



CHAPTER 10

Troubleshooting DCNM

This chapter contains some common issues you may experience while using Cisco Data Center Network Manager (DCNM), and provides solutions.

This chapter contains the following sections:

- [License Requirements, page 10-1](#)
- [Initial Troubleshooting Checklist, page 10-2](#)
- [Tips for Using DCNM, page 10-2](#)
- [Trouble with DCNM Server Installation, page 10-2](#)
- [Trouble with Starting the DCNM Server, page 10-3](#)
- [Trouble with the DCNM Client, page 10-4](#)
- [Trouble with Device Discovery or Device Status, page 10-6](#)
- [Trouble with Device Management, page 10-7](#)
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License Requirements

Some DCNM features are enabled by license. For more information, see the *Cisco DCNM Licensing Guide*.

The following features are enabled in DCNM only after you have installed a LAN Enterprise license:

- 802.1x
- Gateway load-balancing protocol (GLBP)
- Object tracking
- Keychain management
- DHCP snooping
- Dynamic ARP Inspection
- ARP access control lists (ACLs)
- IP Source Guard
- Traffic storm control
- Port security

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- IP tunnels
- Virtual Device Contexts (VDCs)
- Topology view of VDCs within a Nexus chassis
- Display of historical statistical data

Initial Troubleshooting Checklist

Begin troubleshooting DCNM issues by checking the following issues first:

Checklist	Checkoff
Verify that you have a compatible version of Java installed. Java 1.5.0 is recommended.	<input type="checkbox"/>
Verify that the necessary ports are open in your firewall if DCNM server is installed behind a firewall.	<input type="checkbox"/>
Verify that you have installed the same version of the DCNM client and the DCNM server.	<input type="checkbox"/>

Tips for Using DCNM

This section covers the following topics:

- [Events Tabs Show Fewer Events than the Events Browser, page 10-2](#)
- [Event Browser Pie Chart May Be Inaccurate for Small Numbers, page 10-2](#)

Events Tabs Show Fewer Events than the Events Browser

The Event Browser feature shows all messages received by DCNM, even if the message pertains to a feature that is not supported by DCNM.

An Events tab shows only those messages that reflect the status of the currently selected feature. For some features, this is a subset of the possible messages about the feature.

Event Browser Pie Chart May Be Inaccurate for Small Numbers

The Event Browser pie chart may sometimes show incorrect sizes for wedges that are less than 5% of the pie; however, the numbers shown are correct.

Trouble with DCNM Server Installation

This section includes the following topics:

- [Postgres Database Installation Fails, page 10-3](#)
- [Previous Installation Found when No Previous Installation Exists, page 10-3](#)

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Postgres Database Installation Fails

Check [Table 10-1](#) for symptoms related to installation failure of the Postgres database. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-1 *Postgres Database Installation Fails*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> Postgres database installation fails 	Username specified to run the Postgres service already exists on the server.	Specify a different username or remove the existing username from the server.
	Intrusion detection software, such as Cisco Security Agent, blocked the installation.	Temporarily disable the intrusion detection software and reinstall DCNM.

Previous Installation Found when No Previous Installation Exists

During installation, a message wrongly states that a previous installation exists.

This can occur when the following file is found on the server:

```
C:\Program Files\Zero G Registry\.com.zerog.registry.xml
```

Delete the file and restart the DCNM installation.

Trouble with Starting the DCNM Server

This section includes the following topics:

- [DCNM Server Fails to Start, page 10-4](#)

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DCNM Server Fails to Start

Check [Table 10-2](#) for symptoms related to downloading the DCNM client. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-2 *DCNM Server Fails to Start*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> DCNM server fails to start. 	Postgres database did not install.	See the “ Postgres Database Installation Fails ” section on page 10-3 .
	Postgres service is not running.	Start the Postgres service. To do so, choose Start > All Programs > Postgres 8.2 > Start Service .
	Postgres user credentials are incorrect.	Correct the Postgres user credentials and restart the DCNM server.
	Ports used by the server are already in use.	<ol style="list-style-type: none"> Check the server log for messages such as “Port <i>port-number</i> already in use”. The server log is the following file: <i>Installation_directory\jboss-4.2.2.GA\server\dcnm\server.log</i> Determine which application is using the port and stop or reconfigure the application. Restart the DCNM server.

Trouble with the DCNM Client

This section includes the following topics:

- [Cannot Download the DCNM Client from the Server, page 10-4](#)
- [Cannot Start the DCNM Client, page 10-5](#)
- [Cannot Log into the DCNM Client, page 10-5](#)
- [Client Loses Connection to the DCNM Server, page 10-6](#)

Cannot Download the DCNM Client from the Server

Check [Table 10-3](#) for symptoms related to downloading the DCNM client. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-3 *Cannot Download the DCNM Client from the Server*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> Cannot download the DCNM client from the server. 	Using wrong URL or web server port.	Verify that you are using the correct URL, including the port number.
	TCP port blocked by gateway device.	Open TCP port in your firewall.

