About This Guide

This preface defines the objectives, audience, organization, and conventions used in this guide, and gives instructions for obtaining technical assistance and additional information.

Objectives

The purpose of this guide is to help you configure the Cisco VPN 5000 series concentrators for the most common scenarios using the command line interface or by editing a configuration using a text editor. It does not cover every feature, but describes those tasks most commonly required for configuration.

Related Documentation

For more information, refer to the following documentation set for Cisco VPN 5000 concentrators:

- *Cisco VPN 5000 Concentrator Series Command Reference Guide*
- *Cisco VPN 5001 Concentrator Hardware Guide*
- *Cisco VPN 5002 Concentrator Hardware Guide*
- *Cisco VPN 5008 Concentrator Hardware Guide*
- *Cisco VPN 5002 and 5008 ESP Card Hardware Guide*
- *Cisco VPN 5001 Concentrator FRU Installation and Replacement Notes*

- *Cisco VPN 5002 Concentrator FRU Installation and Replacement Notes*

- *Cisco VPN 5008 Concentrator FRU Installation and Replacement Notes*

- *Regulatory Compliance and Safety Information for the Cisco VPN 5001 Concentrator*

- *Regulatory Compliance and Safety Information for the Cisco VPN 5002 and 5008 Concentrators*

Audience

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 may not be familiar with VPN 5000 software

- System administrators who are responsible for installing and configuring internetworking equipment, and who are familiar with VPN 5000 software

Organization

This guide contains the following chapters and appendixes:

- Chapter 1, "Introduction," describes the VPN 5000 software features, and tells you how to use the concentrator in your network.

- Chapter 2, "Getting Started," tells you how to set the management port IP address, create a text configuration, or use the command line interface.

- Chapter 3, "Creating CVCs," tells you how to create and use customer virtual contexts (CVCs).

- Chapter 4, "Configuring Basic System Parameters," tells you how to set basic system parameters such as the password and concentrator name.

- Chapter 5, "Configuring Basic Interface Settings," tells you how to set Ethernet, HSSI, DS3, and Frame Relay interface settings.

- Chapter 6, "Configuring IP Routing," tells you how to configure IP routing for each port.

- Chapter 7, "Configuring the IKE Policy for IPSec Tunnel Security," tells you how to configure VPN tunnel security for IPSec clients and LAN-to-LAN tunnels.

- Chapter 8, "Configuring VPN Groups," tells you how to create VPN groups for use with the VPN 5000 client or L2TP client.

- Chapter 9, "Authenticating VPN Users," describes systems you can use to authenticate users for VPN groups.

- Chapter 10, "Configuring VPN LAN-to-LAN Tunnels," tells you how to create a LAN-to-LAN tunnel between two concentrators.

- Chapter 11, "Installing Certificates on the Concentrator," tells you how to install root and server certificates on the concentrator for authentication.

- Chapter 12, "Sample Configurations," includes sample configuration diagrams and text configuration files.

- Appendix A, "Installing the Software and Configuration," tells you how to install or upgrade the VPN 5000 concentrator software, and how to copy the configuration files to or from Flash memory.

- Appendix D, "Configuring the Firewall for VPN," tells you how to configure a firewall for VPN traffic.

- Appendix B, "Recovering from a Software Failure," tells you how to recover the system from a software failure.

- Appendix C, "Syntax Conventions," describes the syntax conventions for the command line interface and the text configuration file.

- Appendix E, "IP Addressing," describes IP address classes and private addresses, and indicates how to determine the subnet mask.

- The Index provides easy access to topics within the guide.

Document Conventions

The following conventions are used in this guide:

Note   Means reader take note. Notes contain helpful suggestions or references to material not covered in the manual.

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

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

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

- 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

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

You can e-mail your comments to 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.