

Diameter AAA, Server Cannot Connect to CUDB Site

IPWorks

OPERATING INSTRUCTIONS

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Diameter AAA, Server Cannot Connect to CUDB Site



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is issued when the Diameter AAA server can access none of the CUDB node certain specified CUDB site.

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 all CUDB nodes in the specified CUDB site is incorrect.	The configured addresses, ports, or passwords of all CUDB nodes grouped in the specified CUDB site are incorrect.	The attribute address or port of all CUDB nodes grouped in certain CUDB site is configured incorrectly.	Diameter AAA	Diameter AAA cannot get the service from the CUDB site. The traffic sent to the failed site will be switched to another CUDB site (Failover mechanism).	Section 2.1 on page 3
All nodes in the specified CUDB site are unreachable.	All nodes in the specified CUDB site are unreachable because of network connection issues or other network related fault.	Network connection error.	Network	If all the sites are down, Diameter AAA fails to work.	Section 2.2 on page 4
All nodes in the specified CUDB site are down	All nodes grouped in the specific CUDB site are down because of maintenance activity or some other reasons.	All nodes grouped in the specific CUDB site are not started by some reasons.	CUDB nodes		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
Minor Type	864267
Managed Object Class	IpworksDiameterAAA
Source	ManagedElement=<Node Name>,SystemFunctions=1,Fm=1,FmAlarmModel=ipworksDiameterAAA,FmAlarmType=ipworksDiameterAAACUDBSiteFailure,HostName=<hostname>,IpworksDiameterAAA,Site-Name=<site name>
Specific Problem	Diameter AAA, Server Cannot Connect to CUDB Site
Event Type	communicationsAlarm(2)
Probable Cause	x733RemoteNodeTransmissionError (342)
Additional Text	CUDB Site %s is lost when AAA tries to connect to CUDB Site.;uuid:<Product_UUID> ⁽¹⁾
Perceived Severity	Major

(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. Get information from the alarm attribute **Additional Text** to know which CUDB site failed. For example, “site1”.
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 failed site (“site1”), and the IP addresses of the CUDB nodes are 10.170.15.186 and 10.170.15.188 respectively.

Ensure that the IP addresses, port, password, etc. in “site1” are configured as the same as provided by the CUDB node.

```
>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="10.170.15.186"
  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 correct the configuration. For more information, refer to section Configuring CUDB Connection Pool in [Configure EPC AAA](#).

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 one of CUDB nodes' network connection returns to normal.

2.3 Checking the CUDB Node Status

Contact CUDB support, and check the status of all CUDB nodes grouped in the specific CUDB site. If all CUDB nodes are 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 one of the CUDB nodes' status returns to normal.