



Preface

The *Catalyst 2950 Desktop Switch Software Configuration Guide* describes how to configure Catalyst 2950 switches by using the command-line interface (CLI) and web-based applications. This manual refers to these switches as the Catalyst 2950 switches, or generically, as the switch.

Audience and Scope

This guide is for the network manager responsible for configuring Catalyst 2950 switches. We assume that you are familiar with the concepts and terminology of Ethernet and local area networking.

The scope of this guide is to provide the information you need to change the configuration of a switch, create and manage clusters of switches, and troubleshoot problems that might arise.

Organization

This guide is organized into the following chapters:

Chapter 1, “[Overview](#),” is a functional overview of the switch software. It describes Cisco IOS Release 12.0(5)WC(1) features and lists the switches that support the release. Examples show how you could deploy the switches.

Chapter 2, “[Using the Management Interfaces](#),” describes how to use the different management interfaces.

Chapter 3, “[Creating and Managing Clusters](#),” describes how to use the Cluster Management Suite (CMS) and the command-line interface (CLI) to plan and create clusters of switches. The management activities described in this chapter operate on clusters of switches.

Chapter 4, “[Managing Switches](#),” describes how to use the web-based interfaces and the CLI to configure and monitor switches. The how-to information for using the web pages in this chapter is in the online help.

Chapter 5, “[Creating and Maintaining VLANs](#),” describes how to configure VLANs in different network settings. You can configure VLANs on a single switch, by using trunk ports between switches, and by dynamically assigning VLAN membership.

Chapter 6, “[Creating Performance Graphs and Link Reports](#),” describes how to use the CMS to generate performance graphs and link reports.

Chapter 7, “[Troubleshooting](#),” describes how to identify and resolve some of the problems that might arise when you are configuring a switch running this software release.

Appendix A, “[System Error Messages](#),” describes the IOS system error messages for the Catalyst 2950 switches.

Conventions

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

Command descriptions use these conventions:

- Commands and keywords are in **boldface** text.
- Arguments for which you supply values are in *italic*.
- Square brackets ([]) indicate optional elements.
- Braces ({ }) group required choices, and vertical bars (|) separate the alternative elements.
- Braces and vertical bars within square brackets ([{ | }]) indicate a required choice within an optional element.

Interactive examples use these conventions:

- Terminal sessions and system displays are in `screen` font.

- Information you enter is in **boldface screen** font.
- Nonprinting characters, such as passwords or tabs, are in angle brackets (<>).

Related Publications

You can order printed copies of documents with a DOC-xxxxxx= number. For more information, see the [“Obtaining Documentation” section on page xviii](#).

The following publications provide more information about the switches:

- Cisco Catalyst 2950 Desktop Switch Documentation CD

This CD is shipped with the switch and contains the following documents:

- This *Cisco IOS Desktop Switching Software Configuration Guide, Cisco IOS Release 12.0(5)WC(1)* (order number DOC-7811380=)
- *Catalyst 2950 Desktop Switch Command Reference, Cisco IOS Release 12.0(5)WC(1)* (order number DOC-7811381=)
- *Catalyst 2950 Desktop Switch Hardware Installation Guide* (order number DOC-7811157=)
- *Release Notes for the Catalyst 2950 Cisco IOS Release 12.0(5)WC(1)*

Notes, Tips, and Cautions

Notes and cautions use the following conventions and symbols:



Note

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



Tips

Means the following *will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information.

**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 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 send us your comments by completing an online survey. When you display the document listing for this platform, click **Give Us Your Feedback**. If you are using the product-specific CD and you are connected to the Internet, click the pencil-and-paper icon in the toolbar to display the survey. After you display the survey, select the manual that you want to comment on. Click **Submit** to send your comments to the Cisco documentation group.

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.

