



# SightPath to Cisco Hardware Migration Procedure

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# Introduction

The SightPath migration program was created with the dual goal of replacing legacy SightPath hardware and software with the latest Cisco CDN hardware, while simultaneously protecting the technology investment of our SightPath customers.

Using the migration procedures in this document, you will back up your existing SightPath Studio channels and media, activate your new Cisco Content Distribution Manager (CDM) 4600 series hardware, then move your data and media files to the new CDM. Once your data has been migrated to the CDM, the device is activated and existing Content Engines (formerly SightPath Appliances) are pointed to the new CDM and can begin receiving and distributing media.

Following migration, you will have a CDM that uses proven, rack-mounted Cisco hardware. This allows you to easily integrate future CDN software releases and take advantage of next-generation Web services. Following CDM migration, SightPath A200 or A230 Appliances can be replaced with Cisco CEs when it is convenient.

## Migration Paths

The following table presents the recommended hardware migration path for SightPath Studios.

Legacy SightPath Hardware	New Cisco Hardware	Migration Notes
SightPath S1000 Studio	Cisco CDM 4630	Do not attempt to backup or restore data. Manually re-create channels on the Cisco CDM 4630 and import media directly to the Cisco hardware.
SightPath S2000 Studio	Cisco CDM 4650	Follow the migration procedure outlined in this document, watching for instructions specific to the SightPath S2000 Studio.
SightPath S4000 Studio	Cisco CDM 4650	Follow the migration procedure outlined in this document, watching for instructions specific to the SightPath S4000 Studio.

## Program Prerequisites

The SightPath migration program is offered to SightPath customers who meet the following conditions:

- They have a current Cisco support agreement.
- They are currently using a SightPath S1000, S2000, or S4000 Studio.

# Migration Notes

This section describes the process of migrating SightPath Studio hardware and software to the Cisco CDM 4600 series platform.

## Overview

Use the following steps to migrate your SightPath hardware to the Cisco CDN platform:

1. Prepare Devices
2. Back Up SightPath Studio Data
3. Activate Cisco CDM Hardware
4. Restore SightPath Studio Data on Cisco CDM Hardware
5. Verify Media Transfer on the Cisco CDM

See the sections that follow for detailed instructions on completing each of these steps.

## Prepare Devices

During the migration process, you transfer data from a legacy SightPath Studio to a Cisco 4600 series CDM.

Before starting your backup, you need to prepare the SightPath Studio to back up its data, and the Cisco CDM to receive the backed up data from the Studio.

Complete the following steps before attempting to back up and restore your data.

## Update the SightPath Studio Software

Your SightPath Studio must be running at least version 2.1 of the CDN Enterprise software in order for your data to be successfully transferred to the Cisco CDM hardware.

If you are using a version of the CDN Enterprise software other than version 2.1, refer to the “Installation Notes” section of the *Release Notes for the Cisco CDN Software Enterprise Edition Version 2.1* for instructions on acquiring an upgrade to version 2.1 from Cisco.

# Attach Backup Device

You need to have a Quantum DLT 7000 tape backup device attached to your SightPath Studio during backup.

## SightPath S1000 Studio

Refer to Chapter 3, “Working with the Content Delivery Network” in the *Cisco CDN Software Enterprise Solution Users Guide* for instructions on creating content channels on your CDM and importing media to them. Alternatively, you can contact Cisco Technical Support if you have questions. See the “Obtaining Technical Assistance” section on page 15 for details on obtaining technical assistance from Cisco Systems.



**Note**

If you are using a SightPath S1000 Studio, you will not be able to migrate directly from your Studio to the Cisco CDM hardware. Instead, you will need to recreate your data on the Cisco CDM by manually building your content channels and importing your media files directly to the CDM.

## SightPath S2000 or S4000 Studio

If you have only one Quantum DLT 7000 tape drive, attach it first to the SightPath Studio and perform your backup, then attach the device to the CDM and use it to restore data on the CDM.

To attach the Quantum DLT 7000 tape drive to the SightPath S2000 or S4000 Studio:

**Step 1**

If you are backing up a SightPath S2000 Studio, proceed to Step 2.

If you are backing up a SightPath S4000 Studio, disconnect the internal DAT drive before attempting to attach the external Quantum DLT 7000 tape drive.

You can disconnect the internal DAT drive by removing the cover from your S4000 Studio, locating the DAT drive, and disconnecting the SCSI connector cable where it attaches to the internal SCSI card in the S4000.



