Documentation Reference for Ethernet Routing Switch 4900 and 5900 Series

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Contents

Chapter 1: About this Document

This section discusses the purpose of this document, the conventions used, ways to provide feedback, additional help, and information regarding other Extreme Networks publications.

Purpose

This document provides information on features in the following products:

- Extreme Networks Ethernet Routing Switch 4900 Series
- Extreme Networks Ethernet Routing Switch 5900 Series

This document describes information regarding the suite of documents for Ethernet Routing Switch 4900 and 5900 Series. It also describes how the content is organized across the document suite.

Conventions

This section discusses the conventions used in this guide.

Text Conventions

The following tables list text conventions that can be used throughout this document.

Table 1: Notice Icons

Icon	Alerts you to...
Important:	A situation that can cause serious inconvenience.
Note:	Important features or instructions.
Tip:	Helpful tips and notices for using the product.

Table continues…

Icon	Alerts you to...
⚠️ **Danger:**	Situations that will result in severe bodily injury; up to and including death.
⚠️ **Warning:**	Risk of severe personal injury or critical loss of data.
⚠️ **Caution:**	Risk of personal injury, system damage, or loss of data.

Table 2: Text Conventions

Convention	Description
Angle brackets (< >)	Angle brackets (< >) indicate that you choose the text to enter based on the description inside the brackets. Do not type the brackets when you enter the command. If the command syntax is `cfm maintenance-domain maintenance-level <0-7>` , you can enter `cfm maintenance-domain maintenance-level 4`.
Bold text	Bold text indicates the GUI object name you must act upon. Examples: • Click **OK**. • On the **Tools** menu, choose **Options**.
Braces ({ })	Braces ({ }) indicate required elements in syntax descriptions. Do not type the braces when you enter the command. For example, if the command syntax is `ip address {A.B.C.D}`, you must enter the IP address in dotted, decimal notation.
Brackets ([ ])	Brackets ([ ]) indicate optional elements in syntax descriptions. Do not type the brackets when you enter the command. For example, if the command syntax is `show clock [detail]`, you can enter either `show clock` or `show clock detail`.
Ellipses (…)	An ellipsis (…) indicates that you repeat the last element of the command as needed. For example, if the command syntax is `ethernet/2/1 [ <parameter> <value> ]...,` you enter `ethernet/2/1` and as many parameter-value pairs as you need.

Table continues…

Convention	Description
Italic Text	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles that are not active links.
`Plain Courier Text`	Plain Courier text indicates command names, options, and text that you must enter. Plain Courier text also indicates command syntax and system output, for example, prompts and system messages. Examples: • `show ip route` • `Error: Invalid command syntax [Failed][2013-03-22 13:37:03.303 -04:00]`
Separator (>)	A greater than sign (>) shows separation in menu paths. For example, in the Navigation tree, expand the **Configuration** > **Edit** folders.
Vertical Line (|)	A vertical line (|) separates choices for command keywords and arguments. Enter only one choice. Do not type the vertical line when you enter the command. For example, if the command syntax is `access-policy by-mac action { allow	deny }`, you enter either `access-policy by-mac action allow` or `access-policy by-mac action deny`, but not both.

Documentation and Training

Find Extreme Networks product information at the following locations:

Current Product Documentation
Release Notes
Hardware and software compatibility for Extreme Networks products
Extreme Optics Compatibility
Other resources such as white papers, data sheets, and case studies

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit www.extremenetworks.com/education/.

Getting Help

If you require assistance, contact Extreme Networks using one of the following methods:

Extreme Portal   Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

The Hub   A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

Call GTAC   For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2826. For the support phone number in your country, visit: www.extremenetworks.com/support/contact

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

Subscribe to Service Notifications

You can subscribe to email notifications for product and software release announcements, Vulnerability Notices, and Service Notifications.

1. Go to www.extremenetworks.com/support/service-notification-form.
2. Complete the form (all fields are required).
3. Select the products for which you would like to receive notifications.

   ⊛ **Note:**
   You can modify your product selections or unsubscribe at any time.

4. Select **Submit**.

Providing Feedback

The Information Development team at Extreme Networks has made every effort to ensure the accuracy and completeness of this document. We are always striving to improve our documentation and help you work better, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information in the document.
- Broken links or usability issues.

If you would like to provide feedback, you can do so in three ways:

- In a web browser, select the feedback icon and complete the online feedback form.
- Access the feedback form at https://www.extremenetworks.com/documentation-feedback/.
- Email us at documentation@extremenetworks.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

Chapter 2: New in this document

The following sections detail what is new in this document.

Obsolete documents

The following documents are obsolete:

- *Locating Software and Release Notes for Ethernet Routing Switch 4900 Series*.
- *Locating Software and Release Notes for Ethernet Routing Switch 5900 Series*.
- *Regulatory Reference for Ethernet Routing Switch 4900 Series*.
- *Regulatory Reference for Ethernet Routing Switch 5900 Series*.

