is deleted.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike tunnel-stop` command
- MIB: Set hh3cIKETunnelStopTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike tunnel-stop` command
- MIB: Set hh3cIKETunnelStopTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|-------------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |

| | | | | |
|---|---|-----|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.17 (hh3cIKETunActiveTime) | Active period of time of the tunnel. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKENoSaFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.3 | IKE tunnel received nonexistent SA. | Informational | - | - | OFF |

Description

This notification is generated when an IKE tunnel receives a nonexistent SA.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike no-sa-failure` command.
- MIB: Set hh3cIKENoSaTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike no-sa-failure` command.
- MIB: Set hh3cIKENoSaTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEEncryFailFailure**Basic information**

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.4 | IKE tunnel encryption failure. | Informational | - | - | OFF |

Description

This notification is generated when an IKE tunnel has an encryption failure.

Status control**ON**

- CLI: Use the `snmp-agent trap enable ike encrypt-failure` command.
- MIB: Set hh3cIKEEncryFailureTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike encrypt-failure` command.
- MIB: Set hh3cIKEEncryFailureTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEDecryFailFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|--------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.5 | IKE tunnel decryption failure. | Informational | - | - | OFF |

Description

This notification is generated when an IKE tunnel has a decryption failure.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike decrypt-failure` command.
- MIB: Set hh3cIKEDecryFailureTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike decrypt-failure` command.
- MIB: Set hh3cIKEDecryFailureTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEInvalidProposalFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.6 | Invalid proposal received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an invalid proposal is received during an IKE Phase-1 SA negotiation.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike invalid-proposal` command.
- MIB: SET hh3cIKEInvalidProposalTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike invalid-proposal` command.
- MIB: SET hh3cIKEInvalidProposalTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKEtunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKEtunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKEtunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKEtunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKEtunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKEtunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKEtunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEAuthFailFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.7 | IKE Phase-1 authentication failure. | Informational | - | - | OFF |

Description

This notification is generated when the IKE Phase-1 authentication fails.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike auth-failure` command.
- MIB: Set hh3cIKEAuthFailTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike auth-failure` command.
- MIB: Set hh3cIKEAuthFailTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKEtunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKEtunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKEtunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKEtunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKEtunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKEtunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKEtunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEInvalidCookieFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.8 | Invalid cookie received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an invalid cookie is received during an IKE Phase-1 SA negotiation.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike invalid-cookie` command.
- MIB: Set hh3cIKEInvalidCookieTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike invalid-cookie` command.

- MIB: Set hh3cIkeInvalidCookieTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIkeTunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIkeTunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIkeTunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIkeTunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIkeTunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIkeTunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIkeTunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIkeAttrNotSuppFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.9 | Attributes not supported received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an unsupported attribute is received during IKE Phase-1 SA negotiation.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike attr-not-support` command.
- MIB: Set hh3cIkeAttrNotSuppTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike attr-not-support` command.
- MIB: Set `hh3cIKEAttrNotSuppTrapCntl` to `disabled(2)`.

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEUnsportExchTypeFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.10 | Unsupported exchange type received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an unsupported exchange type is received during the IKE Phase-1 SA negotiation.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike unsupport-exch-type` command.
- MIB: Set `hh3cIKEUnsportExchTypeTrapCntl` to `enabled(1)`.

OFF

- CLI: Use the `undo snmp-agent trap enable ike unsupport-exch-type` command.
- MIB: Set `hh3cIkeUnsupportExchTypeTrapCntl` to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIkeTunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIkeTunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIkeTunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIkeTunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIkeTunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIkeTunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIkeTunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIkeInvalidIdFailure**Basic information**

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.11 | Invalid ID received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an invalid ID is received during an IKE Phase-1 SA negotiation.

Status control**ON**

- CLI: Use the `snmp-agent trap enable ike invalid-id` command.
- MIB: Set `hh3cIkeInvalidIdTrapCntl` to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike invalid-id` command.

- MIB: Set hh3cIkeInvalidIdTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIkeTunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIkeTunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.3 (hh3cIkeIdInformation) | ID of the IKE negotiation. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIkeTunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIkeTunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIkeTunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIkeTunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIkeTunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIkeInvalidProtocolFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.12 | IKE tunnel protocol error. | Informational | - | - | OFF |

Description

This notification is generated when a protocol related error occurs during the processing for an IKE tunnel.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike invalid-protocol` command.
- MIB: Set hh3cIkeInvalidProtocolTrapCntl to enabled(1)

OFF

- CLI: Use the `undo snmp-agent trap enable ike invalid-protocol` command.
- MIB: Set `hh3cIkeInvalidProtocolTrapCntl` to disabled(2)

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|-------------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIkeTunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIkeTunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.4 (hh3cIkeProtocolNum) | IKE protocol number | No | Integer32 | -2147483648..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIkeTunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIkeTunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIkeTunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIkeTunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIkeTunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIkeCertTypeUnsuppFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.13 | Unsupported certificate type received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an unsupported certificate type is received during an IKE Phase-1 SA negotiation.

Status control**ON**

- CLI: Use the `snmp-agent trap enable ike cert-type-unsupport` command.
- MIB: Set `hh3cIKECertTypeUnsuppTrapCntl` to `enabled(1)`.

OFF

- CLI: Use the `undo snmp-agent trap enable ike cert-type-unsupport` command.
- MIB: Set `hh3cIKECertTypeUnsuppTrapCntl` to `disabled(2)`.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.5 (hh3cIKECertInformation) | Certificate information | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEInvalidCertAuthFailure**Basic information**

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.14 | Invalid certificate received in IKE Phase-1 | Informational | - | - | OFF |

| | | | | | |
|--|--------------|--|--|--|--|
| | negotiation. | | | | |
|--|--------------|--|--|--|--|

Description

This notification is generated when an invalid certificate is received during an IKE Phase-1 SA negotiation.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike invalid-cert-auth` command.
- MIB: Set `hh3cIkeInvalidCertAuthTrapCntl` to `enabled(1)`.

OFF

- CLI: Use the `undo snmp-agent trap enable ike invalid-cert-auth` command.
- MIB: Set `hh3cIkeInvalidCertAuthTrapCntl` to `disabled(2)`.

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIkeTunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIkeTunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.5 (hh3cIkeCertInformation) | Certificate information. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIkeTunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIkeTunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIkeTunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIkeTunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIkeTunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEInvalidSignFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.15 | Invalid signature received in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when an invalid signature is received during an IKE Phase-1 SA negotiation.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike invalid-sign` command.
- MIB: Set hh3cIKEInvalidSignTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike invalid-sign` command.
- MIB: Set hh3cIKEInvalidSignTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.5 (hh3cKECertInformation) | Certificate information. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIKECertUnavailableFailure**Basic information**

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.16 | Certificate unavailable in IKE Phase-1 negotiation. | Informational | - | - | OFF |

Description

This notification is generated when a certificate is unavailable during an IKE Phase-1 SA negotiation.

Status control**ON**

- CLI: Use the `snmp-agent trap enable ike cert-unavailable` command.
- MIB: Set hh3cIKECertUnavailableTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike cert-unavailable` command.
- MIB: Set hh3cIKECertUnavailableTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.5 (hh3cIKETunLocalAddr) | IP address of the tunnel local end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.9 (hh3cIKETunRemoteAddr) | IP address of the tunnel remote end. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.5 (hh3cIKECertInformation) | Certificate information. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.30.1.1.1.1 (hh3cIKETunIndex) | Index of a tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.30.1.1.1.23 (hh3cIKETunLocalInetAddrType) | IP address type of the tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.24 (hh3cIKETunLocalInetAddr) | IP address of the tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.1.1.25 (hh3cIKETunRemoteInetAddrType) | IP address type of the tunnel remote end. | No | InetAddressType | Standard MIB values. |

| | | | | |
|---|--------------------------------------|----|-------------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.1.1.26 (hh3cIKETunRemoteInetAddr) | IP address of the tunnel remote end. | No | InetAddress | Standard MIB values. |
|---|--------------------------------------|----|-------------|----------------------|

Recommended action

No action is required.

hh3cIKEProposalAdd

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.17 | IKE proposal added. | Informational | - | - | OFF |

Description

This notification is generated when an IKE proposal is added.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike proposal-add` command.
- MIB: Set hh3cIKEProposalAddTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike proposal-add` command.
- MIB: Set hh3cIKEProposalAddTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|--------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.4.1 (hh3cIKEProposalNumber) | IKE proposal number. | No | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.2 (hh3cIKEProposalSize) | Number of IKE proposals. | No | Integer32 | Standard MIB values. |

Recommended action

No action is required.

hh3cIKEProposalDel

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.30.1.6.1.18 | IKE proposal deleted. | Informational | - | - | OFF |

Description

This notification is generated when an IKE proposal is deleted.

Status control

ON

- CLI: Use the `snmp-agent trap enable ike proposal-delete` command.
- MIB: Set hh3cIKEProposalDelTrapCntl to enabled(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ike proposal-delete` command.
- MIB: Set hh3cIKEProposalDelTrapCntl to disabled(2).

Objects

| OID(object name) | Description | Index | Type | Value range |
|---|--------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.30.1.4.1 (hh3cIKEProposalNumber) | IKE proposal number. | No | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.30.1.4.2 (hh3cIKEProposalSize) | Number of IKE proposals. | No | Integer32 | Standard MIB values. |

Recommended action

No action is required.

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HH3C-IPSEC-MONITOR-V2-MIB

About this MIB

Use this MIB to obtain information about IPsec tunnels, IPsec-protected traffic, IPsec SAs, IPsec tunnel packet statistics, and IPsec trap notifications.

MIB file name

hh3c-ipsec-monitor-v2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cIPsecMonitorV2(126)

Scalar objects

hh3cIPsecMIBVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|--------------------------|--------------------------------|-----------------|
| hh3cIPsecMIBVersion (1.3.6.1.4.1.25506.2.126.1.1.1) | read-only | DisplayString | OCTET STRING (1..255) | IPsec MIB version information. | As per the MIB. |

hh3cIPsecGlobalActiveTunnelsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------------|---|-----------------|
| hh3cIPsecGlobalActiveTunnelsV2 (1.3.6.1.4.1.25506.2.126.1.6.1) | read-only | Gauge32 | Gauge32 (0..4294967295) | Total number of currently active IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalActiveSasV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------------|---|-----------------|
| hh3cIPsecGlobalActiveSasV2 (1.3.6.1.4.1.25506.2.126.1.6.2) | read-only | Gauge32 | Gauge32 (0..4294967295) | Total number of existing IPsec Phase-2 SAs. | As per the MIB. |

hh3cIPsecGlobalInOctetsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| hh3cIPsecGlobalInOctetsV2 (1.3.6.1.4.1.25506.2.126.1.6.3) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets received by all current and previous IPsec Phase-2 tunnels. This value is accumulated before determining whether or not the packet should be decompressed. | As per the MIB. |

hh3cIPsecGlobalInDecompOctetsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|----------------|
| hh3cIPsecGlobalInDecompOctetsV2 (1.3.6.1.4.1.25506.2.126.1.6.4) | read-only | Counter64 | Counter64 (0..18446744073709551615) | The total number of decompressed octets received by all current and previous IPsec Phase-2 Tunnels. This value is accumulated after a packet is decompressed. | Not supported |

hh3cIPsecGlobalInPktsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalInPktsV2 (1.3.6.1.4.1.25506.2.126.1.6.5) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets received by all current and previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalInDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalInDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.6) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound packets dropped by all current and previous IPsec | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|------------------|----------------|
| | | | | Phase-2 tunnels. | |

hh3cIPsecGlobalInReplayDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalInReplayDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.7) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound packets dropped due to anti-replay by all current and previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalInAuthFailsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalInAuthFailsV2 (1.3.6.1.4.1.25506.2.126.1.6.8) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound packets that failed authentication on all current previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalInDecryptFailsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalInDecryptFailsV2 (1.3.6.1.4.1.25506.2.126.1.6.9) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of inbound packets that failed decryption on all current and previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalOutOctetsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalOutOctetsV2 (1.3.6.1.4.1.25506.2.126.1.6.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets sent by all current and previous IPsec Phase-2 tunnels. This value is | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|--|----------------|
| | | | | accumulated before determining whether or not the packet should be compressed. | |

hh3cIPsecGlobalOutUncompOctetsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|----------------|
| hh3cIPsecGlobalOutUncompOctetsV2 (1.3.6.1.4.1.25506.2.126.1.6.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | The total number of uncompressed octets sent by all current and previous IPsec Phase-2 Tunnels. This value is accumulated before a packet is compressed. | Not supported |

hh3cIPsecGlobalOutPktsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalOutPktsV2 (1.3.6.1.4.1.25506.2.126.1.6.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets sent by all current and previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalOutDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalOutDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outbound packets dropped by all current and previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalOutEncryptFailsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| hh3cIPsecGlobalOutEncryptFailsV2 (1.3.6.1.4.1.25506.2.126.1.6.14) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outbound packets that failed encryption on all current and previous IPsec Phase-2 tunnels. | As per the MIB. |

hh3cIPsecGlobalNoMemoryDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|----------------|
| hh3cIPsecGlobalNoMemoryDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.15) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by all current and previous IPsec Phase-2 tunnels due to insufficient memory. | Not supported |

hh3cIPsecGlobalNoFindSaDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|--|-----------------|
| hh3cIPsecGlobalNoFindSaDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.16) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by all current and previous IPsec Phase-2 tunnels due to SA not found. | As per the MIB. |

hh3cIPsecGlobalQueueFullDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|----------------|
| hh3cIPsecGlobalQueueFullDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.17) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by all current and previous IPsec Phase-2 tunnels due to full queue. | Not supported |

hh3cIPsecGlobalInvalidLenDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalInvalidLenDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.18) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by all current and previous IPsec Phase-2 tunnels due to invalid packet length. | As per the MIB. |

hh3cIPsecGlobalTooLongDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| hh3cIPsecGlobalTooLongDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.19) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by all current and previous IPsec Phase-2 tunnels due to too long packet. | As per the MIB. |

hh3cIPsecGlobalInvalidSaDropsV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|----------------|
| hh3cIPsecGlobalInvalidSaDropsV2 (1.3.6.1.4.1.25506.2.126.1.6.20) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by all current and previous IPsec Phase-2 tunnels due to invalid SA. | Not supported |

hh3cIPsecPolicyNameV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|--------|-------------------------|---|-----------------|
| hh3cIPsecPolicyNameV2 (1.3.6.1.4.1.25506.2.126.1.7.1) | accessible-for-notification | STRING | OCTET STRING (1..63) | Name of an IPsec policy in a trap notification. | As per the MIB. |

hh3cIPsecPolicySeqNumV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------|-------------------|-----------|-------------|-------------|-----------------|
| hh3cIPsecPolicy | accessible-for-no | Integer32 | Gauge32 | Sequence | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|--------|--------|-----------------|---|----------------|
| SeqNumV2 (1.3.6.1.4.1.2550 6.2.126.1.7.2) | tify | | (0..4294967295) | number of an IPsec policy entry in a trap notification. | |

hh3cIPsecPolicySizeV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|----------------------------|--|-----------------|
| hh3cIPsecPolicySizeV2 (1.3.6.1.4.1.2550 6.2.126.1.7.3) | accessible-for-notify | Integer32 | Gauge32 (0..4294967295) | Number of IPsec policy entries in a trap notification. | As per the MIB. |

hh3cIPsecTrapGlobalCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------|---|-----------------|
| hh3cIPsecTrapGlobalCntIV2 (1.3.6.1.4.1.2550 6.2.126.1.8.1) | read-write | TruthValue | Integer32 (1,2) | Whether to enable trap notifications for IPsec events globally. | As per the MIB. |

hh3cIPsecTunnelStartTrapCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------|--|-----------------|
| hh3cIPsecTunnelStartTrapCntIV2 (1.3.6.1.4.1.2550 6.2.126.1.8.2) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecTunnelStartV2 trap notifications. | As per the MIB. |

hh3cIPsecTunnelStopTrapCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------|---|-----------------|
| hh3cIPsecTunnelStopTrapCntIV2 (1.3.6.1.4.1.2550 6.2.126.1.8.3) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecTunnelStopV2 trap notifications. | As per the MIB. |

hh3cIPsecNoSaTrapCntlV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------|--|-----------------|
| hh3cIPsecNoSaTrapCntlV2 (1.3.6.1.4.1.25506.2.126.1.8.4) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecNoSaFailureV2 trap notifications. | As per the MIB. |

hh3cIPsecAuthFailureTrapCntlV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------|--|-----------------|
| hh3cIPsecAuthFailureTrapCntlV2 (1.3.6.1.4.1.25506.2.126.1.8.5) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecAuthFailureV2 trap notifications. | As per the MIB. |

hh3cIPsecEncryFailureTrapCntlV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------|---|-----------------|
| hh3cIPsecEncryFailureTrapCntlV2 (1.3.6.1.4.1.25506.2.126.1.8.6) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecEncryFailureV2 trap notifications. | As per the MIB. |

hh3cIPsecDecryFailureTrapCntlV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------|---|-----------------|
| hh3cIPsecDecryFailureTrapCntlV2 (1.3.6.1.4.1.25506.2.126.1.8.7) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecDecryFailureV2 trap notifications. | As per the MIB. |

hh3cIPsecInvalidSaTrapCntlV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------|---|-----------------|
| hh3cIPsecInvalidSaTrapCntlV2 (1.3.6.1.4.1.25506.2.126.1.8.8) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecInvalidSaFailureV2 trap notifications. | As per the MIB. |

hh3cIPsecPolicyAddTrapCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------|--|-----------------|
| hh3cIPsecPolicyAddTrapCntIV2 (1.3.6.1.4.1.25506.2.126.1.8.9) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecPolicyAddV2 trap notifications. | As per the MIB. |

hh3cIPsecPolicyDelTrapCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-----------------|--|-----------------|
| hh3cIPsecPolicyDelTrapCntIV2 (1.3.6.1.4.1.25506.2.126.1.8.10) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecPolicyDelV2 trap notifications. | As per the MIB. |

hh3cIPsecPolicyAttachTrapCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------|---|-----------------|
| hh3cIPsecPolicyAttachTrapCntIV2 (1.3.6.1.4.1.25506.2.126.1.8.11) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecPolicyAttachV2 trap notifications. | As per the MIB. |

hh3cIPsecPolicyDetachTrapCntIV2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------|---|-----------------|
| hh3cIPsecPolicyDetachTrapCntIV2 (1.3.6.1.4.1.25506.2.126.1.8.12) | read-write | TruthValue | Integer32 (1,2) | Whether to enable hh3cIPsecPolicyDetachV2 trap notifications. | As per the MIB. |

Tabular objects

hh3cIPsecTunnelV2Table

About this table

This table contains IPsec tunnel information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cIPsecTunIndexV2.

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|-------------------|------------------------------|--|---|
| hh3cIPsecTunIndexV2 (1.3.6.1.4.1.25506.2.126.1.2.1.1) | accessible-for-no tify | Integer32 | Integer32 (1..2147483647) | Index of an IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunIfaceIndexV2 (1.3.6.1.4.1.25506.2.126.1.2.1.2) | read-only | InterfaceIndex | Integer32 (1..2147483647) | Index of the interface. | As per the MIB. |
| hh3cIPsecTunIKE ETunnelIndexV2 (1.3.6.1.4.1.25506.2.126.1.2.1.3) | read-only | Integer32 | Integer32 (1..2147483647) | Index of the IKE tunnel associated with the IPsec tunnel. | The index value of the IKEv2 tunnel associated with the IPsec tunnel is an invalid value of 2147483647. |
| hh3cIPsecTunIKE ETunLocalIDTypeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.4) | read-only | Hh3cIPsecIDTypeV2 | Integer32 (0..11) | Type of the local ID of the IKE tunnel. | The value of the local ID type of the IKEv2 tunnel is an invalid value of 0. |
| hh3cIPsecTunIKE ETunLocalIDValueV2 (1.3.6.1.4.1.25506.2.126.1.2.1.5) | read-only | DisplayString | OCTET STRING (0..255) | Value of the local ID of the IKE tunnel. | For a local ID that exceeds 255 bytes, this object displays only the first 255 bytes of information. The complete ID information is displayed by hh3cIPsecTunIKE ETunLocalIDValueV3V2. The local ID of the IKEv2 tunnel is empty. |
| hh3cIPsecTunIKE | read-only | DisplayString | OCTET STRING | The second | The local IP |

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------------------|----------------------------|--|---|
| ETunLocalIDVal2V2 (1.3.6.1.4.1.25506.2.126.1.2.1.6) | | | (0..255) | specification of the IP address of the IKE tunnel local end. | address of the IKEv2 tunnel is empty. |
| hh3cIPsecTunIKETunRemoteIDTypeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.7) | read-only | Hh3cIPsecIDTypeV2 | Integer32 (0..11) | Type of the remote ID of the IKE tunnel. | The value of the remote ID type of the IKEv2 tunnel is an invalid value of 0. |
| hh3cIPsecTunIKETunRemoteIDVal1V2 (1.3.6.1.4.1.25506.2.126.1.2.1.8) | read-only | DisplayString | OCTET STRING (0..255) | Value of the remote ID of the IKE tunnel. | For a remote ID that exceeds 255 bytes, this object displays only the first 255 bytes of information. The complete ID information is displayed by hh3cIPsecTunIKETunRemoteIDVal3V2. The remote ID of the IKEv2 tunnel is empty. |
| hh3cIPsecTunIKETunRemoteIDVal2V2 (1.3.6.1.4.1.25506.2.126.1.2.1.9) | read-only | DisplayString | OCTET STRING (0..255) | The second specification of the IP address of the IKE tunnel remote end. | The remote IP address of the IKEv2 tunnel is empty. |
| hh3cIPsecTunLocalAddrTypeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.10) | read-only | InetAddressType | Integer32(1,2) | Type of the IP address of the IPsec tunnel local end. | As per the MIB. |
| hh3cIPsecTunLocalAddrV2 (1.3.6.1.4.1.25506.2.126.1.2.1.11) | read-only | InetAddress | OCTET STRING (4) | IP address of the IPsec tunnel local end. | As per the MIB. |
| hh3cIPsecTunRemoteAddrTypeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.12) | read-only | InetAddressType | Integer32(1,2) | Type of the IP address of the IPsec tunnel remote end. | As per the MIB. |
| hh3cIPsecTunRemoteAddrV2 (1.3.6.1.4.1.25506.2.126.1.2.1.13) | read-only | InetAddress | OCTET STRING (4) | IP address of the IPsec tunnel remote end. | As per the MIB. |
| hh3cIPsecTunKeyTypeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.14) | read-only | Hh3cIPsecNegotTypeV2 | Integer32(1,2,21 47483647) | Key negotiation mode of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunEncapModeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.15) | read-only | Hh3cIPsecEncapModeV2 | Integer32(1,2,21 47483647) | Encapsulation mode of the IPsec tunnel. | As per the MIB. |

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------------------|--------------------------------------|--|-------------------------------------|
| hh3cIPsecTunInitiatorV2 (1.3.6.1.4.1.25506.2.126.1.2.1.16) | read-only | INTEGER | Integer32(1,2,2147483647) | Initiator of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunLifetimeSizeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.17) | read-only | Gauge32 | Gauge32(0..4294967295) | Negotiated traffic-based IPsec SA lifetime, in kilobytes. | As per the MIB. |
| hh3cIPsecTunLifetimeTimeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.18) | read-only | Integer32 | Integer32(1..2147483647) | Negotiated time-based IPsec SA lifetime, in seconds. | As per the MIB. |
| hh3cIPsecTunRemainingTimeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.19) | read-only | Integer32 | Integer32(1..2147483647) | Remaining lifetime of the IPsec tunnel, in seconds. | As per the MIB. |
| hh3cIPsecTunActiveTimeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.20) | read-only | Integer32 | Integer32(1..2147483647) | Active period of time of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunRemainingSizeV2 (1.3.6.1.4.1.25506.2.126.1.2.1.21) | read-only | Gauge32 | Gauge32(0..4294967295) | Remaining lifetime of the IPsec tunnel, in kilobytes. | outbound sa remain traffic duration |
| hh3cIPsecTunTotalRefreshesV2 (1.3.6.1.4.1.25506.2.126.1.2.1.22) | read-only | Counter32 | Counter32(0..4294967295) | Total number of SA refreshes. | As per the MIB. |
| hh3cIPsecTunCurrentSaInstancesV2 (1.3.6.1.4.1.25506.2.126.1.2.1.23) | read-only | Gauge32 | Gauge32(0..4294967295) | Number of active and expiring SAs. | As per the MIB. |
| hh3cIPsecTunInSaEncryptAlgorithmV2 (1.3.6.1.4.1.25506.2.126.1.2.1.24) | read-only | Hh3cIPsecEncryptAlgorithmV2 | Integer32(0..26,128..131,2147483647) | Encryption algorithm used by the inbound SA of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunInSaAuthAlgorithmV2 (1.3.6.1.4.1.25506.2.126.1.2.1.25) | read-only | Hh3cIPsecAuthAlgorithmV2 | Integer32(0..6,128,2147483647) | Authentication algorithm used by the inbound AH SA of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunInSaEspAuthAlgorithmV2 (1.3.6.1.4.1.25506.2.126.1.2.1.26) | read-only | Hh3cIPsecAuthAlgorithmV2 | Integer32(0..6,128,2147483647) | Authentication algorithm used by the inbound ESP SA of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunDiffHellmanGroupV2 (1.3.6.1.4.1.25506.2.126.1.2.1.27) | read-only | Hh3cIPsecDiffHellmanGroupV2 | Integer32(0,1,2,5,12,14,2147483647) | DH group used in the IKE Phase-2 negotiation. | As per the MIB. |

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------------------|--|---|-----------------|
| hh3cIPsecTunOutSaEncryptAlgoV2 (1.3.6.1.4.1.25506.2.126.1.2.1.28) | read-only | Hh3cIPsecEncryptAlgoV2 | Integer32 (0..26,128..131,2147483647) | Encryption algorithm used by the outbound SA of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunOutSaAuthAlgoV2 (1.3.6.1.4.1.25506.2.126.1.2.1.29) | read-only | Hh3cIPsecAuthAlgoV2 | Integer32 (0..6,128,2147483647) | Authentication algorithm used by the outbound AH SA of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunOutSaEspAuthAlgoV2 (1.3.6.1.4.1.25506.2.126.1.2.1.30) | read-only | Hh3cIPsecAuthAlgoV2 | Integer32 (0..5,2147483647) | Authentication algorithm used by the outbound ESP SA of the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunPolicyNameV2 (1.3.6.1.4.1.25506.2.126.1.2.1.31) | read-only | DisplayString | OCTET STRING (0..255) | Name of the IPsec policy used by the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunPolicyNumV2 (1.3.6.1.4.1.25506.2.126.1.2.1.32) | read-only | Integer32 | Integer32 (1..2147483647) | Sequence number of the IPsec policy entry used by the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunStatusV2 (1.3.6.1.4.1.25506.2.126.1.2.1.33) | read-only | INTEGER | Integer32 (1,2) | State of the IPsec tunnel. | As per the MIB. |

hh3cIPsecTunnelStatV2Table

About this table

This table contains IPsec tunnel packet statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cIPsecTunIndexV2.

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|-----------------|
| hh3cIPsecTunInOctetsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.1) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of octets received by the IPsec tunnel. This value is accumulated before | As per the MIB. |

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---|---|-----------------|
| | | | | determining whether or not the packet should be decompressed. | |
| hh3cIPsecTunInDecompOctetsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.2) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of decompressed octets received by the IPsec tunnel. This value is accumulated after the packet is decompressed. | Not supported |
| hh3cIPsecTunInPktsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.3) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of packets received by the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunInDropPktsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.4) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of inbound packets dropped by the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunInReplayDropPktsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.5) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of inbound packets dropped by the IPsec tunnel due to anti-replay. | As per the MIB. |
| hh3cIPsecTunInAuthFailsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.6) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of inbound packets that failed authentication on the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunInDecryptFailsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.7) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of inbound packets that failed decryption on the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunOutOctetsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.8) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of octets sent by the IPsec tunnel. This value is accumulated after determining whether or not the packet should be compressed. | As per the MIB. |
| hh3cIPsecTunOutUncompOctetsV2 (1.3.6.1.4.1.2550.6.2.126.1.3.1.9) | read-only | Counter64 | Counter64 (0..18446744073.709551615) | Total number of uncompressed octets sent by this IPsec tunnel. This value is accumulated before the packet | Not supported |

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--|---|-----------------|
| | | | | is compressed. | |
| hh3cIPsecTunOutPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.10) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets sent by the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunOutDropPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.11) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outbound packets dropped by the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunOutEncryptFailsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.12) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of outbound packets that failed encryption on the IPsec tunnel. | As per the MIB. |
| hh3cIPsecTunNoMemoryDropPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.13) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by the IPsec tunnel due to insufficient memory. | Not supported |
| hh3cIPsecTunQueueFullDropPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.14) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by the IPsec tunnel due to full queue. | Not supported |
| hh3cIPsecTunInvalidLenDropPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.15) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by the IPsec tunnel due to invalid length. | As per the MIB. |
| hh3cIPsecTunTooLongDropPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.16) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by the IPsec tunnel due to too long packet. | As per the MIB. |
| hh3cIPsecTunInvalidSaDropPktsV2 (1.3.6.1.4.1.25506.2.126.1.3.1.17) | read-only | Counter64 | Counter64 (0..18446744073709551615) | Total number of packets dropped by the IPsec tunnel due to invalid SA. | Not supported. |

hh3cIPsecSaV2Table

About this table

This table contains IPsec SA information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cIPsecTunIndexV2 and hh3cIPsecSaIndexV2.

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------------------|------------------------|--|--|-----------------|
| hh3cIPsecSaIndexV2 (1.3.6.1.4.1.25506.2.126.1.4.1.1) | accessible-for-no-tify | Integer32 | Integer32 (1..2147483647) | Index of an SA in an IPsec tunnel. | As per the MIB. |
| hh3cIPsecSaDirectionV2 (1.3.6.1.4.1.25506.2.126.1.4.1.2) | read-only | INTEGER | Integer32 (1,2) | Direction of the SA. | As per the MIB. |
| hh3cIPsecSaSpiValueV2 (1.3.6.1.4.1.25506.2.126.1.4.1.3) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | SPI value of the SA. | As per the MIB. |
| hh3cIPsecSaProtocolV2 (1.3.6.1.4.1.25506.2.126.1.4.1.4) | read-only | Hh3cIPsecSaProtocolV2 | Integer32 (0,2,3,4) | Security protocol used by the SA. | As per the MIB. |
| hh3cIPsecSaEncryptAlgoV2 (1.3.6.1.4.1.25506.2.126.1.4.1.5) | read-only | Hh3cIPsecEncryptAlgoV2 | Integer32 (0..26,128..131,2147483647) | Encryption algorithm used by the SA. | As per the MIB. |
| hh3cIPsecSaAuthAlgoV2 (1.3.6.1.4.1.25506.2.126.1.4.1.6) | read-only | Hh3cIPsecAuthAlgoV2 | Integer32 (0..6,128,2147483647) | Authentication algorithm used by the SA. | As per the MIB. |
| hh3cIPsecSaStatusV2 (1.3.6.1.4.1.25506.2.126.1.4.1.7) | read-only | INTEGER | Integer32 (1,2) | Status of the SA. | As per the MIB. |

hh3cIPsecTrafficV2Table

About this table

This table contains information about the traffic protected by IPsec tunnels.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cIPsecTunIndexV2.

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------------------|----------------------------|--|-----------------|
| hh3cIPsecTrafficLocalTypeV2 (1.3.6.1.4.1.25506.2.126.1.5.1.1) | read-only | Hh3cIPsecTrafficTypeV2 | Integer32 (1,4,5,6,7,8) | Type of the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalAddr1TypeV2 (1.3.6.1.4.1.25506.2.126.1.5.1.2) | read-only | InetAddressType | Integer32(1,2) | Type of the first IP address specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalAddr1V2 (1.3.6.1.4.1.25506.2.126.1.5.1.3) | read-only | InetAddress | OCTET STRING (4) | The first IP address specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalAddr2TypeV2 (1.3.6.1.4.1.25506.2.126.1.5.1.4) | read-only | InetAddressType | Integer32(1,2) | Type of the second IP address specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalAddr2V2 (1.3.6.1.4.1.25506.2.126.1.5.1.5) | read-only | InetAddress | OCTET STRING (4) | The second IP address specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalProtocol1V2 (1.3.6.1.4.1.25506.2.126.1.5.1.6) | read-only | Integer32 | Integer32 (0..255) | The first protocol number specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalProtocol2V2 (1.3.6.1.4.1.25506.2.126.1.5.1.7) | read-only | Integer32 | Integer32 (0..255) | The second protocol number specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalPort1V2 (1.3.6.1.4.1.25506.2.126.1.5.1.8) | read-only | Integer32 | Integer32 (0..65535) | The first port number specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficLocalPort2V2 (1.3.6.1.4.1.25506.2.126.1.5.1.9) | read-only | Integer32 | Integer32 (0..65535) | The second port number specification for the local end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemoteTypeV2 (1.3.6.1.4.1.25506.2.126.1.5.1.10) | read-only | Hh3cIPsecTrafficTypeV2 | Integer32 (1,4,5,6,7,8) | Type of the remote end's traffic. | As per the MIB. |

| Object(OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-------------------------|---|-----------------|
| hh3cIPsecTrafficRemAddr1TypeV2 (1.3.6.1.4.1.25506.2.126.1.5.1.11) | read-only | InetAddressType | Integer32(1,2) | Type of the first IP address specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemAddr1V2 (1.3.6.1.4.1.25506.2.126.1.5.1.12) | read-only | InetAddress | OCTET STRING (4) | The first IP address specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemAddr2TypeV2 (1.3.6.1.4.1.25506.2.126.1.5.1.13) | read-only | InetAddressType | Integer32(1,2) | Type of the second IP address specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemAddr2V2 (1.3.6.1.4.1.25506.2.126.1.5.1.14) | read-only | InetAddress | OCTET STRING (4) | The second IP address specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemoPro1V2 (1.3.6.1.4.1.25506.2.126.1.5.1.15) | read-only | Integer32 | Integer32 (0..255) | The first protocol number specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemoPro2V2 (1.3.6.1.4.1.25506.2.126.1.5.1.16) | read-only | Integer32 | Integer32 (0..255) | The second protocol number specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemPort1V2 (1.3.6.1.4.1.25506.2.126.1.5.1.17) | read-only | Integer32 | Integer32 (0..65535) | The first port number specification for the remote end's traffic. | As per the MIB. |
| hh3cIPsecTrafficRemPort2V2 (1.3.6.1.4.1.25506.2.126.1.5.1.18) | read-only | Integer32 | Integer32 (0..65535) | The second port number specification for the remote end's traffic. | As per the MIB. |

Notifications

The following information describes the notifications generated by HH3C-IPSEC-MONITOR-V2-MIB.

hh3cIPsecTunnelStartV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.1 | IPsec tunnel created. | Informational | - | - | OFF |

Description

This notification is generated when an IPsec tunnel is created.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec tunnel-start` command.
- MIB: Set hh3cIPsecTunnelStartTrapCntIV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec tunnel-start` command.
- MIB: Set hh3cIPsecTunnelStartTrapCntIV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.126.1.2.1.1 (hh3cIPsecTunIndexV2) | Index of an IPsec tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.10 (hh3cIPsecTunLocalAddrTypeV2) | Type of the IP address of the IPsec tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.11 (hh3cIPsecTunLocalAddrV2) | IP address of the IPsec tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.12 (hh3cIPsecTunRemoteAddrTypeV2) | Type of the IP address of the IPsec tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.13 (hh3cIPsecTunRemoteAddrV2) | IP address of the IPsec tunnel remote end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.18 (hh3cIPsecTunLifeTimeV2) | Time-based lifetime of the IPsec tunnel, in seconds. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.17 (hh3cIPsecTunLifeSizeV2) | Time-based lifetime of the IPsec tunnel, in kilobytes. | No | Gauge32 | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecTunnelStopV2**Basic information**

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.2 | IPsec tunnel deleted. | Informational | - | - | OFF |

Description

This notification is generated when an IPsec tunnel is deleted.

Status control**ON**

- CLI: Use the `snmp-agent trap enable ipsec tunnel-stop` command.
- MIB: Set hh3cIPsecTunnelStopTrapCntIV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec tunnel-stop` command.
- MIB: Set hh3cIPsecTunnelStopTrapCntIV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.126.1.2.1.1 (hh3cIPsecTunIndexV2) | Index of an IPsec tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.10 (hh3cIPsecTunLocalAddrTypeV2) | Type of the IP address of the IPsec tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.11 (hh3cIPsecTunLocalAddrV2) | IP address of the IPsec tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.12 (hh3cIPsecTunRemoteAddrTypeV2) | Type of the IP address of the IPsec tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.13 (hh3cIPsecTunRemoteAddrV2) | IP address of the IPsec tunnel remote end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.20 (hh3cIPsecTunActiveTimeV2) | Active period of time of the IPsec tunnel. | No | Integer32 | 0..2147483647 |

Recommended action

No action is required.

hh3cIPsecNoSaFailureV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.3 | No SA for IPsec tunnel. | Informational | Warning | - | OFF |

Description

This notification is generated when no SA is available for an IPsec tunnel.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec no-sa-failure` command.
- MIB: Set hh3cIPsecNoSaTrapCntIV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec no-sa-failure` command.
- MIB: Set hh3cIPsecNoSaTrapCntIV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.126.1.2.1.1 (hh3cIPsecTunIndexV2) | Index of an IPsec tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.10 (hh3cIPsecTunLocalAddrTypeV2) | Type of the IP address of the IPsec tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.11 (hh3cIPsecTunLocalAddrV2) | IP address of the IPsec tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.12 (hh3cIPsecTunRemoteAddrTypeV2) | Type of the IP address of the IPsec tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.13 (hh3cIPsecTunRemoteAddrV2) | IP address of the IPsec tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecAuthFailFailureV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.4 | IPsec authentication failure. | Informational | Warning | - | OFF |

Description

This notification is generated when an IPsec authentication failure occurs.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec auth-failure` command.
- MIB: Set hh3cIPsecAuthFailureTrapCntlV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec auth-failure` command.
- MIB: Set hh3cIPsecAuthFailureTrapCntlV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.126.1.2.1.1 (hh3cIPsecTunIndexV2) | Index of an IPsec tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.10 (hh3cIPsecTunLocalAddrTypeV2) | Type of the IP address of the IPsec tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.11 (hh3cIPsecTunLocalAddrV2) | IP address of the IPsec tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.12 (hh3cIPsecTunRemoteAddrTypeV2) | Type of the IP address of the IPsec tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.13 (hh3cIPsecTunRemoteAddrV2) | IP address of the IPsec tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecEncryFailFailureV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.5 | IPsec tunnel encryption failure. | Informational | Warning | - | OFF |

Description

This notification is generated when an IPsec tunnel has an encryption failure.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec encrypt-failure` command.
- MIB: Set hh3cIPsecEncryFailureTrapCntIV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec encrypt-failure` command.
- MIB: Set hh3cIPsecEncryFailureTrapCntIV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.126.1.2.1.1 (hh3cIPsecTunIndexV2) | Index of an IPsec tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.10 (hh3cIPsecTunLocalAddrTypeV2) | Type of the IP address of the IPsec tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.11 (hh3cIPsecTunLocalAddrV2) | IP address of the IPsec tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.12 (hh3cIPsecTunRemoteAddrTypeV2) | Type of the IP address of the IPsec tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.13 (hh3cIPsecTunRemoteAddrV2) | IP address of the IPsec tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecDecryFailFailureV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.6 | IPsec tunnel encryption failure. | Informational | Warning | - | OFF |

Description

This notification is generated when an IPsec tunnel has a decryption failure.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec decrypt-failure` command.
- MIB: Set hh3cIPsecDecryFailTrapCntlV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec decrypt-failure` command.
- MIB: Set hh3cIPsecDecryFailTrapCntlV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.126.1.2.1.1 (hh3cIPsecTunIndexV2) | Index of an IPsec tunnel. | Yes | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.2.1.10 (hh3cIPsecTunLocalAddrTypeV2) | Type of the IP address of the IPsec tunnel local end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.11 (hh3cIPsecTunLocalAddrV2) | IP address of the IPsec tunnel local end. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.12 (hh3cIPsecTunRemoteAddrTypeV2) | Type of the IP address of the IPsec tunnel remote end. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.126.1.2.1.13 (hh3cIPsecTunRemoteAddrV2) | IP address of the IPsec tunnel remote end. | No | InetAddress | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecPolicyAddV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.8 | IPsec policy added. | Informational | - | - | OFF |

Description

This notification is generated when an IPsec policy is added.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec policy-add` command.
- MIB: Set hh3cIPsecPolicyAddTrapCntlV2 to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec policy-add` command.
- MIB: Set hh3cIPsecPolicyAddTrapCntlV2 to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.126.1.7.1 (hh3cIPsecPolicyNameV2) | Name of an IPsec policy. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.126.1.7.2 (hh3cIPsecPolicySeqNumV2) | Sequence number an IPsec policy entry. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.7.3 (hh3cIPsecPolicySizeV2) | Number of the IPsec policy entries. | No | InetAddressType | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecPolicyDelV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.9 | IPsec policy deleted. | Informational | - | - | OFF |

Description

This notification is generated when an IPsec policy is deleted.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec policy-delete` command.
- MIB: Set `hh3cIPsecPolicyDelTrapCntlV2` to `true(1)`.

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec policy-delete` command.
- MIB: Set `hh3cIPsecPolicyDelTrapCntlV2` to `false(2)`.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.126.1.7.1 (hh3cIPsecPolicyNameV2) | Name of an IPsec policy. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.126.1.7.2 (hh3cIPsecPolicySeqNumV2) | Sequence number of an IPsec policy entry. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.4.1.25506.2.126.1.7.3 (hh3cIPsecPolicySizeV2) | Number of the IPsec policy entries. | No | InetAddressType | Standard MIB values. |

Recommended action

No action is required.

hh3cIPsecPolicyAttachV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.10 | IPsec policy applied to interface. | Informational | - | - | OFF |

Description

This notification is generated when an IPsec policy is applied to an interface.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec policy-attach` command.
- MIB: Set `hh3cIPsecPolicyAttachTrapCntlV2` to `true(1)`.

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec policy-attach` command.
- MIB: Set `hh3cIPsecPolicyAttachTrapCntlV2` to `false(2)`.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.126.1.7.1 (hh3cIPsecPolicyNameV2) | Name of an IPsec policy. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.126.1.7.3 (hh3cIPsecPolicySizeV2) | Number of the IPsec policy entries. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of an interface. | Yes | InterfaceIndex | Integer32(1..2147483647) |

Recommended action

No action is required.

hh3cIPsecPolicyDetachV2

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.126.1.9.0.11 | IPsec policy application removed from interface. | Informational | - | - | OFF |

Description

This notification is generated when an IPsec policy application is removed from an interface.

Status control

ON

- CLI: Use the `snmp-agent trap enable ipsec policy-detach` command.
- MIB: Set `hh3cIPsecPolicyDetachTrapCntlV2` to `true(1)`.

OFF

- CLI: Use the `undo snmp-agent trap enable ipsec policy-detach` command.
- MIB: Set `hh3cIPsecPolicyDetachTrapCntlV2` to `false(2)`.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------|-------|---------------|------------------------------|
| 1.3.6.1.4.1.25506.2.126.1.7.1 (hh3cIPsecPolicyNameV2) | Name of an IPsec policy. | No | DisplayString | OCTET STRING (SIZE (0..255)) |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|----------------|--------------------------|
| 1.3.6.1.4.1.25506.2.126.1.7.3 (hh3clPsecPolicySizeV2) | Number of the IPsec policy entries. | No | Integer32 | 1..2147483647 |
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of an interface. | Yes | InterfaceIndex | Integer32(1..2147483647) |

Recommended action

No action is required.

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HH3C-MACSEC-MIB

About this MIB

Use this MIB to configure MACsec.

MIB file name

hh3c-macsec.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMACsec(163)

Tabular objects

hh3cMACsecCFGPortTable

About this table

Use this table to obtain or configure preshared key settings for MACsec-capable ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

You must specify hh3cMACsecCFGPortPSKCKNName and hh3cMACsecCFGPortPSKCAKValue in pairs in an SNMP request.

The hh3cMACsecCFGPortPSKCAKValue object is confidential. **N/A** is returned for the read operation.

Columns

The table index is hh3cMACsecCFGPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|-----------------------|------------------|---|
| hh3cMACsecCFGPortIndex (1.3.6.1.4.1.25506.2.163.1.1.1.1) | not-accessible | InterfaceIndex | Standard MIB values. | Interface index. | As per the MIB. |
| hh3cMACsecCFGPortPSKCKNName (1.3.6.1.4.1.25506.2.163.1.1.1.2) | read-write | OCTET STRING | OCTET STRING (0..128) | CAK name. | Octet string, 0 to 64 characters, an even number of hexadecimal characters. |
| hh3cMACsecCFGPortPSKCAKValue (1.3.6.1.4.1.25506.2.163.1.1.1.3) | read-write | OCTET STRING | OCTET STRING (0..128) | CAK value. | Octet string, 0 to 64 characters, an even number of hexadecimal characters. |

Notifications

hh3cMACsecTimeout

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.163.2.0.1 | MACsec session timeout was detected on the interface. | Informational | Warning | 1.3.6.1.4.1.25506.2.163.2.0.1 (hh3cMACsecTimeoutResume) | ON |

Description

This notification is generated when MACsec session timeout was detected on the interface.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|--------------|----------------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Local interface name. | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.163.2.1.1 (hh3cMACsecDeviceRole) | Local MACsec device role. | No | INTEGER | unknown(0), server(1), client(2) |

Recommended action

Troubleshoot the link where the MACsec interface resides.

If the issue persists, contact H3C Support.

hh3cMACsecTimeoutResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.163.2.0.1 | The MACsec MKA session was resumed on the interface. | Informational | - | - | ON |

Description

This notification is generated when the MACsec MKA session was resumed on the interface.

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------|-------|--------------|--|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Local interface name. | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.163.2.1.1 (hh3cMACsecDeviceRole) | Local MACsec device role. | No | INTEGER | unknown(0), server(1), client(2) |

Recommended action

No action is required.

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HH3C-SAVA-MIB

About this MIB

Use this MIB to configure and obtain SAVA settings.

MIB file name

hh3c-sava.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSava(191)

Tabular objects

hh3cSavaSystemTable

About this table

Use this table to configure and obtain SAVA settings in the system level.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cSavaSystemIPVersion.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|------------------------------------|--|-----------------|
| hh3cSavaSystemIPVersion (1.3.6.1.4.1.25506.2.191.1.1.1.1) | not-accessible | INTEGER | unknown(0), ipv4(1), ipv6(2) | IP version. | As per the MIB. |
| hh3cSavaSystemNotify (1.3.6.1.4.1.25506.2.191.1.1.1.2) | read-write | INTEGER | enable(1), disable(2) | Enabling status of SAVA logging. | As per the MIB. |
| hh3cSavaSystemNotifyInterval (1.3.6.1.4.1.25506.2.191.1.1.1.3) | read-write | Integer32 | Integer32 (5..3600) | SAVA logging interval, in seconds. | As per the MIB. |
| hh3cSavaSystemNotifyNumber (1.3.6.1.4.1.25506.2.191.1.1.1.4) | read-create | Integer32 | Integer32 (1..128) | Number of logs generated in an interval. | As per the MIB. |

hh3cSavalfTable

About this table

Use this table to configure and obtain settings on the SAVA-enabled interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cSavalfIPVersion and hh3cSavalfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|------------------------------------|--|-----------------|
| hh3cSavalfIPVersion (1.3.6.1.4.1.25506.2.191.1.2.1.1) | not-accessible | INTEGER | unknown(0), ipv4(1), ipv6(2) | IP version. | As per the MIB. |
| hh3cSavalfIndex (1.3.6.1.4.1.25506.2.191.1.2.1.2) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3cSavalfEnable (1.3.6.1.4.1.25506.2.191.1.2.1.3) | read-write | INTEGER | enable(1), disable(2) | Enabling status of SAVA on the interface. | As per the MIB. |
| hh3cSavalfRemoteRouteTag (1.3.6.1.4.1.25506.2.191.1.2.1.4) | read-write | Integer32 | Integer32 (1.. 4294967295) | Remote route tag. | As per the MIB. |
| hh3cSavalfAccessSubnet (1.3.6.1.4.1.25506.2.191.1.2.1.5) | read-write | DisplayString | OCTET STRING (0..255) | SAVA access group to which the interface is added. | As per the MIB. |

hh3cSavaPrefixTable

About this table

Use this table to configure and obtain the basic information about the SAVA prefix entry.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cSavaPrefixAddressType, hh3cSavaPrefixIfIndex, hh3cSavaPrefixAddress, and hh3cSavaPrefixLength.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|--|-------------------------|-----------------|
| hh3cSavaPrefixAddressType (1.3.6.1.4.1.25506.2.191.1.3.1.1) | not-accessible | INTEGER | unknown(0), ipv4(1), ipv6(2), ipv4z(3), | IP version. | As per the MIB. |
| hh3cSavaPrefixIndex (1.3.6.1.4.1.25506.2.191.1.3.1.2) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3cSavaPrefixAddress (1.3.6.1.4.1.25506.2.191.1.3.1.3) | not-accessible | OCTET STRING | OCTET STRING (0..255) | Prefix. | As per the MIB. |
| hh3cSavaPrefixLength (1.3.6.1.4.1.25506.2.191.1.3.1.4) | not-accessible | Integer32 | Integer32 (1.. 4294967295) | Prefix length. | As per the MIB. |
| hh3cSavaPrefixSource (1.3.6.1.4.1.25506.2.191.1.3.1.5) | read-only | INTEGER | localroute(1), remoteroute(2), otherif(3), | Flag of the SAVA entry. | As per the MIB. |

hh3cSavaCountTable

About this table

Use this table to obtain SAVA packet filtering statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cSavaCountIPVersion and hh3cSavaCountIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--|--|-----------------|
| hh3cSavaCountIPVersion (1.3.6.1.4.1.25506.2.191.1.4.1.1) | not-accessible | INTEGER | unknown(0), ipv4(1), ipv6(2), | IP version of the source address of packets. | As per the MIB. |
| hh3cSavaCountIfIndex (1.3.6.1.4.1.25506.2.191.1.4.1.2) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3cSavaCountFilterPkt (1.3.6.1.4.1.25506.2.191.1.4.1.3) | read-only | Integer64 | Integer32 (1.. 9223372036854775807) | Number of packets discarded by SAVA. | As per the MIB. |
| hh3cSavaCountFilterBytes (1.3.6.1.4.1.25506.2.191.1.4.1.4) | read-only | Integer64 | Integer32 (1.. 9223372036854775807) | Number of bytes discarded by SAVA. | As per the MIB. |

| | | | | | |
|--|--|--|--------|-------|--|
| terOctets (1.3.6.1.4.1.25506 .2.191.1.4.1.4) | | | 75807) | SAVA. | |
|--|--|--|--------|-------|--|

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HH3C-SESSION-MIB

About this MIB

Use this table to manage sessions.

MIB file name

hh3c-session.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSession(149)

Tabular objects

hh3cSessionStatTable

About this table

Use this table to obtain session statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cSessionStatChassis, hh3cSessionStatSlot, and hh3cSessionStatCPUID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|--|-----------------|
| hh3cSessionStatChassis (1.3.6.1.4.1.25506.2.149.1.1.1.1) | not-accessible | Unsigned32 | 0..65534 | IRF member ID. | As per the MIB. |
| hh3cSessionStatSlot (1.3.6.1.4.1.25506.2.149.1.1.1.2) | not-accessible | Unsigned32 | 0..65534 | Slot number. | As per the MIB. |
| hh3cSessionStatCPUID (1.3.6.1.4.1.25506.2.149.1.1.1.3) | not-accessible | Unsigned32 | 0..7 | CPU ID. | As per the MIB. |
| hh3cSessionStatCount (1.3.6.1.4.1.25506.2.149.1.1.1.4) | read-only | Unsigned32 | Standard MIB values. | Total number of sessions. | As per the MIB. |
| hh3cSessionStatCreateRate (1.3.6.1.4.1.25506.2.149.1.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Number of sessions created per second. | As per the MIB. |
| hh3cSessionStatTCPCount | read-only | Unsigned | Standard | Number of TCP | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| (1.3.6.1.4.1.25506.2.149.1.1.1.6) | | d32 | MIB values. | sessions. | |
| hh3cSessionStatUDPCount (1.3.6.1.4.1.25506.2.149.1.1.1.7) | read-only | Unsigned32 | Standard MIB values. | Number of UDP sessions. | As per the MIB. |
| hh3cSessionStatOtherCount (1.3.6.1.4.1.25506.2.149.1.1.1.8) | read-only | Unsigned32 | Standard MIB values. | Number of sessions other than TCP and UDP sessions. | As per the MIB. |
| hh3cSessionStatTCPCreateRate (1.3.6.1.4.1.25506.2.149.1.1.1.9) | read-only | Unsigned32 | Standard MIB values. | Number of TCP sessions created per second. | As per the MIB. |
| hh3cSessionStatUDPCreateRate (1.3.6.1.4.1.25506.2.149.1.1.1.10) | read-only | Unsigned32 | Standard MIB values. | Number of UDP sessions created per second. | As per the MIB. |
| hh3cSessionStatOtherCreateRate (1.3.6.1.4.1.25506.2.149.1.1.1.11) | read-only | Unsigned32 | Standard MIB values. | Number of non-TCP and non-UDP sessions created per second. | As per the MIB. |
| hh3cSessionStatTCPTotal (1.3.6.1.4.1.25506.2.149.1.1.1.12) | read-only | Counter64 | Standard MIB values. | Total number of TCP sessions created till now. | As per the MIB. |
| hh3cSessionStatUDPTotal (1.3.6.1.4.1.25506.2.149.1.1.1.13) | read-only | Counter64 | Standard MIB values. | Total number of UDP sessions created till now. | As per the MIB. |
| hh3cSessionStatOtherTotal (1.3.6.1.4.1.25506.2.149.1.1.1.14) | read-only | Counter64 | Standard MIB values. | Total number of non-TCP and non-UDP sessions created till now. | As per the MIB. |

hh3cSessionEntTable

About this table

Use this table to obtain statistics about sessions by entity.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSessionEntIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------|--|-----------------|
| hh3cSessionEntIndex | not-accessible | Unsigned32 | 1..2147483647 | Device entity index. | As per the MIB. |
| hh3cSessionEntCount (1.3.6.1.4.1.25506.2.149.1.2.1.2) | read-only | Unsigned32 | Standard MIB values. | Total number of sessions. | As per the MIB. |
| hh3cSessionEntCreateRate (1.3.6.1.4.1.25506.2.149.1.2.1.3) | read-only | Unsigned32 | Standard MIB values. | Number of sessions created per second. | As per the MIB. |
| hh3cSessionEntTCPCount (1.3.6.1.4.1.25506.2.149.1.2.1.4) | read-only | Unsigned32 | Standard MIB values. | Number of TCP sessions. | As per the MIB. |
| hh3cSessionEntUDPCount (1.3.6.1.4.1.25506.2.149.1.2.1.5) | read-only | Unsigned32 | Standard MIB values. | Number of UDP sessions. | As per the MIB. |
| hh3cSessionEntOtherCount (1.3.6.1.4.1.25506.2.149.1.2.1.6) | read-only | Unsigned32 | Standard MIB values. | Number of sessions other than TCP and UDP sessions. | As per the MIB. |
| hh3cSessionEntTCPCreateRate (1.3.6.1.4.1.25506.2.149.1.2.1.7) | read-only | Unsigned32 | Standard MIB values. | Number of TCP sessions created per second. | As per the MIB. |
| hh3cSessionEntUDPCreateRate (1.3.6.1.4.1.25506.2.149.1.2.1.8) | read-only | Unsigned32 | Standard MIB values. | Number of UDP sessions created per second. | As per the MIB. |
| hh3cSessionEntOtherCreateRate (1.3.6.1.4.1.25506.2.149.1.2.1.9) | read-only | Unsigned32 | Standard MIB values. | Number of non-TCP and non-UDP sessions created per second. | As per the MIB. |
| hh3cSessionEntTCPTotal (1.3.6.1.4.1.25506.2.149.1.2.1.10) | read-only | Counter64 | Standard MIB values. | Total number of TCP sessions created till now. | As per the MIB. |
| hh3cSessionEntUDPTotal (1.3.6.1.4.1.25506.2.149.1.2.1.11) | read-only | Counter64 | Standard MIB values. | Total number of UDP sessions created till now. | As per the MIB. |
| hh3cSessionEntOtherTotal (1.3.6.1.4.1.25506.2.149.1.2.1.12) | read-only | Counter64 | Standard MIB values. | Total number of non-TCP and non-UDP sessions created till now. | As per the MIB. |

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HH3C-SSH-MIB

About this MIB

Secure Shell (SSH) is a network security protocol. Using encryption and authentication, SSH can implement secure remote access and file transfer over an insecure network.

SSH uses the typical client-server model to establish a channel for secure data transfer based on TCP.

SSH includes two versions: SSH1.x and SSH2.0 (hereinafter referred to as SSH1 and SSH2), which are not compatible. SSH2 is better than SSH1 in performance and security.

Use this MIB to configure the SSH service.

MIB file name

hh3c-ssh.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSSH(22)

Scalar objects

hh3cSSHServerVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|----------------------|---|--|
| hh3cSSHServerVersion (1.3.6.1.4.1.25506.2.22.1.1.1.1) | read-only | DisplayString | Standard MIB values. | The SSH protocol version of the SSH server. | The default value is 2.00. It is not compatible with SSH 1.x versions. |

hh3cSSHServerCompatibleSSH1x

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|--------------------------------------|---|
| hh3cSSHServerCompatibleSSH1x (1.3.6.1.4.1.25506.2.22.1.1.1.2) | read-write | INTEGER | enableCompatibleSSH1x(1), disableCompatibleSSH1x(2) | Compatibility with SSH 1.x versions. | The default value is disableCompatibleSSH1x(2). |

hh3cSSHServerRekeyInterval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|---|--|
| hh3cSSHServerRekeyInterval (1.3.6.1.4.1.25506.2.22.1.1.1.3) | read-write | Integer32 | Standard MIB values. | Time interval at which the SSH server key is regenerated. | Value range: 0 to 24. The default value is 0, meaning that the key will not be refreshed. |

hh3cSSHServerAuthRetries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|--|---|
| hh3cSSHServerAuthRetries (1.3.6.1.4.1.25506.2.22.1.1.1.4) | read-write | Integer32 | Standard MIB values. | Maximum number of SSH server authentication retries. | Range from 1 to 5. The default value is 3. |

hh3cSSHServerAuthTimeout

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|---|--|
| hh3cSSHServerAuthTimeout (1.3.6.1.4.1.25506.2.22.1.1.1.5) | read-write | Integer32 | Standard MIB values. | SSH server authentication timeout time. | Range from 1 to 120. The default value is 60. |

hh3cSFTPServerIdleTimeout

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|------------------------------------|--|
| hh3cSFTPServerIdleTimeout (1.3.6.1.4.1.25506.2.22.1.1.1.6) | read-write | Integer32 | Standard MIB values. | SFTP connection idle timeout time. | Range from 1 to 35791. The default value is 10. |

hh3cSSHServerEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|-----------------------------------|--|
| hh3cSSHServerEnable (1.3.6.1.4.1.25506.2.22.1.1.1.7) | read-write | INTEGER | enableSSHServer (1), disableSSHServer (2) | Enable or disable the SSH server. | The default value is disableSSHServer (2). |

hh3cSFTPServerEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|------------------------------------|---|
| hh3cSFTPServerEnable (1.3.6.1.4.1.25506.2.22.1.1.1.8) | read-write | INTEGER | enableSFTPServer (1), disableSFTPServer (2) | Enable or disable the SFTP server. | The default value is disableSFTPServer (2). |

hh3cSTelnetServerEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|-----------------------------------|-----------------|
| hh3cSTelnetServerEnable (1.3.6.1.4.1.25506.2.22.1.1.1.9) | read-write | INTEGER | enableSTelnetService(1), disableSTelnetService(2) | Enable or disable Stelnet server. | As per the MIB. |

hh3cSCPServerEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|-------------------------------|-----------------|
| hh3cSCPServerEnable (1.3.6.1.4.1.25506.2.22.1.1.1.10) | read-write | INTEGER | enableSCPServer(1), disableSCPServer(2) | Enable or disable SCP server. | As per the MIB. |

hh3cSSHAttemptUserName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|---------------|----------------------|---|------------------------------|
| hh3cSSHAttemptUserName (1.3.6.1.4.1.25506.2.22.1.2.1) | accessible-for-notification | DisplayString | Standard MIB values. | Name of the user who failed to connect to the server. | Length: 1 to 255 characters. |

hh3cSSHAttemptIpAddrType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-----------------|---|---|-----------------|
| hh3cSSHAttemptIpAddrType (1.3.6.1.4.1.25506.2.22.1.2.2) | accessible-for-notification | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | Address type of the user who failed to connect to the server. | As per the MIB. |

hh3cSSHAttemptIpAddr

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|-------------|-----------------------|--|-----------------|
| hh3cSSHAttemptIpAddr (1.3.6.1.4.1.25506.2.22.1.2.3) | accessible-for-notification | InetAddress | OCTET STRING (0..255) | Address of user who failed to connect to the server. | As per the MIB. |

hh3cSSHUserAuthFailureReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------------|---------|--|------------------------------------|-----------------|
| hh3cSSHUserAuthFailureReason (1.3.6.1.4.1.25506.2.22.1.2.4) | accessible-for-notification | INTEGER | exceedRetries(1), authTimeout(2), otherReason(3) | Reason for the connection failure. | As per the MIB. |

Tabular objects

hh3cSSHUserConfigTable

About this table

Use this table to configure or obtain SSH user information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cSSHUserName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|--|---------------------------------------|--|
| hh3cSSHUserName (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.1) | not-accessible | DisplayString | Standard MIB values. | Name of an SSH user. | Length: 1 to 255 characters. |
| hh3cSSHUserServiceType (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.2) | read-create | INTEGER | invalid(1), all(2), stelnet(3), sftp(4), scp(5), netconf(6) | Service type of the SSH user. | The default value is invalid(1). |
| hh3cSSHUserAuthType (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.3) | read-create | INTEGER | invalid(1), password(2), publicKey(3), any(4), publicKeyPassword(5), keyboardInteractive(6) | Authentication type for the SSH user. | The default value is invalid(1). If the value is password, the user must pass password authentication of AAA. If the value is publicKey, the user must pass the public key authentication of PKEY module. If the value is any, the user must pass password or public key authentication. If the value is publicKeyPassword, the user must pass both public key authentication and password authentication. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|--|---|---|
| hh3cSSHUserPublicKeyName (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.4) | read-create | DisplayString | Standard MIB values. | Name of the public key used for authentication of the SSH user. | Length: 1 to 64 characters. The default value is a zero-length string. The value for this object is obtained from the public key generated in the PKEY module. |
| hh3cSSHUserWorkDirectory (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.5) | read-create | DisplayString | Standard MIB values. | Work directory of the SSH user. | Not supported. |
| hh3cSSHUserRowStatus (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | When the hh3cSSHUserRowStatus is set to active(1), no objects in the conceptual row can be modified. In particular, a newly created user row which uses public key authentication cannot be made active(1) until the corresponding instance of 'hh3cSSHUserAuthType' is 'publicKey' or 'publicKeyPassword', and the 'hh3cSSHUserPublicKeyName' or at least one of the 'hh3cSSHUserPublicKeyName[2-6]' is configured appropriately. |
| hh3cSSHUserPublicKeyName2 (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.7) | read-create | DisplayString | Standard MIB values. | Name of the public key used for authentication of the SSH user. | Length: 1 to 64 characters. The default value is a zero-length string. The value for this object is obtained from the public key generated in the PKEY module. |
| hh3cSSHUserPublicKeyName3 (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.8) | read-create | DisplayString | Standard MIB values. | Name of the public key used for authentication of the SSH user. | Length: 1 to 64 characters. The default value is a zero-length string. The value for this object is obtained from the public key generated in the PKEY module. |
| hh3cSSHUserPublicKeyName4 (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.9) | read-create | DisplayString | Standard MIB values. | Name of the public key used for authentication of the SSH user. | Length: 1 to 64 characters. The default value is a zero-length string. The value for this object is obtained from the public key generated in the PKEY module. |
| hh3cSSHUserPublicKeyName5 (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.10) | read-create | DisplayString | Standard MIB values. | Name of the public key used for authentication of the SSH user. | Length: 1 to 64 characters. The default value is a zero-length string. The value for this object is obtained from the public |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|----------------------|---|--|
| | | | | | key generated in the PKEY module. |
| hh3cSSHUserPublicKeyName6 (1.3.6.1.4.1.25506.2.22.1.1.2.1.1.11) | read-create | DisplayString | Standard MIB values. | Name of the public key used for authentication of the SSH user. | Length: 1 to 64 characters. The default value is a zero-length string. The value for this object is obtained from the public key generated in the PKEY module. |

hh3cSSHSessionInfoTable

About this table

This table contains SSH session information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cSSHSessionID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|---|------------------------------|
| hh3cSSHSessionID (1.3.6.1.4.1.25506.2.22.1.1.3.1.1) | not-accessible | Integer32 | Standard MIB values. | VTY number of an SSH session. | As per the MIB. |
| hh3cSSHSessionUserName (1.3.6.1.4.1.25506.2.22.1.1.3.1.2) | read-only | DisplayString | Standard MIB values. | User name of the SSH session. | Length: 1 to 255 characters. |
| hh3cSSHSessionUserIpAddrType (1.3.6.1.4.1.25506.2.22.1.1.3.1.3) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | User IP address type of the SSH session. | As per the MIB. |
| hh3cSSHSessionUserIpAddr (1.3.6.1.4.1.25506.2.22.1.1.3.1.4) | read-only | InetAddress | OCTET STRING (0..255) | User IP address of the SSH session. | As per the MIB. |
| hh3cSSHSessionClientVersion (1.3.6.1.4.1.25506.2.22.1.1.3.1.5) | read-only | DisplayString | Standard MIB values. | Client protocol version of the SSH session. | As per the MIB. |
| hh3cSSHSessionServiceType (1.3.6.1.4.1.25506.2.22.1.1.3.1.6) | read-only | INTEGER | invalid(1), stelnet(2), sftp(3), scp(4), | Service type of the SSH session. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|--|-----------------|
| | | | netconf(5) | | |
| hh3cSSHSession Encry (1.3.6.1.4.1.25506 .2.22.1.1.3.1.7) | read-only | INTEGER | invalid(1), aes128CBC(2), desCBC(3), des3CBC(4), aes128CTR(5), aes192CTR(6), aes256CTR(7), aes128GCM(8), aes256GCM(9), aes256CBC(10), other(11) | Encryption algorithm of the SSH session. | As per the MIB. |
| hh3cSSHSession State (1.3.6.1.4.1.25506 .2.22.1.1.3.1.8) | read-only | INTEGER | init(1), verExchange(2), keysExchange(3), authRequest(4), serviceRequest(5) , established(6), disconnect(7) | Status of the SSH session. | As per the MIB. |

Notifications

hh3cSSHUserAuthFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------------|-----------------------------------|---------------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.22.1.3.0.1 | User authentication failure | Informational | - | - | ON |

Description

This notification is generated when a user failed authentication.

Status control

This notification cannot be set to the OFF state.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------------|-------|-----------------|-------------------------------------|
| 1.3.6.1.4.1.25506.2.22.1.2.1 (hh3cSSHAttemptUserName) | Name of the invalid user. | No | DisplayString | OCTET STRING(SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.22.1.2.2 (hh3cSSHAttemptIpAddrType) | Address type of the invalid user. | No | InetAddressType | INTEGER{ unknown(0), ipv4(1), |

| | | | | |
|--|--|----|-------------|--|
| | | | | ipv6(2), dns(16) } |
| 1.3.6.1.4.1.25506.2.22.1.2.3 (hh3cSSHAttemptIpAddr) | Address of the invalid user. | No | InetAddress | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.2.22.1.2.4 (hh3cSSHUserAuthFailureReason) | Reason for the authentication failure. | No | INTEGER | exceedRetries(1) authTimeout(2) otherReason(3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Make sure there are no invalid users attempt to log in.

hh3cSSHVersionNegotiationFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------------|------------------------------------|---------------|----------|--------------------------|----------------|
| 1.3.6.1.4.1.25506. 2.22.1.3.0.2 | SSH version negotiation failure | Informational | - | - | ON |

Description

This notification is generated when SSH version negotiation fails.

Status control

This notification cannot be set to the OFF state.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.22.1.2.2 (hh3cSSHAttemptIpAddrType) | Address type of the invalid user. | No | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } |
| 1.3.6.1.4.1.25506.2.22.1.2.3 (hh3cSSHAttemptIpAddr) | Address of the invalid user. | No | InetAddress | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Make sure the client and server use the same SSH version.

hh3cSSHUserLogin

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.22.1.3.0.3 | User login | Informational | - | - | ON |

Description

This notification is generated when a user successfully logs in.

Status control

This notification cannot be set to the OFF state.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.22.1.1.3.1.2 (hh3cSSHSessionUserName) | User name of the SSH session. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.22.1.1.3.1.3 (hh3cSSHSessionUserIpAddrType) | User address type of the SSH session. | No | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } |
| 1.3.6.1.4.1.25506.2.22.1.1.3.1.4 (hh3cSSHSessionUserIpAddr) | User address of the SSH session. | No | InetAddress | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cSSHUserLogoff

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|-------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.22.1.3.0.4 | User logout | Informational | - | - | ON |

Description

This notification is generated when a user logs out.

Status control

This notification cannot be set to the OFF state.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------------|-------|-----------------|---|
| 1.3.6.1.4.1.25506.2.22.1.1.3.1.2 (hh3cSSHSessionUserName) | User name of the SSH session. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.22.1.1.3.1.3 (hh3cSSHSessionUserIpAddrType) | User address type of the SSH session. | No | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } |
| 1.3.6.1.4.1.25506.2.22.1.1.3.1.4 (hh3cSSHSessionUserIpAddr) | User address of the SSH session. | No | InetAddress | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Make sure the user is a valid user.

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SAVI-MIB

About this MIB

Use this MIB to manage SAVI configuration.

MIB file name

savi.mib

Root object

iso(1).org(3).dod(devil).internet(1).mgmt(2).mib-2(1).ip(4).saviMIB(40)

Scalar objects

Tabular objects

saviObjectsSystemTable

About this table

Use this table to configure global SAVI parameters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are saviObjectsSystemIPVersion and saviObjectsSystemTable.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------|---|--|-----------------|
| saviObjectsSystemIPVersion (1.3.6.1.2.1.4.40.1.1.1.1) | not-accessible | INTEGER | unknown(0) ipv4(1) ipv6(2) | IP version. | As per the MIB. |
| saviObjectsSystemMode (1.3.6.1.2.1.4.40.1.1.1.2) | read-write | INTEGER | savi-disable(1) savi-default(2) savi-dhcp-only(3) savi-slaac-only(4) savi-dhcp-slaac-mix(5) savi-send(6) | IP address assignment methods. | As per the MIB. |
| saviObjectsSystemMaxDhcpResponseTime (1.3.6.1.2.1.4.40.1.1.1.3) | read-write | INTEGER | INTEGER (0..2147483647) | Maximum interval between two DHCP responses. | As per the MIB. |

| | | | | | |
|--|-------------|------------|-------------------------------|---|-----------------|
| saviObjectsSystemDataSnoopingInterval (1.3.6.1.2.1.4.40.1.1.1.4) | read-create | INTEGER | INTEGER (0..2147483647) | Data snooping interval. | As per the MIB. |
| saviObjectsSystemMaxLeaseQueryDelay (1.3.6.1.2.1.4.40.1.1.1.5) | read-create | INTEGER | INTEGER (0..2147483647) | Maximum lease query delay. | As per the MIB. |
| saviObjectsSystemOffLinkDelay (1.3.6.1.2.1.4.40.1.1.1.6) | read-write | INTEGER | INTEGER (0..2147483647) | Off-link entry deletion delay. | As per the MIB. |
| saviObjectsSystemDetectionTimeout (1.3.6.1.2.1.4.40.1.1.1.7) | read-write | INTEGER | INTEGER (0..2147483647) | Detection timeout. | As per the MIB. |
| saviObjectsSystemTentLT (1.3.6.1.2.1.4.40.1.1.1.8) | read-write | INTEGER | INTEGER (0..2147483647) | ND snooping tentative entry lifetime. | As per the MIB. |
| saviObjectsSystemDefaultLT (1.3.6.1.2.1.4.40.1.1.1.9) | read-write | INTEGER | INTEGER (0..2147483647) | ND snooping valid entry lifetime. | As per the MIB. |
| saviObjectsSystemTWAIT (1.3.6.1.2.1.4.40.1.1.1.10) | read-write | INTEGER | INTEGER (0..2147483647) | ND snooping DAD NS transmission interval. | As per the MIB. |
| saviObjectsSystemNotifySpoofing (1.3.6.1.2.1.4.40.1.1.1.11) | read-write | INTEGER | enable(1) disable(2) | Status of packet spoofing logging. | As per the MIB. |
| saviObjectsSystemNotifyFilter (1.3.6.1.2.1.4.40.1.1.1.12) | read-write | INTEGER | enable(1) disable(2) | Status of filtering entry logging. | As per the MIB. |
| saviObjectsSystemNotifySpoofingInterval (1.3.6.1.2.1.4.40.1.1.1.13) | read-write | Unsigned32 | Unsigned32 (0 5..3600) | Log output interval for packet spoofing logging, in seconds. | As per the MIB. |
| saviObjectsSystemNotifySpoofingNumber (1.3.6.1.2.1.4.40.1.1.1.14) | read-write | Unsigned32 | Unsigned32 (1..128) | Maximum number of log messages that can be output per interval. | As per the MIB. |
| saviObjectsSystemBindingCount (1.3.6.1.2.1.4.40.1.1.1.15) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Number of binding entries. | As per the MIB. |
| saviObjectsSystemFilteringCount (1.3.6.1.2.1.4.40.1.1.1.16) | read-only | Unsigned32 | Unsigned32 (0..4294967295) | Number of filtering entries. | As per the MIB. |

| | | | | | |
|----------|--|--|--|--|--|
| .1.1.16) | | | | | |
|----------|--|--|--|--|--|

saviObjectsPortTable

About this table

Use this table to configure SAVI parameters on interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are saviObjectsPortIPVersion and saviObjectsPortIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------------------|--|-----------------|
| saviObjectsPortIPVersion (1.3.6.1.2.1.4.40.1.2.1.1) | not-accessible | INTEGER | unknown(0) ipv4(1) ipv6(2) | IP version | As per the MIB. |
| saviObjectsPortIfIndex (1.3.6.1.2.1.4.40.1.2.1.2) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| saviObjectsPortValidatingAttr (1.3.6.1.2.1.4.40.1.2.1.3) | read-write | INTEGER | enable(1) disable(2) | Status of SAVI on the interface. | As per the MIB. |
| saviObjectsPortDhcpTrustAttr (1.3.6.1.2.1.4.40.1.2.1.4) | read-write | INTEGER | enable(1) disable(2) | Whether the interface trusts DHCP packets. | As per the MIB. |
| saviObjectsPortTrustAttr (1.3.6.1.2.1.4.40.1.2.1.5) | read-write | INTEGER | enable(1) disable(2) | Whether the interface trusts any packets. | As per the MIB. |
| saviObjectsPortDhcpSnoopingAttr (1.3.6.1.2.1.4.40.1.2.1.6) | read-write | INTEGER | enable(1) disable(2) | Whether the interface creates bindings based on DHCPv6 snooping. | As per the MIB. |
| saviObjectsPortDataSnoopingAttr (1.3.6.1.2.1.4.40.1.2.1.7) | read-write | INTEGER | enable(1) disable(2) | Whether the interface creates bindings based on data snooping. | As per the MIB. |
| saviObjectsPortFilteringNum (1.3.6.1.2.1.4.40.1.2.1.8) | read-write | Unsigned32 | Unsigned32 (0..4294967295) | Maximum filtering entry number of the interface. | As per the MIB. |

saviObjectsBindingTable

About this table

Use this table to configure binding entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are saviObjectsBindingIpAddressType, saviObjectsBindingType, saviObjectsBindingIfIndex, and saviObjectsBindingIpAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|------------------|-----------------|
| saviObjectsBindingIpAddressType (1.3.6.1.2.1.4.40.1.3.1.1) | not-accessible | INTEGER | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) | IP version. | As per the MIB. |
| saviObjectsBindingType (1.3.6.1.2.1.4.40.1.3.1.2) | not-accessible | INTEGER | manual(1) slaac(2) dhcp(3) send(4) | Binding type. | As per the MIB. |
| saviObjectsBindingIfIndex (1.3.6.1.2.1.4.40.1.3.1.3) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| saviObjectsBindingIpAddress (1.3.6.1.2.1.4.40.1.3.1.4) | not-accessible | OCTET STRING | OCTET STRING (0..255) | IP address. | As per the MIB. |
| saviObjectsBindingMacAddr (1.3.6.1.2.1.4.40.1.3.1.5) | read-create | OCTET STRING | OCTET STRING (6) | MAC address. | As per the MIB. |
| saviObjectsBindingState (1.3.6.1.2.1.4.40.1.3.1.6) | read-create | INTEGER | nO-BIND(1) iNIT-BIND(2) bOUND(3) dETECTION(4) rECOVERY(5) vERIFY(6) tENTATIVE(7) vALID(8) tESTING-TP-LT(9) tESTING-VP(10) tESTING-VPP(11) tENTATIVE-NUD(| Binding status. | As per the MIB. |

| | | | | | |
|--|-------------|--------------|---|----------------------------------|-----------------|
| | | | 12) tentative-DAD(13) | | |
| saviObjectsBindingLifetime (1.3.6.1.2.1.4.40.1.3.1.7) | read-create | INTEGER | INTEGER (0..2147483647) | Remaining lifetime of the entry. | As per the MIB. |
| saviObjectsBindingCreationTime (1.3.6.1.2.1.4.40.1.3.1.8) | read-create | OCTET STRING | OCTET STRING (8..11) | Time when the entry was created. | As per the MIB. |
| saviObjectsBindingTID (1.3.6.1.2.1.4.40.1.3.1.9) | read-create | INTEGER | Standard MIB values. | Transaction ID. | As per the MIB. |
| saviObjectsBindingRowStatus (1.3.6.1.2.1.4.40.1.3.1.10) | read-create | INTEGER | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Status of this row. | As per the MIB. |

saviObjectsFilteringTable

About this table

Use this table to configure filtering entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are saviObjectsFilteringIpAddressType, saviObjectsFilteringIfIndex, and saviObjectsFilteringIpAddress.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|---|-----------------|
| saviObjectsFilteringIpAddressType (1.3.6.1.2.1.4.40.1.4.1.1) | not-accessible | INTEGER | unknown(0) ipv4(1) ipv6(2) ipv4z(3) ipv6z(4) dns(16) | IP address type of the filtering source IP address. | As per the MIB. |
| saviObjectsFilteringIfIndex (1.3.6.1.2.1.4.40.1.4.1.2) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| saviObjectsFilteringIpAddress (1.3.6.1.2.1.4.40.1.4.1.3) | not-accessible | OCTET STRING | OCTET STRING (0..255) | Filtering source IP address. | As per the MIB. |

| | | | | | |
|---|-----------|--------------|---------------------|------------------------------|-----------------|
| saviObjectsFilteringMacAddr (1.3.6.1.2.1.4.40.1.4.1.4) | read-only | OCTET STRING | OCTET STRING (6) | Filtering source IP address. | As per the MIB. |
|---|-----------|--------------|---------------------|------------------------------|-----------------|

saviObjectsCountTable

About this table

Use this table to obtain SAVI packet filtering statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are saviObjectsCountIPVersion and saviObjectsCountIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|--|--|------------------------|
| saviObjectsCountIPVersion (1.3.6.1.2.1.4.40.1.5.1.1) | not-accessible | INTEGER | unknown(0) ipv4(1) ipv6(2) | IP version. | Only supports ipv6(2). |
| saviObjectsCountIfIndex (1.3.6.1.2.1.4.40.1.5.1.2) | not-accessible | Integer32 | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| saviObjectsCountFilterPkts (1.3.6.1.2.1.4.40.1.5.1.3) | read-only | Counter64 | Counter64 (1..18446744073709551616) | Number of spoofed packets filtered by SAVI. | As per the MIB. |
| saviObjectsCountFilterOctets (1.3.6.1.2.1.4.40.1.5.1.4) | read-only | Counter64 | Counter64 (1..18446744073709551616) | Byte count for spoofed packets filtered by SAVI. | As per the MIB. |

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DOT3-OAM-MIB

About this MIB

Ethernet Operation, Administration, and Maintenance (OAM) is a tool that monitors Layer 2 link status. It checks the connectivity of a link by sending OAM protocol data units (OAMPDUs) and reports to the network administrators when a link error occurs.

