



Release Notes:

Version A.14.04 Software

for the HP ProCurve 2615-8-PoE and 2915-8G-PoE Switches

These release notes include information on the following:

- Applicable products ([page ii](#))
- Downloading switch software and documentation from the Web ([page 1](#))
- A listing of software enhancements ([page 7](#))
- A listing of software fixes ([page 8](#))

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Applicable Products

HP 2615-8-PoE Switch	(J9565A)
HP 2915-8G-PoE Switch	(J9562A)

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SSL on ProCurve Switches is based on the OpenSSL software toolkit. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. For more information on OpenSSL, visit www.openssl.org.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com)

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Hewlett-Packard Company
8000 Foothills Boulevard, m/s 5551
Roseville, California 95747-5551
www.hp.com/networking

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Software Management

Download Switch Documentation and Software from the Web

You can download software updates and the corresponding product documentation from the HP networking Web site. Check the Web site frequently for the latest software release available for your switch.

Viewing or Downloading the Software Manual Set

Go to: www.hp.com/networking/support and select **Manuals**.

You may want to bookmark this Web page for easy access in the future.

Downloading Software Updates for Your Switch

Switch software updates are available from the HP networking Web site www.hp.com/networking/software. After obtaining the software update file from the Web site, you can use one of the following methods to update the switch:

- For a TFTP transfer from a server, do either of the following:
 - Select **Download OS** in the Main Menu of the switch's menu interface and use the (default) **TFTP** option.
 - Use the **copy tftp** command in the switch's CLI (see "TFTP Download from a Server" below).
- For an Xmodem transfer from a PC or Unix workstation, do either of the following:
 - Select **Download OS** in the Main Menu of the switch's menu interface and select the **XMODEM** option.
 - Use the **copy xmodem** command in the switch's CLI (page 2).
- Use the download utility in ProCurve Manager Plus management software.

Note

Downloading new software does not change the current switch configuration. The switch configuration is contained in a separate file that can be transferred (for example, to archive or to use in another switch of the same model).

TFTP Download from a Server

This section describes how to use the Command Line Interface (CLI) to download software to the switch. You can also use the menu interface for software downloads. For more information, refer to the *Management and Configuration Guide* for your switch.

Syntax: `copy tftp flash <ip-address> <remote-os-file> [< primary | secondary >]`

Note that if you do not specify the flash destination, the TFTP download defaults to the primary flash.

For example, to download a software file named A_14_03.swi from a TFTP server with the IP address of 10.28.227.103:

1. Execute the copy command as shown below:

```
ProCurve # copy tftp flash 10.28.227.103 A_14_03.swi
The primary OS image will be deleted. continue [y/n]? Y
03125K
```

2. When the switch finishes downloading the software file from the server, it displays the progress message

```
Validating and Writing System Software to FLASH...
```

3. When the CLI prompt re-appears, the switch is ready to reboot to activate the downloaded software:

- a. Use the **show flash** command to verify that the new software version is in the expected flash area (primary or secondary)
- b. Reboot the switch from the flash area that holds the new software (primary or secondary), using the following command:

Syntax: boot system flash [< primary | secondary >]

After the switch reboots, it displays the CLI or Main Menu, depending on the **Logon Default** setting last configured in the menu's Switch Setup screen.

4. Verify the software version by displaying the system information for the switch (for example, through the **show system-information** command), and viewing the Software revision field.

Xmodem Download From a PC or Unix Workstation

This procedure assumes that:

- The switch is connected via the Console RS-232 port to a PC operating as a terminal. (Refer to your switch *Installation and Getting Started Guide* for information on connecting a PC as a terminal and running the switch console interface.)
- The switch software is stored on a disk drive in the PC.
- The terminal emulator you are using includes the Xmodem binary transfer feature. (For example, in the HyperTerminal application included with most Windows systems, the Send File option in the Transfer drop-down menu supports the Xmodem protocol.)

Using Xmodem and a terminal emulator, you can download a switch software file to either primary or secondary flash using the CLI.

Syntax: copy xmodem flash [< primary | secondary >]

1. To reduce the download time, you may want to increase the baud rate in your terminal emulator and in the switch to a value such as 115200 bits per second. (The baud rate must be the same in both devices.) For example, to change the baud rate in the switch to 115200, execute this command:

```
ProCurve(config)# console baud-rate 115200
```

(If you use this option, be sure to set your terminal emulator to the same baud rate.)

