

# vDicos, Diameter Link Failure

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## OPERATING INSTRUCTIONS

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# 1 Introduction

This instruction concerns alarm handling.

## 1.1 Alarm Description

The alarm is issued when a Diameter connection has failed.

**Note:** The alarm is cleared automatically when any of the following alarms are issued:

- *vDicos, Diameter Peer Node Disabled*

Alarms for connections to the peer node are cleared and a new alarm is issued for the peer node.

- *vDicos, Diameter Own Node Disabled*

Alarms for connections (and peer nodes) related to the own node are cleared and a new alarm is issued for the own node.

- *vDicos, Diameter Link Disabled*

Alarm for this connection is cleared and a new alarm is issued for the connection.

The possible alarm causes and fault locations are explained in Table 1.

*Table 1 Alarm Causes*



Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Format error of Capabilities Exchange Request (CER)/Capabilities Exchange Answer (CEA) messages	There is a format error of CER/CEA messages	The received message has not been coded according to the diameter standard for coding parameters	Examine the log in /opt/cdclsv/storage/log/lpmsv to determine fault reason	Missing connection between one or more Diameter peer nodes, which can decrease the throughput of messages between Diameter applications
		One or more Attribute-Value Pairs (AVPs) are missing		
		A vendor-defined mandatory AVP is received and that AVP is not defined in the receiving node		
Configuration fault	The configuration is faulty	The security configuration is not the same on both sides	Software configuration	
		An application is not installed on both sides		
		The number of connections is not equal on both sides		
Link inactivity	There is link inactivity	A connection to a Diameter peer is broken because of link inactivity without response to a watchdog message	Network interface	
IP network failure	The IP network is faulty	IP network failure	IP network	
		Socket failure	Socket	
		Malformed message	Network	
System error	There is a system error	No access to the configuration Database Service (DBS) for Diameter	Software	



The alarm attributes are listed and explained in Table 2.

*Table 2 Alarm Attributes*

Attribute Name	Attribute Value
Major Type	193
Minor Type	2250572777
Managed Object Class	<i>DIA-CFG-Conn</i>
Managed Object Instance	ManagedElement=<node_name>, <ManagedFunction>=<FunctionId>, DIA-CFG-Application=DIA, DIA-CFG-StackContainer=<stackId>, DIA-CFG-PeerNodeContainer=<stackId>, DIA-CFG-NeighbourNode=<hostId>#<stackId>, DIA-CFG-Conn=<stackId>#<hostId>#<connId>
Specific Problem	vDicos, Diameter Link Failure
Event Type	communicationsAlarm (2)
Probable Cause	gsm1211LinkFailure (517)
Additional Text	Detailed Information: Configuration fault, IRP Cause: 517 Detailed Information: Link inactivity, IRP Cause: 517 Detailed Information: IP network failure, IRP Cause: 517 Detailed Information: Format error of CER/CEA messages, IRP Cause: 517 Detailed Information: System error, IRP Cause: 517 Detailed Information: Connection failure, IRP Cause: 517
Perceived Severity	major (4)

## 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 documents:

- *Data Collection Guideline*
- *vDicos, Diameter Link Disabled*
- *vDicos, Diameter Own Node Disabled*
- *vDicos, Diameter Peer Node Disabled*



## **1.2.2 Tools**

No tools are required.

## **1.2.3 Conditions**

Before starting this procedure, ensure that the following conditions are met:

- A vDicos, Diameter Link Failure alarm is raised.
- System authorization and authentication have passed successfully.
- Diameter configuration data is correctly defined.
- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.



## 2 Procedure

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

### 2.1 Analyzing Alarm

Diameter connections are normally re-established automatically without user intervention. If the node is configured as a connection initiator, the node tries to establish the connection periodically. If the node is configured as a connection acceptor, the node waits for new connection requests from the peer node. Timers are available to control the reestablishment of connections automatically. For more information, refer to attribute *tcTimer*.

If the Diameter connection is not re-established automatically within a certain time (normally 120 seconds), select action according to alarm attribute Additional Text, as follows:

- If format error of CER/CEA messages, proceed with Section 2.2 Actions for Format Error of CER/CEA Messages on page 5.
- If configuration fault, proceed with Section 2.3 Actions for Configuration Fault on page 8.
- If link inactivity or IP network failure, proceed with Section 2.4 Actions for Link Inactivity and IP Network Failure on page 13.
- If system error, proceed with Section 2.5 Actions for System Error on page 15.
- If connection failure, proceed with Section 2.6 Actions for Connection Failure on page 17.

