



CHAPTER 16

Starting and Stopping Cisco DCNM Servers

This chapter describes how to start or stop Cisco Data Center Network Manager (DCNM) servers.

This chapter includes the following sections:

- [Information About Starting and Stopping Cisco DCNM Servers, page 16-1](#)
- [Licensing Requirements for Starting and Stopping Cisco DCNM Servers, page 16-1](#)
- [Starting Cisco DCNM Servers, page 16-2](#)
- [Stopping Cisco DCNM Servers, page 16-5](#)
- [Related Documents, page 16-8](#)
- [Feature History for Starting and Stopping a Cisco DCNM Server, page 16-8](#)

Information About Starting and Stopping Cisco DCNM Servers

Starting and stopping Cisco DCNM servers is a necessary part of server maintenance, such as during database backup, cleaning, or restoration. In a clustered server deployment, the order in which you start Cisco DCNM servers determines which server is the master server. This chapter provides detailed steps for starting and stopping Cisco DCNM servers for both single-server deployments and clustered-server deployments.

Licensing Requirements for Starting and Stopping Cisco DCNM Servers

The following table shows the licensing requirements for this feature:

Product	License Requirement
Cisco DCNM	Starting and stopping Cisco DCNM servers requires no license. Any feature not included in a license package is bundled with the Cisco DCNM and is provided at no charge to you. For information about obtaining and installing a Cisco DCNM LAN Enterprise license, see the <i>Cisco DCNM Installation and Licensing Guide, Release 5.x</i> .

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Starting Cisco DCNM Servers

This section includes the following topics:

- [Starting a Single Cisco DCNM Server, page 16-2](#)
- [Starting a Cluster of Cisco DCNM Servers, page 16-3](#)

Starting a Single Cisco DCNM Server

You can start a single Cisco DCNM server. The procedures for starting a single Cisco DCNM server differ for systems using the supported Microsoft Windows Server and Red Hat Enterprise Linux (RHEL) operating systems, as described in the following topics:

- [Starting a Single Cisco DCNM Server \(Microsoft Windows Server\), page 16-2](#)
- [Starting a Single Cisco DCNM Server \(RHEL\), page 16-2](#)

Starting a Single Cisco DCNM Server (Microsoft Windows Server)

On a server system running Microsoft Windows Server, you can start a Cisco DCNM server through the Windows services or by clicking the Start DCNM Server icon.

BEFORE YOU BEGIN

You must have installed the Cisco DCNM server.

If you are starting a server cluster, ensure that you are starting the server in the correct order. For more information, see the [“Starting a Cluster of Cisco DCNM Servers” section on page 16-3](#).

DETAILED STEPS

Step 1 Open the Control Panel window and choose **Administrative Tools > Services**.

The Services window opens.

Step 2 Right-click **Cisco DCNM Server** and choose **Start**.



Note Alternatively, you can choose **Start > All Programs > Cisco DCNM Server > Start DCNM Server**; however, the location of shortcuts depends upon the choices you made when you installed the Cisco DCNM server.

A splash screen opens while the Cisco DCNM server starts. This screen closes once the Cisco DCNM server is running.

Starting a Single Cisco DCNM Server (RHEL)

You can start a Cisco DCNM server on a RHEL server system by using `/etc/init.d/jboss start`.

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BEFORE YOU BEGIN

The Cisco DCNM server must be installed.

If you are starting a server cluster, ensure that you are starting the server in the correct order. For more information, see the “Starting a Cluster of Cisco DCNM Servers” section on page 16-3.

DETAILED STEPS

-
- Step 1** Run the `<DCNM install directory>/dcm/dcnm/bin/startdcnm.sh` script to start the Cisco DCNM server.
- The Cisco DCNM server opens a server console window and displays the processes it runs to start the server. The server is running when you see a “Started in Xm:XXs:XXXms” message.
-

Starting a Cluster of Cisco DCNM Servers

Depending on the operating system of the secondary server, the Cisco DCNM server can be started using the Windows GUI, the CLI, or the DCNM Install Manager tool. You can use the CLI or the DCNM Install Manager tool for a secondary server running RHEL. For a secondary server running Microsoft Windows, the Cisco DCNM server is started with the Windows GUI.