Changing the console baud-rate requires saving to the Startup Config with the **write memory** command. Alternatively, you can logout of the switch and change your terminal emulator speed and allow the switch to AutoDetect your new higher baud rate (i.e. 115200 bps)

2. Execute the following command in the CLI:

```
ProCurve # copy xmodem flash primary
The primary OS image will be deleted. continue [y/n]? Y
Press 'Enter' and start XMODEM on your host...
```

3. Execute the terminal emulator commands to begin the Xmodem transfer. For example, using HyperTerminal:
 - a. Click on **Transfer**, then **Send File**.
 - b. Type the file path and name in the **Filename** field.
 - c. In the Protocol field, select **Xmodem**.
 - d. Click on the **Send** button.

The download can take several minutes, depending on the baud rate used in the transfer.

4. If you increased the baud rate on the switch ([step 1](#)), use the same command to return it to its previous setting. (A baud rate of 9600 bits per second is recommended for most applications.) Remember to return your terminal emulator to the same baud rate as the switch.
5. Use the **show flash** command to verify that the new software version is in the expected flash area (primary or secondary)
6. Reboot the switch from the flash area that holds the new software (primary or secondary).

After the switch reboots, it displays the CLI or Main Menu, depending on the **Logon Default** setting last configured in the menu's Switch Setup screen.

Saving Configurations While Using the CLI

The switch operates with two configuration files:

- **Running-Config File:** Exists in volatile memory and controls switch operation. Rebooting the switch erases the current running-config file and replaces it with an exact copy of the current startup-config file. To save a configuration change, you must save the running configuration to the startup-config file.
- **Startup-Config File:** Exists in flash (non-volatile) memory and preserves the most recently-saved configuration as the “permanent” configuration. When the switch reboots for any reason, an exact copy of the current startup-config file becomes the new running-config file in volatile memory.

When you use the CLI to make a configuration change, the switch places the change in the running-config file. If you want to preserve the change across reboots, you must save the change to the startup-config file. Otherwise, the next time the switch reboots, the change will be lost. There are two ways to save configuration changes while using the CLI:

- Execute **write memory** from the Manager, Global, or Context configuration level.
- When exiting from the CLI to the Main Menu, press **[Y]** (for Yes) when you see the “save configuration” prompt:

Do you want to save current configuration [y/n]?

ProCurve Switch, Routing Switch, and Router Software Keys

Software Letter	ProCurve Networking Products
A	Switch 2615-8-PoE and Switch 2915-8G-PoE
C	1600M, 2400M, 2424M, 4000M, and 8000M
CY	Switch 8100fl Series (8108fl and 8116fl)
E	Switch 5300xl Series (5304xl, 5308xl, 5348xl, and 5372xl)
F	Switch 2500 Series (2512 and 2524), Switch 2312, and Switch 2324
G	Switch 4100gl Series (4104gl, 4108gl, and 4148gl)
H	Switch 2600 Series, Switch 2600-PWR Series: H.07.81 and earlier, or H.08.55 and greater, Switch 2600-8-PWR requires H.08.80 or greater. Switch 6108: H.07.xx and earlier
I	Switch 2800 Series (2824 and 2848)
J	J.xx.xx.biz Secure Router 7000dl Series (7102dl and 7203dl)
J	J.xx.xx.swi Switch 2520G Series (2520G-8-PoE, 2520G-24-PoE)
K	Switch 3500yl Series (3500yl-24G-PWR and 3500yl-48G-PWR), Switch 6200yl-24G, 5400zl Series (5406zl, 5406zl-48G, 5412zl, 5412zl-96G), Switch 8212zl and Switch 6600 Series (6600-24G, 6600-24G-4XG, 6600-24XG).
L	Switch 4200vl Series (4204vl, 4208vl, 4202vl-72, and 4202vl-48G)
M	Switch 3400cl Series (3400-24G and 3400-48G): M.08.51 through M.08.97, or M.10.01 and greater; Series 6400cl (6400cl-6XG CX4, and 6410cl-6XG X2): M.08.51 through M.08.95, or M.08.99 to M.08.100 and greater.
N	Switch 2810 Series (2810-24G and 2810-48G)
P	Switch 1810G (1810G-8, 1810G-24)
PA/PB	Switch 1800 Series (Switch 1800-8G – PA.xx; Switch 1800-24G – PB.xx)
Q	Switch 2510 Series (2510-24)
R	Switch 2610 Series (2610-24, 2610-24/12PWR, 2610-24-PWR, 2610-48 and 2610-48-PWR)
S	Switch 2520 Series (2520-8-PoE, 2520-24-PoE)
T	Switch 2900 Series (2900-24G and 2900-48G)
U	Switch 2510-48
W	Switch 2910al Series (2910al-24G, 2910al-24G-PoE+, 2910al-48G, and 2910al-48G-PoE+)
VA/VB	Switch 1700 Series (Switch 1700-8 - VA and 1700-24 - VB)
WA	ProCurve Access Point 530
WM	ProCurve Access Point 10ag
WS	ProCurve Wireless Edge Services xl Module and the ProCurve Redundant Wireless Services xl Module
WT	ProCurve Wireless Edge Services zl Module and the ProCurve Redundant Wireless Services zl Module
Y	Switch 2510G Series (2510G-24 and 2510G-48)
Z	ProCurve 6120G/XG and 6120XG Blade Switches
numeric	Switch 9408sl, Switch 9300 Series (9304M, 9308M, and 9315M), Switch 6208M-SX and Switch 6308M-SX (Uses software version number only; no alphabetic prefix. For example 07.6.04.)

