



# Installing System Software Release 2.4.0 on the Cisco ICS 7750

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**June 21, 2002**

This document tells how to install system software release 2.4.0 on the Cisco ICS 7750. These instructions can also be used to upgrade the Cisco ICS 7750 from system software release 2.1.0, 2.2.0, or 2.3.0 to system software release 2.4.0. Use this document with the [Release Notes for System Software Release 2.4.0 on the Cisco ICS 7750](#).



**Note**

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If you are using a system software release earlier than 2.1.0, contact your Cisco sales representative for instructions on how to migrate your system from an earlier system software release to system software release 2.1.0.

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**Note**

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Before you upgrade the system software, we recommend that you back up your system data. For instructions, refer to the “Backing Up System Data” section in the “Operating the Cisco ICS 7750” chapter of the [Cisco ICS 7750 Installation and Configuration Guide](#), or the ICS System Manager online help.

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## System Software Release 2.4.0 Installation Scenarios

There are several different installation and upgrade scenarios for system software release 2.4.0. Before installing system software release 2.4.0, determine which scenario applies to your situation, and follow the instructions below to determine on which SPE310 to run the setup program, and which software installation option to choose.



### Note

There must be one SPE310 running ICS System Manager in the chassis. All other SPE310s in the chassis must run Core Software.

- Upgrading the entire chassis from system software release 2.1.0 or later to system software release 2.4.0—In this scenario, you must run the setup program on the SPE310 running ICS System Manager and, when prompted by the setup program, select the SPEs which you want to upgrade to release 2.4.0.
- Upgrading an SPE310 running Core Software to ICS Core Software release 2.4.0—In this scenario, you must run the setup program on the SPE310 running Core Software that you want to upgrade and, when prompted by the setup program, select the option to upgrade ICS Core software.
- New installation of ICS System Manager release 2.4.0 on a new or reimaged SPE310—In this scenario, you must run the setup program on the SPE310 on which you want to run ICS System Manager and, when prompted by the setup program, select the option to install ICS System Manager software. This option is not available if you are accessing the SPE310 through Terminal Services Client or if you downloaded the upgrade-only package from CCO.
- New installation of ICS Core Software release 2.4.0 on a new or re imaged SPE310—In this scenario you must run the setup program on the SPE310 on which you want to install Core Software and, when prompted by the setup program, select the option to install Core Software.
- Conversion of ICS Core Software to ICS System Manager—The system software release 2.4.0 setup program can convert an SPE310 that is running Core Software to an SPE310 running ICS System Manager. In this scenario, you must run the setup program on the SPE310 running Core Software that you want to convert and, when prompted by the setup program, select the option convert ICS Core Software to ICS System Manager. This option is not available if you are accessing the SPE310 through Terminal Services Client or if you downloaded the upgrade-only package from CCO.

## System Software Release 2.4.0 Media Options

System software release 2.4.0 can be installed from the following sources, with the following options:

- CD-ROM—The system software release 2.4.0 CD-ROM contains a complete set of the system software, including Microsoft SQL server software and Microsoft hotfixes. This package can be used to install release 2.4.0 on an SPE310 that does not currently have system software installed, or to upgrade an SPE310.
- Download from CCO—There are two sets of system software release 2.4.0 available from CCO:
  - *S77a-2.4.0.exe*—This package contains the complete set of system software version 2.4.0, including Microsoft SQL server software. This package can be used for new installations or for upgrades of existing system software.

- S77a-Upgrade-2.4.0.exe—This package contains only the software components that have changed since system software release 2.1.0 and that are necessary to upgrade to release 2.4.0. This package does not contain Microsoft SQL server software. This package is smaller, resulting in a much shorter download time, but this package cannot be used for new installations of ICS system software.



