



# Preface

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This guide provides instructions for the administration of the Cisco 11500 Series Content Services Switches (CSS). It describes how to perform administration tasks on the CSS, including logging in to the CSS, configuring CSS Ethernet interface ports, configuring network protocols, upgrading your CSS software, and so on. Information in this guide applies to all CSS models except where noted.

For information on basic CSS configuration, refer to the *Content Services Switch Basic Configuration Guide*. For information on configuring advanced features, refer to the *Content Services Switch Advanced Configuration Guide*.

The CSS software is available in a Standard or optional Enhanced feature set. The Enhanced feature set contains all of the Standard feature set and also includes Network Address Translation (NAT) Peering, Domain Name Service (DNS), Demand-Based Content Replication (Dynamic Hot Content Overflow), Content Staging and Replication, and Network Proximity DNS. Proximity Database and Secure Management, which includes Secure Shell Host and SSL strong encryption for the Device Management software, are optional features.



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**Note**

You must enter a Standard software license key when you boot the CSS for the first time. Refer to [Chapter 1, Booting, Logging In, and Getting Started](#) for details about activating a CSS software option.

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This preface describes the following topics:

- [Audience](#)
- [How to Use This Guide](#)
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- [Obtaining Documentation](#)
- [Obtaining Technical Assistance](#)
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## Audience

This guide is intended for the following trained and qualified service personnel who are responsible for configuring the CSS:

- Web master
- System administrator
- System operator

## How to Use This Guide

This guide is organized as follows:

Chapter	Description
<a href="#">Chapter 1, Booting, Logging In, and Getting Started</a>	Power-on and boot the CSS for the first time, log in to the CSS, and boot the CSS on a routine basis.
<a href="#">Chapter 2, Configuring CSS Basics</a>	Basic configuration of the CSS, including the username and password, Ethernet management port, static IP routes, and the date and time.

<b>Chapter</b>	<b>Description</b>
<a href="#">Chapter 3, Managing the CSS Software</a>	Copy the running-configuration and startup-configuration files, specify file storage locations for a two-disk Cisco 11500 series CSS, and unpack and remove an ArrowPoint Distribution Image (ADI). This chapter also includes an overview on the CSS system software.
<a href="#">Chapter 4, Specifying the CSS Boot Configuration</a>	Set the primary and secondary boot configuration for the CSS.
<a href="#">Chapter 5, Configuring Interfaces and Circuits</a>	Configure the CSS interface ports and circuits for operation.
<a href="#">Chapter 6, Configuring CSS Network Protocols</a>	Configure Domain Name Service (DNS), Address Resolution Protocol (ARP), Routing Information Protocol (RIP), Internet Protocol (IP), and spanning-tree bridging, and Dynamic Host Configuration Protocol (DHCP).
<a href="#">Chapter 7, Configuring Open Shortest Path First (OSPF)</a>	Configure OSPF routing protocol.
<a href="#">Chapter 8, Using the CSS Logging Features</a>	Configure logging for the CSS. This chapter also provides information displaying and interpreting log messages.
<a href="#">Chapter 9, Configuring Flow and Port Mapping Parameters</a>	Configure flow parameters for the CSS, including connections for TCP or UDP ports, flow inactivity timeout values, and port mapping
<a href="#">Chapter 10, Configuring User Profiles</a>	Configure user profiles in the default-profile file.
<a href="#">Chapter 11, Configuring CSS Remote Access Methods</a>	Configure CSS remote access methods, including the Secure Shell Daemon (SSH) protocol, the Remote Authentication Dial-In User Service (RADIUS) protocol, and the Terminal Access Controller Access Control System (TACACS+) protocol.

Chapter	Description
<a href="#">Chapter 12, Configuring Simple Network Management Protocol (SNMP)</a>	Configure SNMP on the CSS. This chapter also includes a summary of all CSS Enterprise Management Information Base (MIB) objects.
<a href="#">Chapter 13, Configuring Remote Monitoring (RMON)</a>	Configure RMON on the CSS.
<a href="#">Appendix A, Upgrading Your CSS Software</a>	Upgrade your CSS software manually or use the upgrade script.
<a href="#">Appendix B, Using the Offline Diagnostic Monitor Menu</a>	Information on using the Offline Diagnostic Monitor (Offline DM) menu.
<a href="#">Appendix C, Troubleshooting the Boot Process</a>	Troubleshoot the boot process for the Cisco 11500 series CSS.

## Related Documentation

In addition to this document, the CSS documentation set includes the following:

Document Title	Description
<i>Release Note for the Cisco 11500 Series Content Services Switch</i>	This release note provides information on operating considerations, caveats, and command line interface (CLI) commands for the Cisco 11500 series CSS.
<i>Cisco 11500 Series Content Services Switch Hardware Installation Guide</i>	This guide provides information for installing, cabling, and powering the Cisco 11500 series CSS. In addition, this guide provides information about CSS specifications, cable pinouts, and hardware troubleshooting.

