



Release Notes: Version H.07.90 Software *for the ProCurve Series 6108 Switches*

Release H.07.90 supports these switches:

- ProCurve Switch 6808 (J4902A)

These release notes include information on the following:

- Downloading switch software and Documentation from the Web ([page 1](#))
 - Clarification of operating details for certain software features ([page 8](#))
 - Software Enhancements ([page 12](#))
 - A listing of software fixes included in releases H.07.02 through H.07.90 ([page 16](#))
-

FEC, CDP Removal

Starting with Software version H.07.57, FEC trunks (Cisco Systems' FastEtherChannel for aggregated links) are no longer supported, and generation of CDP (Cisco Discovery Protocol) packets are no longer supported. In their place are IEEE standards based LACP aggregated links (as well as statically configured trunks) and generation of LLDP packets for device discovery. For more information, please see: <ftp://ftp.hp.com/pub/networking/software/LLDP-and-LACP-statement.pdf>.

Caution: Startup-Config File Compatibility, Pre-H-07.31 Software

The startup-config file saved under version H.07.31 or greater, is NOT backward-compatible with previous software versions. Users are advised to save a copy of the pre-H.07.31 startup-config file BEFORE UPGRADING to H.07.31 or greater, in case there is ever a need to revert to pre-H.07.31 software. Instructions for saving a copy of the startup-config file are found in the "Transferring Switch Configurations" section of Appendix A in the *Management and Configuration Guide* available on the ProCurve Networking Web site. (Refer to "[To Download Product Documentation:](#)" on [page 1](#).)

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Applicable Product

ProCurve Switch 6108 (H.07.xxx only) (J4902A)

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[http:// www.openssh.com](http://www.openssh.com).

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

[http:// www.openssl.org](http://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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Software Management


Downloading Switch Documentation and Software from the Web

You can download software updates and the corresponding product documentation from ProCurve Networking Web site as described below.

To Download a Software Version:

1. Go to the ProCurve Networking Web site at:
<http://www.procurve.com>.
2. Click on **Software updates** (in the sidebar).
3. Under **Latest software**, click on **Switches**.

To Download Product Documentation: You will need the Adobe® Acrobat® Reader to view, print, and/or copy the product documentation. (ProCurve recommends version 5.0 or greater.)

1. Go to the ProCurve Networking Web site at <http://www.procurve.com>.
2. Click on **Technical support**, then **Product manuals**.
3. Click on the name of the product for which you want documentation.
4. On the resulting Web page, double-click on a document you want.
5. When the document file opens, click on the disk icon  in the Acrobat® toolbar and save a copy of the file.

Downloading Software to the Switch

Caution

The startup-config file generated by the latest software release may not be backward-compatible with the same file generated in your switch by earlier software releases. Refer to the “[Caution: Startup-Config File Compatibility, Pre-H-07.31 Software](#)” on the front page.

ProCurve periodically provides switch software updates through the ProCurve Networking Web site (<http://www.procurve.com>). After you acquire the new software file, you can use one of the following methods for downloading the software to the switch:

- For a TFTP transfer from a server, do either of the following:
 - Click on **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 below).
- For an Xmodem transfer from a PC or Unix workstation, do either of the following:
 - Click on **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 4](#)).
- A switch-to-switch file transfer

Note

Downloading a new software version does not change the current switch configuration. The switch configuration is contained in a separate file that can also be transferred, for example, for archive purposes or to be used in another switch of the same model and running the same software version.

This section describes how to use the 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.