Operating System and Web Browser Compatibility Table

The switch Web agent supports the following combinations of computer operating system browsers:

Operating System	Tested Web Browsers
Windows XP SP3	Internet Explorer 7, 8
Windows Vista SP2	Internet Explorer 7, 8
Windows Server 2003 SP2	Internet Explorer 7, 8
Windows Server 2008 SP2	Internet Explorer 7, 8
Windows 7	Internet Explorer 8

Known Issues

This section provides Known Issues for specific software versions. Known Issues are listed in chronological order of the software version, oldest to newest.

Version A.14.03

The following are known issues in software version A.14.03.

- **SSH (PR_0000052970)** — The output of a CLI **show** command may have truncated lines, when the **show** command is executed via an SSH login and the output is very large (on the order of 2 KB).
- **Crash (PR_0000053774)** — In a situation with extremely high levels of routed traffic for an extended period of time (on the order of several days), the switch might reboot unexpectedly with a message similar to the following.

```
Software exception at watchdog.c:446 -- in 'tWatchD', task ID = 0x5d5e400
```

Enhancements

This section lists only the software versions that contain enhancements. Enhancements are listed in chronological order, from oldest to newest software version. Unless otherwise noted, each new software version includes all the enhancements added in previous versions.

A.14.03 is the first software version for the HP 2615-8-PoE and 2915-8G-PoE Switches.

Software Fixes

Software fixes are listed in chronological order, from oldest to newest software version. Unless otherwise noted, each new software version includes all the software fixes added in previous versions.

A.14.03 is the first software version for the HP 2615-8-PoE and 2915-8G-PoE Switches.

Version A.14.03

Status: Released and fully supported, but not posted on the Web.

Version A.14.04

Status: Released and fully supported and posted on the Web.

The following problems were resolved in software version A.14.04.

- **802.1X (PR_0000038874)** — When using 802.1X in client mode, the command **aaa port-access authenticator 1 client-limit 2** should allow two clients to authenticate on that port. After one client is removed and the timeout period has passed, the switch does not allow a new second client to authenticate.
- **CLI (PR_0000039726)** — The switch does not allow a copy of the config file to be saved with a new name (**copy config <source-filename> config <target-filename>**).
- **Crash (PR_0000043167)** — When using TFTP with "octet" mode to upload the switch's configuration file, the switch may reboot unexpectedly with a message similar to the following.

```
Software exception at hwBp.c:156 -- in 'eDevIdle', task ID = 0xabeb240  
-> MemWatch Trigger: Offending task 'tTftpDmn'. Offending IP=0x1cb174
```
- **Crash (PR_0000050103)** — The switch allows setMIB commands to create invalid configurations, which might cause the switch to reboot unexpectedly when the user issues the **show running-config** command, with a message similar to the following. Note that this problem was found and fixed on an internal development software build; symptoms in released software may vary.

```
Software exception at cli_xlate.c:5340 -- in 'mSess1', task ID = > 0xa924e00
```
- **Crash (PR_0000054295)** — The switch allows the invalid configuration of a 255.255.255.255 DHCP server IP address. After configuring that invalid value, the switch might reboot unexpectedly with a message similar to the following. Note that this problem was found and fixed on an internal development software build; symptoms in released software may vary.

```
Software exception at wmaIfManagement.c:103 -- in 'mSnmpCtrl', task ID = 0xa92c0
```
- **Crash (PR_0000054670)** — After configuring an ACL plus Dynamic IP Lockdown on a port, then configuring ARP Protection on the VLAN, the switch might reboot unexpectedly with a message similar to the following. Note that this problem was found and fixed on an internal development software build; symptoms in released software may vary.

```
Software exception at hpBcm_fp.c:119 -- in 'mSess1', task ID = 0x5d85ac0
```
- **Crash (PR_0000056210)** — While unlikely, it is possible that initiating a telnet session from the switch might cause the switch to reboot unexpectedly with a message similar to the following. Note that this problem was found and fixed on an internal development software build; symptoms in released software may vary.

```
Software exception at iputil_integrity.c:5189 -- in 'mSess3', task ID = 0x1ce3cf
```