Document Title	Description
<i>Content Services Switch Basic Configuration Guide</i>	<p>This guide describes how to perform basic CSS configuration tasks, including:</p> <ul style="list-style-type: none"><li>• Services</li><li>• Owners</li><li>• Content rules</li><li>• Sticky parameters</li><li>• Source groups, access control lists (ACLs), Extension Qualifier Lists (EQLs), Uniform Resource Locator Qualifier Lists (URQLs), Network Qualifier Lists (NQLs), and Domain Qualifier Lists (DQLs)</li><li>• HTTP header load balancing</li><li>• Content caching</li></ul>
<i>Content Services Switch Advanced Configuration Guide</i>	<p>This guide describes how to perform advanced CSS configuration tasks, including:</p> <ul style="list-style-type: none"><li>• Domain Name Service (DNS)</li><li>• DNS Sticky</li><li>• Content Routing Agent</li><li>• Client-Side Accelerator</li><li>• Network proximity</li><li>• VIP and virtual interface redundancy</li><li>• Box-to-box redundancy</li><li>• Demand-based content replication and content staging and replication</li><li>• Secure Socket Layer (SSL) termination with the SSL Acceleration Module</li><li>• Firewall load balancing</li><li>• CSS scripting language</li><li>• XML documents to configure the CSS</li></ul>

<b>Document Title</b>	<b>Description</b>
<i>Content Services Switch Command Reference</i>	Provides an alphabetical list of all CLI commands including syntax, options, and related commands.
<i>Content Services Switch Device Management User's Guide</i>	Provides an overview of using the Device Management user interface, an HTML-based Web-based application that you use to configure and manage your CSS.

# Symbols and Conventions

This guide uses the following symbols and conventions to identify different types of information.



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**Caution**

A caution means that a specific action you take could cause a loss of data or adversely impact use of the equipment.

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**Warning**

**A warning describes an action that could cause you physical harm or damage the equipment.**

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**Note**

A note provides important related information, reminders, and recommendations.

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**Bold text** indicates a command in a paragraph.

*Courier text* indicates text that appears on a command line, including the CLI prompt.

**Courier bold text** indicates commands and text you enter in a command line.

*Italic text* indicates the first occurrence of a new term, book title, emphasized text, and variables for which you supply values.

1. A numbered list indicates that the order of the list items is important.
  - a. An alphabetical list indicates that the order of the secondary list items is important.
- A bulleted list indicates that the order of the list topics is unimportant.
  - An indented list indicates that the order of the list subtopics is unimportant.

# Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

## Cisco.com

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

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

International Cisco web sites can be accessed from this 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 may have 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.

Registered Cisco.com users can order the Documentation CD-ROM (product number DOC-CONDOCCD=) through the online Subscription Store:

<http://www.cisco.com/go/subscription>

## Ordering Documentation

You can find instructions for ordering documentation at this URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpk/pdi.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm)

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

<http://www.cisco.com/en/US/partner/ordering/index.shtml>

- Registered Cisco.com users can order the Documentation CD-ROM (Customer Order Number DOC-CONDOCCD=) 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 Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

## Documentation Feedback

You can submit comments electronically on Cisco.com. On the Cisco Documentation home page, click **Feedback** at the top of the page.

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

You can submit your comments by mail by using the response card behind the front cover of your document or by writing to the following address:

Cisco Systems  
Attn: Customer Document Ordering  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

# Obtaining Technical Assistance

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center (TAC) Website, as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

## Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

- 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

To obtain customized information and service, you can self-register on Cisco.com at this 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 levels of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The avenue of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- 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.

## Cisco TAC Website

You can use the Cisco TAC website 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 website, go to this URL:

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

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require 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 this URL to register:

<http://tools.cisco.com/RPF/register/register.do>

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

<http://www.cisco.com/en/US/support/index.html>

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC website so that you can describe the situation in your own words and attach any necessary files.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. 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 automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this 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). When you call the center, please have available your service agreement number and your product serial number.

## Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The Cisco Online Subscription Center is the website where you can sign up for a variety of Cisco e-mail newsletters and other communications. Create a profile and then select the subscriptions that you would like to receive. To visit the Cisco Online Subscription Center, go to this URL:

<http://www.cisco.com/offer/subscribe>

- The *Cisco Product Quick Reference Guide* is a handy, compact reference tool that includes brief product overviews, key features, sample part numbers, and abbreviated technical specifications for many Cisco products that are sold through channel partners. It is updated twice a year and includes the latest Cisco channel product offerings. To order and find out more about the *Cisco Product Quick Reference Guide*, go to this URL:

<http://www.cisco.com/go/guide>

- Cisco Marketplace provides a variety of Cisco books, reference guides, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- Cisco Press publishes a wide range of general networking, training, and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:  
<http://www.ciscopress.com>
- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:  
<http://www.cisco.com/ipj>
- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:  
<http://www.cisco.com/en/US/products/index.html>
- Networking Professionals Connection is an interactive website where networking professionals share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:  
<http://www.cisco.com/discuss/networking>
- “What’s New in Cisco Documentation” is an online publication that provides information about the latest documentation releases for Cisco products. Updated monthly, this online publication is organized by product category to direct you quickly to the documentation for your products. You can view the latest release of “What’s New in Cisco Documentation” at this URL:  
<http://www.cisco.com/univercd/cc/td/doc/abtunicd/136957.htm>
- World-class networking training is available from Cisco. You can view current offerings at this URL:  
<http://www.cisco.com/en/US/learning/index.html>