TFTP Download from a Server

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 **H_07_8x.swi** from a TFTP server with the IP address of 10.28.227.103:

1. Execute the copy command as shown below:

```
HPswitch # copy tftp flash 10.28.227.103 H_07_8x.swi
The primary OS image will be deleted. continue [y/n]? Y
00225K
```

2. When the switch finishes downloading the software file from the server, it displays the progress message shown below. When the CLI prompt re-appears, the switch is ready to reboot to activate the downloaded software:

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

HP ProCurve Switch 6108#
```

3. Reboot the switch.

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.

Xmodem Download From a PC or Unix Workstation

This procedure assumes that:

- The switch is connected via the Console RS-232 port on a PC operating as a terminal. (Refer to the Installation Guide you received with the switch 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 Microsoft Windows NT® terminal emulator, you would use the **Send File** option in the **Transfer** dropdown menu.)

Syntax: copy xmodem flash < unix | pc >

For example, to download a software file named H_07_8x.swi from a PC:

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:

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

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

2. Execute the following command in the CLI:

```
HPswitch # copy xmodem flash 10.28.227.103 H_07_8x.swi
The primary OS image will be deleted. continue [y/n]? Y
02335K
```

3. Execute the terminal emulator commands to begin the Xmodem transfer.

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 (1), use the same command to return it to its previous setting. (HP recommends a baud rate of 9600 bits per second for most applications.)

(Remember to return your terminal emulator to the same baud rate as the switch.)

5. Reboot the switch.

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.

6. Use this command to confirm that the software downloaded correctly:

```
HPswitch> show system
```

Check the **Firmware revision** line to verify that the switch downloaded the new software.

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 Software Key

Software Letter	ProCurve Networking Products
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	Secure Router 7000dl Series (7102dl and 7203dl)
K	Switch 3500yl Series (3500yl-24G-PWR and 3500yl-48G-PWR), Switch 6200yl-24G, and 5400zl Series (5406zl, 5406zl-48G, 5412zl, and 5412zl-96G)
L	Switch 4200vl Series (4204vl, 4208vl, 4202vl-72, and 4202vl-48G)
M	Switch 3400cl Series (3400-24G and 3400-48G): M.08.51 though M.08.97, or M.10.01 and greater; Series 6400cl (6400cl-6XG CX4, and 6410cl-6XG X2): M.08.51 though M.08.95, or M.08.99 to M.08.100 and greater.
N	Switch 2810 Series (2810-24G and 2810-48G)
PA/PB	Switch 1800 Series (Switch 1800-8G – PA.xx; Switch 1800-24G – PB.xx)
Q	Switch 2510 Series (2510-24)
T	Switch 2900 Series (2900-24G, and 2900-48G)
VA/VB	Switch 1700 Series (Switch 1700-8 - VA and 1700-24 - VB)
WA	ProCurve Access Point 530
WS	ProCurve Wireless Edge Services xl Module and the ProCurve Redundant Wireless Services xl Module
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.)

Minimum Software Versions for Switch 6108 Features

To view a tabular listing of major switch software features and the minimum software version each feature requires:

1. Visit the ProCurve Networking Web site at <http://www.procurve.com>.
2. Click on **Software updates**.
3. Click on **Minimum Software Version Required by Feature**.

If you are viewing this publication online, just click on the underlined text in step 3 to go directly to the "ProCurve Networking software updates" page. Click on **Minimum Software Version Required by Feature**.

For ProCurve Switch 6108 (J4902A) the minimum supported software version is H.07.02.

Clarifications

LLDP and LACP

Starting with Software version H.07.57, FEC trunks (Cisco Systems' FastEtherChannel for aggregated links) are no longer supported, and generation of CDP (Cisco Discovery Protocol) packets are no longer supported. In their place are IEEE standards-based LACP aggregated links (as well as statically configured trunks) and generation of LLDP packets for device discovery.

For more information, please see: <ftp://ftp.hp.com/pub/networking/software/LLDP-and-LACP-statement.pdf>.

OS/Web Browser/Java Compatibility Table

The switch Web agent supports the following combinations of OS, Web browsers and Java Virtual Machines:

Operating System	Internet Explorer	Netscape Navigator	Java
Windows NT 4.0 SP6	5.00 5.01 5.01, SP1 6.0, SP1	4.7 7.0 7.01	Sun Java 2 Runtime Environment, Ver. 1.4.1 Microsoft Virtual Machine 5.0.38.09
Windows 2000 SP3	5.01, SP1 6.0, SP1	7.0 7.01	
Windows XP Professional XP Hotfix SP2	6.0, SP1	7.0 7.01	

IGMP

Note: the following information updates and clarifies information in Chapter 4, “Multimedia Traffic Control with IP Multicast (IGMP)” in the *Advanced Traffic Management Guide*—part number 5990-8853, October 2004. Please review this chapter for a detailed explanation of IGMP operation.

Supported Standards and RFCs

The following are supported:

- RFC2236 (IGMP V.2, with backwards support for IGMP V.1)
- Interoperability with RFC3376 (IGMPv3)
- IETF draft for IGMP and MLD snooping switches (for IGMP V1, V2 V3)

The switch provides full IGMPv2 support as well as full support for IGMPv1 Joins. The switch is interoperable with IGMPv3 Joins as it forwards packets for the joined group from all sources. It does not support IGMPv3 “Exclude Source” or “Include Source” options in the Join Reports. The switch can operate in IGMPv2 Querier mode on VLANs with an IP address.

IGMP is supported in the HP MIB, rather than the standard IGMP MIBs, as the latter reduce Group Membership detail in switched environments.

Using Delayed Group Flush

This feature continues to filter IGMP-Left groups for a specified additional period of time. This is beneficial in switches where Data-Driven IGMP is not supported. The delay in flushing the group filter prevents stale traffic from being forwarded by the server. Delayed Group Flush is enabled or disabled for the entire switch.

HP recommends that Delayed Group Flush be used whenever Fast Leave or Forced Fast Leave are enabled on the Series 2600 and 2600-PWR Switches. Note that this command must be executed in the configuration context.

Syntax: `igmp delayedflush <time period>`

*Enables the switch to continue to flush IGMP-Left groups for a specified period of time (0 - 255 seconds). The default setting is **Disabled**. To disable, reset the time period to zero.*

Syntax: `Show igmp delayedflush`

Displays the current setting for the switch.