This MIB focuses on Ethernet OAM functions.

MIB file name

rfc4878-dot3-oam.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dot3OamMIB(25506)

Tabular objects

dot3OamTable

About this table

This table contains information about basic Ethernet OAM functions of a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|---|-----------------|
| dot3OamAdminState (1.3.6.1.2.1.158.1.1.1.1) | read-write | INTEGER | 1..2 | Whether Ethernet OAM is enabled on the port. | As per the MIB. |
| dot3OamOperStatus (1.3.6.1.2.1.158.1.1.1.2) | read-only | INTEGER | disabled(1),linkFault(2),passiveWait(3),activeSendLocal(4),sendLocalAndRemote(5),sendLocalAndRemoteOk(6),oamPeeringLocallyRejected(7),oamPeeringRemotelyRejected(8),operational(9),nonOperHalfDuplex(10) | OAM capability of the link when the interface enters discovery state upon initialization or link error of the OAM entities. | As per the MIB. |
| dot3OamMode | read-write | INTEGER | 1...2 | OAM mode. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|--|---|-----------------|
| (1.3.6.1.2.1.158.1.1.1.3) | | | | Ethernet interfaces have two OAM modes: passive(1) and active(2). | |
| dot3OamMaxOamPduSize (1.3.6.1.2.1.158.1.1.1.4) | read-only | Unsigned32 | 64...1518 | Largest OAMPDU that the OAM entity supports. | As per the MIB. |
| dot3OamConfigRevision (1.3.6.1.2.1.158.1.1.1.5) | read-only | Unsigned32 | 0...65535 | Configuration revision of the local OAM entity. | As per the MIB. |
| dot3OamFunctionsSupported (1.3.6.1.2.1.158.1.1.1.6) | read-only | BITS | unidirectionalSupport(0),loopbackSupport(1),eventSupport(2),variableSupport(3) | Functions supported by the OAM port. | As per the MIB. |

dot3OamPeerTable

About this table

This table contains OAM peer configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|---|-------------------------------------|-----------------|
| dot3OamPeerMacAddress (1.3.6.1.2.1.158.1.2.1.1) | read-only | MacAddress | OCTET STRING (6) Original type + valid length. | MAC address of the OAM peer. | As per the MIB. |
| dot3OamPeerVendorOui (1.3.6.1.2.1.158.1.2.1.2) | read-only | EightOctetOui | OCTET STRING (3) | Peer OUI. | Not supported |
| dot3OamPeerVendorInfo (1.3.6.1.2.1.158.1.2.1.3) | read-only | Gauge32 | Standard MIB values. | Vendor information of the OAM peer. | Not supported |
| dot3OamPeerMode (1.3.6.1.2.1.158.1.2.1.4) | read-only | INTEGER | passive(1), active(2), unknown(3) | Mode of the OAM peer. | As per the MIB. |
| dot3OamPeerMaxOamPduSize | read-only | Unsigned | 1:0,2:64 | Maximum OAMPDU length of | As per the MIB. |

| | | | | | |
|---|-----------|-----------------|--|---|-----------------|
| (1.3.6.1.2.1.158.1.2.1.5) | | d32 | ...1518 | the OAM peer. | |
| dot3OamPeerConfigRevision (1.3.6.1.2.1.158.1.2.1.6) | read-only | Unsigned d32 | 0..65535 | Configuration revision of the OAM peer. | As per the MIB. |
| dot3OamPeerFunctionsSupport ed (1.3.6.1.2.1.158.1.2.1.7) | read-only | BITS | unidirectionalSup port(0), loopback Support(1), eventSu pport(2), variable Support(3) | Functions supported by the OAM peer. | As per the MIB. |

dot3OamStatsTable

About this table

This table contains OAM statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|-------------------------|--|-----------------|
| dot3OamInformationTx (1.3.6.1.2.1.158.1.4.1.1) | read-only | Counter 32 | Standard MIB values. | Number of sent Information OAMPDUs. | As per the MIB. |
| dot3OamInformationRx (1.3.6.1.2.1.158.1.4.1.2) | read-only | Counter 32 | Standard MIB values. | Number of received Information OAMPDUs. | As per the MIB. |
| dot3OamUniqueEventNotificatio nTx (1.3.6.1.2.1.158.1.4.1.3) | read-only | Counter 32 | Standard MIB values. | Number of sent unique Event Notification OAMPDUs. | As per the MIB. |
| dot3OamUniqueEventNotificatio nRx (1.3.6.1.2.1.158.1.4.1.4) | read-only | Counter 32 | Standard MIB values. | Number of received unique Event Notification OAMPDUs. | As per the MIB. |
| dot3OamDuplicateEventNotifica tionTx (1.3.6.1.2.1.158.1.4.1.5) | read-only | Counter 32 | Standard MIB values. | Number of sent duplicate Event Notification OAMPDUs. | As per the MIB. |
| dot3OamDuplicateEventNotifica tionRx (1.3.6.1.2.1.158.1.4.1.6) | read-only | Counter 32 | Standard MIB values. | Number of received duplicate Event Notification | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|----------------------|---|-----------------|
| | | | | OAMPDUs. | |
| dot3OamLoopbackControlTx (1.3.6.1.2.1.158.1.4.1.7) | read-only | Counter 32 | Standard MIB values. | Number of sent Loopback Control OAMPDUs. | As per the MIB. |
| dot3OamLoopbackControlRx (1.3.6.1.2.1.158.1.4.1.8) | read-only | Counter 32 | Standard MIB values. | Number of received Loopback Control OAMPDUs. | As per the MIB. |
| dot3OamVariableRequestTx (1.3.6.1.2.1.158.1.4.1.9) | read-only | Counter 32 | Standard MIB values. | Number of sent Variable Request OAMPDUs. | Not supported |
| dot3OamVariableRequestRx (1.3.6.1.2.1.158.1.4.1.10) | read-only | Counter 32 | Standard MIB values. | Number of received Variable Request OAMPDUs. | Not supported |
| dot3OamVariableResponseTx (1.3.6.1.2.1.158.1.4.1.11) | read-only | Counter 32 | Standard MIB values. | Number of sent Variable Response OAMPDUs. | Not supported |
| dot3OamVariableResponseRx (1.3.6.1.2.1.158.1.4.1.12) | read-only | Counter 32 | Standard MIB values. | Number of received Variable Response OAMPDUs. | Not supported |
| dot3OamOrgSpecificTx (1.3.6.1.2.1.158.1.4.1.13) | read-only | Counter 32 | Standard MIB values. | Number of sent Organization Specific OAMPDUs. | Not supported |
| dot3OamOrgSpecificRx (1.3.6.1.2.1.158.1.4.1.14) | read-only | Counter 32 | Standard MIB values. | Number of received Organization Specific OAMPDUs. | Not supported |
| dot3OamUnsupportedCodesTx (1.3.6.1.2.1.158.1.4.1.15) | read-only | Counter 32 | Standard MIB values. | Number of sent OAMPDUs that do not support operation codes. | Not supported |
| dot3OamUnsupportedCodesRx (1.3.6.1.2.1.158.1.4.1.16) | read-only | Counter 32 | Standard MIB values. | Number of received OAMPDUs that do not support operation codes. | Not supported |
| dot3OamFramesLostDueToOam (1.3.6.1.2.1.158.1.4.1.17) | read-only | Counter 32 | Standard MIB values. | Number of dropped frames due to OAM. | Not supported |

dot3OamEventConfigTable

About this table

This table contains OAM link event detection information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|------------------------------|--|--|
| dot3OamErrSymPeriodWindowHi (1.3.6.1.2.1.158.1.5.1.1) | read-write | Unsigned32 | Standard MIB values. | High 32 bits of the errored symbol event detection window. | Not supported |
| dot3OamErrSymPeriodWindowLo (1.3.6.1.2.1.158.1.5.1.2) | read-write | Unsigned32 | Standard MIB values. | Low 32 bits of the errored symbol event detection window. | Not supported |
| dot3OamErrSymPeriodThresholdHi (1.3.6.1.2.1.158.1.5.1.3) | read-write | Unsigned32 | Standard MIB values. | High 32 bits of the errored symbol event triggering threshold within the detection window. | Not supported |
| dot3OamErrSymPeriodThresholdLo (1.3.6.1.2.1.158.1.5.1.4) | read-write | Unsigned32 | Standard MIB values. | Low 32 bits of the errored symbol event triggering threshold within the detection window. | Not supported |
| dot3OamErrSymPeriodEventNotifiable (1.3.6.1.2.1.158.1.5.1.5) | read-write | TruthValue | true(1), false(2) | Whether errored symbol event notification is enabled. | As per the MIB. |
| dot3OamErrFramePeriodWindow (1.3.6.1.2.1.158.1.5.1.6) | read-write | Unsigned32 | 100..6000(V5) 1-65535(V7) | Errored frame period event detection window. | Value range: 1 to 65535. Default: 1000. |
| dot3OamErrFramePeriodThreshold (1.3.6.1.2.1.158.1.5.1.7) | read-write | Unsigned32 | 0..4294967295 | Errored frame period event triggering threshold. | As per the MIB. |
| dot3OamErrFramePeriodEventNotifiable (1.3.6.1.2.1.158.1.5.1.8) | read-write | TruthValue | true(1), false(2) | Whether errored frame period event notification is enabled. | As per the MIB. |
| dot3OamErrFrameWindow (1.3.6.1.2.1.158.1.5.1.9) | read-write | Unsigned32 | 10..600 | Errored frame event detection window. | Value range: 10 -600. Default: 10. |
| dot3OamErrFrameThreshold (1.3.6.1.2.1.158.1.5.1.10) | read-write | Unsigned32 | 0..4294967295 | Errored frame event triggering threshold. | As per the MIB. |
| dot3OamErrFrameEventNotifiable (1.3.6.1.2.1.158.1.5.1.11) | read-write | TruthValue | true(1), false(2) | Whether errored frame event notification is enabled. | As per the MIB. |
| dot3OamErrFrameSecsSummaryWindow (1.3.6.1.2.1.158.1.5.1.12) | read-write | Integer32 | 100..9000 | Errored frame seconds event detection window. | Value range: 100 to 9000 Default: 600. |
| dot3OamErrFrameSecsSummaryThreshold (1.3.6.1.2.1.158.1.5.1.13) | read-write | Integer32 | 1..900 | Errored frame seconds event triggering threshold. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------|--|-----------------|
| dot3OamErrFrameSecsEvNotif Enable (1.3.6.1.2.1.158.1.5.1.14) | read-write | TruthValue | true(1), false(2) | Whether errored frame seconds event notification is enabled. | As per the MIB. |
| dot3OamDyingGaspEnable (1.3.6.1.2.1.158.1.5.1.15) | read-write | TruthValue | true(1), false(2) | Whether Dying Gasp notification is enabled. | Not supported |
| dot3OamCriticalEventEnable (1.3.6.1.2.1.158.1.5.1.16) | read-write | TruthValue | true(1), false(2) | Whether critical event notification is enabled. | Not supported |

dot3OamEventLogTable

About this table

This table contains OAM event log information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and dot3OamEventLogIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------|---|---|-----------------|
| dot3OamEventLogIndex (1.3.6.1.2.1.158.1.6.1.1) | not-accessible | Unsigned32 | 1..100 | Event index. | As per the MIB. |
| dot3OamEventLogTimestamp (1.3.6.1.2.1.158.1.6.1.2) | read-only | TimeStamp | Standard MIB values. | Timestamp of the event. | As per the MIB. |
| dot3OamEventLogOui (1.3.6.1.2.1.158.1.6.1.3) | read-only | EightOctetOui | OCTET STRING(3) | OUI of the event packet. | As per the MIB. |
| dot3OamEventLogType (1.3.6.1.2.1.158.1.6.1.4) | read-only | Unsigned32 | erroredSymbolEvent(1),erroredFramePeriodEvent(2),erroredFrameEvent(3),erroredFrameSecondsEvent(4),linkFault(256),dyingGaspEvent(257),criticalLinkEvent(258) | Event type. | As per the MIB. |
| dot3OamEventLogLocation (1.3.6.1.2.1.158.1.6.1.5) | read-only | INTEGER | local(1), remote(2) | Whether the event is a local event or a peer event. | As per the MIB. |
| dot3OamEventLogWindowHi (1.3.6.1.2.1.158.1.6.1.6) | read-only | Unsigned32 | Standard MIB values. | High bits of the event statistics window. | As per the MIB. |
| dot3OamEventLogWindowLo (1.3.6.1.2.1.158.1.6.1.7) | read-only | Unsigned32 | Standard MIB values. | Low bits of the event statistics window. | As per the MIB. |
| dot3OamEventLogThresholdHi | read-only | Unsigned | Standard MIB | High bits of the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------------------|----------------------|--|-----------------|
| (1.3.6.1.2.1.158.1.6.1.8) | | d32 | values. | event statistics threshold. | |
| dot3OamEventLogThresholdLo (1.3.6.1.2.1.158.1.6.1.9) | read-only | Unsigned d32 | Standard MIB values. | Low bits of the event statistics threshold. | As per the MIB. |
| dot3OamEventLogValue (1.3.6.1.2.1.158.1.6.1.10) | read-only | Counter Based Gauge64 | Standard MIB values. | Number of occurrences for the event exceeding the threshold within the window. | As per the MIB. |
| dot3OamEventLogRunningTotal (1.3.6.1.2.1.158.1.6.1.11) | read-only | Counter Based Gauge64 | Standard MIB values. | Total number of occurrences for the running event. | As per the MIB. |
| dot3OamEventLogEventTotal (1.3.6.1.2.1.158.1.6.1.12) | read-only | Unsigned d32 | Standard MIB values. | Total number of times the event has occurred. | As per the MIB. |

Notifications

This section contains trap notifications.

dot3OamThresholdEvent

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.158.0.1 | A threshold-crossing event is detected. | Informational | N/A | N/A | OFF |

Description

A notification sent when a threshold-crossing event is detected on the local or remote end. A device detects local threshold-crossing events through the local entity and detects remote threshold-crossing events through received OAMPDUs.

Status control

ON

MIB: Set dot3OamErrSymEvNotifEnable to true(1).

MIB: Set dot3OamErrFramePeriodEvNotifEnable to true(1).

MIB: Set dot3OamErrFrameEvNotifEnable to true(1).

MIB: Set dot3OamErrFrameSecsEvNotifEnable to true(1).

OFF

MIB: Set dot3OamErrSymEvNotifEnable to false(0)

MIB: Set dot3OamErrFramePeriodEvNotifEnable to false(0).

MIB: Set dot3OamErrFrameEvNotifEnable to false(0).

MIB: Set dot3OamErrFrameSecsEvNotifEnable to false(0).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|---------------------|------------------------------|
| 1.3.6.1.2.1.158.1.6.1.2 (dot3OamEventLogTimestamp) | Timestamp of the event. | No | TimeStamp | TimeTicks |
| 1.3.6.1.2.1.158.1.6.1.3 (dot3OamEventLogOui) | OUI of the event packet. | No | EightOTwoOui | OCTET STRING (SIZE (1..255)) |
| 1.3.6.1.2.1.158.1.6.1.4 (dot3OamEventLogType) | Event type. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.158.1.6.1.5 (dot3OamEventLogLocation) | Whether the event is a local event or a peer event. | No | INTEGER | local(1) remote(2) |
| 1.3.6.1.2.1.158.1.6.1.6 (dot3OamEventLogWindowHi) | High bits of the event statistics window. | No | Unsigned32 | 0..65535 |
| 1.3.6.1.2.1.158.1.6.1.7 (dot3OamEventLogWindowLo) | Low bits of the event statistics window. | No | Unsigned32 | 0..65535 |
| 1.3.6.1.2.1.158.1.6.1.8 (dot3OamEventLogThresholdHi) | High bits of the event statistics threshold. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.158.1.6.1.9 (dot3OamEventLogThresholdLo) | Low bits of the event statistics threshold. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.158.1.6.1.10 (dot3OamEventLogValue) | Number of occurrences for the event exceeding the threshold within the window. | No | CounterBasedGauge64 | Counter64 |
| 1.3.6.1.2.1.158.1.6.1.11 (dot3OamEventLogRunningTotal) | Total number of occurrences for the running event. | No | CounterBasedGauge64 | Counter64 |
| 1.3.6.1.2.1.158.1.6.1.12 (dot3OamEventLogEventTotal) | Total number of times the event has occurred. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Detect links.

dot3OamNonThresholdEvent

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.158.0.2 | A non-threshold-crossing event is detected. | Error | Major | N/A | ON |

Description

A notification sent when a non-threshold-crossing event is detected on the local or remote end. A device detects local non-threshold-crossing events through the local entity and detects remote non-threshold-crossing events through received OAMPDUs.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|--------------|---|
| 1.3.6.1.2.1.158.1.6.1.2 (dot3OamEventLogTimestamp) | Timestamp of the event. | No | TimeStamp | TimeTicks |
| 1.3.6.1.2.1.158.1.6.1.3 (dot3OamEventLogOui) | OUI of the event packet. | No | EightOTwoOui | OCTET STRING (SIZE (1..255)) |
| 1.3.6.1.2.1.158.1.6.1.4 (dot3OamEventLogType) | Event type. | No | Unsigned32 | linkFault(256) dyingGaspEvent(257) criticalLinkEvent(258) |
| 1.3.6.1.2.1.158.1.6.1.5 (dot3OamEventLogLocation) | Whether the event is a local event or a peer event. | No | INTEGER | local(1) remote(2) |
| 1.3.6.1.2.1.158.1.6.1.12 (dot3OamEventLogEventTotal) | Total number of times the event has occurred. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Do not use the link before it recovers.

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HH3C-BFD-STD-MIB

About this MIB

Upper layer protocols implement fast fault detection through the link layer. The fault detection time varies by link type, and failures might not be detected sometimes. POS has the fastest detection speed of approximately 50 milliseconds, which is used to measure fault detection time for other protocols.

BFD provides a general-purpose, standard, medium- and protocol-independent fast failure detection mechanism. BFD can uniformly and quickly detect the failures of the bidirectional forwarding paths between two devices for upper-layer protocols such as routing protocols and MPLS. BFD can provide detection measured in milliseconds, which is close to the detection time implemented by POS.

This document describes the following variables required to implement BFD:

- hh3cBfdGlobalObjects includes hh3cBfdVersionNumber (version number), hh3cBfdSysInitMode (session initialization mode), hh3cBfdSessNotificationsEnable (SNMP notifications switch), and hh3cBfdSessNumberLimit (session limit).
- hh3cBfdIfTable describes BFD interface information.
- hh3cBfdSessTable describes BFD session information.
- hh3cBfdSessStatTable describes BFD session statistics information.
- hh3cBfdSessPerfTable describes BFD session performance information.
- In hh3cBfdNotifications, hh3cBfdSessStateChange describes session state changes (from up to another state, or from another state to up), and hh3cBfdSessAuthFail describes authentication failure information.

HH3C-BFD-STD-MIB is based on draft-ietf-bfd-base-04.txt. This MIB is used for network management protocols in the Internet communities. It describes the objects used to configure or monitor bidirectional forwarding on devices supporting BFD.

MIB file name

hh3c-bfd-std.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cBfdMIB(72)

Scalar objects

hh3cBfdVersionNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|-----------------|----------------|
| hh3cBfdVersionNumber(1.3.6.1.4.1.25506.2.72.1.1.1) | read-only | Unsigned 32 | Standard MIB values. | Version number. | Not supported |

hh3cBfdSysInitMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-----------------------|--------------------------------------|----------------|
| hh3cBfdSysInitMode(1.3.6.1.4.1.25506.2.72.1.1.2) | read-write | INTEGER | active(1), passive(2) | Mode for establishing a BFD session. | Not supported |

hh3cBfdSessNotificationsEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|--|-----------------|
| hh3cBfdSessNotificationsEnable(1.3.6.1.4.1.25506.2.72.1.1.3) | read-write | TruthValue | true(1), false(2) | Whether SNMP notifications is enabled. | As per the MIB. |

hh3cBfdSessNumberLimit

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|-----------------------|----------------|
| hh3cBfdSessNumberLimit(1.3.6.1.4.1.25506.2.72.1.1.4) | read-only | Unsigned 32 | Standard MIB values. | Active session limit. | Not supported |

Tabular objects

hh3cBfdIfTable

About this table

This table contains information about the interface enabled with BFD.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cBfdIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|----------------------------|--|-----------------------------------|
| hh3cBfdIfIndex(1.3.6.1.4.1.25506.2.72.1.2.1.1) | read-only | Interface Index | Integer32 (1..2147483647) | Index of the interface enabled with BFD. | As per the MIB. |
| hh3cBfdIfDesiredMinTxInterval(1.3.6.1.4.1.25506.2.72.1.2.1.2) | read-write | BfdInterval | Unsigned 32(1..4294967295) | Minimum interval for transmitting BFD control packets. | Supports only the read operation. |
| hh3cBfdIfDesiredMinRxInterval(1.3.6.1.4.1.25506.2.72.1.2.1.3) | read-write | BfdInterval | Unsigned 32(1..4294967295) | Minimum interval for receiving BFD control packets. | Supports only the read operation. |
| hh3cBfdIfDetectMult(1.3.6.1.4.1.25506.2.72.1.2.1.4) | read-write | Unsigned 32 | Standard MIB | Detection time multiplier for control packet | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|--|-----------------|
| | | | values. | mode. | |
| hh3cBfdIfAuthType(1.3.6.1.4.1.25506.2.72.1.2.1.5) | read-only | INTEGER | none(1), simple(2), md5(3), mmd5(4), sha1(5), msha1(6). The default value is none. | BFD authentication mode for BFD control packets. | As per the MIB. |

hh3cBfdSessTable

About this table

This table contains BFD session information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cBfdSessIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--|---|-----------------|
| hh3cBfdSessIndex (1.3.6.1.4.1.25506.2.72.1.3.1.1) | accessible-for-notify | BfdSessIndex TC | Unsigned32(0..4294967295) | Session index that uniquely identifies a session. | As per the MIB. |
| hh3cBfdSessIfIndex (1.3.6.1.4.1.25506.2.72.1.3.1.2) | read-only | InterfaceIndex | Integer32(1..2147483647) | Index of the interface where the BFD session resides. | As per the MIB. |
| hh3cBfdSessAppSupportId(1.3.6.1.4.1.25506.2.72.1.3.1.3) | read-only | Hh3cAlarmStatus | BITS { none(0), ospf(1), isis(2), bgp(3), mpls(4) } | Upper-layer protocols supported by the BFD session. | As per the MIB. |
| hh3cBfdSessLocalDiscr (1.3.6.1.4.1.25506.2.72.1.3.1.4) | read-only | Unsigned32 | Standard MIB values. | Local discriminator of the BFD session, which is a unique non-zero value. | As per the MIB. |
| hh3cBfdSessRemoteDiscr(1.3.6.1.4.1.25506.2.72.1.3.1.5) | read-only | Unsigned32 | Standard MIB values. | Remote discriminator of the BFD session. The initial value is 0. | As per the MIB. |
| hh3cBfdSessDstPort(1.3.6.1.4.1.25506.2.72.1.3.1.6) | read-only | InetPortNumber | Standard MIB values. | UDP port number of the BFD session. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|---|--|-----------------|
| 3.1.6) | | | The default value is 3784. | | |
| hh3cBfdSessOperMode(1.3.6.1.4.1.25506.2.72.1.3.1.7) | read-only | INTEGER | asynchModeWOEchoFun(1), demandModeWOEchoFunction(2), asynchModeWEchoFun(3), demandModeWEchoFunction(4). The default value is asynchModeWOEchoFun. | BFD session mode. | As per the MIB. |
| hh3cBfdSessAddrType(1.3.6.1.4.1.25506.2.72.1.3.1.8) | read-only | InetAddressType | INTEGER{ unknown(0), ipv4(1), ipv6(2), dns(16) } | IP address type of the interface where the BFD session resides. | As per the MIB. |
| hh3cBfdSessLocalAddr(1.3.6.1.4.1.25506.2.72.1.3.1.9) | read-only | InetAddress | OCTET STRING (0..255) | IP address of the interface where the BFD session resides. | As per the MIB. |
| hh3cBfdSessRemoteAddr(1.3.6.1.4.1.25506.2.72.1.3.1.10) | read-only | InetAddress | OCTET STRING (0..255) | IP address of the interface that receives BFD packets. | As per the MIB. |
| hh3cBfdSessLocalDiag(1.3.6.1.4.1.25506.2.72.1.3.1.11) | read-only | BfdDiag | noDiagnostic(1), controlDetectionTimeExpired(2), echoFunctionFailed(3), neighborSignaledSessionDown(4), forwardingPlaneReset(5), pathDown(6), concatenatedPathDown(7), administrativelyDown(8), reverseConcatenatedPathDown(9). The default value is noDiagnostic. | Diagnosis code that indicates the most recent BFD session state change reason. | As per the MIB. |
| hh3cBfdSessState(1.3.6.1.4.1.25506.2.72.1.3.1.12) | read-only | INTEGER | adminDown(0), down(1), init(2), up(3), The default value is DOWN. | Current state of the BFD session. | As per the MIB. |
| hh3cBfdSessControlPlaneIndepFlag(1.3.6.1.4.1.25506.2.72.1.3.1.13) | read-only | TruthValue | true(1), false(2). The default value is false. | Whether the BFD session can operate independently of the control plane. | As per the MIB. |
| hh3cBfdSessAuthFlag(1.3.6.1.4.1.25506.2.72.1.3.1.14) | read-only | TruthValue | true(1), false(2). The default value is | Flag that indicates whether the BFD session requires | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|---|---|-----------------|
| 1.3.1.14) | | | false. | authentication. | |
| hh3cBfdSessDemandModeFlag(1.3.6.1.4.1.25506.2.72.1.3.1.15) | read-only | TruthValue | true(1), false(2) The default value is false. | Whether the BFD session supports the Demand mode. | As per the MIB. |

hh3cBfdSessStatTable

About this table

This table contains BFD packet statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------------------|---|----------------|
| hh3cBfdSessStatPktInHC(1.3.6.1.4.1.25506.2.72.1.4.1.1) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of received BFD packets. | Not supported |
| hh3cBfdSessStatPktOutHC(1.3.6.1.4.1.25506.2.72.1.4.1.2) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of sent BFD packets. | Not supported |
| hh3cBfdSessStatDownCount(1.3.6.1.4.1.25506.2.72.1.4.1.3) | read-only | Counter32 | INTEGER(0..4294967295) | Number of times the BFD session has entered down state since the most recent reboot of the system. | Not supported |
| hh3cBfdSessStatPktDiscard(1.3.6.1.4.1.25506.2.72.1.4.1.4) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of BFD control packets discarded by the receiver since the most recent reboot of the system. | Not supported |
| hh3cBfdSessStatPktLost(1.3.6.1.4.1.25506.2.72.1.4.1.5) | read-only | Counter64 | INTEGER(0..18446744073709551615) | Number of BFD control packets failed to be sent since the most recent reboot of the system. | Not supported |

hh3cBfdSessPerfTable

About this table

This table contains performance information about a BFD session.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|---------------|--|----------------|
| hh3cBfdSessPerfCreatTime(1.3.6.1.4.1.25506.2.72.1.5.1.1) | read-only | TimeStam p | TimeTick s | System time when the BFD session was created. | Not supported |
| hh3cBfdSessPerfLastUpTime(1.3.6.1.4.1.25506.2.72.1.5.1.2) | read-only | TimeStam p | TimeTick s | System time when the BFD session entered up state. | Not supported |
| hh3cBfdSessPerfLastDownTime(1.3.6.1.4.1.25506.2.72.1.5.1.3) | read-only | TimeStam p | TimeTick s | System time when the BFD session entered down state. | Not supported |

Notifications

hh3cBfdSessStateUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|---------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.72.0.3 | The BFD session comes up. | Informational | - | - | ON |

Description

A notification sent when the BFD session comes up. A BFD session comes up upon completing three-way handshakes.

Status control

ON

CLI: Use the `snmp-agent trap enable bfd` command.

OFF

CLI: Use the `undo snmp-agent trap enable bfd` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-------------------------|--|
| 1.3.6.1.4.1.25506.2.72.1.3.1.1 (hh3cBfdSessIndex) | Session index. | Yes | BfdSessIndexT C | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.72.1.3.1.2 (hh3cBfdSessIfIndex) | Index of the interface where the BFD session resides. | No | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.72.1.3.1.12 (hh3cBfdSessState) | Session state. | No | INTEGER | adminDown(0) down(1) init(2) up(3) |
| 1.3.6.1.4.1.25506.2.72.3.1 (hh3cBfdSessName) | Session name. | No | OCTET STRING (0..64) | Standard MIB values. No value is displayed if the session name does not exist. |
| 1.3.6.1.4.1.25506.2.72.3.2 (hh3cBfdVpnInstanceName) | Name of the VPN to which session is bound. | No | OCTET STRING (0..31) | Standard MIB values. No value is displayed if the session is not bound to any VPNs. |
| 1.3.6.1.4.1.25506.2.72.3.3 (hh3cBfdLocalAddr) | Source address of the session. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.72.3.4 (hh3cBfdRemoteAddr) | Destination address of the session. | No | DisplayString | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cBfdSessStateDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.72.0.4 | The BFD session goes down. | Informational | Major | N/A | ON |

Description

A notification sent when the BFD session goes down. A BFD session goes down after the communication path fails.

Status control

ON

CLI: Use the `snmp-agent trap enable bfd` command.

OFF

CLI: Use the `undo snmp-agent trap enable bfd` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|----------------------|--|
| 1.3.6.1.4.1.25506.2.72.1.3.1.1 (hh3cBfdSessIndex) | Session index. | Yes | BfdSessIndexTC | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.72.1.3.1.2 (hh3cBfdSessIfIndex) | Index of the interface where the BFD session resides. | No | InterfaceIndex | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.72.1.3.1.12 (hh3cBfdSessState) | Session state. | No | INTEGER | adminDown(0) down(1) init(2) up(3) |
| 1.3.6.1.4.1.25506.2.72.3.1 (hh3cBfdSessName) | Session name. | No | OCTET STRING (0..64) | Standard MIB values. No value is displayed if the session name does not exist. |
| 1.3.6.1.4.1.25506.2.72.3.2 (hh3cBfdVpnInstanceName) | Name of the VPN to which session is bound. | No | OCTET STRING (0..31) | Standard MIB values. No value is displayed if the session is not bound to any VPNs. |
| 1.3.6.1.4.1.25506.2.72.3.3 (hh3cBfdLocalAddr) | Source address of the session. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.2.72.3.4 (hh3cBfdRemoteAddr) | Destination address of the session. | No | DisplayString | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cBfdSessReachLimit

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.72.0.5 | The number of BFD sessions has reached the upper limit. | Informational | Major | N/A | ON |

Description

A notification sent when the number of BFD sessions has reached the upper limit on the device. After the notification, new sessions will not become active.

Status control

ON

CLI: Use the `snmp-agent trap enable bfd` command.

OFF

CLI: Use the `undo snmp-agent trap enable bfd` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------------|-------|------------|----------------------|
| 1.3.6.1.4.1.25506.2.72.1.1.4 (hh3cBfdSessNumberLimit) | Upper limit of BFD sessions. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

To resolve the issue:

1. Delete unnecessary BFD sessions.
2. If the issue persists, contact H3C Support.

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HH3C-DLDP2-MIB

About this MIB

HH3C-DLDP2-MIB is a private MIB used to implement network management on the DLDP feature. Use this MIB to enable DLDP globally or on a port, and obtain port running state information, link state information, and DLDP neighbor information.

MIB file name

hh3c-dldp2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).h3cCommon(2).hh3cDldp2(117)

Scalar objects

hh3cDldp2GlobalEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|-----------------------------------|-----------------|
| hh3cDldp2GlobalEnable (1.3.6.1.4.1.25506.2.117.1.1) | read-write | TruthValue | true(1), false(2) | Whether DLDP is enabled globally. | As per the MIB. |

hh3cDldp2Interval

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-------------------|--|-----------------|
| hh3cDldp2Interval (1.3.6.1.4.1.25506.2.117.1.2) | read-write | Integer32 | Integer32(1..100) | Advertisement packet sending interval. | As per the MIB. |

hh3cDldp2AuthMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|----------------------|-----------------|
| hh3cDldp2AuthMode (1.3.6.1.4.1.25506.2.117.1.3) | read-write | INTEGER | unknown(1), none(2), simple(3), md5(4) | Authentication mode. | As per the MIB. |

hh3cDldp2AuthPassword

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|----------------------------|-----------------------------|-----------------|
| hh3cDldp2AuthPassword (1.3.6.1.4.1.25506.2.117.1.4) | read-write | OCTET STRING | OCTET STRING (0..16) | Authentication password. | As per the MIB. |

hh3cDldp2UniShutdown

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--------------------------------------|---|-----------------|
| hh3cDldp2UniShutdown (1.3.6.1.4.1.25506.2.117.1.5) | read-write | INTEGER | unknown(1), auto(2), manual(3) | Port shutdown mode on detecting a unidirectional link. | As per the MIB. |

Tabular objects

hh3cDldp2PortConfigTable

About this table

Use this table to enable DLDP on a port and obtain DLDP port configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---|-----------------|
| hh3cDldp2PortEnable (1.3.6.1.4.1.25506.2.117.2.1.1.1) | read-write | TruthValue | true(1), false(2) | Whether DLDP is enabled on the port. | As per the MIB. |

hh3cDldp2PortStatusTable

About this table

Use this table to obtain DLDP port state and link state information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|-------------|-----------------|
| hh3cDldp2PortOperStatus (1.3.6.1.4.1.25506.2.117.2.2.1.1) | read-only | INTEGER | unknown(1), initial(2), inactive(3), unidirectional(4), bidirectional(5) | Port state. | As per the MIB. |
| hh3cDldp2PortLinkStatus (1.3.6.1.4.1.25506.2.117.2.2.1.2) | read-only | INTEGER | unknown(1), down(2), up(3) | Link state. | As per the MIB. |

hh3cDldp2NeighborTable

About this table

Use this table to obtain neighbor information about a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3cDldp2NeighborBridgeMac, and hh3cDldp2NeighborPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--|-------------------------------------|-----------------|
| hh3cDldp2NeighborBridgeMac (1.3.6.1.4.1.25506.2.117.2.3.1.1) | not-accessible | MacAddress | OCTET STRING (6) | Bridge MAC address of the neighbor. | As per the MIB. |
| hh3cDldp2NeighborPortIndex(1.3.6.1.4.1.25506.2.117.2.3.1.2) | not-accessible | Integer32 | Integer32(1..2147483647) | Port index of the neighbor. | As per the MIB. |
| hh3cDldp2NeighborStatus (1.3.6.1.4.1.25506.2.117.2.3.1.3) | read-only | INTEGER | unknown(1), unconfirmed(2), confirmed(3) | State of the neighbor. | As per the MIB. |
| hh3cDldp2NeighborAgingTime (1.3.6.1.4.1.25506.2.117.2.3.1.4) | read-only | Integer32 | Standard MIB values. | Aging time of the neighbor. | As per the MIB. |

Notifications

This section contains trap notifications.

hh3cDldp2TrapUniLink

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.117.4.0.1 | This notification is generated when DLDP detects unidirectional links. | Failure | Major | - | ON |

Description

A notification sent when DLDP detects unidirectional links.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|------------------------|-------|----------------|------------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Y | InterfaceIndex | 1..2147483647 |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | N | DisplayString | OCTET STRING (SIZE (0..255)) |

Recommended action

Disable the interface, and restore the unidirectional links. If the issue cannot be resolved, contact H3C Support.

hh3cDldp2TrapBidLink

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|------------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.117.4.0.2 | This notification is generated when DLDP detects bidirectional links. | Failure recovery | - | - | ON |

Description

A notification sent when DLDP detects bidirectional links.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|------------------|-------|----------------|---------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Y | InterfaceIndex | 1..2147483647 |

| OID (object name) | Description | Index | Type | Value range |
|-------------------------------|------------------------|-------|---------------|------------------------------|
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface description. | N | DisplayString | OCTET STRING (SIZE (0..255)) |

Recommended action

No action is required.

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HH3C-ERPS-MIB

About this MIB

HH3C-ERPS-MIB is a private MIB used to implement network management for ERPS. Use this MIB to bind a ring port to an ERPS ring or obtain port state information.

MIB file name

hh3c-erps.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).h3cCommon(2).hh3cErps(225)

Notifications

hh3cErpsPortStateForwarding

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.223.1.0.1 | The ERPS ring port transitions to forwarding state. | Informational | Warning | N/A | ON |

Description

A notification sent when the ERPS ring port state becomes forwarding.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.223.1.1.1 (hh3cErpsRingID) | ID of the ERPS ring. | N | Integer32 | Integer32 (1..255) |
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the interface | N | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Name of the interface. | N | OCTET STRING | OCTET STRING (0..255) |

Recommended action

1. Examine the link attached to the blocked port.
2. If the issue persists, contact H3C Support.

hh3cErpsPortStateDiscarding

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.223.1.0.2 | The ERPS ring port transitions to blocked state. | Informational | N/A | 1.3.6.1.4.1.25506.2.223.1.0.1 (hh3cErpsPortStateForwarding) | ON |

Description

A notification sent when the ERPS ring port state becomes blocked.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|--------------|---------------------------|
| 1.3.6.1.4.1.25506.2.223.1.1.1 (hh3cErpsRingID) | ID of the ERPS ring. | N | Integer32 | Integer32 (1..255) |
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the interface | N | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Name of the interface. | N | OCTET STRING | OCTET STRING (0..255) |

Recommended action

1. Examine the link attached to the blocked port.
2. If the issue persists, contact H3C Support.

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HH3C-ETHOAM-MIB

About this MIB

This MIB is a private MIB to implement Ethernet OAM functions.

MIB file name

hh3c-ethoam.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).h3cCommon(2).hh3cEthoam(226)

Notifications

hh3cEthoamNonThresholdRecovery

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.226.1.0.1 | The alarm for a non-threshold-crossing event is cleared. | Informational | - | - | ON |

Description

A notification sent when the alarm for a non-threshold-crossing event is cleared on the local or remote end.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------|-------|--------------|---------------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | No | OCTET STRING | OCTET STRING (0..255) |
| 1.3.6.1.2.1.158.1.6.1.2 (dot3OamEventLogTimestamp) | Timestamp of the event. | No | TimeStamp | TimeTicks |
| 1.3.6.1.2.1.158.1.6.1.3 (dot3OamEventLogOui) | OUI of the event packet. | No | EightOTwoOui | OCTET STRING (SIZE (1..255)) |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|------------|---|
| 1.3.6.1.2.1.158.1.6.1.4 (dot3OamEventLogType) | Event type. | No | Unsigned32 | linkFault(256) dyingGaspEvent(257) criticalLinkEvent(258) |
| 1.3.6.1.2.1.158.1.6.1.5 (dot3OamEventLogLocation) | Whether the event is a local event or a peer event. | No | INTEGER | local(1) remote(2) |
| 1.3.6.1.2.1.158.1.6.1.12 (dot3OamEventLogTimestamp) | Total number of times the event has occurred. | No | Unsigned32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

hh3cEthoamLoopbackFailed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.226.1.0.2 | Loopback detection fails to be enabled on an interface. | Informational | Warning | - | ON |

Description

This notification is generated when loopback detection fails to be enabled on an interface.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|----------------------------------|-----------------|-------|--------------|---------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | No | OCTET STRING | OCTET STRING (0..255) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Verify that the OAM connection is established correctly. If the problem persists, contact H3C Support.

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HH3C-RRPP-MIB

About this MIB

The Rapid Ring Protection Protocol (RRPP) is a link layer protocol designed for Ethernet rings. RRPP can prevent broadcast storms caused by data loops when an Ethernet ring is healthy. RRPP can also rapidly restore the communication paths between the nodes when a link is disconnected on the ring.

Use this MIB to define management information for devices that support RRPP.

MIB file name

hh3c-rrpp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).huawei(2011).h3c(10).h3cCommon(2).h3cRrpp(45)

Scalar objects

hh3cRrppEnableStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|----------------------------|---|-----------------|
| hh3cRrppEnableStatus (1.3.6.1.4.1.25506.2.45.1.1) | read-write | INTEGER | enabled(1), disabled(2) | Whether RRPP is enabled on the device globally. | As per the MIB. |

hh3cRrppPassword

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|---------------------------|-------------------------------|----------------|
| hh3cRrppPassword (1.3.6.1.4.1.25506.2.45.1.2) | read-write | OCTET STRING | OCTET STRING(SIZE(1..16)) | Password configured for RRPP. | Not supported |

hh3cRrppPasswordType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---------------------|----------------|----------------|
| hh3cRrppPasswordType (1.3.6.1.4.1.25506.2.45.1.3) | read-write | INTEGER | simple(1),cipher(2) | Password type. | Not supported |

hh3cRrppProtectVlanConfigMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|-------------------------|--|-----------------|
| hh3cRrppProtectVlanConfigMode (1.3.6.1.4.1.25506.2.45.1.4) | read-only | INTEGER | vlan(1), instance(2) | Mode in which the protected VLANs are configured for RPPP. | As per the MIB. |

Tabular objects

hh3cRrppDomainTable

About this table

This table contains RRPP domain configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---|---|-----------|
| <ol style="list-style-type: none">1. A maximum of 128 RRPP domains can be created.2. When creating an RRPP domain, you must configure hh3cRrppDomainControlVlanID.3. hh3cRrppDomainID must be configured.4. hh3cRrppDomainHelloTime and hh3cRrppDomainFailTime are optional. If configuration is required, they must be both configured.5. By default, hh3cRrppDomainHelloTime is 1 and hh3cRrppDomainFailTime is 3.6. The hh3cRrppDomainFailTime value must be greater than or equal to three times the hh3cRrppDomainHelloTime value.7. hh3cRrppDomainInstanceListLow and hh3cRrppDomainInstanceListHigh are optional. If configuration is required, they must be both configured.8. hh3cRrppDomainProtectVlanListLow and hh3cRrppDomainProtectVlanListHigh are optional. If configuration is required, they must be both configured.9. If the value of hh3cRrppProtectVlanConfigMode is vlan, you can only use hh3cRrppDomainProtectVlanListLow and hh3cRrppDomainProtectVlanListHigh to configure protected VLANs. Configuration for the hh3cRrppDomainInstanceListLow and hh3cRrppDomainInstanceListHigh nodes does not take effect. If the value of hh3cRrppProtectVlanConfigMode is instance, you can only use | <ol style="list-style-type: none">1. hh3cRrppDomainControlVlanID cannot be modified after being created.2. To modify hh3cRrppDomainHelloTime and hh3cRrppDomainFailTime, configure the values for them at the same time.3. The hh3cRrppDomainFailTime value must be greater than or equal to three times the hh3cRrppDomainHelloTime value.4. To modify hh3cRrppDomainInstanceListLow and hh3cRrppDomainInstanceListHigh, configure the values for them at the same time.5. To modify hh3cRrppDomainProtectVlanListLow and hh3cRrppDomainProtectVlanListHigh, configure the values for them at the same time.6. If the value of hh3cRrppProtectVlanConfigMode is vlan, you can only use hh3cRrppDomainProtectVlanListLow and hh3cRrppDomainProtectVlanListHigh to configure protected VLANs. Configuration for the hh3cRrppDomainInstanceListLow and hh3cRrppDomainInstanceListHigh nodes does not take effect. If the value of hh3cRrppProtectVlanConfigMode is instance, you can only use hh3cRrppDomainInstanceListLow and hh3cRrppDomainInstanceListHigh to configure VLANs mapped to the specified MSTIs as protected VLANs. Configuration for the hh3cRrppDomainProtectVlanListLow | An RRPP domain that has RRPP rings cannot be deleted. | Supported |

| Create | Edit/Modify | Delete | Read |
|---|--|--------|------|
| <p>h3cRrpDomainInstanceListLow and h3cRrpDomainInstanceListHigh to configure VLANs mapped to the specified MSTIs as protected VLANs. Configuration for the h3cRrpDomainProtectVlanListLow and h3cRrpDomainProtectVlanListHigh nodes does not take effect.</p> <p>10. When configuring h3cRrpDomainControlVlanID, make sure the VLAN does not exist nor is a reserved VLAN.</p> | <p>and h3cRrpDomainProtectVlanListHigh nodes does not take effect.</p> | | |

Columns

The table index is h3cRrpDomainID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|--------------|---------------|---------------------------------|--|
| hh3cRrpDomainID (1.3.6.1.4.1.25506.2.45.2.1.1.1) | accessible-for-notify | Integer | 1..16128 | RRPP domain ID | As per the MIB. |
| hh3cRrpDomainControlVlanID (1.3.6.1.4.1.25506.2.45.2.1.1.2) | read-create | Integer32 | 2..4094 65535 | Control VLAN ID | <ol style="list-style-type: none"> 1. This object sets the primary control VLAN by its ID in the range of 2 to 4093. The secondary control VLAN ID is automatically configured by using the primary control VLAN ID plus 1. 2. A control VLAN already configured for an RRPP domain cannot be modified or deleted. 3. Make sure the control VLAN for the RRPP domain has not been created nor reserved. |
| hh3cRrpDomainHelloTime (1.3.6.1.4.1.25506.2.45.2.1.1.3) | read-create | Integer32 | 1..10 | Hello timer of the RRPP domain. | As per the MIB. |
| hh3cRrpDomainFailTime (1.3.6.1.4.1.25506.2.45.2.1.1.4) | read-create | Integer32 | 3..30 | Fail timer of the RRPP domain. | As per the MIB. |
| hh3cRrpDomainRowStatus (1.3.6.1.4.1.25506.2.45.2.1.1.5) | read-create | RowStatus | SIZE(256) | Row status. | As per the MIB. |
| hh3cRrpDomainInstanceListLow | read-create | OCTET STRING | | Low MSTI ID of the MSTI list | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|--------------|-------------|--|-----------------|
| (1.3.6.1.4.1.25506.2.45.2.1.1.6) | | | | mapped to protected VLANs. | |
| hh3cRrppDomainInstanceListHigh (1.3.6.1.4.1.25506.2.45.2.1.1.7) | read-create | OCTET STRING | SIZE(256) | High MSTI ID of the MSTI list mapped to protected VLANs. | As per the MIB. |

hh3cRrppRingTable

About this table

This table contains RRPP ring configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---|--|-----------|
| <ol style="list-style-type: none"> 1. A maximum of 128 RRPP rings can be created for an RRPP domain. 2. hh3cRrppDomainID must be configured. This index is provided by hh3cRrppDomainID in hh3cRrppDomainTable. 3. hh3cRrppRingID must be configured. 4. The ring IDs in an RRPP domain must be different. The ring IDs in different RRPP domains can be the same. 5. You must configure hh3cRrppRingNodeMode, hh3cRrppRingPrimaryPort, hh3cRrppRingSecondaryPort, and hh3cRrppRingLevel. 6. hh3cRrppRingEnableStatus is optional. The default value is disabled(2). 7. An RRPP ring cannot be created and enabled at the same time. You must create a ring and then enable it. 8. You must first create the primary ring and configure transit node for it before creating a subring and configure edge node and the assistant edge node for the subring. Make sure the two rings have only one common port. | <ol style="list-style-type: none"> 1. Only the hh3cRrppRingEnableStatus value can be modified. If an RRPP domain contains both a primary ring and subrings: <ol style="list-style-type: none"> a. To set the value from disabled to enabled, first enable the primary ring and then enable the subrings. b. To set the value from enabled to disabled, first disable all subrings and then disable the primary ring. 2. Other values cannot be modified. To modify a value, delete the row and then create it again. | <ol style="list-style-type: none"> 1. An activated domain cannot be deleted. If hh3cRrppRingActive is set to Active(1), the row cannot be deleted. 2. If subrings exist in an RRPP domain, the primary ring cannot be deleted. | Supported |

Columns

The table indexes are hh3cRrppDomainID and hh3cRrppRingID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------|---------------|-----------|-------------|---------------|-----------------|
| hh3cRrppRingID | accessible-fo | Integer32 | 1..64128 | RRPP ring ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|--|--|
| (1.3.6.1.4.1.25506.2.45.2.2.1.1) | r-notify | | | | |
| hh3cRrppRingEnableStatus (1.3.6.1.4.1.25506.2.45.2.2.1.2) | read-create | INTEGER | enabled(1), disabled(2) | Enabling status of the RRPP ring. | As per the MIB. |
| hh3cRrppRingActive (1.3.6.1.4.1.25506.2.45.2.2.1.3) | read-only | INTEGER | active(1),inactive(2) | Whether the RRPP ring is activated. | As per the MIB. |
| hh3cRrppRingState (1.3.6.1.4.1.25506.2.45.2.2.1.4) | read-only | INTEGER | unknown(1), health(2), fault(3) | RRPP ring state. | As per the MIB. |
| hh3cRrppRingNodeMode (1.3.6.1.4.1.25506.2.45.2.2.1.5) | read-create | INTEGER | master(1), transit(2), edge(3), assistantEdge(4) | Node mode of the device in the RRPP ring. | As per the MIB. |
| hh3cRrppRingPrimaryPort (1.3.6.1.4.1.25506.2.45.2.2.1.6) | read-create | Integer32 | Standard MIB values. | Primary port of the device in the RRPP ring. | <ol style="list-style-type: none"> On a primary node or transit node, the value is the interface index of the primary port. If no primary port exists, the value is 0. Common port on an edge node or the assistant edge node. |
| hh3cRrppRingSecondaryPort (1.3.6.1.4.1.25506.2.45.2.2.1.7) | read-create | Integer32 | Standard MIB values. | Secondary port of the device in the RRPP ring. | If no secondary port or edge port exist, the value is 0. |
| hh3cRrppRingLevel (1.3.6.1.4.1.25506.2.45.2.2.1.8) | read-create | INTEGER | majorRing(1), subRing(2) | RRPP ring level. | As per the MIB. |
| hh3cRrppRingRowStatus (1.3.6.1.4.1.25506.2.45.2.2.1.9) | read-create | RowStatus | active(1),notInService(2),notReady(3),createAndGo(4),createAndWait(5),destroy(6) | Row status. | As per the MIB. |

hh3cRrppPortTable

About this table

This table contains RRPP port statistics information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cRrppDomainID, h3cRrppRingID, and h3cRrppPortID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--|---|-----------------|
| hh3cRrppPortID (1.3.6.1.4.1.25506.2.45.2.3.1.1) | not-accessible | Integer32 | Standard MIB values. | Port ID. | As per the MIB. |
| hh3cRrppPortRole (1.3.6.1.4.1.25506.2.45.2.3.1.2) | read-only | INTEGER | primary(1), secondary(2), common(3), edge(4) | Port role. | As per the MIB. |
| hh3cRrppPortState (1.3.6.1.4.1.25506.2.45.2.3.1.3) | read-only | INTEGER | | Port state. | As per the MIB. |
| hh3cRrppPortRXError (1.3.6.1.4.1.25506.2.45.2.3.1.4) | read-only | Counter32 | unknown(1), unblocked(2), blocked(3), down(4) | Number of error packets received on the port. | As per the MIB. |
| hh3cRrppPortRXHello (1.3.6.1.4.1.25506.2.45.2.3.1.5) | read-only | Counter32 | Standard MIB values. | Number of hello packets received on the port. | As per the MIB. |
| hh3cRrppPortRXLinkUp (1.3.6.1.4.1.25506.2.45.2.3.1.6) | read-only | Counter32 | Standard MIB values. | Number of LinkUp packets received on the port. | As per the MIB. |
| hh3cRrppPortRXLinkDown (1.3.6.1.4.1.25506.2.45.2.3.1.7) | read-only | Counter32 | Standard MIB values. | Number of LinkDown packets received on the port. | As per the MIB. |
| hh3cRrppPortRXCommonFlush (1.3.6.1.4.1.25506.2.45.2.3.1.8) | read-only | Counter32 | Standard MIB values. | Number of CommonFlush packets received on the port. | As per the MIB. |
| hh3cRrppPortRXCompleteFlush (1.3.6.1.4.1.25506.2.45.2.3.1.9) | read-only | Counter32 | Standard MIB values. | Number of CompleteFlush packets received on the port. | As per the MIB. |
| hh3cRrppPortTXHello (1.3.6.1.4.1.25506.2.45.2.3.1.10) | read-only | Counter32 | Standard MIB values. | Number of hello packets sent on the port. | As per the MIB. |
| hh3cRrppPortTXLinkUp (1.3.6.1.4.1.25506.2.45.2.3.1.11) | read-only | Counter32 | Standard MIB values. | Number of LinkUp packets sent on the port. | As per the MIB. |
| hh3cRrppPortTXLinkDown (1.3.6.1.4.1.25506.2.45.2.3.1.12) | read-only | Counter32 | Standard MIB values. | Number of LinkDown packets sent on the port. | As per the MIB. |
| hh3cRrppPortTXCommonFlush | read-only | Counter32 | Standard MIB values. | Number of CommonFlush packets sent on | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| (1.3.6.1.4.1.25506.2.45.2.3.1.13) | | | | the port. | |
| hh3cRrppPortTXCompleteFlush (1.3.6.1.4.1.25506.2.45.2.3.1.14) | read-only | Counter32 | Standard MIB values. | Number of CompleteFlush packets sent on the port. | As per the MIB. |
| hh3cRrppPortRXEdgeHello (1.3.6.1.4.1.25506.2.45.2.3.1.15) | read-only | Counter32 | Standard MIB values. | Number of EdgeHello packets received on the port. | As per the MIB. |
| hh3cRrppPortRXMajorFault (1.3.6.1.4.1.25506.2.45.2.3.1.16) | read-only | Counter32 | Standard MIB values. | Number of MajorFault packets received on the port. | As per the MIB. |
| hh3cRrppPortTXEdgeHello (1.3.6.1.4.1.25506.2.45.2.3.1.17) | read-only | Counter32 | Standard MIB values. | Number of EdgeHello packets sent on the port. | As per the MIB. |
| hh3cRrppPortTXMajorFault (1.3.6.1.4.1.25506.2.45.2.3.1.18) | read-only | Counter32 | Standard MIB values. | Number of MajorFault packets sent on the port. | As per the MIB. |

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HH3C-SMLK-MIB

About this MIB

HH3C-SMLK-MIB is a private MIB defined to implement network management on the Smart Link feature. You can use this MIB to create, modify, and delete smart link groups. Smart link group settings include preemption mode, control VLAN, and protected VLAN. You can also configure primary and secondary ports for a smart link group, configure the flush message receiving function, and obtain configuration information.

MIB file name

hh3c-smlk.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).h3cCommon(2).hh3cSmlk(147)

Tabular objects

hh3cSmlkGroupTable

About this table

Use this table to obtain and set basic smart link group information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---|--|-----------|
| If a valid value is set for hh3cSmlkSpeedThreshold, hh3cSmlkPreemptionMode must be set to speed. hh3cSmlkInstanceListLow and hh3cSmlkInstanceListHigh are optional. If configuration is required, they must be both configured. | If a valid value is set for hh3cSmlkSpeedThreshold, hh3cSmlkPreemptionMode must be set to speed. hh3cSmlkInstanceListLow and hh3cSmlkInstanceListHigh must be both configured. If member ports are configured for a smart link group, hh3cSmlkInstanceListLow and hh3cSmlkInstanceListHigh cannot be both set to 0. | To delete a smart link group with member ports configured, delete the member ports from the group first. | Supported |

Columns

The table index is hh3cSmlkGroupID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|-------------------|--------------|--|
| hh3cSmlkGroupID (1.3.6.1.4.1.25506.2.147.1.1.1.1) | accessible-for-notify | Integer32 | Integer32(1..256) | Table index. | Smart link group ID. The valid value range is 1 to 256. Supported value varies by device |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|--|--|--|
| | | | | | model. |
| hh3cSmlkDeviceID (1.3.6.1.4.1.25506.2.147.1.1.1.2) | read-only | MacAddress | OCTET STRING (6) | Device ID. | As per the MIB. |
| hh3cSmlkPreemptionMode (1.3.6.1.4.1.25506.2.147.1.1.1.3) | read-create | INTEGER | none(1), role(2), speed(3) | Preemption mode. | As per the MIB. |
| hh3cSmlkSpeedThreshold (1.3.6.1.4.1.25506.2.147.1.1.1.4) | read-create | Integer32 | Integer32(0..10000) | Speed preemption threshold that applies only to speed preemption mode. | Default: 0. The value takes effect when hh3cSmlkPreemptionMode is set to speed. |
| hh3cSmlkPreemptionDelay (1.3.6.1.4.1.25506.2.147.1.1.1.5) | read-create | Integer32 | Integer32(0..300) | Preemption delay. | As per the MIB. |
| hh3cSmlkControlVlanID (1.3.6.1.4.1.25506.2.147.1.1.1.6) | read-create | Integer32 | Integer32(1..4094 65535) | Control VLAN. | Default: 1. The value 65535 is invalid, indicating not configured. |
| hh3cSmlkInstanceListLow (1.3.6.1.4.1.25506.2.147.1.1.1.7) | read-create | OCTET STRING | OCTET STRING (256) | Low bits of MSTIs mapped to protected VLANs. | As per the MIB. |
| hh3cSmlkInstanceListHigh (1.3.6.1.4.1.25506.2.147.1.1.1.8) | read-create | OCTET STRING | OCTET STRING (256) | High bits of MSTIs mapped to protected VLANs. | As per the MIB. |
| hh3cSmlkGroupRowStatus (1.3.6.1.4.1.25506.2.147.1.1.1.9) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cSmlkPortTable

About this table

Use this table to obtain and set Smart Link port information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|--|-----------|-----------|
| Before creating hh3cSmlkPortTable, you must create protected | Once set, the port roles of the smart link group cannot be modified. | Supported | Supported |

| | | | |
|--|--|--|--|
| VLANs. Do not enable STP, RRPP, or ERPS for the port. When assigning a port to multiple smart link groups, configure each group with a different protected VLAN. Port roles must be specified for the smart link group. | | | |
|--|--|--|--|

Columns

The table indexes are hh3cSmlkGroupID and hh3cSmlkPortIfIdx.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|----------------|--|---|-----------------|
| hh3cSmlkPortIfIdx (1.3.6.1.4.1.25506.2.147.1.2.1.1) | accessible-for-notify | InterfaceIndex | Integer32 (1..2147483647) | Interface index of the smart link group. | As per the MIB. |
| hh3cSmlkPortRole (1.3.6.1.4.1.25506.2.147.1.2.1.2) | read-create | INTEGER | primary(1), secondary(2) | Port role. | As per the MIB. |
| hh3cSmlkPortStatus (1.3.6.1.4.1.25506.2.147.1.2.1.3) | read-only | INTEGER | down(1), active(2), standby(3) | Port state. | As per the MIB. |
| hh3cSmlkFlushCount (1.3.6.1.4.1.25506.2.147.1.2.1.4) | read-only | Counter64 | Standard MIB values. | Number of flush messages sent by the port. | As per the MIB. |
| hh3cSmlkLastFlushTime (1.3.6.1.4.1.25506.2.147.1.2.1.5) | read-only | TimeStamp | Standard MIB values. | Most recent time when flush messages were sent. | As per the MIB. |
| hh3cSmlkPortRowStatus (1.3.6.1.4.1.25506.2.147.1.2.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cSmlkFlushEnableTable

About this table

Use this table to enable flush message receiving on a port and obtain flush message configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|--------------------------------|---------------|-----------|
| Not supported | hh3cSmlkControlVlanListLow and | Not supported | Supported |

| | | | |
|--|---|--|--|
| | hh3cSmlkControlVlanListHigh must be both specified. | | |
|--|---|--|--|

Columns

The table index is hh3cSmlkIfIndx.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|------------------------------|--|-----------------|
| hh3cSmlkIfIndex (1.3.6.1.4.1.25506.2.147.1.3.1.1) | not-accessible | InterfaceIndex | Integer32 (1..2147483647) | Interface index. | As per the MIB. |
| hh3cSmlkControlVlanListLow (1.3.6.1.4.1.25506.2.147.1.3.1.2) | read-write | OCTET STRING | OCTET STRING (256) | Low bits of control VLANs for receiving flush messages. | As per the MIB. |
| hh3cSmlkControlVlanListHigh (1.3.6.1.4.1.25506.2.147.1.3.1.3) | read-write | OCTET STRING | OCTET STRING (256) | High bits of control VLANs for receiving flush messages. | As per the MIB. |

Notifications

This section contains trap notifications.

hh3cSmlkGroupLinkActive

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.147.2.0.1 | A member port transitions to forwarding state. | Informational | N/A | N/A | ON |

Description

A notification sent when a member port becomes active.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|----------------|---------------|
| 1.3.6.1.4.1.25506.2.147.1.1.1.1 (hh3cSmlkGroupID) | Smart link group ID. | No | Integer32 | 1..256 |
| 1.3.6.1.4.1.25506.2.147.1.2.1.1 (hh3cSmlkPortIfIndex) | Index of the member port. | Yes | InterfaceIndex | 1..2147483647 |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Detect the link of the blocked port.

hh3cSmlkGroupStatusSwitch

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|---------------|----------|-----------------------|----------------|
| (1.3.6.1.4.1.25506.2.147.2.0.2) | The state of the smart link group changes. | Informational | N/A | N/A | ON |

Description

A notification sent when the state of the smart link group changes.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|------------------------|-------|-----------|--|
| 1.3.6.1.4.1.25506.2.147.1.1.1.1 (hh3cSmlkGroupID) | Smart link group ID. | No | Integer32 | Integer32 (1..256) |
| 1.3.6.1.4.1.25506.2.147.2.1.1 (hh3cSmlkGroupStatus) | Smart link group state | No | INTEGER | unknown(0), alldown(1), oneup(2), twoup(3), delay(4) |

Recommended action

To resolve the issue:

1. Check the state of the link attached to the smart link group member port and the smart link group configuration.
2. If the issue persists, contact H3C Support.

hh3cSmlkInactiveLinkDown

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|--|---------------|----------|--|----------------|
| 1.3.6.1.4.1.25506.2.147.2.0.3 | The backup link of the smart link group fails. | Informational | Warning | 1.3.6.1.4.1.25506.2.147.2.0.3 (hh3cSmlkInactiveLinkUp) | ON |

Description

A notification sent when the backup link of the smart link group fails.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------|-------|----------------|-----------------------|
| 1.3.6.1.4.1.25506.2.147.1.1.1.1 (hh3cSmlkGroupID) | Smart link group ID. | No | Integer32 | Integer32 (1..256) |
| 1.3.6.1.4.1.25506.2.147.1.2.1.1 (hh3cSmlkPortIfIndex) | Index of the member port. | No | InterfaceIndex | 1..2147483647 |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name. | Yes | OCTET STRING | OCTET STRING (0..255) |

Recommended action

To resolve the issue:

1. Check the state of the link attached to the smart link group member port.
2. If the issue persists, contact H3C Support.

hh3cSmlkInactiveLinkUp

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.147.2.0.4 | The backup link of the smart link group recovers. | Informational | Warning | N/A | ON |

Description

A notification sent when the backup link of the smart link group recovers.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|----------------|-----------------------|
| 1.3.6.1.4.1.25506.2.147.1.1.1.1 (hh3cSmlkGroupID) | Smart link group ID. | No | Integer32 | Integer32 (1..256) |
| 1.3.6.1.4.1.25506.2.147.1.2.1.1 (hh3cSmlkPortIfIndex) | Index of the member port. | No | InterfaceIndex | 1..2147483647 |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name | Yes | OCTET STRING | OCTET STRING (0..255) |

Recommended action

No action is required.

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VRRP-MIB

About this MIB

This MIB contains general VRRP entries.

MIB file name

rfc2787-vrrp.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).vrrpMIB(68)

Scalar objects

vrrpNodeVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--------------|-----------------|
| vrrpNodeVersion (1.3.6.1.2.1.68.1.1) | read-only | Integer32 | Standard MIB values. | VRRP version | As per the MIB. |

vrrpNotificationCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|------------------------------|---|-----------------|
| vrrpNotificationCntl (1.3.6.1.2.1.68.1.2) | read-write | INTEGER | enabled (1), disabled (2) | Whether SNMP notifications is enabled for VRRP. | As per the MIB. |

vrrpTrapPacketSrc

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|-----------|---------------------|---|-----------------|
| vrrpTrapPacketSrc (1.3.6.1.2.1.68.1.5) | accessible-for-notification | IpAddress | OCTET STRING (4) | IP address of the received VRRP packet. | As per the MIB. |

vrrpTrapAuthErrorType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------|--|---|-----------------|
| vrrpTrapAuthErrorType (1.3.6.1.2.1.68.1.6) | accessible-for-notify | INTEGER | invalidAuthType (1), authTypeMismatch (2), authFailure (3) | Potential types of configuration conflicts. | As per the MIB. |

vrrpRouterChecksumErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| vrrpRouterChecksumErrors (1.3.6.1.2.1.68.2.1) | read-only | Counter32 | Standard MIB values. | Total number of received VRRP advertisement packets with an invalid checksum value. | As per the MIB. |

vrrpRouterVersionErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| vrrpRouterVersionErrors (1.3.6.1.2.1.68.2.2) | read-only | Counter32 | Standard MIB values. | Total number of received VRRP advertisement packets with an unknown or unsupported version number. | As per the MIB. |

vrrpRouterVrIdErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| vrrpRouterVrIdErrors (1.3.6.1.2.1.68.2.3) | read-only | Counter32 | Standard MIB values. | Total number of received VRRP advertisement packets with an invalid virtual router ID. | As per the MIB. |

Tabular objects

vrrpOperTable

About this table

Use this table to define operation parameters for a VRRP group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and vrrpOperVrld.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---|--|-----------------------------------|
| vrrpOperVrld (1.3.6.1.2.1.68.1.3.1.1) | not-accessible | Vrld | Integer32(1..255) | Virtual router ID of the VRRP group. | As per the MIB. |
| vrrpOperVirtualMacAddr (1.3.6.1.2.1.68.1.3.1.2) | read-only | MacAddress | OCTET STRING (6) | Virtual MAC address of the VRRP group. | As per the MIB. |
| vrrpOperState (1.3.6.1.2.1.68.1.3.1.3) | read-only | INTEGER | initialize(1), backup(2), master(3) | Current state of the VRRP group. | As per the MIB. |
| vrrpOperAdminState (1.3.6.1.2.1.68.1.3.1.4) | read-create | INTEGER | up(1), down(2) | Whether the VRRP group is enabled. | As per the MIB. |
| vrrpOperPriority (1.3.6.1.2.1.68.1.3.1.5) | read-create | Integer32 | Integer32(0..255) | Priority of the device in the VRRP group. | As per the MIB. |
| vrrpOperIpAddrCount (1.3.6.1.2.1.68.1.3.1.6) | read-only | Integer32 | Integer32(0..255) | Number of virtual IP addresses in the VRRP group. | As per the MIB. |
| vrrpOperMasterIpAddr (1.3.6.1.2.1.68.1.3.1.7) | read-only | IpAddress | OCTET STRING (4) | Real IP address of the master device. | As per the MIB. |
| vrrpOperPrimaryIpAddr (1.3.6.1.2.1.68.1.3.1.8) | read-create | IpAddress | OCTET STRING (4) | Object used to specify the IP address that will become the vrrpOperMasterIpAddr when the device transitions from backup to master (in the case where the interface has multiple IP addresses). | Supports only the read operation. |
| vrrpOperAuthType (1.3.6.1.2.1.68.1.3.1.9) | read-create | INTEGER | noAuthentication(1), simpleTextPassword(2), ipAuthenticationHeader(3) | Authentication mode used for authenticating VRRP packets | Not supported. |
| vrrpOperAuthKey (1.3.6.1.2.1.68.1.3.1.10) | read-create | OCTET STRING | OCTET STRING (0..16) | Authentication key. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|--|---|------------------------------|
| vrpOperAdvertisementInterval (1.3.6.1.2.1.68.1.3.1.11) | read-create | Integer32 | Integer32(1..255) | VRRP advertisement interval in seconds. | Value range: 1 to 41. |
| vrpOperPreemptMode (1.3.6.1.2.1.68.1.3.1.12) | read-create | TruthValue | true(1), false(2) | Whether the preemptive mode is enabled for the VRRP group. | As per the MIB. |
| vrpOperVirtualRouterUpTime (1.3.6.1.2.1.68.1.3.1.13) | read-only | TimeStamp | TimeTicks | Time when the VRRP group transitions from Initialize state to another state. | As per the MIB. |
| vrpOperProtocol (1.3.6.1.2.1.68.1.3.1.14) | read-create | INTEGER | ip (1), bridge (2), decnet (3), other (4) | Protocol controlled by the VRRP group. | The value is fixed at ip(1). |
| vrpOperRowStatus (1.3.6.1.2.1.68.1.3.1.15) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status of the table. | As per the MIB. |

vrpAssolpAddrTable

About this table

This table contains the virtual IP addresses associated with VRRP groups.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex, vrpOperVrId, and vrpAssolpAddr.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|---|--|--|
| vrpAssolpAddr (1.3.6.1.2.1.68.1.4.1.1) | not-accessible | IpAddress | OCTET STRING (4) | Virtual IP address associated with the VRRP group. | As per the MIB. |
| vrpAssolpAddrRowStatus (1.3.6.1.2.1.68.1.4.1.2) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status of the table. | Supports only active(1), createAndGo(4), and destroy(6). |

vrrpRouterStatsTable

About this table

This table contains VRRP group statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|---|-----------------|
| vrrpStatsBecomeMaster (1.3.6.1.2.1.68.2.4.1.1) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of transitions to master state. | As per the MIB. |
| vrrpStatsAdvertiseRcvd (1.3.6.1.2.1.68.2.4.1.2) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets. | As per the MIB. |
| vrrpStatsAdvertiseIntervalErrors (1.3.6.1.2.1.68.2.4.1.3) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with a different advertisement interval than the local configuration. | As per the MIB. |
| vrrpStatsAuthFailures (1.3.6.1.2.1.68.2.4.1.4) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of VRRP advertisement packets that failed to pass authentication. | As per the MIB. |
| vrrpStatsIpTtlErrors (1.3.6.1.2.1.68.2.4.1.5) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with IP TTL not equal to 255. | As per the MIB. |
| vrrpStatsPriorityZeroPktsRcvd (1.3.6.1.2.1.68.2.4.1.6) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with a priority of 0. | As per the MIB. |
| vrrpStatsPriorityZeroPktsSent (1.3.6.1.2.1.68.2.4.1.7) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of sent VRRP advertisement packets with a priority of 0. | As per the MIB. |
| vrrpStatsInvalidTypePktsRcvd (1.3.6.1.2.1.68.2.4.1.8) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with an invalid type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--|-----------------|
| .1.8) | | | | packets with an invalid value in the type field. | |
| vrrpStatsAddressListErrors (1.3.6.1.2.1.68.2.4.1.9) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with an address list that does not match the local configuration. | As per the MIB. |
| vrrpStatsInvalidAuthType (1.3.6.1.2.1.68.2.4.1.10) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with an unknown authentication type. | As per the MIB. |
| vrrpStatsAuthTypeMismatch (1.3.6.1.2.1.68.2.4.1.11) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with an authentication type that does not match the local configuration. | As per the MIB. |
| vrrpStatsPacketLengthErrors (1.3.6.1.2.1.68.2.4.1.12) | read-only | Counter32 | INTEGER(0..4294967295) | Total number of received VRRP advertisement packets with a packet length smaller than that in the VRRP header. | As per the MIB. |

Notifications

vrrpTrapNewMaster

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.68.0.1 | Indicates that the sending device has transitioned to master state. | Informational | Warning | N/A | ON |

Description

A notification sent when the sending device (agent) has transitioned to master state.

Status control

ON

CLI: Use the `snmp-agent trap enable vrrp new-master` command.

OFF

CLI: Use the `undo snmp-agent trap enable vrrp new-master` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------|------------------|
| 1.3.6.1.2.1.68.1.3.1.7 (vrrpOperMasterIpAddr) | Real (primary) IP address of the master router that is used as the source address of VRRP advertisement packets. | No | IpAddress | OCTET STRING (4) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

vrrpTrapAuthFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.68.0.2 | Indicates the received VRRP packet contains an authentication type or authentication key that conflicts with the local configuration. | Informational | Warning | N/A | ON |

Description

A notification sent upon receiving a VRRP packet from a router with an authentication type or authentication key setting that conflicts with the local router. Implementation of this notification is optional.

