

Preface

Audience

This guide is for the networking professional using the Cisco IOS command-line interface (CLI) to manage the Cisco IE 3000 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 Cisco IE 3000 switch is supported by either the LAN base image or the IP services image. The LAN base image provides intelligent Layer 2 services, such as access control lists (ACLs) and quality of service (QoS) features. The IP services image includes Layer 2+ features and full Layer 3 routing (IP unicast routing, IP multicast routing, and fallback bridging).

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 IE 3000 switches. For information about the standard Cisco IOS Release 12.2 commands, see the Cisco IOS documentation set available from the Cisco.com home page by selecting **Technical Support & Documentation > Cisco IOS Software**.

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:



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



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/ps9703/tsd_products_support_series_home.html



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 Cisco IE 3000 Switch
- Cisco IE 3000 Switch Software Configuration Guide
- Cisco IE 3000 Switch Command Reference
- Cisco IE 3000 Switch System Message Guide
- Cisco IE 3000 Switch Hardware Installation Guide
- Cisco IE 3000 Switch Getting Started Guide
- Regulatory Compliance and Safety Information for the Cisco IE 3000 Switch
- For information about the Network Admission Control (NAC) features, see the Network Admission Control Software Configuration Guide
- These 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, at:

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.