### 2.2 Actions for Format Error of CER/CEA Messages

Do the following:

1. Wait for automatic reconnection.
2. Navigate to the *DIA-CFG-Conn* MO indicated by the alarm, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\23conn1
```

3. Check the link status for each of the *DIA-CFG-Conn* MOs, for example:



```
(DIA-CFG-Conn=1) >show linkStatus
```

The following is an example output:

```
linkStatus=Up
```

4. Is at least one of the connections established for the peer node?

Yes: Proceed with Step 13.

No: Continue with the next step.

5. Navigate to the *DIA-CFG-NeighbourNode* Managed Object (MO), for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNodeContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.com\23abc
```

6. Enter Config mode:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >configure
```

7. Disable the peer node:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >enabled=false
```

8. Commit the setting:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >commit -s
```

9. Enable the peer node:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >enabled=true
```

10. Commit the setting:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >commit
```

11. Verify the setting:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >show enabled
```

```
enabled=true
```

12. Proceed with Step 23.



13. Is there only one connection that is not established for the peer node?

Yes: Continue with the next step.

No: Proceed with Step 23.

14. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

15. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)>confi
gure
```

16. Disable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
)>enabled=false
```

17. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
)>commit -s
```

18. Enable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)>e
nabled=true
```

19. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
)>commit
```

20. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)>show
enabled
```

```
enabled=true
```

21. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)>show
linkStatus
```

The following is an example output:

```
linkStatus=Up
```



22. Is the connection established?  
Yes: Continue with the next step.  
No: Proceed with Step 24.
23. Is the alarm cleared?  
Yes: Proceed with Step 26.  
No: Continue with the next step.
24. Perform data collection, refer to *Data Collection Guideline*.
25. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.
26. Job is completed.

## 2.3 Actions for Configuration Fault

Do the following:

1. Wait for automatic reconnection.
2. If the number of connections is not equal on both sides, add or delete *DIA-CFG-Conn* MOs under the appropriate *DIA-CFG-NeighbourNode* MO to get equal numbers on both sides.
3. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App  
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNode  
Container=abc,DIA-CFG-NeighbourNode=node12.ericsson.co  
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

4. Check the link status for each of the *DIA-CFG-Conn* MOs, for example:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show  
linkStatus
```

The following is an example output:

```
linkstatus=Up
```

5. Is at least one of the connections established for the peer node?  
Yes: Proceed with Step 13.  
No: Continue with the next step.
6. Navigate to the *DIA-CFG-NeighbourNode* MO, for example:



```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNo
deContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson
n.com\23abc
```

7. Enter Config mode:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >con
figure
```

8. Disable the peer node:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23abc
) >enabled=false
```

9. Commit the setting:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23
abc) >commit
```

10. Verify the setting:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >show
enabled
```

```
enabled=false
```

11. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

12. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show
linkStatus
```

The following is an example output:

```
linkStatus=Down
```

13. Is there only one connection that is not established for the peer node?

Yes: Continue with the next step.

No: Proceed with Step 18.

14. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >config
ure
```

15. Disable the connection:



```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)  
>enabled=false
```

16. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)  
>commit
```

17. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show  
enabled
```

```
enabled=false
```

18. Ensure that both nodes have the same Diameter applications installed and that the Transport Layer Security (TLS) is not required by the other Diameter node. Contact the deployment organization, if necessary.

19. Select one of the following actions depending on the configuration fault:

- Enable the peer node (DIA-CFG-NeighbourNode) – Proceed with Step 20.
- Enable the connection (DIA-CFG-Conn) – Proceed with Step 27.

20. Navigate to the *DIA-CFG-NeighbourNode* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App  
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNo  
deContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson  
.com\23abc
```

21. Enter Config mode:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >con  
figure
```

22. Enable the peer node:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23ab  
c) >enabled=true
```

23. Commit the setting:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23  
abc) >commit
```

24. Verify the setting:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >show  
enabled
```

```
enabled=true
```



25. Navigate to the *DIA-CFG-Conn* MO:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

26. Proceed with Step 32.

27. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNodeContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.com\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

28. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >configure
```

29. Enable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >enabled=true
```

30. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >commit
```

31. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show enabled
```

```
enabled=true
```

32. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show linkStatus
```

```
linkStatus=Up
```

33. Is the connection established?

Yes: Proceed with Step 46.

No: Continue with the next step:

34. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNodeContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.com\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```



```
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.com\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

35. Check the value of attribute `blockReason`:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show  
blockReason
```

The following is an example output:

```
blockReason=3007(application is unsupported)
```

36. Select action according to the result:

- If 3007(application is unsupported) or 5010(there is no common application), install the needed application.
- If 3010(the peer is unknown), define the peer node.
- If 5012(not enough resources defined), define more connections for the peer node to get equal numbers on both sides.

37. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App  
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod  
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co  
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

38. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >config  
ure
```

39. Disable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1  
) >enabled=false
```

40. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1  
) >commit -s
```

41. Enable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >e  
nabled=true
```

42. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1  
) >commit
```



43. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show
enabled
```

```
enabled=true
```

44. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show
linkStatus
```

The following is an example output:

```
linkStatus=Up
```

45. Is the connection established?

Yes: Continue with the next step.

No: Proceed with Step 47.

46. Is the alarm cleared?

Yes: Proceed with Step 49.

No: Continue with the next step.

47. Perform data collection, refer to *Data Collection Guideline*.

48. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

49. Job is completed.

## 2.4 Actions for Link Inactivity and IP Network Failure

Do the following:

1. Check the IP network and that the other Diameter node is operational by contacting the system administrator of the peer node.
2. Wait for automatic reconnection.
3. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

4. Check the link status:



```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show linkStatus
```

The following is an example output:

```
linkStatus=Up
```

5. Is the connection established?

Yes: Proceed with Step 14.

No: Continue with the next step.

6. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >configure
```

7. Disable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >enabled=false
```

8. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >commit -s
```

9. Enable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >enabled=true
```

10. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >commit
```

11. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show enabled
```

The following is an example output:

```
enabled=true
```

12. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show linkStatus
```

The system returns Up if the connection is established.



13. Is the connection established?

Yes: Continue with the next step.

No: Proceed with Step 15.

14. Is the alarm cleared?

Yes: Proceed with Step 17.

No: Continue with the next step.

15. Perform data collection, refer to *Data Collection Guideline*.

16. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

17. Job is completed.

## 2.5 Actions for System Error

Do the following:

1. Wait for automatic reconnection.

2. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

3. Check the link status for each of the *DIA-CFG-Conn* MOs, for example:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show
linkStatus
```

The following is an example output:

```
linkStatus=Up
```

4. Is the connection established?

Yes: Proceed with Step 13.

No: Continue with the next step.

5. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >config
ure
```

6. Disable the connection:



```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)  
>enabled=false
```

7. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)  
>commit -s
```

8. Enable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >enabled=true
```

9. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1)  
>commit
```

10. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show enabled
```

The following is an example output:

```
enabled=true
```

11. Check the link status for each of the *DIA-CFG-Conn* MOs, for example:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show linkStatus
```

The following is an example output:

```
linkStatus=Up
```

12. Is the connection established?

Yes: Continue with the next step.

No: Proceed with Step 14.

13. Is the alarm cleared?

Yes: Proceed with Step 16.

No: Continue with the next step.

14. Perform data collection, refer to *Data Collection Guideline*.

15. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

16. Job is completed.



## 2.6 Actions for Connection Failure

Do the following:

1. Check the IP network and that the other Diameter node is operational by contacting the system administrator of the peer node.
2. Wait for automatic reconnection.
3. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

4. Check the link status for each of the *DIA-CFG-Conn* MOs, for example:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show
linkStatus
```

The following is an example output:

```
linkStatus=Up
```

5. Is the connection established?

Yes: Proceed with Step 13.

No: Continue with the next step.

6. Navigate to the *DIA-CFG-NeighbourNode* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNo
deContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson
.com\23abc
```

7. Enter Config mode:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >con
figure
```

8. Disable the peer node:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23abc
) >enabled=false
```

9. Commit the setting:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23
abc) >commit
```



10. Verify the setting:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >show enabled
```

The following is an example output:

```
enabled=false
```

11. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNodeContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.com\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

12. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show linkStatus
```

The following is an example output:

```
linkStatus=Down
```

13. Is there only one connection that is not established for the peer node?

Yes: Continue with the next step.

No: Proceed with Step 18.

14. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >configure
```

15. Disable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >enabled=false
```

16. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >commit
```

17. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show enabled
```

The following is an example output:



```
enabled=false
```

18. Check and correct the IP addresses and the ports.
19. Select one of the following actions depending on the configuration failure:
  - Enable the peer node, continue with the next step.
  - Enable the connection, proceed with Step 26.
20. Navigate to the *DIA-CFG-NeighbourNode* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNo
deContainer=abc,DIA-CFG-NeighbourNode=node12.ericss
n.com\23abc
```

21. Enter Config mode:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >con
figure
```

22. Enable the peer node:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23ab
c) >enabled=true
```

23. Commit the setting:

```
(config-DIA-CFG-NeighbourNode=node12.ericsson.com\23
abc) >commit
```

24. Verify the setting:

```
(DIA-CFG-NeighbourNode=node12.ericsson.com\23abc) >show
enabled
```

The following is an example output:

```
enabled=true
```

25. Proceed with Step 33.
26. Navigate to the *DIA-CFG-Conn* MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-App
lication=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-PeerNod
eContainer=abc,DIA-CFG-NeighbourNode=node12.ericsson.co
m\23abc,DIA-CFG-Conn=abc\23node12.ericsson.com\conn1
```

27. Enter Config mode:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >config
ure
```



28. Enable the connection:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >enabled=true
```

29. Commit the setting:

```
(config-DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >commit
```

30. Verify the setting:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show enabled
```

The following is an example output:

```
enabled=true
```

31. Check the link status:

```
(DIA-CFG-Conn=abc\23node12.ericsson.com\conn1) >show linkStatus
```

The following is an example output:

```
linkStatus=Up
```

32. Is the connection established?

Yes: Continue with the next step.

No: Proceed with Step 34.

33. Is the alarm cleared?

Yes: Proceed with Step 36

No: Continue with the next step.

34. Perform data collection, refer to *Data Collection Guideline*.

35. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

36. Job is completed.