**Warning**

**Contact Cisco Technical Support if you are not sure of the proper procedure for removing the cover from your S4000 hardware and removing or replacing any of the hardware used by your S4000, including the internal DAT drive. See the “Obtaining Technical Assistance” section on page 15 for instructions on contacting Technical Support.**

**Step 2**

Use the SCSI connector cable to attach the Quantum DLT 7000 tape drive to the SCSI port located on the back of the SightPath Studio. Make sure that both ends of the cable are properly seated in their ports before continuing.

**Step 3**

Place a blank Quantum DLT Type IV backup cartridge in the DLT 7000 device.

**Step 4**

Power on the DLT 7000 tape drive and reboot the Studio.

The Studio recognizes the DLT 7000 tape drive, and you should hear the blank tape spooling in the tape drive.

- Step 5** Proceed to the “Back Up SightPath Studio Data” section on page 5 to initiate the backup once your tape drive is attached.

## Back Up SightPath Studio Data

Before attempting to upgrade your SightPath Studio hardware and software to the Cisco CDM 4600 series, you must first back up the current SightPath Studio. Make sure you have prepared your SightPath Studio for backup by attaching a Quantum DLT 7000 tape drive to the Studio. See the instructions in the “Attach Backup Device” section on page 4 for details on attaching the DLT 7000 tape drive.

To perform your SightPath Studio backup, you need a PC workstation that is located on the same subnet as your SightPath Studio and has the following software installed:

- Windows 95/98, Windows 2000, or Windows NT operating system
- Microsoft Internet Explorer 5.0 or Netscape Navigator 4.7 Web browser
- X-Windows terminal emulation application such as Reflection or Hummingbird Exceed

## Backing Up the SightPath S2000 Studio

To back up your SightPath S2000 Studio data:

- Step 1** Perform a full backup of your SightPath S2000 Studio data using the Quantum DLT 7000 tape drive. This full backup is for emergency restore purposes, and should be contained on a separate DLT backup tape from that used to migrate data to your CDM device.

Follow the instructions in the “Backing Up the SightPath S4000 Studio” section on page 6 to perform a full backup of your S2000 Studio prior to completing this procedure.

- Step 2** Once your emergency backup of the S2000 Studio is complete, launch a Telnet session and connect to your SightPath S2000 Studio from a PC workstation.

If you receive the following error message, you need to enable Telnet on the Studio.

```
connection to host lost
```

Enable Telnet using the following procedure:

- a. Point your browser to the “box links” area of your CDM. For example:  

```
http://<Studio_2000_IP_address>/cgi/box
```
- b. If prompted, log on using your administrator account.
- c. Click **Feature**.
- d. From the Features interface, select **Enable Telnet until next reboot [telnet]**.

- Step 3** Click **Set** and then close the browser window.

- Step 4** Once you have established a telnet connection to the S2000 Studio, log on to the Studio using the root account. For example:

```
login: root
password: default
```

- Step 5** Copy the contents of the sonoma/state1/cache directory to sonoma/state/cache. For example:

```
cp /sonoma/state1/cache/* sonoma/state/cache
```

**Step 6** Remove the duplicate files from the directory you copied. For example:

```
rm /sonoma/state1/cache/*
```

You are now ready to perform a backup of your S2000 Studio data. From this point forward, the procedure for backing up data is identical to that used for the S4000 Studio.

**Step 7** Proceed to the “Backing Up the SightPath S4000 Studio” section on page 6 to complete backup of your S2000 Studio.

Figure 1 Backup Restore Utility (BRU) User Interface



## Backing Up the SightPath S4000 Studio

To back up your SightPath S4000 Studio data:

- Step 1** From the PC workstation, launch your X-Windows terminal emulator (hereafter referred to as the X client).
- Step 2** Launch your Web browser and enter the IP address or DNS name of the SightPath Studio in the field provided for entering the Web site URL.
- Step 3** Press the **Enter** key.  
The Studio login dialog box appears.
- Step 4** Enter your administrative username and password to log in to the Studio.
- Step 5** Click **Backup/Restore**.  
The Backup/Restore dialog box appears.
- Step 6** Under the heading System Backup, click **Start Backup**.

You are prompted to confirm your decision to initiate a backup.

**Step 7** Click **OK**.

A message indicating that the tape backup utility user interface is being launched appears in the CDM interface. Your X client window now displays the Backup Restore Utility (BRU) interface. (See Figure 1.)