## Accessing the SPE310 Windows Interface

Before you begin installing the release 2.4.0 system software, ensure that you can access the SPE310 Windows interface in either of the following ways:

- [Accessing the SPE310 Windows Interface Through Directly Connected Peripherals](#)
- [Accessing the SPE310 Windows Interface Through Terminal Services Client](#)

### Accessing the SPE310 Windows Interface Through Directly Connected Peripherals

You can connect a monitor, keyboard, and mouse directly to the SPE310 to access the Windows user interface, as follows:

- 
- Step 1** Connect the monitor cable to the video port on the SPE310, and power on the monitor.
- Step 2** Continue as follows, based on the type of peripherals that you are using:
- **USB**—Connect a USB hub to one SPE310 USB port and then connect a USB keyboard and a USB mouse to the USB hub. The USB hub must be used because the CD-ROM drive requires one of the two available USB ports on the SPE310.
  - **PS/2**—Connect the “Y” splitter cable for your keyboard and mouse to the keyboard/mouse port on the target SPE310, and then connect your keyboard and mouse to the available ends of the “Y” splitter cable.
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-  **Note** If you are using the “Y” splitter cable to connect a PS/2 mouse and a keyboard to the SPE310, the keyboard and mouse must be connected at or before the time of SPE310 rebooting in order for them to be recognized by the operating system. This is not the case with a USB keyboard and mouse, which are usually recognized without rebooting the operating system.
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-  **Note** For a summary of the issues related to the connection of peripherals to SPE310s, for best practices in using peripherals with SPE310s, and a list of USB peripherals that have been tested on the Cisco ICS 7750, see the “Using Peripherals with SPE310s” section in the “Operating the Cisco ICS 7750” chapter of the [Cisco ICS 7750 Installation and Configuration Guide](#).
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- Step 3** Use the keyboard, mouse, and monitor to access standard Windows utilities on the SPE310, such as Windows Explorer and the Control Panel.
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## Accessing the SPE310 Windows Interface Through Terminal Services Client



### Note

Not all of the installation and upgrade scenarios are available through Terminal Services Client. For more information, see the [“System Software Release 2.4.0 Installation Scenarios”](#) section on page 2.

To access the SPE310 Windows interface through Terminal Services Client, complete the following steps:

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- Step 1** On the PC that you use to administer the Cisco ICS 7750, choose **Start > Programs > Terminal Services Client > Client Connection Manager**.
- Step 2** Use the Client Connection Manager to open a Terminal Services connection with the target SPE:
- If you already have a Terminal Services Client connection defined for the target SPE, choose it. Then choose **File > Connect**.
  - If you do not have a Terminal Services Client connection defined for the target SPE, choose **File > New Connection**. Follow the instructions in the wizard, and then choose **File > Connect**.

The Terminal Services Client window opens. You can use Terminal Services Client to access standard Windows utilities on the SPE310, such as Windows Explorer and the Control Panel.

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## Installing System Software Release 2.4.0 from the CD-ROM

This section describes how to connect the CD-ROM drive to the Cisco ICS 7750 and how to install release 2.4.0 system software onto the SPE310s. It contains the following topics:

- [Attaching the CD-ROM Drive Tray](#)
- [Installing the CD-ROM Drive](#)
- [Installing the System Software](#)

### Attaching the CD-ROM Drive Tray

Complete the following steps to attach the CD-ROM drive tray to the fan tray on the Cisco ICS 7750.