Chapter 3: Roadmap

Use this section as a guide to find information to perform work involving the Ethernet Routing Switch (ERS) series.

Product Fundamentals

Product fundamentals documentation contains information that is relevant to multiple job functions, and overview and reference information about the product and the product documentation.

Table 3: Product fundamentals documents

Document title	Description
Documentation Reference for Ethernet Routing Switch 4900 and 5900 Series	This document contains an overview of the documentation suite and explains how to use task-based documentation.
Using CLI and EDM on Ethernet Routing Switch 4900 and 5900 Series	This document provides instructions to use the user interfaces, including Command Line Interface (CLI) and Enterprise Device Manager (EDM), and includes procedures to use configuration files.
Command Line Interface Reference for Ethernet Routing Switch 4900 and 5900 Series	This document provides default values and proper syntax for the CLI commands.

Installation and Commissioning

Installation and commissioning documentation enables you to install the product hardware and software and perform the initial configuration.

Table 4: Installation and commissioning documents

Document title	Description
Quick Start Configuration for Ethernet Routing Switch ERS 4900 and 5900 Series	This document provides instructions to connect and initially configure the switch for your network.

Table continues…

Document title	Description
Installing Ethernet Routing Switch 5900 Series Installing Ethernet Routing Switch 4900 Series	These documents provide instructions to install the switch in an equipment rack (individually or in a stack) or on a shelf. It also provides instructions to perform the initial IP configuration on the switch using CLI, BootP, or the IP.CFG file. It also provides instructions to verify the switch status using the front-panel LEDs.
Extreme Networks Pluggable Transceivers Installation Guide	This document provides instructions to install small form factor pluggable transceivers, 10 Gigabit small form factor pluggable transceivers, and includes specifications for these hardware components.
Ethernet Routing Switch 4900 Series Quick Install Guide Ethernet Routing Switch 5900 Series Quick Install Guide Ethernet Routing Switch 59100 Series Quick Install Guide	This document provides instructions to install the switch in an equipment rack or on a shelf and prepare for network connectivity.
Configuring Systems on Ethernet Routing Switch 4900 and 5900 Series	This document provides instructions to perform basic configuration of the switch including procedures to configure the switch IP address after hardware installation. It also provides instructions to configure system-level features such as stacking, feature licensing, Simple Network Time Protocol (SNTP), BootP, Domain Name System, Power over Ethernet (PoE), and Layer Discovery Protocol (LLDP).

Upgrades

Upgrades documentation enables you to upgrade hardware and software from one release to another for the product.

Table 5: Upgrades documents

Document title	Description
Release Notes for Ethernet Routing Switch 4900 and 5900 Series	This document describes new features and important information about the latest release. Release Notes includes a list of known issues (including workarounds where appropriate) and a list of fixed issues.

Operations

Operations documentation provides information that enables you to configure services and applications, manage accounting and billing, and perform routine maintenance of hardware and software for the product.

Table 6: Operations documents

Document title	Description
Configuring VLANs, Spanning Tree, and MultiLink Trunking on Ethernet Routing Switch 4900 and 5900 Series	This document describes procedures and conceptual information to configure VLANs, Spanning Tree, Link Aggregation Control Protocol, and Multi-Link Trunking.
Configuring Quality of Service on Ethernet Routing Switch 4900 and 5900 Series	This document provides procedures and conceptual information to configure Quality of Service.
Configuring IP Routing and Multicast on Ethernet Routing Switch 4900 and 5900 Series	This document provides procedures and conceptual information to configure IP routing features on the switch, including static routes, Proxy ARP, DHCP Relay, and UDP forwarding. It also provides procedures and conceptual information to manage multicast traffic using IGMP and MLD snooping.
Configuring Fabric Connect on Ethernet Routing Switch 4900 and 5900 Series	This document provides procedures and conceptual information to configure Shortest Path Bridging MAC.

Administration and Security

Administration and security documentation supports the configuration and management of systems data, resources, users, and security for the product.

Table 7: Administration and security documents

Document title	Description
Configuring Security on Ethernet Routing Switch 4900 and 5900 Series	This document provides procedures and conceptual information to administer and configure security features for the switch, including MAC-based security, RADIUS, EAPOL, SSH, and IPv6 First Hop Security (FHS).

Fault and Performance Management

Fault and performance management documentation enables you to manage faults, and measure and optimize the performance of the product.

Table 8: Fault and performance management documents

Document title	Description
Configuring System Monitoring on Ethernet Routing Switch 4900 and 5900 Series	This document provides information about system diagnostics tools including syslog, Remote Monitoring, port mirroring, and displaying port and chassis statistics.
Troubleshooting Ethernet Routing Switch 4900 and 5900 Series	This document describes common problems and error messages and the techniques to resolve them.