Starting with Windows GUI or RHEL CLI

Starting a cluster of Cisco DCNM servers requires starting each server individually; however, the order of server startup is important. The server with the oldest start time performs the master server role in the server cluster.

BEFORE YOU BEGIN

We recommend that you use the primary installation server as the master server. For information about deploying a clustered-server environment, see the *Cisco DCNM Installation and Licensing Guide, Release 5.x*.

If any server in the cluster is running, stop it prior to starting the cluster. The only way that you can control which server is the master server is by ensuring that the master server is started before the other servers start. For detailed steps, see the “Stopping Cisco DCNM Servers” section on page 16-5.

DETAILED STEPS

-
- Step 1** Start the server that you want to be the master server of the cluster. To do so, follow the steps for starting a single Cisco DCNM server for the applicable operating system:
- [Starting a Single Cisco DCNM Server \(Microsoft Windows Server\)](#), page 16-2
 - [Starting a Single Cisco DCNM Server \(RHEL\)](#), page 16-2
- Step 2** Wait for the master server to finish starting.
- Step 3** One at a time, start the other servers in the cluster one at a time. After starting a server, wait at least one minute before starting the next server. This delay helps ensure faster stabilization of the server cluster.

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For each server, follow the steps for starting a single Cisco DCNM server for the applicable operating system:

- [Starting a Single Cisco DCNM Server \(Microsoft Windows Server\)](#), page 16-2
- [Starting a Single Cisco DCNM Server \(RHEL\)](#), page 16-2

Starting with Install Manager

DCNM Install Manager is a GUI tool for servers running Linux. It is designed to assist in performing silent mode operations on secondary servers (remote nodes).



Note

DCNM Install Manager does not support Windows servers.

DETAILED STEPS

Step 1 To access Install Manager, navigate to the `dcnm-install-manager.sh` file that is located in the `bin` folder where the DCNM server was installed.

The default `bin` folder location for servers running Linux is `/usr/local/Cisco/dcm/dcnm/bin`.

Step 2 Double click the **dcnm-install-manager.sh** file to launch Install Manager.

Step 3 Click the **New** icon in the tool bar near the top of the Install Manager GUI for every secondary server. A new row in the list of Server Nodes is created every time the New icon is clicked.



Note

Click the **Delete** icon in the tool bar to delete a selected row in the list of Server Nodes. This step does not delete a secondary server from the clustered-server environment.

Step 4 For each secondary server represented by a row in the list of Server Nodes, enter the following:

- Server name or IP address in the Server Name/IP Address field.
- Protocol used for connectivity in the Protocol field.
The protocol is either Telnet or SSH.
- User credentials (user ID and password) used for connecting to the secondary server in the User Credentials field.

The user credentials are used for SSH connectivity to the server. Telnet connectivity to the server does not require user credentials.

Alternatively, default user credentials may be set by entering the credentials in the Default Credentials section of the GUI. The default credentials are used when the User Credential field is blank.

- (Optional) Comments that may be useful to identify the secondary server in the Comments field.

The Last Action Status column in the list of Server Nodes includes the success or failure status of the last performed action. Clicking the “+” icon for the Last Action Status expands the display to show the entire log of actions performed on the server.

Step 5 In the list of Server Nodes, select the secondary servers to start.

Step 6 In the toolbar, click the **Verify** icon to verify the connectivity to the selected secondary servers.

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Correct any connectivity issues before continuing.

Step 7 In the toolbar, click the **Start** icon to start the selected secondary servers.



Note

The Install Manager is a standalone application. The settings specified are not saved and are not persistent. The settings are lost when the Install Manager GUI is closed.

