



Preface

This preface discusses the objectives, audience, organization, and conventions of this software configuration guide, and where to get the latest version of this guide.

Objectives

After installing the router, use this guide to complete a basic router configuration using the **setup** command facility. It also contains information on using the Cisco IOS software to perform other configuration tasks, such as configuring a Voice-over-IP interface and other features.

This guide does not provide complete configuration instructions. Refer to the Cisco IOS configuration guides and command references for detailed configuration instructions. These publications are available on the Documentation CD-ROM that came with your router and on Cisco.com. See the [“Obtaining Documentation” section on page xvi](#) for more information.

Audience

This publication is designed for the person who will be responsible for configuring your router. This guide is intended primarily for the following audiences:

- Customers with technical networking background and experience
- System administrators who are familiar with the fundamentals of router-based internetworking, but who might not be familiar with Cisco IOS software
- System administrators who are responsible for installing and configuring internetworking equipment, and who are familiar with Cisco IOS software

Organization

The major sections of this software configuration guide include:

Chapter	Title	Description
Chapter 1	Understanding Interface Numbering and Cisco IOS Software Basics	Provides an overview of the interface numbering conventions for the Cisco routers. Also provides a basic understanding of the Cisco IOS software.
Chapter 2	Using the Setup Command Facility	Describes how to use the setup command facility to configure your router.
Chapter 3	Configuring with the Command-Line Interface	Describes how to use the Cisco IOS software command-line interface (CLI) to configure basic router functionality.
Chapter 4	Configuring Voice-over-IP	Describes how to configure voice network modules with recEive and transMit (E&M), Foreign Exchange Office (FXO), and Foreign Exchange Station (FXS) interfaces for your router.
Appendix A	Configuration Examples	Provides configuration examples of the Cisco 2600 series, Cisco 3600 series, and Cisco 3700 series routers.
Appendix B	Appendix B, “Formatting the Compact Flash Memory Cards”	Provides configuration information for the Cisco Flash memory.
Appendix C	Appendix C, “Using the ROM Monitor”	Describes how the ROM Monitor works in the Cisco 2600 series, Cisco 3600 series, and Cisco 3700 series routers.

Document Conventions

This publication uses the following conventions to convey instructions and information:

Convention	Description
boldface font	Commands and keywords.
<i>italic font</i>	Variables for which you supply values.
[]	Keywords or arguments that appear within square brackets are optional.
{x y z}	A choice of required keywords appears in braces separated by vertical bars. You must select one.
screen font	Examples of information displayed on the screen.
boldface screen font	Examples of information you must enter.
< >	Nonprinting characters, for example passwords, appear in angle brackets in contexts where italic font is not available.
[]	Default responses to system prompts appear in square brackets.

**Note**

This symbol means *reader take note*. Notes contain helpful suggestions or references to additional information and material.

**Timesaver**

This symbol means *the described action saves time*. You can save time by performing the action described in the paragraph.

**Caution**

This symbol means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

**Tip**

This symbol means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

Additional Information

This guide does not contain the following:

- Network design information
- Application case studies
- Troubleshooting information
- A comprehensive reference to access services

For information about any of the above topics, refer to the following resources:

- Cisco.com
- Documentation CD-ROM
- Cisco Technical Assistance Center (TAC)

Related and Referenced Documents

The documents described here are available online and on the documentation CD-ROM that you received with your router. To be sure of obtaining the latest information, you should access the online documentation.

To print a document in its original page format, access the online document, and click on the PDF icon.

You can also order printed copies of documents. See the [Ordering Documentation](#).

To Access Online User Documentation (PDF and HTML Formats):

From Cisco.com at <http://www.cisco.com>, under **Service & Support**, select **Technical Documents** and select **Cisco Product Documentation**.

Access User Documentation on the Documentation CD-ROM (HTML format only):

On the Documentation CD-ROM, select **Cisco Product Documentation**.

Paths to specific documents are provided below, starting at **Cisco Product Documentation**.



Tip

To navigate up to the next higher level in the documentation hierarchy, click on **CONTENTS** in the navigation bar at the top of each page.

Table 1 *Related and Referenced Documents*

Cisco Product	Document Title
Cisco 2600 series routers	<ul style="list-style-type: none"> • <i>Cisco 2600 Series Routers Hardware Installation Guide</i> • <i>Cisco 2600 Series Modular Routers Quick Access Guide</i> • <i>Cisco Network Modules Hardware Installation Guide</i> • <i>Cisco WAN Interface Cards Hardware Installation Guide</i> • <i>Regulatory Compliance and Safety Information</i>
Cisco 3600 series routers	<ul style="list-style-type: none"> • <i>Cisco 3600 Series Routers Hardware Installation Guide</i> • <i>Cisco 3620 and Cisco 3640 Modular Access Routers Quick Start Guide</i> • <i>Cisco 3660 Modular Access Router Quick Start Guide</i> • <i>Cisco Network Modules Hardware Installation Guide</i> • <i>Cisco WAN Interface Cards Hardware Installation Guide</i> • <i>Cisco RPS Hardware Installation Guide</i> • <i>Regulatory Compliance and Safety Information</i>

Table 1 *Related and Referenced Documents (continued)*

Cisco Product	Document Title
Cisco 3700 series routers	<ul style="list-style-type: none"> • <i>Cisco 3700 Series Routers Hardware Installation Guide</i> • <i>Cisco 3725 and Cisco 3745 Modular Access Routers Quick Start Guide</i> • <i>Cisco Network Modules Hardware Installation Guide</i> • <i>Cisco WAN Interface Cards Hardware Installation Guide</i> • <i>Regulatory Compliance and Safety Information</i>
Cisco IOS software Note Refer to the modular reference publication that corresponds to the Cisco IOS software release installed on your server.	<ul style="list-style-type: none"> • <i>Cisco IOS Configuration Fundamentals Configuration Guide</i> • <i>Cisco IOS Configuration Fundamentals Command Reference</i> • <i>Cisco IOS Dial Technologies Configuration Guide</i> • <i>Cisco IOS Wide-Area Networking Configuration Guide</i> • <i>Cisco IOS IP Configuration Guide Release 12.2</i> • <i>Cisco IOS Wide-Area Networking Command Reference</i> • <i>Debug Command Reference</i> • <i>System Error Messages</i> • <i>Cisco IOS Software Command Summary</i> • <i>Cisco IOS Release notes</i> for your release

Table 1 Related and Referenced Documents (continued)

Cisco Product	Document Title
Other documents	<ul style="list-style-type: none"> • Information about TL1 commands can be found in the Telcordia Technology (formerly Bellcore) document <i>Network Maintenance: Network Element and Transport Surveillance Messages</i>, GR-833-CORE, Issue 5, November 1996. For a reference of security-related commands (ACT-USER and CANC-USER) refer to Telcordia Technology's <i>Operations Applications Messages-Network Element and Network System Security Admin Messages</i>, TR-NWT-000835, Issue 2, January 1993. • Information about the PRI network module, refer to the <i>1-Port and 2-Port ISDN-PRI Network Module Configuration Note</i>. For information on how to install an Ethernet module, refer to the <i>1-Port Ethernet Network Module Configuration Note</i> or the <i>4-Port Ethernet Network Module Configuration Note</i>. • For information on how to correctly install and configure the Digital Network module and the PRI module, refer to the <i>Digital Modem Network Module Configuration Note</i>. • To configure the router for voice traffic, refer to the <i>Voice over IP Configuration</i> document • To configure DLAMs, refer to the <i>Configuration Guide for DSLAs with NI-2</i>.

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
- 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, in North America, by calling 800 553-NETS(6387).

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

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

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

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.