Status control

ON

CLI: Use the `snmp-agent trap enable vrrp auth-failure` command.

OFF

CLI: Use the `undo snmp-agent trap enable vrrp auth-failure` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|---|
| 1.3.6.1.2.1.68.1.5 (vrrpTrapPacketSrc) | IP address of the received VRRP packet. | No | IpAddress | OCTET STRING (4) |
| 1.3.6.1.2.1.68.1.6 (vrrpTrapAuthErrorType) | Potential types of configuration conflicts. | No | INTEGER | invalidAuthType(1) authTypeMismatch(2) authFailure(3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Check for configuration errors or configuration conflicts.

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DISMAN-EVENT-MIB

About this MIB

This MIB provides an automatic and distributed monitoring and management mechanism for MIB objects. By periodically monitoring MIB objects., the system automatically triggers the predefined notifications or set operations when the monitored objects meet the trigger conditions.

MIB file name

rfc2981-disman-event.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dismanEventMIB(88)

Scalar objects

mteResourceSampleMinimum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-----------------------------------|--|--|
| mteResourceSampleMinimum (1.3.6.1.2.1.88.1.1.1) | read-write | Integer32 | Integer32 2 (1..2147483647) | Minimum sampling interval allowed by the system. | Default: 1. Each trigger sampling interval must be equal to or larger than the minimum sampling interval to lessen the impact of constant sampling. Modifying this node does not affect existing triggers. |

mteResourceSampleInstanceMaximum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|--|--|
| mteResourceSampleInstanceMaximum (1.3.6.1.2.1.88.1.1.2) | read-write | Unsigned32 | Standard MIB values. | Maximum number of object instances that can be concurrently sampled. | A value of 0 indicates that no manual limit is specified. The limit is dynamic based on system operations and resources. Changing the maximum number of object instances that can be concurrently sampled does not affect the existing instances. If the maximum number of object instances that can be concurrently sampled is changed to a value smaller than the number of existing instances, the existing instances will continue to be sampled. |

mteResourceSampleInstances

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|--------------------------------------|-----------------|
| mteResourceSampleInstances (1.3.6.1.2.1.88.1.1.3) | read-only | Gauge32 | Standard MIB values. | Number of current sampled instances. | As per the MIB. |

mteResourceSampleInstancesHigh

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------|-----------------------------------|-----------------|
| mteResourceSampleInstancesHigh (1.3.6.1.2.1.88.1.1.4) | read-only | Gauge32 | Standard MIB values. | Peak number of sampled instances. | As per the MIB. |

mteResourceSampleInstanceLacks

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|-----------------|
| mteResourceSampleInstanceLacks (1.3.6.1.2.1.88.1.1.5) | read-only | Counter32 | Standard MIB values. | Number of sampling failures after the maximum number of sampled instances is reached. | As per the MIB. |

mteTriggerFailures

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|----------------------------------|-----------------|
| mteTriggerFailures (1.3.6.1.2.1.88.1.2.1) | read-only | Counter32 | Standard MIB values. | Number of trigger test failures. | As per the MIB. |

mteEventFailures

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--------------------------------------|-----------------|
| mteEventFailures (1.3.6.1.2.1.88.1.4.1) | read-only | Counter32 | Standard MIB values. | Number of notification or set action | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|-------------|----------------|
| | | | | failures. | |

mteHotTrigger

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--------------------------|---|-----------------|
| mteHotTrigger (1.3.6.1.2.1.88.2.1.1) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Name of a trigger causing a notification. | As per the MIB. |

mteHotTargetName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------------|--------------------------|--|-----------------|
| mteHotTargetName (1.3.6.1.2.1.88.2.1.2) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Remote target host name of a notification. | As per the MIB. |

mteHotContextName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--------------------------|---------------------------------|-----------------|
| mteHotContextName (1.3.6.1.2.1.88.2.1.3) | accessible-for-notify | SnmpAdminString | OCTET STRING (0..255) | Context name of a notification. | As per the MIB. |

mteHotOID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------------------|-------------------|----------------------|---|---|
| mteHotOID (1.3.6.1.2.1.88.2.1.4) | accessible-for-notify | OBJECT IDENTIFIER | Standard MIB values. | OID of the target object related to a notification. | <p>If the notification is triggered by mteTriggerFired, mteTriggerRising, mteTriggerFalling, or mteTriggerFailure, the OID is the OID of the monitored object.</p> <p>If the notification is triggered by mteEventSetFailure, the OID is the OID of the set object.</p> |

mteHotValue

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------------|-----------------------|-----------|----------------------|---|-----------------|
| mteHotValue (1.3.6.1.2.1.88.2.1.5) | accessible-for-notify | Integer32 | Standard MIB values. | Value of the target object to match the trigger condition of a trigger. | As per the MIB. |

mteFailedReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------------|--|-------------------------|-----------------|
| mteFailedReason (1.3.6.1.2.1.88.2.1.5) | accessible-for-notify | FailureReason | localResourceLack(-1), badDestination(-2), destinationUnreachable(-3), noResponse(-4), badType(-5), sampleOverrun(-6), noError(0), tooBig(1), noSuchName(2), badValue(3), readOnly(4), genErr(5), noAccess(6), wrongType(7), wrongLength(8), wrongEncoding(9), wrongValue(10), noCreation(11), inconsistentValue(12), resourceUnavailable(13), commitFailed(14), undoFailed(15), authorizationError(16), notWritable(17), inconsistentName(18) | Trigger failure reason. | As per the MIB. |

Tabular objects

mteTriggerTable

About this table

Use this table to configure or obtain information about triggers, including specifying monitored objects and setting the trigger test type, sampling interval, and sampling method.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

- To set the state of a row to createAndGo when creating the row, the objects in the row must meet the following requirements:
 - The index of the row does not exist and an SNMPv3 user with name **mteOwner** exists. In addition, the privileges of the SNMPv3 user are equal to or less than the privileges of the current operator.
 - The node type of monitored objects must be one of the following types: table, conceptual row, table column, simple leaf, or parent node of a leaf node.
 - Set mteTriggerTargetTag to null.
 - The value of mteTriggerFrequency must be equal to or greater than the value of mteResourceSampleMinimum.
 - The mteTriggerObjectsOwner object must be an SNMPv3 user and the privileges of the SNMPv3 user are equal to or less than the privileges of the current operator.
 - Do not set the mteTriggerEnabled node.
 - Other nodes meet the MIB definitions.
- To set the state of a row to createAndWait when creating the row, the objects in the row must meet the following requirements:
 - The index of the row does not exist and an SNMPv3 user with name **mteOwner** exists. In addition, the privileges of the SNMPv3 user are equal to or less than the privileges of the current operator.
 - The node type of monitored objects must be one of the following types or the default type: table, conceptual row, table column, simple leaf, or parent node of a leaf node.
 - Do not set the mteTriggerEnabled node.
 - Other nodes meet the MIB definitions.
- If a row is in active state, you can perform the delete operation and cannot perform the edit/modify operation.
- To change the state of a row from notInService to active, the objects in the row must meet the following requirements:
 - The node type of monitored objects must be one of the following types: table, conceptual row, table column, simple leaf, or parent node of a leaf node.
 - Set mteTriggerTargetTag to null.
 - The value of mteTriggerFrequency must be equal to or greater than the value of mteResourceSampleMinimum.
 - The mteTriggerObjectsOwner object must be an SNMPv3 user and the privileges of the SNMPv3 user are equal to or less than the privileges of the current operator.
 - Do not modify the mteTriggerEnabled object.
 - Other nodes meet the MIB definitions.

Columns

The table indexes are mteOwner and mteTriggerName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|--|--|---|
| mteOwner (1.3.6.1.2.1.88.1.2.2.1.1) | not-accessible | SnmpAdminString | OCTET STRING (0..32) | Owner of a trigger. Level 1 index of the table. | Supports only SNMPv3 users. You must configure the specified SNMPv3 user as the current operator. |
| mteTriggerName (1.3.6.1.2.1.88.1.2.2.1.2) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Trigger name. Level 2 index of the table. | As per the MIB. |
| mteTriggerComment (1.3.6.1.2.1.88.1.2.2.1.3) | read-create | SnmpAdminString | OCTET STRING (0..255) | Trigger description. | The first and last spaces in the string will be automatically removed. |
| mteTriggerTest (1.3.6.1.2.1.88.1.2.2.1.4) | read-create | BITS | BITS {existence(0), boolean(1), threshold(2)} | Type of the trigger test. | As per the MIB. |
| mteTriggerSampleType (1.3.6.1.2.1.88.1.2.2.1.5) | read-create | INTEGER | absoluteValue(1), deltaValue(2) | Trigger sampling method. | As per the MIB. |
| mteTriggerValueID (1.3.6.1.2.1.88.1.2.2.1.6) | read-create | OBJECT IDENTIFIER | OBJECT IDENTIFIER | OID of the monitored object. | Supports only table nodes, conceptual row nodes, table column nodes, simple leaf nodes, and parent nodes of leaf nodes. |
| mteTriggerValueIDWildcard (1.3.6.1.2.1.88.1.2.2.1.7) | read-create | TruthValue | true(1), false(2) | Whether to enable wildcard search for objects. | As per the MIB. |
| mteTriggerTargetTag (1.3.6.1.2.1.88.1.2.2.1.8) | read-create | SnmpTagValue | OCTET STRING (0..255) | Remote tag for the monitored object. A length of 0 indicates the local system. This object supports only the local system. | Supports only the read operation. |
| mteTriggerContextName (1.3.6.1.2.1.88.1.2.2.1.9) | read-create | SnmpAdminString | OCTET STRING (0..255) | Name of the context for the OID of the monitored object. | As per the MIB. |
| mteTriggerContextNameWildcard (1.3.6.1.2.1.88.1.2.2.1.10) | read-create | TruthValue | true(1), false(2) | Whether to enable wildcard search for contexts. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|---|---|---|
| mteTriggerFrequency (1.3.6.1.2.1.88.1.2.2.1.11) | read-create | Unsigned32 | Unsigned32 (0..4294967295) | Sampling interval. The value must be equal to or greater than the minimum sampling interval. | The value of 0 is not supported. |
| mteTriggerObjectsOwner (1.3.6.1.2.1.88.1.2.2.1.12) | read-create | SnmpAdminString | OCTET STRING (0..32) | Owner of the objects bound to the trigger. | As per the MIB. |
| mteTriggerObjects (1.3.6.1.2.1.88.1.2.2.1.13) | read-create | SnmpAdminString | OCTET STRING (0..32) | Objects bound to the trigger. | As per the MIB. |
| mteTriggerEnabled (1.3.6.1.2.1.88.1.2.2.1.14) | read-create | TruthValue | true(1), false(2) | Whether to enable the trigger When the value is false, the trigger is not sampled. | Supports only the read operation. The read value for this object is true(1) if the state of the mteTriggerEntryStatus row is active. |
| mteTriggerEntryStatus (1.3.6.1.2.1.88.1.2.2.1.15) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

mteTriggerExistenceTable

About this table

Use this table to configure or obtain information about existence trigger tests. It specifies the existence trigger test type, configures the type of the existence trigger test for the first sampling, and specifies the monitored objects and trigger event.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

To modify the object owner or event owner for a row, the follow requirements must be met:

- The new owner must be an existing SNMPv3 user.
- The privileges of the new owner must be equal to or lower than the privileges of the current operator.

Columns

The table indexes are mteOwner and mteTriggerName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|---|--|---|
| mteTriggerExistenceTest (1.3.6.1.2.1.88.1.2.4.1.1) | read-write | BITS | BITS {present(0), absent(1), changed(2)} | Type of an existence trigger test. | As per the MIB. |
| mteTriggerExistenceStartup (1.3.6.1.2.1.88.1.2.4.1.2) | read-write | BITS | BITS {present(0), absent(1)} | Type of the existence trigger test for the first sampling. | As per the MIB. |
| mteTriggerExistenceObjectsOwner (1.3.6.1.2.1.88.1.2.4.1.3) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the existence trigger test objects. | Supports only SNMPv3 users. The configuration is the same as the mteOwner object in the Trigger table. |
| mteTriggerExistenceObjects (1.3.6.1.2.1.88.1.2.4.1.4) | read-write | SnmpAdminString | OCTET STRING (0..32) | Objects of the existence trigger test. | As per the MIB. |
| mteTriggerExistenceEventOwner (1.3.6.1.2.1.88.1.2.4.1.5) | read-write | SnmpAdminString | OCTET STRING (0..32) | Event owner. | Supports only SNMPv3 users. The configuration is the same as the mteOwner object in the Trigger table. |
| mteTriggerExistenceEvent (1.3.6.1.2.1.88.1.2.4.1.6) | read-write | SnmpAdminString | OCTET STRING (0..32) | Event name. | As per the MIB. |

mteTriggerBooleanTable

About this table

Use this table to configure or obtain information about Boolean trigger tests. It specifies the Boolean trigger test type and the reference value, configures whether to enable the event for the first sampling, and specifies the monitored objects and trigger event.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

To modify the object owner or event owner for a row, the follow requirements must be met:

- The new owner must be an existing SNMPv3 user.
- The privileges of the new owner must be equal to or lower than the privileges of the current operator.

Columns

The table indexes are mteOwner and mteTriggerName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|---|---|---|
| mteTriggerBooleanComparison (1.3.6.1.2.1.88.1.2.5.1.1) | read-write | INTEGER | unequal(1), equal(2), less(3), lessOrEqual(4), greater(5), greaterOrEqual(6) | Type of a Boolean trigger test. The comparison objects are mteTriggerValueID and mteTriggerBooleanValue. | As per the MIB. |
| mteTriggerBooleanValue (1.3.6.1.2.1.88.1.2.5.1.2) | read-write | Integer32 | Integer32 (-2147483648.. 2147483647) | Reference value for the Boolean trigger test. | As per the MIB. |
| mteTriggerBooleanStartup (1.3.6.1.2.1.88.1.2.5.1.3) | read-write | TruthValue | true(1), false(2) | Whether the event is enabled for the first sampling. | As per the MIB. |
| mteTriggerBooleanObjectsOwner (1.3.6.1.2.1.88.1.2.5.1.4) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the Boolean trigger test objects. | Supports only SNMPv3 users. The configuration must be the same as that of the mteOwner object. |
| mteTriggerBooleanObjects (1.3.6.1.2.1.88.1.2.5.1.5) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the Boolean trigger test objects. | As per the MIB. |
| mteTriggerBooleanEventOwner (1.3.6.1.2.1.88.1.2.5.1.6) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the Boolean event. | Supports only SNMPv3 users. The configuration must be the same as that of the mteOwner object. |
| mteTriggerBooleanEvent (1.3.6.1.2.1.88.1.2.5.1.7) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the Boolean event. | As per the MIB. |

mteTriggerThresholdTable

About this table

Use this table to configure or obtain information about threshold trigger tests. It specifies the threshold trigger test type for the first sampling, sets the absolute or delta rising or falling threshold, and configures the monitored objects and the trigger event.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

When you perform the edit/modify operation, follow these restrictions and guidelines:

- The rising threshold must be equal to or higher than the falling threshold.
- The delta rising threshold must be equal to or higher than the delta falling threshold.
- To modify the object owner or event owner for a row, the follow requirements must be met:
 - The new owner must be an existing SNMPv3 user.
 - The privileges of the new owner must be equal to or lower than the privileges of the current operator.

Columns

The table indexes are mteOwner and mteTriggerName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|---|--|--|
| mteTriggerThresholdStartup (1.3.6.1.2.1.88.1.2.6.1.1) | read-write | INTEGER | rising(1), falling(2), risingOrFalling(3) | Threshold trigger test for the first sampling. | As per the MIB. |
| mteTriggerThresholdRising (1.3.6.1.2.1.88.1.2.6.1.2) | read-write | Integer32 | (-2147483648..2147483647) | Absolute rising threshold. | As per the MIB. |
| mteTriggerThresholdFalling (1.3.6.1.2.1.88.1.2.6.1.3) | read-write | Integer32 | (-2147483648..2147483647) | Absolute falling threshold. | As per the MIB. |
| mteTriggerThresholdDeltaRising (1.3.6.1.2.1.88.1.2.6.1.4) | read-write | Integer32 | (-2147483648..2147483647) | Delta rising threshold. | As per the MIB. |
| mteTriggerThresholdDeltaFalling (1.3.6.1.2.1.88.1.2.6.1.5) | read-write | Integer32 | (-2147483648..2147483647) | Delta falling threshold. | As per the MIB. |
| mteTriggerThresholdObjectsOwner (1.3.6.1.2.1.88.1.2.6.1.6) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the threshold test objects. | Do not configure this object or configure the same settings for this object as the mteOwner object in the Trigger table. |
| mteTriggerThresholdObjects (1.3.6.1.2.1.88.1.2.6.1.7) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the threshold test objects. | As per the MIB. |
| mteTriggerThresholdRisingEventOwner (1.3.6.1.2.1.88.1.2.6.1.8) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the rising event. | Do not configure this object or configure the same settings for this object as the mteOwner object in the Trigger table. |
| mteTriggerThresholdRisingEvent (1.3.6.1.2.1.88.1.2.6.1.9) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the rising event. | As per the MIB. |
| mteTriggerThresholdFallingEventOwner (1.3.6.1.2.1.88.1.2.6.1.10) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the falling event. | Do not configure this object or configure the same settings for this object as the mteOwner object in the Trigger table. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------|-------------------------|-----------------------------------|--|
| mteTriggerThresholdFallingEvent (1.3.6.1.2.1.88.1.2.6.1.11) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the falling event. | As per the MIB. |
| mteTriggerThresholdDeltaRisingEventOwner (1.3.6.1.2.1.88.1.2.6.1.12) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the Delta rising event. | Do not configure this object or configure the same settings for this object as the mteOwner object in the Trigger table. |
| mteTriggerThresholdDeltaRisingEvent (1.3.6.1.2.1.88.1.2.6.1.13) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the Delta rising event. | As per the MIB. |
| mteTriggerThresholdDeltaFallingEventOwner (1.3.6.1.2.1.88.1.2.6.1.14) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the Delta falling event. | Do not configure this object or configure the same settings for this object as the mteOwner object in the Trigger table. |
| mteTriggerThresholdDeltaFallingEvent (1.3.6.1.2.1.88.1.2.6.1.15) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the Delta falling event. | As per the MIB. |

mteObjectsTable

About this table

Use this table to configure or obtain monitored objects, including specifying the name of a monitored object and binding the OID of the object to a trigger.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

The state of a row can be set only to createAndGo. In addition, the following requirements must be met:

- The index of the row does not exist.
- The monitored OID nodes must be one of the following types: table, conceptual row, table column, simple leaf, and parent node of a leaf node.

Columns

The table indexes are mteOwner, mteObjectsName, and mteObjectsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-------------------------|---|-----------------|
| mteObjectsName (1.3.6.1.2.1.88.1.3.1.1.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | A locally-unique, administratively assigned | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|--|--|---|
| | | | | name for a group of objects. Level 2 index. | |
| mteObjectsIndex (1.3.6.1.2.1.88.1.3.1.1.2) | not-accessible | Unsigned32 | Unsigned32 (1..2147483647) | An arbitrary integer for the purpose of identifying individual objects within a mteObjects Name group. Level 3 index. | As per the MIB. |
| mteObjectsID (1.3.6.1.2.1.88.1.3.1.1.3) | read-create | OBJECT IDENTIFIER | OBJECT IDENTIFIER | OID of the objects. | Supports one of the following node types: table, conceptual row, table column, simple leaf, and parent node of a leaf node. |
| mteObjectsIDWildcard (1.3.6.1.2.1.88.1.3.1.1.4) | read-create | TruthValue | true(1), false(2) | Whether to enable wildcard matching. | As per the MIB. |
| mteObjectsEntryStatus (1.3.6.1.2.1.88.1.3.1.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only createAndGo, active, and destroy. |

mteEventTable

About this table

Use this table to configure or obtain information about events, including configuring the event name, event description, and event action type.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

- To set the state of a row to createAndGo when creating the row, the objects in the row must meet the following requirements:
 - The index of the row does not exist.
 - Set mteEventActions to set or notification, or both.
 - Other nodes meet the MIB definitions.

- Do not set mteEventEnabled.
- To set the state of a row to createAndWait when creating the row, the objects in the row must meet the following requirements:
 - The index of the row does not exist.
 - Do not set the mteEventEnabled node together with the row state.
 - Other nodes meet the MIB definitions.
- If a row is in active state, you can perform the delete operation and cannot perform the edit/modify operation.
- To change a row from notInService state to active, the objects in the row must meet the following requirements:
 - Set mteEventActions to set or notification, or both.
 - Do not configure the mteEventEnabled node.
 - Other nodes meet the MIB definitions.

Columns

The table indexes are mteOwner and mteEventName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--|-------------------------------|--|
| mteEventName (1.3.6.1.2.1.88.1.4.2.1.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Event name. | As per the MIB. |
| mteEventComment (1.3.6.1.2.1.88.1.4.2.1.2) | read-create | SnmpAdminString | OCTET STRING (0..255) | Event description. | The first and last spaces will be deleted automatically. |
| mteEventActions (1.3.6.1.2.1.88.1.4.2.1.3) | read-create | BITS | BITS { notification(0), set(1)} | Event action type. | As per the MIB. |
| mteEventEnabled (1.3.6.1.2.1.88.1.4.2.1.4) | read-create | TruthValue | true(1), false(2) | Enabling status of the event. | Supports only the read operation. When the value of mteEventEntryStatus is active, the return value of this object for the read operation is true(1). |
| mteEventEntryStatus (1.3.6.1.2.1.88.1.4.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

mteEventNotificationTable

About this table

Use this table to configure or obtain information about notifications, including specifying the OID of a notification and binding objects to the notification.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

To modify the object owner or event owner for a row, the follow requirements must be met:

- The new owner must be an existing SNMPv3 user.
- The privileges of the new owner must be equal to or lower than the privileges of the current operator.
- The node of the object that inputs the notification is a trap node.

Columns

The table indexes are mteOwner and mteEventName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------------|----------------------|---|--|
| mteEventNotification (1.3.6.1.2.1.88.1.4.3.1.1) | read-write | OBJECT IDENTIFIER | Standard MIB values. | Notification OID. | As per the MIB. |
| mteEventNotificationObjectsOwner (1.3.6.1.2.1.88.1.4.3.1.2) | read-write | SnmpAdminString | OCTET STRING (0..32) | Owner of the objects bound to the notification. | Do not configure this object or configure the same settings as the mteOwner object in the Event table. |
| mteEventNotificationObjects (1.3.6.1.2.1.88.1.4.3.1.3) | read-write | SnmpAdminString | OCTET STRING (0..32) | Name of the objects bound to the notification. | As per the MIB. |

mteEventSetTable

About this table

Use this MIB to configure or obtain information about set objects, including specifying an event for set objects and setting a value for the objects.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

The node type of a set object is from one of the following types: table, conceptual row, table column, simple leaf, and parent node of a leaf node.

Columns

The table indexes are mteOwner and mteEventName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------------|-------------------------------------|---------------------------------------|---|
| mteEventSetObject (1.3.6.1.2.1.88.1.4.4.1.1) | read-write | OBJECT IDENTIFIER | Standard MIB values. | OID of a set-action object. | Supports only the following types of nodes: table, conceptual row, table column, simple leaf, and parent node of a leaf node. |
| mteEventSetObjectWildcard (1.3.6.1.2.1.88.1.4.4.1.2) | read-write | TruthValue | true(1), false(2) | Whether to enable wildcard matching. | As per the MIB. |
| mteEventSetValue (1.3.6.1.2.1.88.1.4.4.1.3) | read-write | Integer32 | Integer32 (-2147483648..2147483647) | Value of the set-action object. | As per the MIB. |
| mteEventSetTargetTag (1.3.6.1.2.1.88.1.4.4.1.4) | read-write | SnmpTagValue | OCTET STRING (0..255) | Remote tag for the set-action object. | Supports only the read operation. This object does not support the edit/modify operation. |
| mteEventSetContextName (1.3.6.1.2.1.88.1.4.4.1.5) | read-write | SnmpAdminString | OCTET STRING (0..255) | Context for the set-action object. | OCTET STRING (0..32) |
| mteEventSetContextNameWildcard (1.3.6.1.2.1.88.1.4.4.1.6) | read-write | TruthValue | true(1), false(2) | Whether to enable wildcard matching. | As per the MIB. |

Notifications

The following information describes the notifications included in the DISMAN-EVENT-MIB module.

mteTriggerFired

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.88.2.0.1 | A notification was triggered by a trigger test. | Informational | N/A | N/A | ON |

Description

This notification is generated when a monitored object meets the trigger condition.

If an existence trigger test is configured, this notification is generated when the state of the monitored object changes from absent to present or from present to absent, or the value of the object changes.

If a Boolean trigger test is configured, this notification is generated if the comparison result for the value of the monitored object and the value of `mteTriggerBooleanValue` meets the trigger condition. If the comparison result changes from meeting the trigger condition to not meeting the trigger condition and then changing back to meeting the trigger condition, this notification is generated again. In other situations, this notification is not generated.

Status control

ON

CLI: Use the `snmp-agent trap enable event-mib` command.

OFF

CLI: Use the `undo snmp-agent trap enable event-mib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|-------------------|-----------------------|
| 1.3.6.1.2.1.88.2.1.1 (mteHotTrigger) | Trigger name | N | SnmpAdminString | OCTET STRING (1..32) |
| 1.3.6.1.2.1.88.2.1.2 (mteHotTargetName) | Target host name. | N | SnmpAdminString | OCTET STRING (0..255) |
| 1.3.6.1.2.1.88.2.1.3(mteHotContextName) | Context name. | N | SnmpAdminString | OCTET STRING (0..32) |
| 1.3.6.1.2.1.88.2.1.4(mteHotOID) | Monitored object OID. | N | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.88.2.1.5(mteHotValue) | Value of the monitored object. | N | Integer32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Configure an event to handle the notification.

mteTriggerRising

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.88.2.0.2 | A rising alarm event was triggered. | Informational | N/A | N/A | ON |

Description

If a threshold trigger test is configured and the value of `mteTriggerThresholdStartup` is rising or risingOrFaling, this notification is generated when the monitored object meets the trigger condition.

- The value of the monitored object is greater than or equal to the rising threshold, this notification is generated.
- The difference between the current sampled value and the previous sampled value is greater than or equal to the delta rising threshold, this notification is generated.

If the value of the monitored object crosses a threshold multiple times in succession, the managed device triggers an alarm event only for the first crossing. For example, if the value of a sampled object crosses the rising threshold multiple times before it crosses the falling threshold, only the first crossing triggers a rising alarm event.

Status control

ON

CLI: Use the `snmp-agent trap enable event-mib` command.

OFF

CLI: Use the `undo snmp-agent trap enable event-mib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|-------------------|-----------------------|
| 1.3.6.1.2.1.88.2.1.1 (mteHotTrigger) | Trigger name. | N | SnmpAdminString | OCTET STRING (1..32) |
| 1.3.6.1.2.1.88.2.1.2 (mteHotTargetName) | Target host name. | N | SnmpAdminString | OCTET STRING (0..255) |
| 1.3.6.1.2.1.88.2.1.3(mteHotContextName) | Context name. | N | SnmpAdminString | OCTET STRING (0..32) |
| 1.3.6.1.2.1.88.2.1.4(mteHotOID) | Monitored object OID. | N | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.88.2.1.5(mteHotValue) | Value of the monitored object. | N | Integer32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Configure an event to handle the notification.

mteTriggerFalling

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.88.2.0.3 | A falling alarm event was triggered | Informational | N/A | N/A | ON |

Description

If a threshold trigger test is configured and the value of `mteTriggerThresholdStartup` is `falling` or `risingOrFaling`, this notification is generated when the monitored object meets the trigger condition.

- If the value of the monitored object is smaller than or equal to the falling threshold, this notification is generated.
- If the difference between the current sampled value and the previous sampled value is smaller than or equal to the delta falling threshold, this notification is generated.

If the value of the monitored object crosses a threshold multiple times in succession, the managed device triggers an alarm event only for the first crossing. For example, if the value of a sampled object crosses the falling threshold multiple times before it crosses the rising threshold, only the first crossing triggers a falling alarm event.

Status control

ON

CLI: Use the `snmp-agent trap enable event-mib` command.

OFF

CLI: Use the `undo snmp-agent trap enable event-mib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|-------------------|-----------------------|
| 1.3.6.1.2.1.88.2.1.1 (mteHotTrigger) | Trigger name. | N | SnmpAdminString | OCTET STRING (1..32) |
| 1.3.6.1.2.1.88.2.1.2 (mteHotTargetName) | Target host name. | N | SnmpAdminString | OCTET STRING (0..255) |
| 1.3.6.1.2.1.88.2.1.3(mteHotContextName) | Context name. | N | SnmpAdminString | OCTET STRING (0..32) |
| 1.3.6.1.2.1.88.2.1.4(mteHotOID) | Monitored object OID. | N | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.88.2.1.5(mteHotValue) | Value of the monitored object. | N | Integer32 | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Configure an event to handle the notification.

mteTriggerFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.88.2.0.4 | Trigger test failure notification. | Informational | N/A | N/A | ON |

Description

This notification is generated when the system fails a trigger test.

Status control

ON

CLI: Use the `snmp-agent trap enable event-mib` command.

OFF

CLI: Use the `undo snmp-agent trap enable event-mib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|-------------------|-----------------------|
| 1.3.6.1.2.1.88.2.1.1(mteHotTrigger) | Trigger name. | N | SnmpAdminString | OCTET STRING (1..32) |
| 1.3.6.1.2.1.88.2.1.2(mteHotTargetName) | Target host name. | N | SnmpAdminString | OCTET STRING (0..255) |
| 1.3.6.1.2.1.88.2.1.3(mteHotContextName) | Context name. | N | SnmpAdminString | OCTET STRING (0..32) |
| 1.3.6.1.2.1.88.2.1.4(mteHotOID) | Monitored object OID. | N | OBJECT IDENTIFIER | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|---------------------------------------|----------------|-------|---------|--|
| 1.3.6.1.2.1.88.2.1.6(mteFailedReason) | Failure reason | N | INTEGER | localResourceLack(-1), badDestination(-2), destinationUnreachable(-3), noResponse(-4), badType(-5), sampleOverrun(-6), noError(0), tooBig(1), noSuchName(2), badValue(3), readOnly(4), genErr(5), noAccess(6), wrongType(7), wrongLength(8), wrongEncoding(9), wrongValue(10), noCreation(11), inconsistentValue(12), resourceUnavailable(13), commitFailed(14), undoFailed(15), authorizationError(16), notWritable(17), inconsistentName(18) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

mteEventSetFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|----------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.88.2.0.5 | Event set-action failure notification. | Informational | N/A | N/A | ON |

Description

This notification is generated when the system fails to perform a set operation in response to an event.

Status control

ON

CLI: Use the `snmp-agent trap enable event-mib` command.

OFF

CLI: Use the `undo snmp-agent trap enable event-mib` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-----------------------|-------|-------------------|--|
| 1.3.6.1.2.1.88.2.1.1(mteHotTrigger) | Trigger name. | N | SnmpAdminString | OCTET STRING (1..32) |
| 1.3.6.1.2.1.88.2.1.2(mteHotTargetName) | Target host name. | N | SnmpAdminString | OCTET STRING (0..255) |
| 1.3.6.1.2.1.88.2.1.3(mteHotContextName) | Context name. | N | SnmpAdminString | OCTET STRING (0..32) |
| 1.3.6.1.2.1.88.2.1.4(mteHotOID) | Monitored object OID. | N | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.88.2.1.6(mteFailedReason) | Failure reason | N | INTEGER | localResourceLack(-1), badDestination(-2), destinationUnreachable(-3), noResponse(-4), badType(-5), sampleOverrun(-6), noError(0), tooBig(1), noSuchName(2), badValue(3), readOnly(4), genErr(5), noAccess(6), wrongType(7), wrongLength(8), wrongEncoding(9), wrongValue(10), noCreation(11), inconsistentValue(12), resourceUnavailable(13), commitFailed(14), undoFailed(15), authorizationError(16), notWritable(17), inconsistentName(18) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

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DISMAN-PING-MIB

About this MIB

Use this MIB to implement the ping utility defined by RFC 2925. Ping operations are performed by NQA ICMP echo probes.

To implement DISMAN PING, the devices must support this MIB. This MIB cannot be used together with CLI.

MIB file name

rfc2925-disman-ping.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).pingMIB(80)

Scalar objects

pingMaxConcurrentRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|----------------|----------------------------|---|--------------------|
| pingMaxConcurrentRequests (1.3.6.1.2.1.80.1.1) | read-only | Unsigned 32 | Standard MIB values. | Maximum number of concurrent active ping requests that are allowed within an agent implementation. | As per the MIB. |

Tabular objects

pingCtlTable

About this table

Use this table to define parameters in a ping operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---|--|--|
| <ul style="list-style-type: none"> You can create the pingCtlAdminStatus node only when the state for the node is disable. Specify a value for the pingCtlType object when you create a ping operation entry. The value for this object is not modifiable after creation. The default value for the pingCtlType object is pingIcmpEcho. The creation operation for a ping operation entry fails if the entry contains parameters not supported by the probe type specified by the pingCtlType object. | <ul style="list-style-type: none"> To save history probe information, set the state of the h3cNQACtlHistoryEnable object to enable. You cannot configure parameters not supported by the probe type specified by the pingCtlType object. Modifying any object in the pingCtlTable except the following objects will clear the corresponding probe results (not including the history records and statistics): <ul style="list-style-type: none"> pingCtlTrapGeneration. pingCtlTrapProbeFailureFilter. pingCtlTrapTestFailureFilter. pingCtlDescr. pingCtlMaxRows. If the new value for this object is lower than the previous value, the system deletes the excessive history records. You must specify pingCtlTargetAddressType and pingCtlTargetAddress in pairs in an SNMP request. You must specify pingCtlSourceAddressType and pingCtlSourceAddress in pairs in an SNMP request. | <p>A delete operation fails if the state of the pingCtlAdminStatus node is enable.</p> | <p>Not supported.</p> <p>The ping operation probe result is invalid if the read operation obtains information about parameters not supported by the probe type specified by the pingCtlType object.</p> |

The following objects are supported by all pingCtlType options: pingCtlOwnerIndex, pingCtlTestName, pingCtlTimeOut, pingCtlAdminStatus, pingCtlFrequency, pingCtlStorageType, pingCtlTrapGeneration, pingCtlType, pingCtlDescr, and pingCtlRowStatus. The pingCtlType options also support other objects. The following table shows the additional objects supported by each pingCtlType option.

| Options for the pingCtlType object | Supported additional objects |
|--|---|
| pingIcmpEcho | pingCtlTargetAddressType pingCtlTargetAddress pingCtlDataSize pingCtlDataFill pingCtlSourceAddressType pingCtlSourceAddress pingCtlIfIndex pingCtlByPassRouteTable pingCtlDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |
| pingUdpEcho hh3cNqaUdpEcho or hh3cpingUdpEcho | pingCtlTargetAddressType pingCtlTargetAddress |

| Options for the pingCtlType object | Supported additional objects |
|---|--|
| | pingCtlDataSize pingCtlDataFill pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |
| pingSnmpQuery | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |
| pingTcpConnectionAttempt hh3cNqaTcpconnect or hh3cpingTcpconnect | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |
| hh3cNqajitter (for UDP jitter operation) hh3cNqaCtlCodecType is defined as notDefined(1) | pingCtlTargetAddressType pingCtlTargetAddress pingCtlDataSize pingCtlDataFill pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount |
| hh3cNqajitter (for voice operation) hh3cNqaCtlCodecType is defined as g711Alaw(2), g711Ulaw(3), or g729A(4) | pingCtlTargetAddressType pingCtlTargetAddress pingCtlDataSize pingCtlDataFill pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField |

| Options for the pingCtlType object | Supported additional objects |
|--|--|
| | pingCtlProbeCount(only 1 is legal) |
| hh3cNqaJitter (for ICMP jitter operation) hh3cNqaCtlCodecType is defined as icmpTimestamp(5) | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount |
| hh3cNqaHttp | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |
| hh3cNqadlsw | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |
| hh3cNqadhcp | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter pingCtlIfIndex |
| hh3cNqaftp | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlByPassRouteTable pingCtlIDSField pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter |

| Options for the pingCtlType object | Supported additional objects |
|------------------------------------|--|
| | pingCtlTrapTestFailureFilter |
| pingArp | pingCtlTargetAddressType pingCtlTargetAddress pingCtlSourceAddressType pingCtlSourceAddress pingCtlProbeCount pingCtlMaxRows pingCtlTrapProbeFailureFilter pingCtlTrapTestFailureFilter |

Columns

The table indexes are pingCtlOwnerIndex and pingCtlTestName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-------------------------|---|---|
| pingCtlOwnerIndex (1.3.6.1.2.1.80.1.2.1.1) | not-accessible | SnmpAdminString | OCTET STRING (0..32) | Administrator name of a ping operation. | For the set operation, the uppercase letters in the value will be converted to lowercase letters. The value cannot contain a minus sign (-). |
| pingCtlTestName (1.3.6.1.2.1.80.1.2.1.2) | not-accessible | SnmpAdminString | OCTET STRING (0..32) | Operation tag. | For the set operation, the uppercase letters in the value will be converted to lowercase letters. The value for this object cannot contain a minus sign (-). |
| pingCtlTargetAddressType (1.3.6.1.2.1.80.1.2.1.3) | read-create | InetAddressType | Standard MIB values. | Destination address type. | Supports only ipv4(1), ipv6(2), unknown(0), and dns(16). |
| pingCtlTargetAddress (1.3.6.1.2.1.80.1.2.1.4) | read-create | InetAddress | Standard MIB values. | Destination address. | <ul style="list-style-type: none"> If the value for the pingCtlTargetAddressType object is ipv4(1), the value for this object must be an IPv4 address. If the value for the pingCtlTargetAddressType object is ipv6(2), the value for this object must be an IPv6 address. If the value for the pingCtlTargetAddressType object is dns(16), the value for this object can be a host name. If the value for the pingCtlTargetAddressType object is unknown(0), the value for this object must be a |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|------------------------------|--|--|
| | | | | | zero-length string. |
| pingCtlDataSize (1.3.6.1.2.1.80.1.2.1.5) | read-create | Unsigned32 | Unsigned32 (0..65507) | Payload size for each probe packet. | <p>The maximum payload size of an IP packet is 65507 octets, excluding the size of the ICMP or UDP packet header (each of the header occupies eight octets) and the IP packet header (20 octets).</p> <p>If the system uses the default payload size, the value is 0 octets.</p> <p>For ICMP or UDP operations, the value range for this object is 20 to 65507 octets.</p> <p>For jitter operations, the value range for this object is 68 to 65507 octets. The default value is 100 octets.</p> <p>For voice operations, the value range for this object is 16 to 65507 octets. If the codec type is g711a or g711μ, the default value is 172 octets. For other codec types, the default value is 32 octets.</p> <p>This object does not take effect on ARP operations.</p> |
| pingCtlTimeOut (1.3.6.1.2.1.80.1.2.1.6) | read-create | Unsigned32 | Unsigned32 (1..60) | Timeout time for waiting for a response to a probe request.. | <p>The return value for the read operation is not accurate if the value is not set to integer seconds at the CLI.</p> <p>For example, if the value configured at the CLI is 1050 milliseconds, the return value for the read operation will be 2 seconds.</p> <p>If the value configured at the CLI exceeds 60 seconds, the return value for the read operation is 60 seconds.</p> <p>For voice operations, the default value is 5 seconds. For other operations, the default value is 3 seconds.</p> |
| pingCtlProbeCount (1.3.6.1.2.1.80.1.2.1.7) | read-create | Unsigned32 | Unsigned32 (1..15) | Number of probes per operation. | For voice operations, the value for this object must be 1. |
| pingCtlAdminStatus (1.3.6.1.2.1.80.1.2.1.8) | read-create | INTEGER | enabled(1), disabled(2) | Administrative status of the probe operation. | As per the MIB. |
| pingCtlDataFill (1.3.6.1.2.1.80.1.2.1.9) | read-create | OCTET STRING | OCTET STRING (0..1024) | Payload fill string for probe packets. | <p>Length: 0 to 200 characters.</p> <p>This object does not take effect on ARP operations.</p> |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|---|--|--|
| pingCtlFrequency (1.3.6.1.2.1.80.1.2.1.10) | read-create | Unsigned32 | Standard MIB values. | Interval between two consecutive probes. | Value range: 0 to 604800 seconds. The return value for the read operation is not accurate if the value is not set to integer seconds at the CLI. For example, if the value configured at the CLI is 1050 milliseconds, the return value for the read operation will be 2 seconds. For voice operations, the default value is 60 seconds. For other operations, the default value is 0 seconds. If the value for this object is 0, the system does not generate statistics for the operation. |
| pingCtlMaxRows (1.3.6.1.2.1.80.1.2.1.11) | read-create | Unsigned32 | Standard MIB values. | Maximum number of history records. | Value range: 0 to 50. |
| pingCtlStorageType (1.3.6.1.2.1.80.1.2.1.12) | read-only | StorageType | Standard MIB values. | Conceptual row storage type. | As per the MIB. |
| pingCtlTrapGeneration (1.3.6.1.2.1.80.1.2.1.13) | read-create | BITS | BITS { probeFailure(0), testFailure(1), testCompletion(2) } | Conditions to generate notifications. | ICMP jitter. voice, UDP jitter operations support only pingTestCompleted(2). |
| pingCtlTrapProbeFailureFilter (1.3.6.1.2.1.80.1.2.1.14) | read-create | Unsigned32 | Unsigned32 (0..15) | Number of successive probe failures that are required before a notification can be generated. | Value range: 1 to 15. This object is not available before you specify probeFailure for pingCtlTrapGeneration. If the value of pingCtlTrapGeneration does not contain probeFailure, the value for this object is 1. This object does not take effect on voice operations. |
| pingCtlTrapTestFailureFilter (1.3.6.1.2.1.80.1.2.1.15) | read-create | Unsigned32 | Unsigned32 (0..15) | Number of accumulated probe failures that are required before a notification can be generated. | Value range: 1 to 15. This object is not available before you specify testFailure for pingCtlTrapGeneration. If the value of pingCtlTrapGeneration does not contain testFailure, the value for this object is 1. This object does not take |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|----------------------|-----------------------|--|--|
| | | | | | effect on voice operations. |
| pingCtlType (1.3.6.1.2.1.80.1.2.1.16) | read-create | OBJECT IDENTIFIER | Standard MIB values. | Operation type. | This object cannot be edited after creation. |
| pingCtlDescr (1.3.6.1.2.1.80.1.2.1.17) | read-create | SnmpAdminString | OCTET STRING (0..255) | Description string for the remote ping operation. | Length: 0 to 200 characters. The value for this object cannot start with a space. |
| pingCtlSourceAddressType (1.3.6.1.2.1.80.1.2.1.18) | read-create | InetAddressType | Standard MIB values. | Source address type. | Only supports ipv4(1), ipv6(2), and unknown(0). Default: unknown(0). |
| pingCtlSourceAddress (1.3.6.1.2.1.80.1.2.1.19) | read-create | InetAddress | Standard MIB values. | Source address. | If the value for the pingCtlSourceAddressType is ipv4(1), the value for this object must be an IPv4 address. If the value for the pingCtlSourceAddressType object is ipv6(2), the value for this object must be an IPv6 address. If the value for the pingCtlSourceAddressType object is unknown(0), the value for this object must be a zero-length string. |
| pingCtlIfIndex (1.3.6.1.2.1.80.1.2.1.20) | read-create | InterfaceIndexOrZero | Standard MIB values. | Interface index. | This object does not take effect on ARP operations. |
| pingCtlByPassRouteTable (1.3.6.1.2.1.80.1.2.1.21) | read-create | TruthValue | Standard MIB values. | Whether to bypass the routing table when sending data packets. | This object does not take effect on ARP operation s. |
| pingCtlDSField (1.3.6.1.2.1.80.1.2.1.22) | read-create | Unsigned32 | Unsigned32 (0..255) | Service type of data packets. | This object does not take effect on ARP operations. |
| pingCtlRowStatus (1.3.6.1.2.1.80.1.2.1.23) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only active(1), createAndgo(4), and destroy(6). |

pingResultsTable

About this table

This table obtains ping result information.

Columns

The table indexes are pingCtlOwnerIndex and pingCtlTestName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--------------------------|-------------------|-----------------|
| pingResultsOperStatus (1.3.6.1.2.1.80.1.3.1.1) | read-only | INTEGER | enabled(1), disabled(2), | Operation status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|----------------------|--|-----------------|
| | | | completed(3) | | |
| pingResultsIpTargetAddressType (1.3.6.1.2.1.80.1.3.1.2) | read-only | InetAddressType | Standard MIB values. | Destination address type. | As per the MIB. |
| pingResultsIpTargetAddress (1.3.6.1.2.1.80.1.3.1.3) | read-only | InetAddress | Standard MIB values. | Destination address. | As per the MIB. |
| pingResultsMinRtt (1.3.6.1.2.1.80.1.3.1.4) | read-only | Unsigned32 | Standard MIB values. | Minimum round-trip time. | As per the MIB. |
| pingResultsMaxRtt (1.3.6.1.2.1.80.1.3.1.5) | read-only | Unsigned32 | Standard MIB values. | Maximum round-trip time. | As per the MIB. |
| pingResultsAverageRtt (1.3.6.1.2.1.80.1.3.1.6) | read-only | Unsigned32 | Standard MIB values. | Average round-trip time. | As per the MIB. |
| pingResultsProbeResponses (1.3.6.1.2.1.80.1.3.1.7) | read-only | Gauge32 | Standard MIB values. | Number of received echo replies. | As per the MIB. |
| pingResultsSentProbes (1.3.6.1.2.1.80.1.3.1.8) | read-only | Gauge32 | Standard MIB values. | Number of sent echo requests. | As per the MIB. |
| pingResultsRttSumOfSquares (1.3.6.1.2.1.80.1.3.1.9) | read-only | Unsigned32 | Standard MIB values. | Sum of squares for the round-trip time. | As per the MIB. |
| pingResultsLastGoodProbe (1.3.6.1.2.1.80.1.3.1.10) | read-only | DateAndTime | Standard MIB values. | Date and time when the last echo reply was received. | As per the MIB. |

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

pingProbeHistoryTable

About this table

This table obtains information about ping history result information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is pingProbeHistoryIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|------------------------------|--|---|
| pingProbeHistoryIndex (1.3.6.1.2.1.80.1.4.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..'ffffff'h) | History record index of a probe operation. | As per the MIB. |
| pingProbeHistoryResponse (1.3.6.1.2.1.80.1.4.1.2) | read-only | Unsigned32 | Standard MIB values. | Time taken for the probe operation. | As per the MIB. |
| pingProbeHistoryStatus (1.3.6.1.2.1.80.1.4.1.3) | read-only | OperationResponseStatus | Standard MIB values. | Probe result. | Result of a particular probe done by a remote host. |
| pingProbeHistoryLastRC (1.3.6.1.2.1.80.1.4.1.4) | read-only | Integer32 | Standard MIB values. | The last implementation method specific reply code received. | Not supported. |
| pingProbeHistoryTime (1.3.6.1.2.1.80.1.4.1.5) | read-only | DateAndTime | Standard MIB values. | Date and time when the result was determined. | As per the MIB. |

Notifications

pingProbeFailed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.80.0.1 | A ping operation failure was detected. | Informational | N/A | N/A | OFF |

Description

This notification is generated when a ping operation failure is detected. A ping operation fails if the value for the **pingCtlTrapGeneration** object is **probeFailure(0)**. Whether to generate the **probeFailure(0)** value depends on the value of the **pingCtlTrapProbeFailureFilter** object. The **pingCtlTrapProbeFailureFilter** object specifies the maximum number of consecutive probe failures allowed by the system. If the maximum number of consecutive probe failures for a ping operation reaches the value specified for the **pingCtlTrapProbeFailureFilter** object, the system determines that the ping operation fails.

Status control

ON

CLI: Use the **reaction trap probe-failure** command.

OFF

CLI: Use the `undo reaction trap probe-failure` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|-------------------------|
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Destination address type. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.1 (pingResultsOperStatus) | Operation status. | No | INTEGER | enabled(1), disabled(2) |
| 1.3.6.1.2.1.80.1.3.1.2 (pingResultsIpTargetAddressType) | Destination address type in the probe result. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.3 (pingResultsIpTargetAddress) | Destination address in the probe result. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.4 (pingResultsMinRtt) | Minimum round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.5 (pingResultsMaxRtt) | Maximum round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.6 (pingResultsAverageRtt) | Average round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.7 (pingResultsProbeResponses) | Number of received echo replies in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.8 (pingResultsSentProbes) | Number of sent echo requests in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.9 (pingResultsRttSumOfSquares) | Sum of squares for the round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.10 (pingResultsLastGoodProbe) | Date and time when the last echo reply was received in the probe result. | No | DateAndTime | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

pingTestFailed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|--------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.80.0.2 | A ping operation failed. | Informational | N/A | N/A | OFF |

Description

This notification is generated when a ping operation fails. A ping operation fails if the value for the **pingCtlTrapGeneration** object is **testFailure(1)**. The **pingCtlTrapTestFailureFilter** object specifies the maximum number of accumulated probe response failures allowed by the system. If the maximum number of accumulated probe response failures for a ping operation reaches the value specified for the **pingCtlTrapTestFailureFilter** object, the system determines that the ping operation fails.

Status control

ON

CLI: Use the **reaction trap test-failure** [*accumulate-probe-failures*] command.

OFF

CLI: Use the **undo reaction trap test-failure** [*accumulate-probe-failures*] command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|-------------------------|
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Destination address type. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.1 (pingResultsOperStatus) | Operation status. | No | INTEGER | enabled(1), disabled(2) |
| 1.3.6.1.2.1.80.1.3.1.2 (pingResultsIpTargetAddressType) | Destination address type in the probe result. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.3 (pingResultsIpTargetAddress) | Destination address in the probe result. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.4 (pingResultsMinRtt) | Minimum round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.5 (pingResultsMaxRtt) | Maximum round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.6 (pingResultsAverageRtt) | Average round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-------------|----------------------|
| 1.3.6.1.2.1.80.1.3.1.7 (pingResultsProbeResponses) | Number of received echo replies in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.8 (pingResultsSentProbes) | Number of sent echo requests in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.9 (pingResultsRttSumOfSquares) | Sum of squares for the round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.10 (pingResultsLastGoodProbe) | Date and time when the last echo reply was received in the probe result. | No | DateAndTime | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

pingTestCompleted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.80.0.3 | A ping operation completed. | Informational | N/A | N/A | OFF |

Description

This notification is generated when a ping operation completes. A ping operation completes if the value for the **pingCtlTrapGeneration** object is **testCompletion(4)**.

Status control

ON

CLI: Use the **reaction trap test-complete** command.

OFF

CLI: Use the **undo reaction trap test-complete** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|-----------------|----------------------|
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Destination address type. | No | InetAddressType | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------------|-------------------------|
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.1 (pingResultsOperStatus) | Operation status. | No | INTEGER | enabled(1), disabled(2) |
| 1.3.6.1.2.1.80.1.3.1.2 (pingResultsIpTargetAddressType) | Destination address type in the probe result. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.3 (pingResultsIpTargetAddress) | Destination address in the probe result. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.4 (pingResultsMinRtt) | Minimum round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.5 (pingResultsMaxRtt) | Maximum round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.6 (pingResultsAverageRtt) | Average round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.7 (pingResultsProbeResponses) | Number of received echo replies in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.8 (pingResultsSentProbes) | Number of sent echo requests in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.9 (pingResultsRttSumOfSquares) | Sum of squares for the round-trip time in the probe result. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.2.1.80.1.3.1.10 (pingResultsLastGoodProbe) | Date and time when the last echo reply was received in the probe result. | No | DateAndTime | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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DISMAN-TRACEROUTE-MIB

About this MIB

This MIB contains information about the traceroute (tracert) utility defined by RFC 4560 and the traceroute notifications. The traceroute utility is implemented by NQA UDP traceroute operations.

To implement DISMAN TRACEROUTE, the devices must support this MIB. This MIB cannot be used together with CLI.

MIB file name

rfc4560-disman-traceroute.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).traceRouteMIB(81)

Scalar objects

traceRouteMaxConcurrentRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|--|-------------------------------------|
| traceRouteMaxConcurrentRequests (1.3.6.1.2.1.81.1.1) | read-only | Unsigned 32 | Standard MIB values. | Maximum number of concurrent active traceroute requests that are allowed within an agent implementation. | Same as ping MaxConcurrentRequests. |

Tabular objects

traceRouteCtlTable

About this table

Use this table to define probe parameters for a traceroute operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---|-----------|-----------|
| <ul style="list-style-type: none"> When create a traceroute operation entry, the default value of traceRouteCtlType is traceRouteUsingUdpProbes. At present, the traceRouteCtlType object supports only traceRouteUsingUdpProbes. When create a traceroute operation entry, the values of the traceRouteCtlOwnerIndex and traceRouteCtlTestName objects must be different than the pingCtlOwnerIndex and pingCtlTestName objects. | <ul style="list-style-type: none"> Modifying any object in the traceRouteCtlTable except the following objects will clear the corresponding probe results, history records, and statistics information: <ul style="list-style-type: none"> traceRouteCtlTrapGeneration. traceRouteCtlDescr. traceRouteCtlMaxRows. If the new value for this object is lower than the previous value, the system deletes the excessive history records. You must specify traceRouteCtlTargetAddressType and traceRouteCtlTargetAddress in pairs in an SNMP request. You must specify traceRouteCtlSourceAddressType and traceRouteCtlSourceAddress in pairs in an SNMP request. When traceRouteCtlAdminStatus is enabled, you cannot change the configuration in the traceRouteCtlTable. | Supported | Supported |

Columns

The table indexes are traceRouteCtlOwnerIndex and traceRouteCtlTestName.

Table OID: 1.3.6.1.2.1.81.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-------------------------|---------------------|--|
| traceRouteCtlOwnerIndex (1.3.6.1.2.1.81.1.2.1.1) | not-accessible | SnmpAdminString | OCTET STRING (0..32) | Administrator name. | For the set operation, the uppercase letters in the value will be converted to lowercase letters. The value cannot contain a minus sign (-) or question mark (?). |
| traceRouteCtlTestName (1.3.6.1.2.1.81.1.2.1.2) | not-accessible | SnmpAdminString | OCTET STRING (0..32) | Operation tag. | For the set operation, the uppercase letters in the value will be converted to lowercase letters. The value cannot contain a minus sign (-) or question mark (?). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|-----------------------|---|--|
| traceRouteCtlTargetAddressType (1.3.6.1.2.1.81.1.2.1.3) | read-create | InetAddressType | Standard MIB values. | Destination address type. | Supports only ipv4(1), dns(16), and unknown(0). |
| traceRouteCtlTargetAddress (1.3.6.1.2.1.81.1.2.1.4) | read-create | InetAddress | Standard MIB values. | Destination address. | If the value for the traceRouteCtlTargetAddressType object is ipv4(1), the value for this object must be an IPv4 address. If the value for the traceRouteCtlTargetAddressType object is dns(16), the value for this object can be a host name. If the value for the traceRouteCtlTargetAddressType object is unknown(0), the value for this object must be a zero-length string. |
| traceRouteCtlByPassRouteTable (1.3.6.1.2.1.81.1.2.1.5) | read-create | TruthValue | Standard MIB values. | Whether to bypass the routing table. | As per the MIB. |
| traceRouteCtlDataSize (1.3.6.1.2.1.81.1.2.1.6) | read-create | Unsigned 32 | Unsigned32 (0..65507) | Size of the data portion of a traceroute request, in octets. | Value range: 20 to 65507 octets. Default: 100 octets. |
| traceRouteCtlTimeOut (1.3.6.1.2.1.81.1.2.1.7) | read-create | Unsigned 32 | Unsigned32 (1-60) | Timeout time for waiting for a response to a probe request.. | Same as the standard MIB file. |
| traceRouteCtlProbesPerHop (1.3.6.1.2.1.81.1.2.1.8) | read-create | Unsigned 32 | Unsigned32 (1-10) | Number of times to reissue a traceroute request with the same time-to-live (TTL) value. | Same as the standard MIB file.. |
| traceRouteCtlPort (1.3.6.1.2.1.81.1.2.1.9) | read-create | Unsigned 32 | Unsigned32 (1-65535) | Destination port number. | Same as the standard MIB file. |
| traceRouteCtlMaxTtl (1.3.6.1.2.1.81.1.2.1.10) | read-create | Unsigned 32 | Unsigned32 (1-255) | Maximum TTL value. | Same as the standard MIB file. |
| traceRouteCtlDSField (1.3.6.1.2.1.81.1.2.1.11) | read-create | Unsigned 32 | Unsigned32 (0-255) | Service type. | As per the MIB. |
| traceRouteCtlSourceAddressType (1.3.6.1.2.1.81.1.2.1.12) | read-create | InetAddressType | Standard MIB values. | Source address type. | Supports only ipv4(1) and unknown(0). Default: unknown(0). |
| traceRouteCtlSourceAddress (1.3.6.1.2.1.81.1.2.1.13) | read-create | InetAddress | Standard MIB values. | Source address. | If the value for the traceRouteCtlSourceAddressType object is ipv4(1), the value for this object must be an IPV4 address. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------------------|---------------------------|--|--|
| | | | | | If the value for the traceRouteCtlSourceAddressType object is unknown(0), the value for this object must be a zero-length string. |
| traceRouteCtlIfIndex (1.3.6.1.2.1.81.1.2.1.14) | read-create | InterfaceIndexOrZero | Standard MIB values. | Output interface index. | Same as the standard MIB file. |
| traceRouteCtlMiscOptions (1.3.6.1.2.1.81.1.2.1.15) | read-create | SnmpAdminString | OCTET STRING (0..255) | Implementation-dependent options. | Value range: 0 to 200 characters. The corresponding function is not supported. |
| traceRouteCtlMaxFailures (1.3.6.1.2.1.81.1.2.1.16) | read-create | Unsigned 32 | Unsigned 32 (0-255) | Maximum number of consecutive timeouts allowed before a remote traceroute request is terminated. | Same as the standard MIB file. |
| traceRouteCtlDontFragment (1.3.6.1.2.1.81.1.2.1.17) | read-create | TruthValue | Standard MIB values. | Whether to enable setting of the don't fragment flag (DF) in the IP header. | Same as the standard MIB file. |
| traceRouteCtlInitialTtl (1.3.6.1.2.1.81.1.2.1.18) | read-create | Unsigned 32 | Unsigned 32 (1..255) | Initial TTL value. | Same as the standard MIB file. |
| traceRouteCtlFrequency (1.3.6.1.2.1.81.1.2.1.19) | read-create | Unsigned 32 | Standard MIB values. | Interval between two consecutive traceroute probes. | Value range: 0 to 604800 seconds. The return value for the read operation is not accurate if the value is not set to integer seconds at the CLI. For example, if the value configured at the CLI is 1050 milliseconds, the return value for the read operation will be 2 seconds. Default: 0 seconds. |
| traceRouteCtlStorageType (1.3.6.1.2.1.81.1.2.1.20) | read-create | StorageType | Standard MIB values. | Storage type. | As per the MIB. |
| traceRouteCtlAdminStatus (1.3.6.1.2.1.81.1.2.1.21) | read-create | INTEGER | enabled(1) disabled(2) | Operation status. | As per the MIB. |
| traceRouteCtlDescr (1.3.6.1.2.1.81.1.2.1.22) | read-create | SnmpAdminString | OCTET STRING (0..255) | Description string for the remote traceroute operation. | Value range: 0 to 200 characters. The value cannot start with a space. |
| traceRouteCtlMaxRows | read-create | Unsigned | Standard | Maximum | Value range: 0 to 50. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------------|---|---------------------------------------|--|
| (1.3.6.1.2.1.81.1.2.1.23) | | 32 | MIB values. | number of history records. | |
| traceRouteCtlTrapGeneration (1.3.6.1.2.1.81.1.2.1.24) | read-create | BITS | BITS { pathChange(0), testFailure(1), testCompletion(2) } | Conditions to generate notifications. | As per the MIB. |
| traceRouteCtlCreateHopsEntries(1.3.6.1.2.1.81.1.2.1.25) | read-create | TruthValue | Standard MIB values. | Whether to generate the hop table. | As per the MIB. |
| traceRouteCtlType (1.3.6.1.2.1.81.1.2.1.26) | read-create | OBJECT IDENTIFIER | Standard MIB values. | Traceroute operation type. | This object cannot be edited after creation. |
| traceRouteCtlRowStatus (1.3.6.1.2.1.81.1.2.1.27) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only active(1), createAndGo(4), and destroy(6). |

traceRouteResultsTable

About this table

This table contains information about traceroute probe results.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are traceRouteCtlOwnerIndex and traceRouteCtlTestName.

Table OID: 1.3.6.1.2.1.81.1.3.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|---|--|-----------------|
| traceRouteResultsOperStatus (1.3.6.1.2.1.81.1.3.1.1) | read-only | INTEGER | enabled(1) , disabled(2) , completed(3) | Operation status of a remote traceroute operation. | As per the MIB. |
| traceRouteResultsCurHopCount (1.3.6.1.2.1.81.1.3.1.2) | read-only | Gauge32 | Standard MIB values. | Current TTL value for the traceroute | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|----------------------|--|-----------------|
| | | | | request. | |
| traceRouteResultsCurProbeCount (1.3.6.1.2.1.81.1.3.1.3) | read-only | Gauge32 | Standard MIB values. | Current probe count for the remote traceroute operation. | As per the MIB. |
| traceRouteResultsIpTgtAddrType (1.3.6.1.2.1.81.1.3.1.4) | read-only | InetAddressType | Standard MIB values. | Type of address stored in the corresponding traceRouteResultsIpTgtAddr object. | As per the MIB. |
| traceRouteResultsIpTgtAddr (1.3.6.1.2.1.81.1.3.1.5) | read-only | InetAddress | Standard MIB values. | IP address associated with a traceRouteCtlTargetAddress value when the destination address is specified as a DNS name. | As per the MIB. |
| traceRouteResultsTestAttempts (1.3.6.1.2.1.81.1.3.1.6) | read-only | Gauge32 | Standard MIB values. | Current number of probe attempts. | As per the MIB. |
| traceRouteResultsTestSuccesses (1.3.6.1.2.1.81.1.3.1.7) | read-only | Gauge32 | Standard MIB values. | Current number of succeeded probe attempts. | As per the MIB. |
| traceRouteResultsLastGoodPath (1.3.6.1.2.1.81.1.3.1.8) | read-only | DateAndTime | Standard MIB values. | Date and time when the last complete path was determined. | As per the MIB. |

traceRouteProbeHistoryTable

About this table

Use this table to obtain history information about each probe in a traceroute operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are traceRouteCtlOwnerIndex, traceRouteCtlTestName, traceRouteProbeHistoryIndex, traceRouteProbeHistoryHopIndex, and traceRouteProbeHistoryProbeIndex.

Table OID: 1.3.6.1.2.1.81.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|----------------------------|--|-----------------|
| traceRouteProbeHistoryIndex (1.3.6.1.2.1.81.1.4.1.1) | not-accessible | Unsigned 32 | Unsigned 32 (1..'ffffff'h) | History record index of a traceroute operation. | As per the MIB. |
| traceRouteProbeHistoryHopIndex (1.3.6.1.2.1.81.1.4.1.2) | not-accessible | Unsigned 32 | Unsigned 32 (1-255) | Index of a hop in the record. | As per the MIB. |
| traceRouteProbeHistoryProbeIndex (1.3.6.1.2.1.81.1.4.1.3) | not-accessible | Unsigned 32 | Unsigned (1-10) | Index of a probe for the hop in the traceroute path. | As per the MIB. |
| traceRouteProbeHistoryHAddrType (1.3.6.1.2.1.81.1.4.1.4) | read-only | InetAddressType | Standard MIB values. | Type of address for the hop in the traceroute path. | As per the MIB. |
| traceRouteProbeHistoryHAddr (1.3.6.1.2.1.81.1.4.1.5) | read-only | InetAddress | Standard MIB values. | Address of the hop in the traceroute path. | As per the MIB. |
| traceRouteProbeHistoryResponse (1.3.6.1.2.1.81.1.4.1.6) | read-only | Unsigned 32 | Standard MIB values. | Amount of time measured in milliseconds from when the probe was sent to when its response was received or when it timed out. | As per the MIB. |
| traceRouteProbeHistoryStatus (1.3.6.1.2.1.81.1.4.1.7) | read-only | Operation ResponseStatus | Standard MIB values. | Probe result. | As per the MIB. |
| traceRouteProbeHistoryLastRC (1.3.6.1.2.1.81.1.4.1.8) | read-only | Integer32 | Standard MIB values. | The last implementation-method-specific reply code received. | As per the MIB. |
| traceRouteProbeHistoryTime (1.3.6.1.2.1.81.1.4.1.9) | read-only | DateAnd Time | Standard MIB values. | Time when the probe result was determined. | As per the MIB. |

traceRouteHopsTable

About this table

This table contains information about each hop in a traceroute path.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are traceRouteCtlOwnerIndex, traceRouteCtlTestName, and traceRouteHopsHopIndex.

Table OID: 1.3.6.1.2.1.81.1.5.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--------------------------------|--|-----------------|
| traceRouteHopsHopIndex (1.3.6.1.2.1.81.1.5.1.1) | not-accessible | Unsigned 32 | Unsigned 32 (1..4294967295) | Hop index. | As per the MIB. |
| traceRouteHopsIpTgtAddressType (1.3.6.1.2.1.81.1.5.1.2) | read-only | InetAddressType | Standard MIB values. | Destination address type. | As per the MIB. |
| traceRouteHopsIpTgtAddress (1.3.6.1.2.1.81.1.5.1.3) | read-only | InetAddress | Standard MIB values. | Destination address. | As per the MIB. |
| traceRouteHopsMinRtt (1.3.6.1.2.1.81.1.5.1.4) | read-only | Unsigned 32 | Standard MIB values. | Minimum bidirectional delay. | As per the MIB. |
| traceRouteHopsMaxRtt (1.3.6.1.2.1.81.1.5.1.5) | read-only | Unsigned 32 | Standard MIB values. | Maximum bidirectional delay. | As per the MIB. |
| traceRouteHopsAverageRtt (1.3.6.1.2.1.81.1.5.1.6) | read-only | Unsigned 32 | Standard MIB values. | Average bidirectional delay | As per the MIB. |
| traceRouteHopsRttSumOfSquares (1.3.6.1.2.1.81.1.5.1.7) | read-only | Unsigned 32 | Standard MIB values. | Sum of squares for delay. | As per the MIB. |
| traceRouteHopsSentProbes (1.3.6.1.2.1.81.1.5.1.8) | read-only | Unsigned 32 | Standard MIB values. | Number of sent probe packets. | As per the MIB. |
| traceRouteHopsProbeResponses (1.3.6.1.2.1.81.1.5.1.9) | read-only | Unsigned 32 | Standard MIB values. | Number of received probe reply packets. | As per the MIB. |
| traceRouteHopsLastGoodProbe (1.3.6.1.2.1.81.1.5.1.10) | read-only | DateAndTime | Standard MIB values. | Date and time when the last probe reply packet was received. | As per the MIB. |

Notifications

traceRoutePathChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.81.0.1 | The traceroute path changed. | Informational | N/A | N/A | OFF |

Description

This notification is generated if the path obtained by the current traceroute operation is different from the path obtained by previous traceroute operations. The traceroute path changes if the value for the `traceRouteCtlTrapGeneration` object is `pathChange(0)`.

Status control

ON

CLI: Use the `reaction trap path-change` command.

OFF

CLI: Use the `undo reaction trap path-change` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------------|----------------------|
| 1.3.6.1.2.1.81.1.2.1.3 (<code>traceRouteCtlTargetAddressType</code>) | Destination address type. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.81.1.2.1.4 (<code>traceRouteCtlTargetAddress</code>) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.81.1.3.1.4 (<code>traceRouteResultsIpTgtAddrType</code>) | Destination address type in the probe result. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.81.1.3.1.5 (<code>traceRouteResultsIpTgtAddr</code>) | Destination address in the probe result. | No | InetAddress | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

traceRouteTestFailed

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|--------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.81.0.2 | A traceroute operation failed. | Informational | N/A | N/A | OFF |

Description

This notification is generated when a traceroute operation fails. A traceroute operation fails if the value for the `traceRouteCtlTrapGeneration` object is `testFailure(1)`.

Status control

ON

CLI: Use the `reaction trap test-failure [accumulate-probe-failures]` command.

OFF

CLI: Use the `undo reaction trap test-failure [accumulate-probe-failures]` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|----------------------|
| 1.3.6.1.2.1.81.1.2.1.3 (traceRouteCtlTargetAddressType) | Destination address type. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.81.1.2.1.4 (traceRouteCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.81.1.3.1.4 (traceRouteResultsIpTgtAddrType) | Destination address type in the probe result. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.81.1.3.1.5 (traceRouteResultsIpTgtAddr) | Destination address in the probe result. | No | InetAddress | Standard MIB values. |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

traceRouteTestCompleted

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.81.0.3 | A traceroute operation completed. | Informational | N/A | N/A | OFF |

Description

This notification is generated when a traceroute operation completes successfully. A traceroute operation completes successfully if the value for the traceRouteCtlTrapGeneration object is testCompletion(4).

Status control

ON

CLI: Use the `reaction trap test-complete` command.

OFF

CLI: Use the `undo reaction trap test-complete` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|----------------------|
| 1.3.6.1.2.1.81.1.2.1.3 (traceRouteCtlTargetAddressType) | Destination address type. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.81.1.2.1.4 (traceRouteCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.81.1.3.1.4 (traceRouteResultsIpTgtAddrType) | Destination address type in the probe result. | No | InetAddressType | Standard MIB values. |

| | | | | |
|--|---|----|-------------|----------------------|
| 1.3.6.1.2.1.81.1.3.1.5 (traceRouteResultsIpTgtAddr) | Destination address in the probe result. | No | InetAddress | Standard MIB values. |
|--|---|----|-------------|----------------------|

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-MIRRORGROUP-MIB

About this MIB

Use this MIB to configure the source port, monitor port, reflector port, remote probe VLAN, and more.

MIB file name

hh3c-mirroring.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cMirrGroup(68)

Tabular objects

hh3cMGTable

About this table

This table creates, deletes, or obtains a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is h3cMGID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|---|------------------------|--|
| hh3cMGID (1.3.6.1.4.1.25506.2.68.1.1.1.1.1) | not-accessible | Integer32 | 0..2147483647 | Mirroring group ID. | Implementation varies by product. |
| hh3cMGType (1.3.6.1.4.1.25506.2.68.1.1.1.1.2) | read-create | INTEGER | local(1) remote-source(2) remote-destination(3) | Mirroring group type. | Implementation varies by product. |
| hh3cMGStatus (1.3.6.1.4.1.25506.2.68.1.1.1.1.3) | read-only | INTEGER | active(1) inactive(2) | Mirroring group state. | As per the MIB. |
| hh3cMGRowStatus (1.3.6.1.4.1.25506.2.68.1.1.1.1.4) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none">active(1).createAndGo(4).destroy(6). |

hh3cMGMirrorIfTable

About this table

This table creates, deletes, or obtains a source port in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cMGID, h3cMGMirrorIfIndex, and h3cMGMirrorDirection.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|--------------------------------------|----------------------|--|
| hh3cMGMirrorIfIndex (1.3.6.1.4.1.25506.2.68.1.2.1.1.1) | not-accessible | Integer32 | Standard MIB values. | Source port index. | As per the MIB. |
| hh3cMGMirrorDirection (1.3.6.1.4.1.25506.2.68.1.2.1.1.2) | not-accessible | INTEGER | inbound(1) outbound(2) both(3) | Mirroring direction. | As per the MIB. |
| hh3cMGMirrorRowStatus (1.3.6.1.4.1.25506.2.68.1.2.1.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none">• active(1).• createAndGo(4).• destroy(6). |

hh3cMGMonitorIfTable

About this table

This table creates, deletes, or obtains a monitor port in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cMGID and h3cMGMonitorIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|----------------------|---------------------|-------------------------------------|
| hh3cMGMonitorIfIndex (1.3.6.1.4.1.25506.2.68.1.3.1.1.1) | not-accessible | Integer32 | Standard MIB values. | Monitor port index. | As per the MIB. |
| hh3cMGMonitorRowStatus (1.3.6.1.4.1.25506.2.68.1.3.1.1.2) | read-create | RowStatus | Standard MIB | Row status. | Supports only the following values: |

| | | | | | |
|----|--|--|---------|--|--|
| 2) | | | values. | | <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |
|----|--|--|---------|--|--|

hh3cMGReflectorIfTable

About this table

This table creates, deletes, or obtains a reflector port in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cMGID and h3cMGReflectorIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|----------------------|-----------------------|--|
| hh3cMGReflectorIfIndex (1.3.6.1.4.1.25506.2.68.1.4.1.1.1) | not-accessible | Integer32 | Standard MIB values. | Reflector port index. | As per the MIB. |
| hh3cMGReflectorRowStatus (1.3.6.1.4.1.25506.2.68.1.4.1.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cMGRprobeVlanTable

About this table

This table creates, deletes, or obtains a remote probe VLAN in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cMGID and h3cMGRprobeVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------|----------------|----------|-------------|--------------|-----------------|
| hh3cMGRprobeVlanID | not-accessible | Integer3 | 1..4094 | Remote probe | As per the MIB. |

| | | | | | |
|---|-------------|-----------|----------------------|-------------|--|
| (1.3.6.1.4.1.25506.2.68.1.5.1.1.1) | e | 2 | | VLAN ID. | |
| hh3cMGRprobeVlanRowStatus (1.3.6.1.4.1.25506.2.68.1.5.1.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cMGEgressIfTable

About this table

This table creates, deletes, or obtains an egress port in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cMGID and h3cMGEgressIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|----------------------|--------------------|--|
| hh3cMGEgressIfIndex (1.3.6.1.4.1.25506.2.68.1.6.1.1.1) | not-accessible | Integer32 | 0..2147483647 | Egress port index. | As per the MIB. |
| hh3cMGEgressRowStatus (1.3.6.1.4.1.25506.2.68.1.6.1.1.2) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cMGMirrorVlanTable

About this table

This table creates, deletes, or obtains a source VLAN in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cMGID and h3cMGMirrorVlanID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|--------------------------------------|----------------------|--|
| hh3cMGMirrorVlanID (1.3.6.1.4.1.25506.2.6.8.1.7.1.1.1) | not-accessible | Integer32 | 1~4094 | Source VLAN ID. | As per the MIB. |
| hh3cMGMirrorVlanDirection (1.3.6.1.4.1.25506.2.6.8.1.7.1.1.2) | read-create | INTEGER | inbound(1) outbound(2) both(3) | Mirroring direction. | As per the MIB. |
| hh3cMGMirrorVlanRowStatus (1.3.6.1.4.1.25506.2.6.8.1.7.1.1.3) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

hh3cMGMirrorCpuTable

About this table

This table creates, deletes, or obtains a source CPU in a mirroring group.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are h3cMGID, h3cMGMirrorCpuChassis, and h3cMGMirrorCpuSlot.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--|------------------------------------|--|
| hh3cMGMirrorCpuChassis (1.3.6.1.4.1.25506.2.68.1.8.1.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Chassis number for the source CPU. | As per the MIB. |
| hh3cMGMirrorCpuSlot (1.3.6.1.4.1.25506.2.68.1.8.1.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Slot number for the source CPU. | As per the MIB. |
| hh3cMGMirrorCpuDirection (1.3.6.1.4.1.25506.2.68.1.8.1.1.3) | read-create | INTEGER | inbound(1), outbound(2), both(3) | Mirroring direction. | As per the MIB. |
| hh3cMGMirrorCpuRowStatus (1.3.6.1.4.1.25506.2.68.1.8.1.1.4) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1). • createAndGo(4). • destroy(6). |

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HH3C-NETCONF-MIB

About this MIB

Use this MIB to notify SNMP NMSs of NETCONF session establishment and disconnection events.