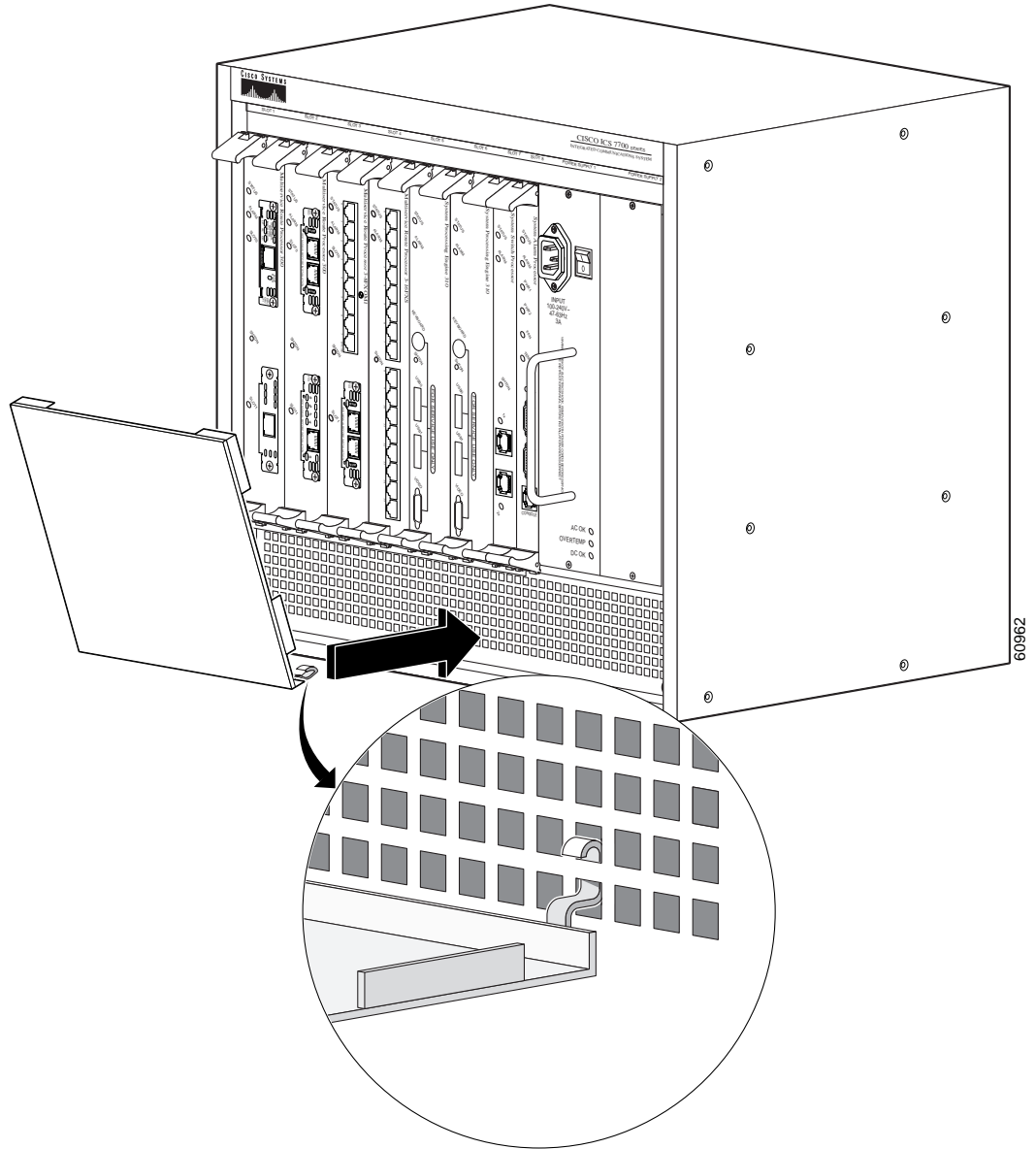
### Note

The CD-ROM drive tray is for temporary use when installing software. Remove the CD-ROM drive and drive tray when you finish the installation.

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- Step 1** Remove the CD-ROM drive tray from the accessory kit.
- Step 2** Attach the CD-ROM drive tray to the fan tray underneath the SPE310 by threading the hooks on the drive tray into the grid on the fan tray, as shown in [Figure 1](#).

