


Read Me First

for the HP ProCurve Routing Switches 9304M, 9308M, and 9315M

Edition 10 (10/02) Covering Software Release 07.6.00 or Greater






WARNING

9304M Exceeds 40 lbs. (18.1 kg)
9308M Exceeds 55 lbs. (24.9 kg)

9315M Exceeds 80 lbs. (35 kg) without modules and power supplies installed. To avoid personal injury, reduce weight of chassis by removing all modules and power supplies from chassis prior to lifting or moving.

When handling, two or more people are required.



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Software Updates Are *Free!*

Help Us Help You...Register Now To Keep Up-To-Date on the Latest Software!

Hewlett-Packard provides *free* software updates for all managed HP ProCurve networking products. To access the software updates, to the HP ProCurve website at <http://www.hp.com/go/hpprocurve>, then click on **software** to go to the **free software updates** page.

Register for Automatic Notification of Updates. From the **free software updates** page you can also register yourself to automatically receive email notice of new updates for your managed HP ProCurve networking products. Just follow the instructions on that page for how to receive the update notices.

To determine whether you have the latest software, compare the software version that is available on the website with the version that is currently installed in the management module(s) in your routing switch. To load a new software image, see the chapter titled "Updating Software Images and Configuration Files" in the *Installation and Getting Started Guide*, on the Documentation CD-ROM (for software release 07.5.04 or greater) you received with the Management Module. If you are installing release 07.5.0x or greater in a management module that does not already have a version of release 07.5.x or greater in flash memory, refer to Software Upgrade Procedure for Release 07.5.04 and Greater.

Note that current product documentation, and any release notes describing how to use any recently released software updates are available on the above website (click on **technical support**, then **manuals**).



New Software Release 07.6.00 (or Greater) Is Now Available

- Support for these new products:
 - J4885A HP ProCurve 9300 Enhanced Performance (EP) 8-Port mini GBIC Redundant Management Module
 - J4881A HP ProCurve 9300 Enhanced Performance (EP) 48-Port 10/100 RJ-45 Module
 - J4889A HP ProCurve 9300 Enhanced Performance (EP) 48-Port 10/100 Telco (RJ-21) Module
 - J4894A HP ProCurve 9300 Enhanced Performance (EP) 16-Port mini-GBIC Module
 - J4895A HP ProCurve 9300 Enhanced Performance (EP) 16-Port 100/1000-T Module
 - J4891A HP ProCurve 9300 10-Gigabit 10km Module
- Software Fixes and System Level Enhancements

If you received this edition (ed. 10) of *Read Me First* with a Redundant Management module, then software release 07.6.00 (or greater) is already installed in the device. (To verify the version number for the currently installed software, execute the **show version** command in the CLI (Command Line Interface).

For more information on the features in release 07.6.00, refer to the release notes on the HP ProCurve website and to the manuals on the *Documentation CD-ROM* (for release 07.5.04 or greater) shipped with new chassis and management module units. The release notes, manuals, and other information are also available on HP's ProCurve website at <http://www.hp.com/go/hpprocurve> (click on **technical support**, then **manuals**).

Now Available with 7.5.04 is the T-Flow Redundant Management Modules(MV) .

The 7.5.04 software image now supports the T-Flow Redundant Management Module (J4879A) from HP ProCurve. The 7.5.04 manual supplement for this new module is available at the HP ProCurve's Website, <http://www.hp.com/go/ProCurve> (click on **technical support**, then **manuals**).

Note:

Release 7.6.00 of the software image does not support the T-Flow Redundant Management Module (J4879A).

Software Branches

Beginning with the software releases 6.6.28 and 07.1.10, HP offers two software (Operating System) branches:

- **06.6.28 and later 06.X releases:** These releases typically include only bug fixes, and operate on the following devices:
 - HP 9304M and 9308M routing switches *without* Redundant Management (that is, with MI modules)
 - HP 6308M-SX routing switch
 - HP 6208M-SX switch
- **07.1.10 and later 07.1 releases:** These releases typically include new features, enhancements to existing features, and bug fixes, and operate only with the HP 9304M and 9308M routing switches with redundant management (MII and MIV modules).