MIB file name

hh3c-netconf.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cNetconf(206)

Scalar objects

hh3cNetconfSessionId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|-----------|------------------------------|---------------------|-----------------------------------|
| hh3cNetconfSessionId (1.3.6.1.4.1.25506.2.206.1.1.1) | accessible -for-notify | Integer32 | Integer32 (1..2147483647) | NETCONF session ID. | Implementation varies by product. |

hh3cNetconfSessionUserName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|---------------------------|---------------|-------------------------|---------------------------|-----------------|
| hh3cNetconfSessionUserName (1.3.6.1.4.1.25506.2.206.1.1.2) | accessible -for-notify | DisplayString | OCTET STRING (1..80) | NETCONF session username. | As per the MIB. |

hh3cNetconfSessionPeerIpAddressType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|-------------|----------------------|---|-----------------|
| hh3cNetconfSessionPeerIpAddressType (1.3.6.1.4.1.25506.2.206.1.1.3) | accessible -for-notify | InetAddress | Standard MIB values. | Type of the remote IP address that established the NETCONF session with the device. | As per the MIB. |

hh3cNetconfSessionPeerIpAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|-------------|------------------------|-----------------|
| hh3cNetconfSessionPeerIpAddress (1.3.6.1.4.1.25506.2.206.1.1.4) | accessible | InetAddress | Standard | Remote IP address that | As per the MIB. |

| | | | | | |
|------------------------------------|-------------|---------|---------------|--|--|
| ss (1.3.6.1.4.1.25506.2.206.1.1.4) | -for-notify | essType | d MIB values. | established the NETCONF session with the device. | |
|------------------------------------|-------------|---------|---------------|--|--|

hh3cNetconfSessionTerminationReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------|--|---|---|
| hh3cNetconfSessionTerminationReason (1.3.6.1.4.1.25506.2.206.1.1.5) | accessible-for-notify | INTEGER | other(1), closed(2), linkDown(3), idleTimeout(4), | Reason. for the session to be disconnected by the NETCONF client. | Options: other(1) —Any other reason than those listed below. closed(2) —Session was closed. linkDown(3) —Link went down. idleTimeout(4) —Session timed out. |

Notifications

hh3cNetconfServerSessionStart

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| (1.3.6.1.4.1.25506.2.206.2.0.1) | NETCONF server established a session. | Informational | N/A | N/A | ON |

Description

This notification is generated when the NETCONF server established a session with a NETCONF client.

Status control

No action is required.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.206.1.1.1 (hh3cNetconfSessionId) | NETCONF session ID. | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.206.1.1.2 (hh3cNetconfSessionUserName) | NETCONF session username. | No | DisplayString | OCTET STRING (1..80) |
| 1.3.6.1.4.1.25506.2.206.1.1.3 (hh3cNetconfSessionPeerIpAddressType) | Type of the remote IP address that established the NETCONF session with the device. | No | InetAddressType | Standard MIB values. |

| | | | | |
|--|---|----|-------------|----------------------|
| 1.3.6.1.4.1.25506.2.206.1.1.4 (hh3cNetconfSessionPeerIPAddress) | Remote IP address that established the NETCONF session with the device. | No | InetAddress | Standard MIB values. |
|--|---|----|-------------|----------------------|

Recommended action

No action is required.

hh3cNetconfServerSessionEnd

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--------------------------------|-------|----------|-----------------------|----------------|
| (1.3.6.1.4.1.25506.2.206.2.0.2) | NETCONF server ended a session | Error | N/A | N/A | ON |

Description

NETCONF server ended a session

Status control

This notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.206.1.1.1 (hh3cNetconfSessionId) | NETCONF session ID. | No | Integer32 | Integer32 (1..2147483647) |
| 1.3.6.1.4.1.25506.2.206.1.1.2 (hh3cNetconfSessionUserName) | NETCONF session username. | No | DisplayString | OCTET STRING (1..80) |
| 1.3.6.1.4.1.25506.2.206.1.1.3 (hh3cNetconfSessionPeerIPAdressType) | Type of the remote IP address that established the NETCONF session with the device. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.206.1.1.4 (hh3cNetconfSessionPeerIPAddress) | Remote IP address that established the NETCONF session with the device. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.206.1.1.5 (hh3cNetconfSessionTerminationReason) | Reasons for the session to be disconnected by the NETCONF client: | No | INTEGER | Options: other(1) —Any other reason than those listed below. closed(2) —Session was closed. timeout(3) —Session exception occurred. idleTimeout(4) —Session timed out. |

Recommended action

- If the session was closed normally, no action is required.

- If the session was closed abnormally, check the physical link.

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HH3C-NQA-MIB

About this MIB

Use this MIB to implement the following functions:

- Configure the extended attributes for NQA operations.
- Display the statistical results of the NQA operations.
- Display the extended results of the jitter operations.
- Configure TCP/UDP server properties.
- Save the statistical results of an operation within a specific interval and save multiple statistics groups.
- Save a certain number of history records for an operation.
- Configure the start and end time for each operation.
- Display the statistical results and history records within a specific period of time.

MIB file name

hh3c-nqa.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3cNqa(3)

To support this MIB, the device must also support DISMAN-PING-MIB. HH3C-NQA-MIB and DISMAN-PING-MIB cannot be used together with the CLI.

Scalar objects

hh3cNqaMIBVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|--------------------------|--------------|-----------------|
| hh3cNqaMIBVersion (1.3.6.1.4.1.25506.8.3.1.1) | read-only | DisplayString | OCTET STRING (0..255) | MIB version. | As per the MIB. |

hh3cNqaAgentEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--------------------------|--|-----------------|
| hh3cNqaAgentEnable (1.3.6.1.4.1.25506.8.3.1.5) | read-write | INTEGER | Enable(1), disable(2) | Whether or not to enable the NQA client. | As per the MIB. |

hh3cNqaServerEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--------------------------|--|-----------------|
| hh3cNqaServerEnable (1.3.6.1.4.1.25506.8.3.1.8) | read-write | INTEGER | Enable(1), disable(2) | Whether or not to enable the NQA server. | As per the MIB. |

hh3cNqaStatsMaxGroupNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| hh3cNqaStatsMaxGroupNumber (1.3.6.1.4.1.25506.8.3.1.9) | read-only | Integer32 | Standard MIB values. | Maximum number of statistics groups that can be saved. | As per the MIB. |

Tabular objects

hh3cNqaCtlTable

About this table

Use this table to configure NQA operations.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

- The parameters not supported by pingCtlType are not configurable.
- With configuration modified, the results, history records, and statistics of the corresponding entries will be cleared.
- The results, history records, and statistics must actually reflect the operation results of the current configuration.
- The users cannot obtain the probe results of the previous configuration.
- The result is invalid if a parameter not supported by pingCtlType is configured.
- The table displays the parameters supported by pingCtlType.

| pingCtlType value | Supported parameters |
|-------------------|--|
| pingIcmpEcho | hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlVPNInstance |

| pingCtlType value | Supported parameters |
|---|---|
| pingUdpEcho hh3cNqaUdpEcho | hh3cNqaCtlTargetPort hh3cNqaCtlSourcePort hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlVPNInstance |
| pingSnmpQuery | hh3cNqaCtlSourcePort hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlVPNInstance |
| pingTcpConnectionAttempt hh3cNqaTcpconnect | hh3cNqaCtlTargetPort hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlVPNInstance |
| hh3cNqajitter (for UDP jitter operations) Note: The hh3cNqaCtlCodecType object is set to notDefined(1). | hh3cNqaCtlTargetPort hh3cNqaCtlSourcePort hh3cNqaCtlTTL hh3cNqaCtlJitterAdminInterval hh3cNqaCtlJitterAdminNumPackets hh3cNqaCtlCodecType hh3cNqaCtlVPNInstance |
| hh3cNqajitter (for voice operations) Note: The hh3cNqaCtlCodecType object is set to g711Alaw(2), g711Ulaw(3), or g729A(4). | hh3cNqaCtlTargetPort hh3cNqaCtlSourcePort hh3cNqaCtlTTL hh3cNqaCtlJitterAdminInterval hh3cNqaCtlJitterAdminNumPackets hh3cNqaCtlICPIFAdvFactor hh3cNqaCtlCodecType hh3cNqaCtlVPNInstance |
| hh3cNqajitter (for ICMP jitter operations) Note: The hh3cNqaCtlCodecType object is set to icmpTimestamp(5). | hh3cNqaCtlTTL hh3cNqaCtlJitterAdminInterval hh3cNqaCtlJitterAdminNumPackets hh3cNqaCtlCodecType hh3cNqaCtlVPNInstance |
| hh3cNqaHttp | hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlHttpOperationType hh3cNqaCtlHttpOperationString hh3cNqaCtlVPNInstance |
| hh3cNqadlsw | hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlVPNInstance |

| pingCtlType value | Supported parameters |
|-------------------|--|
| hh3cNqaDhcp | hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlVPNInstance |
| hh3cNqaftp | hh3cNqaCtlTTL hh3cNqaCtlHistoryKeptTime hh3cNqaCtlHistoryEnable hh3cNqaCtlFtpOperationType hh3cNqaCtlFtpUsername hh3cNqaCtlFtpPassword hh3cNqaCtlFtpOperationString hh3cNqaCtlVPNInstance |

Columns

The table indexes are pingCtlOwnerIndex and pingCtlTestName.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|-------------------------------|--|---|
| hh3cNqaCtlTargetPort (1.3.6.1.4.1.25506.8.3.1.2.1.1) | read-create | Integer32 | Integer32 (0..65536) | Destination port. | Value range: 0 to 65535. If the value for pingCtlType is pingUdpEcho or pingTcpConnectionAttempt , the value for this object must be 7. If the value for pingCtlType is hh3cNqaUdpEcho or hh3cNqaTcpConnect , the value for this object cannot be 7. |
| hh3cNqaCtlSourcePort (1.3.6.1.4.1.25506.8.3.1.2.1.2) | read-create | Integer32 | Integer32 (0..65536) | Source port. | Value range: 0 to 65535. |
| hh3cNqaCtlTTL (1.3.6.1.4.1.25506.8.3.1.2.1.3) | read-create | Integer32 | Standard values. MIB | TTL for an NQA operation. | Value range: 1 to 255. |
| hh3cNqaCtlJitterAdminInterval (1.3.6.1.4.1.25506.8.3.1.2.1.4) | read-create | Integer32 | Integer32 (0..60000) | Time interval between two continuous probes in a jitter operation. | Value range: 0 to 60000. |
| hh3cNqaCtlJitterAdminNumPackets (1.3.6.1.4.1.25506.8.3.1.2.1.5) | read-create | Integer32 | Standard values. MIB | Number of packets in a jitter operation. | For ICMP jitter and UDP jitter operations, the value range is 10 to 1000 and the default value is 10. For voice operations, the value range is 10 to 60000 and the default value is 1000. The object is applicable to only ICMP jitter, voice, and UDP jitter operations. |
| hh3cNqaCtlHttpOperationType (1.3.6.1.4.1.25506.8.3.1.2.1.6) | read-create | INTEGER | get(1), post(2), raw(3) | HTTP operation type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------|----------------------------|--|--|
| hh3cNqaCtlHttpOperationString (1.3.6.1.4.1.25506.8.3.1.2.1.7) | read-create | DisplayString | OCTET STRING (0..1023) | HTTP operation string. | <p>If the value for hh3cNqaCtlHttpOperationType is raw(3), the URL length is in the range of 0 to 1023.</p> <p>If the value for hh3cNqaCtlHttpOperationType is get(1) or post(2), the following information applies: The object contains resource and HTTP version, and the resource is part of the URL. The typical format of URL is http://host/resource.</p> <p>The length of the resource is in the range 0 to 246.</p> <p>The resource is case sensitive.</p> <p>The HTTP version is case insensitive and supports HTTP/1.0 and HTTP/1.1.</p> <p>The default HTTP version is v1.0.</p> <p>The object value must contain and only contain one space that separates the resource and HTTP version.</p> <p>If the object value is a zero-length string, the default resource and HTTP version are used.</p> |
| hh3cNqaCtlFtpOperationType (1.3.6.1.4.1.25506.8.3.1.2.1.8) | read-create | INTEGER | get(1), put(2) | FTP operation type. | As per the MIB. |
| hh3cNqaCtlFtpUsername (1.3.6.1.4.1.25506.8.3.1.2.1.9) | read-create | DisplayString | OCTET STRING (0..32) | FTP username. | As per the MIB. |
| hh3cNqaCtlFtpPassword (1.3.6.1.4.1.25506.8.3.1.2.1.10) | read-create | DisplayString | OCTET STRING (0..32) | FTP password. | As per the MIB. |
| hh3cNqaCtlFtpOperationString (1.3.6.1.4.1.25506.8.3.1.2.1.11) | read-create | DisplayString | OCTET STRING (0..255) | File name transmitted between the FTP client and server. | <p>If the value for hh3cNqaCtlFtpOperationType is put(2), the length of the object is in the range of 1 to 200.</p> <p>If the value for hh3cNqaCtlFtpOperationType is get(1), the length of the object is in the range of 1 to 247.</p> |
| hh3cNqaCtlVPNInstance (1.3.6.1.4.1.25506.8.3.1.2.1.12) | read-create | DisplayString | OCTET STRING (0..255) | VPN name. | <p>The length of the object is in the range of 0 to 31.</p> <p>The object is not configurable if the device does not support VPN.</p> |
| hh3cNqaCtlHistoryKeepTime (1.3.6.1.4.1.25506.8.3.1.2.1.13) | read-create | Integer32 | Integer32 (1..1440) | Lifetime of history records. | As per the MIB. |
| hh3cNqaCtlHistoryEnable (1.3.6.1.4.1.25506.8.3.1.2.1.14) | read-create | INTEGER | enabled(1), disabled(2) | Enabling status of saving | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|---|----------------------------------|---|
| .3.1.2.1.14) | | | | history records. | |
| hh3cNqaCtlICPIFAdvFactor (1.3.6.1.4.1.25506.8.3.1.2.1.15) | read-create | Integer32 | Standard values. MIB | Value of the advantage factor. | Value range: 0 to 20. |
| hh3cNqaCtlCodecType (1.3.6.1.4.1.25506.8.3.1.2.1.16) | read-create | INTEGER | notDefined(1), g711Alaw(2), g711Ulaw(3), g729A(4), icmpTimestamp(5) | Code type for jitter operations. | <p>The object is valid only if pingCtlType is hh3cNqajitter.</p> <p>For UDP jitter operations, pingCtlType is hh3cNqajitter and the value for this object is notDefined.</p> <p>For voice operations, pingCtlType is hh3cNqajitter and the value for this object is g711Alaw, g711Ulaw, or g729A.</p> <p>For ICMP jitter operations, pingCtlType is hh3cNqajitter and the value for this object is icmpTimestamp.</p> <p>If the value for this object indicates a new operation type, the system performs the following tasks:</p> <ul style="list-style-type: none"> • Delete the entries of the old operation type. • Use the default settings to create entries for the new operation type. <p>In the current software version, the supported values are notDefined, g711Alaw, g711Ulaw, g729A, and icmpTimestamp.</p> |

hh3cNqaResultsTable

About this table

This table displays the saved configuration of the NQA operations.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pingCtlOwnerIndex and pingCtlTestName.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.2.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|---------------------------------------|-----------------|
| hh3cNqaResultsRttNumDisconnects (1.3.6.1.4.1.25506.8.3.1.3.1.1) | read-only | Unsigned32 | Standard values. MIB | Number of disconnections by the peer. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|--|--|
| hh3cNqaResultsRttTimeouts (1.3.6.1.4.1.25506.8.3.1.3.1.2) | read-only | Unsigned32 | Standard values. MIB | Number of timeout occurrences in an operation. | As per the MIB. |
| hh3cNqaResultsRttBusies (1.3.6.1.4.1.25506.8.3.1.3.1.3) | read-only | Unsigned32 | Standard values. MIB | Number of probe failures because the upper limit is reached. | Not supported |
| hh3cNqaResultsRttNoConnections (1.3.6.1.4.1.25506.8.3.1.3.1.4) | read-only | Unsigned32 | Standard values. MIB | Number of failures because of unreachable destination. | As per the MIB. |
| hh3cNqaResultsRttDrops (1.3.6.1.4.1.25506.8.3.1.3.1.5) | read-only | Unsigned32 | Standard values. MIB | Number of failures to allocate the system resources. | As per the MIB. |
| hh3cNqaResultsRttSequenceErrors (1.3.6.1.4.1.25506.8.3.1.3.1.6) | read-only | Unsigned32 | Standard values. MIB | Number of received out-of-sequence packets. | As per the MIB. |
| hh3cNqaResultsRttStatsErrors (1.3.6.1.4.1.25506.8.3.1.3.1.7) | read-only | Unsigned32 | Standard values. MIB | Number of other errors. | As per the MIB. |
| hh3cNqaResultsMaxDelaySD (1.3.6.1.4.1.25506.8.3.1.3.1.8) | read-only | Unsigned32 | Standard values. MIB | Maximum delay from source to destination. | As per the MIB. |
| hh3cNqaResultsMaxDelayDS (1.3.6.1.4.1.25506.8.3.1.3.1.9) | read-only | Unsigned32 | Standard values. MIB | Maximum delay from destination to source. | As per the MIB. |
| hh3cNqaResultsLostPacketRatio (1.3.6.1.4.1.25506.8.3.1.3.1.10) | read-only | Unsigned32 | Standard values. MIB | Packet loss ratio. | This object value reflects the packet loss ratio for all operations in DISMAN-PING-MIB and HH3C-NQA-MIB. |
| hh3cNqaResultsPacketLateArrival (1.3.6.1.4.1.25506.8.3.1.3.1.11) | read-only | Unsigned32 | Standard values. MIB | Number of packets arrived after expiration of the timeout timer. | As per the MIB. |
| hh3cNqaResultsRttSum (1.3.6.1.4.1.25506.8.3.1.3.1.12) | read-only | Unsigned32 | Standard values. MIB | Sum of round-trip time. | As per the MIB. |
| hh3cNqaResultsNumOfDelaySD (1.3.6.1.4.1.25506.8.3.1.3.1.13) | read-only | Unsigned32 | Standard values. MIB | Number of delays from source to | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| | | | | destination. | |
| hh3cNqaResultsMinDelaySD (1.3.6.1.4.1.25506.8.3.1.3.1.14) | read-only | Unsigned32 | Standard values. MIB | Minimum delay from source to destination. | As per the MIB. |
| hh3cNqaResultsSumDelaySD (1.3.6.1.4.1.25506.8.3.1.3.1.15) | read-only | Unsigned32 | Standard values. MIB | Sum of delays from source to destination. | As per the MIB. |
| hh3cNqaResultsSum2DelaySD (1.3.6.1.4.1.25506.8.3.1.3.1.16) | read-only | Unsigned32 | Standard values. MIB | Square sum of delays from source to destination. | As per the MIB. |
| hh3cNqaResultsNumOfDelayDS (1.3.6.1.4.1.25506.8.3.1.3.1.17) | read-only | Unsigned32 | Standard values. MIB | Number of delays from destination to source. | As per the MIB. |
| hh3cNqaResultsMinDelayDS (1.3.6.1.4.1.25506.8.3.1.3.1.18) | read-only | Unsigned32 | Standard values. MIB | Minimum delay from destination to source. | As per the MIB. |
| hh3cNqaResultsSumDelayDS (1.3.6.1.4.1.25506.8.3.1.3.1.19) | read-only | Unsigned32 | Standard values. MIB | Sum of delays from destination to source. | As per the MIB. |
| hh3cNqaResultsSum2DelayDS (1.3.6.1.4.1.25506.8.3.1.3.1.20) | read-only | Unsigned32 | Standard values. MIB | Square sum of delays from destination to source. | As per the MIB. |

hh3cNqaJitterStatsTable

About this table

This table displays the saved jitter operations.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pingCtlOwnerIndex and pingCtlTestName.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.4.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|-----------------------------|-----------------|
| hh3cNqaJitterStatsNumOfRTT (1.3.6.1.4.1.25506.8.3.1.4.1.1) | read-only | Counter32 | Standard values. MIB | Number of received response | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|--|-----------|---------|------------------|-----|---|-----------------|
| 1.4.1.1) | | | | | packets. | |
| hh3cNqaJitterStatsMinOfPositivesSD (1.3.6.1.4.1.25506.8.3.1.4.1.2) | read-only | Gauge32 | Standard values. | MIB | Minimum positive jitter from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsMaximumOfPositivesSD (1.3.6.1.4.1.25506.8.3.1.4.1.3) | read-only | Gauge32 | Standard values. | MIB | Maximum positive jitter from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsMinimumOfPositivesSD (1.3.6.1.4.1.25506.8.3.1.4.1.4) | read-only | Gauge32 | Standard values. | MIB | Number of positive jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsSumOfPositivesSD (1.3.6.1.4.1.25506.8.3.1.4.1.5) | read-only | Gauge32 | Standard values. | MIB | Sum of positive jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsSumm2PositivesSD (1.3.6.1.4.1.25506.8.3.1.4.1.6) | read-only | Gauge32 | Standard values. | MIB | Square sum of positive jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsMinimumOfNegativesSD (1.3.6.1.4.1.25506.8.3.1.4.1.7) | read-only | Gauge32 | Standard values. | MIB | Minimum absolute value among negative jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsMaximumOfNegativesSD (1.3.6.1.4.1.25506.8.3.1.4.1.8) | read-only | Gauge32 | Standard values. | MIB | Maximum absolute value among negative jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsMinimumOfNegativesSD (1.3.6.1.4.1.25506.8.3.1.4.1.9) | read-only | Gauge32 | Standard values. | MIB | Number of negative jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsSumOfNegativesSD (1.3.6.1.4.1.25506.8.3.1.4.1.10) | read-only | Gauge32 | Standard values. | MIB | Sum of negative jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsSumm2NegativesSD (1.3.6.1.4.1.25506.8.3.1.4.1.11) | read-only | Gauge32 | Standard values. | MIB | Square sum of negative jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsMinimumOfPositivesDS (1.3.6.1.4.1.25506.8.3.1.4.1.12) | read-only | Gauge32 | Standard values. | MIB | Minimum positive jitter from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsMaximumOfPositivesDS (1.3.6.1.4.1.25506.8.3.1.4.1.13) | read-only | Gauge32 | Standard values. | MIB | Maximum positive jitter from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsNumber | read-only | Gauge32 | Standard | MIB | Number of | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|--|-----------|---------|------------------|-----|---|-----------------|
| mOfPositivesDS (1.3.6.1.4.1.25506.8.3.1.4.1.14) | | | values. | | positive jitters from destination to source. | |
| hh3cNqaJitterStatsSumOfPositivesDS (1.3.6.1.4.1.25506.8.3.1.4.1.15) | read-only | Gauge32 | Standard values. | MIB | Sum of positive jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsSum2PositivesDS (1.3.6.1.4.1.25506.8.3.1.4.1.16) | read-only | Gauge32 | Standard values. | MIB | Square sum of positive jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsMinOfNegativesDS (1.3.6.1.4.1.25506.8.3.1.4.1.17) | read-only | Gauge32 | Standard values. | MIB | Minimum absolute value among negative jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsMaxOfNegativesDS (1.3.6.1.4.1.25506.8.3.1.4.1.18) | read-only | Gauge32 | Standard values. | MIB | Maximum absolute value among negative jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsNumOfNegativesDS (1.3.6.1.4.1.25506.8.3.1.4.1.19) | read-only | Gauge32 | Standard values. | MIB | Number of negative jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsSumOfNegativesDS (1.3.6.1.4.1.25506.8.3.1.4.1.20) | read-only | Gauge32 | Standard values. | MIB | Sum of absolute values of negative jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsSum2NegativesDS (1.3.6.1.4.1.25506.8.3.1.4.1.21) | read-only | Gauge32 | Standard values. | MIB | Square sum of negative jitters from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsPacketLossSD (1.3.6.1.4.1.25506.8.3.1.4.1.22) | read-only | Gauge32 | Standard values. | MIB | Number of lost packets from source to destination. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|--|-----------|---------|------------------|-----|---|--|
| hh3cNqaJitterStatsPacketLossDS (1.3.6.1.4.1.25506.8.3.1.4.1.23) | read-only | Gauge32 | Standard values. | MIB | Number of lost packets from destination to source. | As per the MIB. |
| hh3cNqaJitterStatsAveragePositivesSD (1.3.6.1.4.1.25506.8.3.1.4.1.24) | read-only | Gauge32 | Standard values. | MIB | Average positive jitter from source to destination. | If the time difference between two consecutive packets from source to destination is positive, the statistical time is added by 1 and the sum of jitters is added by the time difference. □ Average positive jitter = Sum of jitters / statistical time |
| hh3cNqaJitterStatsAverageNegativesSD (1.3.6.1.4.1.25506.8.3.1.4.1.25) | read-only | Gauge32 | Standard values. | MIB | Average negative jitter from source to destination. | If the time difference between two consecutive packets from source to destination is negative, the statistical time is added by 1 and the sum of jitters is added by the absolute value of the time difference. □ Average negative jitter = Sum of jitters / statistical time |
| hh3cNqaJitterStatsAveragePositivesDS (1.3.6.1.4.1.25506.8.3.1.4.1.26) | read-only | Gauge32 | Standard values. | MIB | Average positive jitter from destination to source. | If the time difference between two consecutive packets from destination to source is positive, the statistical time is added by 1 and the sum of jitters is added by the time difference. □ Average positive jitter = Sum of jitters / statistical time |
| hh3cNqaJitterStatsAverageNegativesDS (1.3.6.1.4.1.25506.8.3.1.4.1.27) | read-only | Gauge32 | Standard values. | MIB | Average negative jitter from destination to source. | If the time difference between two consecutive packets from destination to source is negative, the statistical time is added by 1 and the sum of jitters is added by the absolute value of the time difference. □ Average negative jitter = Sum of jitters / statistical time |
| hh3cNqaJitterStatsPacketLossUnknown (1.3.6.1.4.1.25506.8.3.1.4.1.28) | read-only | Gauge32 | Standard values. | MIB | Number of lost packets for unknown reasons. | Number of lost packets for unknown reasons. |
| hh3cNqaJitterStatsOperationOfICPIF (1.3.6.1.4.1.25506.8.3.1.4.1.29) | read-only | Gauge32 | Standard values. | MIB | ICPIF value of the operation. | Supports only voice operations. |
| hh3cNqaJitterStatsOperationOfMOS (1.3.6.1.4.1.25506.8.3.1.4.1.30) | read-only | Gauge32 | Standard values. | MIB | MOS value of the operation. | Supports only voice operations. The object value is 100 times the |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|----------------------|---|-----------------|
| 1.4.1.30) | | | | | actual value. |
| hh3cNqaJitterStatsAveSD (1.3.6.1.4.1.25506.8.3.1.4.1.31) | read-only | Gauge32 | Standard values. MIB | Average jitters from source to destination. | As per the MIB. |
| hh3cNqaJitterStatsAveDS (1.3.6.1.4.1.25506.8.3.1.4.1.32) | read-only | Gauge32 | Standard values. MIB | Average jitters from destination to source. | As per the MIB. |

hh3cNqaTcpServerTable

About this table

This table configures the TCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are h3cNQATcpServerIpAddress and h3cNQATcpServerPort.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.6.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|----------------------|--------------------------------|---|
| hh3cNqaTcpServerIpAddress (1.3.6.1.4.1.25506.8.3.1.6.1.1) | not-accessible | InetAddress | Standard values. MIB | IP address of the TCP server. | Supports both IPv4 and IPv6 addresses. |
| hh3cNqaTcpServerPort (1.3.6.1.4.1.25506.8.3.1.6.1.2) | not-accessible | Integer32 | Integer32 (0..65536) | Port number of the TCP server. | Value range: 1 to 65535. |
| hh3cNqaTcpServerRowStatus (1.3.6.1.4.1.25506.8.3.1.6.1.3) | read-create | RowStatus | Standard values. MIB | Row status. | Supports only values active(1) , createAndGo(4) , and destroy(6) . |

hh3cNqaUdpServerTable

About this table

This table configures the UDP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cNqaUdpServerIpAddress and hh3cNqaUdpServerPort.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.7.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------|----------------------|--------------------------------|---|
| hh3cNqaUdpServerIpAddress (1.3.6.1.4.1.25506.8.3.1.7.1.1) | not-accessible | InetAddress | Standard values. MIB | IP address of the UDP server. | Supports both IPv4 and IPv6 addresses. |
| hh3cNqaUdpServerPort (1.3.6.1.4.1.25506.8.3.1.7.1.2) | not-accessible | Integer32 | Integer32 (0..65536) | Port number of the UDP server. | Value range: 1 to 65535. |
| hh3cNqaUdpServerRowStatus (1.3.6.1.4.1.25506.8.3.1.7.1.3) | read-create | RowStatus | Standard values. MIB | Row status. | Supports only values active(1) , createAndGo(4) , and destroy(6) . |

hh3cNqaStatisticsCtlTable

About this table

This table configures the collection of NQA operation statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are pingCtlOwnerIndex and pingCtlTestName.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.10.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|----------------------|---|--|
| hh3cNqaCtlStatisticsInterval (1.3.6.1.4.1.25506.8.3.1.10.1.1) | read-create | Unsigned32 | Standard MIB values. | Statistics collection interval, in minutes. | Value range: 1 to 35791394. Default: 60. |
| hh3cNqaCtlStatisticsGroupNumber (1.3.6.1.4.1.25506.8.3.1.10.1.2) | read-create | Unsigned32 | Standard MIB values. | Maximum number of statistics groups. | Value range: 0 to the value of hh3cNqaStatsMaxGroupNumber. Default: 2. If the object value is 0, no statistics collection will be enabled. |
| hh3cNqaCtlStatisticsKeptTime (1.3.6.1.4.1.25506.8.3.1.10.1.3) | read-create | Unsigned32 | Unsigned32 (1..1440) | Statistics lifetime, in minutes. | Value range: 1 to 1440. Default: 120. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|----------------------|-----------------------------------|--|
| hh3cNqaCtlBeginTime (1.3.6.1.4.1.25506.8.3.1.10.1.4) | read-create | DateAndTime | Standard MIB values. | Start time for saving statistics. | Obeys the time format. Available year range: 2000 to 2035. |
| hh3cNqaCtlLifeTime (1.3.6.1.4.1.25506.8.3.1.10.1.5) | read-create | Unsigned32 | Standard MIB values. | Operation lifetime, in seconds. | Value range: 1 to 2147483647. The value 4294967295 indicates that the operation will never stop. |

hh3cNqaStatisticsResultsTable

About this table

This table displays NQA operation statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pingCtlOwnerIndex, pingCtlTestName, and h3cNQAStatResIndex.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.11.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-------------------------------|---------------------------------|-----------------|
| hh3cNqaStatResIndex (1.3.6.1.4.1.25506.8.3.1.11.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Statistics table index. | As per the MIB. |
| hh3cNqaStatResIpTargetAddressType (1.3.6.1.4.1.25506.8.3.1.11.1.2) | read-only | InetAddressType | Standard MIB values. | Type of destination IP address. | As per the MIB. |
| hh3cNqaStatResIpTargetAddress (1.3.6.1.4.1.25506.8.3.1.11.1.3) | read-only | InetAddress | Standard MIB values. | Destination IP address. | As per the MIB. |
| hh3cNqaStatResMinRtt (1.3.6.1.4.1.25506.8.3.1.11.1.4) | read-only | Gauge32 | Standard MIB values. | Minimum round-trip time. | As per the MIB. |
| hh3cNqaStatResMaxRtt (1.3.6.1.4.1.25506.8.3.1.11.1.5) | read-only | Gauge32 | Standard MIB values. | Maximum round-trip time. | As per the MIB. |
| hh3cNqaStatResAverageRtt (1.3.6.1.4.1.25506.8.3.1.11.1.6) | read-only | Gauge32 | Standard MIB values. | Average round-trip time. | As per the MIB. |
| hh3cNqaStatResProbeResponses (1.3.6.1.4.1.25506.8.3.1.11.1.7) | read-only | Counter32 | Standard MIB values. | Number of received packets. | As per the MIB. |
| hh3cNqaStatResSentProbes (1.3.6.1.4.1.25506.8.3.1.11.1.8) | read-only | Counter32 | Standard MIB values. | Number of sent probe packets. | As per the MIB. |
| hh3cNqaStatResRttSumOfSquares (1.3.6.1.4.1.25506.8.3.1.11.1.9) | read-only | Counter32 | Standard MIB values. | Square sum of round-trip time. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | | Description | Implementation |
|---|-----------|-------------|------------------|-----|--|-----------------|
| hh3cNqaStatResStartTime (1.3.6.1.4.1.25506.8.3.1.11.1.10) | read-only | DateAndTime | Standard values. | MIB | Start time of the statistics. | As per the MIB. |
| hh3cNqaStatResInterval (1.3.6.1.4.1.25506.8.3.1.11.1.11) | read-only | Gauge32 | Standard values. | MIB | End time of the statistics. | As per the MIB. |
| hh3cNqaStatResRttNumDisconnections (1.3.6.1.4.1.25506.8.3.1.11.1.12) | read-only | Counter32 | Standard values. | MIB | Number of disconnections by the peer. | As per the MIB. |
| hh3cNqaStatResRttTimeouts (1.3.6.1.4.1.25506.8.3.1.11.1.13) | read-only | Counter32 | Standard values. | MIB | Number of timeout occurrences in an operation. | As per the MIB. |
| hh3cNqaStatResRttBusies (1.3.6.1.4.1.25506.8.3.1.11.1.14) | read-only | Counter32 | Standard values. | MIB | Number of failures due to the busy system. | As per the MIB. |
| hh3cNqaStatResRttNoConnections (1.3.6.1.4.1.25506.8.3.1.11.1.15) | read-only | Counter32 | Standard values. | MIB | Number of failures to connect with the peer. | As per the MIB. |
| hh3cNqaStatResRttDrops (1.3.6.1.4.1.25506.8.3.1.11.1.16) | read-only | Counter32 | Standard values. | MIB | Number of failures to allocate the system resources. | As per the MIB. |
| hh3cNqaStatResRttSequenceErrors (1.3.6.1.4.1.25506.8.3.1.11.1.17) | read-only | Counter32 | Standard values. | MIB | Number of failures due to out-of-sequence packets. | As per the MIB. |
| hh3cNqaStatResRttErrors (1.3.6.1.4.1.25506.8.3.1.11.1.18) | read-only | Counter32 | Standard values. | MIB | Number of failures due to other errors. | As per the MIB. |
| hh3cNqaStatResLostPacketRatio (1.3.6.1.4.1.25506.8.3.1.11.1.19) | read-only | Gauge32 | Standard values. | MIB | Packet loss ratio. | As per the MIB. |
| hh3cNqaStatResPacketLateArrival (1.3.6.1.4.1.25506.8.3.1.11.1.20) | read-only | Counter32 | Standard values. | MIB | Number of packets arrived after the timeout. | As per the MIB. |
| hh3cNqaStatResRttSum (1.3.6.1.4.1.25506.8.3.1.11.1.21) | read-only | Counter32 | Standard values. | MIB | Sum of round-trip time. | As per the MIB. |
| hh3cNqaStatResNumOfDelaySD (1.3.6.1.4.1.25506.8.3.1.11.1.22) | read-only | Counter32 | Standard values. | MIB | Number of delays from source to destination. | As per the MIB. |
| hh3cNqaStatResMinDelaySD (1.3.6.1.4.1.25506.8.3.1.11.1.23) | read-only | Gauge32 | Standard values. | MIB | Minimum delay from source to destination. | As per the MIB. |
| hh3cNqaStatResMaxDelaySD (1.3.6.1.4.1.25506.8.3.1.11.1.24) | read-only | Gauge32 | Standard values. | MIB | Maximum delay from | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| | | | | source to destination. | |
| hh3cNqaStatResSumDelaySD (1.3.6.1.4.1.25506.8.3.1.11.1.25) | read-only | Counter32 | Standard values. MIB | Sum of delays from source to destination. | As per the MIB. |
| hh3cNqaStatResSum2DelaySD (1.3.6.1.4.1.25506.8.3.1.11.1.26) | read-only | Counter32 | Standard values. MIB | Square sum of delays from source to destination. | As per the MIB. |
| hh3cNqaStatResNumOfDelayDS (1.3.6.1.4.1.25506.8.3.1.11.1.27) | read-only | Counter32 | Standard values. MIB | Number of delays from destination to source. | As per the MIB. |
| hh3cNqaStatResMinDelayDS (1.3.6.1.4.1.25506.8.3.1.11.1.27) | read-only | Gauge32 | Standard values. MIB | Minimum delay from destination to source. | As per the MIB. |
| hh3cNqaStatResMaxDelayDS (1.3.6.1.4.1.25506.8.3.1.11.1.29) | read-only | Gauge32 | Standard values. MIB | Maximum delay from destination to source. | As per the MIB. |
| hh3cNqaStatResSumDelayDS (1.3.6.1.4.1.25506.8.3.1.11.1.30) | read-only | Counter32 | Standard values. MIB | Sum of delays from destination to source. | As per the MIB. |
| hh3cNqaStatResSum2DelayDS (1.3.6.1.4.1.25506.8.3.1.11.1.31) | read-only | Counter32 | Standard values. MIB | Square sum of delays from destination to source. | As per the MIB. |

hh3cNqaGroupStatsJitterTable

About this table

This table displays jitter operation statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are pingCtlOwnerIndex, pingCtlTestName, and h3cNQAStatJitterIndex.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.12.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|-------------------------------|------------------------|-----------------|
| hh3cNqaStatJitterIndex (1.3.6.1.4.1.25506.8.3.1.12.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Statistics table index | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|---|-----------------|
| | | | | for a jitter operation. | |
| hh3cNqaStatJitterMinOfPosSD (1.3.6.1.4.1.25506.8.3.1.12.1.2) | read-only | Gauge32 | Standard values. | MIB Minimum positive jitter from source to destination. | As per the MIB. |
| hh3cNqaStatJitterMaxOfPosSD (1.3.6.1.4.1.25506.8.3.1.12.1.3) | read-only | Gauge32 | Standard values. | MIB Maximum positive jitter from source to destination. | As per the MIB. |
| hh3cNqaStatJitterNumOfPosSD (1.3.6.1.4.1.25506.8.3.1.12.1.4) | read-only | Counter32 | Standard values. | MIB Number of positive jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterSumOfPosSD (1.3.6.1.4.1.25506.8.3.1.12.1.5) | read-only | Counter32 | Standard values. | MIB Sum of positive jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterSumOfSquarePosSD (1.3.6.1.4.1.25506.8.3.1.12.1.6) | read-only | Counter32 | Standard values. | MIB Square sum of positive jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterMinOfNegSD (1.3.6.1.4.1.25506.8.3.1.12.1.7) | read-only | Gauge32 | Standard values. | MIB Minimum negative jitter from source to destination. | As per the MIB. |
| hh3cNqaStatJitterMaxOfNegSD (1.3.6.1.4.1.25506.8.3.1.12.1.8) | read-only | Gauge32 | Standard values. | MIB Maximum negative jitter from source to destination. | As per the MIB. |
| hh3cNqaStatJitterNumOfNegSD (1.3.6.1.4.1.25506.8.3.1.12.1.9) | read-only | Counter32 | Standard values. | MIB Number of negative jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterSumOfNegSD (1.3.6.1.4.1.25506.8.3.1.12.1.10) | read-only | Counter32 | Standard values. | MIB Sum of negative jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterSumOfSquareNegSD (1.3.6.1.4.1.25506.8.3.1.12.1.11) | read-only | Counter32 | Standard values. | MIB Square sum of negative jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterMinOfPosDS (1.3.6.1.4.1.25506.8.3.1.12.1.12) | read-only | Gauge32 | Standard values. | MIB Minimum positive jitter from destination to | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------|---|-----------------|
| | | | | source. | |
| hh3cNqaStatJitterMaxOfPosDS (1.3.6.1.4.1.25506.8.3.1.12.1.13) | read-only | Gauge32 | Standard values. | MIB Maximum positive jitter from destination to source. | As per the MIB. |
| hh3cNqaStatJitterNumOfPosDS (1.3.6.1.4.1.25506.8.3.1.12.1.14) | read-only | Counter32 | Standard values. | MIB Number of positive jitters from destination to source. | As per the MIB. |
| hh3cNqaStatJitterSumOfPosDS (1.3.6.1.4.1.25506.8.3.1.12.1.15) | read-only | Counter32 | Standard values. | MIB Sum of positive jitters from destination to source. | As per the MIB. |
| hh3cNqaStatJitterSumOfSquarePosDS (1.3.6.1.4.1.25506.8.3.1.12.1.16) | read-only | Counter32 | Standard values. | MIB Square sum of positive jitters from destination to source. | As per the MIB. |
| hh3cNqaStatJitterMinOfNegDS (1.3.6.1.4.1.25506.8.3.1.12.1.17) | read-only | Gauge32 | Standard values. | MIB Minimum negative jitter from destination to source. | As per the MIB. |
| hh3cNqaStatJitterMaxOfNegDS (1.3.6.1.4.1.25506.8.3.1.12.1.18) | read-only | Gauge32 | Standard values. | MIB Maximum negative jitter from destination to source. | As per the MIB. |
| hh3cNqaStatJitterNumOfNegDS (1.3.6.1.4.1.25506.8.3.1.12.1.19) | read-only | Counter32 | Standard values. | MIB Number of negative jitters from destination to source. | As per the MIB. |
| hh3cNqaStatJitterSumOfNegDS (1.3.6.1.4.1.25506.8.3.1.12.1.20) | read-only | Counter32 | Standard values. | MIB Sum of negative jitters from destination to source. | As per the MIB. |
| hh3cNqaStatJitterSumOfSquareNegDS (1.3.6.1.4.1.25506.8.3.1.12.1.21) | read-only | Counter32 | Standard values. | MIB Square sum of negative jitters from destination to source. | As per the MIB. |
| hh3cNqaStatJitterPacketLossSD (1.3.6.1.4.1.25506.8.3.1.12.1.22) | read-only | Counter32 | Standard values. | MIB Number of lost packets from source to destination. | As per the MIB. |
| hh3cNqaStatJitterPacketLossDS (1.3.6.1.4.1.25506.8.3.1.12.1.23) | read-only | Counter32 | Standard values. | MIB Number of lost packets from destination to source. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|---|---|
| hh3cNqaStatJitterAvePosSD (1.3.6.1.4.1.25506.8.3.1.12.1.24) | read-only | Gauge32 | Standard values. MIB | Average positive jitter from source to destination. | As per the MIB. |
| hh3cNqaStatJitterAveNegSD (1.3.6.1.4.1.25506.8.3.1.12.1.25) | read-only | Gauge32 | Standard values. MIB | Average negative jitter from source to destination. | As per the MIB. |
| hh3cNqaStatJitterAvePosDS (1.3.6.1.4.1.25506.8.3.1.12.1.26) | read-only | Gauge32 | Standard values. MIB | Average positive jitter from destination to source. | As per the MIB. |
| hh3cNqaStatJitterAveNegDS (1.3.6.1.4.1.25506.8.3.1.12.1.27) | read-only | Gauge32 | Standard values. MIB | Average negative jitter from destination to source. | As per the MIB. |
| hh3cNqaStatJitterPktLossUnknown (1.3.6.1.4.1.25506.8.3.1.12.1.28) | read-only | Counter32 | Standard values. MIB | Number of lost packets for unknown reasons. | As per the MIB. |
| hh3cNqaStatJitterMaxOfICIPF (1.3.6.1.4.1.25506.8.3.1.12.1.29) | read-only | Gauge32 | Standard values. MIB | Maximum ICPIF value. | Supports only voice operations. |
| hh3cNqaStatJitterMinOfICIPF (1.3.6.1.4.1.25506.8.3.1.12.1.30) | read-only | Gauge32 | Standard values. MIB | Minimum ICPIF value. | Supports only voice operations. |
| hh3cNqaStatJitterMaxOfMOS (1.3.6.1.4.1.25506.8.3.1.12.1.31) | read-only | Gauge32 | Standard values. MIB | Maximum MOS value. | Supports only voice operations. The object value is 100 times the actual value. |
| hh3cNqaStatJitterMinOfMOS (1.3.6.1.4.1.25506.8.3.1.12.1.32) | read-only | Gauge32 | Standard values. MIB | Minimum MOS value. | Supports only voice operations. The object value is 100 times the actual value. |
| hh3cNqaStatJitterAveSD (1.3.6.1.4.1.25506.8.3.1.12.1.33) | read-only | Gauge32 | Standard values. MIB | Average jitters from source to destination. | As per the MIB. |
| hh3cNqaStatJitterAveDS (1.3.6.1.4.1.25506.8.3.1.12.1.34) | read-only | Gauge32 | Standard values. MIB | Average jitters from destination to source. | As per the MIB. |

hh3cNqaReactionTable

About this table

This table configures reaction entries for NQA operations.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cNqaReactOwnerIndex, hh3cNqaReactTestName, and hh3cNqaReactItemIndex.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.13.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------------|--|---|---|
| hh3cNqaReactOwnerIndex (1.3.6.1.4.1.25506.8.3.1.13.1.1) | accessible-for-notify | SnmpAdminString | OCTET STRING(0..32) | Administrator index. | As per the MIB. |
| hh3cNqaReactTestName (1.3.6.1.4.1.25506.8.3.1.13.1.2) | accessible-for-notify | SnmpAdminString | OCTET STRING(0..32) | Operation tag. | As per the MIB. |
| hh3cNqaReactItemIndex (1.3.6.1.4.1.25506.8.3.1.13.1.3) | accessible-for-notify | Unsigned32 | Unsigned32 (1..10) | A reaction entry is identified by its ID uniquely for an NQA operation. | As per the MIB. |
| hh3cNqaReactCheckedElement (1.3.6.1.4.1.25506.8.3.1.13.1.4) | read-create | INTEGER | probetime(1) probefailure(2) jitterrtt(3) jitterpacketloss(4) jittersd(5) jiterds(6) icpif(7) mos(8) jitterOwdSD(9) jitterOwdDS(10) | Monitored performance metric. | As per the MIB. |
| hh3cNqaReactThresholdUpperLimit (1.3.6.1.4.1.25506.8.3.1.13.1.5) | read-create | Unsigned32 | Standard values. | Upper limit of the threshold. | If hh3cNqaReactCheckedElement uses value icpif , the value range of this object is 1 to 100. If hh3cNqaReactCheckedElement uses value mos , the value range of this object is 1 to 500. If hh3cNqaReactCheckedElement uses value jittersd , jiterds , jitterOwdSD , jitterOwdDS , jitterrtt , or probetime , the value range of this object is 0 to 3600000 milliseconds. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|---|--|---|
| | | | | | In other cases, the value of this object should not be set. |
| hh3cNqaReactThresholdLowerLimit (1.3.6.1.4.1.25506.8.3.1.13.1.6) | read-create | Unsigned32 | Standard values. MIB | Lower limit of the threshold. | <p>If hh3cNqaReactCheckedElement uses value icpif, the value range of this object is 1 to 100.</p> <p>If hh3cNqaReactCheckedElement uses value mos, the value range of this object is 1 to 500.</p> <p>If hh3cNqaReactCheckedElement uses value jittersd, jitterds, jitterOwdSD, jitterOwdDS, jitterrrt, or probetime, the value range of this object is 0 to 3600000 milliseconds.</p> <p>In other cases, the value of this object should not be set.</p> |
| hh3cNqaReactThresholdType (1.3.6.1.4.1.25506.8.3.1.13.1.7) | read-create | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) | Threshold type. | <p>If hh3cNqaReactCheckedElement uses value jittersd or jitterds, this object value can be average or accumulative.</p> <p>If hh3cNqaReactCheckedElement uses value jitterpacketloss, this object value can be accumulative.</p> <p>If hh3cNqaReactCheckedElement uses value probetime, this object value can be average, consecutive, or accumulative.</p> <p>If hh3cNqaReactCheckedElement uses value probefailure, this object value can be consecutive or accumulative.</p> <p>If hh3cNqaReactCheckedElement uses value jitterrrt, this object value can be average or accumulative.</p> <p>In other cases, the value of this object should not be set.</p> |
| hh3cNqaReactThresholdConsecNum (1.3.6.1.4.1.25506.8.3.1.13.1.8) | read-create | Unsigned32 | Standard values. MIB | Consecutive threshold limit. If the threshold type is not set to consecutive, this object is meaningless. | <p>If hh3cNqaReactCheckedElement uses value probetime or probefailure, the value range of this object is 1 to 16.</p> <p>In other cases, the value of this object should not be set.</p> |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|--|--|--|
| hh3cNqaReactThresholdAccumNum (1.3.6.1.4.1.25506.8.3.1.13.1.9) | read-create | Unsigned32 | Standard values. MIB | Accumulative threshold limit. If the threshold type is not set to accumulate, this object is meaningless. | <p>If hh3cNqaReactCheckedElement uses value jittersd or jitterds and the operation type is set to ICMP-jitter or UDP-jitter, the value range of this object is 1 to 14999.</p> <p>If hh3cNqaReactCheckedElement uses value jittersd or jitterds and the operation type is set to voice, the value range of this object is 1 to 59999.</p> <p>If hh3cNqaReactCheckedElement uses value jitterpacketloss or jitterrtt and the operation type is set to ICMP-jitter or UDP-jitter, the value range of this object is 1 to 15000.</p> <p>If hh3cNqaReactCheckedElement uses value jitterpacketloss or jitterrtt and the operation type is set to voice, the value range of this object is 1 to 60000.</p> <p>If hh3cNqaReactCheckedElement uses value probetime or probefailure, the value range of this object is 1 to 15.</p> <p>In other cases, the value of this object should not be set.</p> |
| hh3cNqaReactActionType (1.3.6.1.4.1.25506.8.3.1.13.1.10) | read-create | INTEGER | none(0), trapOnly(1), triggerOnly(2), trapAndTrigger(3) | Sets the action for the threshold violation event. By default, no action is specified for the threshold violation event. | The supported action type depends on the monitored performance metric. |
| hh3cNqaReactCurrentStatus (1.3.6.1.4.1.25506.8.3.1.13.1.11) | read-only | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) | Obtain the alarm status for the threshold violation event. | As per the MIB. |
| hh3cNqaReactRowStatus (1.3.6.1.4.1.25506.8.3.1.13.1.12) | read-create | RowStatus | Standard values. MIB | An indication of the creation and deletion of reaction entries. | As per the MIB. |
| hh3cNqaReactCheckedNum (1.3.6.1.4.1.25506.8.3.1.13.1.13) | read-only | Unsigned32 | Standard values. MIB | Number of targets that have been monitored for data collection. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---------------------------------|-----------------|
| hh3cNqaReactThresholdNum (1.3.6.1.4.1.25506.8.3.1.13.1.14) | read-only | Unsigned32 | Standard values. MIB | Number of threshold violations. | As per the MIB. |

hh3cNqaStatisticsReactionTable

About this table

This table records the number of monitored targets and number of threshold violations in a certain time period.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cNqaStatReactOwnerIndex, hh3cNqaStatReactTestName, hh3cNqaStatReactIndex, and hh3cNqaStatReactItemIndex.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.14.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---|-----------------|
| hh3cNqaStatReactOwnerIndex (1.3.6.1.4.1.25506.8.3.1.14.1.1) | not-accessible | SnmpAdminString | OCTET STRING(0..32) | Administrator index. | As per the MIB. |
| hh3cNqaStatReactTestName (1.3.6.1.4.1.25506.8.3.1.14.1.2) | not-accessible | SnmpAdminString | OCTET STRING(0..32) | Operation tag. | As per the MIB. |
| hh3cNqaStatReactIndex (1.3.6.1.4.1.25506.8.3.1.14.1.3) | not-accessible | Unsigned32 | Standard values. MIB | A reaction entry is identified by its ID uniquely for an NQA operation. | As per the MIB. |
| hh3cNqaStatReactItemIndex (1.3.6.1.4.1.25506.8.3.1.14.1.4) | not-accessible | Unsigned32 | Standard values. MIB | Number of monitored hh3cNqaReactCheckedElement in a time period. | As per the MIB. |
| hh3cNqaStatReactCheckedNum (1.3.6.1.4.1.25506.8.3.1.14.1.5) | read-only | Counter32 | Standard values. MIB | Number of monitored hh3cNqaReactCheckedElement in a time period. | As per the MIB. |
| hh3cNqaStatReactThresholdNum (1.3.6.1.4.1.25506.8.3.1.14.1.6) | read-only | Counter32 | Standard values. MIB | Number of monitored threshold violations in a time period. | As per the MIB. |

hh3cNqaTcpServerExtendTable

About this table

This table configures the TCP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cNqaTcpServerExtIpAddress, hh3cNqaTcpServerExtPort, hh3cNqaTcpServerExtVPNTType, and hh3cNqaTcpServerExtVPNInstance.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.15.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|----------------------|--------------------------------------|---|
| hh3cNqaTcpServerExtIpAddress (1.3.6.1.4.1.25506.8.3.1.15.1.1) | not-accessible | InetAddress | Standard MIB values. | IP address of the TCP server. | As per the MIB. |
| hh3cNqaTcpServerExtPort (1.3.6.1.4.1.25506.8.3.1.15.1.2) | not-accessible | Integer32 | Integer32 (0..65536) | Port number of the TCP server. | Value range: 1 to 65535. |
| hh3cNqaTcpServerExtVPNTType (1.3.6.1.4.1.25506.8.3.1.15.1.3) | not-accessible | VpnInstance Type | Standard MIB values. | VPN instance type of the TCP server. | Supports only values public(1) and VPN(2) . |
| hh3cNqaTcpServerExtVPNInstance (1.3.6.1.4.1.25506.8.3.1.15.1.4) | not-accessible | OCTET STRING | OCTET STRING (0..31) | VPN instance of the TCP server. | <p>The length of the object is 0 to 31.</p> <p>For the set operation:</p> <ul style="list-style-type: none"> If the NQA server listens on a public network, the hh3cNqaTcpServerExtVPNTType object must use value public(1) and the object value can be set to any non-printable string. If the NQA server listens on a dedicated network, the hh3cNqaTcpServerExtVPNTType object must use value VPN(2) and the object value can be set to any non-printable string. <p>For the get operation:</p> <ul style="list-style-type: none"> If the NQA server listens on a public network, the object value can be public. |
| hh3cNqaTcpServerExtDSField (1.3.6.1.4.1.25506.8.3.1.15.1.5) | read-create | Unsigned32 | Unsigned32 (0..256) | ToS value of the TCP server. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|----------------------|-------------|---|
| .1.15.1.5) | | | | | |
| hh3cNqaTcpServerExtRowStatus (1.3.6.1.4.1.25506.8.3.1.15.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only values active(1) , createAndgo(4) , and destroy(6) . |

hh3cNqaUdpServerExtendTable

About this table

This table configures the UDP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cNqaUdpServerExtIpAddress, hh3cNqaUdpServerExtPort, hh3cNqaUdpServerExtVPNTType, and hh3cNqaUdpServerExtVPNInstance.

The OID of the table is 1.3.6.1.4.1.25506.8.3.1.16.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|--------------------------------------|---|
| hh3cNqaUdpServerExtIpAddress (1.3.6.1.4.1.25506.8.3.1.16.1.1) | not-accessible | InetAddress | Standard MIB values. | IP address of the UDP server. | As per the MIB. |
| hh3cNqaUdpServerExtPort (1.3.6.1.4.1.25506.8.3.1.16.1.2) | not-accessible | Integer32 | Integer32 (0..65536) | Port number of the UDP server. | Value range: 1 to 65535. |
| hh3cNqaUdpServerExtVPNTType (1.3.6.1.4.1.25506.8.3.1.16.1.3) | not-accessible | VpnInstanceType | Standard MIB values. | VPN instance type of the UDP server. | Supports only values public(1) and VPN(2) . |
| hh3cNqaUdpServerExtVPNInstance (1.3.6.1.4.1.25506.8.3.1.16.1.4) | not-accessible | OCTET STRING | OCTET STRING (0..31) | VPN instance of the UDP server. | <p>The length of the object is 0 to 31. For the set operation:</p> <ul style="list-style-type: none"> If the NQA server listens on a public network, the hh3cNqaUdpServerExtVPNTType must use value public(1) and the object value can be set to any non-printable string. If the NQA server listens on a dedicated network, the hh3cNqaUdpServerExtVPNTType must use value VPN(2) and the object value can be set to any non-printable string. <p>For the get operation:</p> <ul style="list-style-type: none"> If the NQA server listens on a public network, the object value |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|----------------------|------------------------------|---|
| | | | | | can be public. |
| hh3cNqaUdpServerExtDSField (1.3.6.1.4.1.25506.8.3.1.16.1.5) | read-create | Unsigned 32 | Unsigned32 (0..256) | ToS value of the UDP server. | As per the MIB. |
| hh3cNqaUdpServerExtRowStatus (1.3.6.1.4.1.25506.8.3.1.16.1.6) | read-create | RowStatus | Standard MIB values. | Row status. | Supports only values active(1) , createAndgo(4) , and destroy(6) . |

Notifications

hh3cNqaProbeTimeOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.1 | Threshold violation of the probe duration. | Informational | - | - | OFF |

Description

This notification is generated when the probe duration of an NQA operation exceeds the threshold.

For average or consecutive threshold type, this trap is generated if the hh3cNqaReactCurrentStatus value changed when a operation was completed.

For accumulative threshold type, this trap is generated if the hh3cNqaReactCurrentStatus value changed when a probe was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element probe-duration threshold-type { accumulate accumulate-occurrences | average | consecutive consecutive-occurrences } threshold-value upper-threshold lower-threshold action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element probe-duration threshold-type { accumulate accumulate-occurrences | average | consecutive consecutive-occurrences } threshold-value upper-threshold lower-threshold action-type none** command.

Objects

| OID (object) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-----------------|---------------------|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |

| OID (object) | Description | Index | Type | Value range |
|--|-------------------------------|-------|-------------------|--|
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (pingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (pingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.7 (hh3cNqaReactThresholdType) | Threshold type. | No | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of the probe link delay changes.
2. If the issue persists, contact H3C Support.

hh3cNqaJitterRTTOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.2 | Threshold violation of the probe round-trip time. | Informational | - | - | OFF |

Description

This notification is generated when the threshold violation of the round-trip time for UDP jitter and voice operations occurs. The object supports only accumulate and average threshold types. This trap is generated if the hh3cNqaReactCurrentStatus value changed when a UDP jitter or voice operation was completed.

Status control

ON

CLI: Use the `reaction item-number checked-element rtt threshold-type { accumulate accumulate-occurrences | average } threshold-value upper-threshold lower-threshold action-type trap-only` command.

OFF

CLI: Use the `reaction item-number checked-element rtt threshold-type { accumulate accumulate-occurrences | average } threshold-value upper-threshold lower-threshold action-type none` command.

Objects

| OID (object) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-------------------|--|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (pingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (pingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.7 (hh3cNqaReactThresholdType) | Threshold type. | No | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of the probe link delay changes.
2. If the issue persists, contact H3C Support.

hh3cNqaProbeFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.3 | Threshold violation of the probe failure. | Informational | Warning | - | OFF |

Description

This notification is generated when the probe failure of an NQA operation exceeds the threshold.

For consecutive threshold type, this trap is generated if the hh3cNqaReactCurrentStatus value changed when an operation was completed.

For accumulative threshold type, this trap is generated if the hh3cNqaReactCurrentStatus value changed when a probe was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element probe-fail threshold-type { accumulate accumulate-occurrences | consecutive consecutive-occurrences } action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element probe-fail threshold-type { accumulate accumulate-occurrences | consecutive consecutive-occurrences } action-type none** command.

Objects

| OID (object) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-------------------|--|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (pingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (pingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.7 (hh3cNqaReactThresholdType) | Threshold type. | No | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of packet loss on the link.
2. If the issue persists, contact H3C Support.

hh3cNqaJitterPacketLoss

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.4 | Threshold violation of the packet loss ratio. | Informational | - | - | OFF |

Description

This notification is generated when the threshold violation of the packet loss ratio for UDP jitter and voice operations occurs. This trap is generated if the hh3cNqaReactCurrentStatus value changed when a UDP jitter or voice operation was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element packet-loss threshold-type accumulate accumulate-occurrences action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element packet-loss threshold-type accumulate accumulate-occurrences action-type none** command.

Objects

| OID (object) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-------------------|---|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (pingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (pingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.7 (hh3cNqaReactThresholdType) | Threshold type. | No | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) |

| OID (object) | Description | Index | Type | Value range |
|--|---------------|-------|---------|--|
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of packet loss on the link.
2. If the issue persists, contact H3C Support.

hh3cNqaJitterSDOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.5 | Threshold violation of the one-way jitter from source to destination. | Informational | - | - | OFF |

Description

This notification is generated when the threshold violation of the one-way jitter from source to destination for UDP jitter and voice operations occurs. The object supports only accumulate and average threshold types. This trap is generated if the hh3cNqaReactCurrentStatus value changed when a UDP jitter or voice operation was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element jitter-sd threshold-type { accumulate accumulate-occurrences | average } threshold-value upper-threshold lower-threshold action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element jitter-sd threshold-type { accumulate accumulate-occurrences | average } threshold-value upper-threshold lower-threshold action-type none** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (PingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------|-------|-------------------|--|
| 1.3.6.1.2.1.80.1.2.1.4 (PingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (PingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (PingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.7 (hh3cNqaReactThresholdType) | Threshold type. | No | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of the delay of the probe link from source to destination changes.
2. If the issue persists, contact H3C Support.

hh3cNqaJitterDSOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.6 | Threshold violation of the one-way jitter from destination to source. | Informational | - | - | OFF |

Description

This notification is generated when the threshold violation of the one-way jitter from destination to source for UDP jitter and voice operations occurs. The object supports only accumulate and average threshold types. This trap is generated if the hh3cNqaReactCurrentStatus value changed when a UDP jitter or voice operation was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element jitter-ds threshold-type { accumulate accumulate-occurrences | average } threshold-value upper-threshold lower-threshold action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element jitter-ds threshold-type { accumulate accumulate-occurrences | average } threshold-value upper-threshold lower-threshold action-type none** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-------------------|--|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (pingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (pingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.7 (hh3cNqaReactThresholdType) | Threshold type. | No | INTEGER | invalid(0), average(1), consecutive(2), accumulative(3) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of the delay of the probe link from destination to source changes.
2. If the issue persists, contact H3C Support.

hh3cNqaICPIFOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.7 | Threshold violation of the ICPIF value. | Informational | - | - | OFF |

Description

This notification is generated when the ICPIF value of a voice operation exceeds the threshold. This trap is generated if the hh3cNqaReactCurrentStatus value changed when a voice operation was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element icpif threshold-value upper-threshold lower-threshold action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element icpif threshold-value upper-threshold lower-threshold action-type none** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-------------------|--|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (PingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (PingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (PingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (PingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of the ICPIF value changes on the probe link.
2. If the issue persists, contact H3C Support.

hh3cNqaMOSOverThreshold

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------|---------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.3.3.8 | Threshold violation of the MOS value. | Informational | - | - | OFF |

Description

This notification is generated when the MOS value of a voice operation exceeds the threshold. This trap is generated if the hh3cNqaReactCurrentStatus value changed when a voice operation was completed.

Status control

ON

CLI: Use the **reaction item-number checked-element mos threshold-value upper-threshold lower-threshold action-type trap-only** command.

OFF

CLI: Use the **reaction item-number checked-element mos threshold-value upper-threshold lower-threshold action-type none** command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------------------|-------|-------------------|--|
| 1.3.6.1.4.1.25506.8.3.1.13.1.1 (hh3cNqaReactOwnerIndex) | Administrator name of an operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.2 (hh3cNqaReactTestName) | Operation tag of the operation. | Yes | SnmpAdminString | OCTET STRING(0..32) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.3 (hh3cNqaReactItemIndex) | Reaction entry number. | Yes | Unsigned32 | Unsigned32 (1..10) |
| 1.3.6.1.2.1.80.1.2.1.3 (pingCtlTargetAddressType) | Type of destination address. | No | InetAddressType | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.4 (pingCtlTargetAddress) | Destination address. | No | InetAddress | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.16 (pingCtlType) | Operation type. | No | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.80.1.2.1.17 (pingCtlDescr) | Description of the operation. | No | SnmpAdminString | OCTET STRING(0..255) |
| 1.3.6.1.4.1.25506.8.3.1.13.1.11 (hh3cNqaReactCurrentStatus) | Alarm status. | No | INTEGER | invalid(1), overThreshold(2), belowThreshold(3), overUpperThreshold(4), belowLowerThreshold(5) |

Recommended action

To resolve the issue:

1. Find out the cause of the MOS value changes on the probe link.
2. If the issue persists, contact H3C Support.

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HH3C-NTP-MIB

About this MIB

Use this MIB to configure NTP of the device.

MIB file name

hh3c-ntp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cRhw(8).hh3cNTP(22)

Scalar objects

hh3cNTPSysLeap

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|--------------------------------|-----------------|
| hh3cNTPSysLeap (1.3.6.1.4.1.25506.8.22.1.1.1) | read-only | INTEGER | noWarning(0), addSecond(1), subtractSecond(2), alarm(3) | Two-bit system leap indicator. | As per the MIB. |

hh3cNTPSysStratum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| hh3cNTPSysStratum (1.3.6.1.4.1.25506.8.22.1.1.2) | read-only | Integer32 | Integer32 (1..16) | Stratum level of the local system clock. | As per the MIB. |

hh3cNTPSysPrecision

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------|-------------------------------|-----------------|
| hh3cNTPSysPrecision (1.3.6.1.4.1.25506.8.22.1.1.3) | read-only | Integer32 | Integer32 (-20..20) | Accuracy of the system clock. | As per the MIB. |

hh3cNTPSysRootdelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--------------|---|-----------------|
| hh3cNTPSysRootdelay (1.3.6.1.4.1.25506.8.22.1.1.4) | read-only | OCTET STRING | OCTET STRING | Round-trip delay from the local device to the primary reference | As per the MIB. |

| | | | | | |
|--|--|--|----------|---|--|
| | | | (1..128) | source at the root of the synchronization subnet. | |
|--|--|--|----------|---|--|

hh3cNTPSysRootdispersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|--------------------------|---|-----------------|
| hh3cNTPSysRootdispersion (1.3.6.1.4.1.25506.8.22.1.1.5) | read-only | OCTET STRING | OCTET STRING (1..128) | Maximum error of the system clock relative to the primary reference source at the root of the synchronization subnet. | As per the MIB. |

hh3cNTPSysRefid

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--------------------------|--|-----------------|
| hh3cNTPSysRefid (1.3.6.1.4.1.25506.8.22.1.1.6) | read-only | OCTET STRING | OCTET STRING (1..128) | Reference clock ID of the local clock. | As per the MIB. |

hh3cNTPSysReftime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--------------------------|--|-----------------|
| hh3cNTPSysReftime (1.3.6.1.4.1.25506.8.22.1.1.7) | read-only | OCTET STRING | OCTET STRING (1..128) | Timestamp of the local system clock updated most recently. | As per the MIB. |

hh3cNTPSysPoll

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------|--------------------------|-----------------|
| hh3cNTPSysPoll (1.3.6.1.4.1.25506.8.22.1.1.8) | read-only | Integer32 | Integer32 (-20..20) | System polling interval. | As per the MIB. |

hh3cNTPSysPeer

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|---|
| hh3cNTPSysPeer (1.3.6.1.4.1.25506.8.22.1.1.9) | read-only | Integer32 | Integer32 (0..2147483647) | Reference synchronization source specified by the system. | This object is replaced by hh3cNTPSysSrcPeer. |

hh3cNTPSysState

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|----------------------------|---|
| hh3cNTPSysState (1.3.6.1.4.1.25506.8.22.1.1.10) | read-only | INTEGER | noUpdateClock(0), getfreqInfo(1), clockBySet(2), clockBySetAndNoFreq(3), clockBySyms(4), findError(5) | Status of the local clock. | An integer indicates the status of the local clock. Currently, clockBySet(2) is not supported. |

hh3cNTPSysOffset

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|-----------------------|--|-----------------|
| hh3cNTPSysOffset (1.3.6.1.4.1.25506.8.22.1.1.11) | read-only | OCTET STRING | OCTET STRING (1..128) | Offset of the local clock updated most recently. | As per the MIB. |

hh3cNTPSysDrift

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-----------------------|---------------------------|-----------------|
| hh3cNTPSysDrift (1.3.6.1.4.1.25506.8.22.1.1.12) | read-only | OCTET STRING | OCTET STRING (1..128) | Pre-made clock frequency. | As per the MIB. |

hh3cNTPSysCompliance

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|-----------------------|---------------|-----------------|
| hh3cNTPSysCompliance (1.3.6.1.4.1.25506.8.22.1.1.13) | read-only | OCTET STRING | OCTET STRING (1..128) | System error. | As per the MIB. |

hh3cNTPSysClock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-----------------------|--------------------|-----------------|
| hh3cNTPSysClock (1.3.6.1.4.1.25506.8.22.1.1.14) | read-only | OCTET STRING | OCTET STRING (1..128) | System local time. | As per the MIB. |

hh3cNTPSysStabil

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--------------------------|----------------------------|-----------------|
| hh3cNTPSysStabil (1.3.6.1.4.1.25506.8.22.1.1.15) | read-only | OCTET STRING | OCTET STRING (1..128) | Clock frequency stability. | As per the MIB. |

hh3cNTPSysAuthenticate

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---------------------------------------|---|-----------------|
| hh3cNTPSysAuthenticate (1.3.6.1.4.1.25506.8.22.1.1.16) | read-write | INTEGER | noAuthenticate(0), authenticate(1) | An integer indicates that the system supports authentication. | As per the MIB. |

hh3cNTPSysPollSec

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------------|--------------------------------------|-----------------|
| hh3cNTPSysPollSec (1.3.6.1.4.1.25506.8.22.1.1.17) | read-only | Integer32 | Integer32 (2..1048576) | System polling interval, in seconds. | As per the MIB. |

hh3cNTPSysClockSec

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--------------------------------|-----------------|
| hh3cNTPSysClockSec (1.3.6.1.4.1.25506.8.22.1.1.18) | read-only | Integer32 | Standard MIB values. | System local time, in seconds. | As per the MIB. |

hh3cNTPServerIP

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|---------------------|-------------------------------|-----------------|
| hh3cNTPServerIP (1.3.6.1.4.1.25506.8.22.1.1.19) | read-write | IpAddress | OCTET STRING (4) | IP address of the NTP server. | As per the MIB. |

hh3cNTPSysSrcPeer

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|---|-----------------|
| hh3cNTPSysSrcPeer (1.3.6.1.4.1.25506.8.22.1.1.20) | read-only | Unsigned 32 | Standard MIB values. | Reference synchronization source specified by the system. | As per the MIB. |

hh3cNTPSysOldServerIP

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|------------------|------------------------------------|-----------------|
| hh3cNTPSysOldServerIP (1.3.6.1.4.1.25506.8.22.1.1.21) | accessible-for-notify | IpAddress | OCTET STRING (4) | IP address of the last NTP server. | As per the MIB. |

hh3cNTPSysSrcVpnName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------------|-----------------------|---|-----------------|
| hh3cNTPSysSrcVpnName (1.3.6.1.4.1.25506.8.22.1.1.22) | accessible-for-notify | DisplayString | OCTET STRING (0..255) | VPN instance to which the current NTP server belongs. | As per the MIB. |

hh3cNTPSysOldSrcVpnName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|---------------|-----------------------|--|-----------------|
| hh3cNTPSysOldSrcVpnName (1.3.6.1.4.1.25506.8.22.1.1.23) | accessible-for-notify | DisplayString | OCTET STRING (0..255) | VPN instance to which the last NTP server belongs. | As per the MIB. |

hh3cNTPSysMaxDynamicSessions

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|--------------------|---|-----------------|
| hh3cNTPSysMaxDynamicSessions (1.3.6.1.4.1.25506.8.22.1.1.24) | accessible-for-notify | Integer32 | Integer32 (0..255) | Maximum number of dynamic NTP sessions. | As per the MIB. |

Tabular objects

hh3cNTPPeerTable

About this table

This table provides information about the peers associated with the local NTP server.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| Supported. The hh3cNTPPeerRowStatus column supports only value createAndGo . | Not supported | Supported | Supported |

Columns

The table indexes are hh3cNTPPeerRemAdr and hh3cNTPPeerHMode.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|--------------------------------|---|-----------------|
| hh3cNTPPeerConfig (1.3.6.1.4.1.25506.8.22.2.1.1.1.1) | read-only | TruthValue | true(1), false(2) | A bit indicates the establishment of the association. If a peer is unreachable, the bit is not recoverable. | As per the MIB. |
| hh3cNTPPeerAuthenable (1.3.6.1.4.1.25506.8.22.2.1.1.1.2) | read-only | TruthValue | true(1), false(2) | A bit indicates that the peer system supports authentication. | As per the MIB. |
| hh3cNTPPeerAuthentic (1.3.6.1.4.1.25506.8.22.2.1.1.1.3) | read-only | TruthValue | true(1), false(2) | A bit indicates that the authentic message passes authentication. | As per the MIB. |
| hh3cNTPPeerRemAdr (1.3.6.1.4.1.25506.8.22.2.1.1.1.4) | not-accessible | IpAddresses | OCTET STRING (4) | IP address of the peer. Set the object when creating a new association. | As per the MIB. |
| hh3cNTPPeerRemPort (1.3.6.1.4.1.25506.8.22.2.1.1.1.5) | read-only | Integer32 | Integer32 (1..65535) | The UDP port number on which the peer receives NTP messages. | As per the MIB. |
| hh3cNTPPeerLocAdr (1.3.6.1.4.1.25506.8.22.2.1.1.1.6) | read-only | IpAddresses | OCTET STRING (4) | IP address of the local host. | As per the MIB. |
| hh3cNTPPeerLocPort (1.3.6.1.4.1.25506.8.22.2.1.1.1.7) | read-only | Integer32 | Integer32 (1..65535) | The UDP port number on which the local host receives NTP messages. | As per the MIB. |
| hh3cNTPPeerLeap (1.3.6.1.4.1.25506.8.22.2.1.1.1.8) | read-only | INTEGER | noWarning(0), addSecond(1), | Second leap indicator of the peer. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--|---|-----------------|
| | | | subtractSeco nd(2), alarm(3) | | |
| hh3cNTPPeerHMode (1.3.6.1.4.1.25506.8.22.2.1.1.1.9) | not-accessible | INTEGE R | unspecified (0), symmetricActi ve (1), symmetricPas sive (2), client (3), server(4), broadcast (5), reservedCont rol (6), reservedPriva te (7), broadcastclie nt (8), multicastclient (9) | Host association mode. | As per the MIB. |
| hh3cNTPPeerStratum (1.3.6.1.4.1.25506.8.22.2.1.1.1.10) | read-only | Integer32 | Integer32 (0..255) | Stratum level of the peer, indicating the clock accuracy. | As per the MIB. |
| hh3cNTPPeerPPoll (1.3.6.1.4.1.25506.8.22.2.1.1.1.11) | read-only | Integer32 | Integer32 (-20..20) | The interval at which the peer polls the local host. | As per the MIB. |
| hh3cNTPPeerHPoll (1.3.6.1.4.1.25506.8.22.2.1.1.1.12) | read-only | Integer32 | Integer32 (-20..20) | The interval at which the local host polls the peer. | As per the MIB. |
| hh3cNTPPeerPrecision (1.3.6.1.4.1.25506.8.22.2.1.1.1.13) | read-only | Integer32 | Integer32 (-20..20) | Precision of the peer clock. | As per the MIB. |
| hh3cNTPPeerRootDelay (1.3.6.1.4.1.25506.8.22.2.1.1.1.14) | read-only | OCTET STRING | OCTET STRING (1..128) | Round-trip delay from the peer clock to the local clock. | As per the MIB. |
| hh3cNTPPeerRootDispersion (1.3.6.1.4.1.25506.8.22.2.1.1.1.15) | read-only | OCTET STRING | OCTET STRING (1..128) | Clock time difference between the peer clock and the time source. | As per the MIB. |
| hh3cNTPPeerRefId (1.3.6.1.4.1.25506.8.22.2.1.1.1.16) | read-only | OCTET STRING | OCTET STRING (1..128) | Reference source ID of the peer clock. | As per the MIB. |
| hh3cNTPPeerRefTime (1.3.6.1.4.1.25506.8.22.2.1.1.1.17) | read-only | OCTET STRING | OCTET STRING (1..128) | Timestamp of the peer clock. | As per the MIB. |
| hh3cNTPPeerOrg (1.3.6.1.4.1.25506.8.22.2.1.1.1.18) | read-only | OCTET STRING | OCTET STRING (1..128) | Local clock timestamp in the NTP message sent most recently. | As per the MIB. |
| hh3cNTPPeerRec (1.3.6.1.4.1.25506.8.22.2.1.1.1.19) | read-only | OCTET STRING | OCTET STRING (1..128) | Local timestamp in the NTP message received most recently | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|------------------------------|---|-----------------|
| | | | | from the peer. | |
| hh3cNTPPeerXmt (1.3.6.1.4.1.25506.8.22.2.1.1.1.20) | read-only | OCTET STRING | OCTET STRING (1..128) | Local time after the sending of a NTP message. | As per the MIB. |
| hh3cNTPPeerReach (1.3.6.1.4.1.25506.8.22.2.1.1.1.21) | read-only | Integer32 | Integer32 (0..2147483647) | Reachability count. A peer is unreachable if the object value is 0. | As per the MIB. |
| hh3cNTPPeerValid (1.3.6.1.4.1.25506.8.22.2.1.1.1.22) | read-only | Integer32 | Integer32 (0..255) | Valid sampling data. | As per the MIB. |
| hh3cNTPPeerTimer (1.3.6.1.4.1.25506.8.22.2.1.1.1.23) | read-only | Integer32 | Integer32 (0..2147483647) | The interval of transmitted NTP messages from the host to the peer. | As per the MIB. |
| hh3cNTPPeerDelay (1.3.6.1.4.1.25506.8.22.2.1.1.1.24) | read-only | OCTET STRING | OCTET STRING (1..128) | Delay of messages from the host to the peer. | As per the MIB. |
| hh3cNTPPeerOffset (1.3.6.1.4.1.25506.8.22.2.1.1.1.25) | read-only | OCTET STRING | OCTET STRING (1..128) | Offset of the peer relative to the local clock. | As per the MIB. |
| hh3cNTPPeerJitter (1.3.6.1.4.1.25506.8.22.2.1.1.1.26) | read-only | OCTET STRING | OCTET STRING (1..128) | Sampling data flag. | As per the MIB. |
| hh3cNTPPeerDispersion (1.3.6.1.4.1.25506.8.22.2.1.1.1.27) | read-only | OCTET STRING | OCTET STRING (1..128) | Maximum error of the peer relative to the local clock. | As per the MIB. |
| hh3cNTPPeerKeyId (1.3.6.1.4.1.25506.8.22.2.1.1.1.28) | read-only | Unsigned 32 | Standard MIB values. | Authentication key ID in NTP messages. | As per the MIB. |
| hh3cNTPPeerFiltDelay (1.3.6.1.4.1.25506.8.22.2.1.1.1.29) | read-only | OCTET STRING | OCTET STRING (1..128) | Round-trip delay of the peer relative to the local clock. | As per the MIB. |
| hh3cNTPPeerFiltOffset (1.3.6.1.4.1.25506.8.22.2.1.1.1.30) | read-only | OCTET STRING | OCTET STRING (1..128) | Offset of the peer relative to the local clock. | As per the MIB. |
| hh3cNTPPeerFiltError (1.3.6.1.4.1.25506.8.22.2.1.1.1.31) | read-only | OCTET STRING | OCTET STRING (1..128) | Maximum error of the peer relative to the local clock. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------------------|--|----------------------------------|---|
| hh3cNTPPeerPMode (1.3.6.1.4.1.25506.8.22.2.1.1.1.32) | read-only | INTEGER | unspecified (0), symmetricActive (1), symmetricPassive (2), client (3), server (4), broadcast (5), reservedControl (6), reservedPrivate (7), broadcastclient (8), multicastclient (9) | Association mode of the peer. | As per the MIB. |
| hh3cNTPPeerReceived (1.3.6.1.4.1.25506.8.22.2.1.1.1.33) | read-only | INTEGER(0..4294967295) | Standard MIB values. | Number of received NTP messages. | As per the MIB. |
| hh3cNTPPeerSent (1.3.6.1.4.1.25506.8.22.2.1.1.1.34) | read-only | INTEGER(0..4294967295) | Standard MIB values. | Number of sent NTP messages. | As per the MIB. |
| hh3cNTPPeerFlash (1.3.6.1.4.1.25506.8.22.2.1.1.1.35) | read-only | Hh3cAlarmStatus | BITS{ recvRepeatMsg(0), recvremainMsg(1), unSynMsg(2), dispBeyond(3), unauthenticated(4), unSynClock(5), straBeyond(6), rootDispBeyond(7), noAuthen(8), refuOperate(9)} } | Message test flag. | As per the MIB. |
| hh3cNTPPeerRowStatus (1.3.6.1.4.1.25506.8.22.2.1.1.1.36) | read-create | RowStatus | Supports only values active , createAndGo , and destroy . | Row status. | Supports only values active , createAndGo , and destroy . If the value broadcast , broadcastclient , or multicastclient is used for hh3cNTPPeerHMode, this object supports only the read operation. |

Notifications

This section contains HH3C-NTP-MIB notifications.

hh3cNTPSysStateChangeTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.22.1.2.0.1 | A change occurred on the NTP time synchronization status. | Informational | N/A | N/A | ON |

Description

This notification is generated when a change occurs on the NTP time synchronization status.