Setting Fast-Leave and Forced Fast-Leave from the CLI

In previous software versions, Fast-Leave and Forced Fast-Leave options for a port were set through the MIB. The following commands now allow a port to be configured for Fast-Leave or Forced Fast-leave operation from the CLI. Note that these command must be executed in a VLAN context

Syntax: [no] ip igmp fastleave <port-list>

*Enables IGMP Fast-Leaves on the specified ports in the VLAN (the default setting). In the Config context, use the VLAN specifier; for example, **vlan < vid > ip igmp fastleave <port-list>**. The “no” form disables Fast-Leave on the specified ports.*

[no] ip igmp forcedfastleave <port-list>

Forces IGMP Fast-Leaves on the specified ports in the VLAN, even if they are cascaded.

To view the IGMP Fast-Leave status of a port use the **show running-config** or **show configuration** commands.

Displaying the Fast-Leave Setting for Switch/VLAN Ports

Use the **walkmib** command, below, to display this setting for all switch ports or the ports on a specified VLAN.

Syntax:

walkmib hpSwitchIgmpportFastLeaveState<.vlan number>

<pre> HPswitch(vlan-1)# walkmib hpswitchigmpportfastleavestate.1 hpSwitchIgmpportFastLeaveState.1.1 = 1 hpSwitchIgmpportFastLeaveState.1.2 = 2 hpSwitchIgmpportFastLeaveState.1.3 = 1 hpSwitchIgmpportFastLeaveState.1.4 = 2 hpSwitchIgmpportFastLeaveState.1.5 = 1 hpSwitchIgmpportFastLeaveState.1.6 = 2 </pre>		<p>The 2 at the end of a port listing shows that Fast-Leave is disabled on the corresponding port.</p>
	<p>The 1 at the end of a port listing shows that Fast-Leave is enabled on the corresponding port.</p>	
<p>Internal VLAN Number for the Default VLAN Note: Internal VLAN numbers reflect the sequence in which VLANs are created, and are not related to the unique VID assigned to each VLAN.</p>	<p>Sequential Port Numbers (not all ports shown here)</p>	

Clarifications

Displaying Spanning Tree Configuration Detail

IGMP Operating Notes

- Forced fast leave can be used when there are multiple devices attached to a port.

Displaying Spanning Tree Configuration Detail

A new CLI command has been added to provide more detailed statistics on spanning tree operation.

Syntax: show spanning-tree <port-list> detail

Lists 802.1D and 802.1w port operating statistics for all ports, or those specified.

Enhancements

Unless otherwise noted, each new release includes the enhancements added in all previous releases.

Release H.07.90 Enhancements

Software fixes only; no new enhancements.

Release H.07.89 Enhancements

Software fixes only; no new enhancements.

Release H.07.88 Enhancements

Enhancement (PR_1000411313) — The show tech transceivers command added.

Support for the following mini-GBICs added:

- J4858C ProCurve Gigabit-SX-LC Mini-GBIC
 - J4859C ProCurve Gigabit-LX-LC Mini-GBIC
 - J4860C ProCurve Gigabit-LH-LC Mini-GBIC
-

Release H.07.87 Enhancements

Software fixes only; no new enhancements.

Release H.07.86 Enhancements

Software fixes only; no new enhancements.

Release H.07.85 Enhancements

- **Enhancement (PR_1000340292)** — Flash file system compaction improvements.
-

Release H.07.84 Enhancements

Software fixes only; no new enhancements.

Release H.07.58 through H.07.83 Enhancements

Software fixes only; no new enhancements.

Releases H.07.58 to H.07.80 were never built.

Release H.07.57 Enhancements

Implementation of LLDP

For network device discovery solutions, software version H.07.57 implements the industry standard Link Layer Discovery Protocol (LLDP) on your switch, as an alternative to the Cisco Discovery Protocol (CDP).

For more information on LLDP operation and configuration, refer to the latest version of the *Management and Configuration Guide* available on the ProCurve Networking Web site: <http://www.procurve.com>. (Click on Technical support, then Product Manuals, and then select the link for your switch model).

Release H.07.56 Enhancements

Software fixes only; no new enhancements.

Release H.07.53, H.07.54 and H.07.55 Enhancements

Software fixes only; no new enhancements.

Release H.07.46, and H.07.50 Enhancements

Software fixes only; no new enhancements.

Release H.07.45 Enhancements

Release H.07.45 provides support for the HP ProCurve 600 Redundant and External Power Supply (J8168A). This enhancement only applies to the 2600-PWR switches (J8164A and J8165A). To use the EPS power support from an HP ProCurve 600, you must upgrade the software on your 2600-PWR switches to H.07.45 or later.

If an HP 600 EPS cable is connected to a 2600-PWR running software releases prior to H.07.45, the FAULT LED and EPS status LED will flash, and the error log will contain the following message:

```
W 01/01/90 00:01:25 chassis: EPS not supported by switch code. Please
update.
```

Release H.07.41 Enhancements

Release H.07.41 was the first release for the 2600-PWR Switches, 2626-PWR (J8164A) and the 2650-PWR (J8165A). The 2600-PWR Switches provides 802.3af compliant Power over Ethernet (PoE) capabilities. This software remains backward compatible and runs on the Series 2600 Switches and the Switch 6108.

Release H.07.32 Enhancements

Software fixes only; no new enhancements.

Release H.07.31 Enhancements

To Locate Publications Supporting H.07.31 Features:

1. Go to the ProCurve Networking Web site at <http://www.procurve.com>.
2. Click on **Technical support**, then **Product manuals**.
3. Click on the name of the product for which you want documentation.
4. Select the document indicated in the enhancement description (table 1) for the desired feature.

(HP recommends periodically visiting the [ProCurve Web site](#) to keep up-to-date with the latest documentation available for ProCurve Switches.)

Table 1. Release H.07.31 Enhancements

Enhancement	Overview
Software Support for New HP ProCurve Switch 2626	Release H.07.31 supports the new, stackable HP ProCurve 2626 Switch offering 24 auto-sensing 10/100 ports plus 2 dual personality ports for 10/100/1000 or mini-GBIC connectivity. If you are viewing this document online, click here to visit the ProCurve Networking Web site for more information .
SSL	Provides Secure Socket Layer (SSL) transactions for Web management access. This allows the switch to authenticate itself to the user and to establish a secure connection. Includes support for self-signed and CA signed certificates to allow administrators to choose the level of security required. ¹
SSHv2	Updates SSH to support SSHv2, allowing PEM-encoded keys and greater compatibility with SSH client software. ¹
802.1x Open VLAN Mode	Adds flexibility for clients lacking 802.1x supplicant software, plus an additional provision for controlling access by authenticated clients. ¹
Debug and Syslog Messaging Operation	The Debug/Syslog feature provides a method for recording messages useful for debugging network-level problems such as routing misconfigurations and other protocol details. ²
Port-Security Option for Configuring Allowed MAC Addresses	Adds the configured option to port-security learn-mode to allow a port to add only specifically configured MAC addresses. Using this option, a switch port does not automatically learn non-specified MAC addresses from the network. ¹
SNMPv3 Access	The Series 2600 switches and the Switch 6108 now support SNMPv3 to enhance the security of SNMPv3 traffic. It includes authentication and/or encryption of management traffic configurable at the operator's discretion. ²
IGMPv3 Support	Adds support for the IGMPv3 Join request. ²
Additional Outbound Port Queue	Adds a fourth outbound port queue. ²

¹ Refer to the *Access Security Guide* for the HP ProCurve Series 4100 Switches, Series 2600 Switches, and the Switch 6108, Edition 1—5990-5995, May 2003 (or later) on the ProCurve Networking Web site.

² Refer to the *Management and Configuration Guide* for the HP ProCurve Series 4100 Switches, Series 2600 Switches, and the Switch 6108, Edition 1 — 5990-5998, May 2003 (or later) on the ProCurve Networking Web site.

Release H.07.03 Enhancements

Software fixes only; no new enhancements.

Release H.07.02 Enhancements

Release H.07.02 was the original software released to support the HP ProCurve Switch 2650 and the Switch 6108.

Software Fixes in Releases H.07.xx - H.07.90

Release H.07.02

Release H.07.02 was the first software release for the HP ProCurve Switches 2650 and 6108.

Release H.07.03

Problems Resolved in Release H.07.03

- **Agent Unresponsive (PR_5903)** — The switch may get into a state where end nodes and other network devices cannot contact (ping, telnet, SNMP, etc) switch's agent.
- **Crash (PR_5877)** — When setting the host name to a very long (~20 characters) string, the switch may crash with a bus error similar to:

```
-> Bus error: HW Addr=0x29283030 IP=0x002086ac Task='mSnmpCtrl' Task ID=0x165ae00.
```
- **Crash (PR_5345)** — Switch may crash with a message similar to:

```
->Assertion failed:0, file drvmem.c, line 167
```
- **IGMP (PR_5991)** — If switch receives an IGMPv3 Join with a reserved Multicast address, or an invalid IP Multicast address, the switch may crash with a message similar to:

```
-> Software exception at alloc_free.c:479 -- in 'tDevPollTx' Task ID = 0x1900f18 buf_free: corrupted buffer
```
- **IGMP (PR_6001)** — When an IGMP v3 Join contains an invalid IP Multicast address or a reserved IP Multicast address in the IGMP Group Address field, the switch will attempt to stop processing the Join, and mistakenly double-free, or double-forward the Join packet. One possible symptom is a switch crash similar to:

```
->Software exception at alloc_free.c ... buf_free: corrupted buffer
```
- **SNMP (PR_6006)** — The ifAlias OID is defaulted to "not assigned", which may cause network management applications such as Network Node Manager to log error messages. [The fix is to default ifAlias to a zero-length string, as stated in the MIB.]

Release H.07.31

Release numbers H.07.04 through H.07.30 were never created. Release H.07.31 is the first software release for the HP ProCurve Switch 2626.

Problems Resolved in Release H.07.31

- **CLI (PR_81948)** — A duplicate "enable" command is present in the Interface Configuration text within the CLI.
- **CLI (PR_82475)** — Within the CLI, the "ip" auto-extend help text for "source-route" is incorrect.
- **Config / Switch Management (PR_89846)** — When the "no web-management" command is executed, "no telnet-server" is also added to the running config. A loss of Telnet connectivity is only seen when the config file is saved to a TFTP server, then copied back.
- **IGMP (PR_90376)** — In some cases, the switch would display "0.0.0.0" for the output of the CLI command "show ip igmp."
- **IP Stack Mgmt/Web (PR_89753)** — A bus error occurs when accessing the close-up view of a 15-member stack (IP Stack Management) through the Web interface.
- **IP Routing (PR_90711)** — Switch incorrectly identifying packets routed from a trunk port across the stack link as port security violations. This resulted in overrunning the CPU queues and causing management problems.
- **QOS (PR_90937)** — Switch only utilizing three of the four available priority queues.
- **Spanning Tree (PR_90412)** — Enhancements to 802.1w operation to address version 3 BPDU communication issues.
- **Self Test (PR_90777)** — A self test error may occur when a Gigabit-SX, or LX mini-GBIC module is inserted into the switch while powered on.
- **UI / CLI (PR_90302)** — Addressed grammatical errors for the "interfaces" command when "show <tab>" is executed.
- **UI (PR_81885)** — In the absence of a time server, the switch may report that it is the year "26".
- **Web/Stack Mgmt (PR_88743)** — Inverted IP address displayed in the Identity tab when the IP Stack Member switch is accessed through the IP Stack Commander switch.
- **Web-Browser Interface (PR_82530)** — A client using Sun java 1.3.X or 1.4.X to access the Web-Browser Interface of the switch, may cause the switch's CPU utilization to increase causing agent processes (such as console, telnet, STP, ping, etc.) to stop functioning.

- **Web-Browser Interface (PR_82652)** — The Web agent is showing disabled ports as "Port Not Connected", rather than "Port Disabled."
- **Web-Browser Interface / Port Security (PR_88612)** — When static MAC addresses are configured under port security to allow PCs to communicate through the switch, and one of those MAC addresses is removed via the Web interface of the 2650 and then re-entered, the owner of that MAC address cannot communicate again until the link of that port is toggled.

Release H.07.32

Problems Resolved in Release H.07.32

- **Agent Hang (PR_92802)** — The switch may become unresponsive or hang due to UDP port 1024 broadcast packets never being freed, after the TIMEP and SNTP clients are disabled on the switch.
- **VLAN (PR_92466)** — The switch may experience a Bus error related to 802.1X/unauthorized VLAN. The Bus error is similar to:

```
Bus error: HW Addr=0x3861000c IP=0x002df470 Task='mAdMgrCtrl'  
Task ID=0x16e616 0 fp: 0x006a090c sp:0x016e5df0 lr:0x0021d6d8
```
- **Web Browser (PR_90068)** — There is a Netscape 4.7, 7.0, and 7.1 problem when changing any attribute in the stacking menu. After clicking 'OK', Netscape returns error "The document contains no data. Try again later."

Release H.07.41

Release numbers H.07.33 through H.07.40 were never created.

Problems Resolved in Release H.07.41

- **Bridge Management (PR_82358)** — Switch was not forwarding multicast packets with address of 01-80-C2-00-00-10 reserved for Bridge Management functions.
- **Crash (PR_95850)** — software exception in ISR at hardware.c:3871
- **Link (PR_96223/95598)** — Mini-GBIC ports that were configured to a forced speed/duplex (vs. 'auto' mode) were incorrectly reporting Link state when there were no fiber links connected.
- **Management (PR_92720)** — Switch 'show CPU' reports 136 percent busy. The calculation for CPU busy was being performed incorrectly.

- **Port Security (PR_88612)** — Port security enabled via the MIB hpSecPtLearnMode was improperly filtering a host MAC entry, when the entry was removed via the CLI, SNMP or Web interface.
 - **Web (PR_82652)** — Web agent showing disabled ports as "Port Not Connected."
-

Release H.07.45

Release numbers H.07.42 through H.07.44 were never created.

Problems Resolved in Release H.07.45 (Never released)

- **CLI (PR_97671)** — Uncertain error message when trying to add more than the maximum VLANS
 - **Crash (PR_95525)** — Switch is crashing with a bus error from the instrumentation data structure.

Crash msg: Bus error: HW Addr=0xe1f08796 IP=0x003a51b4 Task='mInstCtrl'
Task I D=0x1767af8 fp: 0x00000006 sp:0x01767988 lr:0x003979a4
 - **IP Stacking(PR_97323)** — back-of-box stacking support for all current stackable products
 - **Port Security (PR_98193)** — "port-security learn-mode configured "is not working properly
 - **RSTP (PR_100001612)** — Port takes ~30 seconds to go into the Forwarding state
 - **Web (PR_81848)** — Clear changes button does not work for the Default Gateway or VLAN selections
 - **Web (PR_82039)** — When using the Web agent and you select GVRP mode, a user can select a port and then select nothing as an option for the port mode and all ports below the selected port disappear.
 - **Web (PR_82199)** — VLAN port modification shows misleading mode
 - **Web (PR_92078)** — After making changes under the Device Features tab, Web page never fully loads.
 - **Web Mgmt Crash(PR_92826)** — Commander switch for IP-stack / Web Mgmt Crash of commander. With an eight switch IP stack, using the Web interface can cause the commander switch to crash. If the user-administrator using the WEB interface selects options too quickly or moves from one option to another, the Web agent can freeze and become unresponsive. The commander can also crash with a Bus Error. Telnet and console interfaces both can also become unresponsive.
-

- **Web (PR_97407)** — Port security error message is unclear with mac lockdown feature
 - **Web (PR_98500)** — Browser window spontaneously closes
 - **Web (PR_100000452)** — when you reset a device using the Web Browser, the refreshed page returns to a incorrect URL.
-

Release H.07.46

Problems Resolved in Release H.07.46

- **(PR_100004025)** — System Uptime counter wrapped in approx. 49 days.
-

Release H.07.50

Release numbers H.07.47 through H.07.49 were never released.

Problems Resolved in Release H.07.50

- **CLI (PR_82086)** — Command **show mac <mac-address>** does not work.
- **CLI (PR_100005082)** — If GVRP is enabled, an incorrect error message of Commit Failed is generated when trying to add more than the configured “max vlans” in the CLI. The proper error message should be Maximum number of VLANs (max-vlans) has already been reached. Dynamically created VLANs were not being included in the count.
- **Crash (PR_1000012823)** — OpenSSL vulnerability addressed.
- **Flow Control (PR_98957)** — Flow Control mechanism was not generating Pause frames.

Limitations for this fix:

Due to interactions with setting QoS priorities on inbound packets, some packets will be dropped in order to preserve the Queue Priorities when a 4:1 or higher oversubscription of 100- or 1000-Mbps ports have streams flowing to another 100- or 1000-Mbps port.

100-Mbps ports to 10-Mbps ports works correctly.

Workaround: Do not use Flow Control and QoS priorities simultaneously.

2650 (J4899A) and 2650-PWR (J8165A) switches only:

If an ingress port in the range of ports 1-24 and 49 are overflowing an egress port in the range of 25-48 and 50, a Pause Frame will NOT be generated out the ingress port.

- **Link (PR_1000020645)** — 2626 port 25 with a fiber link does not work after reset; also applies to the 6108 port 7.
-

Software Fixes in Releases H.07.xx - H.07.90
Release H.07.53

- **PoE (PR_1000004040)** — Event log message system: PoE controller selftest failure occurs when a system is rebooting while powered by an external power supply (HP 600, J8168A).
 - **RMON (PR_1000011690)** — When RMON thresholds in the switch are exceeded, no trap is generated.
 - **Web (PR_1000003580)** — In the Diagnostics/LinkTest page, the Web interface allows broadcast/multicast MAC destination addresses. The CLI does not allow them. For consistency and because they should not be used, the Web interface should be changed to not allow them either.
 - **Web (PR_1000004111)** — Stack Management view, scrolling problem.
 - **Web (PR_1000007144)** — VLAN Configuration help link is not available.
-

Release H.07.53

Release numbers H.07.51 and H.07.52 were never released.

Problems Resolved in Release H.07.53

- **Switching (PR_1000022819)** — Bringing up a trunk port flushes the addresses in the MAC address table that are located on the next higher-numbered port, which results in unexpected flooding.
 - **TELNET (PR_1000019573)** — Switch reboots when TELNET is disabled and port 1506 accessed. When the switch reboots there is no error listed in the log or in the boot history of the switch.
-

Release H.07.54

Problems Resolved in Release H.07.54

- **Auto TFTP (PR_1000187649)** — Auto-TFTP will not allow a forced download of software after Auto-TFTP is Disabled.
 - **Auto TFTP/Rebooting (PR_1000020802)** — Auto-TFTP causes constant rebooting, with no resulting crash files.
 - **Switching (PR_1000022819)** — Bringing up a trunk port flushes the addresses in the MAC address table that are located on the next higher-numbered port, which results in unexpected flooding.
-

Release H.07.55

Problems Resolved in Release H.07.55

- **802.1X (PR_1000208530)** — Effects are unknown, but could include crashes such as bus errors.
- **CDP (PR_1000195343)** — Entering the command "**show cdp neighbor detail x**" displays incorrect information.
- **Config (PR_1000197097)** — When copying a configuration that doesn't have SNMP community names defined, the 6108 switch adds the 'public' community name with manager unrestricted rights.
- **Crash (PR_1000205768)** — "null" System Name in the Web user interface may crash with:

