
Chapter 1

Getting Started

Introduction

This guide describes how to install, configure, and monitor the following devices:

- HP ProCurve Routing Switch 9308M
- HP ProCurve Routing Switch 9304M
- HP ProCurve Routing Switch 6308M-SX
- HP ProCurve Switch 6208M-SX

This guide also describes how to monitor these products using statistics and summary screens.

Audience

This guide assumes that you have a working knowledge of Layer 2 and Layer 3 switching and routing. You also should be familiar with the following protocols if applicable to your network—IP, RIP, OSPF, BGP4, IGMP, PIM, DVMRP, IPX, AppleTalk, SRP, and VRRP.

Nomenclature

This guide uses the following typographical conventions:

Italic highlights the title of another publication and occasionally emphasizes a word or phrase.

Bold highlights a CLI command.

Bold Italic highlights a term that is being defined.

Underline highlights a link on the Web management interface.

Capitals highlights field names and buttons that appear in the Web management interface.

NOTE: A note emphasizes an important fact or calls your attention to a dependency.

WARNING: A warning calls your attention to a possible hazard that can cause injury or death.

CAUTION: A caution calls your attention to a possible hazard that can damage equipment.

Terminology

The following table defines basic product terms used in this guide.

Product Terms	
Term	Definition
<i>chassis</i> or <i>chassis device</i>	A switch or routing switch that accepts optional modules or power supplies.
<i>fixed-port device</i>	A device that contains a fixed configuration of ports, instead of swappable modules. The 6208M-SX switch and 69308M-SX routing switch are fixed-port devices.
<i>routing switch</i> or <i>router</i>	A layer 2 and Layer 3 device that switches and routes network traffic. The term router is sometimes used in this document in descriptions of a routing switch's Layer 3 routing protocol features.
<i>switch</i>	A layer 2 device that switches network traffic.
HP9300 or HP6208 or HP6308	An example Command Line Interface (CLI) prompt. Actual prompts show the product number for the device, such as HP9304.

Related Publications

The following product documentation is available for your HP switch or routing switch:

- ***Read Me First*** for the HP ProCurve Routing Switches 9304M, 9308M, and 6308M-SX, and the HP ProCurve Switch 6208M-SX—This document includes software update information, the parts list for your HP ProCurve device, and other product information. Updates to this document are published on the World Wide Web from time to time, and may include additional troubleshooting, errata, and operating notes. To check for the latest version of *Read Me First*, go to HP's ProCurve website at www.hp.com/go/procurve, select **Technical Support**, and then **Manual**.
- ***Book 1: Installation and Getting Started Guide*** for the HP ProCurve Routing Switches 9304M, 9308M, and 6308M-SX, and the HP ProCurve Switch 6208M-SX—This document is shipped with your HP switch or routing switch and is also included in PDF (portable document format) on the CD-ROM you also received with your HP device. (HP part number 5969-2321)
- ***Book 2: Advanced Configuration and Management Guide*** for the HP ProCurve Routing Switches 9304M, 9308M, and 6308M-SX, and the HP ProCurve Switch 6208M-SX—This document is available in PDF (portable document format) on the CD-ROM shipped with your HP device, and can also be ordered in hardcopy from HP. For price information and ordering of this guide (HP part number 5969-2322), see *Read Me First*, included with your HP device.

- **Documentation CD for the HP ProCurve Routing Switches 9304M, 9308M, 6308M-SX, and the HP ProCurve Switch 6208M-SX**—This CD contains PDF files for Book 1 and Book 2 (above), and provides a method for electronically searching either individual chapters or an entire manual for specific topics. For a brief description of the CD contents and how to use the CD to save time, do the following:
 1. Insert the CD in your PC's CD-ROM drive.
 2. Using the file manager in your PC, select the drive containing the CD and display the CD's directory.
 3. Do either of the following:
 - Use Adobe® Acrobat® Reader to display the **README.pdf** file in the CD's root directory.
 - Use a compatible text editor to display the **README.txt** file in the CD's root directory.

NOTE: For important information on how to use Book 1 and Book 2, see "Organization of Product Documentation" on page iii (right after the title page).

- **Manual Supplement**—These documents are included with your HP device if the software shipped with the device includes feature upgrades that were added after the last revision of the manual. They are also included with software upgrades when available on the World Wide Web. To check for the latest software version, go to HP's ProCurve website at www.hp.com/go/procurve and select **Free Software Updates**.
- **Support is as Close as the World Wide Web!**—Included with your HP switch or routing switch, this document is a guide to HP support services and also provides information on your HP networking product warranty.

What's New in this Edition?

This edition contains descriptions of the following new features.

Chassis Hardware Enhancement

This guide includes information about the following new hardware:

- **Redundant Management Module** – A pair of these modules installed in a 9304M or 9308M provides redundancy to protect against system outage and also increases route table capacity for BGP4. See "Using Redundant Management Modules" on page 3-1.