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Cannot Start the DCNM Client

Check [Table 10-4](#) for symptoms related to starting the DCNM client. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-4 *Cannot Start the DCNM Client*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> Cannot start the DCNM client. 	Appropriate version of Java may not be installed.	Install the supported version of the Java Runtime Environment. For up-to-date information about the supported Java version, see the <i>Cisco DCNM Release, Notes, Release 4.0</i> at the following website: http://www.cisco.com/en/US/docs/switches/datacenter/sw/4_0/dcnm/release/notes/dcnm_4_0_relnotes.html

Cannot Log into the DCNM Client

Check [Table 10-5](#) for symptoms related to logging into the DCNM client. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-5 *Cannot Log into the DCNM Client*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> Cannot log into the DCNM client. 	Forgot password.	Ask a DCNM administrator to reset your password. If no one has administrative access to DCNM, stop the DCNM server, clean the database, and restart the DCNM server. Then access DCNM using the default administrator account.
	DCNM server is down.	Restart the DCNM server. See the “Starting the DCNM Server” section on page 2-9.
	DCNM server is unreachable.	Ensure that the computer that runs the DCNM client meets the network requirements for using the DCNM client remotely.
<ul style="list-style-type: none"> When you try to log into the DCNM client, you receive the error message “Can not resolve DCNM server <i>hostname</i> via DNS. Make sure that DCNM server has a valid DNS entry”. 	You used a hostname to specify the DCNM server during login and DNS does not have an entry for the DCNM server.	Ensure that DNS on your network has an entry for the DCNM server hostname.

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Client Loses Connection to the DCNM Server

Check [Table 10-6](#) for symptoms related to the DCNM client losing its connection with the server. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-6 *Client Loses Connection to the DCNM Server*

Symptoms	Possible Cause	Solution
<ul style="list-style-type: none"> Client loses connection to the server. 	Client failure.	Restart the client.
	DCNM server is down.	Restart the DCNM server. See the “Starting the DCNM Server” section on page 2-9 .
<ul style="list-style-type: none"> The client window is pink. 	DCNM server is unreachable.	Investigate your network to determine if it meets the network requirements for using the DCNM client remotely.

Trouble with Device Discovery or Device Status

Check [Table 10-7](#) for symptoms related to issues with device discovery or device status. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-7 *Trouble with Device Discovery or Management*

Symptoms	Possible Cause	Solution
<ul style="list-style-type: none"> A device discovery task fails. A device status changes to Unmanaged or Unreachable 	Incorrect device credentials provided.	Reenter the username and password, and try discovering the device again. If you are attempting to discover CDP neighbors of the seed device, ensure that the credentials that you provide are valid on all devices that you want to discover.
	The SSH server is disabled on the device.	Reenable the SSH server on the device and try discovering the device again.
	The maximum number of SSH sessions that the device can support has been reached.	Check the number of user sessions on the device. Free at least one connection and try discovering the device again.
	CDP is disabled on the device or on the device interface that the DCNM server connects to.	Ensure that CDP is enabled on the device globally and that it is enabled on the specific interface the DCNM server connects to.
	The device interface that the DCNM server connects to is shut down.	Ensure that the device interface that the DCNM server connects to is up.
	The device restarted or shut down before discovery could complete.	Ensure that the device is running and try discovering the device again.
	The DCNM server cannot reach the device.	Ensure that the network requirements for device management are met. See the “NX-OS Device Configuration Requirements” section on page 1-5 .

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Trouble with Device Management

Check [Table 10-4](#) for symptoms related to device management. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-8 *Trouble with Device Management*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> The client shows device configuration information that is out of date. 	The DCNM server was down.	You can do either of the following: <ul style="list-style-type: none"> Rediscover the device. For more information, see the “Discovering a Device” section on page 9-12. Restart the DCNM server with a clean database. If the server was down for a long time, this is the recommended solution.

Trouble with Event Browsing

Check [Table 10-9](#) for symptoms related to event browsing issues. For each symptom that describes your trouble, determine which possible causes apply and follow the corresponding solutions.

Table 10-9 *Trouble with Event Browsing*

Symptom	Possible Cause	Solution
<ul style="list-style-type: none"> Events available on the device command line do not appear in the client Too few events shown in Events Browser or an Events tab 	Logging levels on managed devices are set incorrectly.	Check logging level configuration on managed devices. See the “NX-OS System-Message Logging Requirements” section on page 1-6.
	The client fetches events that are not old enough.	Check the events-related setting in the client preferences. For more information, see the “Configuring the Maximum Age of Events Fetched from the Server” section on page 4-15.
<ul style="list-style-type: none"> Too many events shown in Events Browser or an Events tab 	A managed device has an issue that is generating many system log messages.	Temporarily unmanage the device until you resolve the issues on the device. For more information, see the “Unmanaging a Device” section on page 9-13.
	Logging levels on managed devices are set incorrectly.	Check logging level configuration on managed devices. See the “NX-OS System-Message Logging Requirements” section on page 1-6.
<ul style="list-style-type: none"> A feature Events tab does not show events that appear in the Events browser 	By design, an Events tab shows only messages that apply to the currently selected feature and may show only a subset of the possible messages for the feature. For more information, see the “Events Tabs Show Fewer Events than the Events Browser” section on page 10-2.	Use the Event Browser to see status-related system messages received by DCNM. For more information, see the “Viewing Events in the Events Browser” section on page 7-3.

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