Figure 1 Attaching the CD-ROM Drive Tray



## Installing the CD-ROM Drive

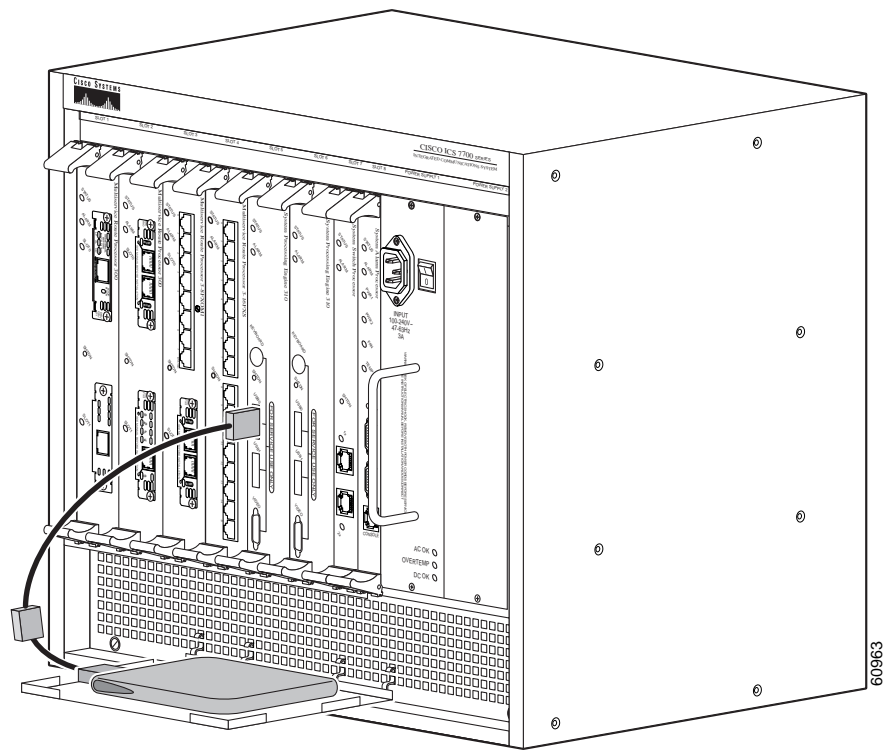
Complete the following steps to install the CD-ROM drive:

- Step 1 Remove the CD-ROM drive from the accessory kit.
- Step 2 Place the CD-ROM drive in the drive tray as shown in [Figure 2](#).



**Caution** Do not place any object other than the CD-ROM drive on the drive tray. The drive tray is designed only for the weight of the CD-ROM drive.

**Figure 2** *Installing the CD-ROM Drive*



- Step 3 Connect the CD-ROM drive USB cable to one of the USB ports on the SPE310.

## Installing the System Software

When you have connected the CD-ROM drive, complete the following steps to install release 2.4.0 system software:

**Step 1** Access the Windows interface on the SPE310 running System Manager. See the “[Accessing the SPE310 Windows Interface](#)” section on page 3.

**Step 2** On the SPE310 on which you want to install release 2.4.0 software, choose **Start > Run**.



**Note** For more information about which SPE310 to install the release 2.4.0 software on, see the “[System Software Release 2.4.0 Installation Scenarios](#)” section on page 2.

The Run dialog opens.

**Step 3** in the Open field, enter **d:\setup** to run setup.exe from the CD-ROM.

The Installation Wizard starts, displaying the Welcome page.

**Step 4** Follow the instructions presented by the Installation Wizard. If more clarification is needed about any of the options presented by the Installation Wizard, consult the online help.



**Note** During the installation process, the SPE310 may restart. If you are accessing the SPE310 through directly connected peripherals, the setup program will automatically log in as Administrator and continue the installation process after the SPE310 restarts. If you are accessing the SPE310 through Terminal Services Client, then you will have to log in to the SPE310 again after the restart. The setup program will continue the installation process after you log in.

## Downloading and Installing System Software Release 2.4.0

Complete the following steps to download system software release 2.4.0 from Cisco’s website and to install the software:

**Step 1** Access the Windows interface on the target SPE310. See the “[Accessing the SPE310 Windows Interface](#)” section on page 3.



**Note** For more information about which SPE310 to install the release 2.4.0 software on, see the “[System Software Release 2.4.0 Installation Scenarios](#)” section on page 2.

**Step 2** Using the web browser installed on the SPE310 running System Manager, log on to CCO either as a registered user or as a guest.

Go to the Cisco home page ([www.cisco.com](http://www.cisco.com)), and log on as a guest or registered user:

- Guest users will be granted limited access to Cisco’s Software Image Library. Contact your Cisco service representative to obtain Special File privileges.

- Registered users with software service contracts will be granted full access privileges to the Software Center. If you do not have access to the Software Image Library, please check the terms of your service contract before contacting Cisco (or your sponsoring Cisco partner for PICA customers).

**Step 3** Enter the following URL in the web browser:

<http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml>

**Step 4** In the ICS 7750 section, click the link for System Release 2.4.0.




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**Note** If you are downloading one of the software images with Triple DES (3DES) encryption, special approval might be required. Follow the instructions on the screen.

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**Step 5** Enter the special access code in the field as instructed, if necessary.