Layer 3 Enhancements

The following enhancements are available beginning with software release 05.2.x or later (included in the HP device with which this guide was shipped) apply only to routing switches.

- **Larger default maximum number of IP routes (80000) supported on Redundant Management module** – See "Configuring BGP4" on page 12-1.
- **Increase in default maximum number of BGP4 routes and route-attribute entries on Redundant Management modules** – See "Border Gateway Protocol Version 4 Routes" on page 3-2.
- **Larger default maximum number of IP routes supported on Redundant Management modules** – This software release increases the default maximum number of IP routes the Management II module supports from 10,000 to 80,000. See "Configuring BGP4" on page 12-1.
- **Faster BGP4 route update convergence time** – When a switching router comes up as a BGP4 router, it sends its route table more quickly than in the previous software release. This increase is due to a change in the way the routing switch uses the BGP4 advertisement interval. See "Adding BGP4 Neighbors" on page 12-13.
- **Larger default maximum number of prefixes for BGP4 neighbors supported on Redundant Management modules** – This software release increases the default maximum number of prefixes for neighbors the Management II module supports from 5,000 to 80,000. See "Adding BGP4 Neighbors" on page 12-13.

NOTE: BGP4 is supported on the HP 9308M and 9304M. The increases in default maximum table sizes apply only to chassis devices using the Redundant Management module.

- Change to default administrative distance for default routes – See “Modifying the Default Administrative Distance” on page 9-31 and “Changing Administrative Distances” on page 12-22.
- IP route table display enhancements for the CLI – See “Displaying the IP Route Table” on page 9-49.
- New CLI commands and options for OSPF – See “Displaying OSPF Route Information” on page 10-34 and “Displaying OSPF External Link State Information” on page 10-36.
- Increase in maximum number of OSPF routes you can configure a routing switch to hold – See “Modify the Maximum Number of Routes” on page 10-24.
- Increase in maximum number of summary Link State Advertisements (LSAs) you can configure a routing switch to hold – See “Modify LSDB Limits” on page 10-25.
- IPX enhancements – See “Configuring IPX” on page 15-1.
- Globally-distributed Server Load Balancing (SLB) – See “Route Health Injection” on page 18-1.

Layer 2 Enhancements

The following enhancements apply to routing switches and switches.

- AppleTalk cable VLANs – See “Configuring AppleTalk Cable VLANs” on page 17-32.

NOTE: This enhancement does not apply to the 6208M-SX switch.

- Support for dynamic port membership in IP protocol, IP sub-net, IPX protocol, IPX network, and AppleTalk protocol VLANs – See “Configuring AppleTalk Cable VLANs” on page 17-32.
- Enhancement to VLAN information display – You can display VLAN information for a specific port. See “Displaying VLAN Information for Specific Ports” on page 17-49.
- Layer 2 broadcast and multicast filters – See “Defining Broadcast and Multicast Filters” on page 8-57.

System-Level Enhancements

The following enhancements apply to all HP routing switches and switches unless otherwise noted.

- Tighter security for default Web management access – See “Configuring the SNMP Community Strings” on page 2-26.
- Support for multiple read-only and read-write SNMP community strings – See “Configuring the SNMP Community Strings” on page 2-26.
- New commands to restrict remote management access to specific hosts – See “Restricting Remote Access to the Device to Specific IP Addresses” on page 2-25.
- Terminal Access Controller Access Control System (TACACS) and TACACS+ support – See “Configuring for TACACS/TACACS+ Authentication” on page 2-34.
- Enhancement to negotiation mode for Gigabit Ethernet ports – See “Changing the Default Gigabit Negotiation Mode” on page 8-20.
- New commands for limiting broadcast, multicast, and unknown-unicast traffic – See “Limiting Broadcast, Multicast, or Unknown-Unicast Rates” on page 8-21.
- Support for filter ranges – See “Applying IP Access Policies to Ports” on page 9-19.
- Support for two SyslogD servers – See “Configuring the Syslog Service” on page 8-15.
- Multi-slot trunk groups – See “Configuring Trunk Groups” on page 8-38.

NOTE: This enhancement applies only to the HP 9308M and 9304M.

- New command to disable IGMP on individual interfaces – See “Disabling IGMP Queries on Individual Ports” on page 11-3.
- Ctrl-key based CLI editing commands – See “Logging on Through the CLI” on page 2-21.
- New log message for IP address conflicts with another 9304M, 9308M, or 6308M-SX routing switch or 6208M-SX switch – See Example 3 in “show logging” on page B-242.
- New log message and SNMP trap for packets denied by Layer 2 MAC filters and IP access policies – See “show logging” on page B-242.
- New command to reduce the number of required 10/100Base-Tx port startup confirmations – See “confirm-port-up” on page B-90.

CAUTION: The **confirm-port-up** command is for very specific applications. Do not use this new command unless advised to do so by HP technical support.

Support and Warranty Information

Refer to *Support is as Close as the World Wide Web*, which was shipped with your HP switch or routing switch.