Status control

The notification cannot be disabled.

Objects

This table does not have indexes.

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|---------------|--|
| 1.3.6.1.4.1.25506.8.22.1.1.10 (hh3cNTPSysState) | Local clock status. | No | INTEGER | noUpdateClock(0), getfreqInfo(1), clockBySet(2), clockBySetAndNoFreq(3), clockBySyms(4), findError(5) |
| 1.3.6.1.4.1.25506.8.22.1.1.19 (hh3cNTPServerIP) | IP address of the NTP server. | No | IpAddress | OCTET STRING (4) |
| 1.3.6.1.4.1.25506.8.22.1.1.22 (hh3cNTPSysSrcVpnName) | VPN instance to which the NTP server belongs. | No | DisplayString | OCTET STRING(0..255) |

Recommended action

No action is required.

hh3cNTPSysPeerChangeTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.22.1.2.0.2 | Change of the NTP server. | Informational | N/A | N/A | ON |

Description

This notification is generated when the NTP time server changes.

Status control

The notification cannot be disabled.

Objects

This table does not have indexes.

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|---------------|-----------------------|
| 1.3.6.1.4.1.25506.8.22.1.1.21 (hh3cNTPSysOldServerIP) | IP address of last NTP server. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.22.1.1.23 (hh3cNTPSysOldSrcVpnName) | VPN instance to which the last NTP server belongs. | No | DisplayString | OCTET STRING (0..255) |
| 1.3.6.1.4.1.25506.8.22.1.1.19 (hh3cNTPServerIP) | IP address of the current NTP server. | No | IpAddress | Standard MIB values. |
| 1.3.6.1.4.1.25506.8.22.1.1.22 (hh3cNTPSysSrcVpnName) | VPN instance to which the current NTP server belongs. | No | DisplayString | OCTET STRING (0..255) |

Recommended action

No action is required.

hh3cNTPDynSessionLimit

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.22.1.2.0.3 | The number of dynamic NTP sessions reached the threshold. | Informational | N/A | N/A | ON |

Description

This notification is generated when the number of dynamic NTP sessions reaches the threshold.

Status control

The notification cannot be disabled.

Objects

This table does not have indexes.

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|--------------------|
| 1.3.6.1.4.1.25506.8.22.1.1.24 (hh3cNTPSysMaxDynamicSessions) | Maximum number of dynamic NTP sessions. | No | Integer32 | Integer32 (0..255) |

Recommended action

No action is required.

hh3cNTPDynSessionLimitResume

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.8.22.1.2.0.4 | The number of dynamic NTP sessions dropped below the threshold. | Informational | N/A | N/A | ON |

Description

This notification is generated when the number of dynamic NTP sessions drops below the threshold.

Status control

The notification cannot be disabled.

Objects

This table does not have indexes.

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|-----------------------|
| 1.3.6.1.4.1.25506.8.22.1.1.24 (hh3cNTPSysMaxDynamicSessions) | Maximum number of dynamic NTP sessions. | No | Integer32 | Integer32 (0..255) |

Recommended action

No action is required.

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HH3C-RMON-EXT2-MIB

About this MIB

This MIB defines the private alarm group, which enables you to perform basic math operations on multiple variables, and compare the calculation result with the rising and falling thresholds.

The RMON agent samples variables and takes an alarm action based on a private alarm entry as follows:

1. Samples the private alarm variables in the user-defined formula.
2. Processes the sampled values with the formula.
3. Compares the calculation result with the predefined thresholds, and then takes one of the following actions:
 - Triggers the event associated with the rising alarm event if the result is equal to or greater than the rising threshold.
 - Triggers the event associated with the falling alarm event if the result is equal to or smaller than the falling threshold.

This MIB relies on RMON-MIB. Like the alarm group of RMON-MIB, the RMON agent generates an alarm event only for the first crossing if a private alarm entry crosses a threshold multiple times in succession. For example, if the value of a sampled alarm variable crosses the rising threshold multiple times before it crosses the falling threshold, only the first crossing triggers a rising alarm event.

MIB file name

hh3c-rmon-ext2.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cRmonExt(125)

Tabular objects

hh3cRmonExtAlarmTable

About this table

Use this table to configure private alarm entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|--|-----------|-----------|
| <ul style="list-style-type: none">• To create a private alarm entry, you must specify hh3cRmonExtAlarmVariable, hh3cRmonExtAlarmSympol, and h3cRmonExtAlarmStatus together.• If you create a new entry with values of hh3cRmonExtAlarmVariable, hh3cRmonExtAlarmInterval, hh3cRmonExtAlarmSampleType, hh3cRmonExtAlarmRisingThreshold, and hh3cRmonExtAlarmFallingThreshold being the same as those of an existing entry, the system returns a genErr error.• If the command lines used for instance creations exceed the maximum build run specifications, the | <ul style="list-style-type: none">• When the value of hh3cRmonExtAlarmStatus is valid(1), you cannot modify any objects except hh3cRmonExtAlarmOwner.• If you change the values of hh3cRmonExtAlarmVariable, hh3cRmonExtAlarmInterval, hh3cRmonExtAlarmSampleType, hh3cRmonExtAlarmRisingThreshold, and hh3cRmonExtAlarmFallingThreshold of an entry to be the same as those of an existing entry, the system returns a genErr error. | Supported | Supported |

| | | | |
|---------------------------|--|--|--|
| creation operation fails. | | | |
|---------------------------|--|--|--|

Columns

The table index is hh3cRmonExtAlarmIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|---------------|--|---|---|
| hh3cRmonExtAlarmIndex (1.3.6.1.4.1.25506.2.125.1.1.1) | read-only | Integer32 | Integer32 (1..65535) | Index of a private alarm entry. | As per the MIB. |
| hh3cRmonExtAlarmInterval (1.3.6.1.4.1.25506.2.125.1.1.2) | read-create | Integer32 | Integer32 (10..65535) | Sampling interval in seconds. | Default value: 1800. |
| hh3cRmonExtAlarmVariable (1.3.6.1.4.1.25506.2.125.1.1.3) | read-create | DisplayString | OCTET STRING (0..255) | Object identifier of the variable to be sampled | <p>The variables in the formula must be represented in OID format that starts with a dot (.), for example, (1.3.6.1.2.1.2.1.10.1)*8.</p> <p>Only variables that resolve to an ASN.1 primitive type of INTEGER (INTEGER, Integer32, Counter32, Counter64, Gauge, or TimeTicks) can be sampled.</p> <p>You can configure a formula to perform the basic math operations of addition, subtraction, multiplication, and division on these variables. To get a correct calculation result, make sure the following conditions are met:</p> <ul style="list-style-type: none"> The values of the variables in the formula are positive integers. The result of each calculating step does not exceed the integer64 range. Division operations are not performed on decimals. The result of the formula calculation is integer32. No spaces exist in the formula. |
| hh3cRmonExtAlarmSympol (1.3.6.1.4.1.25506.2.125.1.1.4) | read-create | DisplayString | OCTET STRING (0..255) | Description for this entry. | A case-sensitive string of 1 to 127 characters, which can contain spaces and digits but not question marks or not-displayable characters. |
| hh3cRmonExtAlarmSampleType (1.3.6.1.4.1.25506.2.125.1.1.5) | read-create | INTEGER | absoluteValue(1), deltaValue(2), speedValue(3) | Method of sampling the selected variable and calculating the value to be compared | <p>Supports only absoluteValue(1) and anddeltaValue(2). Default: absoluteValue(1).</p> <p>If the value of this object is absoluteValue(1), the value of the selected variable will be compared directly with the thresholds at the end of the sampling interval. If the value of this object is deltaValue(2), the value of the selected variable at</p> |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|---|--|
| | | | | against the thresholds. | the last sample will be subtracted from the current value, and the difference compared with the thresholds. |
| hh3cRmonExtAlarmValue (1.3.6.1.4.1.25506.2.125.1.1.6) | read-only | Integer32 | Integer32 (-2147483648..2147483647) | Sampled value. | If the sampled value exceeds 2147483647, this object returns the negation of the value when read. If the hh3cRmonExtAlarmSampleType is absoluteValue(1), this value will be the sampled value at the end of the period. If the hh3cRmonExtAlarmSampleType is deltaValue(2), this value will be the difference between the current and last samples. |
| hh3cRmonExtAlarmStartupAlarm (1.3.6.1.4.1.25506.2.125.1.1.7) | read-create | INTEGER | risingAlarm(1), fallingAlarm(2), risingOrFallingAlarm(3) | Alarms that can be generated at the first sampling when a rising or falling threshold is reached or exceeded. | As per the MIB. Default: isingOrFallingAlarm(3). |
| hh3cRmonExtAlarmRisingThreshold (1.3.6.1.4.1.25506.2.125.1.1.8) | read-create | Integer32 | Integer32 (-2147483648..2147483647) | Rising threshold. | As per the MIB. Default: 1. |
| hh3cRmonExtAlarmFallingThreshold (1.3.6.1.4.1.25506.2.125.1.1.9) | read-create | Integer32 | Integer32 (-2147483648..2147483647) | Falling threshold. | As per the MIB. Default value: 0. |
| hh3cRmonExtAlarmRisingEvtIndex (1.3.6.1.4.1.25506.2.125.1.1.10) | read-create | Integer32 | Integer32 (0..65535) | Index of the eventEntry that is used when a rising threshold is crossed. | As per the MIB. Default value: 0. |
| hh3cRmonExtAlarmFallingEvtIndex (1.3.6.1.4.1.25506.2.125.1.1.11) | read-create | Integer32 | Integer32 (0..65535) | Index of the eventEntry that is used when a falling threshold is crossed. | As per the MIB. Default value: 0. |
| hh3cRmonExtAlarmStatCycle (1.3.6.1.4.1.25506.2.125.1.1.12) | read-create | Integer32 | Integer32 (0..4294967) | Lifetime of the entry, in seconds. | As per the MIB. Default value: 0. The aging timer starts when hh3cRmonExtAlarmStatus is set to valid(1). The system automatically deletes the entry when the aging timer expires. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|---|--|---|
| | | | | | <p>When hh3cRmonExtAlarmStatType is during (2), the lifetime must be greater than the sampling interval.</p> <p>When hh3cRmonExtAlarmStatType is forever(1), the object value is 0.</p> |
| hh3cRmonExtAlarmStatType (1.3.6.1.4.1.25506.2.125.1.1.13) | read-create | INTEGER | forever(1), during(2) | Indicates whether the entry has an infinite or limited lifetime. | <p>As per the MIB.</p> <p>Default: forever(1).</p> <p>If the value of the object is forever(1), the entry exists permanently. If the value of the object is during(2), the entry has an aging time, which is set by hh3cRmonExtAlarmStatCycle.</p> |
| hh3cRmonExtAlarmOwner (1.3.6.1.4.1.25506.2.125.1.1.14) | read-create | OwnerString | OCTET STRING (0..127) | Owner of the entry. | Case-sensitive string of 1 to 127 characters that can contain spaces and digits but not question marks or not-displayable characters. |
| hh3cRmonExtAlarmStatus (1.3.6.1.4.1.25506.2.125.1.1.15) | read-create | EntryStatus | valid(1), createRequest(2), underCreation(3), invalid(4) | Status of the entry. | <p>An entry in valid(1) state is fully configured and consistent and fully represents the configuration or operation such a row is intended to represent. When you create or modify an entry, you can specify the valid(1) state for the entry.</p> <p>This object can be set to createRequest(2) only when this instance is created. Immediately after completing the create operation, the agent must set this object to underCreation(3).</p> <p>Setting this object to invalid(4) has the effect of invalidating the corresponding entry.</p> |

Notifications

This section contains the HH3C-RMON-EXT2-MIB notifications.

hh3cRmonExtRisingAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.125.0.1 | A private alarm entry crossed its rising threshold | Informational | N/A | N/A | ON |

Description

This notification is sent when a private alarm entry crosses its rising threshold and generates an event configured for sending SNMP traps.

Status control

ON

CLI: Use the **rmon event** *entry-number* [**description string**] { **log-trap security-string** | **trap security-string** } [**owner text**] command.

OFF

CLI: Use the **rmon event** *entry-number* [**description string**] { **log** | **none** } [**owner text**] command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------------|-------|---------------|--|
| 1.3.6.1.4.1.25506.2.125.1.1.1 (hh3cRmonExtAlarmIndex) | Index of a private alarm entry. | Y | Integer32 | 1..65535 |
| 1.3.6.1.4.1.25506.2.125.1.1.4 (hh3cRmonExtAlarmSympol) | Sampling formula. | N | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.125.1.1.5 (hh3cRmonExtAlarmSampleType) | Sampling method. | N | INTEGER | absoluteValue(1), deltaValue(2), speedValue(3) |
| 1.3.6.1.4.1.25506.2.125.1.1.6 (hh3cRmonExtAlarmValue) | Sampled value. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.125.1.1.8 (hh3cRmonExtAlarmRisingThreshold) | Rising threshold. | N | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Check the monitored object for reasons that trigger the alarm.
2. If the issue persists, contact H3C Support.

hh3cRmonExtFallingAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.125.0.2 | A private alarm entry fell to or below its falling threshold | Informational | N/A | N/A | ON |

Description

This notification is sent when a private alarm entry falls to or below its falling threshold and generates an event configured for sending SNMP traps.

Status control

ON

CLI: Use the **rmon event** *entry-number* [**description string**] { **log-trap security-string** | **trap security-string** } [**owner text**] command.

OFF

CLI: Use the **rmon event** *entry-number* [**description string**] { **log** | **none** } [**owner text**] command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------------|-------|---------------|--|
| 1.3.6.1.4.1.25506.2.125.1.1.1 (hh3cRmonExtAlarmIndex) | Index of a private alarm entry. | Y | Integer32 | 1..65535 |
| 1.3.6.1.4.1.25506.2.125.1.1.4 (hh3cRmonExtAlarmSympol) | Sampling formula. | N | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.125.1.1.5 (hh3cRmonExtAlarmSampleType) | Sampling method. | N | INTEGER | absoluteValue(1), deltaValue(2), speedValue(3) |
| 1.3.6.1.4.1.25506.2.125.1.1.6 (hh3cRmonExtAlarmValue) | Sampled value. | N | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.125.1.1.9 (hh3cRmonExtAlarmFallingThreshold) | Falling threshold. | N | Integer32 | Standard MIB values. |

Recommended action

No action is required.

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HH3C-SNMP-EXT-MIB

About this MIB

This MIB adds objects to extend SNMP management.

MIB file name

hh3c-snmp-ext.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSnmpExt(104)

Scalar objects

hh3cSnmpExtMaxContextNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|---|-----------------|
| hh3cSnmpExtMaxContextNum (1.3.6.1.4.1.25506.2.104.1.4) | read-only | Integer32 | Integer32 (1..65535) | Maximum number of SNMP contexts supported by the system. | As per the MIB. |

hh3cSnmpExtVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------|--|---------------|-----------------|
| hh3cSnmpExtVersion (1.3.6.1.4.1.25506.2.104.1.5) | read-write | BITS | BITS { snmpV1(0), snmpV2c(1), snmpV3(2) } | SNMP version. | As per the MIB. |

hh3cSnmpExtTrapSource

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|-----------------------------|---|-----------------|
| hh3cSnmpExtTrapSource (1.3.6.1.4.1.25506.2.104.1.6) | read-only | SnmpAdminString | OCTET STRING (0..255) | Interface, the SNMP agent uses the primary IP address of which as the source IP address in all its traps. | As per the MIB. |

hh3cSnmpExtInformSource

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------|----------------------------|--|-----------------|
| hh3cSnmpExtInformSource (1.3.6.1.4.1.25506.2.104.1.7) | read-only | SnmpAdmin String | OCTET STRING(1..63) | Interface, the SNMP agent uses the primary IP address of which as the source IP address in all its informs. | As per the MIB. |

Tabular objects

hh3cSnmpExtCommunityTable

About this table

Use this table to configure the extended properties for SNMP communities (SNMPv1 or SNMPv2c) and SNMP users (SNMPv3).

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are hh3cSnmpExtCommunitySecurityLevel and hh3cSnmpExtCommunitySecurityName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------|--------------------------------------|---|-----------------|
| hh3cSnmpExtCommunity SecurityLevel (1.3.6.1.4.1.25506.2.104. 2.1.1.1) | not-accessible | SnmpSecurityModel | INTEGER (0..3) | Security model of a community or user. | As per the MIB. |
| hh3cSnmpExtCommunity SecurityName (1.3.6.1.4.1.25506.2.104. 2.1.1.2) | not-accessible | SnmpAdmin String | OCTET STRING (1..32) | Security name of the community or user. | As per the MIB. |
| hh3cSnmpExtCommunity Name (1.3.6.1.4.1.25506.2.104. 2.1.1.3) | read-only | OCTET STRING | OCTET STRING (1..32) | Community name or username. | As per the MIB. |
| hh3cSnmpExtCommunity AcNum (1.3.6.1.4.1.25506.2.104. 2.1.1.4) | read-write | Integer32 | Integer32 (0 2000..3999) | IPv4 ACL number used by the community or the user. | As per the MIB. |
| hh3cSnmpExtCommunity IPv6AcNum | read-write | Integer32 | Integer32 (0 | IPv6 ACL number used by the | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------------|--------|--------|-------------|------------------------|----------------|
| (1.3.6.1.4.1.25506.2.104.2.1.1.5) | | | 2000..3999) | community or the user. | |

hh3cSnmpExtContextTable

About this table

Use this table to configure SNMP context extended properties.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cSnmpExtContextName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---|-----------------------|---|
| hh3cSnmpExtContextName (1.3.6.1.4.1.25506.2.104.2.3.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Context name. | As per the MIB. |
| hh3cSnmpExtContextRowStatus (1.3.6.1.4.1.25506.2.104.2.3.2) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Status of this entry. | Supports only action, createAndGo, and destroy. |

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RMON2-MIB

About this MIB

Use this MIB to monitor the data traffic on a network segment or the entire network. RMON2-MIB is an extended version of RMON to support multi-dimensional monitoring and statistics.

MIB file name

rfc4502-rmon2.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).rmon(16)

Scalar objects

probeCapabilities

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------|--|---|-----------------|
| probeCapabilities (1.3.6.1.2.1.16.19.1) | read-only | BITS | BITS { etherStats(0), historyControl(1), etherHistory(2), alarm(3), hosts(4), hostTopN(5), matrix(6), filter(7), capture(8), event(9), tokenRingMLStats(10), tokenRingPStats(11), tokenRingMLHistory(12), tokenRingPHistory(13), ringStation(14), ringStationOrder(15), ringStationConfig(16), sourceRouting(17), protocolDirectory(18), protocolDistribution(19), addressMapping(20), nlHost(21), nlMatrix(22), alHost(23), alMatrix(24), usrHistory(25), probeConfig(26) } | An indication of the RMON MIB groups supported on a minimum of one interface by this probe. | As per the MIB. |

probeSoftwareRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|----------------------|-----------------------------------|-----------------|
| probeSoftwareRev (1.3.6.1.2.1.16.19.2) | read-only | OCTET STRING | OCTET STRING (0..15) | Software revision of this device. | As per the MIB. |

probeHardwareRev

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|----------------------|-----------------------------------|----------------|
| probeHardwareRev (1.3.6.1.2.1.16.19.3) | read-only | DisplayString | OCTET STRING (0..31) | Hardware revision of this device. | Not supported. |

probeDateTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|---------------------------------|-----------------------------------|-----------------|
| probeDateTime (1.3.6.1.2.1.16.19.4) | read-only | OCTET STRING | OCTET STRING (0 8 11) | Probe's current date and time. | As per the MIB. |

probeResetControl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--|--|-----------------------------------|
| probeResetControl (1.3.6.1.2.1.16.19.5) | read-write | INTEGER | running(1), warmBoot(2), coldBoot(3) | Reset control setting on the device. | Supports only read operations. |

Tabular objects

usrHistoryControlTable

About this table

Use this table to configure user-defined history control entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| To create a row of instances, you must specify usrHistoryControlIndex and usrHistoryControlStatus in pairs. | Not supported | Supported | Supported |

Columns

The table index is usrHistoryControlIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------|-------------------------|---|--|
| usrHistoryControlIndex (1.3.6.1.2.1.16.18.1.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Index of a usrHistoryControl entry. | As per the MIB. |
| usrHistoryControlObjects (1.3.6.1.2.1.16.18.1.1.2) | read-create | Integer32 | Integer32 (1..65535) | Number of MIB objects on which historical data is collected. | Value range: 1 to 30. Default value: 1. |
| usrHistoryControlBucketsRequest ed (1.3.6.1.2.1.16.18.1.1.3) | read-create | Integer32 | Integer32 (1..65535) | Requested number of samples to be retained for the entry. | A maximum of 50 samples are supported. You can set a value larger than 50 for this object, but only 50 |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------|--|---|---|
| | | | | | samples are supported. |
| usrHistoryControlBucketsGranted (1.3.6.1.2.1.16.18.1.1.4) | read-only | Integer32 | Integer32 (1..65535) | Granted number of samples to be retained for the entry. | As per the MIB. |
| usrHistoryControlInterval (1.3.6.1.2.1.16.18.1.1.5) | read-create | Integer32 | Integer32 (1..2147483647) | Sampling interval, in seconds. | Value range: 1 to 4294967. |
| usrHistoryControlOwner (1.3.6.1.2.1.16.18.1.1.6) | read-create | OwnerString | OCTET STRING (0..127) | Owner of the entry. | Not-displayable characters or question marks are not allowed. Default: Zero-length string. |
| usrHistoryControlStatus (1.3.6.1.2.1.16.18.1.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Status of the entry. | Supports only createAndWait(5) after the entry is created. |

usrHistoryObjectTable

About this table

Use this table to configure user-defined data-collection entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are usrHistoryControlIndex and usrHistoryObjectIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|------------------------------------|--|-----------------|
| usrHistoryObjectIndex (1.3.6.1.2.1.16.18.2.1.1) | not-accessible | Integer32 | Integer32 (1..65535) | Index of a usrHistoryObject entry. | As per the MIB. |
| usrHistoryObjectVariable (1.3.6.1.2.1.16.18.2.1.2) | read-create | OBJECT IDENTIFIER | Standard MIB values. | OID of the variable to be sampled. | As per the MIB. |
| usrHistoryObjectSampleType (1.3.6.1.2.1.16.18.2.1.3) | read-create | INTEGER | absoluteValue(1), deltaValue(2) | Method of sampling the selected variable for storage in the usrHistoryTable. | As per the MIB. |

usrHistoryTable

About this table

Use this table to obtain information about history samples.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are usrHistoryControlIndex, usrHistorySampleIndex, and usrHistoryObjectIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|--|---|-----------------|
| usrHistorySampleIndex (1.3.6.1.2.1.16.18.3.1.1) | not-accessible | Integer32 | Integer32 (1..2147483647) | Index of a sample of this entry. | As per the MIB. |
| usrHistoryIntervalStart (1.3.6.1.2.1.16.18.3.1.2) | read-only | TimeTicks | Standard MIB values | Sampling start time. | As per the MIB. |
| usrHistoryIntervalEnd (1.3.6.1.2.1.16.18.3.1.3) | read-only | TimeStamp | Standard MIB values | Sampling end time. | As per the MIB. |
| usrHistoryAbsValue (1.3.6.1.2.1.16.18.3.1.4) | read-only | Gauge32 | Standard MIB values | Absolute value of the monitored object. | As per the MIB. |
| usrHistoryValStatus (1.3.6.1.2.1.16.18.3.1.5) | read-only | INTEGER | valueNotAvailable(1), valuePositive(2), valueNegative(3) | Indicates the validity and sign of the data in the associated instance of usrHistoryAbsValue. | As per the MIB. |

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RMON-MIB

About this MIB

Use this MIB to monitor data traffic on a network segment or the entire network.

MIB file name

rfc2819-rmon.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).rmon(16)

Tabular objects

etherStatsTable

About this table

Use this table to obtain statistics about Ethernet interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| You must specify etherStatsDataSource and etherStatsStatus in pairs when creating a row of instances. | Not supported | Supported | Supported |

Columns

The table index is etherStatsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------------|-------------------------|---|------------------------------------|
| etherStatsIndex (1.3.6.1.2.1.16.1.1.1.1) | read-only | Integer32 | Integer32 (1..65535) | Index of an etherStats entry. | As per the MIB. |
| etherStatsDataSource (1.3.6.1.2.1.16.1.1.1.2) | read-create | OBJECT IDENTIFIER | Standard MIB values. | Interface on which statistics are gathered. | As per the MIB. |
| etherStatsDropEvents (1.3.6.1.2.1.16.1.1.1.3) | read-only | Counter32 | Standard MIB values. | Total number of events in which packets were dropped. | Implementation varies by product.. |
| etherStatsOctets (1.3.6.1.2.1.16.1.1.1.4) | read-only | Counter32 | Standard MIB values. | Total number of octets received on the interface. | Implementation varies by product. |
| etherStatsPkts (1.3.6.1.2.1.16.1.1.1.5) | read-only | Counter32 | Standard MIB values. | Total number of packets received on the interface. | Implementation varies by product. |
| etherStatsBroadcastPkt | read-only | Counter32 | Standard MIB | Total number of | Implementation |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------------------------|
| s (1.3.6.1.2.1.16.1.1.1.6) | | | values. | broadcast packets received on the interface. | varies by product. |
| etherStatsMulticastPkts (1.3.6.1.2.1.16.1.1.1.7) | read-only | Counter32 | Standard MIB values. | Total number of multicast packets received on the interface. | Implementation varies by product. |
| etherStatsCRCAlignErrors (1.3.6.1.2.1.16.1.1.1.8) | read-only | Counter32 | Standard MIB values. | Total number of packets with CRC errors received on the interface. | Implementation varies by product. |
| etherStatsUndersizePkts (1.3.6.1.2.1.16.1.1.1.9) | read-only | Counter32 | Standard MIB values. | Total number of undersize packets received on the interface. | Implementation varies by product. |
| etherStatsOversizePkts (1.3.6.1.2.1.16.1.1.1.10) | read-only | Counter32 | Standard MIB values. | Total number of oversize packets received on the interface. | Implementation varies by product. |
| etherStatsFragments (1.3.6.1.2.1.16.1.1.1.11) | read-only | Counter32 | Standard MIB values. | Total number of undersize packets with FCS errors received on the interface. | Implementation varies by product. |
| etherStatsJabbers (1.3.6.1.2.1.16.1.1.1.12) | read-only | Counter32 | Standard MIB values. | Total number of oversize packets with FCS errors received on the interface. | Implementation varies by product. |
| etherStatsCollisions (1.3.6.1.2.1.16.1.1.1.13) | read-only | Counter32 | Standard MIB values. | Total number of colliding packets received on the interface. | Implementation varies by product. |
| etherStatsPkts64Octets (1.3.6.1.2.1.16.1.1.1.14) | read-only | Counter32 | Standard MIB values. | Total number of packets with a length smaller than or equal to 64 octets received on the interface. | Implementation varies by product. |
| etherStatsPkts65to127Octets (1.3.6.1.2.1.16.1.1.1.15) | read-only | Counter32 | Standard MIB values. | Total number of 65- to 127-octet packets received on the interface. | Implementation varies by product. |
| etherStatsPkts128to255Octets (1.3.6.1.2.1.16.1.1.1.16) | read-only | Counter32 | Standard MIB values. | Total number of 128- to 255-octet packets received on the interface | Implementation varies by product. |
| etherStatsPkts256to511Octets (1.3.6.1.2.1.16.1.1.1.17) | read-only | Counter32 | Standard MIB values. | Total number of 256- to 511-octet packets received on the interface. | Implementation varies by product. |
| etherStatsPkts512to1023Octets (1.3.6.1.2.1.16.1.1.1.18) | read-only | Counter32 | Standard MIB values. | Total number of 512- to 1023-octet packets received on the interface | Implementation varies by product. |
| etherStatsPkts1024to1518Octets (1.3.6.1.2.1.16.1.1.1.19) | read-only | Counter32 | Standard MIB values. | Total number of 1024- to 1518-octet packets received on the interface | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|---|---------------------------------|---|
| etherStatsOwner (1.3.6.1.2.1.16.1.1.1.20) | read-create | OwnerString | OCTET STRING (0..127) | Owner of the etherStats entry. | Not-displayable characters or question marks are not allowed. The default value is a zero-length string. |
| etherStatsStatus (1.3.6.1.2.1.16.1.1.1.21) | read-create | EntryStatus | valid(1), createRequest (2), underCreation(3), invalid(4) | Status of the etherStats entry. | As per the MIB. |

historyControlTable

About this table

Use this table to configure history control entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|-----------|-----------|
| You must specify historyControlDataSource and historyControlStatus in pairs when creating an instance. | Not supported | Supported | Supported |

Columns

The table index is historyControlIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-------------------|-------------------------|---|--|
| historyControlIndex (1.3.6.1.2.1.16.2.1.1.1) | read-only | Integer32 | Integer32 (1..65535) | Index of a historyControl entry. | As per the MIB. |
| historyControlDataSource (1.3.6.1.2.1.16.2.1.1.2) | read-create | OBJECT IDENTIFIER | Standard MIB values. | Interface on which historical data was collected. | As per the MIB. |
| historyControlBucketsRequested (1.3.6.1.2.1.16.2.1.1.3) | read-create | Integer32 | Integer32 (1..65535) | Requested number of samples to be retained for the entry. | A maximum of 50 samples are supported. You can set a value larger than 50 for this object, but only 50 samples are supported. |
| historyControlBucketsGranted (1.3.6.1.2.1.16.2.1.1.4) | read-only | Integer32 | Integer32 (1..65535) | Granted number of samples to be retained for the entry. | As per the MIB. |
| historyControlInterval (1.3.6.1.2.1.16.2.1.1.5) | read-create | Integer32 | Integer32 (1..3600) | Sampling interval in seconds. | Value range: 5 to 3600 Default: 1800 |

| | | | | | |
|--|-------------|-------------|---|---------------------------------|--|
| historyControlOwner (1.3.6.1.2.1.16.2.1.1.6) | read-create | OwnerString | OCTET STRING (0..127) | Owner of this entry. | Not-displayable characters or question marks are not allowed. The default value is a zero-length string. |
| historyControlStatus (1.3.6.1.2.1.16.2.1.1.7) | read-create | EntryStatus | valid(1), createRequest (2), underCreation(3), invalid(4) | Statistics about this entry. | As per the MIB. |

etherHistoryTable

About this table

Use this table to obtain information about RMON history control entries and history samples of Ethernet statistics for Ethernet interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are etherHistoryIndex and etherHistorySampleIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|--|--------------------------------------|
| etherHistoryIndex (1.3.6.1.2.1.16.2.2.1.1) | read-only | Integer32 | Integer32 (1..65535) | Index of an etherHistory entry. | As per the MIB. |
| etherHistorySampleIndex (1.3.6.1.2.1.16.2.2.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Index of a sample. | As per the MIB. |
| etherHistoryIntervalStart (1.3.6.1.2.1.16.2.2.1.3) | read-only | TimeTicks | Standard MIB values. | Sampling start time. | As per the MIB. |
| etherHistoryDropEvents (1.3.6.1.2.1.16.2.2.1.4) | read-only | Counter32 | Standard MIB values. | Total number of events in which packets were dropped during this sampling interval. | Implementation varies by product. |
| etherHistoryOctets (1.3.6.1.2.1.16.2.2.1.5) | read-only | Counter32 | Standard MIB values. | Total number of octets received on the interface during this sampling interval. | Implementation varies by product. |
| etherHistoryPkts (1.3.6.1.2.1.16.2.2.1.6) | read-only | Counter32 | Standard MIB values. | Total number of packets received during this sampling interval. | Implementation varies by product. |
| etherHistoryBroadcastPkt s (1.3.6.1.2.1.16.2.2.1.7) | read-only | Counter32 | Standard MIB values. | Total number of broadcast packets received during this sampling interval. | Implementation varies by product. |
| etherHistoryMulticastPkts (1.3.6.1.2.1.16.2.2.1.8) | read-only | Counter32 | Standard MIB values. | Total number of multicast packets | Implementation varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------------------------|
| | | | | received during this sampling interval. | |
| etherHistoryCRCAlignErrors (1.3.6.1.2.1.16.2.2.1.9) | read-only | Counter32 | Standard MIB values. | Total number of packets with CRC alignment errors received during the sampling interval. | Implementation varies by product. |
| etherHistoryUndersizePkts (1.3.6.1.2.1.16.2.2.1.10) | read-only | Counter32 | Standard MIB values. | Total number of undersize packets received during the sampling interval. | Implementation varies by product. |
| etherHistoryOversizePkts (1.3.6.1.2.1.16.2.2.1.11) | read-only | Counter32 | Standard MIB values. | Total number of oversize packets received during the sampling interval. | Implementation varies by product. |
| etherHistoryFragments (1.3.6.1.2.1.16.2.2.1.12) | read-only | Counter32 | Standard MIB values. | Total number of undersize packets with FCS errors received during the sampling interval. | Implementation varies by product. |
| etherHistoryJabbers (1.3.6.1.2.1.16.2.2.1.13) | read-only | Counter32 | Standard MIB values. | Total number of oversize packets with FCS errors received during the sampling interval. | Implementation varies by product. |
| etherHistoryCollisions (1.3.6.1.2.1.16.2.2.1.14) | read-only | Counter32 | Standard MIB values. | Total number of colliding packets received during the sampling interval. | Implementation varies by product. |
| etherHistoryUtilization (1.3.6.1.2.1.16.2.2.1.15) | read-only | Integer32 | Integer32 (0..10000) | Bandwidth utilization during the sampling period. | Implementation varies by product. |

alarmTable

About this table

Use this table to configure alarm entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|---------------|-----------|-----------|
| You must specify alarmVariable and alarmStatus in pairs when creating a row of instances. If the buildruns of the instances exceed the maximum specification, the creation fails. | Not supported | Supported | Supported |

Columns

The table index is alarmIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------------|---|---|---|
| alarmIndex (1.3.6.1.2.1.16.3.1.1.1) | read-only | Integer32 | Integer32 (1..65535) | Index of an RMON alarm entry. | As per the MIB. |
| alarmInterval (1.3.6.1.2.1.16.3.1.1.2) | read-create | Integer32 | Standard MIB values. | Sampling interval in seconds. | Value range: 5 to 3600. Default value: 1800. |
| alarmVariable (1.3.6.1.2.1.16.3.1.1.3) | read-create | OBJECT IDENTIFIER | Standard MIB values. | OID of the variable to be sampled. | As per the MIB. |
| alarmSampleType (1.3.6.1.2.1.16.3.1.1.4) | read-create | INTEGER | absoluteValue(1), deltaValue(2) | Sampling type. | Default value: absoluteValue(1). |
| alarmValue (1.3.6.1.2.1.16.3.1.1.5) | read-only | Integer32 | Standard MIB values. | Value of the sampled variable. | If the object value exceeds the maximum positive value, the negation of the object value is returned when read. |
| alarmStartupAlarm (1.3.6.1.2.1.16.3.1.1.6) | read-create | INTEGER | risingAlarm(1), fallingAlarm(2), risingOrFallingAlarm(3) | Alarms that can be generated at the first sampling. | Default value: risingOrFallingAlarm(3). |
| alarmRisingThreshold (1.3.6.1.2.1.16.3.1.1.7) | read-create | Integer32 | Standard MIB values. | Rising threshold. | Default value: 1. |
| alarmFallingThreshold (1.3.6.1.2.1.16.3.1.1.8) | read-create | Integer32 | Standard MIB values. | Falling threshold. | Default value: 0. |
| alarmRisingEventIndex (1.3.6.1.2.1.16.3.1.1.9) | read-create | Integer32 | Integer32 (0..65535) | Index of the event that is triggered when the rising threshold is crossed. | Default value: 0. |
| alarmFallingEventIndex (1.3.6.1.2.1.16.3.1.1.10) | read-create | Integer32 | Integer32 (0..65535) | Index of the event that is triggered when the falling threshold is crossed. | Default value: 0. |
| alarmOwner (1.3.6.1.2.1.16.3.1.1.11) | read-create | OwnerString | OCTET STRING (0..127) | Owner of the alarm entry. | Not-displayable characters or question marks are not allowed. Default value: zero-length string. |
| alarmStatus (1.3.6.1.2.1.16.3.1.1.12) | read-create | EntryStatus | valid(1), createRequest(2), underCreation(3), invalid(4) | Status of the alarm entry. | As per the MIB. |

eventTable

About this table

Use this table to configure event entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|-----------|-----------|
| Supported. You must specify eventStatus when creating a row of instances. If the buildruns of the instances exceed the maximum specification, the creation fails. | Not supported | Supported | Supported |

Columns

The table index is eventIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|---------------|---|---|---|
| eventIndex (1.3.6.1.2.1.16.9.1.1.1) | read-only | Integer32 | Integer32 (1..65535) | Event entry index. | As per the MIB. |
| eventDescription (1.3.6.1.2.1.16.9.1.1.2) | read-create | DisplayString | OCTET STRING (0..127) | Event description. | Default value: Zero-length string. |
| eventType (1.3.6.1.2.1.16.9.1.1.3) | read-create | INTEGER | none(1), log(2), snmptrap(3), logandtrap(4) | Event type. | Default value: none(1) |
| eventCommunity (1.3.6.1.2.1.16.9.1.1.4) | read-create | OCTET STRING | OCTET STRING (0..127) | SNMP community to which an SNMP trap is sent. | Not supported. |
| eventLastTimeSent (1.3.6.1.2.1.16.9.1.1.5) | read-only | TimeTicks | TimeTicks (0..4294967295) | Time at which the most recent event occurs. | As per the MIB. |
| eventOwner (1.3.6.1.2.1.16.9.1.1.6) | read-create | OwnerString | OCTET STRING (0..127) | Event owner. | Not-displayable characters or question marks are not allowed. Default value: Zero-length string. |
| eventStatus (1.3.6.1.2.1.16.9.1.1.7) | read-create | EntryStatus | valid(1), createRequest(2), underCreation(3), invalid(4) | Event status. | As per the MIB. |

logTable

About this table

Use this table to obtain event logs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are logEventIndex and logIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|------------------------------|---|-----------------|
| logEventIndex (1.3.6.1.2.1.16.9.2.1.1) | read-only | Integer32 | Integer32 (1..65535) | Index of the event entry that generated this log entry. | As per the MIB. |
| logIndex (1.3.6.1.2.1.16.9.2.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Index of the log entry. | As per the MIB. |
| logTime (1.3.6.1.2.1.16.9.2.1.3) | read-only | TimeTicks | Standard MIB values. | Time when the log entry was created. | As per the MIB. |
| logDescription (1.3.6.1.2.1.16.9.2.1.4) | read-only | DisplayString | OCTET STRING (0..255) | Description of the event that activated this log entry. | As per the MIB. |

Notifications

This section contains the RMON-MIB notifications.

risingAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.16.0.1 | An alarm entry crossed its rising threshold | Informational | N/A | N/A | ON |

Description

This notification is generated when an alarm entry crosses its rising threshold and generates an event configured for sending SNMP traps.

Status control

ON

CLI: Use the **rmon event** *entry-number* [**description string**] { **log-trap security-string** | **trap security-string** } [**owner text**] command.

OFF

CLI: Use the **rmon event** *entry-number* [**description string**] { **log** | **none** } [**owner text**] command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------|-------|-------------------|-----------------------------------|
| 1.3.6.1.2.1.16.3.1.1.1 (alarmIndex) | Index of the alarm entry | Y | Integer32 | 1..65535 |
| 1.3.6.1.2.1.16.3.1.1.3 (alarmVariable) | Variable to be sampled | N | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.16.3.1.1.4 (alarmSampleType) | Sampling type | N | INTEGER | absoluteValue(1) deltaValue(2) |
| 1.3.6.1.2.1.16.3.1.1.5 (alarmValue) | Sampled value | N | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.16.3.1.1.7 (alarmRisingThreshold) | Rising threshold | N | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Check the monitored object for the reason that causes the alarm.
2. If the issue persists, contact H3C Support.

fallingAlarm

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|--------------------|--|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.16.0.2 | An alarm entry crossed its falling threshold | Informational | N/A | N/A | ON |

Description

A notification sent when an alarm entry crosses its falling threshold and generates an event configured for sending SNMP traps.

Status control

ON

CLI: Use the **rmon event** *entry-number* [**description string**] { **log-trap security-string** | **trap security-string** } [**owner text**] command.

OFF

CLI: Use the **rmon event** *entry-number* [**description string**] { **log** | **none** } [**owner text**] command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------|-------|-------------------|------------------------------------|
| 1.3.6.1.2.1.16.3.1.1.1 (alarmIndex) | Index of the alarm entry | Y | Integer32 | 1..65535 |
| 1.3.6.1.2.1.16.3.1.1.3 (alarmVariable) | Variable to be sampled | N | OBJECT IDENTIFIER | Standard MIB values. |
| 1.3.6.1.2.1.16.3.1.1.4 (alarmSampleType) | Sampling type | N | INTEGER | absoluteValue(1), deltaValue(2) |

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------|-------|-----------|----------------------|
| 1.3.6.1.2.1.16.3.1.1.5 (alarmValue) | Sampled value | N | Integer32 | Standard MIB values. |
| 1.3.6.1.2.1.16.3.1.1.8 (alarmFallingThreshold) | Falling threshold | N | Integer32 | Standard MIB values. |

Recommended action

No action is required.

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SFLOW-MIB

About this MIB

Use this MIB to configure sFlow, a traffic monitoring technology.

MIB file name

sflow.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).sflow(14706).sFlowMIB(1).sFlowAgent(1)

Scalar objects

sFlowVersion

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|----------------------|----------------------|-----------------|
| sFlowVersion (1.3.6.1.4.1.14706.1.1.1) | read-only | SnmpAdminString | Standard MIB values. | Version information. | As per the MIB. |

sFlowAgentAddressType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|----------------------|---------------------|-----------------|
| sFlowAgentAddressType (1.3.6.1.4.1.14706.1.1.2) | read-only | InetAddressType | Standard MIB values. | Agent address type. | As per the MIB. |

sFlowAgentAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------|----------------|-----------------|
| sFlowAgentAddress (1.3.6.1.4.1.14706.1.1.3) | read-only | InetAddress | Standard MIB values. | Agent address. | As per the MIB. |

Tabular objects

sFlowRcvrTable

About this table

This table configures the sFlow collector information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is sFlowRcvrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|-----------------------|--|-------------------|
| sFlowRcvrIndex (1.3.6.1.4.1.14706.1.1.4.1.1) | not-accessible | INTEGER | Integer32(1..65535) | Collector index. | As per the MIB. |
| sFlowRcvrOwner (1.3.6.1.4.1.14706.1.1.4.1.2) | read-write | OwnerString | Standard MIB values. | Collector description. | As per the MIB. |
| sFlowRcvrTimeout (1.3.6.1.4.1.14706.1.1.4.1.3) | read-write | INTEGER | Standard MIB values. | Aging time. | As per the MIB. |
| sFlowRcvrMaximumDatagramSize (1.3.6.1.4.1.14706.1.1.4.1.4) | read-write | INTEGER | Integer32(200..3000) | Maximum number of data bytes that can be sent in a single sample datagram. | As per the MIB. |
| sFlowRcvrAddressType (1.3.6.1.4.1.14706.1.1.4.1.5) | read-write | InetAddressType | Standard MIB values. | Collector address type. | As per the MIB. |
| sFlowRcvrAddresses (1.3.6.1.4.1.14706.1.1.4.1.6) | read-write | InetAddress | OCTET STRING (0..255) | Collector IP address. | As per the MIB. |
| sFlowRcvrPort (1.3.6.1.4.1.14706.1.1.4.1.7) | read-write | INTEGER | Standard MIB values. | UDP port number. | As per the MIB. |
| sFlowRcvrDatagramVersion (1.3.6.1.4.1.14706.1.1.4.1.8) | read-write | Integer32 | Standard MIB values. | Datagram version. | Supports only V5. |

sFlowFsTable

About this table

This table configures sFlow flow sampling.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are sFlowFsDataSource and sFlowFsInstance.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|--|-----------------|
| sFlowFsDataSource (1.3.6.1.4.1.14706.1.1.5.1.1) | not-accessible | SFlowDataSource | Standard MIB values. | Data source. | As per the MIB. |
| sFlowFsInstance (1.3.6.1.4.1.14706.1.1.5.1.2) | not-accessible | SFlowInstance | Standard MIB values. | Instance ID. | As per the MIB. |
| sFlowFsReceiver (1.3.6.1.4.1.14706.1.1.5.1.3) | read- write | SFlowReceiver | Standard MIB values. | Receiver. | As per the MIB. |
| sFlowFsPacketSamplingRate (1.3.6.1.4.1.14706.1.1.5.1.4) | read- write | INTEGER | Standard MIB values. | Sampling rate. | As per the MIB. |
| sFlowFsMaximumHeaderSize (1.3.6.1.4.1.14706.1.1.5.1.5) | read- write | INTEGER | Integer32(18..512) | Maximum number of bytes that should be copied from a sampled packet. | As per the MIB. |

sFlowCpTable

About this table

This table configures sFlow counter sampling.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are sFlowCpDataSource and sFlowCpInstance.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|---------------------|-----------------|
| sFlowCpDataSource (1.3.6.1.4.1.14706.1.1.6.1.1) | not-accessible | SFlowDataSource | Standard MIB values. | Data source. | As per the MIB. |
| sFlowCpInstance (1.3.6.1.4.1.14706.1.1.6.1.2) | not-accessible | SFlowInstance | Standard MIB values. | Instance ID. | As per the MIB. |
| sFlowCpReceiver (1.3.6.1.4.1.14706.1.1.6.1.3) | read- write | INTEGER | Standard MIB values. | Sampling collector. | As per the MIB. |
| sFlowCpInterval (1.3.6.1.4.1.14706.1.1.6.1.4) | read- write | INTEGER | Integer32(2..86400) | Sampling interval. | As per the MIB. |

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SNMP-FRAMEWORK-MIB

About this MIB

Use this MIB to obtain information about the SNMP engine, which provides functions for authenticating and encrypting messages and controlling access to managed objects.

MIB file name

rfc2571-snmp-framework.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpFrameworkMIB(10)

Scalar objects

snmpEngineID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|----------------------|-----------------|---|
| snmpEngineID (1.3.6.1.6.3.10.2.1.1) | read-only | SnmpEngineID | Standard MIB values. | SNMP engine ID. | <p>As per the MIB.</p> <p>The SNMP engine ID has a length of 16 octets by default.</p> <ul style="list-style-type: none">The first four octets are the enterprise ID of the SNMP entity (assigned by IANA). The very first bit is set to 1. For example, if the H3C enterprise ID is 25506, the first four octets of SNMP engine ID is 0x80 0x00 0x63 0xa2.The fifth octet is 0x80, indicating that the remaining octets are defined by the enterprise.Starting from the sixth octet is the lowest MAC address of the device. The remaining four octets are the MDC number. |

snmpEngineBoots

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|------------------------------|---|--|
| snmpEngineBoots (1.3.6.1.6.3.10.2.1.2) | read-only | Integer32 | Integer32 (1..2147483647) | Number of (re-)initialization of the SNMP engine since the most recent configuration of snmpEngineID. | If the SNMP protocol stack is enabled from disabled state, the object value automatically increases by 1. If the SNMP engine ID is changed, the object value is restored to 1. If snmpEngineTime reaches its maximum value, the object value automatically increases by 1. |

snmpEngineTime

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|------------------------------|---|-----------------|
| snmpEngineTime (1.3.6.1.6.3.10.2.1.3) | read-only | Integer32 | Integer32 (0..2147483647) | Time in seconds since the most recent change of the value of snmpEngineBoots. | As per the MIB. |

snmpEngineMaxMessageSize

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--------------------------------|---|-----------------|
| snmpEngineMaxMessageSize (1.3.6.1.6.3.10.2.1.4) | read-only | Integer32 | Integer32 (484..2147483647) | Maximum length (in octets) of an SNMP message that the SNMP engine can send or receive and process. | As per the MIB. |

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SNMP-MPD-MIB

About this MIB

Use this MIB to monitor the SNMP message processing and dispatching process. It provides statistics about dropped packets.

MIB file name

rfc2572-snmp-mpd.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpMPDMIB(11)

Scalar objects

snmpUnknownSecurityModels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| snmpUnknownSecurityModels (1.3.6.1.6.3.11.2.1.1) | read-only | Counter32 | Standard MIB values. | Total number of packets received but dropped by the SNMP engine because they referenced a security model unknown to or supported by the SNMP engine. | As per the MIB. |

snmpInvalidMsgs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| snmpInvalidMsgs (1.3.6.1.6.3.11.2.1.2) | read-only | Counter32 | Standard MIB values. | Total number of packets received but dropped by the SNMP engine because they contain invalid or inconsistent components. | As per the MIB. |

snmpUnknownPDUHandlers

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| snmpUnknownPDUHandlers (1.3.6.1.6.3.11.2.1.3) | read-only | Counter32 | Standard MIB values. | Total number of packets received but dropped by the SNMP engine because the PDU contained in the packet could not be passed to an application responsible for handling the PDU type. For example, no SNMP application had registered for the proper combination of the context Engine ID and the PDU type. | As per the MIB. |

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SNMP-NOTIFICATION-MIB

About this MIB

Use this MIB to remotely configure the parameters used by an SNMP entity for generation of notifications.

MIB file name

rfc3413-snmp-notification.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpNotificationMIB(13)

Tabular objects

snmpNotifyTable

About this table

Use this table to select the management targets to receive notifications and the type of notifications to send to each selected management target.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is snmpNotifyName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--------------------------|--|-----------------|
| snmpNotifyName (1.3.6.1.6.3.13.1.1.1.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Locally arbitrary but unique identifier of an snmpNotifyEntry. | As per the MIB. |
| snmpNotifyTag (1.3.6.1.6.3.13.1.1.1.2) | read-create | SnmpTagValue | OCTET STRING (0..255) | A single tag value used to select entries in the snmpTargetAddrTable. Any entry in the snmpTargetAddrTable that contains a tag value equal to the value of an instance of this object is selected. If the object value is zero length, no entries are selected. | As per the MIB. |
| snmpNotifyType (1.3.6.1.6.3.13.1.1.1.3) | read-create | INTEGER | trap(1), inform(2) | Type of notification to be generated for entries in the snmpTargetAddrTable selected by the corresponding instance of snmpNotifyTag. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|---|--|-----------------|
| | | | | <p>This value is only used for generation of notifications, and is ignored when snmpTargetAddrTable is used for other purposes.</p> <ul style="list-style-type: none"> If the value of this object is trap(1), any messages generated for selected rows will contain unconfirmed-class PDUs. If the value of this object is inform(2), any messages generated for selected rows will contain confirmed-class PDUs. | |
| snmpNotifyStorageType (1.3.6.1.6.3.13.1.1.4) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. Conceptual rows with a value of permanent(4) are denied write-access to any columnar objects in the row. | As per the MIB. |
| snmpNotifyRowStatus (1.3.6.1.6.3.13.1.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

snmpNotifyFilterProfileTable

About this table

This table associates a notification filter profile with a particular set of target parameters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is IMPLIED snmpTargetParamsName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|------------------------|---|-----------------|
| snmpNotifyFilterProfileName (1.3.6.1.6.3.13.1.2.1.1) | read-create | SnmpAdminString | OCTET STRING (1..32) | Name of the filter profile to be used for generation of notifications using the corresponding entry in the snmpTargetAddrTable. | As per the MIB. |
| snmpNotifyFilterProfileStorType | read-create | StorageType | other(1), volatile(2), | Storage type for this conceptual | As per the MIB. |

| | | | | | |
|--|-------------|-----------|---|--|-----------------|
| (1.3.6.1.6.3.13.1.2.1.2) | | | nonVolatile(3), permanent(4), readOnly(5) | row. Conceptual rows with a value of permanent(4) are denied write-access to any columnar objects in the row. | |
| snmpNotifyFilterProfile RowStatus (1.3.6.1.6.3.13.1.2.1.3) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

snmpNotifyFilterTable

About this table

This table determines whether specific management targets will receive specific notifications. When a notification is generated, it must be compared with the filters associated with each management target configured to receive notifications, to determine whether it is sent to these management targets.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are snmpNotifyFilterProfileName and IMPLIED snmpNotifyFilterSubtree.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|----------------------|--|-----------------|
| snmpNotifyFilterSubtree (1.3.6.1.6.3.13.1.3.1.1) | not-accessible | OBJECT IDENTIFIER | Standard MIB values | MIB subtree, which is combined with the corresponding instance of snmpNotifyFilterMask, defines a family of subtrees that are included in or excluded from the filter profile. | As per the MIB. |
| snmpNotifyFilterMask (1.3.6.1.6.3.13.1.3.1.2) | read-create | OCTET STRING | OCTET STRING (0..16) | <p>Bit mask, which in combination with the corresponding instance of snmpNotifyFilterSubtree, defines a family of subtrees that are included in or excluded from the filter profile.</p> <p>Each bit of this bit mask corresponds to a sub-identifier of snmpNotifyFilterSubtree, with the most significant bit of the i-th octet of this octet string value corresponding to the (8*i-7)-th sub-identifier, and the least significant bit of the i-th octet of this octet string corresponding to the (8*i)-th sub-identifier, where i is in the range of 1 through 16.</p> <p>Each bit of this bit mask specifies whether or not the corresponding sub-identifiers must match when determining if an object identifier</p> | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|--|---|-----------------|
| | | | | <p>matches this family of filter subtrees.</p> <p>A 1 indicates that an exact match must occur. A 0 indicates wild card, which means that any sub-identifier value matches.</p> <p>Therefore, the object identifier X of an object instance is contained in a family of filter subtrees if, for each sub-identifier of the value of snmpNotifyFilterSubtree, either the i-th bit of snmpNotifyFilterMask is 0, or the i-th sub-identifier of X is equal to the i-th sub-identifier of the value of snmpNotifyFilterSubtree.</p> <p>If the value of this bit mask is M bits long and there are more than M sub-identifiers in the corresponding instance of snmpNotifyFilterSubtree, the bit mask is extended with 1s to be the required length.</p> <p>If the value of this object is a zero-length string, this extension rule results in a mask of all-1s being used (no wild card), and the family of filter subtrees is the one subtree uniquely identified by the corresponding instance of snmpNotifyFilterSubtree.</p> | |
| snmpNotifyFilterType (1.3.6.1.6.3.13.1.3.1.3) | read-create | INTEGER | included(1), excluded(2) | Whether the family of filter subtrees defined by this entry are included in or excluded from a filter. | As per the MIB. |
| snmpNotifyFilterStorageType (1.3.6.1.6.3.13.1.3.1.4) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. Conceptual rows with a value of permanent(4) are denied write-access to any columnar objects in the row. | As per the MIB. |
| snmpNotifyFilterRowStatus (1.3.6.1.6.3.13.1.3.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

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SNMP-TARGET-MIB

About this MIB

Use this MIB to configure parameters used by an SNMP entity for generation of SNMP messages.

Use snmpTargetAddrTable and snmpTargetParamsTable together for creating a target host and follow these rules.

- To create a target host, you must create an instance in both snmpTargetAddrTable and snmpTargetParamsTable.
- Set the same value for snmpTargetAddrName and snmpTargetAddrParams.
- Set the same value for snmpTargetAddrParams and snmpTargetParamsName.
- Set snmpTargetAddrName in the traphost+snmpTargetParamsSecurityName+IpAddress+VPNInstancename format, where IpAddress is the IP address in the snmpTargetAddrTAddress value. You do not need to specify VPNInstancename if the device does not support VPN.
- Set snmpTargetAddrTagList to TrapHost or InformHost.
- Set snmpTargetAddrStorageType to nonVolatile.
- Set snmpTargetParamsSecurityName to a value with a length of 1 to 32 octets in snmpTargetAddrParams.
- Set VPNInstancename to a value with a length of 1 to 31 octets in snmpTargetAddrParams.

***** SNMP QUERY STARTED *****

1:[Loaded:SNMPv2-TM]

snmpTargetAddrTDomain.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.54
(object identifier) snmpUDPDomain

2:snmpTargetAddrTAddress.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.
54 (octet string) A9.FE.4C.4C.00.A2 (hex)

3:snmpTargetAddrTimeout.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.54
(integer) 1500

4:snmpTargetAddrRetryCount.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.5
5.54 (integer) 3

5:snmpTargetAddrTagList.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.54
(octet string) TrapHost [54.72.61.70.48.6F.73.74 (hex)]

6:snmpTargetAddrParams.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.54
(octet string) traphost.gl.169.254.76.76
[74.72.61.70.68.6F.73.74.2E.67.6C.2E.31.36.39.2E.32.35.34.2E.37.36.2E.37.36 (hex)]

7:snmpTargetAddrStorageType.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.
55.54 (integer) nonVolatile(3)

8:snmpTargetAddrRowStatus.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.
.54 (integer) active(1)

9:snmpTargetParamsMPModel.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.5
5.54 (integer) 0

10:snmpTargetParamsSecurityModel.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.5
4.46.55.54 (integer) 1

11:snmpTargetParamsSecurityName.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.5
4.46.55.54 (octet string) gl [67.6C (hex)]

12:snmpTargetParamsSecurityLevel.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.5
4.46.55.54 (integer) noAuthNoPriv(1)

13:snmpTargetParamsStorageType.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54
.46.55.54 (integer) nonVolatile(3)

14:snmpTargetParamsRowStatus.116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.54 (integer) active(1)

15:snmpUnavailableContexts.0 (counter) 0

16:snmpUnknownContexts.0 (counter) 0

***** SNMP QUERY FINISHED *****

The preceding information is an SNMP query result for a target host instance. The index of the instance is 116.114.97.112.104.111.115.116.46.103.108.46.49.54.57.46.50.53.52.46.55.54.46.55.54, which can be converted to traphost.gl.169.254.76.76.

- With 116.114.97.112.104.111.115.116.46 converted to traphost.
- With 103.108.46 converted to gl.
- With 46.49.54.57.46.50.53.52.46.55.54.46.55.54 converted to 169.254.76.76.

MIB file name

rfc2573-snmp-target.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpTargetMIB(12)

Scalar objects

snmpTargetSpinLock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|----------------------|--|-----------------|
| snmpTargetSpinLock (1.3.6.1.6.3.12.1.1) | read-write | TestAndIncr | Standard MIB values. | This object is used to facilitate modification of table entries. In particular, it is useful when modifying the value of the snmpTargetAddrTagList object. | As per the MIB. |

snmpUnavailableContexts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|---------------------|--|-----------------|
| snmpUnavailableContexts (1.3.6.1.6.3.12.1.4) | read-only | Counter32 | Standard MIB values | Total number of messages received but dropped by the SNMP engine because the context contained in the message was unavailable. | As per the MIB. |

snmpUnknownContexts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------|-----------|-----------|--------------|-----------------------------------|-----------------|
| snmpUnknownContexts | read-only | Counter32 | Standard MIB | Total number of messages received | As per the MIB. |

| | | | | | |
|----------------------|--|--|--------|--|--|
| (1.3.6.1.6.3.12.1.5) | | | values | but dropped by the SNMP engine because the context contained in the message was unknown. | |
|----------------------|--|--|--------|--|--|

Tabular objects

snmpTargetAddrTable

About this table

Use this table to configure target addresses for SNMP messages

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is IMPLIED snmpTargetAddrName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|------------------------------|---|---|
| snmpTargetAddrName (1.3.6.1.6.3.12.1.2.1.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Identifier for an snmpTargetAddrEntry. | The value must be in a length of 1 to 255 octets. It can contain only displayable characters except for question marks. |
| snmpTargetAddrTDomain (1.3.6.1.6.3.12.1.2.1.2) | read-create | TDomain | Standard MIB values. | Transport type of the address contained in the snmpTargetAddrTAddress object. | The value is snmpUDPDDomain. |
| snmpTargetAddrTAddresses (1.3.6.1.6.3.12.1.2.1.3) | read-create | TAddress | OCTET STRING (1..255) | Target address, the format of which depends on the value of the snmpTargetAddrTDomain object. | As per the MIB. |
| snmpTargetAddrTimeout (1.3.6.1.6.3.12.1.2.1.4) | read-create | TimeInterval | Integer32 (0..2147483647) | Expected maximum round trip time for communicating with the target address defined by this row. | As per the MIB. |
| snmpTargetAddrRetryCount (1.3.6.1.6.3.12.1.2.1.5) | read-create | Integer32 | Integer32 (0..255) | Default number of retries when a response is not received for a generated message. | As per the MIB. |
| snmpTargetAddrTagList (1.3.6.1.6.3.12.1.2.1.6) | read-create | SnmpTagList | OCTET STRING (0..255) | List of tag values which are used to select target addresses for a | The value can be TrapHost or |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|--|--|---|
| | | | | particular operation. | InformHost only. It can contain only displayable characters except for question marks. |
| snmpTargetAddrParams (1.3.6.1.6.3.12.1.2.1.7) | read-create | SnmpAdminString | OCTET STRING (1..32) | The value of this object identifies an entry in the snmpTargetParamsTable. | The value must be in a length of 1 to 255 octets. It can contain only displayable characters except for question marks. |
| snmpTargetAddrStorageType (1.3.6.1.6.3.12.1.2.1.8) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. | This object takes effect only when the value is nonVolatile . You can set the object to other values, but they do not take effect. |
| snmpTargetAddrRowStatus (1.3.6.1.6.3.12.1.2.1.9) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

snmpTargetParamsTable

About this table

Use this table to configure SNMP parameters to be used for generation of SNMP messages to be sent to a target.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is snmpTargetParamsName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------|--|--|
| snmpTargetParamsName (1.3.6.1.6.3.12.1.3.1.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Identifier for an snmpTargetParamsEntry. | The value must be in a length of 1 to 255 octets. It can contain only displayable characters except for question marks. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------------------------|--|--|---|
| snmpTargetParamsMPModel (1.3.6.1.6.3.12.1.3.1.2) | read-create | SnmpMessageProcessingModel | Integer32 (0..2147483647) | Message processing model to be used for generation of SNMP messages using this entry. | As per the MIB. |
| snmpTargetParamsSecurityModel (1.3.6.1.6.3.12.1.3.1.3) | read-create | SnmpSecurityModel | Integer32 (1..2147483647) | Security model to be used for generation of SNMP messages using this entry. An implementation might choose to return an inconsistent value error if an attempt is made to set this variable to a value for a security model which the implementation does not support. | As per the MIB. |
| snmpTargetParamsSecurityName (1.3.6.1.6.3.12.1.3.1.4) | read-create | SnmpAdminString | OCTET STRING (0..255) | Security name which identifies the principal on whose behalf SNMP messages will be generated. | As per the MIB. |
| snmpTargetParamsSecurityLevel (1.3.6.1.6.3.12.1.3.1.5) | read-create | SnmpSecurityLevel | noAuthNoPriv(1), authNoPriv(2), authPriv(3) | Security level to be used for generation of SNMP messages. | As per the MIB. |
| snmpTargetParamsStorageType (1.3.6.1.6.3.12.1.3.1.6) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. | This object takes effect only when the value is nonVolatile . You can set the object to other values, but they do not take effect. |
| snmpTargetParamsRowStatus (1.3.6.1.6.3.12.1.3.1.7) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

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SNMP-USER-BASED-SM-MIB

About this MIB

Use this MIB to implement the SNMP user-based security model.

MIB file name

rfc3414-snmp-usm.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpUsmMIB(15)

Scalar objects

usmStatsUnsupportedSecLevels

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------|--|-----------------|
| usmStatsUnsupportedSecLevels (1.3.6.1.6.3.15.1.1.1) | read-only | Counter32 | Standard MIB values | Total number of packets received but dropped by the SNMP engine because they requested a security level unknown to the SNMP engine or not available. | As per the MIB. |

usmStatsNotInTimeWindows

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------|--|-----------------|
| usmStatsNotInTimeWindows (1.3.6.1.6.3.15.1.1.2) | read-only | Counter32 | Standard MIB values | Total number of packets received but dropped by the SNMP engine because they appeared outside of the authoritative SNMP engine's window. | As per the MIB. |

usmStatsUnknownUserNames

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------|---|-----------------|
| usmStatsUnknownUserNames (1.3.6.1.6.3.15.1.1.3) | read-only | Counter32 | Standard MIB values | Total number of packets received but dropped by the SNMP engine because they referenced a user unknown to the | As per the MIB. |

| | | | | | |
|--|--|--|--|--------------|--|
| | | | | SNMP engine. | |
|--|--|--|--|--------------|--|

usmStatsUnknownEngineIDs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------|---|-----------------|
| usmStatsUnknownEngineIDs (1.3.6.1.6.3.15.1.1.4) | read-only | Counter32 | Standard MIB values | Total number of packets received but dropped by the SNMP engine because they referenced an SNMP Engine ID unknown to the SNMP engine. | As per the MIB. |

usmStatsWrongDigests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------|---|-----------------|
| usmStatsWrongDigests (1.3.6.1.6.3.15.1.1.5) | read-only | Counter32 | Standard MIB values | Total number of packets received but dropped by the SNMP engine because they did not contain the expected digest value. | As per the MIB. |

usmStatsDecryptionErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---------------------|--|-----------------|
| usmStatsDecryptionErrors (1.3.6.1.6.3.15.1.1.6) | read-only | Counter32 | Standard MIB values | Total number of packets received but dropped by the SNMP engine because they could not be decrypted. | As per the MIB. |

usmUserSpinLock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------|---------------------|---|-----------------|
| usmUserSpinLock (1.3.6.1.6.3.15.1.2.1) | read-write | TestAndIncr | Standard MIB values | An advisory lock used to allow several cooperating command generator applications to coordinate their use of facilities to alter secrets in the usmUserTable. | As per the MIB. |

Tabular objects

usmUserTable

About this table

Use this table to create users.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are usmUserEngineID and usmUserName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------------|--------------------------|---|--|
| usmUserEngineID (1.3.6.1.6.3.15.1.2.2.1.1) | not-accessible | SnmpEngine ID | OCTET STRING (5..32) | Administratively unique identifier for the SNMP engine. | As per the MIB. |
| usmUserName (1.3.6.1.6.3.15.1.2.2.1.2) | not-accessible | SnmpAdmin String | OCTET STRING (1..32) | Use name. It is the (user-based security) model dependent security ID. | The value can contain only displayable characters except question marks. |
| usmUserSecurity Name (1.3.6.1.6.3.15.1.2.2.1.3) | read-only | SnmpAdmin String | OCTET STRING (0..255) | A human readable string representing the user in security model independent format. The default transformation of the user-based security model dependent security ID to the security name and vice versa is the identity function so that the security name is the same as the user name. | As per the MIB. |
| usmUserCloneFrom (1.3.6.1.6.3.15.1.2.2.1.4) | read-create | RowPointer | Standard MIB values | A pointer to another conceptual row in this usmUserTable. The user in this other conceptual row is called the clone-from user. | This object must be specified for creating an instance. If the object corresponds to a user created by the command line, this operation succeeds but does not take effect. When a new user is created (a new conceptual row is instantiated in this table), the privacy and authentication parameters of the new user must be cloned from its clone-from user. These parameters are: <ul style="list-style-type: none">authentication protocol (usmUserAuthProtocol) |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|--|--|---|
| | | | | | <ul style="list-style-type: none"> privacy protocol (usmUserPrivProtocol) <p>They will be copied regardless of what the current value is.</p> <p>Cloning also causes the initial values of the secret authentication key (authKey) and the secret encryption key (privKey) of the new user to be set to the same values as the corresponding secrets of the clone-from user to allow the KeyChange process to occur as required during user creation.</p> <p>The first time an instance of this object is set by a management operation (either at or after its instantiation), the cloning process is invoked.</p> <p>Subsequent writes are successful but invoke no action to be taken by the receiver.</p> <p>The cloning process fails with an inconsistentName error if the conceptual row representing the clone-from user does not exist or is not in an active state when the cloning process is invoked.</p> <p>When this object is read, the ZeroDotZero OID is returned.</p> |
| usmUserAuthProtocol (1.3.6.1.6.3.15.1.2.2.1.5) | read-create | Autonomous Type | Standard MIB values | Indicates whether messages sent on behalf of this user to/from the SNMP engine identified by usmUserEngineID can be authenticated and the authentication protocol to be used. | As per the MIB. |
| usmUserAuthKeyChange (1.3.6.1.6.3.15.1.2.2.1.6) | read-create | KeyChange | -- typically (SIZE (0 32)) for HMACMD5 -- typically (SIZE (0 40)) for HMACSHA | An object, which when modified, causes the secret authentication key used for messages sent on behalf of this user to/from the SNMP engine identified by usmUserEngineID, to be modified via a one-way function. | When read, this object returns a zero-length string. |
| usmUserOwnAuthKeyChange (1.3.6.1.6.3.15.1.2.2.1.7) | read-create | KeyChange | -- typically (SIZE (0 32)) for HMACMD5 -- typically (SIZE (0 40)) for | Functions exactly as usmUserAuthKeyChange, with one notable difference: in order for the set operation to succeed, the usmUserName of the | When read, this object returns a zero-length string. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------------|--|--|--|
| | | | HMACSHA | operation requester must match the usmUserName that indexes the row which is targeted by this operation. | |
| usmUserPrivProtocol (1.3.6.1.6.3.15.1.2.2.1.8) | read-create | Autonomous Type | Standard MIB values | An indication of whether messages sent on behalf of this user to/from the SNMP engine identified by usmUserEngineID can be protected from disclosure, and the type of privacy protocol to be used. | As per the MIB. |
| usmUserPrivKeyChange (1.3.6.1.6.3.15.1.2.2.1.9) | read-create | KeyChange | -- typically (SIZE (0 32)) for DES | An object, which when modified, causes the secret encryption key used for messages sent on behalf of this user to/from the SNMP engine identified by usmUserEngineID, to be modified via a one-way function. | When read, this object returns a zero-length string. |
| usmUserOwnPrivKeyChange (1.3.6.1.6.3.15.1.2.2.1.10) | read-create | KeyChange | Standard MIB values | Functions exactly as usmUserPrivKeyChange, with one notable difference: in order for the Set operation to succeed, the usmUserName of the operation requester must match the usmUserName that indexes the row which is targeted by this operation. | When read, this object returns a zero-length string. |
| usmUserPublic (1.3.6.1.6.3.15.1.2.2.1.11) | read-create | OCTET STRING | OCTET STRING (0..32) | A publicly-readable value that can be written as part of the procedure for changing a user's secret authentication and/or privacy key, and later read to determine whether the change of the secret was effected. | As per the MIB. |
| usmUserStorageType (1.3.6.1.6.3.15.1.2.2.1.12) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. | Supports only nonVolatile(3). |
| usmUserStatus (1.3.6.1.6.3.15.1.2.2.1.13) | read-create | RowStatus | active(1), notInService | Row status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|---|-------------|----------------|
| .2.1.13) | | | e(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | | |

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SNMPv2-MIB

About this MIB

Use this MIB to configure SNMPv2 basic settings and obtain SNMP packet statistics.

