

ERH, CUDB Node Failure

IPWorks

OPERATING INSTRUCTIONS

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1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is issued 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 by maintenance activity or some other reason.	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 does n'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



Attribute Name	Attribute Value
Minor Type	856108
Managed Object Class	ipworksErh
Source	ManagedElement=<Node Name>, SystemFunctions=1,Fm=1,FmAlarmModel=IpworksErh,FmAlarmType=ipworksERHCUDBNodeFailure, HostName=<Hostname>,IpworksErh,Node=<NodeIP>
Specific Problem	ERH, 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

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

- System Safety Information
- Personal Health and Safety Information

1.2.2 Tools

No tools are required.

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 ERH 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,DataBaseI
CudbManager=1,CudbServiceSite=NP,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=[] <empty>
  password=[] <empty>
  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. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

2.3 Troubleshooting the 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 without a PLDB replica.

If Yes, ignore this alarm, as this CUDB node is configured to not receive direct traffic. If No, consult the next level of maintenance support. Further actions are outside the scope of this instruction.