



Preface

Audience

This guide is for the networking professional using the Cisco IOS command-line interface (CLI) to manage the Catalyst 37503560 and 3560-C2960, 2960-S, and 2960-C switch, hereafter referred to as *the switch*. Before using this guide, you should have experience working with the Cisco IOS commands and the switch software features. Before using this guide, you should have experience working with the concepts and terminology of Ethernet and local area networking.

Purpose

The Catalyst 37503560 and 3560-C switch is supported by either the IP base image or the IP services image. The IP base image provides Layer 2+ features including access control lists (ACLs), quality of service (QoS), static routing, and the Routing Information Protocol (RIP). The IP services image provides a richer set of enterprise-class features. It includes Layer 2+ features and full Layer 3 routing (IP unicast routing, IP multicast routing, and fallback bridging). To distinguish it from the Layer 2+ static routing and RIP, the IP services image includes protocols such as the Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol.

Catalyst 2960, 2960-S, and 2960-C switches run one of these images:

- The LAN base software image provides enterprise-class intelligent services such as access control lists (ACLs) and quality of service (QoS) features. On a Catalyst 2960-S switch, stacking is also supported.
- The LAN Lite image provides reduced functionality.

The Catalyst 2960-S ships with a universal image that includes cryptographic functionality. The software image on the switch is either the LAN base or LAN Lite image, depending on the switch model. To determine which image your switch is running:

- Switches running the LAN Lite image do not support the FlexStack module. They do not have a FlexStack module slot on the rear of the switch.
- On the front of the switch, the label in the top right corner ends in -S if the switch model runs the LAN Lite image.
- Enter the show version privileged EXEC command. The line that shows the product ID also ends in either -L (if running the LAN base image) or -S (if running the LAN Lite image). For example, WS-C2960S-48PD-L is running LAN base; WS-C2960S-24TS-S is running LAN Lite image.
- Enter the show license privileged EXEC command, and see which is the active image:

```

Switch# show license
Index 1 Feature: lanlite
      Period left: 0 minute 0 second
Index 2 Feature: lanbase
      Period left: Life time
      License Type: Permanent
      License State: Active, In Use
      License Priority: Medium
      License Count: Non-Counted

```

This guide provides the information that you need about the Layer 2 and Layer 3 commands that have been created or changed for use with the Catalyst 37503560 and 3560-C2960, 2960-S, and 2960-C switches. For information about the standard Cisco IOS Release 15.2 commands, see the Cisco IOS documentation set available on Cisco.com.

This guide does not provide procedures for configuring your switch. For detailed configuration procedures, see the software configuration guide for this release.

This guide does not describe system messages you might encounter. For more information, see the system message guide for this release.

For documentation updates, see the release notes for this release.

Conventions

This publication uses these 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 ([]) means optional elements.
- Braces ({}) group required choices, and vertical bars (|) separate the alternative elements.
- Braces and vertical bars within square brackets ({{ | }}) mean 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 (< >).

Notes, cautions, and warnings use these conventions and symbols:



Note

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



Caution

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

Filtering show Command Output

The **show** commands have optional output modifiers to filter the command output.

- | **begin**—Display begins with the line that matches the *expression*.
- | **exclude**—Display excludes with the line that matches the *expression*.
- | **include**—Display includes with the line that matches the *expression*.
- *expression*—Expression in the output to use as a reference point.

Expressions are case sensitive. If you enter | **exclude output**, the lines that contain *output* are not displayed, but the lines that contain *Output* are displayed.

Related Publications

These documents provide complete information about the switch and are available from this Cisco.com site:

http://www.cisco.com/en/US/products/hw/switches/ps5023/tsd_products_support_series_home.html

http://www.cisco.com/en/US/products/hw/switches/ps5528/tsd_products_support_series_home.html

http://www.cisco.com/en/US/products/ps6406/tsd_products_support_series_home.html



Note

Before installing, configuring, or upgrading the switch, see these documents:

- For initial configuration information, see the “Using Express Setup” section in the getting started guide or the “Configuring the Switch with the CLI-Based Setup Program” appendix in the hardware installation guide.
- For device manager requirements, see the “System Requirements” section in the release notes (not orderable but available on Cisco.com).
- For Network Assistant requirements, see the *Getting Started with Cisco Network Assistant* (not orderable but available on Cisco.com).
- For cluster requirements, see the *Release Notes for Cisco Network Assistant* (not orderable but available on Cisco.com).
- For upgrade information, see the “Downloading Software” section in the release notes.

See these documents for other information about the switches:

- *Release Notes for the Catalyst 3750, 3560, 3560-C, 2960, 2960-S, and 2960- C Switches*
- *Catalyst 3750 Switch Software Configuration Guide*
- *Catalyst 3750 Switch Command Reference*
- *Catalyst 3750 Switch Hardware Installation Guide*
- *Catalyst 3750 Switch Getting Started Guide*
- *Regulatory Compliance and Safety Information for the Catalyst 3750 Switch*
- *Catalyst 3560 and 3560-C Switch Software Configuration Guide*
- *Catalyst 3560 and 3560-C Switch Command Reference*
- Device manager online help (available on the switch)

- *Catalyst 3560 Switch Hardware Installation Guide*
- *Catalyst 3560-C and 2960-C Switch Hardware Installation Guide*
- *Catalyst 3560 Switch Getting Started Guide*
- *Catalyst 3560-C and 2960-C Switch Getting Started Guide*
- *Regulatory Compliance and Safety Information for the Catalyst 3560 Switch*
- *Regulatory Compliance and Safety Information for the Catalyst 3560-C and 2960-C Switch*
- *Release Notes for the Catalyst 2960-S switches*
- *Catalyst 2960 Switch Getting Started Guide*
- *Catalyst 2960-S Switch Getting Started Guide*
- *Catalyst 3560-C and 2960-C Switch Hardware Installation Guide*
- *Catalyst 2960, 2960-S, and 2960-C Switch Software Configuration Guide*
- *Catalyst 2960, 2960-S, and 2960-C Switch Command Reference*
- *Catalyst 2960 Switch Hardware Installation Guide*
- *Catalyst 2960-S Switch Hardware Installation Guide*
- *Catalyst 3560-C and 2960-C Switch Hardware Installation Guide*
- *Regulatory Compliance and Safety Information for the Catalyst 2960 and 2960-S Switch*
- *Regulatory Compliance and Safety Information for the Catalyst 3560-C and 2960-C Switch*
- *Catalyst 3750, 3560, 2960, and 2960-S Switch System Message Guide*
- *Auto Smartports Configuration Guide*
- *Call Home Configuration Guide*
- *Cisco EnergyWise Configuration Guide*
- *Smart Install Configuration Guide*
- *Release Notes for Cisco Network Assistant*
- *Getting Started with Cisco Network Assistant*
- *Cisco RPS 300 Redundant Power System Hardware Installation Guide*
- *Cisco RPS 675 Redundant Power System Hardware Installation Guide*
- *Cisco Redundant Power System 2300 Hardware Installation Guide*
- For more information about the Network Admission Control (NAC) features, see the *Network Admission Control Software Configuration Guide*.
- Information about Cisco SFP, SFP+, and GBIC modules is available from this Cisco.com site:
http://www.cisco.com/en/US/products/hw/modules/ps5455/prod_installation_guides_list.html
These SFP compatibility matrix documents are available from this Cisco.com site:
http://www.cisco.com/en/US/products/hw/modules/ps5455/products_device_support_tables_list.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.