MIB file name

rfc3418-snmpv2.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpMIB(1)

Scalar objects

snmpTrapOID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------------------------|-------------------|----------------------|---|-----------------|
| snmpTrapOID (1.3.6.1.6.3.1.1.4.1) | accessible-for-notification | OBJECT IDENTIFIER | Standard MIB values. | OID of the notification currently being sent. | As per the MIB. |

snmpTrapEnterprise

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------------|-------------------|----------------------|--|-----------------|
| snmpTrapEnterprise (1.3.6.1.6.3.1.1.4.3) | accessible-for-notification | OBJECT IDENTIFIER | Standard MIB values. | OID of the enterprise associated with the trap currently being sent. | As per the MIB. |

snmpSetSerialNo

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|----------------------|--|-----------------|
| snmpSetSerialNo (1.3.6.1.6.3.1.1.6.1) | read-write | TestAndIncr | Standard MIB values. | An advisory lock used to allow several cooperating command generator applications to coordinate their use of the SNMP set operation. | As per the MIB. |

snmplnPks

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------|-----------|-----------|----------------------|---|-----------------|
| snmplnPks (1.3.6.1.2.1.11.1) | read-only | Counter32 | Standard MIB values. | Total number of SNMP messages received on | As per the MIB. |

| | | | | | |
|--|--|--|--|-----------------|--|
| | | | | the SNMP agent. | |
|--|--|--|--|-----------------|--|

snmpOutPkts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------|-----------|-----------|----------------------|---|-----------------|
| snmpOutPkts (1.3.6.1.2.1.11.2) | read-only | Counter32 | Standard MIB values. | Total number of SNMP messages sent by the SNMP agent. | As per the MIB. |

snmplnBadVersions

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|---|-----------------|
| snmplnBadVersions (1.3.6.1.2.1.11.3) | read-only | Counter32 | Standard MIB values. | Total number of received SNMP messages not supported by the SNMP version. | As per the MIB. |

snmplnBadCommunityNames

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| snmplnBadCommunityNames (1.3.6.1.2.1.11.4) | read-only | Counter32 | Standard MIB values. | Total number of received SNMP messages which used an SNMP community name unknown to the SNMP entity. | As per the MIB. |

snmplnBadCommunityUses

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| snmplnBadCommunityUses (1.3.6.1.2.1.11.5) | read-only | Counter32 | Standard MIB values. | Total number of messages carrying an operation that the community has no right to perform. | As per the MIB. |

snmplnASNParseErrs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------|-----------|----------|--------------|---|-----------------|
| snmplnASNParseErrs | read-only | Counter3 | Standard MIB | Total number of received SNMP messages that | As per the MIB. |

| | | | | | |
|--------------------|--|---|---------|--|--|
| (1.3.6.1.2.1.11.6) | | 2 | values. | had ASN.1 or BER errors during decoding. | |
|--------------------|--|---|---------|--|--|

snmpInTooBigs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|---|--|
| snmpInTooBigs (1.3.6.1.2.1.11.8) | read-only | Counter32 | Standard MIB values. | Total number of received SNMP PDUs with a TooBig error. | When read, this object always returns 0 . |

snmpInNoSuchNames

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------------------|-----------|-----------|----------------------|---|--|
| snmpInNoSuchNames (1.3.6.1.2.1.11.9) | read-only | Counter32 | Standard MIB values. | Total number of received SNMP PDUs with a NoSuchName error. | When read, this object always returns 0 . |

snmpInBadValues

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|---|--|
| snmpInBadValues (1.3.6.1.2.1.11.10) | read-only | Counter32 | Standard MIB values. | Total number of received SNMP PDUs with a BadValue error. | When read, this object always returns 0 . |

snmpInReadOnlys

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|----------------------|---|--|
| snmpInReadOnlys (1.3.6.1.2.1.11.11) | read-only | Counter32 | Standard MIB values. | Total number of received SNMP PDUs with a readOnly error. | When read, this object always returns 0 . |

snmpInGenErrors

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-------------------------------------|-----------|-----------|--------------|---|--|
| snmpInGenErrors (1.3.6.1.2.1.11.12) | read-only | Counter32 | Standard MIB | Total number of received SNMP PDUs with a | When read, this object always returns 0 . |

| | | | | | |
|--|--|--|---------|---------------|--|
| | | | values. | genErr error. | |
|--|--|--|---------|---------------|--|

snmpInTotalReqVars

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| snmpInTotalReqVars (1.3.6.1.2.1.11.13) | read-only | Counter32 | Standard MIB values. | Total number of MIB objects that have been successfully retrieved. | As per the MIB. |

snmpInTotalSetVars

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| snmpInTotalSetVars (1.3.6.1.2.1.11.14) | read-only | Counter32 | Standard MIB values. | Total number of MIB objects that have been successfully modified. | As per the MIB. |

snmpInGetRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| snmpInGetRequests (1.3.6.1.2.1.11.15) | read-only | Counter32 | Standard MIB values. | Total number of GetRequest requests that have been received and processed. | As per the MIB. |

snmpInGetNexts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|-----------------|
| snmpInGetNexts (1.3.6.1.2.1.11.16) | read-only | Counter32 | Standard MIB values. | Total number of getNext requests that have been received and processed. | As per the MIB. |

snmpInSetRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|--------------|---|-----------------|
| snmpInSetRequests (1.3.6.1.2.1.11.17) | read-only | Counter32 | Standard MIB | Total number of set requests that have been | As per the MIB. |

| | | | | | |
|--|--|--|---------|-------------------------|--|
| | | | values. | received and processed. | |
|--|--|--|---------|-------------------------|--|

snmpOutTooBigs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|-----------------|
| snmpOutTooBigs (1.3.6.1.2.1.11.20) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP PDUs with a TooBig error. | As per the MIB. |

snmpOutNoSuchNames

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| snmpOutNoSuchNames (1.3.6.1.2.1.11.21) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP PDUs with a NoSuchName error. | As per the MIB. |

snmpOutBadValues

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|--|-----------------|
| snmpOutBadValues (1.3.6.1.2.1.11.22) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP PDUs with a BadValues error. | As per the MIB. |

snmpOutGenErrs

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|-----------------|
| snmpOutGenErrs (1.3.6.1.2.1.11.24) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP PDUs with a genErr error. | As per the MIB. |

snmpOutGetRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--------------|---------------------------------------|-----------------|
| snmpOutGetRequests (1.3.6.1.2.1.11.25) | read-only | Counter32 | Standard MIB | Total number of sent SNMP Get-Request | As per the MIB. |

| | | | | | |
|--|--|--|---------|--------|--|
| | | | values. | PDU's. | |
|--|--|--|---------|--------|--|

snmpOutGetNexts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| snmpOutGetNexts (1.3.6.1.2.1.11.26) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP Get-Next PDUs. | As per the MIB. |

snmpOutSetRequests

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|----------------------|---|-----------------|
| snmpOutSetRequests (1.3.6.1.2.1.11.27) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP Set-Request PDUs. | As per the MIB. |

snmpOutGetResponses

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| snmpOutGetResponses (1.3.6.1.2.1.11.28) | read-only | Counter32 | Standard MIB values. | Total number of sent SNMP Get-Response PDUs. | As per the MIB. |

snmpOutTraps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|----------------------------------|-----------|-----------|----------------------|--|-----------------|
| snmpOutTraps (1.3.6.1.2.1.11.29) | read-only | Counter32 | Standard MIB values. | Total number of notifications sent by the SNMP entity. | As per the MIB. |

snmpEnableAuthenTraps

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-------------------------|---|--|
| snmpEnableAuthenTraps (1.3.6.1.2.1.11.30) | read-write | INTEGER | enabled(1), disabled(2) | Whether authentication failure traps are enabled. | The default value is enabled(1) . |

snmpSilentDrops

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--|-----------------|
| snmpSilentDrops (1.3.6.1.2.1.11.31) | read-only | Counter32 | Standard MIB values. | Number of packets delivered to but dropped by the SNMP entity because the response packet size exceeded the limit. | As per the MIB. |

snmpProxyDrops

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------------------|-----------|-----------|----------------------|---|--|
| snmpProxyDrops (1.3.6.1.2.1.11.32) | read-only | Counter32 | Standard MIB values. | Total number of packets delivered to but dropped by the SNMP entity because transmission of the message to a proxy target failed. | When read, this object always returns 0 . |

Notifications

This section contains SNMPv2-MIB notifications.

coldStart

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.6.3.1.1.5.1 | SNMP agent cold start | Informational | Warning | N/A | ON |

Description

This notification is generated when an SNMP agent is reinitializing itself with the configuration probably changed.

Status control

ON

CLI: `snmp-agent trap enable standard coldstart`

OFF

CLI: `undo snmp-agent trap enable standard coldstart`

Objects

N/A

Recommended action

No action is required.

warmStart

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.6.3.1.1.5.2 | SNMP agent warm start | Informational | Warning | N/A | ON |

Description

This notification is generated when an SNMPv2 agent is reinitializing itself with the configuration unaltered.

Status control

ON

CLI: `snmp-agent trap enable standard warmstart`

OFF

CLI: `undo snmp-agent trap enable standard warmstart`

Objects

N/A

Recommended action

No action is required.

authenticationFailure

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.6.3.1.1.5.5 | SNMP authentication failure | Informational | N/A | N/A | ON |

Description

This notification is generated when an SNMPV2 agent receives a protocol message that is not properly authenticated. While all implementations of the SNMPv2 must be capable of generating this trap, the `snmpEnableAuthenTraps` object indicates whether this trap will be generated.

Status control

ON

CLI: `snmp-agent trap enable standard authentication`

OFF

CLI: `undo snmp-agent trap enable standard authentication`

Objects

N/A

Recommended action

1. Verify that the agent and network management system are configured with the same SNMP settings.
2. Identify whether a network attack has occurred.
3. If the issue persists, contact H3C Support.

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SNMP-VIEW-BASED-ACM-MIB

About this MIB

Use this MIB to manage SNMPv3 settings, including access control view, group, VACM security mode, and security level.

MIB file name

rfc3415-snmp-vacm.mib

Root object

iso(1).org(3).dod(6).internet(1).snmpV2(6).snmpModules(3).snmpVacmMIB(16).vacmMIBObjects(1)

Scalar objects

vacmViewSpinLock

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-------------|---------------------|---|-----------------|
| vacmViewSpinLock (1.3.6.1.6.3.16.1.5.1) | read-write | TestAndIncr | Standard MIB values | An advisory lock used to allow cooperating SNMP command generator applications to coordinate their use of the Set operation in creating or modifying views. | As per the MIB. |

Tabular objects

vacmContextTable

About this table

This table contains locally available contexts.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is vacmContextName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------------|--------------|---|-----------------|
| vacmContextName (1.3.6.1.6.3.16.1.1.1.1) | read-only | SnmpAdmin String | OCTET STRING | A human readable name identifying a context at an | As per the MIB. |

| | | | | | |
|--|--|--|---------|--|--|
| | | | (0..32) | SNMP entity. An empty contextName (zero length) represents the default context. | |
|--|--|--|---------|--|--|

vacmSecurityToGroupTable

About this table

This table maps a combination of securityModel and securityName into a groupName that is used to define an access control policy for a group of principals.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are vacmSecurityModel and vacmSecurityName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------|--|---|--|
| vacmSecurityModel (1.3.6.1.6.3.16.1.2.1.1) | not-accessible | SnmpSecurityModel | Integer32 (1..2147483647) | Security model, by which the vacmSecurityName referenced by this entry is provided. | As per the MIB. |
| vacmSecurityName (1.3.6.1.6.3.16.1.2.1.2) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Security Name. | The value can contain only displayable characters except question marks. |
| vacmGroupName (1.3.6.1.6.3.16.1.2.1.3) | read-create | SnmpAdminString | OCTET STRING (1..32) | Name of the group to which this entry (combination of securityModel and securityName) belongs | The value can contain only displayable characters except question marks. |
| vacmSecurityToGroupStorageType (1.3.6.1.6.3.16.1.2.1.4) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. | Supports only be nonVolatile(3). |
| vacmSecurityToGroupStatus (1.3.6.1.6.3.16.1.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), | Row status. | As per the MIB. |

| | | | | | |
|--|--|--|------------|--|--|
| | | | destroy(6) | | |
|--|--|--|------------|--|--|

vacmAccessTable

About this table

Use this table to configure access rights for groups.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are vacmGroupName, vacmAccessContextPrefix, vacmAccessSecurityModel, and vacmAccessSecurityLevel.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|---|---|---|
| vacmAccessContextPrefix (1.3.6.1.6.3.16.1.4.1.1) | not-accessible | SnmpAdminString | OCTET STRING (0..32) | In order to gain the access rights allowed by this conceptual row, a contextName must match exactly (if the value of vacmAccessContextMatch is exact) or partially (if the value of vacmAccessContextMatch is prefix) the value of the instance of this object. | Only the value - is effective. Other values do not take effect. |
| vacmAccessSecurityModel (1.3.6.1.6.3.16.1.4.1.2) | not-accessible | SnmpSecurityModel | Integer32 (0..2147483647) | In order to gain the access rights allowed by this conceptual row, this securityModel must be in use. | As per the MIB. |
| vacmAccessSecurityLevel (1.3.6.1.6.3.16.1.4.1.3) | not-accessible | SnmpSecurityLevel | noAuthNoPriv(1), authNoPriv(2), authPriv(3) | Minimum level of security required to gain the access rights allowed by this conceptual row. | As per the MIB. |
| vacmAccessContextMatch (1.3.6.1.6.3.16.1.4.1.4) | read-create | INTEGER | exact(1), prefix(2) | Match type. If the value of this object is exact(1), all rows where the contextName exactly matches vacmAccessContextPrefix are selected. If the value of this object is prefix(2), all rows where the contextName whose starting octets exactly | The default value is exact(1). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|---------------------|---|--|--|
| | | | | match vacmAccessContextP refix are selected. | |
| vacmAccessReadVi ewName (1.3.6.1.6.3.16.1.4.1 .5) | read-create | SnmpAdminStri ng | OCTET STRING (0..32) | The value of an instance of this object identifies the MIB view of the SNMP context to which this conceptual row authorizes read access. | The value can contain only displayable characters except question marks. |
| vacmAccessWriteVi ewName (1.3.6.1.6.3.16.1.4.1 .6) | read-create | SnmpAdminStri ng | OCTET STRING (0..32) | The value of an instance of this object identifies the MIB view of the SNMP context to which this conceptual row authorizes write access. | The value can contain only displayable characters except question marks. |
| vacmAccessNotifyV iewName (1.3.6.1.6.3.16.1.4.1 .7) | read-create | SnmpAdminStri ng | OCTET STRING (0..32) | The value of an instance of this object identifies the MIB view of the SNMP context to which this conceptual row authorizes access for notifications. | The value can contain only displayable characters except question marks. |
| vacmAccessStorag eType (1.3.6.1.6.3.16.1.4.1 .8) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. | Supports only nonVolatile(3). |
| vacmAccessStatus (1.3.6.1.6.3.16.1.4.1 .9) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5) destroy(6) | Row status. | As per the MIB. |

vacmViewTreeFamilyTable

About this table

Use this table to save information about families of subtrees within MIB views locally.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are vacmViewTreeFamilyViewName and vacmViewTreeFamilySubtree.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|--|--|--|
| vacmViewTreeFamilyViewName (1.3.6.1.6.3.16.1.5.2.1.1) | not-accessible | SnmpAdminString | OCTET STRING (1..32) | Name for a family of view subtrees. | The value can contain only displayable characters except question marks. |
| vacmViewTreeFamilySubtree (1.3.6.1.6.3.16.1.5.2.1.2) | not-accessible | OBJECT IDENTIFIER | Standard MIB values | MIB subtree which, when combined with the corresponding instance of vacmViewTreeFamilyMask, defines a family of view subtrees. | As per the MIB. |
| vacmViewTreeFamilyMask (1.3.6.1.6.3.16.1.5.2.1.3) | read-create | OCTET STRING | OCTET STRING (0..16) | Bit mask which, in combination with the corresponding instance of vacmViewTreeFamilySubtree, defines a family of view subtrees. | The default value is a zero-length character string. |
| vacmViewTreeFamilyType (1.3.6.1.6.3.16.1.5.2.1.4) | read-create | INTEGER | included(1), excluded(2)} | Indicates whether the corresponding instances of vacmViewTreeFamilySubtree and vacmViewTreeFamilyMask define a family of view subtrees which is included in or excluded from the MIB view. | The default value is included(1). |
| vacmViewTreeFamilyStorageType (1.3.6.1.6.3.16.1.5.2.1.5) | read-create | StorageType | other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5) | Storage type for this conceptual row. | Supports only nonVolatile(3). |
| vacmViewTreeFamilyStatus (1.3.6.1.6.3.16.1.5.2.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

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FC-MGMT-MIB

About this MIB

Use this MIB to define management information specific to Fibre Channel-attached devices. A switch does not support this MIB when operating in NPV mode.

MIB file name

rfc4044-fc-mgmt.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).fcMgmtMIB(56)

Tabular objects

fcmPortTable

About this table

This table obtains information about Fibre Channel ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|---------------------------|--|---|
| fcmPortInstanceIndex (1.3.6.1.2.1.10.56.1.3.1.1) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Port index. | When read, this object always returns 1. |
| fcmPortWwn (1.3.6.1.2.1.10.56.1.3.1.2) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Port name. | As per the MIB. |
| fcmPortNodeWwn (1.3.6.1.2.1.10.56.1.3.1.3) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Node name. | When read, this object always returns a zero-length string. |
| fcmPortAdminType (1.3.6.1.2.1.10.56.1.3.1.4) | read-write | FcPortType | Unsigned32(1..4294967295) | Administratively desired type of the port. | The value is 6 for an F_Port, 8 for an E_Port, and 10 for a G_Port. A VFC interface cannot act as a G_Port. Only the read operation is supported for member ports of an FC aggregation group. |
| fcmPortOperType (1.3.6.1.2.1.10.56.1.3.1.5) | read-only | FcPortType | Unsigned32(1..4294967295) | Current operational type | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--|--|
| | | | 67295) | of the port. | |
| fcmPortFcCapClass (1.3.6.1.2.1.10.56.1.3.1.6) | read-only | FcClasses | BITS { classF(0), class1(1), class2(2), class3(3), class4(4), class5(5), class6(6) } | Classes of service capability of the port. | As per the MIB. |
| fcmPortFcOperClass (1.3.6.1.2.1.10.56.1.3.1.7) | read-only | FcClasses | BITS { classF(0), class1(1), class2(2), class3(3), class4(4), class5(5), class6(6) } | Classes of service that are currently operational on the port. | As per the MIB. |
| fcmPortTransmitterType (1.3.6.1.2.1.10.56.1.3.1.8) | read-only | INTEGER | unknown(1), other(2), shortwave850nm(3), longwave1550nm(4), longwave1310nm(5), electrical(6) | Technology of the port transceiver. | When read, this object always returns Unknown. |
| fcmPortConnectorType (1.3.6.1.2.1.10.56.1.3.1.9) | read-only | INTEGER | unknown(1), other(2), gbic(3), embedded(4), glm(5), gbicSerialId(6), gbicNoSerialId(7), sfpSerialId(8), sfpNoSerialId(9) | Module type of the port connector. | When read, this object always returns Unknown. |
| fcmPortSerialNumber | read-only | SnmpAd | OCTET | Port serial | When read, this object |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---|--|--|
| (1.3.6.1.2.1.10.56.1.3.1.10) | | minString | STRING(0..79) | number. | always returns a zero-length string. |
| fcmPortPhysicalNumber (1.3.6.1.2.1.10.56.1.3.1.11) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Physical port number. | As per the MIB. |
| fcmPortAdminSpeed (1.3.6.1.2.1.10.56.1.3.1.12) | read-write | INTEGER | auto(1), eighthGbs(2), quarterGbs(3), halfGbs(4), oneGbs(5), twoGbs(6), fourGbs(7), tenGbs(8) | Configured port speed. | If the configured port speed the out of range, this object, when read, returns a value close to it. The speeds of VFC interfaces and FC aggregate interface can only be auto and cannot be configured. |
| fcmPortCapProtocols (1.3.6.1.2.1.10.56.1.3.1.13) | read-only | BITS | unknown(0), loop(1), fabric(2), scsi(3), tcplp(4), vi(5), ficon(6) | Higher-level protocols that are capable of running on the port. | When read, this object always returns Unknown. |
| fcmPortOperProtocols (1.3.6.1.2.1.10.56.1.3.1.14) | read-only | BITS | unknown(0), loop(1), fabric(2), scsi(3), tcplp(4), vi(5), ficon(6) | Higher-level protocols that are currently operational on the port. | When read, this object always returns Unknown. |

fcmlSPortTable

About this table

This table obtains additional information about Fibre Channel ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|---------------------------|--|--|
| fcmISPortClassFCredit (1.3.6.1.2.1.10.56.1.8.1.1) | read-write | FcBbCredit | Unsigned32(1..4294967295) | Maximum number of Class F data frames that can be transmitted by the inter-switch port without receipt of ACK or Link_Response frames. | Supports only the read operation. When read, this object always returns 1. |
| fcmISPortClassFDataFieldSize (1.3.6.1.2.1.10.56.1.8.1.2) | read-only | FcDataFieldSize | Unsigned32(1..4294967295) | Negotiated MTU value. | As per the MIB. |

fcmFLoginTable

About this table

This table obtains information about F_Ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and fcmFLoginNxPortIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|------------------------------|--|-----------------|
| fcmFLoginNxPortIndex (1.3.6.1.2.1.10.56.1.9.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Index of an Nx_Port attached to the F_Port. | As per the MIB. |
| fcmFLoginPortWwn (1.3.6.1.2.1.10.56.1.9.1.2) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Nx_Port WWN. | As per the MIB. |
| fcmFLoginNodeWwn (1.3.6.1.2.1.10.56.1.9.1.3) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Node WWN of the Nx_Port. | As per the MIB. |
| fcmFLoginBbCreditModel (1.3.6.1.2.1.10.56.1.9.1.4) | read-only | FcBbCreditModel | regular(1) alternative(2) | Buffer-to-buffer credit model of the F_Port. | As per the MIB. |
| fcmFLoginBbCredit (1.3.6.1.2.1.10.56.1.9.1.5) | read-only | FcBbCredit | integer32(1..15) | Number of buffers available for holding frames to be transmitted to the attached | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------------|--|---|--|
| | | | | Nx_Port. | |
| fcmFLoginClassesAgreed (1.3.6.1.2.1.10.56.1.9.1.6) | read-only | FcClasses | BITS { classF(0), class1(1), class2(2), class3(3), class4(4), class5(5), class6(6) } | Classes of Service that the F_Port has agreed to support for the Nx_Port. | When read, this object always returns Class3 (0x08). |
| fcmFLoginClass2SeqDelivAgreed (1.3.6.1.2.1.10.56.1.9.1.7) | read-only | TruthValue | true(1), false(2) | Indicates whether the F_Port has agreed to support Class 2 sequential delivery for the Nx_Port. | When read, this object always returns false. |
| fcmFLoginClass2DataFieldSize (1.3.6.1.2.1.10.56.1.9.1.8) | read-only | FcDataFieldSize | Standard MIB values. | MTU value for Class 2. | When read, this object always returns 2112. |
| fcmFLoginClass3SeqDelivAgreed (1.3.6.1.2.1.10.56.1.9.1.9) | read-only | TruthValue | true(1), false(2) | Indicates whether the F_Port has agreed to support Class 3 sequential delivery for the Nx_Port. | When read, this object always returns false. |
| fcmFLoginClass3DataFieldSize (1.3.6.1.2.1.10.56.1.9.1.10) | read-only | FcDataFieldSize | Standard MIB values. | MTU value for Class 3. | When read, this object always returns 2112. |

fcmLinkTable

About this table

This table obtains information about Fibre Channel links.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex and fcmLinkIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--|------------------------------|---|
| fcmLinkIndex (1.3.6.1.2.1.10.56.1.10.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Link index. | As per the MIB. |
| fcmLinkEnd1NodeWwn (1.3.6.1.2.1.10.56.1.10.1.2) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Local node WWN. | When read, this object always returns a zero-length string. |
| fcmLinkEnd1PhysPortNumber (1.3.6.1.2.1.10.56.1.10.1.3) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Local physical port number. | As per the MIB. |
| fcmLinkEnd1PortWwn (1.3.6.1.2.1.10.56.1.10.1.4) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Local port WWN. | As per the MIB. |
| fcmLinkEnd2NodeWwn (1.3.6.1.2.1.10.56.1.10.1.5) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Remote node WWN. | As per the MIB. |
| fcmLinkEnd2PhysPortNumber (1.3.6.1.2.1.10.56.1.10.1.6) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Remote physical port number. | As per the MIB. |
| fcmLinkEnd2PortWwn (1.3.6.1.2.1.10.56.1.10.1.7) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Remote port WWN. | As per the MIB. |
| fcmLinkEnd2AgentAddress (1.3.6.1.2.1.10.56.1.10.1.8) | read-only | SnmpAdminString | OCTET STRING (0..79) | Remote agent address. | When read, this object always returns a zero-length string. |
| fcmLinkEnd2PortType (1.3.6.1.2.1.10.56.1.10.1.9) | read-only | FcPortType | Unsigned32(1..4294967295) | Remote port type. | As per the MIB. |
| fcmLinkEnd2UnitType (1.3.6.1.2.1.10.56.1.10.1.10) | read-only | FcUnitFunctions | BITS{ other(0), hub(1), switch(2), bridge(3), gateway(4), host(5), storageSubsys(| Remote device type. | When read, this object always returns other. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------------|---|--------------------|---|
| | | | 6), storage Access Dev(7), nas(8), wdmux(9), storage Device(10) } | | |
| fcmLinkEnd2FcAddressId (1.3.6.1.2.1.10.56.1.10.1.11) | read-only | FcAddressIdOrZero | OCTET STRING (0 3) | Remote FC address. | When read, this object always returns a zero-length string. |

fcmSwitchTable

About this table

This table obtains information about Fibre Channel switches.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex and fcmSwitchIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------|--------------------------------|---|--|
| fcmSwitchIndex (1.3.6.1.2.1.10.56.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Switch index. | As per the MIB. |
| fcmSwitchDomainId (1.3.6.1.2.1.10.56.1.2.1.2) | read-write | FcDomainIdOrZero | Integer32 (0..5,214,748,364,7) | Domain ID in the default VSAN. | Supports only the read operation. A value of zero indicates that a switch has not been assigned a Domain ID. |
| fcmSwitchPrincipal (1.3.6.1.2.1.10.56.1.2.1.3) | read-only | TruthValue | true(1), false(2) | Indicates whether the switch is the principal switch in the default VSAN. | As per the MIB. |
| fcmSwitchWWN (1.3.6.1.2.1.10.56.1.2.1.4) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Switch WWN. | As per the MIB. |

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HH3C-FC-FLOGIN-MIB

About this MIB

Use this MIB to obtain Fabric Login information

MIB file name

hh3c-fc-flogin.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFcFLogin(3)

Scalar objects

hh3cFcFLoginVsanID

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|------------------------|----------------|-----------------|
| hh3cFcFLoginVsanID (1.3.6.1.4.1.25506.2.127.3.1.2.1) | accessible-for-notify | Integer32 | Integer32 (1..3839) | VSAN ID value. | As per the MIB. |

hh3cFcFLoginMaxNum

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|-------------------------|--|-----------------|
| hh3cFcFLoginMaxNum (1.3.6.1.4.1.25506.2.127.3.1.2.2) | accessible-for-notify | Integer32 | Integer32 (1..65535) | Maximum number of logged-in nodes allowed in the VSAN. | As per the MIB. |

hh3cFcFLoginMaxTrapCntl

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|--------------------|--|-----------------|
| hh3cFcFLoginMaxTrapCntl (1.3.6.1.4.1.25506.2.127.3.1.3.1) | read-write | TruthValue | Integer32 (1,2) | Specifies whether a notification is sent when the maximum number of logged-in nodes allowed in the VSAN is exceeded. | As per the MIB. |

Tabular objects

hh3cFcFLoginTable

About this table

This table obtains the information held by FC switches about the Nx_Ports that are attached to their Fx_Ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex, hh3cVsanIndex, and hh3cFcFLoginIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------|----------------------------------|--|-----------------|
| hh3cFcFLoginIndex (1.3.6.1.4.1.25506.2.127.3.1.1.1.1) | not-accessible | Hh3cFcAddressId | OCTET STRING (0..255) | Fabric Login index. | As per the MIB. |
| hh3cFcFLoginPortNodeWWN (1.3.6.1.4.1.25506.2.127.3.1.1.1.2) | read-only | Hh3cFcNameId | OCTET STRING (0 8) | Node WWN for an Nx_Port. | As per the MIB. |
| hh3cFcFLoginPortWWN (1.3.6.1.4.1.25506.2.127.3.1.1.1.3) | read-only | Hh3cFcNameId | OCTET STRING (0 8) | Nx_Port WWN. | As per the MIB. |
| hh3cFcFLoginPortFcId (1.3.6.1.4.1.25506.2.127.3.1.1.1.4) | read-only | Hh3cFcAddressId | OCTET STRING (0..255) | FC ID assigned to the Nx_Port. | As per the MIB. |
| hh3cFcFLoginRxBbCredit (1.3.6.1.4.1.25506.2.127.3.1.1.1.5) | read-only | Hh3cFcBbCredit | Integer32 (0..32767) | Number of buffers available for holding frames to be received from the Nx_Port. | As per the MIB. |
| hh3cFcFLoginTxBbCredit (1.3.6.1.4.1.25506.2.127.3.1.1.1.6) | read-only | Hh3cFcBbCredit | Integer32 (0..32767) | Number of buffers available for holding frames to be transmitted to the Nx_Port. | As per the MIB. |
| hh3cFcFLoginClass2RxMTU (1.3.6.1.4.1.25506.2.127.3.1.1.1.7) | read-only | Hh3cFcRxMTU | Integer32 (128..2112) | MTU value for Class 2 frames to the Nx_Port. | As per the MIB. |
| hh3cFcFLoginClass3RxMTU (1.3.6.1.4.1.25506.2.127.3.1.1.1.8) | read-only | Hh3cFcRxMTU | Integer32 (128..2112) | MTU value for Class 3 frames to the Nx_Port. | As per the MIB. |
| hh3cFcFLoginSuppClassRequested (1.3.6.1.4.1.25506.2.127.3.1.1.1.9) | read-only | Hh3cFcClassOfServices | BITS{ classF(0), class1(1) | Classes of Service that the Nx_Port requests from the Fx_Port. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|---|---|-----------------|
| | | |), class2(2) , class3(3) , class4(4) , class5(5) , class6(6)) { | | |
| hh3cFcFLoginClass2ReqAgreed (1.3.6.1.4.1.25506.2.127.3.1.1.1.1.1.0) | read-only | TruthValue | true(1), false(2) | Indicates whether the Fx_Port supports Class 2. | As per the MIB. |
| hh3cFcFLoginClass3ReqAgreed (1.3.6.1.4.1.25506.2.127.3.1.1.1.1.1.1) | read-only | TruthValue | true(1), false(2) | Indicates whether the Fx_Port supports Class 3. | As per the MIB. |

Notifications

hh3cFcFLoginMaxNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------------|---|---------------|----------|-----------------------|----------------|
| (1.3.6.1.4.1.25506.2.127.3.1.4.0.1) | Alarm generated when the maximum number of logged-in nodes allowed in the current VSAN is exceeded. | Informational | - | - | OFF |

Description

This notification is generated when the maximum number of logged-in nodes allowed in the current VSAN is exceeded.

Status control

ON

- CLI: snmp-agent trap enable fc-link login-max
- MIB: Set hh3cCfgOperateEndNotificationSwitch to true(1).

OFF

- CLI: undo snmp-agent trap enable fc-link login-max

- MIB: Set hh3cCfgOperateEndNotificationSwitch to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--|-------|-----------|-------------------------|
| hh3cFcFLoginVsanID (1.3.6.1.4.1.25506.2.127.3.1.2.1) | VSAN ID value. | No | Integer32 | Integer32 (1..3839) |
| hh3cFcFLoginMaxNum (1.3.6.1.4.1.25506.2.127.3.1.2.2) | Maximum number of logged-in nodes allowed in the VSAN. | No | Integer32 | Integer32 (1..65535) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

No action is required.

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HH3C-FC-NAME-SERVER-MIB

About this MIB

Use this MIB to obtain name service information.

MIB file name

hh3c-fc-name-server.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFcNameServer(10)

Scalar objects

hh3cFcNsPortLoginNotifyEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|----------------------------------|-----------------|
| hh3cFcNsPortLoginNotifyEnable (1.3.6.1.4.1.25506.2.127.10.1.1.1.1) | read-write | TruthValue | true(1), false(2) | Trap for hh3cFcNsPortLoginNotify | As per the MIB. |

hh3cFcNsPortLogoutNotifyEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|-----------------------------------|-----------------|
| hh3cFcNsPortLogoutNotifyEnable (1.3.6.1.4.1.25506.2.127.10.1.1.1.2) | read-write | TruthValue | true(1), false(2) | Trap for hh3cFcNsPortLogoutNotify | As per the MIB. |

Tabular objects

hh3cFcNsObjsForNotification

About this table

This table contains FC name service information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|---------------------------|------------------|------------------------|--|-----------------|
| hh3cFcNsLocalSwitchWWN (1.3.6.1.4.1.25506.2.127.10.1.1.2.1) | accessible-for -notify | Hh3cFc NameId | OCTET STRING (8) | Local switch WWN. | As per the MIB. |
| hh3cFcNsFloginPortWWN (1.3.6.1.4.1.25506.2.127.10.1.1.2.2) | accessible-for -notify | Hh3cFc NameId | OCTET STRING (8) | WWN of the Nx_Port performing a Fabric Login to the local switch. | As per the MIB. |

Notifications

hh3cFcNsPortLoginNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------------|-------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.10.1.1.0.1 | Node online | Informational | N/A | N/A | OFF |

Description

An Nx_Port performs a Fabric Login.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-name-service login` command.
- MIB: Set hh3cFcNsPortLoginNotifyEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-name-service login` command.
- MIB: Set hh3cFcNsPortLoginNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.10.1.1.2.1 (hh3cFcNsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (0 8) |
| 1.3.6.1.4.1.25506.2.127.10.1.1.2.2 (hh3cFcNsFloginPortWWN) | Port WWN. | No | Hh3cFcNameId | OCTET STRING (0 8) |

Recommended action

No action is required.

hh3cFcNsPortLogoutNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|------------------------------------|--------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.10.1.1.0.2 | Node offline | Informational | - | - | OFF |

Description

An Nx_Port performs a Fabric Logout.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-name-service logout` command.
- MIB: Set hh3cFcNsPortLogoutNotifyEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-name-service logout` command.
- MIB: Set hh3cFcNsPortLogoutNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------|-------|-----------------|----------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.10.1.1.2.1 (hh3cFcNsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (0 8) |
| 1.3.6.1.4.1.25506.2.127.10.1.1.2.2 (hh3cFcNsFloginPortWWN) | Port WWN. | No | Hh3cFcNameId | OCTET STRING (0 8) |

Recommended action

No action is required.

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HH3C-FCOE-MIB

About this MIB

Use this MIB to configure FCoE information.

MIB file name

hh3c-fcoe.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cFCoE(120)

Tabular objects

hh3cFCoECfgTable

About this table

This table obtains FCoE configuration information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is fcmInstanceIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|--------------|-------------------|--|---------------------------------|
| hh3cFCoECfgFcmap (1.3.6.1.4.1.25506.2.120.1.1.1.1.1) | read-write | OCTET STRING | OCTET STRING (3) | FC map value. | As per the MIB. |
| hh3cFCoECfgDynamicVfcCreation (1.3.6.1.4.1.25506.2.120.1.1.1.1.2) | read-write | TruthValue | true(1), false(2) | Indicates whether the switch can automatically VFC interfaces. | The value can only be false(2). |
| hh3cFCoECfgDefaultFCFPriority (1.3.6.1.4.1.25506.2.120.1.1.1.1.3) | read-write | Unsigned32 | Unsigned32 0..255 | System FCF priority. | As per the MIB. |
| hh3cFCoECfgDATov (1.3.6.1.4.1.25506.2.120.1.1.1.1.4) | read-write | Unsigned32 | Unsigned32 4..600 | Keepalive timer. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---|---------------|--------------------------------|
| hh3cFcoECfgAddressingMode (1.3.6.1.4.1.25506.2.120.1.1.1.1.5) | read-write | INTEGER | INTEGER 1:fpma(1) 2:spma(2) 3:fpmaAndSpma(3) | Address mode. | The value can only be fpma(1). |

hh3cFCoEVLANTable

About this table

This table configures or obtains VLAN-VSAN mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are fcmInstanceIndex, hh3cFCoEVLANIndex, and hh3cFCoEFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|---|--------------------------|--|
| hh3cFCoEVLANIndex (1.3.6.1.4.1.25506.2.120.1.1.2.1.1) | not-accessible | VlanIndex | Unsigned32 (0..4094) | VLAN index. | As per the MIB. |
| hh3cFCoEFabricIndex (1.3.6.1.4.1.25506.2.120.1.1.2.1.2) | not-accessible | T11FabricIndex | Unsigned32 (0..4095) | VSAN index. | As per the MIB. |
| hh3cFCoEVLANOperState (1.3.6.1.4.1.25506.2.120.1.1.2.1.3) | read-only | INTEGER | 1:up(1) 2:down(2) | VLAN-VSAN mapping state. | If the VSAN exists, the VLAN-VSAN mapping is up. If the VSAN does not exist, the VLAN-VSAN mapping is down. |
| hh3cFCoEVLANRowStatus (1.3.6.1.4.1.25506.2.120.1.1.2.1.4) | read-create | RowStatus | 1:active(1) 2:notInService(2) 3:notReady(3) 4:createAndGo(4) 5:createAndWait(5) 6:destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none"> createandgo. createandwait. destroy. |

hh3cFCoEStaticVfcTable

About this table

This table configures or obtains VFC interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are fcmlInstanceIndex and hh3cFCoEStaticVfcIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------|--|--|--|
| hh3cFCoEStaticVfcIndex (1.3.6.1.4.1.25506.2.120.1.1.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..65535) | VFC record index. | As per the MIB. |
| hh3cFCoEStaticVfcFCFPriority (1.3.6.1.4.1.25506.2.120.1.1.3.1.2) | read-create | Unsigned32 | Unsigned32 (0..255) | FCF priority. | The default value is 128. |
| hh3cFCoEStaticVfcBindType (1.3.6.1.4.1.25506.2.120.1.1.3.1.3) | read-create | Hh3cFCoEVfcBindType | INTEGER 1:interfaceIndex (1) 2:macAddress(2) | Binding type. | The interfaceIndex (1) value is required, and the macAddress(2) is optional. |
| hh3cFCoEStaticVfcBindIfIndex (1.3.6.1.4.1.25506.2.120.1.1.3.1.4) | read-create | Interface IndexOrZero | Integer32 (0..2147483647) | Index of the bound Ethernet interface. | |
| hh3cFCoEStaticVfcBindMACAddress (1.3.6.1.4.1.25506.2.120.1.1.3.1.5) | read-create | MacAddress | OCTET STRING (6) | Bound MAC address. | As per the MIB. |
| hh3cFCoEStaticVfcIfIndex (1.3.6.1.4.1.25506.2.120.1.1.3.1.6) | read-only | Interface Index | Integer32 (1..2147483647) | VFC interface index. | As per the MIB. |
| hh3cFCoEStaticVfcCreationTime (1.3.6.1.4.1.25506.2.120.1.1.3.1.7) | read-only | TimeStamp | TimeTicks (0..4294967295) | Creation time. | As per the MIB. |
| hh3cFCoEStaticVfcFailureCause (1.3.6.1.4.1.25506.2.120.1.1.3.1.8) | read-only | SnmpAdminString | OCTET STRING (0..255) | Last binding failure time. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|-------------|--|
| hh3cFCoEStaticVfcRowStatus (1.3.6.1.4.1.25506.2.120.1.1.3.1.9) | read-create | RowStatus | 1:active(1) 2:notInService(2) 3:notReady(3) 4:createAndGo(4) 5:createAndWait(5) 6:destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none"> createandgo. createandwait. destroy. |

hh3cFCoEFIPsnoopingTable

About this table

This table obtains FIP snooping settings for a VLAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are fcmlInstanceIndex and hh3cFCoEFIPsnoopingVLANIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|----------------------|---------------------|--------------------------------|
| hh3cFCoEFipSnoopingVLANIndex (1.3.6.1.4.1.25506.2.120.1.1.4.1.1) | not-accessible | VlanIndex | Unsigned32 (0..4094) | VLAN index. | As per the MIB. |
| hh3cFCoEFIPsnoopingEnable (1.3.6.1.4.1.25506.2.120.1.1.4.1.2) | read-write | TruthValue | true(1), false(2) | FIP snooping state. | The default value is false(2). |
| hh3cFCoEFIPsnoopingFcmap (1.3.6.1.4.1.25506.2.120.1.1.4.1.3) | read-write | OCTET STRING | OCTET STRING (3) | FC-MAP value. | As per the MIB. |

hh3cFCoEVlanCfgTable

About this table

This table configures FCoE settings in a VLAN. This table is supported only when the switch is operating in FCF-NPV mode.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table index is hh3cFCoEVLanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|---|--|-----------------|
| hh3cFCoEVLanIndex (1.3.6.1.4.1.25506.2.120.1.1.2.1.1) | not-accessible | VlanIndex | Unsigned32(0..4094) | VLAN index. | As per the MIB. |
| hh3cFCoEVlanCfgFcmmap (1.3.6.1.4.1.25506.2.120.1.1.5.1.1) | read-create | OCTET STRING | OCTET STRING (SIZE (3)) | FC-MAP value. | As per the MIB. |
| hh3cFCoEVlanCfgFCFPriority (1.3.6.1.4.1.25506.2.120.1.1.5.1.2) | read-create | Unsigned32 | Unsigned32 (0..255) | FCF priority. | As per the MIB. |
| hh3cFCoEVlanCfgDATov (1.3.6.1.4.1.25506.2.120.1.1.5.1.3) | read-create | Unsigned32 | Unsigned32 (4..600) | FKA advertisement interval in seconds. | As per the MIB. |
| hh3cFCoEVlanCfgRowStatus (1.3.6.1.4.1.25506.2.120.1.1.5.1.4) | read-create | RowStatus | 1:active(1) 2:notInService(2) 3:notReady(3) 4:createAndGo(4) 5:createAndWait(5) 6:destroy(6) | Row status. | As per the MIB. |

hh3cFCoEFIPsnoopingFCFTable

About this table

This table obtains FIP snooping FCF information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, hh3cFCoEFIPsnoopingFCFVLANIndex, hh3cFCoEFIPsnoopingFCFIfIndex, and hh3cFCoEFIPsnoopingFCFMAC.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---------------------------|---|-----------------|
| hh3cFCoEFIPSSnoopingFCFVLANIndex(1.3.6.1.4.1.25506.2.120.1.1.6.1.1) | not-accessible | VlanIndex | Unsigned32 (0..4094) | VLAN index. | As per the MIB. |
| hh3cFCoEFIPSSnoopingFCFInterfaceIndex(1.3.6.1.4.1.25506.2.120.1.1.6.1.2) | not-accessible | Interface Index | Integer32 (0..2147483647) | Index of the Ethernet interface connected to the FCF. | As per the MIB. |
| hh3cFCoEFIPSSnoopingFCFMAC(1.3.6.1.4.1.25506.2.120.1.1.6.1.3) | not-accessible | MacAddress | OCTET STRING (6) | MAC address of the FCF connected to the FIP snooping device. | As per the MIB. |
| hh3cFCoEFIPSSnoopingFCFSwitchName(1.3.6.1.4.1.25506.2.120.1.1.6.1.4) | read-only | Hh3cFcNameId | OCTET STRING (8) | FCF switch name. | As per the MIB. |
| hh3cFCoEFIPSSnoopingFCFFabricName(1.3.6.1.4.1.25506.2.120.1.1.6.1.5) | read-only | Hh3cFcNameId | OCTET STRING (8) | FCF fabric name. | As per the MIB. |
| hh3cFCoEFIPSSnoopingFCFENodeCount(1.3.6.1.4.1.25506.2.120.1.1.6.1.6) | read-only | Unsigned32 | Unsigned32 | Number of ENodes connected to the FCF through the Ethernet interface. | As per the MIB. |

hh3cFCoEFIPSSnoopingENodeTable

About this table

This table obtains FIP snooping ENode information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, hh3cFCoEFIPSSnoopingENodeVLANIndex, hh3cFCoEFIPSSnoopingENodeInterfaceIndex, and hh3cFCoEFIPSSnoopingENodeMAC.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---------------------------|--|-----------------|
| hh3cFCoEFIPSSnoopingENodeVLANIndex(1.3.6.1.4.1.25506.2.120.1.1.7.1.1) | not-accessible | VlanIndex | Unsigned32 (0..4094) | VLAN index. | As per the MIB. |
| hh3cFCoEFIPSSnoopingENodeInterfaceIndex(1.3.6.1.4.1.25506.2.120.1.1.7.1.2) | not-accessible | Interface Index | Integer32 (0..2147483647) | Index of the Ethernet interface connected to | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|------------------|--------------------|-----------------|
| | | | 483647) | the ENode. | |
| hh3cFCoEFIPSSnoopingENodeMAC(1.3.6.1.4.1.25506.2.120.1.1.7.1.3) | not-accessible | MacAddress | OCTET STRING (6) | ENode MAC address. | As per the MIB. |
| hh3cFCoEFIPSSnoopingENodeName(1.3.6.1.4.1.25506.2.120.1.1.7.1.4) | read-only | Hh3cFcNameId | OCTET STRING (8) | ENode node name. | As per the MIB. |

hh3cFCoEFIPSSnoopingVNTTable

About this table

This table obtains FIP snooping VN information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmlInstanceIndex, hh3cFCoEFIPSSnoopingVNVLANIndex, hh3cFCoEFIPSSnoopingVNEndIndex, hh3cFCoEFIPSSnoopingVNEndMAC, hh3cFCoEFIPSSnoopingVNFcfMAC, and hh3cFCoEFIPSSnoopingVNMAC.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|---------------------------|---|-----------------|
| hh3cFCoEFIPSSnoopingVNVLANIndex(1.3.6.1.4.1.25506.2.120.1.1.8.1.1) | not-accessible | VlanIndex | Unsigned32 (0..4094) | VLAN index. | As per the MIB. |
| hh3cFCoEFIPSSnoopingVNEndIndex(1.3.6.1.4.1.25506.2.120.1.1.8.1.2) | not-accessible | Interface Index | Integer32 (0..2147483647) | Index of the Ethernet interface connected to the ENode. | As per the MIB. |
| hh3cFCoEFIPSSnoopingVNEndMAC(1.3.6.1.4.1.25506.2.120.1.1.8.1.3) | not-accessible | MacAddress | OCTET STRING (6) | ENode MAC address. | As per the MIB. |
| hh3cFCoEFIPSSnoopingVNFcfMAC(1.3.6.1.4.1.25506.2.120.1.1.8.1.4) | not-accessible | MacAddress | OCTET STRING (6) | FCF MAC address. | As per the MIB. |
| hh3cFCoEFIPSSnoopingVNMAC(1.3.6.1.4.1.25506.2.120.1.1.8.1.5) | not-accessible | MacAddress | OCTET STRING (6) | MAC address of the virtual N_Port. | As per the MIB. |
| hh3cFCoEFIPSSnoopingVNNName(1.3.6.1.4.1.25506.2.120.1.1.8.1.6) | read-only | Hh3cFcNameId | OCTET STRING (8) | Port name of the virtual N_Port. | As per the MIB. |
| hh3cFCoEFIPSSnoopingVNFcfIndex(1.3.6.1.4.1.25506.2.120.1.1.8.1.7) | read-only | Interface Index | Integer32 (0..2147483647) | Index of the Ethernet interface connected to the FCF. | As per the MIB. |

hh3cFCoEFIPsnoopingIfCfgTable

About this table

This table configures or obtains Ethernet interface settings for FIP snooping.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are `fcmlInstanceIndex` and `hh3cFCoEFIPsnoopingIfCfgIfIndex`.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|--------------------------------|------------------------------------|-----------------|
| <code>hh3cFCoEFIPsnoopingIfCfgIfIndex(1.3.6.1.4.1.25506.2.120.1.1.9.1.1)</code> | not-accessible | Interface Index | Integer32 (0..2147483647) | Ethernet interface index. | As per the MIB. |
| <code>hh3cFCoEFIPsnoopingIfCfgPortType(1.3.6.1.4.1.25506.2.120.1.1.9.1.2)</code> | read-write | INTEGER | INTEGER 1:fcf(1) 2:enode(2) | Ethernet interface operating mode. | As per the MIB. |

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HH3C-FCOE-MODE-MIB

About this MIB

Use this MIB to obtain FCoE mode information.

MIB file name

hh3c-fcoe-mode.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cFcoeMode(135)

Scalar objects

hh3cFcoeModeCfgMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|-----------------|-------------|-----------------|
| hh3cFcoeModeCfgMode (1.3.6.1.4.1.25506.2.135.1.1) | read-write | Integer32 | Integer32(1..5) | FCoE mode | As per the MIB. |

hh3cFcoeModeCfgLastResult

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|--|--------------------------------|-----------------|
| hh3cFcoeModeCfgLastResult (1.3.6.1.4.1.25506.2.135.1.2) | read-only | INTEGER | success(1), noLicence(2), needReset(3), unknownFault(4) | Last FCoE mode setting result. | As per the MIB. |

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HH3C-FC-PING-MIB

About this MIB

Use this MIB to configure an FC ping operation.

MIB file name

hh3c-fc-ping.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFcPing(5).hh3cFcPingObjects(1).hh3cFcPingConfigurations(1).hh3cFcPingTable(1).hh3cFcPingEntry(1)

Tabular objects

hh3cFcPingTable

About this table

This table initiates an FC ping operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|---------------|
| Supported | Supported | Supported | Not supported |

Columns

The table index is hh3cFcPingIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-------------------|----------------------|---------------------------------|-------------------------------|
| hh3cFcPingIndex (1.3.6.1.4.1.25506.2.127.5.1.1.1.1) | accessible-for-notify | Unsigned32 | Unsigned32(1..65535) | FC ping entry index. | As per the MIB. |
| hh3cFcPingVsan (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.2) | read-create | Hh3cFcVsanIndex | Unsigned32(1..4095) | VSAN for the FC ping operation. | The value range is 1 to 3839. |
| hh3cFcPingAddressType (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.3) | read-create | Hh3cFcAddressType | wwn(1), fcid(2) | FC ping destination type. | Supports only fcid(2). |
| hh3cFcPingAddress (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.4) | read-create | Hh3cFcAddress | OCTET STRING (3 8) | FC ping destination address. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|----------------|---|---|-----------------|
| hh3cFcPingPacketCount (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.5) | read-create | Unsigned32 | Unsigned32(1..2147483647) | Number of echo requests to be sent. | As per the MIB. |
| hh3cFcPingPayloadSize (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.6) | read-only | Unsigned32 | Standard MIB values. | Payload size of echo requests. | As per the MIB. |
| hh3cFcPingTimeout (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.7) | read-create | Unsigned32 | Unsigned32(1..10) | Timeout time for the FC ping operation. | As per the MIB. |
| hh3cFcPingDelay (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.8) | read-only | Unsigned32 | Standard MIB values. | Timeout time for a single echo request. | As per the MIB. |
| hh3cFcPingAgeInterval (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.9) | read-create | Unsigned32 | Unsigned32(500..900) | Aging time for the FC ping entry. | As per the MIB. |
| hh3cFcPingAdminStatus (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.10) | read-create | Hh3cFcStarOper | enable (1), disable (2) | Administrative status for the FC ping entry. | As per the MIB. |
| hh3cFcPingOperStatus (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.11) | read-only | INTEGER | inProgress (1), complete (2), disabled (3), failed(4) | Operational status for the FC ping entry. | As per the MIB. |
| hh3cFcPingTrapOnCompletion (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.12) | read-create | TruthValue | true (1), false (2) | Indicates whether to generate traps upon the completion of the FC ping operation. | As per the MIB. |
| hh3cFcPingRowStatus (1.3.6.1.4.1.25506.2.127.5.1.1.1.1.13) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cFcPingStatTable

About this table

This table obtains FC ping statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table index is hh3cFcPingIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|----------------------|--|-----------------|
| hh3cFcPingReqPackets (1.3.6.1.4.1.25506.2.127.5.1.2.1.1.1) | read-only | Unsigned32 | Standard MIB values. | Number of echo requests. | As per the MIB. |
| hh3cFcPingResPackets (1.3.6.1.4.1.25506.2.127.5.1.2.1.1.2) | read-only | Unsigned32 | Standard MIB values. | Number of echo replies. | As per the MIB. |
| hh3cFcPingMinTime (1.3.6.1.4.1.25506.2.127.5.1.2.1.1.3) | read-only | Integer32 | Standard MIB values. | Minimum RTT. | As per the MIB. |
| hh3cFcPingAverageTime (1.3.6.1.4.1.25506.2.127.5.1.2.1.1.4) | read-only | Integer32 | Standard MIB values. | Average RTT. | As per the MIB. |
| hh3cFcPingMaxTime (1.3.6.1.4.1.25506.2.127.5.1.2.1.1.5) | read-only | Integer32 | Standard MIB values. | Maximum RTT. | As per the MIB. |
| hh3cFcPingTimeoutNum (1.3.6.1.4.1.25506.2.127.5.1.2.1.1.6) | read-only | Unsigned32 | Standard MIB values. | Number of echo replies received after time out time expires. | As per the MIB. |

Notifications

hh3cFcPingCompletionNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.5.1.3.0.1 | FC ping operation completed | Informational | N/A | N/A | OFF |

Description

An FC ping operation is completed.

Status control

ON

MIB: Set hh3cFcPingTrapOnCompletion to true(1).

OFF

MIB: Set hh3cFcPingTrapOnCompletion to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|---------------------------|-------|-------------------|-----------------------|
| 1.3.6.1.4.1.25506.2.127.5.1.1.1.1.1 (hh3cFcPingIndex) | FC ping entry index. | Yes | Unsigned32 | Unsigned32 (1..65535) |
| 1.3.6.1.4.1.25506.2.127.5.1.1.1.1.2 (hh3cFcPingVsan) | VSAN ID. | No | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.5.1.1.1.1.3 (hh3cFcPingAddressType) | Ping packet address type. | No | Hh3cFcAddressType | WWN(1), FCID(2) |
| 1.3.6.1.4.1.25506.2.127.5.1.1.1.1.4 (hh3cFcPingAddress) | Ping packet address. | No | Hh3cFcAddress | OCTET STRING (3) |
| 1.3.6.1.4.1.25506.2.127.5.1.2.1.1.1 (hh3cFcPingReqPackets) | Ping request length. | No | Unsigned32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.127.5.1.2.1.1.2 (hh3cFcPingResPackets) | Ping reply length. | No | Unsigned32 | Standard MIB values. |

Recommended action

No action is required.

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HH3C-FC-PSM-MIB

About this MIB

Use this MIB to configure port security.

MIB file name

hh3c-fc-psm.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFcPsm(8)

Scalar objects

hh3cFcPsmNotifyEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---------------------|--------------------------------|
| hh3cFcPsmNotifyEnable (1.3.6.1.4.1.25506.2.127.8.1.1.1) | read-write | TruthValue | true(1), false(2) | Notifications state | The default value is false(2). |

Tabular objects

hh3cFcPsmEnableTable

About this table

This table enables port security in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|--------------------------|--------------|-----------------|
| hh3cFcPsmEnableVsanIndex (1.3.6.1.4.1.25506.2.127.8.1.2.1.1.1) | not-accessible | Unsigned 32 | Unsigned 32(1..4095) | VSAN ID | As per the MIB. |
| hh3cFcPsmEnable | read-write | INTEGER | enable(1), enableWith | Enable type. | As per the MIB. |

| | | | | | |
|---|-----------|------------|--|----------------|-----------------|
| (1.3.6.1.4.1.25506.2.127.8.1.2.1.1.2) | | | hAutoLearn(2), disable(3), noop(4) | | |
| hh3cFcPsmEnableState (1.3.6.1.4.1.25506.2.127.8.1.2.1.1.3) | read-only | TruthValue | true(1), false(2) | Enable status. | As per the MIB. |

hh3cFcPsmConfigTable

About this table

This table configures port security settings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|---------------|
| Supported | Not supported | Supported | Not supported |

Columns

The table indexes are hh3cFcPsmEnableVsanIndex and hh3cFcPsmIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------------|---|--------------------------------------|-----------------|
| hh3cFcPsmIndex (1.3.6.1.4.1.25506.2.127.8.1.2.2.1.1) | not-accessible | Unsigned32 | Unsigned32(1..32768) | Index of the port bound to the VSAN. | As per the MIB. |
| hh3cFcPsmLoginDevType (1.3.6.1.4.1.25506.2.127.8.1.2.2.1.2) | read-create | Hh3cFcPsmPortBindDevType | nWWN(1), pWWN(2), sWWN(3), wildCard(4) | Device type. | As per the MIB. |
| hh3cFcPsmLoginDev (1.3.6.1.4.1.25506.2.127.8.1.2.2.1.3) | read-create | Hh3cFcNameIdOrZero | OCTET STRING(0..255) | Device address. | As per the MIB. |
| hh3cFcPsmLoginPoint (1.3.6.1.4.1.25506.2.127.8.1.2.2.1.4) | read-create | InterfaceIndexOrZero | Integer32(0..255) | Port address. | As per the MIB. |
| hh3cFcPsmRowStatus (1.3.6.1.4.1.25506.2.127.8.1.2.2.1.5) | read-create | RowStatus | INTEGER (0..7) | Row status. | As per the MIB. |

hh3cFcPsmEnfTable

About this table

This table obtains port security database information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex and hh3cFcPsmEnfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|---|--------------------------------------|-----------------|
| hh3cFcPsmEnfIndex (1.3.6.1.4.1.25506.2.127.8.1.2.3.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..32768) | Index of the port bound to the VSAN. | As per the MIB. |
| hh3cFcPsmEnfLoginDevType (1.3.6.1.4.1.25506.2.127.8.1.2.3.1.2) | read-only | Hh3cFcPsmPortBindDevType | nWWN(1), pWWN(2), sWWN(3), wildCard(4) | Device type. | As per the MIB. |
| hh3cFcPsmEnfLoginDev (1.3.6.1.4.1.25506.2.127.8.1.2.3.1.3) | read-only | Hh3cFcNameIdOrZero | OCTET STRING (0..255) | Device address. | As per the MIB. |
| hh3cFcPsmEnfLoginPoint (1.3.6.1.4.1.25506.2.127.8.1.2.3.1.4) | read-only | Interface IndexOrZero | Integer32(0..255) | Port address. | As per the MIB. |
| hh3cFcPsmEnfEntryType (1.3.6.1.4.1.25506.2.127.8.1.2.3.1.5) | read-only | INTEGER | learning(1), learned(2), static(3) | Binding entry type. | As per the MIB. |

hh3cFcPsmCopyToConfigTable

About this table

This table converts learned entries to static entries.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---------------------|---|-----------------|
| hh3cFcPsmCopyToConfig (1.3.6.1.4.1.25506.2.127.8.1.2.4.1.1) | read-write | INTEGER | copy(1), noop(2) | Converts learned entries to static entries. | As per the MIB. |

hh3cFcPsmAutoLearnTable

About this table

This table enables auto learning.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|------------------------|-----------------|
| hh3cFcPsmAutoLearnEnable (1.3.6.1.4.1.25506.2.127.8.1.2.5.1.1) | not-accessible | TruthValue | true(1), false(2) | Enables auto learning. | As per the MIB. |

hh3cFcPsmClearTable

About this table

This table clears binding entries in the port security database and port security statistics for an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-------------------------|--|---------------------|-----------------|
| hh3cFcPsmClearType (1.3.6.1.4.1.25506.2.127.8.1.2.6.1.1) | read-write | Hh3cFcPsmClearEntryType | clearStatic(1), clearAutolearn(2), clearAll(3), noop(4) | Binding entry type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------------------|------------------------------|---------------------|-----------------|
| hh3cFcPsmClearIntf (1.3.6.1.4.1.25506.2.127.8.1.2.6.1.2) | read-write | Interface IndexOr Zero | Integer32 (0..2147483647) | Interface index. | As per the MIB. |

hh3cFcPsmStatsTable

About this table

This table obtains port security statistics on the local device.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------------|-------------------------|---|-----------------|
| hh3cFcPsmAllowedLogins (1.3.6.1.4.1.25506.2.127.8.1.3.1.1.1) | read-only | Counter 32 | Standard MIB values. | Number of allowed logins. | As per the MIB. |
| hh3cFcPsmDeniedLogins (1.3.6.1.4.1.25506.2.127.8.1.3.1.1.2) | read-only | Counter 32 | Standard MIB values. | Number of denied logins. | As per the MIB. |
| hh3cFcPsmStatsClear (1.3.6.1.4.1.25506.2.127.8.1.3.1.1.3) | read-write | INTEGER | clear(1), noop(2) | Clears statistics of hh3cFcPsmStats Table. | As per the MIB. |

hh3cFcPsmViolationTable

About this table

This table obtains security violation entries. If a WWN logs in to an interface repeatedly, the system updates the login time and count.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cFcPsmEnableVsanIndex and hh3cFcPsmViolationIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------|--------------------------|--------------------------------|-----------------|
| hh3cFcPsmViolationIndex (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.1) | not-accessible | Unsigned32 | Unsigned32(1..1024) | Violation index. | As per the MIB. |
| hh3cFcPsmLoginPWWN (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.2) | read-only | Hh3cFcNameIdOrZero | OCTET STRING (0 8) | pWWN of a denied device. | As per the MIB. |
| hh3cFcPsmLoginNWWN (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.3) | read-only | Hh3cFcNameIdOrZero | OCTET STRING (0 8) | nWWN of a denied device. | As per the MIB. |
| hh3cFcPsmLoginSWWN (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.4) | read-only | Hh3cFcNameIdOrZero | OCTET STRING (0 8) | sWWN of a denied device. | As per the MIB. |
| hh3cFcPsmLoginIntf (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.5) | read-only | Interface Index | Integer32(1..2147483647) | Port index of a denied device. | As per the MIB. |
| hh3cFcPsmLoginTime (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.6) | read-only | DateAndTime | OCTET STRING (1..255) | Violation time. | As per the MIB. |
| hh3cFcPsmLoginCount (1.3.6.1.4.1.25506.2.127.8.1.3.2.1.7) | read-only | Counter32 | Standard MIB values. | Number of violations. | As per the MIB. |

Notifications

hh3cFcPsmFPortDenyNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.8.0.1 | F_Port denied device login | Informational | - | - | OFF |

Description

An F_Port denied device login.

Status control

ON

- MIB: Set hh3cFcPsmNotifyEnable to true(1).

OFF

- MIB: Set hh3cFcPsmNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|--------------------|--------------------------|
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | ifDescr name | No | STRING | OCTET STRING(0...255) |
| 1.3.6.1.4.1.25506.2.127.8.1.3.2.1.2 (hh3cFcPsmLoginPWWN) | pWWN of a denied device. | No | Hh3cFcNameIdOrZero | OCTET STRING(0...255) |
| 1.3.6.1.4.1.25506.2.127.8.1.3.2.1.5 (hh3cFcPsmLoginIntf) | Port index of a denied device. | No | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.127.8.1.3.2.1.6 (hh3cFcPsmLoginTime) | Violation time. | No | DateAndTime | OCTET STRING(0...255) |

Recommended action

No action is required.

hh3cFcPsmEPortDenyNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.8.0.2 | E_Port denied device login | Informational | - | - | OFF |

Description

An E_Port denied device login.

Status control

ON

- MIB: Set hh3cFcPsmNotifyEnable to true(1).

OFF

- MIB: Set hh3cFcPsmNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|--------------------|--------------------------|
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | ifDescr name | No | STRING | OCTET STRING(0...255) |
| 1.3.6.1.4.1.25506.2.127.8.1.3.2.1.4 (hh3cFcPsmLoginSwwn) | pWWN of a denied device. | No | Hh3cFcNameIdOrZero | OCTET STRING(0...255) |
| 1.3.6.1.4.1.25506.2.127.8.1.3.2.1.5 (hh3cFcPsmLoginIntf) | Port index of a denied device. | No | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.4.1.25506.2.127.8.1.3.2.1.6 (hh3cFcPsmLoginTime) | Violation time. | No | DateAndTime | OCTET STRING(0...255) |

Recommended action

No action is required.

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HH3C-FC-TRACE-ROUTE-MIB

About this MIB

Use this MIB to configure an FC traceroute operation.

MIB file name

hh3c-fc-trace-route.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFcTraceRoute(4)

Tabular objects

hh3cFcTraceRouteTable

About this table

This table initiates an FC traceroute operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|---------------|
| Supported | Supported | Supported | Not supported |

Columns

The table index is hh3cFcTraceRouteIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-------------------|----------------------|---|-----------------|
| hh3cFcTraceRouteIndex (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.1) | accessible-for-notify | Unsigned32 | Unsigned32(1..65535) | FC traceroute entry index. | As per the MIB. |
| hh3cFcTraceRouteVsan (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.2) | read-create | Hh3cFcVsanIndex | Unsigned32(1..4095) | VSAN for the FC traceroute operation. | As per the MIB. |
| hh3cFcTraceRouteAddressType (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.3) | read-create | Hh3cFcAddressType | wwn(1), fcid(2) | FC traceroute destination type. | As per the MIB. |
| hh3cFcTraceRouteAddress (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.4) | read-create | Hh3cFcAddress | OCTET STRING (3 8) | FC traceroute destination address. | As per the MIB. |
| hh3cFcTraceRouteTimeout (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.5) | read-create | Unsigned32 | Unsigned32 (1..10) | Timeout time for the FC traceroute operation. | As per the MIB. |
| hh3cFcTraceRouteAdminStatus | read-create | Hh3cFc | enable | Administrative | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|------------|--|--|-----------------|
| (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.6) | | StartOper | (1), disable (2) | status for the FC traceroute entry. | |
| hh3cFcTraceRouteOperStatus (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.7) | read-only | INTEGER | inProgress(1), success(2), partialSuccess(3), failure(4), disabled(5) | Operational status for the FC traceroute entry. | As per the MIB. |
| hh3cFcTraceRouteAgeInterval (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.8) | read-create | Unsigned32 | Unsigned32(500..900) | Aging time for the FC traceroute entry. | As per the MIB. |
| hh3cFcTraceRouteTrapOnCompletion (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.9) | read-create | TruthValue | true (1), false (2) | Indicates whether to generate traps upon the completion of the FC traceroute operation.. | As per the MIB. |
| hh3cFcTraceRouteRowStatus (1.3.6.1.4.1.25506.2.127.4.1.1.1.1.10) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cFcTraceRouteHopsTable

About this table

This table contains path information for an FC traceroute operation.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|---------------|
| Not supported | Not supported | Not supported | Not supported |

Columns

The table indexes are hh3cFcTraceRouteIndex and hh3cFcTraceRouteHopsIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---------------------------|----------------|----------|-------------|-------------------|-----------------|
| hh3cFcTraceRouteHopsIndex | not-accessible | Unsigned | Unsigned | Path entry index. | As per the MIB. |

| | | | | | |
|---|-----------|--------------|------------------|---------------|-----------------|
| (1.3.6.1.4.1.25506.2.127.4.1.2.1.1.1) | ble | 32 | 32(1..65535) | | |
| hh3cFcTraceRouteHopsAddr (1.3.6.1.4.1.25506.2.127.4.1.2.1.1.2) | read-only | Hh3cFcNameId | OCTET STRING (8) | WWN of a hop. | As per the MIB. |

Notifications

hh3cFcTraceRouteCompletionNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|-----------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.4.1.3.0.1 | FC traceroute operation completed | Informational | N/A | N/A | OFF |

Description

An FC traceroute operation is completed.

Status control

ON

MIB: Set hh3cFcTraceRouteTrapOnCompletion to true(1).

OFF

MIB: Set hh3cFcTraceRouteTrapOnCompletion to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--------------------------------------|-------|-------------------|---|
| 1.3.6.1.4.1.25506.2.127.4.1.1.1.1.1 (hh3cFcTraceRouteIndex) | FC traceroute entry index. | Yes | Unsigned32 | Unsigned32(1..65535) |
| 1.3.6.1.4.1.25506.2.127.4.1.1.1.1.2 (hh3cFcTraceRouteVsan) | VSAN ID. | No | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.4.1.1.1.1.3 (hh3cFcTraceRouteAddressType) | Traceroute packet address type. | No | Hh3cFcAddressType | WWN(1), FCID(2) |
| 1.3.6.1.4.1.25506.2.127.4.1.1.1.1.4 (hh3cFcTraceRouteAddress) | Traceroute packet address. | No | Hh3cFcAddress | OCTET STRING (3) |
| 1.3.6.1.4.1.25506.2.127.4.1.1.1.1.7 (hh3cFcTraceRouteOperStatus) | Traceroute entry operational status. | No | INTEGER | inProgress(1), success(2), partialSuccess(3), failure(4), disabled(5) |

Recommended action

No action is required.

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HH3C-FC-ZONE-SERVER-MIB

About this MIB

Use this MIB to configure or obtain zoning settings.