- **07.5.0x and later releases:** These releases supersede the 07.1 releases, offering new features, enhancements to existing features, bug fixes, and support for the new HP ProCurve 9315M Routing Switch. These releases operate only with the HP 9304M, 9308M, and 9315M routing switches with redundant management (MII, MIV, and MV modules). Note that this is the minimum release for the 9315M routing switch and T-Flow Redundant Management Module.
- **07.6.00 and later releases:** These releases supersede the 07.5 releases, offering new features, enhancements to existing features, bug fixes, and support for the new HP ProCurve Enhanced Performance (EP) Modules. These releases operate only with the HP 9304M, 9308M, and 9315M routing switches with redundant management (MII and MIV modules). Note that this is the minimum release for the EP Modules.

(HP made releases 06.6.28 and 07.1.10 available on the HP ProCurve website, but not in management modules shipped from the factory.)

Software Upgrade Procedure for Release 07.5.04 and Greater

Notes

The 9315M Routing Switch requires a minimum of one Redundant Management Module running software release 07.5.04 or greater.

Due to the size of the OS software image after 07.5.04, you cannot directly upgrade the OS image in a Redundant Management Module if that module does not already have an 07.5.04 (or greater) image in flash memory. Thus to upgrade a Redundant Management Module to release 07.5.04 (or greater) for the first time (for use in the 9304M, 9308M, or the 9315M), you must use the switch's BOOT MONITOR feature and initially boot the switch using 07.5.04 (or greater) code residing in a TFTP server.

Management modules shipped from the factory after May, 2002 include the minimum OS and boot code software required to operate a 9315M routing switch. (These modules can be installed in a 9304M, 9308M, or 9315M chassis). However, there are instances where you may be planning to use a management module with release 07.5.x (or greater), but that module's OS and/or boot code is earlier than release 07.5.x. For example:

- A module has been in prior service in a 9304M or 9308M chassis without upgrading to release 07.5.x.
- A module was shipped from the factory before release 07.5.x was released.

In these cases, it is necessary to upgrade the management module to 07.5.0x (or greater) OS and boot code. The following table provides a guide for this operation.

Hardware and Software Configuration	Software Upgrade Steps
MII or MIV Redundant Management Module installed in a 9304M or 9308M Chassis with: <ul style="list-style-type: none"> • Boot Code Earlier than 07.5.04 • OS Code Earlier than 07.5.04 	<ol style="list-style-type: none"> 1. Copy the 07.5.04 (or greater) OS software to a TFTP server and note the file name and path. 2. Upgrade the boot code in the management module to the proper release for your OS software and module. (Refer to the chapter titled "Updating Software Images and Configuration Files" in the <i>Installation and Getting Started Guide for the HP ProCurve Routing Switches 9304M, 9308M, and 9315M.</i>) 3. Reboot the routing switch as follows. <ol style="list-style-type: none"> a. Execute the reload command. b. Immediately after executing the boot command, enter Boot Monitor mode by pressing and holding the [B] key. You will then see this prompt: BOOT MONITOR > c. Assign an IP address to the routing switch: BOOT MONITOR > ip address < ip-address > < subnet-mask > d. If necessary, assign a default gateway IP address to the routing switch: BOOT MONITOR > ip default_gateway < ip-address > 4. Boot the switch using the 07.5.x OS you previously copied into the TFTP server: <ol style="list-style-type: none"> a. BOOT MONITOR > boot system tftp < server-ip-address > < file-name > b. Upgrade the OS to 07.504 (or greater). (Refer to the chapter titled "Updating Software Images and Configuration Files" in the <i>Installation and Getting Started Guide for the HP ProCurve Routing Switches 9304M, 9308M, and 9315M.</i>)
MII or MIV Redundant Management Module installed in a 9315M chassis, and: <ul style="list-style-type: none"> • Boot Code 07.5.04 or greater. • OS Code Earlier than 07.5.04 	<ol style="list-style-type: none"> 1. Copy the 07.5.04 (or greater) OS software to a TFTP server and note the file name and path. 2. Reboot the 9315M as follows. <ol style="list-style-type: none"> a. Execute the reload command. b. Immediately after executing the boot command, enter Boot Monitor mode by pressing and holding the [B] key. You will then see this prompt: BOOT MONITOR > c. Assign an IP address to the 9315M: BOOT MONITOR > ip address < ip-address > < subnet-mask > d. If necessary, assign a default gateway IP address to the 9315M: BOOT MONITOR > ip default_gateway < ip-address > 3. Boot the switch using the 07.5.x OS you previously copied into the TFTP server: <ol style="list-style-type: none"> a. BOOT MONITOR > boot system tftp < server-ip-address > < file-name > b. Upgrade the OS to 07.5.04. (Refer to the chapter titled "Updating Software Images and Configuration Files" in the <i>Installation and Getting Started Guide for the HP ProCurve Routing Switches 9304M, 9308M, and 9315M.</i>)