**Step 8** Switch from the CDM to the X client displaying the BRU interface.



**Note** The SightPath Studio is unable to serve media to users from this point forward.

**Step 9** In BRU, click **Full**.

The Device Stats dialog box appears, providing details on the functioning of the tape backup device.

**Step 10** Click **OK** to continue.

The Enter Archive Label dialog box appears.

**Step 11** In the field provided, enter a name for your backup volume, and then click **Create Backup**.

The Archive Requirements dialog box appears while BRU calculates the number of backup tapes required to back up all your Studio data.

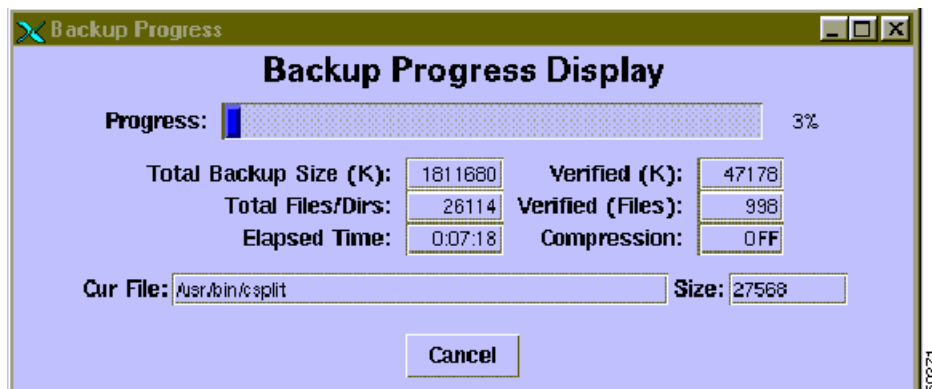
**Step 12** When the Archive Requirements dialog box displays an “Estimate Done” message, note the number of 40- or 80- GB tapes required in the **Volumes Req’d** field.

**Step 13** Click **Continue**.

The Backup Progress Display dialog box appears, showing the progress of the Studio data backup and displaying a status message for each stage in the status bar on the BRU dialog box. (See Figure 2.) The two stages of the backup process are:

- Writing Studio data to the new volume
- Verifying backed up data on the backup tape

*Figure 2 Backup Progress Display Dialog Box*



**Step 14** When the display indicates the backup process is complete, click **Unload**.

**Step 15** Wait a few moments and remove your backup tape from the Quantum DLT 7000 tape drive. Properly label and store your backup tape. You will need it to activate your Cisco CDM.

**Step 16** Proceed to the “Restore SightPath Studio Data on Cisco CDM Hardware” section on page 10.

Once you have successfully backed up your SightPath Studio, shut down the device and physically disconnect it from your LAN. Proceed to the next step, activating the Cisco CDM.

## Activate Cisco CDM Hardware

Before attempting to activate your Cisco CDM, make sure that you meet the following criteria:

- You have a newly installed Cisco Content Distribution Manager 4630 or 4650 without channels or imported media. For instructions on installing your CDM hardware, refer to the following documents:
  - *Cisco Content Distribution Manager 4630 Hardware Installation Guide*
  - *Cisco Content Networking Hardware Installation Guide for the Seven-Rack Unit Chassis*
  - *Cisco Content Distribution Manager 4650 (Product Description Note)*
- Errors do not appear in the log files on the CDM.

To activate your CDM:

- 
- Step 1** Refer to the section on activating the Content Distribution Manager in Chapter 2, “Configuring and Activating Content Delivery Network Devices” in the *Cisco CDN Software Enterprise Solution Configuration Guide*.
  - Step 2** Once the CDM has booted successfully, use your X client to connect to the CDM and log in using your administrative username and password.
  - Step 3** Navigate to the following directory:
 

```
/sonoma/state
```
  - Step 4** Once in the proper directory, use the **-f log** command to view the end of the CDM error log, showing any errors that may have occurred when booting your CDM. For example:
 

```
tail -f log
```
  - Step 5** Verify that errors were not reported in the CDM error log. If errors were logged, see the “Obtaining Technical Assistance” section on page 15.
  - Step 6** Verify that the CDM is accessible by returning to your PC desktop and pointing your Web browser to the CDM by typing the CDM IP address or DNS name in the field provided for entering the Web site URL.
- 

Once you have activated the CDM, you are ready to restore your SightPath Studio data, completing the upgrade process.



## Attach Backup Device

You need to have a Quantum DLT 7000 tape backup device attached to your Cisco CDM when you restore your Studio data to the CDM.