MIB file name

hh3c-fc-zone-server.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFcZoneServer(9)

Scalar objects

hh3cFcZsClearAllPktStats

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--------------------------------------|---|-----------------|
| hh3cFcZsClearAllPktStats (1.3.6.1.4.1.25506.2.127.9.1.2.5) | read-write | INTEGER | noOperation(1) clearStatistics(2) | Clears packet statistics for all VSANs. | As per the MIB. |

hh3cFcZsZonesetNextFreeIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|---------------------------|---|------------------------------------|
| hh3cFcZsZonesetNextFreeIndex (1.3.6.1.4.1.25506.2.127.9.1.3.5.1) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Smallest available index used to create zone set. | The value range varies by product. |

hh3cFcZsZoneNextFreeIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|---------------------------|---|------------------------------------|
| hh3cFcZsZoneNextFreeIndex (1.3.6.1.4.1.25506.2.127.9.1.3.5.2) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Smallest available index used to create zone. | The value range varies by product. |

hh3cFcZsZoneAliasNextFreeIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|---------------------------|---|------------------------------------|
| hh3cFcZsZoneAliasNextFreeIndex (1.3.6.1.4.1.25506.2.127.9.1.3.5.3) | read-only | Unsigned32 | Unsigned32(1..4294967295) | Smallest available index used to create zone alias. | The value range varies by product. |

hh3cFcZsDefaultZoneChangedEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------|---|-----------------|
| hh3cFcZsDefaultZoneChangedEnable (1.3.6.1.4.1.25506.2.127.9.1.4.1.1) | read-write | TruthValue | true(1) false(2) | Trap switch for hh3cFcZsDefaultZoneChangedNotify. | As per the MIB. |

hh3cFcZsHardZoneChangedEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|--|-----------------|
| hh3cFcZsHardZoneChangedEnable (1.3.6.1.4.1.25506.2.127.9.1.4.1.2) | read-write | TruthValue | true(1) false(2) | Trap switch for hh3cFcZsHardZoneChangedNotify. | As per the MIB. |

hh3cFcZsMergeFailedEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|--|-----------------|
| hh3cFcZsMergeFailedEnable (1.3.6.1.4.1.25506.2.127.9.1.4.1.3) | read-write | TruthValue | true(1) false(2) | Trap switch for hh3cFcZsMergeFailedNotify. | As per the MIB. |

hh3cFcZsMergeSucceededEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---------------------|---|-----------------|
| hh3cFcZsMergeSucceededEnable (1.3.6.1.4.1.25506.2.127.9.1.4.1.4) | read-write | INTEGER | true(1) false(2) | Trap switch for hh3cFcZsMergeSucceededNotify. | As per the MIB. |

hh3cFcZsActivationCompletedEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|--|-----------------|
| hh3cFcZsActivationCompletedEnable (1.3.6.1.4.1.25506.2.127.9.1.4.1.5) | read-write | TruthValue | true(1) false(2) | Trap switch for hh3cFcZsActivationCompletedNotify. | As per the MIB. |

hh3cFcZsLocalSwitchWWN

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|--------------|---------------------|-------------------|-----------------|
| hh3cFcZsLocalSwitchWWN (1.3.6.1.4.1.25506.2.127.9.1.4.2.1) | accessible-for-notify | Hh3cFcNameId | OCTET STRING (8) | Local switch WWN. | As per the MIB. |

hh3cFcZsPeerSwitchWWN

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|--------------|---------------------|------------------|-----------------|
| hh3cFcZsPeerSwitchWWN (1.3.6.1.4.1.25506.2.127.9.1.4.2.2) | accessible-for-notify | Hh3cFcNameId | OCTET STRING (8) | Peer switch WWN. | As per the MIB. |

hh3cFcZsMergeFailCause

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|---------|--|---------------------------|-----------------|
| hh3cFcZsMergeFailCause (1.3.6.1.4.1.25506.2.127.9.1.4.2.3) | accessible-for-notify | INTEGER | zoneModelInconsistent(1), zonePolicyNotEqual(2), hardZoneInconsistent(3), dataNotEqualInRestrict(4), activeZoneSetMergeFailed(5), zoneMergeDataTooBig(6), zoningObjectNumberTooBig(7), zoneDbMergeFaildInBasic(8), zoneDbMergeFaildInEnhanced(9), other(10) | Zone merge failure cause. | As per the MIB. |

Tabular objects

hh3cFcZsServerTable

About this table

This table configures or obtains zoning configuration.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|--|-------------------------|-----------------|
| hh3cFcZsZoneModeCfg (1.3.6.1.4.1.25506.2.127.9.1.1.1.1) | read-write | INTEGER | basic(1) enhanced(2) | Zoning mode. | As per the MIB. |
| hh3cFcZsHardZoneEnable (1.3.6.1.4.1.25506.2.127.9.1.1.1.2) | read-write | TruthValue | true(1) false(2) | Hard zoning. | As per the MIB. |
| hh3cFcZsDistributeRule (1.3.6.1.4.1.25506.2.127.9.1.1.1.3) | read-write | INTEGER | none(1) activeOnly(2) full(3) | Zone distribution type. | As per the MIB. |
| hh3cFcZsDefaultZoneSetting (1.3.6.1.4.1.25506.2.127.9.1.1.1.4) | read-write | INTEGER | deny(1) permit(2) | Default zone policy. | As per the MIB. |
| hh3cFcZsMergeControlSetting (1.3.6.1.4.1.25506.2.127.9.1.1.1.5) | read-write | INTEGER | none(1) allow(2) restrict(3) | Merge control mode. | As per the MIB. |
| hh3cFcZsServerLastResult (1.3.6.1.4.1.25506.2.127.9.1.1.1.6) | read-only | INTEGER | none(1) success(2) busy(3) noSupportI nFabric(4) noSupportI nBasic(5) noSupportI nEnhanced (6) activeZone SetTooBig(7) otherFault(8) | Last operation result. | As per the MIB. |

hh3cFcZsZonesetTable

About this table

This table creates, deletes, or renames a zone set.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cVsanIndex and hh3cFcZsZonesetIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|-----------------|---|
| hh3cFcZsZonesetIndex (1.3.6.1.4.1.25506.2.127.9.1.1.2.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Zone set index. | The value range varies by product. |
| hh3cFcZsZonesetName (1.3.6.1.4.1.25506.2.127.9.1.1.2.1.2) | read-create | Hh3cFcZsGenName | OCTET STRING (1..255) | Zone set name. | N/A. |
| Hh3cFcZsZonesetRowStatus (1.3.6.1.4.1.25506.2.127.9.1.1.2.1.3) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none">• active(1) .• createAndGo(4).• destroy(6). |

hh3cFcZsZoneTable

About this table

This table creates, deletes, or renames a zone, or change the Pairwise enable status for the zone.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|---------------|
| Supported | Supported | Supported | Not supported |

Columns

The table indexes are hh3cVsanIndex and hh3cFcZsZoneIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|---------------------------|-------------|------------------------------------|
| hh3cFcZsZoneIndex (1.3.6.1.4.1.25506.2.127.9.1.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Zone index. | The value range varies by product. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------------|---|-------------------------|---|
| .1.1) | | | 294967295) | | |
| hh3cFcZsZoneName (1.3.6.1.4.1.25506.2.127.9.1.1.3.1.2) | read-create | Hh3cFcZsGenName | OCTET STRING (1..255) | Zone name. | As per the MIB. |
| hh3cFcZsZonePairwiseEnable (1.3.6.1.4.1.25506.2.127.9.1.1.3.1.3) | read-create | TruthValue | true(1) false(2) | Pairwise enable status. | As per the MIB. |
| hh3cFcZsZoneRowStatus (1.3.6.1.4.1.25506.2.127.9.1.1.3.1.4) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1) . • createAndGo(4). • destroy(6). |

hh3cFcZsSetZoneTable

About this table

This table assigns a zone to a zone set.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table indexes are hh3cVsanIndex, hh3cFcZsZonesetIndex, and hh3cFcZsZoneIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|--|-------------|---|
| hh3cFcZsSetZoneRowStatus (1.3.6.1.4.1.25506.2.127.9.1.1.4.1.1) | read-create | RowStatus | active(1), notInService(2) , notReady(3), createAndGo(4), createAndWait(5) , destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1) . • createAndGo(4). • destroy(6). |

hh3cFcZsZoneAliasTable

About this table

This table configures or obtains zone aliases in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cVsanIndex and hh3cFcZsZoneAliasIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|-------------------|---|
| hh3cFcZsZoneAliasIndex (1.3.6.1.4.1.25506.2.127.9.1.1.5.1.1) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Zone alias index. | The value range varies by product. |
| hh3cFcZsZoneAliasName (1.3.6.1.4.1.25506.2.127.9.1.1.5.1.2) | read-create | Hh3cFcZsGenName | OCTET STRING (1..255) | Zone alias name. | As per the MIB. |
| hh3cFcZsZoneAliasRowStatus (1.3.6.1.4.1.25506.2.127.9.1.1.5.1.3) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none">• active(1) .• createAndGo(4).• destroy(6). |

hh3cFcZsZoneMemberTable

About this table

This table configures or obtains the members of a zone or zone alias in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cVsanIndex, hh3cFcZsZoneMemberParentType, hh3cFcZsZoneMemberParentIndex, and hh3cFcZsZoneMemberIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|---------------------------|---------------------------------|-----------------|
| hh3cFcZsZoneMemberParentType (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.1) | not-accessible | INTEGER | zone(1) alias(2) | Parent type. | As per the MIB. |
| hh3cFcZsZoneMemberParentIndex (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.2) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Zone index or zone alias index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------|---|---------------|---|
| .1.2) | | | 295) | | |
| hh3cFcZsZoneMemberIndex (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.3) | not-accessible | Unsigned32 | Unsigned32(1..4294967295) | Member index. | As per the MIB. |
| hh3cFcZsZoneMemberFormat (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.4) | read-create | Hh3cFcZsZoneMemberType | fcid(1) fwwn(2) pwwn(3) aliasName(4) | Member type. | As per the MIB. |
| hh3cFcZsZoneMemberIdentifier (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.5) | read-create | OCTET STRING | OCTET STRING (SIZE (1..255)) | Member. | As per the MIB. |
| hh3cFcZsZoneMemberPairwiseRole (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.6) | read-create | INTEGER | none(1) both(2) initiator(3) target(4) | Member role. | This object is applicable only to port members, and the default value is both(2). For a zone alias member, the member role can only be none(1). |
| hh3cFcZsZoneMemberRowStatus (1.3.6.1.4.1.25506.2.127.9.1.1.6.1.7) | read-create | RowStatus | active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only the following values: <ul style="list-style-type: none"> • active(1) . • createAndGo(4). • destroy(6). |

hh3cFcZsActivateTable

About this table

This table activates or deactivates a zone set and obtains the result.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------------|-----------------------|---------------------------------------|-----------------|
| hh3cFcZsActivate (1.3.6.1.4.1.25506.2.127.9.1.2.1.1.1) | read-write | Hh3cFcZsGenNameOrZero | OCTET STRING (0..255) | Name of the zone set to be activated. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|--|--|-----------------|
| hh3cFcZsDeactivate (1.3.6.1.4.1.25506.2.127.9.1.2.1.1.2) | read-write | INTEGER | noOper(1) deactivate(2) | Name of the zone set to be deactivated. | As per the MIB. |
| hh3cFcZsActivateResult (1.3.6.1.4.1.25506.2.127.9.1.2.1.1.3) | read-only | INTEGER | none(1) inProgress(2) activateSuccess(3) activateFailure(4) deactivateSuccess(5) deactivateFailure(6) | Last zone set activation or deactivation result. | As per the MIB. |
| hh3cFcZsActivateFailReason (1.3.6.1.4.1.25506.2.127.9.1.2.1.1.4) | read-only | INTEGER | none(1) busy(2) activeZoneSetTooBig(3) noZoneSet(4) noMember(5) | Failure cause of the last zone set activation or deactivation. | As per the MIB. |

hh3cFcZsDistributeTable

About this table

This table triggers a zone distribution and obtains the result.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------|---|-------------------------------|-----------------|
| hh3cFcZsDistribute (1.3.6.1.4.1.25506.2.127.9.1.2.2.1.1) | read-write | INTEGER | noOper(1) distribute(2) | Triggers a zone distribution. | As per the MIB. |
| hh3cFcZsDistributeLastResult (1.3.6.1.4.1.25506.2.127.9.1.2.2.1.2) | read-only | INTEGER | none(1) success(2) inProgress(3) rejectFailure(4) otherFault(5) | Last distribution result. | As per the MIB. |
| hh3cFcZsDistributeReasonCod | read-only | Unsigned | Unsigned32 | Reason code | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------|---|-----------------|
| e (1.3.6.1.4.1.25506.2.127.9.1.2.2.1.3) | | d32 | | for the last distribution result. | |
| hh3cFcZsDistributeExplainCode (1.3.6.1.4.1.25506.2.127.9.1.2.2.1.4) | read-only | Unsigned32 | Unsigned32 | Explanation code for the reason code of the last distribution result. | As per the MIB. |

hh3cFcZsClearDatabaseTable

About this table

This table clears the zone database in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|---------------|
| Not supported | Supported | Not supported | Not supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|-----------------------|-------------------------------------|-----------------|
| hh3cFcZsClearDatabase (1.3.6.1.4.1.25506.2.127.9.1.2.3.1.1) | read-write | INTEGER | noOp(1) clearDb(2) | Clears the zone database in a VSAN. | As per the MIB. |

hh3cFcZsClearPktStatsTable

About this table

This table clears zoning packet statistics in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|---------------|
| Not supported | Supported | Not supported | Not supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|--------------------------|--|-----------------|
| hh3cFcZsClearPktStats (1.3.6.1.4.1.25506.2.127.9.1.2.4.1.1) | read-write | INTEGER | noOp(1) clearStats(2) | Clears zoning packet statistics in a VSAN. | As per the MIB. |

hh3cFcZsActiveZoneTable

About this table

This table obtains information about the active zone.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cVsanIndex and t11ZsActiveZoneIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|---------------------|---|-----------------|
| hh3cFcZsActiveZonePairwiseEnable (1.3.6.1.4.1.25506.2.127.9.1.3.1.1.1) | read-only | TruthValue | true(1) false(2) | Pairwise enable status for the active zone. | As per the MIB. |

hh3cFcZsActiveMemberTable

About this table

This table obtains information about members in the active zone.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cVsanIndex, t11ZsActiveZoneIndex, and t11ZsActiveZoneMemberIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--------------------------------------|--------------|-----------------|
| hh3cFcZsActiveMemberPairwiseRole (1.3.6.1.4.1.25506.2.127.9.1.3.2.1.1) | read-only | INTEGER | both(1) initiator(2) target(3) | Member role. | As per the MIB. |

hh3cFcZsServerStatusTable

About this table

This table obtains the zoning configuration and status in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|--|-------------------------|-----------------|
| hh3cFcZsServerStatus (1.3.6.1.4.1.25506.2.127.9.1.3.3.1.1) | read-only | INTEGER | free(1) distributed(2) merge(3) | Zone service status. | As per the MIB. |
| hh3cFcZsHardZoneStatus (1.3.6.1.4.1.25506.2.127.9.1.3.3.1.2) | read-only | INTEGER | enable(1) adminDisable(2) noResourceDisable(3) | Hard zoning status. | As per the MIB. |
| hh3cFcZsAliasCount (1.3.6.1.4.1.25506.2.127.9.1.3.3.1.3) | read-only | Unsigned 32 | Unsigned 32(0..4294967295) | Number of zone aliases. | As per the MIB. |
| hh3cFcZsZoneCount (1.3.6.1.4.1.25506.2.127.9.1.3.3.1.4) | read-only | Unsigned 32 | Unsigned 32(0..4294967295) | Number of zones. | As per the MIB. |
| hh3cFcZsZonesetCount (1.3.6.1.4.1.25506.2.127.9.1.3.3.1.5) | read-only | Unsigned 32 | Unsigned 32(0..4294967295) | Number of zone sets. | As per the MIB. |

hh3cFcZsPktStatsTable

About this table

This table obtains the zoning packet statistics in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------|--|-----------------|
| hh3cFcZsPktInMergeReqCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.1) | read-only | Counter 64 | Counter 64 | Number of incoming Merge Request packets. | As per the MIB. |
| hh3cFcZsPktOutMergeReqCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.2) | read-only | Counter 64 | Counter 64 | Number of outgoing Merge Request packets. | As per the MIB. |
| hh3cFcZsPktInMergeAccCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.3) | read-only | Counter 64 | Counter 64 | Number of incoming Merge Accept packets. | As per the MIB. |
| hh3cFcZsPktOutMergeAccCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.4) | read-only | Counter 64 | Counter 64 | Number of outgoing Merge Accept Request packets. | As per the MIB. |
| hh3cFcZsPktInMergeRjtCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.5) | read-only | Counter 64 | Counter 64 | Number of incoming Merge Reject packets. | As per the MIB. |
| hh3cFcZsPktOutMergeRjtCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.6) | read-only | Counter 64 | Counter 64 | Number of outgoing Merge Reject packets. | As per the MIB. |
| hh3cFcZsPktInChangeReqCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.7) | read-only | Counter 64 | Counter 64 | Number of incoming Distribution Request packets. | As per the MIB. |
| hh3cFcZsPktOutChangeReqCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.8) | read-only | Counter 64 | Counter 64 | Number of outgoing Distribution Request packets. | As per the MIB. |
| hh3cFcZsPktInChangeAccCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.9) | read-only | Counter 64 | Counter 64 | Number of incoming Distribution Accept packets. | As per the MIB. |
| hh3cFcZsPktOutChangeAccCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.10) | read-only | Counter 64 | Counter 64 | Number of outgoing Distribution Accept packets. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------|---|-----------------|
| hh3cFcZsPktInChangeRjtCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.11) | read-only | Counter 64 | Counter 64 | Number of incoming Distribution Reject packets. | As per the MIB. |
| hh3cFcZsPktOutChangeRjtCount (1.3.6.1.4.1.25506.2.127.9.1.3.4.1.12) | read-only | Counter 64 | Counter 64 | Number of outgoing Distribution Reject packets. | As per the MIB. |

hh3cFcZsZoneMemberNextFreeIndexTable

About this table

This table obtains the smallest available index used to create a member.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cFcZsZoneMemberParentType and hh3cFcZsZoneMemberParentIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------|----------------------------|---|-----------------|
| hh3cFcZsZoneMemberNextFreeIndex (1.3.6.1.4.1.25506.2.127.9.1.3.5.4.1.1) | read-only | Unsigned 32 | Unsigned 32(1..4294967295) | Smallest available index used to create a member. | As per the MIB. |

Notifications

hh3cFcZsDefaultZoneChangedNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|-----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.9.1.4.0.1 | Default zone policy changed | Informational | N/A | N/A | OFF |

Description

The default zone policy changes in a VSAN.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-zone defaultzone-change` command.

- MIB: Set hh3cFcZsDefaultZoneChangedEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-zone defaultzone-change` command.
- MIB: Set hh3cFcZsDefaultZoneChangedEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------|-------|-----------------|-------------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.1 (hh3cFcZsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |
| 1.3.6.1.4.1.25506.2.127.9.1.1.1.1.4 (hh3cFcZsDefaultZoneSetting) | Default zone policy. | No | INTEGER | deny(1) permit(2) |

Recommended action

No action is required.

hh3cFcZsHardZoneChangedNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|----------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.9.1.4.0.2 | Hard zoning status changed | Informational | N/A | N/A | OFF |

Description

The hard zoning status changes in a VSAN.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-zone hardzone-change` command.
- MIB: Set hh3cFcZsHardZoneChangedEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-zone hardzone-change` command.
- MIB: Set hh3cFcZsHardZoneChangedEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------|-------|-----------------|-------------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.1 (hh3cFcZsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------|-------|---------|--|
| 1.3.6.1.4.1.25506.2.127.9.1.3.3.1.2 (hh3cFcZsHardZoneStatus) | Hard zoning status. | No | INTEGER | enable(1) adminDisable(2) noResourceDisable(3) |

Recommended action

No action is required.

hh3cFcZsMergeFailedNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|--------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.127.9.1.4.0.3 | Zone merge failure | Error | Major | 1.3.6.1.4.1.25506.2.127.9.1.4.0.4(hh3cFcZsMergeSucceededNotify) | OFF |

Description

A zone merge failure occurred.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-zone merge-failed` command.
- MIB: Set hh3cFcZsMergeFailedEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-zone merge-failed` command.
- MIB: Set hh3cFcZsMergeFailedEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------|-------|-----------------|------------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.1 (hh3cFcZsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.2 (hh3cFcZsPeerSwitchWWN) | Peer switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------------|-------|---------|---|
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.3 (hh3cFcZsMergeFailCause) | Zone merge failure cause. | No | INTEGER | zoneModelInconsistent(1) zonePolicyNotEqual(2) hardZoneInconsistent(3) dataNotEqualInRestrict(4) activeZoneSetMergeFailed(5) zoneMergeDataTooBig(6) zoningObjectNumberTooBig(7) zoneDbMergeFailInBasic(8) zoneDbMergeFailInEnhanced(9) other(10) |

Recommended action

To resolve the issue:

1. Check the zoning configuration and make corrections.
2. If the issue persists, contact H3C Support.

hh3cFcZsMergeSucceededNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|--------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.9.1.4.0.4 | Zone merge success | Recovery | N/A | N/A | OFF |

Description

A zone merge is performed successfully.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-zone merge-succeeded` command.
- MIB: Set hh3cFcZsMergeSucceededEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-zone merge-succeeded` command.
- MIB: Set hh3cFcZsMergeSucceededEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------|-------|-----------------|------------------------------|
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Interface index. | Yes | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Interface name. | No | DisplayString | OCTET STRING (SIZE (0..255)) |
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.1 (hh3cFcZsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

| OID (object name) | Description | Index | Type | Value range |
|--|------------------|-------|--------------|-------------------------|
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.2 (hh3cFcZsPeerSwitchWWN) | Peer switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

Recommended action

No action is required.

hh3cFcZsActivationCompletedNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|-------------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.9.1.4.0.5 | Zone set activation or deactivation | Informational | N/A | N/A | OFF |

Description

A zone set activation or deactivation operation is completed.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-zone activation-completed` command.
- MIB: Set hh3cFcZsActivationCompletedEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-zone activation-completed` command.
- MIB: Set hh3cFcZsActivationCompletedEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|------------------------------------|-------|-----------------|--|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.9.1.4.2.1 (hh3cFcZsLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |
| 1.3.6.1.4.1.25506.2.127.9.1.2.1.1.3 (hh3cFcZsActivateResult) | Activation or deactivation result. | No | INTEGER | none(1) inProgress(2) activateSuccess(3) activateFailure(4) deactivateSuccess(5) deactivateFailure(6) |

Recommended action

If the activation or deactivation result is failure, find out the failure cause and perform an activation or deactivation again.

If the issue persists, contact H3C Support.

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HH3C-FDMI-MIB

About this MIB

Use this MIB to obtain FDMI information.

MIB file name

hh3c-fdmi.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cFdmi(7)

Tabular objects

hh3cFdmiHbaInfoTable

About this table

This table obtains information about HBAs registered with FDMI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, hh3cFdmiHbaInfoFabricIndex, and hh3cFdmiHbaInfoFold.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|-----------------------------|--------------------|-----------------|
| hh3cFdmiHbaInfoFabricIndex (1.3.6.1.4.1.25506.2.127.7.1.1.1.1) | not-accessible | Unsigned 32 | Unsigned32 1..3839 | VSAN ID. | As per the MIB. |
| hh3cFdmiHbaInfoFold (1.3.6.1.4.1.25506.2.127.7.1.1.1.2) | not-accessible | OCTET STRING | FcNameIdOrZero Size: 8 | HBA WWN. | As per the MIB. |
| hh3cFdmiHbaInfoNodeName (1.3.6.1.4.1.25506.2.127.7.1.1.1.3) | read-only | OCTET STRING | FcNameIdOrZero Size: 8 | Node WWN. | As per the MIB. |
| hh3cFdmiHbaInfoMfg (1.3.6.1.4.1.25506.2.127.7.1.1.1.4) | read-only | OCTET STRING | OCTET STRING Size: 1..63 | HBA manufacturer. | As per the MIB. |
| hh3cFdmiHbaInfoSn (1.3.6.1.4.1.25506.2.127.7.1.1.1.5) | read-only | OCTET STRING | OCTET STRING Size: 1..63 | HBA serial number. | As per the MIB. |
| hh3cFdmiHbaInfoModel (1.3.6.1.4.1.25506.2.127.7.1.1.1.6) | read-only | OCTET STRING | OCTET STRING | HBA model. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|------------------------------|--|-----------------|
| | | | Size: 1..255 | | |
| hh3cFdmIHbaInfoModelDescr (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.7) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | HBA model description. | As per the MIB. |
| hh3cFdmIHbaInfoHwVer (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.8) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | HBA hardware version. | As per the MIB. |
| hh3cFdmIHbaInfoDriverVer (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.9) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | HBA driver version number. | As per the MIB. |
| hh3cFdmIHbaInfoOptROMVer (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.10) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | HBA Option ROM or BIOS version. | As per the MIB. |
| hh3cFdmIHbaInfoFwVer (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.11) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | HBA firmware version number. | As per the MIB. |
| hh3cFdmIHbaInfoOSInfo (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.12) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | Operating system type and version number. | As per the MIB. |
| hh3cFdmIHbaInfoMaxCTPayload (1.3.6.1.4.1.25506.2.127.7.1.1.1.1.13) | read-only | Unsigned 32 | Unsigned32 (1..4294967295) | Maximum length of CT payload allowed by the HBA. | As per the MIB. |

hh3cFdmIHbaPortTable

About this table

This table obtains information about HBA ports registered with FDMI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmlInstanceIndex, hh3cFdmIHbaInfoFabricIndex, hh3cFdmIHbaInfoFold, and hh3cFdmIHbaPortId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---------------------------------|-----------------------------------|-----------------|
| hh3cFdmIHbaPortId (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.1) | not-accessible | OCTET STRING | FcNameIdOrZero Size: 8 | Port WWN. | As per the MIB. |
| hh3cFdmIHbaPortSupportedFC4Type (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.2) | read-only | OCTET STRING | OCTET STRING Size: 1..02..32 | FC-4 types supported by the port. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|------------------------------|---|-----------------|
| hh3cFdmIHbaPortSupportedSpeed (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.3) | read-only | Unsigned32 | Unsigned32 | Speeds supported by the port. | As per the MIB. |
| hh3cFdmIHbaPortCurrentSpeed (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.4) | read-only | Unsigned32 | Unsigned32 | Current port speed. | As per the MIB. |
| hh3cFdmIHbaPortMaxFrameSize (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.5) | read-only | Unsigned32 | Unsigned32 (1..4294967295) | Maximum frame size supported by the port. | As per the MIB. |
| hh3cFdmIHbaPortOsDevName (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.6) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | Operating system name for the port. . | As per the MIB. |
| hh3cFdmIHbaPortHostName (1.3.6.1.4.1.25506.2.127.7.1.1.2.1.7) | read-only | OCTET STRING | OCTET STRING Size: 1..255 | Name of the node where the port resides. | As per the MIB. |

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HH3C-NPV-MIB

About this MIB

Use this MIB to configure or obtain NPV settings.

MIB file name

hh3c-npv.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cNpv(6)

Scalar objects

hh3cNpvLoadbalanceVsan

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------------|---|------------------------------------|
| hh3cNpvLoadbalanceVsan (1.3.6.1.4.1.25506.2.127.6.1.1.1.1) | read-write | Unsigned32 | Unsigned32 (1..4095) | Initiates a load balancing process in a VSAN. | Supports only the write operation. |

Tabular objects

hh3cNpvTrafficMapConfigTable

About this table

This table configures or obtains downlink-to-uplink interface mappings.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ifIndex and hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|----------------------------------|-----------------------------------|-----------------|
| hh3cNpvTrafficMapExternalIfIndexList (1.3.6.1.4.1.25506.2.127.6.1.1.2.1.1) | read-create | OCTET STRING | octet string (size(4..65535)) | List of uplink interface indexes. | As per the MIB. |
| hh3cNpvTrafficMapLastChange (1.3.6.1.4.1.25506.2.127.6.1.1.2.1.2) | read-only | TimeStamps | TimeTicks | Last mapping | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-----------|---|--------------|-----------------|
| .1.2) | | mp | (0..4294967295) | change time. | |
| hh3cNpvTrafficMapRowStatus (1.3.6.1.4.1.25506.2.127.6.1.1.2.1.3) | read-create | RowStatus | 1:active(1) 2:notInService(2) 3:notReady(3) 4:createAndGo(4) 5:createAndWait(5) 6:destroy(6) | Row status. | As per the MIB. |

hh3cNpvServerIfTable

About this table

This table obtains uplink interface indexes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|-------------------------|-------------------------|-----------------|
| hh3cNpvExternallfIndex (1.3.6.1.4.1.25506.2.127.6.1.1.1.3.1.1) | read-only | Integer32 | Integer32 (0..32767) | Uplink interface index. | As per the MIB. |

hh3cNpvLoadBalanceTable

About this table

This table configures automatic load balancing.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------------------------|---|-----------------|
| hh3cNpvAutoLoadBalanceEnable (1.3.6.1.4.1.25506.2.127.6.1.1.4.1.1) | read-write | TruthValue | TruthValue true(1) false(2) | Enables/Disables automatic load balancing. | As per the MIB. |
| hh3cNpvAutoLoadBalanceInterval (1.3.6.1.4.1.25506.2.127.6.1.1.4.1.2) | read-write | Unsigned32 | Unsigned32 (1..300) | Delay timer for automatic load balancing, in seconds. | As per the MIB. |

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HH3C-SAN-AGG-MIB

About this MIB

Use this MIB to configure SAN aggregation.

MIB file name

hh3c-san-agg.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cSanAgg(2)

Scalar objects

hh3cSanAggMaxMemberNumber

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|-------------|--|-----------------|
| hh3cSanAggMaxMemberNumber (1.3.6.1.4.1.25506.2.127.2.1.1) | read-only | Integer32 | Integer32 | Maximum number of member ports allowed in an FC aggregate interface. | As per the MIB. |

hh3cSanAggGroupPreviousSpeed

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|-----------|-------------|--|-----------------|
| hh3cSanAggGroupPreviousSpeed (1.3.6.1.4.1.25506.2.127.2.3.1) | accessible-for-notify | Integer32 | Integer32 | Speed of the FC aggregate interface before speed change. | As per the MIB. |

hh3cSanAggGroupCurrentSpeed

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|-------------|---|-----------------|
| hh3cSanAggGroupCurrentSpeed (1.3.6.1.4.1.25506.2.127.2.3.2) | accessible-for-notify | Integer32 | Integer32 | Speed of the FC aggregate interface after speed change. | As per the MIB. |

Tabular objects

hh3cSanAggGroupTable

About this table

This table configures or obtains FC aggregate interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|---------------|-----------|
| Supported | Supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|--------------|------------------|--------------------------------|---|
| hh3cSanAggGroupNumber (1.3.6.1.4.1.25506.2.127.2.2.1.1) | accessible-for-notify | Integer32 | Integer (32 bit) | FC aggregate interface number. | As per the MIB. |
| hh3cSanAggGroupIndex (1.3.6.1.4.1.25506.2.127.2.2.1.2) | read-only | Integer32 | Integer (32 bit) | FC aggregate interface index. | As per the MIB. |
| hh3cSanAggMemberList (1.3.6.1.4.1.25506.2.127.2.2.1.3) | read-create | OCTET STRING | Octets | List of member port indexes. | As per the MIB. |
| hh3cSanAggMemberStateList (1.3.6.1.4.1.25506.2.127.2.2.1.4) | read-only | OCTET STRING | Octets | List of member port states. | As per the MIB. |
| hh3cSanAggGroupRowStatus (1.3.6.1.4.1.25506.2.127.2.2.1.5) | read-create | INTEGER | Integer (32 bit) | Row status. | Supports the following values: <ul style="list-style-type: none">• active(1).• createAndGo(4).• destroy(6). |

Notifications

hh3cSanAggGroupSpeedChange

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--------------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.2.4.0.1 | FC aggregate interface speed changed | Error | Warning | N/A | ON |

Description

This notification is generated when the speed of an FC aggregate interface changes and contains the following information:

- Aggregation group number for the aggregate interface (hh3cSanAggGroupNumber).
- Speed after change.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.127.2.2.1.1 (hh3cSanAggGroupNumber) | Aggregation group number for the aggregate interface. | No | Integer32 | 1..65535 |
| 1.3.6.1.4.1.25506.2.127.2.3.1 (hh3cSanAggGroupPreviousSpeed) | Speed of the FC aggregate interface before speed change | No | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.127.2.3.2 (hh3cSanAggGroupCurrentSpeed) | Speed of the FC aggregate interface after speed change | No | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Verify that no link error or network topology change occurs.
2. If the issue persists, contact H3C Support.

hh3cSanAggMemberInactive

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|---------------------------------|-------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.127.2.4.0.2 | Member port becoming Unselected | Error | Major | 1.3.6.1.4.1.25506.2.127.2.4.0.3(hh3cSanAggMemberActive) | ON |

Description

This notification is generated when a member port becomes Unselected and contains the following information:

- Aggregation group number for the aggregate interface (hh3cSanAggGroupNumber).
- Index of the member port (ifIndex).
- Description of the member port (ifDescr).

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.127.2.2.1.1 (hh3cSanAggGroupNumber) | Aggregation group number for the aggregate interface. | No | Integer32 | 1..65535 |
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the member port. | No | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Description of the member port. | No | DisplayString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue:

1. Verify that no link error or network topology change occurs.
2. If the issue persists, contact H3C Support.

hh3cSanAggMemberActive

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-------------------------------|----------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.2.4.0.3 | Member port becoming Selected | Recovery | N/A | N/A | ON |

Description

This notification is generated when a member port becomes Selected and contains the following information:

- Aggregation group number for the aggregate interface (hh3cSanAggGroupNumber).
- Index of the member port (ifIndex).
- Description of the member port (ifDescr).

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---|-------|----------------|------------------------------|
| 1.3.6.1.4.1.25506.2.127.2.2.1.1 (hh3cSanAggGroupNumber) | Aggregation group number for the aggregate interface. | No | Integer32 | 1..65535 |
| 1.3.6.1.2.1.2.2.1.1 (ifIndex) | Index of the member port. | No | InterfaceIndex | Integer32(1..2147483647) |
| 1.3.6.1.2.1.2.2.1.2 (ifDescr) | Description of the member port. | No | DisplayString | OCTET STRING (SIZE (0..255)) |

Recommended action

To resolve the issue:

1. Verify that no link error or network topology change occurs.

2. If the issue persists, contact H3C Support.

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HH3C-VSAN-MIB

About this MIB

Use this MIB to configure or obtain VSAN settings.

MIB file name

hh3c-vsan.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSan(127).hh3cVsan(1)

Scalar objects

hh3cVsanDmFabricChangeNotifyEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------------------------|--|-----------------|
| hh3cVsanDmFabricChangeNotifyEnable (1.3.6.1.4.1.25506.2.127.1.1.3.1.1) | read-write | TruthValue | TruthValue true(1) false(2) | Trap switch for hh3cVsanDmFabricChangeNotify | As per the MIB. |

hh3cVsanDmDomainIdChangeNotifyEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-----------------------------------|--|-----------------|
| hh3cVsanDmDomainIdChangeNotifyEnable (1.3.6.1.4.1.25506.2.127.1.1.3.1.2) | read-write | TruthValue | TruthValue true(1) false(2) | Trap switch for hh3cVsanDmDomainIdChangeNotify | As per the MIB. |

Tabular objects

hh3cVsanTable

About this table

This table creates or deletes a VSAN, and obtains the physical switch name.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|---------------|-----------|-----------|
| Supported | Not supported | Supported | Supported |

Columns

The table index is hh3cVsanIndex.

OID of this table is:1.3.6.1.4.1.25506.2.127.1.1.1.1

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|--------------------|---|-----------------------------|---|
| hh3cVsanIndex (1.3.6.1.4.1.25506.2.127.1.1.1.1.1) | accessible-for-notify | Unsigned32 | Unsigned32 (1..4095) | VSAN ID | The value range is 2 to 3839 for creating, configuring, or deleting a VSAN. VSAN 1 is the default VSAN, and VSAN 4079 is the control VSAN. |
| hh3cVsanCoreSwitchName (1.3.6.1.4.1.25506.2.127.1.1.1.1.1.2) | read-only | Hh3cFcNameIdOrZero | OCTET STRING (8 16) | Physical switch name. | As per the MIB. |
| hh3cVsanRowStatus (1.3.6.1.4.1.25506.2.127.1.1.1.1.1.3) | read-create | INTEGER | 1:active(1) 2:notInService(2) 3:notReady(3) 4:createAndGo(4) 5:createAndWait(5) 6:destroy(6) | Row status. | VSANs 2 to 3839 support the following values: <ul style="list-style-type: none">• active(1).• createAndGo(4).• destroy(6). VSAN 1 and VSAN 4079 support only active(1). |
| hh3cVsanName (1.3.6.1.4.1.25506.2.127.1.1.1.1.1.4) | read-create | OCTET STRING | OCTET STRING Size: 0..32 | VSAN name. | As per the MIB. |
| hh3cVsanWorkingMode (1.3.6.1.4.1.25506.2.127.1.1.1.1.1.5) | read-write | Integer32 | Integer32 | Operating mode of the VSAN. | As per the MIB. |

hh3cVsanDmTable

About this table

This table configures or obtains domain information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

OID of this table is: 1.3.6.1.4.1.25506.2.127.1.1.1.2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------------|--|-----------------------------------|-----------------|
| hh3cVsanDmDomainConfigureEnable (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.1) | read-write | TruthValue | true(1), false(2) | Fabric configuration status. | As per the MIB. |
| hh3cVsanDmFabricNameConfigured (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.2) | read-write | Hh3cFcNameIdOrZero | OCTET STRING (0 8 16) | Configured fabric name. | As per the MIB. |
| hh3cVsanDmPriorityConfigured (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.3) | read-write | Unsigned32 | noOperation(1) nonDisruptive(2), disruptive(3) | Configured switch priority. | As per the MIB. |
| hh3cVsanDmAllowedDomainIdList (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.4) | read-write | OCTET STRING | disabledWithNoDomain(1), disabledWithDomainCfg(2) stableWithNoEports(3) stableWithDomainCfg(4) stableWithNoDomain(5) principalSwitchInSelect(6) domainIdRequesting(7) buildFabricPhase(8) reconfigureFabricPhase(9) unknown(10) | Allowed domain ID list. | As per the MIB. |
| hh3cVsanDmDomainIdConfigured (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.5) | read-write | Hh3cFcDomainIdOrZero | Integer32 (0..239) | Configured domain ID. | As per the MIB. |
| hh3cVsanDmDomainIdTypeConfigured (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.6) | read-write | INTEGER | static(1), preferred(2) | Configured domain ID type. | As per the MIB. |
| hh3cVsanDmAutoReconfigureEnable (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.7) | read-write | TruthValue | true(1), false(2) | Automatic reconfiguration status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------------|---|--|-----------------|
| hh3cVsanDmDomainRestart (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.8) | read-write | INTEGER | noOperation(1), nonDisruptive(2), disruptive(3) | Fabric reconfiguration type. | As per the MIB. |
| hh3cVsanDmState (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.9) | read-only | Hh3cFcDmState | disabledWithNoDomain(1), disabledWithDomainCfg(2), stableWithNoEports(3), stableWithDomainCfg(4), stableWithNoDomain(5), principalSwitchInSelect(6), domainIdRequesting(7), buildFabricPhase(8), reconfigureFabricPhase(9), unknown(10) | Domain status. | As per the MIB. |
| hh3cVsanDmDomainIdAssigned (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.10) | read-only | Hh3cFcDomainIdOrZero | Integer32 (0..239) | Assigned domain ID. | As per the MIB. |
| hh3cVsanDmPrincipalSwitchWWN (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.11) | read-only | Hh3cFcNameId | OCTET STRING (8) | Principal switch WWN. | As per the MIB. |
| hh3cVsanDmLocalSwitchWWN (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.12) | read-only | Hh3cFcNameId | OCTET STRING (8) | Local switch WWN. | As per the MIB. |
| hh3cVsanDmPrincipalSwRunPriority (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.13) | read-only | Hh3cFcDomainPriority | Unsigned32 (1..254) | Principal switch runtime priority. | As per the MIB. |
| hh3cVsanDmLocalSwRunPriority (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.14) | read-only | Hh3cFcDomainPriority | Unsigned32 (1..254) | Local switch runtime priority. | As per the MIB. |
| hh3cVsanDmPrincipalSwSlctCnt (1.3.6.1.4.1.25506.2.127.1.1.1.2.1.15) | read-only | Counter32 | Standard MIB values. | Number of times the local switch participates in | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| | | | | principal switch election is a VSAN. | |
| hh3cVsanDmLocalPrincipalSwSlctCnt(1.3.6.1.4.1.25506.2.127.1.1.1.2.1.16) | read-only | Counter 32 | Standard MIB values. | Number of times the local switch becomes the principal switch. | As per the MIB. |
| hh3cVsanDmBFCnt(1.3.6.1.4.1.25506.2.127.1.1.1.2.1.17) | read-only | Counter 32 | Standard MIB values. | Number of times the local switch participates in nondisruptive reconfiguration. | As per the MIB. |
| hh3cVsanDmRCFCnt(1.3.6.1.4.1.25506.2.127.1.1.1.2.1.18) | read-only | Counter 32 | Standard MIB values. | Number of times the local switch participates in disruptive reconfiguration. | As per the MIB. |

hh3cVsanDmIfConfigTable

About this table

This table configures domain information for an interface in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|---------------|
| Supported | Supported | Supported | Not supported |

Columns

The table indexes are ifIndex and hh3cVsanIndex.

OID of this table is:1.3.6.1.4.1.25506.2.127.1.1.1.3

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|-------------------|--|-----------------|
| hh3cVsanDmIfConfigRcfReject(1.3.6.1.4.1.25506.2.127.1.1.1.3.1.1) | read-write | TruthValue | true(1), false(2) | Indicates whether the interface rejects incoming RCF requests. | As per the MIB. |

hh3cVsanDmDatabaseTable

About this table

This table obtains the physical switch name for a domain ID in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cVsanIndex and hh3cVsanDmDatabaseDomainId.

OID of this table is:1.3.6.1.4.1.25506.2.127.1.1.2.1

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|------------------------|-----------------------|-----------------|
| hh3cVsanDmDatabaseDomainId (1.3.6.1.4.1.25506.2.127.1.1.2.1.1.1) | not-accessible | Integer32 | Integer32 (1..239) | Domain ID. | As per the MIB. |
| hh3cVsanDmDatabaseSwitchWWN (1.3.6.1.4.1.25506.2.127.1.1.2.1.1.2) | read-only | OCTET STRING | octet string (size(8)) | Physical switch name. | As per the MIB. |

hh3cVsanDmIfInfoTable

About this table

This table obtains interface status in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ifIndex and hh3cVsanIndex.

OID of this table is:1.3.6.1.4.1.25506.2.127.1.1.2.2

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|--|-----------------------------------|-----------------|
| hh3cVsanDmIfInfoRole (1.3.6.1.4.1.25506.2.127.1.1.2.2.1.1) | read-only | INTEGER | nonPrincipal(1) principalUpstream(2) principalDownstream(3) isolated(4) unknown(5) | Status of an interface in a VSAN. | As per the MIB. |

hh3cVsanFcIdTable

About this table

This table configures or obtains the persistent FC ID feature information in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cVsanIndex.

OID of this table is:1.3.6.1.4.1.25506.2.127.1.1.1.4

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|----------------------|---------------------------|-----------------|
| hh3cVsanFreeFclds(1.3.6.1.4.1.25506.2.127.1.1.1.4.1.1) | read-only | Counter 32 | Counter 32 | Free FC IDs. | As per the MIB. |
| hh3cVsanAssignedFclds(1.3.6.1.4.1.25506.2.127.1.1.1.4.1.2) | read-only | Counter 32 | Counter 32 | Assigned FC IDs. | As per the MIB. |
| hh3cVsanFcldPersistency(1.3.6.1.4.1.25506.2.127.1.1.1.4.1.3) | read-write | INTEGER | TruthValue | Persistent FC ID feature. | As per the MIB. |
| hh3cVsanFcldPurge(1.3.6.1.4.1.25506.2.127.1.1.1.4.1.4) | read-write | INTEGER | noOp(1) enable(2) | FC ID purging. | As per the MIB. |

hh3cVsanFcldPersistencyTable

About this table

This table manages the persistent FC ID database in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are hh3cVsanIndex and hh3cVsanFcldPersistencyWwn.

OID of this table is:1.3.6.1.4.1.25506.2.127.1.1.1.5

Note: When creating a new instance of this table, the following objects should be set simultaneously
hh3cVsanFcldPersistencyFcld, hh3cVsanFcldPersistencyType, hh3cVsanFcldPersistencyRowStatus.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------|-------------------|-----------------|
| hh3cVsanFcldPersistencyWwn(1.3.6.1.4.1.25506.2.127.1.1.1.5.1.1) | not-accessible | OCTET STRING | Octets | Persistent WWN. | As per the MIB. |
| hh3cVsanFcldPersistencyFcld(1.3.6.1.4.1.25506.2.127.1.1.1.5.1.2) | read-create | OCTET STRING | Octets | Persistent FC ID. | As per the MIB. |
| hh3cVsanFcldPersistencyUsed(| read-only | INTEGER | TruthVal | Persistency. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|---|----------------------|-----------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.5.1.3) | | R | ue | | |
| hh3cVsanFcldPersistencyType(1.3.6.1.4.1.25506.2.127.1.1.1.5.1.4) | read-create | INTEGE R | static(1) dynamic (2) static (name) | Persistency type. | As per the MIB. |
| hh3cVsanFcldPersistencyRowS tatus(1.3.6.1.4.1.25506.2.127.1.1.5.1.5) | read-create | INTEGE R | Integer (32 bit) | Row status. | As per the MIB. |

Notifications

hh3cVsanDmDomainIdNotAssignedNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.1.1.3.0.1 | Domain ID assignment failure | Error | Major | N/A | ON |

Description

This notification is generated in any of the following situations:

- The switch's request to apply for a domain ID is rejected.
- The switch receives an assigned domain ID that is different from the statically configured domain ID.
- The switch receives an assigned domain ID that is not in its allowed domain ID list.
- On the switch, the fabric configuration feature is disabled and the configured domain ID is removed.
- On the switch, there is no configured domain ID when the fabric configuration feature is disabled.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------|-------|-----------------|----------------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32 (1..4095) |
| 1.3.6.1.4.1.25506.2.127.1.1.1.2.1.12 (hh3cVsanDmLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

Recommended action

To resolve the issue:

1. Verify that the configuration and network topology are correct.
2. If the issue persists, contact H3C Support.

hh3cVsanDmNewPrincipalSwitchNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|---|---------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.1.1.3.0.2 | A switch selected as the principal switch in a VSAN | Informational | N/A | N/A | ON |

Description

A switch is selected as the principal switch in a VSAN.

Status control

The notification cannot be disabled.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------|-------|-----------------|-------------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.1.1.1.2.1.12 (hh3cVsanDmLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

Recommended action

No action is required.

hh3cVsanDmFabricChangeNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|---|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.1.1.3.0.3 | BF or RCF frames received or sent in a VSAN | Error | Warning | N/A | OFF |

Description

The switch receives or sends BF or RCF frames in a VSAN.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-fabric fabric-change` command.
- MIB: Set hh3cVsanDmFabricChangeNotifyEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-fabric fabric-change` command.
- MIB: Set hh3cVsanDmFabricChangeNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------|-------|-----------------|---------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |

Recommended action

If the BF or RCF frames are desired, no action is required.

If the BF or RCF frames are not desired, to resolve the issue:

1. Verify that the configuration and network topology are correct.
2. If the issue persists, contact H3C Support.

hh3cVsanDmDomainIdChangeNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|-----------------------------------|-------------------------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.127.1.1.3.0.4 | Runtime domain ID changed in a VSAN | Error | Warning | N/A | OFF |

Description

The runtime domain ID changes in a VSAN.

Status control

ON

- CLI: Use the `snmp-agent trap enable fc-fabric domain-id-change` command.
- MIB: Set hh3cVsanDmDomainIdChangeNotifyEnable to true(1).

OFF

- CLI: Use the `undo snmp-agent trap enable fc-fabric domain-id-change` command.
- MIB: Set hh3cVsanDmDomainIdChangeNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------|-------|----------------------|-------------------------|
| 1.3.6.1.4.1.25506.2.127.1.1.1.1.1 (hh3cVsanIndex) | VSAN ID. | Yes | Hh3cFcVsanIndex | Unsigned32(1..4095) |
| 1.3.6.1.4.1.25506.2.127.1.1.2.1.10 (hh3cVsanDmDomainIdAssigned) | Assigned domain ID. | No | Hh3cFcDomainIdOrZero | Integer32(0..239) |
| 1.3.6.1.4.1.25506.2.127.1.1.2.1.12 (hh3cVsanDmLocalSwitchWWN) | Local switch WWN. | No | Hh3cFcNameId | OCTET STRING (SIZE (8)) |

Recommended action

If the domain ID change is desired, no action is required.

If the domain ID change is not desired, to resolve the issue:

1. Verify that the configuration and network topology are correct.

-
2. If the issue persists, contact H3C Support.

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T11-FC-FABRIC-CONFIG-SERVER-MIB

About this MIB

Use this MIB to implement the functions supported by RFC 4935. The t11FcsPlatformTable and t11FcsNodeNameListTable tables are not supported.

MIB file name

rfc4935-t11-fc-fabric-config-server.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).t11FcFabricConfigServerMIB(162)

Scalar objects

t11FcsMgmtAddrChangeFabricIndex

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------------------|----------------|----------------------|---|----------------|
| t11FcsMgmtAddrChangeFabricIndex (1.3.6.1.2.1.162.1.4.2) | accessible-for-notify | T11FabricIndex | Unsigned32 (0..4095) | ID of the VSAN in which a management address change has been detected.. | Not supported |

t11FcsMgmtAddrChangeName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|----------------|---------------------------|--|----------------|
| t11FcsMgmtAddrChangeName (1.3.6.1.2.1.162.1.4.3) | accessible-for-notify | FcNameIdOrZero | OCTET STRING (0 8 16) | WWN of the IE for which a management address change has been detected. | Not supported |

Tabular objects

t11FcsFabricDiscoveryTable

About this table

This table contains control information for discovery of Fabric configuration by switches.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|---------------|
| Not supported | Supported | Not supported | Not supported |

Columns

The table indexes are fcmInstanceIndex and fcmSwitchIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|----------------|------------------------------------|---|-----------------|
| t11FcsFabricDiscoveryRangeLow (1.3.6.1.2.1.162.1.1.1.1.1) | read-write | T11FabricIndex | Unsigned32 (0..4095) | Start VSAN of the VSAN range for discovery. | As per the MIB. |
| t11FcsFabricDiscoveryRangeHigh (1.3.6.1.2.1.162.1.1.1.1.2) | read-write | T11FabricIndex | Unsigned32 (0..4095) | End VSAN of the VSAN range for discovery. | As per the MIB. |
| t11FcsFabricDiscoveryStart (1.3.6.1.2.1.162.1.1.1.1.3) | read-write | INTEGER | INTEGER 1:start(1) 2:noOp(2) | Initiates a topology discovery. | As per the MIB. |
| t11FcsFabricDiscoveryTimeout (1.3.6.1.2.1.162.1.1.1.1.4) | read-write | Unsigned32 | Unsigned32 300..86400 | Minimum interval of time for which the discovered Fabric information is cached. | As per the MIB. |

t11FcsDiscoveryStateTable

About this table

This table contains the status of discovery.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, and t11FcsFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------|----------------------|--------------------------|-----------------|
| t11FcsFabricIndex (1.3.6.1.2.1.162.1.1.2.1.1) | not-accessible | T11FabricIndex | Unsigned32 (0..4095) | VSAN index. | As per the MIB. |
| t11FcsDiscoveryStatus (1.3.6.1.2.1.162.1.1.2.1.2) | read-write | INTEGER | 1:inProgress(1) | Status of the discovery. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------|--|---|-----------------|
| | | | 2:complete d(2) 3:localOnly (3) | | |
| t11FcsDiscoveryCompleteTime (1.3.6.1.2.1.162.1.1.2.1.3) | read-only | TimeTic ks | TimeTicks (0.. 42949672 95) | Time when discovery was most recently completed. | As per the MIB. |

t11FcsleTable

About this table

This table contains information about Interconnect Elements (IEs).

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11FcsFabricIndex, and t11FcsleName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-------------------------------------|---|-----------------|
| t11FcsleName (1.3.6.1.2.1.162.1.2.1.1.1) | not-accessible | OCTET STRING | FcNameIdOr Zero | IE WWN. | As per the MIB. |
| t11FcsleType (1.3.6.1.2.1.162.1.2.1.1.2) | read-only | INTEGE R | T11FcleTyp e | IE type. | As per the MIB. |
| t11FcsleDomainId (1.3.6.1.2.1.162.1.2.1.1.3) | read-only | Integer3 2 | FcDomainId OrZero | IE domain ID. | As per the MIB. |
| t11FcsleMgmtId (1.3.6.1.2.1.162.1.2.1.1.4) | read-only | OCTET STRING | FcAddressId OrZero | Domain controller address of the IE. | As per the MIB. |
| t11FcsleFabricName (1.3.6.1.2.1.162.1.2.1.1.5) | read-only | OCTET STRING | FcNameIdOr Zero | Fabric name (WWN) of the IE. | As per the MIB. |
| t11FcsleLogicalName (1.3.6.1.2.1.162.1.2.1.1.6) | read-only | OCTET STRING | OCTET STRING Size: 0..255 | Logical name (WWN) of the IE. | As per the MIB. |
| t11FcsleMgmtAddrListIndex (1.3.6.1.2.1.162.1.2.1.1.7) | read-only | Unsigne d32 | T11FcListIn dexPointerO rZero | Management address list index for the IE. | As per the MIB. |
| t11FcsleInfoList (1.3.6.1.2.1.162.1.2.1.1.8) | read-only | OCTET STRING | OCTET STRING Size: 0..252 | Information list for the IE, including vendor name, model name/number, and release code/level, and vendor-specific | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|-------------|--------------|----------------|
| | | | | information. | |

t11FcsMgmtAddrListTable

About this table

This table contains information about management address lists.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11FcsMgmtAddrListIndex, and t11FcsMgmtAddrIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|-------------------------------|--------------------------------|-----------------|
| t11FcsMgmtAddrListIndex (1.3.6.1.2.1.162.1.2.2.1.1) | not-accessible | Unsigned32 | T11FcListIndex | Management address list index. | As per the MIB. |
| t11FcsMgmtAddrIndex (1.3.6.1.2.1.162.1.2.2.1.2) | not-accessible | Unsigned32 | Unsigned32 1:1..4294967295 | Management address index. | As per the MIB. |
| t11FcsMgmtAddr (1.3.6.1.2.1.162.1.2.2.1.3) | read-only | OCTET STRING | URLString | Management address. | As per the MIB. |

t11FcsPortTable

About this table

This table contains information about the ports of IEs.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11FcsIeName, and t11FcsPortName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|----------------|------------------------------|-----------------|
| t11FcsPortName (1.3.6.1.2.1.162.1.2.4.1.1) | not-accessible | OCTET STRING | FcNameIdOrZero | Port name (WWN) of the port. | As per the MIB. |
| t11FcsPortType (1.3.6.1.2.1.162.1.2.4.1.2) | read-only | Unsigned32 | FcPortType | Port type. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|-------------------------------|----------------------------|-----------------|
| t11FcsPortTxType (1.3.6.1.2.1.162.1.2.4.1.3) | read-only | INTEGER | T11FcPortTxType | Port Tx Type. | As per the MIB. |
| t11FcsPortModuleType (1.3.6.1.2.1.162.1.2.4.1.4) | read-only | Unsigned32 | Unsigned32 Size: 0..255 | Port module type. | As per the MIB. |
| t11FcsPortPhyPortNum (1.3.6.1.2.1.162.1.2.4.1.5) | read-only | Unsigned32 | Unsigned32 | Physical port number. | As per the MIB. |
| t11FcsPortAttachPortNameIndex (1.3.6.1.2.1.162.1.2.4.1.6) | read-only | Unsigned32 | T11FcListIndexPointerOrZero | Attached port name list. | As per the MIB. |
| t11FcsPortState (1.3.6.1.2.1.162.1.2.4.1.7) | read-only | INTEGER | T11FcPortState | Port status. | As per the MIB. |
| t11FcsPortSpeedCapab (1.3.6.1.2.1.162.1.2.4.1.8) | read-only | OCTET STRING | OCTET STRING SIZE (2) | Port speed capabilities. | As per the MIB. |
| t11FcsPortOperSpeed (1.3.6.1.2.1.162.1.2.4.1.9) | read-only | OCTET STRING | OCTET STRING SIZE (2) | Operating port speed. | As per the MIB. |
| t11FcsPortZoningEnfStatus (1.3.6.1.2.1.162.1.2.4.1.10) | read-only | OCTET STRING | OCTET STRING SIZE (12) | Zoning enforcement status. | As per the MIB. |

t11FcsAttachPortNameListTable

About this table

This table contains all the lists of attached port names.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11FcsAttachPortNameListIndex, and t11FcsAttachPortName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------|---------------------------|---|-----------------|
| t11FcsAttachPortNameListIndex (1.3.6.1.2.1.162.1.2.5.1.1) | not-accessible | Unsigned32 | T11FcListIndex | Attached port name list index. | As per the MIB. |
| t11FcsAttachPortName (1.3.6.1.2.1.162.1.2.5.1.2) | read-only | OCTET STRING | OCTET STRING SIZE (12) | Attached port name, including port WWN, port flag, and port | As per the MIB. |

| | | | | | |
|--|--|--|--|-------|--|
| | | | | type. | |
|--|--|--|--|-------|--|

t11FcsPlatformTable

About this table

This table contains information on platforms.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11FcsFabricIndex, and t11FcsPlatformIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|-------------------------------|---|-----------------|
| t11FcsPlatformIndex (1.3.6.1.2.1.162.1.2.6.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Platform index. | As per the MIB. |
| t11FcsPlatformName (1.3.6.1.2.1.162.1.2.6.1.2) | read-only | OCTET STRING | OCTET STRING (1..255) | Platform name. | As per the MIB. |
| t11FcsPlatformType (1.3.6.1.2.1.162.1.2.6.1.3) | read-only | OCTET STRING | OCTET STRING (1..4) | Platform type. | As per the MIB. |
| t11FcsPlatformNodeNameListIndex (1.3.6.1.2.1.162.1.2.6.1.4) | read-only | Unsigned32 | T11FcsListIndexPointerOrZero | List of nodes for this platform. | As per the MIB. |
| t11FcsPlatformMgmtAddrListIndex (1.3.6.1.2.1.162.1.2.6.1.5) | read-only | Unsigned32 | T11FcsListIndexPointerOrZero | List of management addresses for this platform. | As per the MIB. |
| t11FcsPlatformVendorId (1.3.6.1.2.1.162.1.2.6.1.6) | read-only | SnmpAdminString | OCTET STRING (0 12) | Vendor of this platform. | As per the MIB. |
| t11FcsPlatformProductId (1.3.6.1.2.1.162.1.2.6.1.7) | read-only | SnmpAdminString | OCTET STRING (0 20) | Vendor's product and/or model identifier for this platform. | As per the MIB. |
| t11FcsPlatformProductRevLevel (1.3.6.1.2.1.162.1.2.6.1.8) | read-only | SnmpAdminString | OCTET STRING (0 4..32) | Product revision level for this platform. | As per the MIB. |
| t11FcsPlatformDescription (1.3.6.1.2.1.162.1.2.6.1.9) | read-only | SnmpAdminString | OCTET STRING (0 4..128) | Description of this platform. | As per the MIB. |
| t11FcsPlatformLabel (1.3.6.1.2.1.162.1.2.6.1.10) | read-only | SnmpAdminString | OCTET STRING (0 4..64) | Administratively assigned symbolic name for the platform. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|------------------------------|---|-----------------|
| t11FcsPlatformLocation (1.3.6.1.2.1.162.1.2.6.1.11) | read-only | SnmpAdminString | OCTET STRING (0 4 ..128) | Physical location of the platform. | As per the MIB. |
| t11FcsPlatformSystemID (1.3.6.1.2.1.162.1.2.6.1.12) | read-only | SnmpAdminString | OCTET STRING (0 4 ..64) | ID of the hosting system that this platform is associated with. | As per the MIB. |
| t11FcsPlatformSysMgmtAddr (1.3.6.1.2.1.162.1.2.6.1.13) | read-only | Unsigned32 | T11FcsListIndexPointerOrZero | List of management addresses for the platform. | As per the MIB. |
| t11FcsPlatformClusterId (1.3.6.1.2.1.162.1.2.6.1.14) | read-only | SnmpAdminString | OCTET STRING (0 4 ..64) | ID of the cluster that this platform is associated with. | As per the MIB. |
| t11FcsPlatformClusterMgmtAddr (1.3.6.1.2.1.162.1.2.6.1.15) | read-only | Unsigned32 | T11FcsListIndexPointerOrZero | List of management addresses for the cluster. | As per the MIB. |
| t11FcsPlatformFC4Types (1.3.6.1.2.1.162.1.2.6.1.16) | read-only | OCTET STRING | OCTET STRING | FC-4 types supported by this platform. | As per the MIB. |

t11FcsNodeNameListTable

About this table

This table contains all the lists of nodes.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11FcsNodeNameListIndex, and t11FcsNodeName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------|----------------------------|-----------------------|-----------------|
| t11FcsNodeNameListIndex (1.3.6.1.2.1.162.1.2.7.1.1) | not-accessible | T11FcsListIndex | Unsigned32 (1..4294967295) | Node name list index. | As per the MIB. |
| t11FcsNodeName (1.3.6.1.2.1.162.1.2.7.1.2) | read-only | OCTET STRING | FcNameIdOrZero | Node name. | As per the MIB. |

t11FcsStatsTable

About this table

This table contains all the statistics related to the Fabric Configuration Server (FCS).

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, and t11FcsFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|-------------|--|--|
| t11FcsInGetReqs (1.3.6.1.2.1.162.1.3.1.1.1) | read-only | Counter 32 | Counter 32 | Number of Get Requests received by the FCS. | As per the MIB. |
| t11FcsOutGetReqs (1.3.6.1.2.1.162.1.3.1.1.2) | read-only | Counter 32 | Counter 32 | Number of Get Requests sent by the FCS. | As per the MIB. |
| t11FcsInRegReqs (1.3.6.1.2.1.162.1.3.1.1.3) | read-only | Counter 32 | Counter 32 | Number of Registration Requests received by the FCS. | When read, this object always returns 0. |
| t11FcsOutRegReqs (1.3.6.1.2.1.162.1.3.1.1.4) | read-only | Counter 32 | Counter 32 | Number of Registration Requests sent by the FCS. | When read, this object always returns 0. |
| t11FcsInDeregReqs (1.3.6.1.2.1.162.1.3.1.1.5) | read-only | Counter 32 | Counter 32 | Number of Deregistration Requests received by the FCS. | When read, this object always returns 0. |
| t11FcsOutDeregReqs (1.3.6.1.2.1.162.1.3.1.1.6) | read-only | Counter 32 | Counter 32 | Number of Deregistration Requests sent by the FCS. | When read, this object always returns 0. |
| t11FcsRejects (1.3.6.1.2.1.162.1.3.1.1.7) | read-only | Counter 32 | Counter 32 | Total number of requests rejected by the FCS. | As per the MIB. |

t11FcsNotifyControlTable

About this table

This table contains control information for notifications generated due to FCS events.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, and t11FcsFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|--------------------------|--|--|-----------------|
| t11FcsReqRejectNotifyEnable (1.3.6.1.2.1.162.1.4.1.1.1) | read-write | INTEGER | TruthValue true(1) false(2) | Specifies if the FCS should generate t11FcsReqRejectNotifyEnable notifications. | As per the MIB. |
| t11FcsDiscoveryCompNotifyEnable (1.3.6.1.2.1.162.1.4.1.1.2) | read-write | INTEGER | TruthValue true(1) false(2) | Specifies if the FCS should generate t11FcsDiscoveryCompNotifyEnable notifications. | As per the MIB. |
| t11FcsMgmtAddrChangeNotifyEnable (1.3.6.1.2.1.162.1.4.1.1.3) | read-write | INTEGER | TruthValue true(1) false(2) | Specifies if the FCS should generate t11FcsMgmtAddrChangeNotifyEnable notifications. | As per the MIB. |
| t11FcsRejectCtCommandString (1.3.6.1.2.1.162.1.4.1.1.4) | read-only | OCTET STRING | OCTET STRING (SIZE (0..255)) | Binary content of the FCS request. | As per the MIB. |
| t11FcsRejectRequestSource (1.3.6.1.2.1.162.1.4.1.1.5) | read-only | OCTET STRING | FcNameIdOrZero | WWN that was the source of the CT_IU contained in the corresponding instance of t11FcsRejectCtCommandString. | As per the MIB. |
| t11FcsRejectReasonCode (1.3.6.1.2.1.162.1.4.1.1.6) | read-only | T11NsGs4RejectReasonCode | none(1), invalidCmdCode(2), invalidVerLevel(3), logicalError(4), invalidIUSize(5), logicalBusy(6), protocolError(7), | Reason code corresponding to the latest FCS request rejected by the local system. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-------------------------------|--|---|-----------------|
| | | | unableToPerformCmdReq(8), cmdNotSupported(9), serverNotAvailable(10), couldNotEstablishSession(11), vendorError(12) | | |
| t11FcsRejectReasonCodeExp (1.3.6.1.2.1.162.1.4.1.1.7) | read-only | T11FcsRejectReasonExplanation | noAdditionalExplanation(1), invNameIdForIEOrPort(2), ieListNotAvailable(3), ieTypeNotAvailable(4), domainIdNotAvailable(5), mgmtIdNotAvailable(6), fabNameNotAvailable(7), ieLogNameNotAvailable(8), mgmtAddrListNotAvailable(9), ieInfoListNotAvailable(10), | Corresponding reason code explanation when the corresponding instance of t11FcsRejectReasonCode has the value: 'unable to perform command request'. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------|--------|--------|---|-------------|----------------|
| | | | portList NotAvail able(11), portTyp eNotAva ilable(12), phyPort NumNot Availabl e(13), attPortN ameList NotAvail able(14) , portStat eNotAva ilable(15), unableT oRegIE LogNam e(16), platform NameN oExist(1 7), platform NameAl readyEx ists(18), platform NodeNa meNoEx ists(19), platform NodeNa meAlrea dyExists (20), resourc eUnavai lable(21), noEntrie sInLunM ap(22), invalidD eviceNa meLeng th(23), | | |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--|---|-----------------|
| | | | multiple Attributes(24), invalidAttributeBlock Length(25), attributesMissing(26) | | |
| t11FcsRejectReasonVendorCode (1.3.6.1.2.1.162.1.4.1.1.8) | read-only | OCTET STRING | OCTET STRING (SIZE(1)) | Registration reject vendor-specific code. | As per the MIB. |

Notifications

This document provides information about the SNMP notifications for T11-FC-FABRIC-CONFIG-SERVER-MIB. It also provides recommended actions to help you remove the error conditions reported through SNMP notifications.

t11FcsRqRejectNotification

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|----------------------|-------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.162.0.1 | FCS request rejected | Error | Major | N/A | OFF |

Description

This notification is generated whenever the FCS on a switch (indicated by the value of t11FamLocalSwitchWwn) rejects an FCS request.

The FCS should update the t11FcsRejectReasonCode, t11FcsRejectReasonCodeExp and t11FcsRejectReasonVendorCode objects with the corresponding reason code, explanation and vendor specific code before sending the notification.

Status control

ON

MIB: Set t11FcsReqRejectNotifyEnable to true(1).

OFF

MIB: Set t11FcsReqRejectNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|-------------------|-------|----------------|----------------------------------|
| 1.3.6.1.2.1.137.1.1.1.1.8 (t11FamLocalSwitchWwn) | Local switch WWN. | No | FcNameIdOrZero | OCTET STRING (SIZE (0 8 16)) |

| OID (object name) | Description | Index | Type | Value range |
|--|---|-------|-------------------------------|---|
| 1.3.6.1.2.1.162.1.4.1.1.6 (t11FcsRejectReasonCode) | Reason code corresponding to the latest FCS request rejected by the local system. | No | T11NsGs4RejectReasonCode | none(1) invalidCmdCode(2) invalidVerLevel(3) logicalError(4) invalidIUSize(5) logicalBusy(6) protocolError(7) unableToPerformCmdReq(8) cmdNotSupported(9) serverNotAvailable(10) couldNotEstabSession(11) vendorError(12) |
| 1.3.6.1.2.1.162.1.4.1.1.7 (t11FcsRejectReasonExplanation) | Corresponding reason code explanation when the corresponding instance of t11FcsRejectReasonCode has the value: 'unable to perform command request'. | No | T11FcsRejectReasonExplanation | noAdditionalExplanation(1) invNameIdForIEOrPort(2) ieListNotAvailable(3) ieTypeNotAvailable(4) domainIdNotAvailable(5) mgmtIdNotAvailable(6) fabNameNotAvailable(7) ieLogNameNotAvailable(8) mgmtAddrListNotAvailable(9) ieInfoListNotAvailable(10) portListNotAvailable(11) portTypeNotAvailable(12) phyPortNumNotAvailable(13) attPortNameListNotAvailable(14) portStateNotAvailable(15) unableToRegIELogName(16) platformNameNoExist(17) platformNameAlreadyExists(18) platformNodeNameNoExists(19) platformNodeNameAlreadyExists(20) resourceUnavailable(21) noEntriesInLunMap(22) invalidDeviceNameLength(23) multipleAttributes(24) invalidAttribBlockLength(25) attributesMissing(26) |
| 1.3.6.1.2.1.162.1.4.1.1.8(t11FcsRejectReasonVendorCode) | Registration reject vendor-specific code. | No | OCTET STRING | SIZE(1) |

Recommended action

To resolve the issue:

1. Verify that the FCS configuration is correct.

2. If the issue persists, contact H3C Support.

t11FcsDiscoveryCompleteNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|------------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.162.0.2 | Discovery completed in VSANs | Informational | N/A | N/A | OFF |

Description

This notification is generated by the FCS on the completion of the discovery of Fabrics in the range that has t11FcsFabricDiscoveryRangeLow at its low end.

Status control

ON

MIB: Set t11FcsDiscoveryCompNotifyEnable to true(1).

OFF

MIB: Set t11FcsDiscoveryCompNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------------------|-------|----------------|---------------------|
| 1.3.6.1.2.1.162.1.1.1.1.1 (t11FcsFabricDiscoveryRangeLow) | Start VSAN ID of the VSAN range. | Yes | T11FabricIndex | Unsigned32(0..4095) |

Recommended action

No action is required.

t11FcsMgmtAddrChangeNotify

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------|---------------------------|---------------|----------|-----------------------|----------------|
| 1.3.6.1.2.1.162.0.3 | Management address change | Informational | N/A | N/A | OFF |

Description

This notification is generated by the FCS whenever the management address of an IE changes, i.e., whenever an entry in the t11FcsMgmtAddrListTable changes.

Status control

ON

MIB: Set t11FcsMgmtAddrChangeNotifyEnable to true(1).

OFF

MIB: Set t11FcsMgmtAddrChangeNotifyEnable to false(2).

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|----------------------|-------|----------------|-------------------------------------|
| 1.3.6.1.2.1.162.1.4.2 (t11FcsMgmtAddrChangeFabricIndex) | VSAN ID. | Yes | T11FabricIndex | Unsigned32(0..4095) |
| 1.3.6.1.2.1.162.1.4.3 (t11FcsMgmtAddrChangeleName) | Local switch WWN. | No | FcNameIdOrZero | OCTET STRING (SIZE (0 8 16)) |

Recommended action

No action is required.

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T11-FC-NAME-SERVER-MIB

About this MIB

Use this MIB to implement the functions supported by RFC 4438. A switch does not support this MIB when it is operating in NPV mode.

MIB file name

rfc4438-t11-fc-name-server.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).t11FcNameServerMIB(135)

Tabular objects

t11NsInfoSubsetTable

About this table

This table contains one entry for each Name Server Information Subset within each Fibre Channel management instance.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|---------------|
| Not supported | Supported | Not supported | Not supported |

Columns

The table indexes are fcmlInstanceIndex and t11NsInfoSubsetIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|--------------------------------|--|-----------------|
| t11NsInfoSubsetIndex (1.3.6.1.2.1.135.1.1.1.1.1) | not-accessible | Unsigned32 | Unsigned32 (1...4294967295) | An arbitrary integer value that uniquely identifies this Name Server Information Subset. | As per the MIB. |
| t11NsInfoSubsetSwitchIndex (1.3.6.1.2.1.135.1.1.1.1.2) | read-only | Unsigned32 | Unsigned32 (0...4294967295) | Switch index. | As per the MIB. |
| t11NsInfoSubsetTableLastChange (1.3.6.1.2.1.135.1.1.1.1.3) | read-only | TimeStamp | Timestamps (0..4294967295) | Last entry update time. | As per the MIB. |
| t11NsInfoSubsetNumRows (1.3.6.1.2.1.135.1.1.1.1.4) | read-only | Integer32 | Integer32 (0..2147483647) | Number of Nx_Ports currently registered in this Name Server | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|-------------------|---|-----------------|
| | | | | Information Subset. | |
| t11NsInfoSubsetTotalRejects (1.3.6.1.2.1.135.1.1.1.1.5) | read-only | Counter 32 | Counter 32 | Total number of (CT_IU) Requests for Name Server functions that were rejected for inclusion in this Name Server Information Subset. | As per the MIB. |
| t11NsInfoSubsetRejReqNotfyEnable (1.3.6.1.2.1.135.1.1.1.1.6) | read-write | TruthValue | true(1), false(2) | Indicates notifications are generated by rejections of requests to register information in this Name Server Information Subset. | As per the MIB. |

t11NsRegTable

About this table

This table contains entries for all Nx_Ports registered in the identified Name Server Information Subsets across all Fabrics for which such subsets contain information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, t11NsInfoSubsetIndex, t11NsRegFabricIndex, and t11NsRegPortIdentifier.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|---------------------------|-----------------------------|-----------------|
| t11NsRegFabricIndex (1.3.6.1.2.1.135.1.1.2.1.1) | not-accessible | T11FabricIndex | Unsigned32 (0..4095) | VSAN ID. | As per the MIB. |
| t11NsRegPortIdentifier (1.3.6.1.2.1.135.1.1.2.1.2) | not-accessible | FcAddressIdOrZero | OCTET STRING (0 3) | FC ID of the Nx_Port. | As per the MIB. |
| t11NsRegPortName (1.3.6.1.2.1.135.1.1.2.1.3) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Port WWN of the Nx_Port. | As per the MIB. |
| t11NsRegNodeName (1.3.6.1.2.1.135.1.1.2.1.4) | read-only | FcNameIdOrZero | OCTET STRING (0 8 16) | Node WWN of the Nx_Port. | As per the MIB. |
| t11NsRegClassOfSvc (1.3.6.1.2.1.135.1.1.2.1.5) | read-only | FcClasses | BITS { classF(0 | Class of service indicator. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------------|---|---|---|
| | | |), class1(1) , class2(2) , class3(3) , class4(4) , class5(5) , class6(6) } | | |
| t11NsRegNodeIpAddress (1.3.6.1.2.1.135.1.1.2.1.6) | read-only | OCTET STRING | OCTET STRING (0 16) | IP address of the node of the Nx_Port. | As per the MIB. |
| t11NsRegProcAssoc (1.3.6.1.2.1.135.1.1.2.1.7) | read-only | OCTET STRING | OCTET STRING (0 8) | Fibre Channel Initial Process Associator. | As per the MIB. Obsoleted in the FC-GS-6(09-153v1). |
| t11NsRegFc4Type (1.3.6.1.2.1.135.1.1.2.1.8) | read-only | OCTET STRING | OCTET STRING (0 32) | FC-4 protocol types supported by the Nx_Port. | As per the MIB. |
| t11NsRegPortType (1.3.6.1.2.1.135.1.1.2.1.9) | read-only | FcPortT ype | Unsigne d32 | Port type. | As per the MIB. |
| t11NsRegPortIpAddress (1.3.6.1.2.1.135.1.1.2.1.10) | read-only | OCTET STRING | OCTET STRING (0 16) | IP address of the associated port. | As per the MIB. Obsoleted in the FC-GS-6(09-153v1). |
| t11NsRegFabricPortName (1.3.6.1.2.1.135.1.1.2.1.11) | read-only | FcName IdOrZero | OCTET STRING (0 8 1 6) | Fabric Port Name (WWN) of the Fx_Port to which the Nx_Port is attached. | As per the MIB. |
| t11NsRegHardAddress (1.3.6.1.2.1.135.1.1.2.1.12) | read-only | FcAddre ssIdOrZ ero | OCTET STRING (0 3) | Hardware address. | As per the MIB. |
| t11NsRegSymbolicPortName (1.3.6.1.2.1.135.1.1.2.1.13) | read-only | SnmpAd minStrin g | OCTET STRING (0...255) | User-defined name of the port. | As per the MIB. |
| t11NsRegSymbolicNodeName (1.3.6.1.2.1.135.1.1.2.1.14) | read-only | SnmpAd minStrin g | OCTET STRING (0...255) | User-defined name of the node of this port. | As per the MIB. |
| t11NsRegFc4Features (1.3.6.1.2.1.135.1.1.2.1.15) | read-only | OCTET STRING | OCTET STRING (0 128) | FC-4 Features associated with FC-4 Types on this port. | As per the MIB. |

t11NsRejectTable

About this table

This table contains information about the most recent Name Server Registration Request failures for various ports on various Fabrics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, t11NsInfoSubsetIndex, t11NsRegFabricIndex, and t11NsRegPortIdentifier.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------------|--|--|-----------------|
| t11NsRejectCtCommandString (1.3.6.1.2.1.135.1.1.4.1.1) | read-only | OCTET STRING | OCTET STRING 1:0..255 | Binary content of the Registration Request. | As per the MIB. |
| t11NsRejectReasonCode (1.3.6.1.2.1.135.1.1.4.1.2) | read-only | T11NsGs4RejectReason Code | none(1), invalidCmdCode(2), invalidVerLevel(3), logicalError(4), invalidIUSize(5), logicalBusy(6), protocolError(7), unableToPerformCmdReq(8), cmdNotSupported(9), serverNotAvailable(10), couldNotEstablishSession(11), vendorError(12) | Registration reject reason code. | As per the MIB. |
| t11NsRejReasonCodeExp (1.3.6.1.2.1.135.1.1.4.1.3) | read-only | T11NsRejReasonCodeExpl | noAdditionalExplanation(1), portIdentifierNotRegistered(2), portNameNotRegistered(3), nodeNameNotRegistered(4), | Registration reject reason code explanation. | As per the MIB. |

| | | | | | |
|--|--|--|---|--|--|
| | | | classOfServiceNotRegistered(5), nodeIpAddressNotRegistered(6), ipAddressNotRegistered(7), fc4TypeNotRegistered(8), symbolicPortNameNotRegistered(9), symbolicNodeNameNotRegistered(10), portTypeNotRegistered(11), portIpAddressNotRegistered(12), fabricPortNameNotRegistered(13), hardAddressNotRegistered(14), fc4DescriptorNotRegistered(15), fc4FeaturesNotRegistered(16), accessDenied(17), unacceptablePortIdentifier(18), databaseEmpty(19), noObjectRegInSpecifiedScope(20), domainIdNotPresent(21), portIdNotPresent(22), noDeviceAttached(23), authorizat | | |
|--|--|--|---|--|--|

| | | | | | |
|---|-----------|-----------------|---|---|-----------------|
| | | | ionExcept ion(24), authentic ationExce ption(25), database Full(26) | | |
| t11NsRejReasonVendorCode (1.3.6.1.2.1.135.1.1.4.1.4) | read-only | OCTET STRING | OCTET STRING (1) | Registration reject vendor-specific code. | As per the MIB. |

t11NsStatsTable

About this table

This table contains per-Fabric state and statistics for operations upon the identified Name Server Information Subsets.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, t11NsInfoSubsetIndex, and t11NsRegFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------|---------------|--|-----------------|
| t11NsInGetReqs (1.3.6.1.2.1.135.1.2.1.1.1) | read-only | Counter 32 | Counter 32 | Total number of (CT_IU) Get Requests received requesting information from this Name Server Information Subset on this Fabric. | As per the MIB. |
| t11NsOutGetReqs (1.3.6.1.2.1.135.1.2.1.1.2) | read-only | Counter 32 | Counter 32 | Total number of (CT_IU) Get Requests sent in order to obtain information needed in this Name Server Information Subset on this Fabric. | As per the MIB. |
| t11NsInRegReqs (1.3.6.1.2.1.135.1.2.1.1.3) | read-only | Counter 32 | Counter 32 | Total number of (CT_IU) Registration Requests received to register information in the Name Server Information Subset on this Fabric. | As per the MIB. |
| t11NsInDeRegReqs (1.3.6.1.2.1.135.1.2.1.1.4) | read-only | Counter 32 | Counter 32 | Total number of (CT_IU) | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|---------------------|---|-----------------|
| | | | | De-registration Requests received to de-register information from this Name Server Information Subset on this Fabric. | |
| t11NsInRscns (1.3.6.1.2.1.135.1.2.1.1.5) | read-only | Counter 32 | Counter 32 | Total number of received RSCNs, indicating Name Server-related changes relating to this Name Server Information Subset on this Fabric. | As per the MIB. |
| t11NsOutRscns (1.3.6.1.2.1.135.1.2.1.1.6) | read-only | Counter 32 | Counter 32 | Total number of transmitted RSCNs, indicating Name Server-related changes relating to this Name Server Information Subset on this Fabric. | As per the MIB. |
| t11NsRejects (1.3.6.1.2.1.135.1.2.1.1.7) | read-only | Counter 32 | Counter 32 | Total number of CT_IU Requests for Name Server functions on this Name Server Information Subset on this Fabric that were rejected. | As per the MIB. |
| t11NsDatabaseFull (1.3.6.1.2.1.135.1.2.1.1.8) | read-only | TruthValue | true(1) false(2) | Indicates whether the database containing this Name Server Information Subset is full. | As per the MIB. |

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T11-FC-ROUTE-MIB

About this MIB

Use this MIB to implement the functions supported by RFC 4625. A switch does not support this MIB when it is operating in NPV mode.

MIB file name

rfc4625-t11-fc-route.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).t11FcRouteMIB(144)

Tabular objects

t11FcRouteFabricTable

About this table

This table obtains routing information in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, and t11FcRouteFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------|------------------------------|--------------------|-----------------|
| t11FcRouteFabricIndex (1.3.6.1.2.1.144.1.1.1.1) | not-accessible | T11FabricIndex | Unsigned32 (0..4095) | VSAN ID. | As per the MIB. |
| t11FcRouteFabricLastChange (1.3.6.1.2.1.144.1.1.1.2) | read-only | TimeStamp | TimeTicks (0..4294967295) | Route update time. | As per the MIB. |

t11FcRouteTable

About this table

This table obtains information about a specific route.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex , fcmSwitchIndex, t11FcRouteFabricIndex, t11FcRouteDestAddrId, t11FcRouteDestMask, t11FcRouteSrcAddrId, t11FcRouteSrcMask, t11FcRouteInInterface, t11FcRouteProto, and t11FcRouteOutInterface.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------|--|--|-----------------------------------|
| t11FcRouteDestAddrId (1.3.6.1.2.1.144.1.2.1.1) | not-accessible | FcAddressIdOrZero | OCTET STRING (3) | Destination FC address. | As per the MIB. |
| t11FcRouteDestMask (1.3.6.1.2.1.144.1.2.1.2) | not-accessible | FcAddressIdOrZero | OCTET STRING (0 3) | Mask for the destination FC address. | As per the MIB. |
| t11FcRouteSrcAddrId (1.3.6.1.2.1.144.1.2.1.3) | not-accessible | FcAddressIdOrZero | OCTET STRING (0 3) | Source FC address. | As per the MIB. |
| t11FcRouteSrcMask (1.3.6.1.2.1.144.1.2.1.4) | not-accessible | FcAddressIdOrZero | OCTET STRING (0 3) | Mask for the source FC address. | As per the MIB. |
| t11FcRouteInInterface (1.3.6.1.2.1.144.1.2.1.5) | not-accessible | Interface IndexOrZero | Integer32 (0.. 2147483647) | Input interface index. | As per the MIB. |
| t11FcRouteProto (1.3.6.1.2.1.144.1.2.1.6) | not-accessible | INTEGER | INTEGER 1:other(1) 2:local(2) 3:netmgmt(3) 4:fsfp(4) | Mechanism via which the route was learned. | As per the MIB. |
| t11FcRouteOutInterface (1.3.6.1.2.1.144.1.2.1.7) | not-accessible | Interface IndexOrZero | Integer32 (0.. 2147483647) | Output interface index. | As per the MIB. |
| t11FcRouteDomainId (1.3.6.1.2.1.144.1.2.1.8) | read-create | FcDomainIdOrZero | Integer32 (0.. 239) | Domain ID of next hop switch.. | Supports only the read operation. |
| t11FcRouteMetric (1.3.6.1.2.1.144.1.2.1.9) | read-create | Unsigned32 | Unsigned32 (0.. 65536) | Routing metric for the route.. | Supports only the read operation. |
| t11FcRouteType (1.3.6.1.2.1.144.1.2.1.10) | read-create | INTEGER | INTEGER 1:local(1) 2:remote | Route type. | Supports only the read operation. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|--|--|---|
| | | | (2) | | |
| t11FcRouteIfDown (1.3.6.1.2.1.144.1.2.1.11) | read-create | INTEGER | INTEGER 1:remove(1) 2:retain(2) | Indicates what happens to the route when the output interface is operationally down. | Supports only the read operation. |
| t11FcRouteStorageType (1.3.6.1.2.1.144.1.2.1.12) | read-create | Storage Type | INTEGER other(1) volatile(2) nonVolatile(3) permanent(4) readOnly(5) | Storage type. | Supports only the read operation. When read, this object always returns Volatile (2). |
| t11FcRouteRowStatus (1.3.6.1.2.1.144.1.2.1.13) | read-create | RowStatus | INTEGER active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | Supports only the read operation. |

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T11-FC-VIRTUAL-FABRIC-MIB

About this MIB

Use this MIB to implement the functions supported by RFC 4747. A switch does not support this MIB when it is operating in NPV mode.

