

ENUM, CUDB Node Failure

IPWorks

OPERATING INSTRUCTIONS

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1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

This alarm is issued by ENUM server when the ENUM server fails to access any specific CUDB node.

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

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact	Solution
Any specific CUDB server is down.	ENUM server fails to access any specific CUDB server.	CUDB node is down due to maintenance activity or some other reasons.	CUDB Server	The traffic of the failed CUDB node will be switched to another CUDB node.	See Section 2.2 on page 3.
CUDB server is unreachable.	The CUDB server is unreachable because of network connection issues or other network related glitches.	Network connection error	Network		See Section 2.3 on page 4.
This CUDB node doesn't handle direct traffic.	Flexible PL Deployment function is enabled, and this CUDB node is configured without a PLDB. This CUDB node will not handle direct traffic.	Flexible PL Deployment function is enabled in CUDB, and this CUDB node is without a PLDB.	CUDB Server		See Section 2.4 on page 4.

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

The alarm attributes are listed and explained in Table 2.



Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	856111
Managed Object Class	IpworksEnum
Source	ManagedElement=<Node Name>, SystemFunctions=1,Fm=1,FmAlarmModel=IpworksEnum,FmAlarmType=ipworksEnumCUDBNodeFailure, HostName=<Hostname>,IpworksEnum, Node=<NodeIP>
Specific Problem	ENUM, CUDB Node Failure
Event Type	communicationsAlarm(2)
Probable Cause	x733RemoteNodeTransmissionError(342)
Additional Text	This alarm is raised when CUDB Node %s fails during the access.;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

This instruction references the following document:

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

1.2.2 Tools

Not applicable.



1.2.3 Conditions

No conditions.

2 Procedure

This section describes the procedure to follow when this alarm is received.

2.1 Analyzing the Alarm

Do the following at the maintenance center:

1. Troubleshoot the IPWorks configuration.
2. Troubleshoot the network issues.
3. Troubleshoot the CUDB Configuration.

2.2 Troubleshooting IPWorks Configuration

To clear the alarm, perform the following steps:

1. Obtain the IP address of the failed CUDB server through the alarm attribute `Additional Text`. For example, the failed CUDB server is `10.170.15.188`.
2. Ensure that the CUDB Connection with ENUM server is configured correctly.

For example, the following indicates that two CUDB nodes are deployed in one site, and the node `10.170.15.188` is in `site1`. Ensure that the IP addresses of `site1` are configured the same as provided by the CUDB node.



```

>ManagedElement=<Node Name>,IpworksFunction=1,IpworksCommonRoot=1,DataBaseInfo=1,
CudbManager=1,CudbServiceSite=ENUM,CudbSiteManager=1,CudbSite=site1
(CudbSite=site1)>show
CudbSite=site1
    CudbNode=node2
    CudbNode=node1
(CudbSite=site1)>CudbNode=node1
(CudbNode=node1)>show -v
CudbNode=node1
    address="192.168.20.14"
    cudbNodeId="node1" <default>
    distinguishedName="cudbUser=ENUMUser,ou=admin,dc=ericsson,dc=com"
    password="1:gliG5ALpb/AiV+hl2cd89uNRnnnCZCR7"
    poolSize=16 <default>
    port=389 <default>
(CudbNode=node1)>up
(CudbSite=site1)>CudbNode=node2
(CudbNode=node2)>show -v
CudbNode=node2
    address="10.170.15.188" <default>
    cudbNodeId="node2"
    distinguishedName=[] <empty>
    password=[] <empty>
    poolSize=16 <default>
    port=389 <default>
(CudbNode=node2)>

```

If the configuration is not correct, try to fix the configuration. For more detail, refer to section *Configuring CUDb Connection Pool* in *Configure DNS and ENUM*.

If the configuration is correct, and the alarm still exists, do the following:

3. Fix the issues of the failed CUDb node.

This action is outside the scope of IPWorks instruction.

4. 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.

2.3 Troubleshooting Network Issues

To clear the alarm, perform the following steps:

1. Debug and troubleshoot the network issues, for example, ping the IP address, check the cable connection and etc.

The alarm is expected to be cleared automatically when the network connection returns to normal.

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.



2.4 Troubleshooting the CUDB Configuration

Consult with CUDB maintenance support, and check whether the Flexible PL Deployment function is enabled and this CUDB node is not an AD node anymore.

You can remove this CUDB Node from IPWorks configuration. Or ignore this alarm, as this CUDB node is temporary change to D node.

Otherwise, consult the next level of maintenance support. Further actions are outside the scope of this instruction.