Hardware and Software Configuration	Software Upgrade Steps
MII or MIV Redundant Management Module installed in a 9315M chassis, and: <ul style="list-style-type: none"> • Boot Code earlier than 07.5.04 • OS Code earlier than 07.5.04 	You will need assistance. Contact your HP support representative.
MII or MIV Redundant Management Module installed in a 9315M chassis, and: <ul style="list-style-type: none"> • Boot Code 07.5.04 or greater • OS Code 07.5.04 or greater 	No upgrade necessary to use release 07.5.x OS and boot code. (For the latest code release, visit http://www.hp.com/go/hpprocurve and click on software .)

Module Installation

Caution—Routing Switch 9304M, 9308M, and 9315M

To avoid hardware damage during module installation, be careful to properly line up the edges of the module board with the guides built into the module slot on the chassis.

Powering-Up a Device Having Multiple Power Supplies

When you power-up a device that requires multiple power supplies, make sure you apply power to all the supplies (or at least to the minimum number of supplies required for your configuration) at the same time. Otherwise, the device either will not boot at all, or will boot and then repeatedly display a warning message stating that you need to add more power supplies.

Getting Started

You can initially access the routing switch in either of the following ways:

- Via Telnet or FTP *through port 1 on the management module*, using the factory default IP address (209.157.22.254) and subnet mask (255.255.255.0)
 - By connecting a terminal device to the serial port on the management module
- Note:** HP recommends that you use the console cable provided with the routing switch. If you need to use a different cable, please see the "Console Cable" entry under "Accessory Parts List" on page 8.

After you have accessed the device, change the default IP address and subnet mask to correspond to your network's addressing scheme. For more on assigning an IP address and other topics, see the following:

Topic	Chapter or Appendix	Manual
Installation Procedures and Precautions	2, "Installation"	<i>Quick Start Guide</i> ¹ <i>Installation and Getting Started Guide</i> ²
Attaching a Terminal Device and Assigning an IP Address	2, "Installation"	Same as above.
Using Redundant Management Modules	3, "Using Redundant Management Modules"	<i>Installation and Getting Started Guide</i> ²
Enhanced Performance (EP) Series Modules		<i>7.6.00 Release Notes</i>
T-Flow Module		<i>7.6.00 Release Notes</i>
System Boot from a Bootp Server	5, "Privileged EXEC Commands"	<i>Command Line Interface Reference</i> ²
Software Specifications	C, "Software Specifications"	<i>Installation and Getting Started Guide</i> ²

Topic	Chapter or Appendix	Manual
Hardware Specifications	B, "Hardware Specifications"	<i>Quick Start Guide</i> ¹ <i>Installation and Getting Started Guide</i> ²
Enabling Telnet	2, Securing Access to Management Functions	<i>Security Guide</i> ²

¹ Shipped in printed form with all HP ProCurve Series 9300M chassis, and also available on the HP ProCurve website.

² Provided on the *Documentation CD-ROM* shipped with modules, and also available on the HP ProCurve website.

Note:

Unmanaged modules will contain the Product Documentation and Software CD-ROM and a TopTools CD-ROM, both of which are not applicable to the operation of the unmanaged module.

Your *Free* Ticket to Proactive Networking!

HP TopTools for Hubs & Switches is a breakthrough in network management software that gives you more network with less work. The HP TopTools for Hubs & Switches CD is included at no extra charge with your HP ProCurve routing switch. See the system requirements printed on the sleeve containing the HP TopTools CD.

Note: Support for the 9315M in *HP TopTools for Hubs & Switches* will be included in version 5.6, available Fall, 2002.