MIB file name

rfc4747-t11-fc-virtual-fabric.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).t11FcVirtualFabricMIB(147)

Tabular objects

t11vfPortTable

About this table

This table obtains information about FC or VFC interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

This table does not contain indexes.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|----------------|---------------------------------------|--|--|
| t11vfPortVfId (1.3.6.1.2.1.147.1.3.1.1) | read-write | T11FabricIndex | Unsigned32 (1..3839) | Access VSAN. | Only the read operation is supported for VFC interfaces. |
| t11vfPortTaggingAdminStatus (1.3.6.1.2.1.147.1.3.1.2) | read-write | INTEGER | INTEGER off(1) on(2) auto(3) | Administrative status of Virtual Fabric tagging. | Only the read operation is supported for VFC interfaces. When read, this object always returns on(2) for VFC interfaces. |
| t11vfPortTaggingOperStatus (1.3.6.1.2.1.147.1.3.1.3) | read-only | INTEGER | INTEGER off(1) on(2) | Operational status of Virtual Fabric tagging. | When an interface is down, the value is off(1). When read, this object always returns on(2) for VFC interfaces. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|--|---------------|--|
| t11vfPortStorageType (1.3.6.1.2.1.147.1.3.1.4) | read- write | Storage Type | INTEGER other(1) volatile(2)) nonVolatile(3) permanent(4) readOnly(5) | Storage type. | Only the read operation is supported for VFC interfaces. When read, this object always returns volatile(2) for VFC interfaces. |

t11vfLocallyEnabledTable

About this table

This table obtains trunk VSAN information about FC or VFC interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are t11vfLocallyEnabledPortIfIndex and t11vfLocallyEnabledVfId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|--|---|-----------------|
| t11vfLocallyEnabledPortIfIndex (1.3.6.1.2.1.147.1.4.1.1) | not-accessible | Interface Index | Integer32 (1..4294967295) | Interface index. | As per the MIB. |
| t11vfLocallyEnabledVfId (1.3.6.1.2.1.147.1.4.1.2) | not-accessible | T11FabricIndex | Unsigned32 (1..3839) | VSAN ID. | As per the MIB. |
| t11vfLocallyEnabledOperStatus (1.3.6.1.2.1.147.1.4.1.3) | read-only | INTEGER | INTEGER 1:off(1) 2:on(2) | Operational status of Virtual Fabric tagging. | As per the MIB. |
| t11vfLocallyEnabledRowStatus (1.3.6.1.2.1.147.1.4.1.4) | read-create | RowStatus | INTEGER active(1) notInService(2) notReady(3) createAndGo(4) createAndWait(5) destroy(6) | Row status. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|--------------|--|---------------|--|
| t11vfLocallyEnabledStorageType (1.3.6.1.2.1.147.1.4.1.5) | read-create | Storage Type | INTEGER other(1) volatile(2)) nonVolatile(3) permanent(4) readOnly(5) | Storage type. | When read, this object always returns volatile(2). |

t11vfCoreSwitchTable

About this table

This table obtains physical switch information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmlInstanceIndex and t11vfCoreSwitchSwitchName.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------|---|---|---|
| t11vfCoreSwitchSwitchName (1.3.6.1.2.1.147.1.1.1.1) | not-accessible | FcName IdOrZero | OCTET STRING (8 16) | Physical switch WWN. | As per the MIB. |
| t11vfCoreSwitchMaxSupported (1.3.6.1.2.1.147.1.1.1.2) | read-write | Unsigned 32 | Unsigned 32 (1..4095) | Maximum number of VSANs supported. | Supports only the read operation. |
| t11vfCoreSwitchStorageType (1.3.6.1.2.1.147.1.1.1.3) | read-write | Storage Type | INTEGER 1:other(1) 2:volatile (2) 3:nonVolatile(3) 4:permanent(4) 5:readOnly(5) | Storage type. | Supports only the read operation. When read, this object always returns readOnly(5). |

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T11-FC-ZONE-SERVER-MIB

About this MIB

Use this MIB to implement the functions supported by RFC 4936. A switch does not support this MIB when it is operating in NPV mode.

MIB file name

rfc4936-t11-fc-zone-server.mib

Root object

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).t11ZoneServerMIB(160)

Tabular objects

t11ZsActiveTable

About this table

This table obtains information about the active zone set in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, and t11ZsServerFabricIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------|------------------------------|---|-----------------|
| t11ZsActiveZoneSetName (1.3.6.1.2.1.160.1.1.10.1.1) | read-only | T11ZoneName | OCTET STRING (1..64) | Active zone set name. | As per the MIB. |
| t11ZsActiveActivateTime (1.3.6.1.2.1.160.1.1.10.1.2) | read-only | TimeStamp | TimeTicks (0..4294967295) | Time when the zone set is most recently activated since the last system reboot. | As per the MIB. |

t11ZsActiveZoneTable

About this table

This table obtains information about zones in the active zone set in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11ZsServerFabricIndex, and t11ZsActiveZoneIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|-------------------------------|--|---|
| t11ZsActiveZoneIndex (1.3.6.1.2.1.160.1.1.11.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Zone index. | As per the MIB. |
| t11ZsActiveZoneName (1.3.6.1.2.1.160.1.1.11.1.2) | read-only | T11ZoningName | OCTET STRING (1..64) | Zone name. | As per the MIB. |
| t11ZsActiveZoneBroadcastZoning (1.3.6.1.2.1.160.1.1.11.1.3) | read-only | TruthValue | true(1) false(2) | Indicates whether broadcast zoning is enabled. | When read, this object always returns false(2). |
| t11ZsActiveZoneHardZoning (1.3.6.1.2.1.160.1.1.11.1.4) | read-only | TruthValue | true(1) false(2) | Indicates whether hardware zoning is enabled. | When read, this object always returns true(1). |

t11ZsActiveZoneMemberTable

About this table

This table obtains information about members of a zone in the active zone set in a VSAN.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are fcmInstanceIndex, fcmSwitchIndex, t11ZsServerFabricIndex, t11ZsActiveZoneIndex, and t11ZsActiveZoneMemberIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------------|---------------|-----------------|
| t11ZsActiveZoneMemberIndex (1.3.6.1.2.1.160.1.1.12.1.1) | not-accessible | Unsigned32 | Unsigned32 (1..4294967295) | Member index. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------------------|---|--------------|-----------------|
| t11ZsActiveZoneMemberFormat (1.3.6.1.2.1.160.1.1.12.1.2) | read-only | T11ZsZoneMemberType | Unsigned32 (0..255) 01 - N_Port_Name 02 - Domain_ID and physical port 03 - N_Port_ID 04 - Node_Name 05 - Alias Name 06 - F_Port_Name E0-FF (hex) - Vendor Specific | Member type. | As per the MIB. |
| t11ZsActiveZoneMemberID (1.3.6.1.2.1.160.1.1.12.1.3) | read-only | OCTET STRING | OCTET STRING (1..255) | Member ID. | As per the MIB. |

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HH3C-OFP-MIB

About this MIB

OpenFlow is the communications interface defined between the control and forwarding layers of a Software-Defined Networking architecture. With OpenFlow, you can perform centralized data forwarding management for physical and virtual devices through controllers.

MIB file name

hh3c-ofp.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cOfp(167)

Scalar objects

hh3cOfpTrapDisconnectReason

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------------------|-----------|-------------|---|-----------------|
| hh3cOfpTrapDisconnectReason (1.3.6.1.4.1.25506.2.167.2.1.1) | accessible-for-notify | Integer32 | 0..10 | Reason why an OpenFlow instance was disconnected from a controller. | As per the MIB. |

Tabular objects

hh3cOfpInstanceControllerTable

About this table

This table contains controller information for an OpenFlow instance.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cOfpInstanceID and hh3cOfpInstanceControllerID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------|-------------|----------------------------------|-----------------|
| h3cOFPIInstanceID (1.3.6.1.4.1.25506.2.167.1.1.1.1) | not-accessible | Integer32 | 1..4094 | ID of an OpenFlow instance. | As per the MIB. |
| h3cOFPIInstanceControllerID (1.3.6.1.4.1.25506.2.167.1.1.1.2) | not-accessible | Integer32 | 0..63 | Index of an OpenFlow controller. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------------|-------------------------------------|---|-----------------|
| h3cOfpInstanceControllerRole (1.3.6.1.4.1.25506.2.167.1.1.1.3) | read-only | INTEGER | equal(1), master(2), slave(3) | Role of the OpenFlow controller. | As per the MIB. |
| hh3cOfpInstanceCtrConnectType (1.3.6.1.4.1.25506.2.167.1.1.1.4) | read-only | INTEGER | tcp(1), ssl(2) | Type of the connection between the OpenFlow instance and the controller. | As per the MIB. |
| hh3cOfpInstanceCtrConnectState (1.3.6.1.4.1.25506.2.167.1.1.1.5) | read-only | INTEGER | idle(0), established(1) | State of the connection between the OpenFlow instance and the controller. | As per the MIB. |
| hh3cOfpInstanceCtrSSLPolicy (1.3.6.1.4.1.25506.2.167.1.1.1.6) | read-only | DisplayString | OCTET STRING (SIZE(0..31)) | Name of the SSL client policy used for SSL connections. | As per the MIB. |
| hh3cOfpInstanceCtrVRFName (1.3.6.1.4.1.25506.2.167.1.1.1.7) | read-only | DisplayString | OCTET STRING (SIZE(0..31)) | Name of the VRF to which the controller belongs. | As per the MIB. |
| hh3cOfpInstanceCtrIPType (1.3.6.1.4.1.25506.2.167.1.1.1.8) | read-only | InetAddressType | Standard MIB values. | Type of the OpenFlow controller's IP address. | As per the MIB. |
| hh3cOfpInstanceCtrIPAddress (1.3.6.1.4.1.25506.2.167.1.1.1.9) | read-only | InetAddress | OCTET STRING (SIZE(0..255)) | IP address of the OpenFlow controller. | As per the MIB. |
| hh3cOfpInstanceCtrPort (1.3.6.1.4.1.25506.2.167.1.1.1.10) | read-only | Integer32 | 1..65535 | Port number of the OpenFlow controller. | As per the MIB. |

hh3cOfpInstanceFlowTableTable

About this table

This table contains flow table information for an OpenFlow instance.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cOfpFlowTableInstanceID and hh3cOfpInstanceTableID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------|----------------------|-----------------------------|-----------------|
| hh3cOfpFlowTableInstanceID (1.3.6.1.4.1.25506.2.167.1.2.1.1) | not-accessible | Integer32 | 1..4094 | ID of an OpenFlow instance. | As per the MIB. |
| hh3cOfpInstanceTableID (1.3.6.1.4.1.25506.2.167.1.2.1.2) | not-accessible | Integer32 | 0..254 | ID of a flow table. | As per the MIB. |
| hh3cOfpInstanceFlowEntryNumCtrl | read-only | Unsigned32 | Standard MIB values. | Number of flow entries | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|------------|----------------------|---|-----------------|
| (1.3.6.1.4.1.25506.2.167.1.2.1.3) | | | | deployed by the controller. | |
| hh3cOfpInstanceFlowEntryTotalNum (1.3.6.1.4.1.25506.2.167.1.2.1.4) | read-only | Unsigned32 | Standard MIB values. | Total number of flow entries in the table. | As per the MIB. |
| hh3cOfpInstanceFlowEntryLimit (1.3.6.1.4.1.25506.2.167.1.2.1.5) | read-only | Unsigned32 | Standard MIB values. | Maximum number of flow entries supported by the flow table. | As per the MIB. |

Notifications

This section contains the HH3C-OFP-MIB notifications.

hh3cOfpControllerDisconnect

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|--------------------|----------|---|----------------|
| 1.3.6.1.4.1.25506.2.167.2.2.0.1 | Disconnection of the connection between an OpenFlow instance and the controller. | Error notification | Major | 1.3.6.1.4.1.25506.2.167.2.2.0.2(hh3cOfpControllerConnect) | ON |

Description

This notification is generated when the connection between an OpenFlow instance and the controller is disconnected.

Status control

ON

CLI: Use the `snmp-agent trap enable` command.

OFF

CLI: Use the `undo snmp-agent trap enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|--|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.167.1.1.1.1 (hh3cOfpInstanceId) | ID of an OpenFlow instance | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.167.1.1.1.2 (hh3cOfpInstanceControllerID) | ID of the OpenFlow controller | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.167.2.1.1 (hh3cOfpTrapDisconnectReason) | Reason why the OpenFlow instance was disconnected from a controller. | No | Integer32 | Standard MIB values. |

Recommended action

To resolve the issue:

1. Check whether OpenFlow connection backup is disabled. You can ignore this notification if the generation of this notification is triggered by an active/standby switchover.
2. Check the link between the device and the controller.
3. If the issue persists, contact H3C Support.

hh3cOfpControllerConnect

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|--|-----------------------|----------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.167.2.2.0.2 | Establishment of connection between an OpenFlow instance and the controller. | Recovery notification | N/A | N/A | ON |

Description

This notification is generated when the connection is established between an OpenFlow instance and the controller.

Status control

ON

CLI: Use the `snmp-agent trap enable` command.

OFF

CLI: Use the `undo snmp-agent trap enable` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|--------------------------------|-------|-----------|----------------------|
| 1.3.6.1.4.1.25506.2.167.1.1.1.1 (hh3cOfpInstanceId) | ID of an OpenFlow instance. | Yes | Integer32 | Standard MIB values. |
| 1.3.6.1.4.1.25506.2.167.1.1.1.2 (hh3cOfpInstanceControllerID) | ID of the OpenFlow controller. | Yes | Integer32 | Standard MIB values. |

Recommended action

No action is required.

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HH3C-SPB-MIB

About this MIB

Use this MIB to management the global SPBM status, interface-specific SPBM status, and B-VLAN and SPBM multicast replication mode of a VSI.

MIB file name

hh3c-spb.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506).hh3cCommon(2).hh3cSpb(128)

Scalar objects

hh3cSpbSysStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|---------|---------------------------|---------------------|-----------------|
| hh3cSpbSysStatus (1.3.6.1.4.1.25506.2.128.1.1.1) | read-write | INTEGER | enabled(1) disabled(2) | Global SPBM status. | As per the MIB. |

hh3cSpbMulticastBVlanStatus

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---------------------------|---------------------------------|-----------------|
| hh3cSpbMulticastBVlanStatus (1.3.6.1.4.1.25506.2.128.1.1.2) | read-write | INTEGER | enabled(1) disabled(2) | Global multicast B-VLAN status. | As per the MIB. |

Tabular objects

hh3cSpbIfTable

About this table

Use this table to obtain the status of SPBM on an interface.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is ifIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|---------|---------------------------|--------------|-----------------|
| hh3cSpbIfStatus (1.3.6.1.4.1.25506.2.128.1.2.1.1.1) | read-write | INTEGER | enabled(1) disabled(2) | SPBM status. | As per the MIB. |

hh3cSpbSrvTable

About this table

Use this table to manage B-VLAN and SPBM multicast replication mode settings of a VSI.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table indexes are h3cSpbSrvTableEntryTopIx and h3cSpbSrvTableEntrySid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------|---------------------------|----------------------------------|-----------------|
| hh3cSpbSrvTableEntryTopIx (1.3.6.1.4.1.25506.2.128.1.2.2.1.1) | not-accessible | Unsigned 32 | Standard MIB values. | Topology ID. | As per the MIB. |
| hh3cSpbSrvTableEntrySid(1.3.6.1.4.1.25506.2.128.1.2.2.1.2) | not-accessible | Unsigned 32 | Unsigned32(255..16777215) | I-SID. | As per the MIB. |
| hh3cSpbSrvTableEntryBaseVid(1.3.6.1.4.1.25506.2.128.1.2.2.1.3) | read-write | VlanIdOr None | Integer32 (0 1..4094) | B-VLAN. | As per the MIB. |
| hh3cSpbSrvTableEntryMode (1.3.6.1.4.1.25506.2.128.1.2.2.1.4) | read-write | INTEGER | headEnd(1) tandem(2) | SPBM multicast replication mode. | As per the MIB. |

Notifications

hh3cSpbSPSourceConflictTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------------|-------------|--------------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.128.1.3.0.1 | SPSource ID conflict. | Fault alarm | Notification | - | ON |

Description

This notification is generated if a remote SPSource ID and the local SPSource ID are identical.

Status control

ON

CLI: Use the `snmp-agent trap enable spbm spsource-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable spbm spsource-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|--|-------------------------|-------|------------------------|------------------|
| 1.3.6.1.4.1.25506.2.128.1.3.1.1 (hh3cSpbConflictSysID) | Remote SPSource ID. | No | MacAddress | OCTET STRING (6) |
| 1.3.6.1.4.1.25506.2.128.1.3.1.2 (hh3cSpbConflictSPSourceID) | Conflicted SPSource ID. | No | IEEE8021SpbmSPsourceId | OCTET STRING (3) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Modify the local or remote SPSource ID.

If you cannot resolve the issue, contact H3C Support.

hh3cSpbBMacConflictTrap

Basic information

| OID | Event | Type | Severity | Recovery notification | Default status |
|---------------------------------|-----------------|-------------|--------------|-----------------------|----------------|
| 1.3.6.1.4.1.25506.2.128.1.3.0.2 | B-MAC conflict. | Fault alarm | Notification | - | ON |

Description

This notification is generated if a remote B-MAC and the local B-MAC are identical.

Status control

ON

CLI: Use the `snmp-agent trap enable spbm b-mac-conflict` command.

OFF

CLI: Use the `undo snmp-agent trap enable spbm b-mac-conflict` command.

Objects

| OID (object name) | Description | Index | Type | Value range |
|---|---------------------|-------|------------|------------------|
| 1.3.6.1.4.1.25506.2.128.1.3.1.1 (hh3cSpbConflictSysID) | Remote SPSource ID. | No | MacAddress | OCTET STRING (6) |
| 1.3.6.1.4.1.25506.2.128.1.3.1.3 (hh3cSpbConflictBMac) | Conflicted B-MAC. | No | MacAddress | OCTET STRING (6) |

This table does not contain indexes. For information about the index or indexes of a MIB object instance in an SNMP variable binding, see the section for that MIB object.

Recommended action

Modify the local or remote B-MAC.

If you cannot resolve the issue, contact H3C Support.

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IEEE8021-SPB-MIB

About this MIB

Use this MIB to configure or obtain information about basic SPB parameters.

MIB file name

ieee8021-spb.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbered-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021SpbMib(26)

Scalar objects

ieee8021SpbSysAreaAddress

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------------|---------------------|-------------------|-----------------------------------|
| ieee8021SpbSysAreaAddress (1.3.111.2.802.1.1.26.1.1.1) | read-write | IEEE8021SpbAreaAddress | OCTET STRING (3) | SPB area address. | Supports only the read operation. |

ieee8021SpbSysId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|------------|---------------------|----------------|-----------------------------------|
| ieee8021SpbSysId (1.3.111.2.802.1.1.26.1.1.2) | read-write | MacAddress | OCTET STRING (6) | SPB system ID. | Supports only the read operation. |

ieee8021SpbSysControlAddr

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|---------------------|--|-----------------|
| ieee8021SpbSysControlAddr (1.3.111.2.802.1.1.26.1.1.3) | read-write | MacAddress | OCTET STRING (6) | Control address of SPB protocol packets. | As per the MIB. |

ieee8021SpbSysName

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|--------------|----------------------|------------------|---|
| ieee8021SpbSysName (1.3.111.2.802.1.1.26.1.1.4) | read-only | OCTET STRING | OCTET STRING (0..32) | SPB system name. | The return value is a zero-length string if the actual system name exceeds 32 characters. |

ieee8021SpbSysBridgePriority

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------------------------|------------------|----------------------|-----------------|
| ieee8021SpbSysBridgePriority (1.3.111.2.802.1.1.26.1.1.5) | read-only | IEEE8021SpbBridgePriority | OCTET STRING (2) | SPB bridge priority. | As per the MIB. |

ieee8021SpbmSysSPSourceId

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------------|------------------|-------------------------------|-----------------|
| ieee8021SpbmSysSPSourceId (1.3.111.2.802.1.1.26.1.1.6) | read-write | IEEE8021SpbmSPSourceId | OCTET STRING (3) | SPBM shortest path source ID. | As per the MIB. |

ieee8021SpbvSysMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------------|---|-------------------|----------------|
| ieee8021SpbvSysMode (1.3.111.2.802.1.1.26.1.1.7) | read-write | IEEE8021SpbMode | INTEGER { auto(1), manual(2) } | SPBV system mode. | Not supported. |

ieee8021SpbmSysMode

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------------|---|--|-----------------|
| ieee8021SpbmSysMode (1.3.111.2.802.1.1.26.1.1.8) | read-write | IEEE8021SpbmMode | INTEGER { auto(1), manual(2) } | SPBM shortest path source system mode. | As per the MIB. |

ieee8021SpbSysDigestConvention

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------------------------|--|----------------------------------|-----------------|
| ieee8021SpbSysDigestConvention (1.3.111.2.802.1.1.26.1.1.9) | read-write | IEEE8021SpbDigestConvention | INTEGER{ off(1), loopFreeBoth(2), loopFreeMcastOnly(3) } | SPB digest agreement convention. | As per the MIB. |

Tabular objects

ieee8021SpbMtidStaticTable

About this table

This table contains SPB static topology information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ieee8021SpbMtidStaticEntryMtid and ieee8021SpbToplX.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------|---|---|--|
| ieee8021SpbMtidStaticEntryMtid (1.3.111.2.802.1.1.26.1.2.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | IS-IS multiple topology ID (MTID) of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbMtidStaticEntryMtidOverload (1.3.111.2.802.1.1.26.1.2.1.2) | read-create | TruthValue | true(1), false(2) | Whether to set the overload bit. | As per the MIB. |
| ieee8021SpbMtidStaticEntryRowStatus (1.3.111.2.802.1.1.26.1.2.1.3) | read-create | RowStatus | Active(1), CreateAndGo(4), Destroy(6) | Row status. | N/A |
| ieee8021SpbToplX (1.3.111.2.802.1.1.26.1.2.1.4) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of the SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |

ieee8021SpbToplxDynamicTable

About this table

This table contains SPB dynamic topology information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ieee8021SpbToplxDynamicEntryToplx.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------------|-------------------|----------------------------------|--|
| ieee8021SpbToplxDynamicEntryToplx (1.3.111.2.802.1.1.26.1.3.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of an SPB topology | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbToplxDynamicEntryAgreeDigest (1.3.111.2.802.1.1.26.1.3.1.2) | read-only | IEEE8021SpbDigest | OCTET STRING (32) | Topology agreement digest value. | As per the MIB. |
| ieee8021SpbToplxDynamicEntryMCID (1.3.111.2.802.1.1.26.1.3.1.3) | read-only | IEEE8021SpbMCID | OCTET STRING (51) | MST Identifier MCID. | As per the MIB. |
| ieee8021SpbToplxDynamicEntryAuxMCID (1.3.111.2.802.1.1.26.1.3.1.4) | read-only | IEEE8021SpbMCID | OCTET STRING (51) | Auxiliary MCID for migration. | As per the MIB. |

ieee8021SpbEctStaticTable

About this table

This table contains B-VLAN to ECT algorithm static mapping entries on a bridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ieee8021SpbEctStaticEntryToplx and ieee8021SpbEctStaticEntryBaseVid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|---------------------------------------|---|--|
| ieee8021SpbEctStaticEntryTopIx (1.3.111.2.802.1.1.26.1.4.1.1) | not-accessible | IEEE8021SpbMT ID | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbEctStaticEntryBaseVid (1.3.111.2.802.1.1.26.1.4.1.2) | not-accessible | VlanIdOrAny | Integer32(1..4094) | B-VLAN in a mapping entry. | The wildcard value of 4095 is not supported. |
| ieee8021SpbEctStaticEntryEctAlgorithm (1.3.111.2.802.1.1.26.1.4.1.3) | read-create | IEEE8021SpbEctAlgorithm | OCTET STRING (4) | ECT algorithm in the mapping entry. | Default: 00-80-c2-01. |
| ieee8021SpbvEctStaticEntrySpvid (1.3.111.2.802.1.1.26.1.4.1.4) | read-create | VlanIdOrNone | Integer32 (0 1..4094) | VID originating from this bridge if the mode is SPBV. | Not supported. The value is fixed at 0. |
| ieee8021SpbEctStaticEntryRowStatus (1.3.111.2.802.1.1.26.1.4.1.5) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports active(1), createAndGo(4), and destroy(6). |

ieee8021SpbEctDynamicTable

About this table

This table contains information about the ECT behaviors on a bridge.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021SpbEctDynamicEntryTopIx and ieee8021SpbEctDynamicEntryBaseVid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|--------------------|-----------------------|----------------------------------|--|
| ieee8021SpbEctDynamicEntryTopIx (1.3.111.2.802.1.1.26.1.5.1.1) | not-accessible | IEEE8021SpbMT ID | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbEctDynamicEntryBaseVid (1.3.111.2.802.1.1.26.1.5.1.2) | not-accessible | VlanId | Integer32(1..4094) | B-VLAN ID. | As per the MIB. |
| ieee8021SpbEctDynamicEntryMode (1.3.111.2.802.1.1.26.1.5.1.3) | read-only | IEEE8021SpbEctMode | INTEGER{ disabled(1), | Operating mode of the B-VLAN ID. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|--------------------------|---|--|
| | | | spbm(2), spbv(3) } | | |
| ieee8021SpbEctDynamicEntryLocalUse (1.3.111.2.802.1.1.26.1.5.1.4) | read-only | TruthValue | true(1), false(2) | Whether the ECT is in use locally for this B-VLAN ID. | As per the MIB. |
| ieee8021SpbEctDynamicEntryRemoteUse (1.3.111.2.802.1.1.26.1.5.1.5) | read-only | TruthValue | true(1), false(2) | Whether the remote ECT is in use for this B-VLAN ID. | As per the MIB. |
| ieee8021SpbEctDynamicEntryIngressCheckDiscards (1.3.111.2.802.1.1.26.1.5.1.6) | read-only | Unsigned32 | Standard MIB values. | Number of SA check failures for this mapping. | Not supported. The value is fixed at 0. |

ieee8021SpbAdjStaticTable

About this table

Use this table to configure neighbor interface parameters or obtain neighbor interface information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|-----------|-------------|-----------|-----------|
| Supported | Supported | Supported | Supported |

Columns

The table indexes are ieee8021SpbAdjStaticEntryTopIx and ieee8021SpbAdjStaticEntryIfIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------|---|--|--|
| ieee8021SpbAdjStaticEntryTopIx(1.3.111.2.802.1.1.26.1.6.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbAdjStaticEntryIfIndex(1.3.111.2.802.1.1.26.1.6.1.2) | not-accessible | Interface IndexOrZero | Integer32(0..2147483647) | Interface index. | The wildcard value of 0 is not supported. |
| ieee8021SpbAdjStaticEntryMetric(1.3.111.2.802.1.1.26.1.6.1.3) | read-create | IEEE8021SpbLinkMetric | Integer32(1..16777215) | Link metric value. | As per the MIB. |
| ieee8021SpbAdjStaticEntryIfAdminState(1.3.111.2.802.1.1.26.1.6.1.4) | read-create | IEEE8021SpbAdjState | INTEGER{ up(1), down(2), testing(3) } | Administration state of the interface. | Not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|---------------------------------------|-------------|---|
| ieee8021SpbAdjStaticEntryRowStatus(1.3.111.2.802.1.1.26.1.6.1.5) | read-create | RowStatus | active(1), createAndGo(4), destroy(6) | Row status. | Supports active(1), createAndGo(4), and destroy(6). |

ieee8021SpbAdjDynamicTable

About this table

This table contains SPB neighbor dynamic information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021SpbAdjDynamicEntryTopIx, ieee8021SpbAdjDynamicEntryIfIndex, and ieee8021SpbAdjDynamicEntryPeerSysId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|----------------------------|--------------------------------------|---|
| ieee8021SpbAdjDynamicEntryTopIx (1.3.111.2.802.1.1.26.1.7.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbAdjDynamicEntryIfIndex (1.3.111.2.802.1.1.26.1.7.1.2) | not-accessible | InterfaceIndexOrZero | Integer32(0..2147483647) | Interface index. | The wildcard value of 0 is not supported. |
| ieee8021SpbAdjDynamicEntryPeerSysId (1.3.111.2.802.1.1.26.1.7.1.3) | not-accessible | MacAddress | OCTET STRING (6) | SPB neighbor system ID. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryPort (1.3.111.2.802.1.1.26.1.7.1.4) | read-only | IEEE8021BridgePortNumber | Unsigned32(1..65535) | Port number to reach this adjacency. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryIfOperState (1.3.111.2.802.1.1.26.1.7.1.5) | read-only | IEEE8021SpbAdjState | up(1), down(2), testing(3) | Operational state of this port.. | Not supported. The value is always up(1). |
| ieee8021SpbAdjDynamicEntryPeerSysName (1.3.111.2.802.1.1.26.1.7.1.6) | read-only | SnmpAdminString | OCTET STRING (0..255) | Neighbor system name. | The return value is a zero-length string if the actual system name exceeds 32 characters. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-------------------|----------------------|--|--|
| ieee8021SpbAdjDynamicEntryPeerAgreeDigest (1.3.111.2.802.1.1.26.1.7.1.7) | read-only | IEEE8021SpbDigest | OCTET STRING (32) | Neighbor topology agreement digest value. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryPeerMCID (1.3.111.2.802.1.1.26.1.7.1.8) | read-only | IEEE8021SpbMCID | OCTET STRING (51) | Neighbor MST Identifier MCID. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryPeerAuxMCID (1.3.111.2.802.1.1.26.1.7.1.9) | read-only | IEEE8021SpbMCID | OCTET STRING (51) | Neighbor auxiliary MST Identifier. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryLocalCircuitID (1.3.111.2.802.1.1.26.1.7.1.10) | read-only | Unsigned32 | Standard MIB values. | Local circuit ID. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryPeerLocalCircuitID (1.3.111.2.802.1.1.26.1.7.1.11) | read-only | Unsigned32 | Standard MIB values. | Neighbor circuit ID. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryPortIdentifier (1.3.111.2.802.1.1.26.1.7.1.12) | read-only | Unsigned32 | Standard MIB values. | Port ID of the circuit selected by the local bridge when multiple candidate circuits are available. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryPeerPortIdentifier (1.3.111.2.802.1.1.26.1.7.1.13) | read-only | Unsigned32 | Standard MIB values. | Port ID of the circuit selected by the neighbor bridge when multiple candidate circuits are available. | As per the MIB. |
| ieee8021SpbAdjDynamicEntryIscircIndex (1.3.111.2.802.1.1.26.1.7.1.14) | read-only | Unsigned32 | Standard MIB values. | The isisCircTable reference. This allows cross referencing to an IS-IS MIB. | Not supported. The value is fixed at 0. |

ieee8021SpbTopNodeTable

About this table

Use this table to obtain bridge information in an SPB network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021SpbTopNodeEntryTopIx and ieee8021SpbTopNodeEntrySysId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------------|----------------------|---------------------------|---|
| ieee8021SpbTopNodeEntryTopIx (1.3.111.2.802.1.1.26.1.8.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbTopNodeEntrySysId (1.3.111.2.802.1.1.26.1.8.1.2) | not-accessible | MacAddresses | OCTET STRING (6) | System ID of a bridge. | The wildcard value of 0 is not supported. |
| ieee8021SpbTopNodeEntryBridgePriority (1.3.111.2.802.1.1.26.1.8.1.3) | read-only | IEEE8021SpbBridgePriority | OCTET STRING (2) | Bridge priority. | As per the MIB. |
| ieee8021SpbTopNodeEntrySPSourceID (1.3.111.2.802.1.1.26.1.8.1.4) | read-only | IEEE8021SpbMTSPSourceID | OCTET STRING (3) | Shortest path source ID. | As per the MIB. |
| ieee8021SpbTopNodeEntrySystemName (1.3.111.2.802.1.1.26.1.8.1.5) | read-only | SnmpAdminString | OCTET STRING (0..32) | System name. | The return value is a zero-length string if the actual system name exceeds 32 characters. |

ieee8021SpbTopEctTable

About this table

Use this table to obtain ECT and B-VLAN information in an SPB network.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021SpbTopEctEntryTopIx, ieee8021SpbTopEctEntrySysId, and ieee8021SpbTopEctEntryBaseVid.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|-----------------------------|----------------|---------------|-------------|---------------------------|--|
| ieee8021SpbTopEctEntryTopIx | not-accessible | IEEE8021SpbMT | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-------------------------|--|--|--|
| (1.3.111.2.802.1.1.26.1.9.1.1) | | ID | | | The value is fixed at 0. |
| ieee8021SpbTopEctEntrySysId (1.3.111.2.802.1.1.26.1.9.1.2) | not-accessible | MacAddress | OCTET STRING (6) | System ID in a mapping entry. | The wildcard value of 0 is not supported. |
| ieee8021SpbTopEctEntryBaseVid (1.3.111.2.802.1.1.26.1.9.1.3) | not-accessible | VlanIdOrAny | Integer32(1..4094) | B-VLAN ID in a mapping entry. | The wildcard value of 4095 is not supported. |
| ieee8021SpbTopEctEntryEctAlgorithm (1.3.111.2.802.1.1.26.1.9.1.4) | read-only | IEEE8021SpbEctAlgorithm | OCTET STRING (4) | ECT algorithm in a mapping entry. | As per the MIB. |
| ieee8021SpbTopEctEntryMode (1.3.111.2.802.1.1.26.1.9.1.5) | read-only | IEEE8021SpbEctMode | INTEGER{ disabled(1), spbm(2), spbv(3) } | Interface operating mode. | As per the MIB. |
| ieee8021SpbvTopEctSysMode (1.3.111.2.802.1.1.26.1.9.1.6) | read-only | IEEE8021SpbMode | INTEGER{ auto(1), manual(2) } | SPBV system mode. | Not supported. |
| ieee8021SpbvTopEctEntrySpvid (1.3.111.2.802.1.1.26.1.9.1.7) | read-only | VlanIdOrNone | Integer32 (0 1..4094) | VID used to load traffic in SPBV mode. | Not supported. |
| ieee8021SpbTopEctEntryLocalUse (1.3.111.2.802.1.1.26.1.9.1.8) | read-only | TruthValue | true(1), false(2) | Whether the local bridge uses this B-VLAN to load traffic. | As per the MIB. |

Ieee8021SpbTopEdgeTable

About this table

Use this table to obtain link information for a pair of devices.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021SpbTopEdgeEntryTopIx, ieee8021SpbTopEdgeEntrySysIdNear, and ieee8021SpbTopEdgeEntrySysIdFar.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|------------------------------|----------------|---------------|-------------|---------------------------|--|
| ieee8021SpbTopEdgeEntryTopIx | not-accessible | IEEE8021SpbMT | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|-----------------------|------------------------|--|---|
| (1.3.111.2.802.1.1.26.1.10.1.1) | | ID | | | The value is fixed at 0. |
| ieee8021SpbTopEdgeEntrySysIdNear (1.3.111.2.802.1.1.26.1.10.1.2) | not-accessible | MacAddress | OCTET STRING (6) | System ID of the local bridge. | The wildcard value of 0 is not supported. |
| ieee8021SpbTopEdgeEntrySysIdFar (1.3.111.2.802.1.1.26.1.10.1.3) | not-accessible | MacAddress | OCTET STRING (6) | System ID of the remote bridge. | The wildcard value of 0 is not supported. |
| ieee8021SpbTopEdgeEntryMetricNear2Far (1.3.111.2.802.1.1.26.1.10.1.4) | read-only | IEEE8021SpbLinkMetric | Integer32(1..16777215) | Link metric for the local bridge to reach the remote bridge. | As per the MIB. |
| ieee8021SpbTopEdgeEntryMetricFar2Near (1.3.111.2.802.1.1.26.1.10.1.5) | read-only | IEEE8021SpbLinkMetric | Integer32(1..16777215) | Link metric for the remote bridge to reach the local bridge. | As per the MIB. |

ieee8021SpbmTopSrvTable

About this table

Use this table to obtain information about SPBM PBB services.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021SpbmTopSrvEntryTopIx, ieee8021SpbmTopSrvEntrySysId, ieee8021SpbmTopSrvEntryIsid, ieee8021SpbmTopSrvEntryBaseVid, and ieee8021SpbmTopSrvEntryMac.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-----------------------------------|---------------------------|---------------------------|--|
| ieee8021SpbmTopSrvEntryTopIx(1.3.111.2.802.1.1.26.1.11.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of an SPB topology. | Multiple topologies are not supported. The value is fixed at 0. |
| ieee8021SpbmTopSrvEntrySysId(1.3.111.2.802.1.1.26.1.11.1.2) | not-accessible | MacAddress | OCTET STRING (6) | System ID. | The wildcard value of 0 is not supported. |
| ieee8021SpbmTopSrvEntryIsid(1.3.111.2.802.1.1.26.1.11.1.3) | not-accessible | IEEE8021SpbServiceIdentifierOrAny | Unsigned32(255..16777215) | I-SID. | The wildcard value of 0 is not supported. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|-----------------------------|-----------------------|--|
| ieee8021SpbmTopSrvEntryBaseVid(1.3.111.2.802.1.1.26.1.11.1.4) | not-accessible | VlanIdOrAny | Integer32(1..4094) | B-VLAN ID. | The wildcard value of 4095 is not supported. |
| ieee8021SpbmTopSrvEntryMac(1.3.111.2.802.1.1.26.1.11.1.5) | not-accessible | MacAddress | OCTET STRING (6) | B-MAC address. | The wildcard value of 0 is not supported. |
| ieee8021SpbmTopSrvEntryIsidFlags(1.3.111.2.802.1.1.26.1.11.1.6) | read-only | IEEE8021PbbIngressEgress | BITS{ingress(0), egress(1)} | I-SID transmit flags. | As per the MIB. |

ieee8021SpbvTopSrvTable

About this table

This table is obsolete. It contains SPBV PBB service information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are `ieee8021SpbvTopSrvEntryTopIx`, `ieee8021SpbvTopSrvEntrySysId`, and `ieee8021SpbvTopSrvEntryMMac`.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|-----------------------------|--|-----------------|
| ieee8021SpbvTopSrvEntryTopIx(1.3.111.2.802.1.1.26.1.12.1.1) | not-accessible | IEEE8021SpbMTID | Unsigned32 | Index of an SPB topology. | As per the MIB. |
| ieee8021SpbvTopSrvEntrySysId(1.3.111.2.802.1.1.26.1.12.1.2) | not-accessible | MacAddress | OCTET STRING (6) | System ID. | As per the MIB. |
| ieee8021SpbvTopSrvEntryMMac(1.3.111.2.802.1.1.26.1.12.1.3) | not-accessible | MacAddress | OCTET STRING (6) | Multicast MAC address. | As per the MIB. |
| ieee8021SpbvTopSrvEntryBaseVid(1.3.111.2.802.1.1.26.1.12.1.4) | read-only | VlanId | Integer32(1..4094) | B-VLAN ID. | As per the MIB. |
| ieee8021SpbvTopSrvEntryMMacFlags(1.3.111.2.802.1.1.26.1.12.1.5) | read-only | IEEE8021PbbIngressEgress | BITS{ingress(0), egress(1)} | Transmit flags of the multicast MAC address. | As per the MIB. |

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HH3C-EVB-MIB

About this MIB

Use this private MIB to manage EVB features extended based on the standard EVB MIB, for example, the default VSI manager configuration and manual creation of S-channels and VSI interfaces.

MIB file name

hh3c-evb.mib

Root object

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).hh3c(25506). h3cCommon(2).hh3cEvb(134)

Scalar objects

hh3cEvbSetResult

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|---------|---|---------------------------|-----------------|
| hh3cEvbSetResult(1.3.6.1.4.1.25506.2.134.1.1) | read-only | INTEGER | unknown(1), processing(2), success(3), failed(4) | EVB set operation result. | As per the MIB. |

Tabular objects

hh3cEvbDefaultManagerTable

About this table

Use this table to configure or obtain information about the default VSI manager.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|--|-----------|-----------|
| <ul style="list-style-type: none"> You must specify the hh3cEvbManagerType object when creating the default VSI manager. If the value of the hh3cEvbManagerType object is local, you must delete the hh3cEvbManagerID and hh3cEvbManagerPort objects when creating the default VSI manager. If the value of the hh3cEvbManagerType object is ipv4 or ipv6, you must specify the hh3cEvbManagerID object when creating the default VSI manager. The value of the hh3cEvbManagerID object is the IPv4 or IPv6 address of the default VSI manager. If the value of the hh3cEvbManagerType object is name, you must specify the hh3cEvbManagerID object when creating the default VSI manager. The value of the hh3cEvbManagerID object is a string of 1 to 127 characters, which represents the name of the default VSI manager. | <ul style="list-style-type: none"> The restrictions for modifying the hh3cEvbManagerType object are the same as those for creating the default VSI manager. If you change the value of the hh3cEvbManagerType object to ipv4, ipv6, or name, you must specify the hh3cEvbManagerID object. The hh3cEvbManagerPort object is optional. If you do not specify the hh3cEvbManagerPort object, the object automatically uses the default value. If you change the value of the hh3cEvbManagerType object to local, the values of the hh3cEvbManagerID and hh3cEvbManagerPort objects automatically change to a zero-length string and zero, respectively. The new values are invalid values. When the value of the hh3cEvbManagerType object is set to local, you cannot modify the hh3cEvbManagerID or hh3cEvbManagerPort object. | Supported | Supported |

Columns

The table index is hh3cSystemDiagInfoIndex.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------|--|---|---|
| hh3cEvbManagerIndex(1.3.6.1.4.1.25506.2.134.1.2.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Index value. | The value is fixed at 1. |
| hh3cEvbManagerType(1.3.6.1.4.1.25506.2.134.1.2.1.2) | read-create | INTEGER | ipv4 (1), ipv6 (2), name (3), local (4) | Type of the default VSI manager. | As per the MIB. |
| hh3cEvbManagerID(1.3.6.1.4.1.25506.2.134.1.2.1.3) | read-create | OCTET STRING | OCTET STRING (0..127) | ID of the default VSI manager. | The value is a zero-length string when the default VSI manager type is local. |
| hh3cEvbManagerPort(1.3.6.1.4.1.25506.2.134.1.2.1.4) | read-create | Unsigned32 | Unsigned32 (0..65535) | Port number of the default VSI manager. | If the default VSI manager type is local, the return value is zero. |
| hh3cEvbManagerRowStatus (1.3.6.1.4.1.25506.2.134.1.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cEvbPortConfigTable

About this table

Use this table to manage the VDP keepalive exponent and the VDP resource-wait-delay exponent.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|-------------|---------------|-----------|
| Not supported | Supported | Not supported | Supported |

Columns

The table index is hh3cEvbPortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|----------------------------|-----------------------|-----------------------------------|-----------------|
| hh3cEvbPortNumber(1.3.6.1.4.1.25506.2.134.2.1.1.1) | not-accessible | IEEE8021 BridgePort Number | Unsigned32 (1..65535) | Port number. | As per the MIB. |
| hh3cEvbRWD(1.3.6.1.4.1.25506.2.134.2.1.1.2) | read- write | Unsigned32 | Unsigned32 (15..31) | VDP resource-wait-delay exponent. | As per the MIB. |
| hh3cEvbRKA(1.3.6.1.4.1.25506.2.134.2.1.1.3) | read- write | Unsigned32 | Unsigned32 (14..31) | VDP keepalive exponent. | As per the MIB. |

hh3cEvbSchannelConfigTable

About this table

Use this table to create S-channels and enable or disable MAC address learning and RR mode for S-channels.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|--|-----------|--|
| <ul style="list-style-type: none">When you create an S-channel on a port, make sure the ieee8021BridgeEvbUAPConfigTable table already has a row with the port number as the index. The hh3cEvbPortNumber objects represents the port number.When you create an S-channel on a port, the supported values for the hh3cEvbSchannelID object are 2 to 167 and 4094. The ID of the default S-channel is 1. You cannot create the default S-channel, but you can change the enabling status of MAC address learning and RR mode for the default S-channel.When you create an S-channel on a port, the supported values for the hh3cEvbSchannelSVLAN object are 0 and 2 to 4094. The value of 0 indicates that no S-VLAN ID (SVID) is specified for the S-channel. The system automatically assigns an SVID to the S-channel. | You cannot modify the hh3cEvbSchannelSVLAN object. | Supported | You cannot delete the default S-channel whose S-channel ID (hh3cEvbSchannelID) is 1. |

| Create | Edit/Modify | Delete | Read |
|---|-------------|--------|------|
| <ul style="list-style-type: none"> To ensure successful creation, make sure the value specified for the hh3cEvbSchannelSVLAN object has not been used by other S-channels on the same port. When you create an S-channel on a port, you must delete the hh3cEvbMacLearningStatus and hh3cEvbRRStatus objects. You can change them after S-channel creation. | | | |

Columns

The table indexes are hh3cEvbPortNumber and hh3cEvbSchannelID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|-------------|---|--|--|
| hh3cEvbSchannelID(1.3.6.1.4.1.25506.2.134.2.2.1.1) | not-accessible | Unsigned 32 | Standard MIB values. | S-channel ID (SCID). | Value range: 1 to 167 and 4094. |
| hh3cEvbSchannelSVLAN(1.3.6.1.4.1.25506.2.134.2.2.1.2) | read-create | Unsigned 32 | Unsigned32 (0..4094) | S-VLAN ID (SVID) of the S-channel. | The value of 0 indicates that no SVID is specified for the S-channel. The system automatically assigns an SVID to the S-channel. |
| hh3cEvbMacLearningStatus(1.3.6.1.4.1.25506.2.134.2.2.1.3) | read-write | TruthValue | true(1), false(2) | Enabling status of MAC address learning. | As per the MIB. |
| hh3cEvbRRStatus(1.3.6.1.4.1.25506.2.134.2.2.1.4) | read-write | TruthValue | true(1), false(2) | Enabling status of the RR mode. | As per the MIB. |
| hh3cEvbSchannelRowStatus(1.3.6.1.4.1.25506.2.134.2.2.1.5) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cEvbVSIConfigTable

About this table

Use this table to create VSI interfaces and activate VSI interfaces.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---|--|-----------|-----------|
| <ul style="list-style-type: none"> The value of the hh3cEvbVSILocalID object must be in the range of 0 to 1023. When creating a VSI interface, you must specify the hh3cEvbVSICommand object. This object | <ul style="list-style-type: none"> You can change the value of the hh3cEvbVSIsActive object to true for a VSI interface only when the VSI interface has filter information. | Supported | Supported |

| Create | Edit/Modify | Delete | Read |
|---|--|--------|------|
| supports only preAssociate and associate. <ul style="list-style-type: none"> When creating a VSI interface, you cannot specify the hh3cEvbVSIsActive object. This object can be modified after VSI creation. | <ul style="list-style-type: none"> You can set the value of the hh3cEvbVSICommand object only to preAssociate or associate. | | |

Columns

The table indexes are hh3cEvbSBPPortNumber and hh3cEvbVSILocalID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|----------------------------|---|--|---|
| hh3cEvbSBPPortNumber(1.3.6.1.4.1.25506.2.134.2.3.1.1) | not-accessible | IEEE8021 BridgePort Number | Unsigned32 (1..65535) | Port number of a Station-facing Bridge Port (SBP). | As per the MIB. |
| hh3cEvbVSILocalID(1.3.6.1.4.1.25506.2.134.2.3.1.2) | not-accessible | Unsigned32 | Standard MIB values. | Local ID of a VSI interface. | Value range: 0 to 1023. |
| hh3cEvbVSICommand(1.3.6.1.4.1.25506.2.134.2.3.1.3) | read-create | INTEGER | preAssociate(1), preAssociateWithRsrcReservation(2), associate(3), deAssociate(4) | Association property of the VSI interface. | Supports only preAssociate(1) and associate(3). |
| hh3cEvbVSIIfIndex(1.3.6.1.4.1.25506.2.134.2.3.1.4) | read-only | InterfaceIndexOrZero | Integer32 (0..2147483647) | VSI interface index. | As per the MIB. |
| hh3cEvbVSIsActive(1.3.6.1.4.1.25506.2.134.2.3.1.5) | read-write | TruthValue | true(1), false(2) | Whether the VSI interface is activated. | As per the MIB. |
| hh3cEvbVSIRowStatus(1.3.6.1.4.1.25506.2.134.2.3.1.6) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cEvbVSIFilterConfigTable

About this table

Use this table to create VSI filters on a VSI interface or obtain VSI filter information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|--|---------------|--|-----------|
| When you create a VSI filter on a VSI interface, make sure the VSI interface is not activated. | Not supported | Before you delete a VSI filter on a VSI interface, change the value of the hh3cEvbVSIsActive object to false in the hh3cEvbVSIFilterConfigTable table. | Supported |

Columns

The table indexes are hh3cEvbSBPPortNumber, hh3cEvbVSILocalID, hh3cEvbGroupID, hh3cEvbVSIMac, and hh3cEvbVSIvlanId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|--|--|--|
| hh3cEvbGroupID(1.3.6.1.4.1.25506.2.134.2.4.1.1) | not-accessible | Unsigned32 | Standard MIB values. | Group ID contained in a VSI filter. | The group ID used by the VSI filter to filter traffic. A group ID and a VLAN ID together identify a VLAN. |
| hh3cEvbVSIMac(1.3.6.1.4.1.25506.2.134.2.4.1.2) | not-accessible | MacAddress | OCTET STRING (6) | MAC address contained in the VSI filter. | The MAC address used by the VSI filter to filter traffic. |
| hh3cEvbVSIvlanId(1.3.6.1.4.1.25506.2.134.2.4.1.3) | not-accessible | VlanIndex | Unsigned32(0..4294967295) | VLAN ID in the VSI filter. | As per the MIB. The VLAN ID used by the VSI filter to filter traffic. |
| hh3cEvbVSIRowStatus(1.3.6.1.4.1.25506.2.134.2.4.1.4) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | As per the MIB. |

hh3cFlex10PortConfigTable

About this table

Use this table to enable or disable Flex10 on ports.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|--|---------------|-----------|
| Not supported | Flex10 and EVB cannot be both enabled on a port. | Not supported | Supported |

Columns

The table index is hh3cFlex10PortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|-----------------------|----------------------------|-----------------|
| hh3cFlex10PortNumber(1.3.6.1.4.1.25506.2.134.3.1.1.1) | not-accessible | IEEE8021BridgePortNumber | Unsigned32 (1..65535) | Port number. | As per the MIB. |
| hh3cFlex10PortEnableStatus(1.3.6.1.4.1.25506.2.134.3.1.1.2) | read-write | TruthValue | true(1), false(2) | Enabling status of Flex10. | As per the MIB. |

hh3cFlex10RemoteSchannelTable

About this table

Use this table to obtain remote S-channel information, including the remote S-channel description format, termination type, termination capability, traffic class, Committed Information Rate (CIR), Peak Information Rate (PIR), and connection instance ID.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cFlex10PortNumber and hh3cEvbSchannelID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---|---|-----------------|
| hh3cFlex10RemSchDesFormat(1.3.6.1.4.1.25506.2.134.3.2.1.1) | read-only | BITS | format0 (0), format1 (1) | Description format of a remote S-channel. | As per the MIB. |
| hh3cFlex10RemSchTerminationType(1.3.6.1.4.1.25506.2.134.3.2.1.2) | read-only | Integer32 | Standard MIB values. | Termination type of the remote S-channel. | As per the MIB. |
| hh3cFlex10RemSchTerminationCap(1.3.6.1.4.1.25506.2.134.3.2.1.3) | read-only | BITS | ethernet (0), fCoE(1), iSCSI(2), roCEE(3) | Termination capability of the remote S-channel. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|---|---|-----------------|
| hh3cFlex10RemSchTrafficClass(1.3.6.1.4.1.25506.2.134.3.2.1.4) | read-only | BITS | class0 (0), class1 (1), class2 (2), class3 (3), class4 (4), class5 (5), class6 (6), class7 (7) | Traffic class of the remote S-channel. | As per the MIB. |
| hh3cFlex10RemSchCir(1.3.6.1.4.1.25506.2.134.3.2.1.5) | read-only | Integer32 | Standard MIB values. | CIR of the remote S-channel. | As per the MIB. |
| hh3cFlex10RemSchPir(1.3.6.1.4.1.25506.2.134.3.2.1.6) | read-only | Integer32 | Standard MIB values. | PIR of the remote S-channel. | As per the MIB. |
| hh3cFlex10RemSchConnectionID(1.3.6.1.4.1.25506.2.134.3.2.1.7) | read-only | OCTET STRING | OCTET STRING (0..16) | Connection instance ID of the remote S-channel. | As per the MIB. |

hh3cFlex10SchannelLinkCtlTable

About this table

Use this table to obtain link status information about Flex10 S-channels.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are hh3cFlex10PortNumber and hh3cEvbSchannelID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|---|-------------------------------|-----------------|
| hh3cFlex10SchannelSVID(1.3.6.1.4.1.25506.2.134.3.3.1.1) | read-only | Integer32 | Integer32 (1..4094) | S-VLAN ID of an S-channel | As per the MIB. |
| hh3cFlex10SchannelLocalStatus(1.3.6.1.4.1.25506.2.134.3.3.1.2) | read-only | Integer32 | Integer32 { unknown(1), disabled (2), enabled (3) } | Link status of the local end. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|--------------------------------|-----------------|
| hh3cFlex10SchannelRemoteStatus(1.3.6.1.4.1.25506.2.134.3.3.1.3) | read-only | Integer32 | Integer32 { unknown(1), disabled (2), enabled (3) } | Link status of the remote end. | As per the MIB. |

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IEEE8021-EVB-MIB

About this MIB

This MIB is defined by IEEE P802.1Qbg/D2.2 to control access to and manage EVB system information, ECP running information, S-channels, and VSI interfaces. This MIB is applicable to both EVB bridge and EVB station. However, we use this MIB only to configure a EVB bridge.

MIB file name

ieee8021-evb.mib

Root object

iso(1).org(3).ieee(111).standards-association-numbered-series-standards(2).lan-man-stds(802).ieee802dot1(1).ieee802dot1mibs(1).ieee8021BridgeEvbMib(24)

Tabular objects

Scalar objects

ieee8021BridgeEvbSysType

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|---------|----------------------------------|-------------|-----------------------------------|
| ieee8021BridgeEvbSysType (1.3.111.2.802.1.1.24.1.1.1) | read-only | INTEGER | evbBridge (1), evbStation (2) | EVB role. | The value is always evbBridge(1). |

ieee8021BridgeEvbSysNumExternalPorts

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|------------|-------------------------|--|--|
| ieee8021BridgeEvbSysNumExternalPorts (1.3.111.2.802.1.1.24.1.1.2) | read-only | Unsigned32 | Unsigned32 (1..4095) | Number of externally accessible ports. | Maximum number of EVB ports supported by the system. |

ieee8021BridgeEvbSysEvbLldpTxEnable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|--|--|
| ieee8021BridgeEvbSysEvbLldpTxEnable (1.3.111.2.802.1.1.24.1.1.3) | read-write | TruthValue | true(1), false(2) | Whether to advertise EVB information through LLDP. | Supports only the read operation. The value is always true. |

ieee8021BridgeEvbSysEvbLldpManual

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|---|---|
| ieee8021BridgeEvbSysEvbLldpManual (1.3.111.2.802.1.1.24.1.1.4) | read-write | TruthValue | true(1), false(2) | Whether the effective EVB settings are from manual configuration. | Supports only the read operation. The value is always false. |

ieee8021BridgeEvbSysEvbLldpGidCapable

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|------------|----------------------|-----------------------|--|
| ieee8021BridgeEvbSysEvbLldpGidCapable (1.3.111.2.802.1.1.24.1.1.5) | read-write | TruthValue | true(1), false(2) | Support for Group ID. | Supports only the read operation. The value is always true. |

ieee8021BridgeEvbSysEcpAckTimer

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|----------------------|------------------------------|--|
| ieee8021BridgeEvbSysEcpAckTimer (1.3.111.2.802.1.1.24.1.1.6) | read-write | Integer32 | Standard MIB values. | ECP retransmission exponent. | Supports only the read operation. The value is fixed at 16. |

ieee8021BridgeEvbSysEcpMaxRetries

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|------------|-----------|------------------|--|---|
| ieee8021BridgeEvbSysEcpMaxRetries(1.3.111.2.802.1.1.24.1.1.7) | read-write | Integer32 | Integer32 (0..7) | Maximum number of times to retransmit an ECP packet. | Supports only the read operation. The value is fixed at 3. |

ieee8021BridgeEvbSysVdpDfltRsrcWaitDelay

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|-----------------------------------|--|
| ieee8021BridgeEvbSysVdpDfltRsrcWaitDelay(1.3.111.2.802.1.1.24.1.1.8) | read-write | Integer32 | Standard MIB values. | VDP resource-wait-delay exponent. | Supports only the read operation. The value is fixed at 20. |

ieee8021BridgeEvbSysVdpDfltReinitKeepAlive

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|------------|-----------|----------------------|-------------------------|-----------------|
| ieee8021BridgeEvbSysVdpDfltReinitKeepAlive(1.3.111.2.802.1.1.24.1.1.9) | read-write | Integer32 | Standard MIB values. | VDP keepalive exponent. | As per the MIB. |

Tabular objects

ieee8021BridgeEvbSbpTable

About this table

Use this table to obtain running parameter information about Station-facing Bridge Ports (SBPs), including the source of effective EVB settings, the effective RWD and RKA, and the VDP keepalive time.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021BridgeEvbSbpComponentID and ieee8021BridgeEvbSbpPortNumber.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------------|----------------------------|---|--|
| ieee8021BridgeEvbSbpComponentID(1.3.111.2.802.1.1.24.1.1.10.1.1) | not-accessible | IEEE8021PbbComponentIdentifier | Unsigned32 (1..4294967295) | Component ID of an SBP. | The value is fixed at 1. |
| ieee8021BridgeEvbSbpPortNumber(1.3.111.2.802.1.1.24.1.1.10.1.2) | not-accessible | IEEE8021BridgePortNumber | Unsigned32 (1..65535) | SBP port number. | As per the MIB. |
| ieee8021BridgeEvbSbpLdpManual(1.3.111.2.802.1.1.24.1.1.10.1.3) | read-write | TruthValue | true(1), false(2) | Whether the effective EVB settings are from manual configuration. | Supports only the read operation. The value is always false. |
| ieee8021BridgeEvbSbpVdpOperatorRsrcWaitDelay(1.3.111.2.802.1.1.24.1.1.10.1.4) | read-only | Unsigned32 | Standard MIB values. | Effective RWD (VDP resource wait-delay exponent) on the SBP. | Exponent type. No measurement unit. |
| ieee8021BridgeEvbSbpVdpOperatorReinitKeepAlive(1.3.111.2.802.1.1.24.1.1.10.1.5) | read-only | Unsigned32 | Standard MIB values. | Effective RKA (VDP keepalive exponent) on the SBP. | Exponent type. No measurement unit. |
| ieee8021BridgeEvbSbpVdpOperatorToutKeepAlive(1.3.111.2.802.1.1.24.1.1.10.1.6) | read-only | Unsigned32 | Standard MIB values. | VDP keepalive time on the SBP. | As per the MIB. |

ieee8021BridgeEvbVSIDBTable

About this table

Use this table to obtain running information about VSI interfaces, including the creation time, association operation type, filter format, filter count, and VDP packet statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021BridgeEvbVSIComponentID, ieee8021BridgeEvbVSIPortNumber, ieee8021BridgeEvbVSIIDType, and ieee8021BridgeEvbVSIID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|------------------------|--------------------------|-------------------|----------------|
| ieee8021BridgeEvbVSIComponentID(1.3.111.2.802.1.1.24.1.2. | not-accessible | IEEE8021PbbComponentId | Unsigned32 (1..429496729 | Component ID of a | The value is |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|--------------------------|--|--|--|
| 1.1.1) | e | entifier | 5) | VSI interface. | fixed at 1. |
| ieee8021BridgeEvbVSIPortNumber(1.3.111.2.802.1.1.24.1.2.1.1.2) | not-accessible | IEEE8021BridgePortNumber | Unsigned32 (1..65535) | Port number of the SBP or URP to which a VSI interface belongs. | As per the MIB. |
| ieee8021BridgeEvbVSIIDType(1.3.111.2.802.1.1.24.1.2.1.1.3) | not-accessible | INTEGER | vsiidIpv4 (1), vsiidIpv6 (2), vsiidMAC (3), vsiidLocal (4), vsiidUUID (5) | VSI interface ID type. | As per the MIB. |
| ieee8021BridgeEvbVSIID(1.3.111.2.802.1.1.24.1.2.1.1.4) | not-accessible | OCTET STRING | OCTET STRING(16) | VSI interface ID. | As per the MIB. |
| ieee8021BridgeEvbVSITimeSinceCreate(1.3.111.2.802.1.1.24.1.2.1.1.5) | read-only | Unsigned32 | Standard MIB values. | Time since VSI interface creation. | As per the MIB. |
| ieee8021BridgeEvbVsiVdpOperCmd(1.3.111.2.802.1.1.24.1.2.1.1.6) | read-only | INTEGER | preAssociate (1), preAssociateWithRsrcReservation (2), associate (3), deAssociate (4) | VDP association operation type. | An EVB bridge supports only associate and preAssociate for VSI interfaces. |
| ieee8021BridgeEvbVsiOperRevert(1.3.111.2.802.1.1.24.1.2.1.1.7) | read-only | TruthValue | true(1), false(2) | Whether the VSI interface has received the most recent value of the KEEP indicator from the VDP protocol exchange. | As per the MIB. |
| ieee8021BridgeEvbVsiOperHard(1.3.111.2.802.1.1.24.1.2.1.1.8) | read-only | TruthValue | true(1) false(2) | Whether the VSI interface has received the most recent value of the HARD indicator from the VDP protocol | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------|--|--|---|
| | | | | exchange. | |
| ieee8021BridgeEvbVsiOperReason(1.3.111.2.802.1.1.24.1.2.1.1.9) | read-only | BITS | success(0), invalidFormat(1), insufficientResources(2), otherfailure(3) | Outcome of the most recent request. | An EVB bridge supports only success and insufficientResources for VSI interfaces. |
| ieee8021BridgeEvbVSIManagerID(1.3.111.2.802.1.1.24.1.2.1.1.10) | read-only | OCTET STRING | OCTET STRING(1) | ID of the VSI manager. | One byte is not enough for the address of the VSI manager. The object returns 0 to indicate that the function of this object cannot be realized. |
| ieee8021BridgeEvbVSIType(1.3.111.2.802.1.1.24.1.2.1.1.11) | read-only | Integer32 | Standard MIB values. | VSI interface type. | As per the MIB. |
| ieee8021BridgeEvbVSITypeVersion(1.3.111.2.802.1.1.24.1.2.1.1.12) | read-only | OCTET STRING | OCTET STRING(1) | Version of the VSI interface type. | As per the MIB. |
| ieee8021BridgeEvbVSIFormat(1.3.111.2.802.1.1.24.1.2.1.1.13) | read-only | INTEGER | basic(1), partial(2), vlanOnly(3) | VSI filter MAC/VLAN format. | For basic MAC/VLAN format, this object returns basic(1). For VLAN-only MAC/VLAN format, this object returns vlanOnly(3). For partial MAC/VLAN format, this object returns partial(2). |
| ieee8021BridgeEvbVSINumMACs(1.3.111.2.802.1.1.24.1.2.1.1.14) | read-only | Integer32 | Standard MIB values. | Number of MAC address/VLAN ID pairs contained in the repeated portion of the MAC/VLANs field in the VDP TLV. | As per the MIB. |
| ieee8021BridgeEvbVDPMachineState(1.3.111.2.802.1.1.24.1.2.1.1.15) | read-only | INTEGER | preAssociate(1), preAssociateWithRsrcRelease | VDP state machine. | An EVB bridge supports only associate and preAssociate for |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|-----------|--|---|-----------------|
| | | | rvation(2), associate(3), deAssociate(4) | | VSI interfaces. |
| ieee8021BridgeEvbVDPCommandsSucceeded(1.3.111.2.802.1.1.24.1.2.1.1.16) | read-only | Counter32 | Standard MIB values. | Number of successful VDP commands since creation. | As per the MIB. |
| ieee8021BridgeEvbVDPCommandsFailed(1.3.111.2.802.1.1.24.1.2.1.1.17) | read-only | Counter32 | Standard MIB values. | Number of failed VDP commands since creation. | As per the MIB. |
| ieee8021BridgeEvbVDPCommandReverts(1.3.111.2.802.1.1.24.1.2.1.1.18) | read-only | Counter32 | Standard MIB values. | Number of VDP command reverts since creation. | As per the MIB. |
| ieee8021BridgeEvbVDPCounterDiscontinuity(1.3.111.2.802.1.1.24.1.2.1.1.19) | read-only | TimeTicks | Standard MIB values. | The time since the last counter discontinuity. | As per the MIB. |

ieee8021BridgeEvbVSIDBMacTable

About this table

Use this table to obtain filter information on active VSI interfaces, including the MAC and VLAN information for the filters.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021BridgeEvbVSIComponentID, ieee8021BridgeEvbVSIPortNumber, ieee8021BridgeEvbVSIIDType, ieee8021BridgeEvbVSIID, ieee8021BridgeEvbGroupID, ieee8021BridgeEvbVSIMac, and ieee8021BridgeEvbVSIvlanId.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--------------------------|---------------|---------|-------------|-------------|----------------------|
| ieee8021BridgeEvbGroupID | not-accessibl | Unsigne | Standard | Group ID | The group ID used by |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|------------|----------------------------|--|--|
| (1.3.111.2.802.1.1.24.1.2.2.1.1) | e | d32 | MIB values. | contained in a VSI filter. | the VSI filter to filter traffic. A group ID and a VLAN ID together identify a VLAN. The value of 0 indicates that the VSI filter does not contain a group ID. |
| ieee8021BridgeEvbVSIMac (1.3.111.2.802.1.1.24.1.2.2.1.2) | not-accessible | MacAddress | OCTET STRING(6) | MAC address contained in the VSI filter. | The MAC address used by the VSI filter to filter traffic. The value of 00:00:00:00:00:00 indicates that the VSI filter does not contain a MAC address. |
| ieee8021BridgeEvbVSIvlanId (1.3.111.2.802.1.1.24.1.2.2.1.3) | read-only | VlanIndex | Unsigned 32(0..4294967295) | VLAN ID in the VSI filter. | As per the MIB. |

ieee8021BridgeEvbUAPConfigTable

About this table

Use this table to obtain information about UAP configuration parameters, including the port number, interface index, CDCP running status, and CDCP running role information. A UAP is an EVB-enabled port. Creating a row enables EVB on a port.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table index is ieee8021BridgePhyPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-----------|--------------------------------|----------------------------|-----------------------------|--------------------------|
| ieee8021BridgeEvbUAPComponentId (1.3.111.2.802.1.1.24.1.3.1.1.1) | read-only | IEEE8021PbbComponentIdentifier | Unsigned32 (1..4294967295) | Component ID of a UAP. | The value is fixed at 1. |
| ieee8021BridgeEvbUAPPort(1.3.111.2.802.1.1.24.1.3.1.1.2) | read-only | IEEE8021BridgePortNumber | Unsigned32 (1..65535) | Port number of the UAP. | As per the MIB. |
| ieee8021BridgeEvbUapConfigIndex (1.3.111.2.802.1.1.24.1.3.1.1.3) | read-only | InterfaceIndexOrZero | Integer32 (0..2147483647) | Interface index of the UAP. | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-------------|-----------|--------------------------------|--|--|
| ieee8021BridgeEvbUAPSchCdcPAdminEnable(1.3.111.2.802.1.1.24.1.3.1.1.4) | read-create | INTEGER | enable (1), disable (2) | Administrative status of CDCP on the UAP. | Supports only the read operation. The value is always enable(1). |
| ieee8021BridgeEvbUAPSchAdminCDCPRole(1.3.111.2.802.1.1.24.1.3.1.1.5) | read-create | INTEGER | cdcpRoleB(1), cdcpRoleS (2) | Administratively configured value for the UAP's role parameter. The cdcpRoleB value represents the EVB bridge role and the cdcpRoleS value represents the EVB station role. | Supports only the read operation. The value is always cdcdRoleB(1). |
| ieee8021BridgeEvbUAPSchAdminCDCPChanCap(1.3.111.2.802.1.1.24.1.3.1.1.6) | read-create | Integer32 | Integer32(1 .. 167) | Administratively configured value for the maximum number of S-channels supported by the UAP. | Supports only the read operation. The value is fixed at 167. |
| ieee8021BridgeEvbUAPSchOperCDCPChanCap(1.3.111.2.802.1.1.24.1.3.1.1.7) | read-only | Integer32 | Integer32(1 .. 167) | Operational value for the maximum number of S-channels supported by the UAP. | The value is fixed at 167. |
| ieee8021BridgeEvbUAPSchAdminCDCPSVIDPoolLow(1.3.111.2.802.1.1.24.1.3.1.1.8) | read-create | VlanIndex | Unsigned32(0..4294967295) | Lowest S-VLAN ID that can be assigned to S-channels by CDCP. | Supports only the read operation. The value is fixed at 2. |
| ieee8021BridgeEvbUAPSchAdminCDCPSVIDPoolHigh(1.3.111.2.802.1.1.24.1.3.1.1.9) | read-create | VlanIndex | Unsigned32(0..4294967295) | Highest S-VLAN ID that can be assigned to S-channels by CDCP. | Supports only the read operation. The value is fixed at 4094. |
| ieee8021BridgeEvbUAPSchOperState(1.3.111.2.802.1.1.24.1.3.1.1.10) | read-only | INTEGER | running (1), notRunning (2) | Local CDCP running state. | The value is always running(1). |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|-------------|-------------|---|--|--|
| ieee8021BridgeEvSchCdcRemoteEnabled(1.3.111.2.802.1.1.24.1.3.1.1.11) | read-only | INTEGER S | enable (1), disable (2) | Remote CDCP state. | As per the MIB. |
| ieee8021BridgeEvSchCdcRemoteRole(1.3.111.2.802.1.1.24.1.3.1.1.12) | read-only | INTEGER | cdcpRoleB(1), cdcpRoleS (2) | Remote CDCP running role. The cdcpRoleB value represents the EVB bridge role. The cdcpRoleS value represents the EVB station role. | The value is always cdcpRoleS(2). |
| ieee8021BridgeEvUAPConfigStorageType(1.3.111.2.802.1.1.24.1.3.1.1.13) | read-create | StorageType | INTEGER {other(1), volatile(2), nonVolatile(3), permanent(4), readOnly(5)} | Whether to store the configuration permanently. | Supports only the read operation. The value is always volatile. |
| ieee8021BridgeEvUAPConfigRowStatus(1.3.111.2.802.1.1.24.1.3.1.1.14) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only active, createAndGo, and destroy. |

ieee8021BridgeEvCAPConfigTable

About this table

Use this table to obtain information about S-channel Access Ports (CAPs), including the port number and interface index information.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021BridgePhyPort and ieee8021BridgeEvSchID.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|---|----------------|---------------------------------|---|--|--|
| ieee8021BridgeEvpSchID(1.3.111.2.802.1.1.24.1.3.2.1.1) | not-accessible | Unsigned 32 | Unsigned32 (1..4094) | S-VLAN ID of an EVB bridge or S-channel ID (SCID) of an EVB station. | As per the MIB. |
| ieee8021BridgeEvpCAPComponentId(1.3.111.2.802.1.1.24.1.3.2.1.2) | read-only | IEEE8021 PbbComponentIdentifier | Unsigned32 (1..4294967295) | Component ID of a CAP. | The value is fixed at 1. |
| ieee8021BridgeEvpCapConfigIndex(1.3.111.2.802.1.1.24.1.3.2.1.3) | read-only | InterfaceIndexOrZero | Integer32 (0..2147483647) | Interface index of the CAP. | As per the MIB. |
| ieee8021BridgeEvpCAPPort(1.3.111.2.802.1.1.24.1.3.2.1.4) | read-only | IEEE8021 BridgePort Number | Unsigned32 (1..65535) | Port number of the CAP. | As per the MIB. |
| ieee8021BridgeEvpCAPSChannelID(1.3.111.2.802.1.1.24.1.3.2.1.5) | read-only | Unsigned 32 | Unsigned32 (1..65535) | SCID of the CAP. | As per the MIB. |
| ieee8021BridgeEvpCAPAssociateSBPOrURPCompID(1.3.111.2.802.1.1.24.1.3.2.1.6) | read-write | IEEE8021 PbbComponentIdentifier | Unsigned32 (1..4294967295) | Component ID of the SBP or URP associated with the CAP. | Supports only the read operation. The value is fixed at 1. |
| ieee8021BridgeEvpCAPAssociateSBPOrURPPort(1.3.111.2.802.1.1.24.1.3.2.1.7) | read-write | IEEE8021 BridgePort Number | Unsigned32 (1..4294967295) | Port number of the SBP or URP associated with the CAP. For an EVB bridge, this object represents the port number of the SBP. | Supports only the read operation. |
| ieee8021BridgeEvpCAPRowStatus(1.3.111.2.802.1.1.24.1.3.2.1.8) | read-create | RowStatus | active(1), notInService(2), notReady(3), createAndGo(4), createAndWait(5), destroy(6) | Row status. | Supports only the read operation. The value is always active. |

ieee8021BridgeEvpEcpTable

About this table

Use this table to obtain information about Edge Control Protocol (ECP), including the following:

- The maximum number of retransmission times.
- The number of times ECP failed to successfully deliver a frame since ECP was instantiated.
- ECP packet statistics.

Support for operations

| Create | Edit/Modify | Delete | Read |
|---------------|---------------|---------------|-----------|
| Not supported | Not supported | Not supported | Supported |

Columns

The table indexes are ieee8021BridgeEvpEcpComponentId and ieee8021BridgeEvpEcpPort.

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|----------------|---------------------------------|----------------------------|--|--------------------------|
| ieee8021BridgeEvpEcpComponentId(1.3.111.2.802.1.1.24.1.3.4.1.1) | not-accessible | IEEE8021 PbbComponentIdentifier | Unsigned32 (1..4294967295) | Component ID. | The value is fixed at 1. |
| ieee8021BridgeEvpEcpPort(1.3.111.2.802.1.1.24.1.3.4.1.2) | not-accessible | IEEE8021 BridgePort Number | Unsigned32 (1..65535) | Port number. | As per the MIB. |
| ieee8021BridgeEvpEcpOperAckTimerInit(1.3.111.2.802.1.1.24.1.3.4.1.3) | read-only | Unsigned 32 | Standard MIB values. | Initial value used to initialize ackTimer. The timer is calculated based on the RTE value after negotiation. | As per the MIB. |
| ieee8021BridgeEvpEcpOperMaxRetries(1.3.111.2.802.1.1.24.1.3.4.1.4) | read-only | Unsigned 32 | Standard MIB values. | Maximum number of times to retransmit an ECP packet. (R value after negotiation.) | As per the MIB. |
| ieee8021BridgeEvpEcpTxFrameCount(1.3.111.2.802.1.1.24.1.3.4.1.5) | read-only | Counter32 | Standard MIB values. | Number of transmitted ECP frames. | As per the MIB. |
| ieee8021BridgeEvpEcpTxRetryCount(1.3.111.2.802.1.1.24.1.3.4.1.6) | read-only | Counter32 | Standard MIB values. | Number of retransmitted ECP frames. | As per the MIB. |
| ieee8021BridgeEvpEcpTxFailures(1.3.111.2.802.1.1.24.1.3.4.1.7) | read-only | Counter32 | Standard MIB values. | Number of ECP frames that the port failed to | As per the MIB. |

| Object (OID) | Access | Syntax | Value range | Description | Implementation |
|--|-----------|-----------|----------------------|--------------------------------|-----------------|
| | | | | transmit. | |
| ieee8021BridgeEvbEcpRxFrameCount(1.3.111.2.802.1.1.24.1.3.4.1.8) | read-only | Counter32 | Standard MIB values. | Number of received ECP frames. | As per the MIB. |