



# About the Cisco IOS Software Documentation

---

This section discusses the objectives, audience, organization, and conventions of the Cisco IOS software documentation. It also discusses how to obtain documentation on Cisco Connection Online and the Documentation CD-ROM.

## Documentation Objectives

This Cisco IOS software documentation describes the tasks and commands necessary to configure and maintain your access server or router.

## Audience

The Cisco IOS software documentation is intended primarily for users who configure and maintain access servers and routers, but are not necessarily familiar with tasks, the relationship between tasks, or the commands necessary to perform particular tasks.

## Documentation Organization

The Cisco IOS software documentation is divided into 12 modules and two master indexes. In addition to the main documentation set, there are four supporting documents.

## Documentation Modules

Each module consists of two books: a configuration guide and a corresponding command reference. Chapters in a configuration guide describe protocols, configuration tasks, and Cisco IOS software functionality and contain comprehensive configuration examples. Chapters in a command reference provide complete command syntax information. Each configuration guide can be used in conjunction with its corresponding command reference.

## Master Indexes

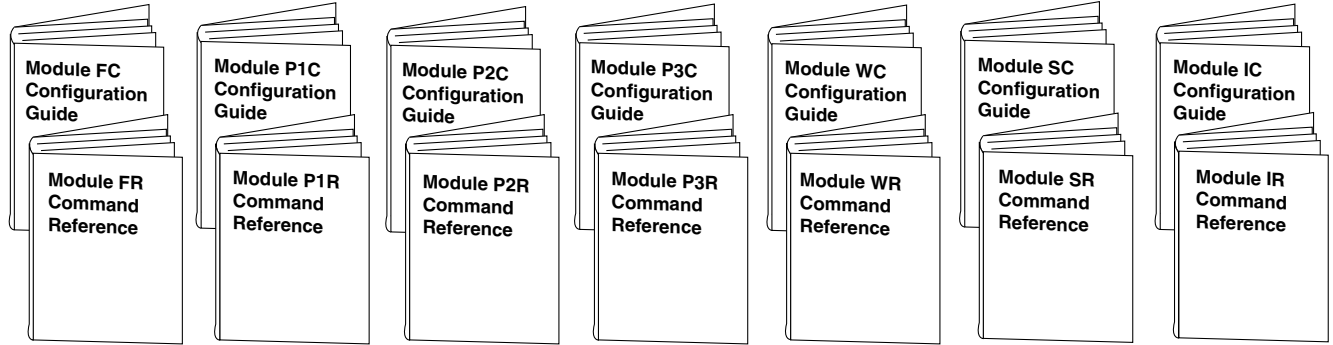
Two master indexes provide indexing information for the Cisco IOS software documentation set: an index for the configuration guides and an index for the command references. In addition, individual books contain a book-specific index.

**(DRAFT LABEL) ALPHA DRAFT - CISCO CONFIDENTIAL**

## Documentation Set

The Cisco IOS software documentation set is shown in Figure 1.

**Figure 1 Cisco IOS Software Documentation Modules**



**Module FC/FR:**  
**Configuration Fundamentals**

- Configuration Fundamentals Overview
- Cisco IOS User Interfaces
- File Management
- System Management

**Module P1C/P1R:**  
**Network Protocols, Part 1**

- IP Addressing
- IP Services
- IP Routing Protocols

**Module P2C/P2R:**  
**Network Protocols, Part 2**

- AppleTalk
- Novell IPX

**Module P3C/P3R:**  
**Network Protocols, Part 3**

- Apollo Domain
- Banyan VINES
- DECnet
- ISO CLNS
- XNS

**Module WC/WR:**  
**Wide-Area Networking**

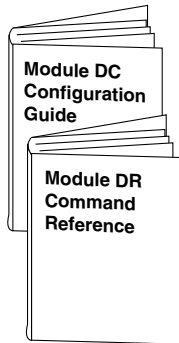
- ATM
- Frame Relay
- SMDS
- X.25 and LAPB

**Module SC/SR:**  
**Security**

- AAA Security Services
- Security Server Protocols
- Traffic Filtering and Firewalls
- IP Security and Encryption
- Passwords and Privileges
- Neighbor Router Authentication
- IP Security Options

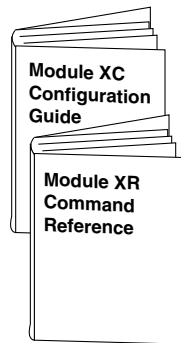
**Module IC/IR:**  
**Cisco IOS Interface Configuration**

- Interface Configuration



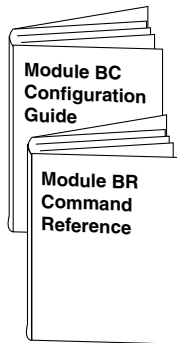
**Module DC/DR:**  
**Dial Solutions**

- Dial-In Port Setup
- Dial-In Terminal Services
- Dial-on-Demand Routing (DDR)
- Dial Backup
- Dial-Out Modem Pooling
- Large-Scale Dial Solutions
- Cost-Control Solutions
- ISDN
- X.25 over ISDN
- VPDN
- Dial Business Solutions and Examples



