

vDicos, Diameter Link Disabled

OPERATING INSTRUCTIONS

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vDicos, Diameter Link Disabled



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is raised when the relevant Diameter connection is either administratively disabled by Operation and Maintenance (OAM) or disabled by a peer.

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

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Link disabled by O&M	The Diameter connection is disabled by OAM	The link is administratively disabled or a new link is created (disabled by default)	Own node	No traffic flow through the disabled link
Link disabled by peer	The Diameter connection is disabled by the peer	The link is disabled because a Disconnect Peer Request (DPR) was received	Peer	

Note: The alarm is cleared automatically if one of the following alarms is raised:

- *vDicos, Diameter Peer Node Disabled*

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

The alarm attributes are listed and explained in Table 2.



Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	2250572778
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 Disabled
Event Type	communicationsAlarm (2)
Probable Cause	m3100Unavailable (14)
Additional Text	Detailed Information: Link disabled by OAM, IRP Cause: 14 Detailed Information: Link disabled by peer, IRP Cause: 14
Perceived Severity	warning (6)

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 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 Disabled alarm is raised.



- 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

Select action according to the alarm cause indicated in the `additionalText` attribute:

- If the link is disabled by OAM, proceed with Section 2.2 Actions for Link Disabled by Operation and Maintenance on page 5.
- If the link is disabled by the peer, proceed with Section 2.3 Actions for Link Disabled by Peer on page 6.

2.2 Actions for Link Disabled by Operation and Maintenance

Do the following:

1. Contact the network or node administrator. Is the node administratively disabled for maintenance reasons?

Yes: Proceed with Step 13.

No: Continue with the next step.

2. Is the alarm raised for a connection acting as responder (incoming connection)?

Yes: Proceed with Step 8.

No: Continue with the next step.

3. Navigate to the *DIA-CFG-Conn* 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,DIA-CFG-Conn=abc\23node12.ericsson.com\23conn1
```

4. Enable the outgoing connection:

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



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

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

5. Verify the setting:

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

The following is an example output:

```
enabled=true
```

6. Check the link status:

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

The following is an example output:

```
linkStatus=Up
```

7. Is the connection established?

Yes: Proceed with Step 10.

No: Proceed with Step 11.

8. Contact the peer node administrator to enable the connection from the peer node.

9. Proceed with Step 13.

10. Is the alarm cleared?

Yes: Proceed with Step 13.

No: Continue with the next step.

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

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

13. Job is completed.

2.3 Actions for Link Disabled by Peer

Do the following:



1. Is the alarm raised for a connection acting as responder (incoming connection)?

Yes: Continue with the next step.

No: Proceed with Step 6.

2. Wait for the peer node to re-establish the connection and reception of a Capabilities-Exchange-Request (CER).

3. Is the alarm cleared?

Yes: Proceed with Step 15.

No: Continue with the next step.

4. Contact the network or peer node administrator to investigate the peer node.

5. Proceed with Step 15.

6. 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\23conn1
```

7. Check attribute `blockReason`:

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

The following is an example output:

```
blockReason="Not blocked"
```

8. Is attribute `blockReason` of the corresponding connection DPR received, `cause=DoNotWantToTalkToYou`, or DPR received, `cause=Busy`?

Yes: Continue with the next step.

No: Proceed with Step 11.

9. Disable and enable the connection:

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

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



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

Note: The value of attribute `blockReason` is automatically changed to `Not blocked`.

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

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

10. Verify the setting:

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

```
enabled=true
```

11. Wait for automatic reconnect and sending of CER.

12. Is the alarm cleared?

Yes: Proceed with Step 15.

No: Continue with the next step.

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

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

15. Job is completed.