Accessory Parts List

Accessory	Notes
Power Cords	<p>The HP ProCurve 9304M: Either three power cords (one each for the U.S.A., the U.K., and continental Europe) or one power cord for Australia or Japan.</p> <p>The HP ProCurve 9308M: Either six power cords (two each for the U.S.A., the U.K., and continental Europe) or two power cords for Australia or Japan.</p> <p>The HP ProCurve 9315M: Six power cords (two each for the U.S.A., the U.K., and continental Europe.)</p> <p>Caution: If the installation requires a different power cord than the one supplied with the switch or routing switch, be sure to use a shielded power cord displaying the mark of the safety agency that defines the regulations for power cords in your country. The mark is your assurance that the power cord can be used safely with the switch or routing switch.</p>
Console Cable	Connects terminal, PC, or modem to serial port on any HP 9300 management module for direct-connect or modem access management using the Command Line Interface (CLI). If you need to use a different cable, select a "straight-through" serial cable with a female DB-9 to DB-9 connector for the connection to the switch or routing switch. For more information, see "Attaching a PC or Terminal" in the Quick Start Guide or the Installation and Getting Started Guide for you routing switch
CESD Grounding Tap Kit	Use the Cable Electrostatic Discharge (CESD) Grounding Tap before connecting Category 5 or better UTP copper networking cables to the routing switch. Refer to the documentation provided with the kit.
ESD Strap	Helps to prevent electrostatic discharge between your body and routing switch modules or chassis.
Rack Mount Kit	Contains two mounting brackets and the screws required to attach the brackets to the routing switch.
Product Documentation (for software release 7.5.x or later)	<ul style="list-style-type: none">• <i>Read Me First</i> (this document) Updates are periodically posted on the HP ProCurve website. Go to http://www.hp.com/go/hpprocurve, click on technical support, and then click on manuals.• <i>Quick Start Guide</i> (Shipped with the 9304M, 9308M, and 9315 chassis.)
Warranty and Support Booklet	Included with routing switch chassis, modules, and RPS shipments.
Declaration of Conformity	Included with routing switch chassis and RPS shipments.

Product Documentation Set for Software Releases 07.6.00

Document:	Where Provided:
<i>Read Me First</i> (this document)	<ul style="list-style-type: none">Printed version included with your 9304M, 9308M, 9315M, and modules devices. This document is periodically revised. The latest edition is on the HP ProCurve website.¹
<i>Release Notes</i>	<ul style="list-style-type: none">Portable document format (PDF) file of the <i>Release Notes</i> are available on the HP ProCurve website.¹
<i>Manual Supplements</i>	<ul style="list-style-type: none">Portable document format (PDF) file of the <i>Manual Supplements</i> are available on the HP ProCurve website.¹
<i>Quick Start Guide</i> ²	<ul style="list-style-type: none">Printed version included with your 9304M, 9308M, 9315M chassis. The latest edition is on the HP ProCurve website.*
<i>Installation and Getting Started Guide</i> ²	<ul style="list-style-type: none">Portable document format (PDF) file included on the <i>Product Documentation CD-ROM</i> shipped with all 9300 series modules, and also available on the HP ProCurve website¹.
<i>Advanced Configuration and Management Guide</i> ²	<ul style="list-style-type: none">Portable document format (PDF) file included on the <i>Product Documentation and Software CD-ROM</i> shipped with all 9300 series modules, and also available on the HP ProCurve website¹.
<i>Security Guide</i> ²	<ul style="list-style-type: none">Portable document format (PDF) file included on the <i>Product Documentation and Software CD-ROM</i> shipped with all 9300 series modules, and also available on the HP ProCurve website¹.
<i>HP ProCurve Command Line Interface Reference</i> ²	<ul style="list-style-type: none">Portable document format (PDF) file included on the <i>Product Documentation and Software CD-ROM</i> shipped with all 9300 series modules, and also available on the HP ProCurve website¹.

¹ Go to <http://www.hp.com/go/hpprocurve>, click on **technical support**, then **manuals**, and select the appropriate product.

² These documents are for release 7.5.04. See the release notes for 7.6.00 for enhancements and fixes from 7.5.04

Note: The *Quick Start Guide* and *Documentation CD-ROM* for software releases 07.5.0x include "software release 07.5.0x or greater" on the cover or CD sleeve.

If you received an earlier version of the above documentation and are running software release 07.6.00 (or greater), you may want to download the latest documentation from the HP ProCurve website. (See the footnote in the preceding table.)