**Note**

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Your CDM must be rebooted subsequent to attaching the Quantum DLT 7000 tape drive, and before attempting to transfer your Studio data to the CDM.

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Refer to the instructions that follow for information on attaching the Quantum DLT 7000 tape drive to your CDM.

### Cisco Content Distribution Manager 4630

If you have only one DLT 7000 tape drive, attach it first to the SightPath Studio and perform your backup, then attach the device to the CDM and use it to restore data to the CDM.

To attach the Quantum DLT 7000 tape drive to the Cisco Content Distribution Manager 4630:

- 
- Step 1** Use a SCSI connection cable to attach the Quantum DLT 7000 tape drive to the SCSI port located on the back of your Cisco Content Distribution Manager 4630 device. Make sure that both ends of the cable are properly mounted in their ports before continuing.
  - Step 2** Place the DLT Type IV backup cartridge with your Studio backup on it into the Quantum DLT 7000 tape drive.
  - Step 3** Power on your Quantum DLT 7000 tape drive and reboot the CDM.  
The CDM recognizes the DLT 7000 tape drive, and you should hear the blank tape spooling in the drive.
  - Step 4** Proceed to the “Restore SightPath Studio Data on Cisco CDM Hardware” section on page 10.
- 

### Cisco 4650 Content Distribution Manager

The Cisco 4650 Content Distribution Manager comes with a factory-installed DLT 7000 tape drive, so no attachment to an external tape drive is required. You will, however, require an external DLT 7000 tape drive to attach to your SightPath Studio and back up your Studio data.

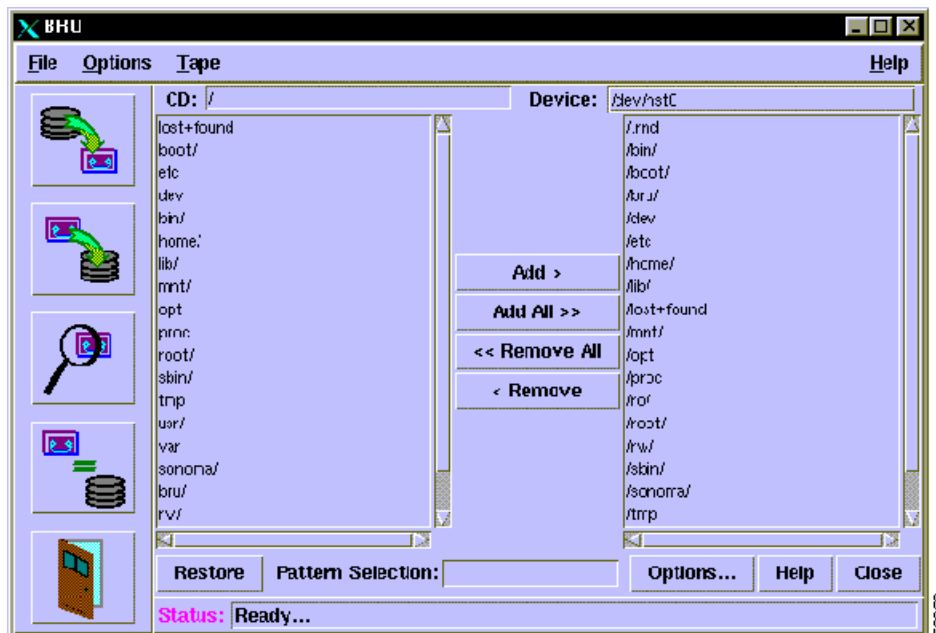
To prepare your Content Distribution Manager 4650 to accept SightPath Studio data:

- 
- Step 1** Locate the Quantum DLT 7000 tape drive on your CDM.
  - Step 2** Open the tape drive door and place the DLT Type IV backup cartridge with your Studio backup on it into the tape drive.
  - Step 3** Proceed to the “Restore SightPath Studio Data on Cisco CDM Hardware” section on page 10.
-

## Restore SightPath Studio Data on Cisco CDM Hardware

Once you have backed up your SightPath S2000 or S4000 Studio, activated your Content Distribution Manager 4630 or 4650 hardware, and successfully booted the CDM, you need to prepare it to receive the data copied from your SightPath device.