There are some areas of the Software Center to which you can gain access only by entering a special access code. Special access codes are provided either through a postal letter (through electronic or regular mail) informing you of the availability of an upgrade on CCO or through a conversation with authorized Cisco personnel.

**Step 6** Click the link corresponding to the package that you wish to download. There are two options available:

- S77a-2.4.0.exe*—This package contains the entire set of system software release 2.4.0. This package should be used for new installations.
- S77a-Upgrade-2.4.0.exe*—This package contains only the software necessary to upgrade to system software version 2.4.0 from system software version 2.1.0, 2.2.0, or 2.3.0. This package is smaller, resulting in shorter download time, but this package cannot be used for all installation and upgrade scenarios. For more information about which installation and upgrade scenarios cannot use the upgrade package, see the “[System Software Release 2.4.0 Installation Scenarios](#)” section on page 2.

**Step 7** When prompted, select the option in the browser to save the package to the SPE310 hard drive.




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**Note** These instructions assume that the Cisco ICS 7750 has Internet connectivity. If the ICS 7750 does not have Internet connectivity, you can also download the system software package to a PC and then copy the package to the SPE310 hard disk.

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**Step 8** When the download has finished, from the Windows 2000 Start menu, choose **Start > Programs > Accessories > Windows Explorer** to open Windows Explorer.

**Step 9** In Windows Explorer, navigate to the subdirectory in which you saved the downloaded package.

**Step 10** In Windows Explorer, double-click the downloaded package name.

The Location to Save Files dialog box appears.

**Step 11** Click **Next** to accept the default directory name. Optionally, you can change the directory name to extract the system software to a different directory, but you must extract the software on the SPE310 hard disk.

The system software is extracted from the download package. The Installation Wizard appears, displaying the Welcome page.

- Step 12** Follow the instructions presented by the Installation Wizard. If more clarification is needed about any of the options presented by the Installation Wizard, consult the online help.



**Note** During the installation process, the SPE310 may restart. If you are accessing the SPE310 through directly connected peripherals, the setup program will automatically log in as Administrator and continue the installation process after the SPE310 restarts. If you are accessing the SPE310 through Terminal Services Client, then you will have to log in to the SPE310 again after the restart. The setup program will continue the installation process after you log in.

## Upgrading Cisco IOS Software Images

The system switch processor (SSP), multiservice route processors (MRPs), and analog station interfaces (ASIs) in your Cisco ICS 7750 run Cisco IOS software. There are two different procedures for upgrading Cisco IOS images on system cards:

- [Upgrading IOS Software Images Through System Manager](#)—Use this procedure for SSP, MRP200, ASI81, and ASI160 system cards.
- [Upgrading IOS Software Images Through the IOS Command-Line Interface](#)—Use this procedure for MRP300, MRP3-8FXS, and MRP3-16FXS system cards.

Current Cisco IOS images are available on CCO.



**Note** When upgrading to system software release 2.4.0, you must upgrade the Cisco IOS images on all MRP200s, ASI81s, ASI160s, and the SSP.

## Upgrading IOS Software Images Through System Manager

To upgrade an IOS software image on a non-Flash-based system card, use the Software Upgrade tab in System Manager to first upload the new software image to the System Manager software library, and then to deliver the new image to the system card.



**Note** Although the System Manager software library will display the IOS image running on Flash-based system cards (the MRP300, MRP3-8FXS, and MRP3-16FXS), you cannot use System Manager to upgrade the IOS image on these cards. You must upgrade those cards through the IOS CLI.



**Note** Before you can upgrade an IOS software image on a non-Flash-based card (MRP200, ASI81, and ASI160), you must have installed ICS System Manager and completed the initial configuration of the Cisco ICS 7750 using ICSCConfig. For more information about initial configuration using ICSCConfig, refer to the “Completing the Cisco ICS 7750 Installation” chapter in the [Cisco ICS 7750 Installation and Configuration Guide](#).