Stopping Cisco DCNM Servers

This section includes the following topics:

- [Stopping Single Cisco DCNM Servers, page 16-5](#)
- [Stopping a Cluster of Cisco DCNM Servers, page 16-6](#)

Stopping Single Cisco DCNM Servers

You can stop a single Cisco DCNM server.

The steps for stopping a single Cisco DCNM server differ for systems using the supported Microsoft Windows Server and RHEL operating systems, as described in the following topics:

- [Stopping a Single Cisco DCNM Server \(Microsoft Windows Server\), page 16-5](#)
- [Stopping a Single Cisco DCNM Server \(RHEL\), page 16-5](#)

Stopping a Single Cisco DCNM Server (Microsoft Windows Server)

On a server system running Microsoft Windows Server, you can stop a Cisco DCNM server through the Windows services or by clicking the Stop DCNM Server icon.

DETAILED STEPS

Step 1 Open the Control Panel window and choose **Administrative Tools > Services**.

A window opens listing the Windows services.

Step 2 Right-click **Cisco DCNM Server** and choose **Stop**.



Note

Alternatively, you can choose **Start > All Programs > Cisco DCNM Server > Stop DCNM Server**; however, the location of shortcuts depends upon the choices you made when you installed the Cisco DCNM server.

A splash screen opens while the Cisco DCNM server begins to shut down. When the Cisco DCNM server has stopped, the splash screen closes.

Stopping a Single Cisco DCNM Server (RHEL)

On a server system running RHEL, you can stop a Cisco DCNM server with `/etc/init.d/jboss stop`.

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DETAILED STEPS

- Step 1** Run the `<DCNM install directory>/dcm/dcnm/bin/stop.sh` script to stop the Cisco DCNM LAN server.

The Cisco DCNM server opens a server console window and displays the processes that it runs to stop the server. The server is stopped when you see a “Stopped at Xm:XXs:XXXms” message.

Stopping a Cluster of Cisco DCNM Servers

Depending on the operating system of the secondary server, the Cisco DCNM server can be stopped using the CLI or the DCNM Install Manager tool. You can use the CLI or the DCNM Install Manager tool for a secondary server running RHEL. For a secondary server running Microsoft Windows, the Cisco DCNM server is stopped with the CLI.

Stopping with CLI

If you have a clustered-server Cisco DCNM deployment, you can use the `stop-dcnm-cluster` script to stop all the servers in the cluster.

BEFORE YOU BEGIN

Ensure that you know which server is currently the master server in the Cisco DCNM server cluster. You can use the Cluster Administration feature to do so. For more information, see the [“Viewing Server Information” section on page 11-4](#).

DETAILED STEPS

- Step 1** On the master server, access a command prompt.
- Step 2** Use the `cd` command to change the directory to the bin directory under the Cisco DCNM installation directory, as follows:
- ```
cd path
```
- where *path* is the relative or absolute path to the bin directory. For Microsoft Windows, the default path to the Cisco DCNM bin directory is `C:\Program Files\Cisco Systems\dcm\dcnm\bin`. For RHEL, the default path to the bin directory is `/usr/local/cisco/dcm/dcnm/bin`.
- Step 3** Run the `stop-dcnm-cluster` script. The script name depends upon the server operating system, as shown in the following table:

| Server Operating System | Stop DCNM Cluster Script           |
|-------------------------|------------------------------------|
| Microsoft Windows       | <code>stop-dcnm-cluster.bat</code> |
| Linux                   | <code>stop-dcnm-cluster.sh</code>  |

The script instructs each Cisco DCNM server in the cluster to stop.