Figure 3 BRU displaying Backup Tape Contents



To restore data on your new Cisco CDM:

- Step 1 Return to the PC workstation and launch the X client.
- Step 2 From your PC, launch your Web browser and point it to your CDM by entering the IP address or DNS name of your CDM in the field provided for the Web page URL.
- Step 3 In the CDM user interface, click **Backup/Restore**.  
The Backup/Restore dialog box appears.
- Step 4 Under the heading System Restore, click **Start Restore**.  
You are prompted to confirm your decision to restore data to the CDM.
- Step 5 Click **OK**.  
A message indicating that the tape backup utility user interface is being launched appears in the CDM user interface. Your X client window now displays the Backup Restore Utility (BRU) user interface.
- Step 6 Switch from the CDM to the X client displaying the BRU user interface.
- Step 7 Select the restore option (the icon depicting a tape-to-disk transfer) or click **File > Restore**.  
The Device Stats dialog box appears, providing you with the status of the Quantum DLT 7000 tape drive.
- Step 8 Click **OK** and wait while BRU retrieves a list of the files on the backup tape.  
BRU displays the contents of the backup tape. (See Figure 3.)

Click **Add All** to select all the files on the backup tape for transfer to the CDM. The filenames appear in the right half of the BRU dialog box.

- Step 9** When the status indicator at the bottom of BRU reads “ready,” click **Restore**. The BRU Restore dialog box appears, showing you the progress of your data transfer. Depending upon the amount of data you are restoring, this transfer could take between ten and thirty minutes.
- Step 10** When the restore completes, the following message appears:  
Warning: BRU Exited abnormally.  
This message is expected, and does not mean your data has not been restored on the CDM.
- Step 11** Click **Cancel** to close the error message.  
The BRU Execution Log dialog appears with these error messages:  
Can't access for write...Read-only file system.  
Ignore the messages. They are expected.
- Step 12** Click **Close** to close the BRU Execution Log.
- Step 13** Click **File > Exit**, or the open door button to close BRU.  
The BRU application closes and the CDM reboots.

---

Once the CDM has completed rebooting, verify that your CDM data has been successfully transferred from the SightPath Studio to the Cisco CDM.

## Verify Media Transfer on the Cisco CDM

Once you have transferred data from your SightPath Studio to the CDM, you need to verify that your channel and media information was properly transferred between the two devices, and that the CDM is ready to begin replicating content out to Content Engines (CEs) on your CDN.

To verify that your backed up data has been successfully transferred to the CDM:

- 
- Step 1** From your Windows desktop, launch your Web browser and point it to your CDM by entering the IP address or DNS name of your CDM in the field provided for the Web page URL.
- Step 2** Click **Device Console**. You should be able to see the other CEs on your CDN. (See Figure 4.) Verify that the CDM is not the only device listed on the Device Console.  
If the CDM is the only device listed, from the Device Console, verify that the CDM is using the correct IP address.
- Step 3** Click **Channel Console**. Verify that your channels and their content were accurately transferred to the Cisco CDM:
- a. Click **Previewer**.  
A separate browser window opens, displaying your CDM channels.
  - b. Click the first channel icon and verify that links to the media files in that channel appear.
  - c. Verify that a media file from each channel was successfully transferred to the Cisco CDM by clicking **CDM Preview** to play back the media file.

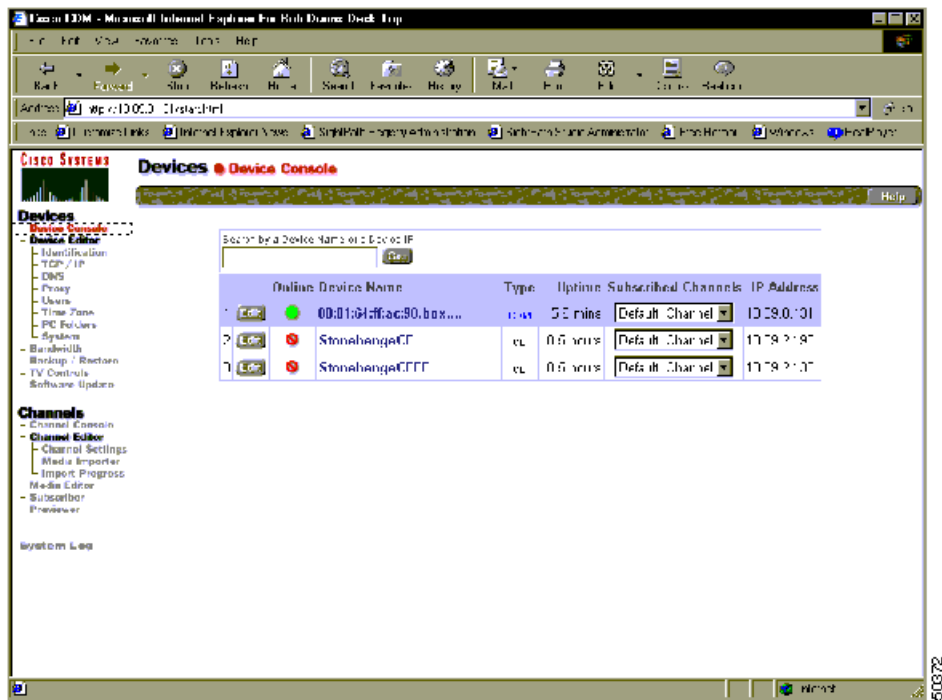
**Step 4** If your channels and their content were successfully transferred to the CDM, but you were required to change the IP address of the CDM from that used by the SightPath Studio, you need to reconfigure each of your CEs to point to the new CDM IP address using the CDN Installation Wizard.