## Uploading a Software Image into the Software Library

Follow these steps to upload an image to the Software Library:

- 
- Step 1** On a PC, open Netscape Communicator or Microsoft Internet Explorer.
  - Step 2** In the Location or Address field, enter the following URL, replacing *IP address* with the IP address of the system processing engine (SPE) running System Manager:  
`http://IP address/ics`
  - Step 3** Log in as the super administrator (user ID is *admin*), and enter your password (the default is *admin*).
  - Step 4** Click **Login**.
  - Step 5** From the System Manager home page, click the **Software Upgrade** tab.
  - Step 6** Click **Add Image**.
  - Step 7** In the Specify Image File Name field, enter the image file name. You can also click **Browse** to open the browser Choose File dialog box, and locate the image file by browsing your PC file system.
  - Step 8** Click **Upload to ICS 7750**. The image will be uploaded to the software library. This takes about 30 seconds for a 4-MB file. Once the upload is complete, the Software Upgrade main page appears with an entry for the uploaded image in the Software Library.
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## Delivering an IOS Image to a System Card

Follow these steps to deliver an IOS software image from the software library to a non-Flash-based system card:

- 
- Step 1** From the System Manager home page, click the **Software Upgrade** tab.
  - Step 2** In the Software Library table, find the IOS image that you want to deliver.
  - Step 3** In the same row as the image that you want to deliver, click **deliver to a system card**.
  - Step 4** Select the system card from the Select a Target System Card pull-down field.
  - Step 5** Click Deliver.
-

## Upgrading IOS Software Images Through the IOS Command-Line Interface

Delivery of an IOS image to the MRP300, MRP3-8FXS, and MRP3-16FXS system cards is not supported via the Upgrade tab in the current version of System Manager. These cards contain Flash memory and require the use of the Cisco IOS command-line interface (CLI) to copy an IOS image from a Trivial File Transfer Protocol (TFTP) server to the Flash memory in order to deliver a new IOS image to them. Follow these steps to upgrade an image on one of these cards:

- 
- Step 1** From the Windows 2000 Start menu, choose **Start > Run**.
- Step 2** Enter the following command to open a Telnet session, where *IP address* is the IP address of the Flash-based system card on which you want to upgrade the IOS image.
- ```
telnet IP address
```
- Step 3** Enter your login password.
- Step 4** Enter the **enable** command and your IOS enable password to enter privileged EXEC command mode:
- ```
> enable
Password: password
#
```
- Step 5** Enter the following command:
- ```
# copy tftp: flash:
```
- Step 6** Respond to the prompts to supply the location and name of the IOS image file.




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**Note** For more information about the **copy tftp: flash:** IOS command, see the “[Loading and Maintaining System Images](#)” section of the *Cisco IOS Configuration Fundamentals Configuration Guide, Release 12.2*.

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## Related Documentation

The following sections describe the documentation available for the Cisco ICS 7750. These documents consist of hardware and software installation guides, Cisco IOS configuration and command references, system error messages, feature modules, and other documents.

### Cisco ICS 7750 Documents

The documents described in this section are available on CCO and on CD.

On Cisco.com, beginning under the **Service & Support** heading, navigate to:

**Technical Documents > Voice/Telephony > Cisco ICS 7750**

Using the Documentation CD-ROM (order number DOC-CONDOCCD=), navigate to:

**Cisco Product Documentation > Voice/Telephony > Cisco ICS 7750**

## Release 2.4.0 Documents

The following documents were updated or created for system software release 2.4.0. The documents are available at the following location:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/ics/ics24/index.htm>

- *Cisco ICS 7750 Documentation Locator*
- *Cisco ICS 7750 Installation and Configuration Guide*
- *Cisco ICS 7750 Troubleshooting Guide*
- *Cisco ICS 7750 FRU Installation and Replacement*
- *Release Notes for Cisco IOS 12.2(4)YH on the Cisco ICS 7750*
- *Installing System Software Release 2.4.0 on the Cisco ICS 7750* (this document)

## Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

### World Wide Web

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

<http://www.cisco.com>

Translated documentation is available at the following URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

### Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped 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 through 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)
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

## Documentation Feedback

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

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems  
Attn: 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 by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- Streamline business processes and improve productivity
- Resolve technical issues with online support

- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

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

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

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

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

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

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

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

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

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This document is to be used in conjunction with the *Release Notes for System Software Release 2.4.0 on the Cisco ICS 7750*.

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