- **IPv6 (PR_0000042273)** — The switch responds to LLDP requests with the first IPv6 address defined internally, which may be the link-local address. With this fix, the switch will advertise an IPv6 address that can communicate to remote sites.
- **MAC Authentication (PR_0000056402)** — After a client is authenticated, the switch might fail to forward a small number of packets from the client.
- **SSH (PR_0000041760)** — If the switch is configured for SSH with a username that includes a colon (:), users are not able to log into the switch.
- **SSH (PR_0000052970)** — The output of a CLI **show** command may have truncated lines, when the **show** command is executed via an SSH login and the output is very large (on the order of 2 KB).
- **Stacking (PR_0000052110)** — When a commander accesses a member switch and the user issues the **show tech all** command, in some situations the session from commander to member can become unresponsive. Workaround: from the commander switch, **kill** the unresponsive session.
- **TACACS (PR_0000052495)** — If the switch is configured to use TACACS for telnet access and the TACACS timeout is configured for a value greater than 75 seconds, the switch waits much longer than 75 seconds before timing out the TACACS request.
- **Unauthenticated VLAN (PR_0000010533)** — The switch allows an inherent configuration conflict; an unauthenticated VLAN (**unauth-vid**) can be configured concurrently for both 802.1X and Web/MAC authentication. This fix will not allow concurrent configuration of an **unauth-vid** for the **aaa port-access authenticator** and **aaa port-access web-based** or **aaa port-access mac-based** functions. Software versions that contain this fix will not allow this configuration conflict at the CLI. *Existing configurations will be altered by this fix*, and an error will be reported at the switch CLI and event log.

Best Practice Tip: 802.1X should not have an unauthenticated VLAN setting when it works concurrently with Web-based or MAC-based authentication if the unauth-period in 802.1X is zero (the default value). Recall that the unauth-period is the time that 802.1X will wait for authentication completion before the client will be authorized on an unauthenticated VLAN. If 802.1X is associated with an unauthenticated VLAN when the unauth-period is zero, Web- or MAC-auth may not get the opportunity to initiate authentication at all if the first packet from the client is an 802.1X packet. Alternatively, if the first packet sent was not 802.1X, Web- or MAC-auth could be initiated before 802.1X places the user in the unauthenticated VLAN and when Web- or MAC-auth completes successfully, it will be awaiting traffic (to enable VLAN assignment) from the client but the traffic will be restricted to the unauthenticated VLAN, and thus the client will remain there.

If a MAC- or Web-based configuration on a port is associated with an unauth-VID, and an attempt is made to configure an unauth-VID for 802.1X (**port-access authenticator**), the switch with this fix will reject the configuration change with a message similar to one of the following:

Message 1 (when an unauth-vid config is attempted on a port with an existing Web- or MAC-auth unauth-vid):

```
Configuration change denied for port <number>. Only Web or MAC authenticator can have
unauthenticated VLAN enabled if 802.1X authenticator is enabled on the same port.
Please disable Web and MAC authentication on this port using the following commands:
```

```
no aaa port-access web-based <PORT-LIST> or
no aaa port-access mac-based <PORT-LIST>
```

Then you can enable 802.1X authentication with unauthenticated VLAN. You can re-enable Web and/or MAC authentication after you remove the unauthenticated VLAN from 802.1X. Note that you can set unauthenticated VLAN for Web or MAC authentication instead.

Message 2 (when an unauth-vid config is attempted on a port with an existing 802.1X unauth-vid):

Configuration change denied for port <number>. Only Web or MAC authenticator can have unauthenticated VLAN enabled if 802.1X authenticator is enabled on the same port. Please remove the unauthenticated VLAN from 802.1X authentication on this port using the following command:

no aaa port-access authenticator <PORT-LIST> unauth-vid

Note that you can set unauthenticated VLAN for Web or MAC authentication instead.

Message 3:

Configuration change denied for port <number>. Only Web or MAC authenticator can have unauthenticated VLAN enabled if 802.1X authenticator is enabled on the same port. Please use unauthenticated VLAN for Web or MAC authentication instead.

Event log message when the configuration is changed:

mgr: Disabled unauthenticated VLAN on port <number> for the 802.1X.
Unauthenticated VLAN cannot be simultaneously enabled on both 802.1X and Web or MAC authentication.

- **Web Management (PR_0000054907)** — The Web user interface does not allow the user to configure port mirroring.

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