Refer to the instructions for configuring and activating content engines in Chapter 2, “Configuring and Activating Content Delivery Network Devices” of the *Cisco CDN Software Enterprise Solution Configuration Guide, Version 2.1*.

**Step 5** Once your CEs are properly configured and recognize your CDM, the migration is complete. You can now invite users back on to the system.

If your channels or content did not transfer successfully, contact Cisco Technical Support.

**Figure 4** Content Distribution Manager (CDM) Device Console



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# Important Notes

## SightPath S1000 Studio Users

If you are migrating from a SightPath S1000 Studio to the Cisco CDM 4630, you cannot use the backup and data transfer procedures described in this document.

Instead, you must manually recreate your Studio data on the Cisco CDM. To accomplish this, you must:

1. Catalog the name and contents of each channel on your Studio.
2. Make note of any user or administrative accounts on the Studio.
3. Locate copies of all media files you want to move to the Cisco CDM.
4. Activate your Cisco CDM 4630 using procedures documented in the *Cisco CDN Enterprise Solution Configuration Guide Version 2.1*.
5. Recreate the necessary user and administrative accounts on the Cisco CDM 4630 using procedures documented in the *Cisco CDN Enterprise Solution User Guide Version 2.1*.
6. Recreate your channels on the Cisco CDM 4630 using procedures documented in the *Cisco CDN Enterprise Solution User Guide Version 2.1*.
7. Reimport media files to your channels on the Cisco CDM 4630 using procedures documented in the *Cisco CDN Enterprise Solution User Guide Version 2.1*.

## Related Documentation

The Content Delivery Network software comes with both printed documentation and online help to assist you in learning to use the features of the CDN. Refer to the following documents when you have questions regarding your CDN software.

- *Cisco CDN Software Enterprise Solution Configuration Guide*
- *Cisco CDN Software Enterprise Solution User Guide*
- *Release Notes for the Cisco CDN Enterprise Solution Software Edition*
- Cisco CDN online help system

In addition, you can find information related to the installation, configuration, and maintenance of your CDN hardware in the following Cisco Systems documents:

- *Cisco Content Engine 500 Series Hardware Installation Guide*
- *Cisco Content Networking Hardware Installation Guide for the Seven-Rack Unit Chassis*
- *Regulatory Compliance and Safety Information for the Cisco Content Networking Product Series*
- *Cisco Content Distribution Manager 4630 Hardware Installation Guide*
- *Cisco Content Distribution Manager 4650 (Product Description Note)*

# Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

## World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

## Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

## Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)
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- Nonregistered CCO users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

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You can e-mail your comments to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

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Cisco Systems, Inc.  
Document Resource Connection  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

### Cisco.com

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To access Cisco.com, go to the following website:

<http://www.cisco.com>

### Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

### Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.cisco.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

<http://www.cisco.com/register/>

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

## Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.

P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available. Customers and partners can self-register on CCO to obtain additional personalized information and services. Registered users may order products, check on the status of an order and view benefits specific to their relationships with Cisco.

You can access CCO in the following ways:

- WWW: [www.cisco.com](http://www.cisco.com)
- Telnet: [cco.cisco.com](http://cco.cisco.com)
- Modem using standard connection rates and the following terminal settings: VT100 emulation; 8 data bits; no parity; and 1 stop bit.
  - From North America, call 408 526-8070
  - From Europe, call 33 1 64 46 40 82

You can e-mail questions about using CCO to [cco-team@cisco.com](mailto:cco-team@cisco.com).



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