

DHCPv4, DHCPv4 TPS Under Low Threshold

Operating Instructions



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1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is issued when DHCPv4 server fails to start.

The possible alarm causes and the corresponding fault reasons, fault locations, and impacts are described in Page 1.

Table 1 Alarm Causes

| Alarm Cause | Description | Fault Reason | Fault Location | Impact | Solution |
|--|---|--|----------------|---|--|
| TPS of DHCPv4 message falls below the low TPS threshold. | This alarm is issued when the TPS level falls below a predefined threshold level. | The option <code>lowTPSThreshold</code> is configured inappropriately. | DHCPv4 server | No impact. | See Section 2.1 Changing Low TPS Threshold Configuration on page 3 |
| Network disconnection. | DHCPv4 server loses the network connection to clients. | Network issue. | Network | All DHCP clients may not get responses. | See Section 2.2 Troubleshooting Network Issues on page 3 |

Note: An alarm can appear as a result of the maintenance activity.

The alarm attributes are listed and explained in Page 1.

Table 2 Alarm Attributes

| Attribute Name | Attribute Value |
|----------------------|-----------------|
| Major Type | 193 |
| Minor Type | 872460 |
| Managed Object Class | IpworksDhcpv4 |



| Attribute Name | Attribute Value |
|--------------------|--|
| Source | ManagedElement=<Node Name>,SystemFunctions=1,Fm=1,FmAlarmModel=ipworksDHCPv4,FmAlarmType=ipworksDhcpv4UnderLowTpsThreshold,HostName=<PL hostname> |
| Specific Problem | DHCPv4, DHCPv4 TPS Under Low Threshold |
| Event Type | qualityOfServiceAlarm(11) |
| Probable Cause | x733ThresholdCrossed(351) |
| Additional Text | This is an alarm that can be automatically cleared when the TPS of dhcpv4 message rise above the low TPS threshold.;uuid:<Product_UUID> ⁽¹⁾ |
| Perceived Severity | Warning |

(1) <Product_UUID> is the universally unique identifier (UUID) of machine that generates the alarm. The value can be fetched from `/sys/devices/virtual/dmi/id/product_uuid` on the PL node.

1.2 Prerequisites

This section provides information on the documents, tools, and conditions that apply to the procedure.

1.2.1 Documents

Before starting this procedure, ensure that you have read the following documents:

- *System Safety Information*
- *Personal Health and Safety Information*
- *Fault Management*

1.2.2 Tools

No tools are required.

1.2.3 Conditions

No conditions.



2 Procedure

This section describes the procedure to clear this alarm.

2.1 Changing Low TPS Threshold Configuration

Do the following:

1. Log on to the ECLI interface.

```
# ssh <username>@<OAM IP Address> -t -s cli
```

2. Configure the low TPS threshold for DHCPv4 server. For example:

```
>dn ManagedElement=<Node Name>,IpworksFunction=1,IPWorks
DHCPv4Service=1
```

```
(DHCPv4Service=1)>configure
```

```
(config-DHCPv4Service=1)>lowTPSThreshold=<Low TPS
Threshold>
```

```
(config-DHCPv4Service=1)>commit
```

```
(DHCPv4Service=1)>exit
```

Note: If *<Low TPS Threshold>* is 0, Low TPS threshold function will be disabled, and this alarm will be automatically cleared after DHCPv4 server restart.

3. Confirm the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

4. Restart DHCPV4 server. For example:

```
# ipw-ctr restart dhcp <PL hostname>
```

5. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

2.2 Troubleshooting Network Issues

Do the following:

1. Debug and troubleshoot the network issues.



2. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.