Operating Notes and Troubleshooting

Redundant Management Module Operation

When two redundant management modules are installed in a Series 9300M routing switch, the two modules work together as active and standby management modules. If the active module becomes unavailable, the standby module automatically takes over system operation. If this occurs, the routing tables, ARP tables, etc. are all updated dynamically, as if the routing switch had been rebooted. As a result of this reconvergence, a noticeable, temporary network disruption will occur. The duration of the disruption depends on the number of routes being utilized through the device, and can be significant.

Auto-Negotiation Between the HP 9300M Routing Switches and Extreme Summit™ Switches

Condition. Auto-Negotiation between the HP 9300M routing switches and Extreme Summit switches may sometimes fail.

Solution. Disable auto-gig on the routing switch port(s) attached to the Extreme Summit switch.

For example, use the following CLI commands to disable auto-gig on port 2 in slot 1 of the HP 9304M Routing Switch:

```
HP 9304M (config)# int e 1/2
HP 9304M (config-if-1/2)# no auto-gig
```

Web Management Interface Running Slow or Failing To Respond

Condition. The Web management interface on the routing switch times out or does not respond. This can occur when the routing switch CPU is processing an excessive amount of broadcast traffic.

Solution. The Web management interface recovers automatically when the CPU is sufficiently free of broadcast traffic. Because the Web management interface is a low priority for the CPU, you may want to take steps to reduce the broadcast traffic on your network. One method for doing this is to use TopTools for Hubs & Switches to determine the "top talkers" on your network, then create VLANs to segment the network for optimum traffic control.

Note: Use TopTools for Hubs & Switches 5.6 (p/n J2569R)—or a later version. The latest version of TopTools for Hubs & Switches and any recommended patches are also available on the HP ProCurve website. (For software downloads, see "Software Updates Are *Free!*" on page 1.) Note that support for the EP and T-Flow modules will be added in later versions.

Web Management Interface "Not Available" or "In Use"

Condition. You are unable to access the Web management interface.

Solution. A routing switch allows only one session of the Web management interface at any given time. Thus, if one user is accessing the routing switch via the Web, the **not available** or **in use** messages will appear to another user who is trying to access that routing switch through the Web management interface. You can, however, limit access via the Web management interface by assigning a password to the routing switch. With a password set, access via the Web management interface will be available only to users who can enter the password. For more on passwords, refer to the *Security Guide*. (For information on the latest version, see Product Documentation Set for Software Releases 07.6.00.)

Device Will Not Boot Up Due to Corrupt Operating System

Condition. The operating system (OS) is corrupt on both the primary and secondary flash memory, and the routing switch will not boot up.

Solution. The routing switch will first try to boot up using the primary OS written to flash memory. If this fails, the device automatically tries to boot from the secondary flash memory. If this also fails, the routing switch then tries to connect to a TFTP server and boot from there. This will fail if a TFTP server is not configured to support the routing switch, or is not found. You can perform this solution only if you have access to a TFTP server. Otherwise, there are TFTP applications (available on the World Wide Web) that you can use to enable your PC to appear as a TFTP server to the routing switch. One website where such software can be found is <http://www.walusoft.co.uk>.

1. Using a straight-through cable, directly connect a PC or terminal to the serial port on the routing switch. (For more information on attaching a PC or terminal, refer to chapter 2, "Installation", in the *Quick Start Guide* or the *Installation and Getting Started Guide*.)
2. Ensure that the OS version you want the switch to use is properly stored in your TFTP server.
3. Reboot the routing switch as follows.
 - a. Execute the **reload** command.
 - b. Immediately after executing the boot command, enter Boot Monitor mode by pressing and holding the **[B]** key. You will then see this prompt:

BOOT MONITOR >

4. Assign an IP address to the routing switch:

BOOT MONITOR > ip address < ip-address > < subnet-mask >

5. If necessary, assign a default gateway IP address to the routing switch:

BOOT MONITOR > ip default_gateway < ip-address >

6. Boot the switch using the OS you previously copied into the TFTP server:

a. **BOOT MONITOR > boot system tftp** *< server-ip-address > < file-name >*

The routing switch will now be able to boot up over the network. A new copy of the operating system can now be downloaded to the primary and secondary flash memories via the TFTP server.

See also the Software Upgrade Procedure for Release 07.5.04 and Greater.



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