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## Example

The following example from a Microsoft Windows server shows how to stop a cluster of Cisco DCNM servers, with Cisco DCNM installed in the default directory:

```
C:\Documents and Settings\Administrator>cd "C:\Program Files\Cisco Systems\dcm\dcnm\bin"

C:\Program Files\Cisco Systems\dcm\dcnm\bin>stop-dcnm-cluster.bat

C:\Program Files\Cisco Systems\dcm\dcnm\bin>set JAVA_HOME=C:\Program Files\Cisco Systems\dcm\java\jre1.5

C:\Program Files\Cisco Systems\dcm\dcnm\bin>"C:\Program Files\Cisco Systems\dcm\jboss-4.2.2.GA\bin\twiddle.bat" -s 172.28.254.254:1099 invoke
"com.cisco.dcbu.dcm:service=ClusterServerInfo" stopServerInstancesInCluster 10
Shutdown Triggered for all Servers Successfully
C:\Program Files\Cisco Systems\dcm\dcnm\bin>
```

## Stopping with Install Manager

Cisco DCNM Install Manager is a GUI tool for servers running Linux. It is designed to assist in performing silent mode operations on secondary servers (remote nodes).



### Note

Cisco DCNM Install Manager does not support Windows servers.

## DETAILED STEPS

**Step 1** To access Install Manager, navigate to the `dcnm-install-manager.sh` file that is located in the `bin` folder where the DCNM server was installed.

The default `bin` folder location for servers running Linux is `/usr/local/Cisco/dcm/dcnm/bin`.

**Step 2** Double click the `dcnm-install-manager.sh` file to launch Install Manager.

**Step 3** Click the **New** icon in the toolbar near the top of the Install Manager GUI for every secondary server. A new row in the list of Server Nodes is created every time the New icon is clicked.



### Note

In the toolbar, click the **Delete** icon to delete a selected row in the list of Server Nodes. This step does not delete a secondary server from the clustered-server environment.

**Step 4** For each secondary server represented by a row in the list of Server Nodes, enter the following:

- Server name or IP address in the Server Name/IP Address field.
- Protocol used for connectivity in the Protocol field.  
The protocol is either Telnet or SSH.
- User credentials (user ID and password) used for connecting to the secondary server in the User Credentials field.

The user credentials are used for SSH connectivity to the server. Telnet connectivity to the server does not require user credentials.

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Alternatively, default user credentials may be set by entering the credentials in the Default Credentials section of the GUI. The default credentials are used when the User Credential field is blank.

- (Optional) Comments that may be useful to identify the secondary server in the Comments field.

The Last Action Status column in the list of Server Nodes includes the success or failure status of the last performed action. Clicking the “+” icon for the Last Action Status expands the display to show the entire log of actions performed on the server.

**Step 5** In the list of Server Nodes, select the secondary servers to stop.

**Step 6** In the toolbar, click the **Verify** icon to verify the connectivity to the selected secondary servers. Correct any connectivity issues before continuing.

**Step 7** In the toolbar, click the **Stop** icon to stop the selected secondary servers.



### Note

The Install Manager is a standalone application. The settings specified are not saved and are not persistent. The settings are lost when the Install Manager GUI is closed.

## Related Documents

| Related Topic                                                                | Document Title                                                    |
|------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Deploying single Cisco DCNM servers and deploying Cisco DCNM server clusters | <i>Cisco DCNM Installation and Licensing Guide, Release 5.x</i>   |
| Viewing server cluster information                                           | <a href="#">Chapter 11, “Working with Cluster Administration”</a> |
| Backing up, cleaning, and restoring Cisco DCNM databases                     | <a href="#">Chapter 17, “Maintaining the Cisco DCNM Database”</a> |

## Feature History for Starting and Stopping a Cisco DCNM Server

[Table 16-1](#) lists the release history for this feature.

**Table 16-1** Feature History for Starting and Stopping a Cisco DCNM Server

| Feature Name                               | Releases | Feature Information                                                    |
|--------------------------------------------|----------|------------------------------------------------------------------------|
| Starting and stopping a cluster of servers | 5.0(2)   | Support for starting and stopping a cluster of servers was introduced. |