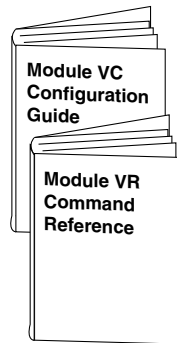
**Module XC/XR:**  
**Cisco IOS Switching Services**

- Switching Paths for IP Networks
  - Fast Switching
  - Autonomous Switching
  - NetFlow Switching
  - Optimum Switching
  - Cisco Express Forwarding
  - Tag Switching
  - Multilayer Switching
- Virtual LAN (VLAN) Switching and Routing
  - Inter-Switch Link Protocol Encapsulation
  - IEEE 802.10 Encapsulation
  - LAN Emulation
  - Multiprotocol over ATM



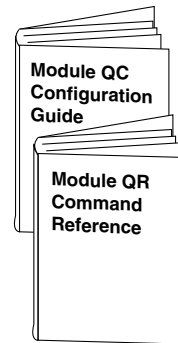
**Module BC/BR:**  
**Bridging and IBM Networking**

- Transparent Bridging
- Source-Route Bridging
- Token Ring Inter-Switch Link
- Remote Source-Route Bridging
- DLSw+
- STUN and BSTUN
- LLC2 and SDLC
- IBM Network Media Translation
- DSPU and SNA Service Point
- SNA Frame Relay Access Support
- APPN
- Cisco Database Connection
- NCIA Client/Server Topologies
- Cisco Mainframe Channel Connection
- Airline Product Set



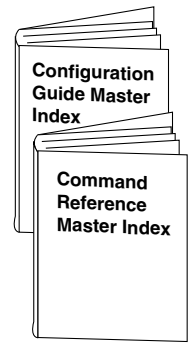
**Module VC/VR:**  
**Voice, Video, and Home Applications**

- Voice over IP
- Voice over Frame Relay
- Voice over ATM
- Voice over HDLC
- Video Support
- Universal Broadband Features



**Module QC/QR:**  
**Quality of Service Solutions**

- Classification
- Scheduling
- Packet Drop
- Traffic Shaping
- ATM QoS
- SNA QoS
- Line Protocols



**Configuration Guide Master Index**

**Command Reference Master Index**

## Supporting Documents

The following documents support the Cisco IOS software documentation set:

**(DRAFT LABEL) ALPHA DRAFT - CISCO CONFIDENTIAL**

- *Cisco IOS Software Command Summary*
- *Cisco IOS Software System Error Messages*
- *Debug Command Reference*
- *Dial Solutions Quick Configuration Guide*

## Document Conventions

The Cisco IOS documentation set uses the following conventions:

Convention	Description
<code>^</code> or <code>Ctrl</code>	Represents the Control key. For example, when you read <code>^D</code> or <code>Ctrl-D</code> , you should hold down the Control key while you press the D key. Keys are indicated in capital letters but are not case sensitive.
<i>string</i>	A string is defined as a nonquoted set of characters. For example, when setting an SNMP community string to public, do not use quotation marks around the string; otherwise, the string will include the quotation marks.

Examples use the following conventions:

Convention	Description
<code>screen</code>	Shows an example of information displayed on the screen.
<b>boldface screen</b>	Shows an example of information that you must enter.
<code>&lt;</code> <code>&gt;</code>	Nonprinting characters, such as passwords, appear in angled brackets.
<code>!</code>	Exclamation points at the beginning of a line indicate a comment line. They are also displayed by the Cisco IOS software for certain processes.
<code>[ ]</code>	Default responses to system prompts appear in square brackets.

The following conventions are used to attract the reader's attention:

**Caution**

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

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.

**Timesaver**

Means the *described action saves time*. You can save time by performing the action described in the paragraph.

Within the Cisco IOS software documentation, the term *router* is used to refer to both access servers and routers. When a feature is supported on the access server only, the term *access server* is used.

Within examples, routers and access servers are alternately shown. These products are used only for example purposes; that is, an example that shows one product does not indicate that the other product is not supported.

## Command Syntax Conventions

Command descriptions use the following conventions:

Convention	Description
<b>boldface</b>	Indicates commands and keywords that are entered literally as shown.
<i>italics</i>	Indicates arguments for which you supply values; in contexts that do not allow italics, arguments are enclosed in angle brackets (< >).
[x]	Keywords or arguments that appear within square brackets are optional.
{x   y   z}	A choice of required keywords (represented by x, y, and z) appears in braces separated by vertical bars. You must select one.
[x {y   z}]	Braces and vertical bars within square brackets indicate a required choice within an optional element. You do not need to select one. If you do, you have some required choices.

## Cisco Connection Online

Cisco Connection Online (CCO) is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, product documentation, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously: a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and it is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: <http://www.cisco.com>
- WWW: <http://www-europe.cisco.com>
- WWW: <http://www-china.cisco.com>
- Telnet: [cco.cisco.com](http://cco.cisco.com)
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact [cco-help@cisco.com](mailto:cco-help@cisco.com). For additional information, contact [cco-team@cisco.com](mailto:cco-team@cisco.com).



**Note** If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or [tac@cisco.com](mailto:tac@cisco.com). To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or [cs-rep@cisco.com](mailto:cs-rep@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, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

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