

Diameter AAA, Server Cannot Connect to CUDB Node

IPWorks

OPERATING INSTRUCTIONS

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Diameter AAA, Server Cannot Connect to CUDB Node



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is issued when the Diameter AAA server fails to connect to certain specified 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
The configuration of CUDB node is incorrect.	The configured address or port of the specified CUDB node is invalid.	The address, port, password, etc. of certain specified CUDB node does not match the actual CUDB node.	Diameter AAA	Diameter AAA cannot get the service from the specified CUDB node. If all nodes grouped in one CUDB site cannot be connected, the traffic sent to the failed site will be switched to another CUDB site (Failover mechanism).	Section 2.1 on page 3
The specified CUDB node is unreachable.	The CUDB node is unreachable because of network connection issues or other network related glitches.	Network connection error.	Network		Section 2.2 on page 4
The specified CUDB node is down.	The CUDB node is down because of maintenance activity or some other reasons.	CUDB node is not started by some reasons.	CUDB node		Section 2.3 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	864266
Managed Object Class	IpworksDiameterAAA
Source	ManagedElement=<Node Name>,SystemFunctions=1,Fm=1,FmAlarmModel=ipworksDiameterAAA,FmAlarmType=ipworksDiameterAAACUDBNodeFailure,HostName=<hostname>,IpworksDiameterAAA,Node-IP=<IP address>
Specific Problem	Diameter AAA, Server Cannot Connect to CUDB Node
Event Type	communicationsAlarm(2)
Probable Cause	x733RemoteNodeTransmissionError (342)
Additional Text	CUDB Node %s is lost when AAA tries to connect to CUDB Node.;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 the following document has been read:

— Fault Management

1.2.2 Tools

Not available.

1.2.3 Conditions

Not applicable.



1.3 Related Information

Trademark information, typographic conventions, and definition and explanation of abbreviations and terminology can be found in the following documents:

- Trademark Information
- Typographic Conventions
- Glossary of Terms and Acronyms

2 Procedure

This section describes the procedure to follow to clear this alarm.

2.1 Correcting CUDB Connection Configuration

To clear the alarm, do the following:

1. Obtain the IP address of the failed CUDB node through the alarm attribute **Additional Text**. For example, the failed CUDB node is 10.170.15.188.
2. Check whether the CUDB connection configuration with AAA is correct.

For example, the following example shows that two CUDB nodes (“node1” and “node2”) are deployed in the site (“site1”). The IP address of the failed CUDB node (“node2”) is 10.170.15.188.

```
>ManagedElement=<Node Name>,IpworksFunction=1,IpworksCommonRoot=1,⇒
DataBaseInfo=1,CudbManager=1,CudbServiceSite=PKI,CudbSiteManager=1,CudbSi
(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 incorrect, try to correct the configuration. For more information, refer to section Configuring CUDB Connection Pool in [Configure EPC AAA](#).

If the configuration is correct, try to fix the issue on the failed CUDB nodes. This action is outside of the scope of IPWorks documents.

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.

2.2 Troubleshooting the Network Issues

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

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

2.3 Checking the CUDB Node Status

Contact CUDB support, and check the status of the specified CUDB node. If the specified CUDB node is really down, try to debug and troubleshoot the issues. Further actions are outside the scope of this instruction.

The alarm is expected to be cleared automatically when the status of the CUDB node returns to normal.