```
Software exception at lldpSysNameTlv.c:251 -- in 'mlldpCtrl', >task ID = 0x12dc88 -> ASSERT: failed.
```
- **Crash (PR_1000201614)** — When the switch is set with a 16 character manager password, hitting the down arrow keys twice within the start of the setup menu, a 'Bus error' crash may occur. The bus errors vary.
- **Crash (PR_1000092011)** — The switch may crash while using the web user interface with a message similar to:

```
Software exception at exception.c:356 -- in 'mHttpCtrl', task ID = 0x139ba40.
```
- **DHCP Relay (PR_1000188635)** — DHCP Relay sometimes preserves the incoming MAC SA in relayed packets.
- **IGMP (PR_1000191237)** — IGMP will not process any incoming or outgoing IGMP protocol packets if user adds a port to VLAN with 257 groups.
- **RMON (PR_1000196477)** — When RMON thresholds in the switch are exceeded no trap is generated.
- **SNMP (PR_1000212170)** — The Switch transmits Warm and Cold Start traps with an agent address of 0.0.0.0.
- **SNMP (PR_1000190654)** — Some of the fault finder events in the SNMP traps list a 0.0.0.0 IP address in the URL. This happens when the switch has the IP address configured on a VLAN other than the default.
- **SNTP (PR_1000199632)** — NTP (SNTP) Some ProCurve switches on certain code levels will not accept a good NTP version 4 broadcast. Some switches can learn time from version 3 broadcast or version 4 unicast.

- **SNMP (PR_1000086062)** - SNMP Sets allowed in Operator mode and IP Authorized-Manager is set.
 - **Web UI (PR_1000191635)** - The Port column may not be sorted correctly in all Web user interface screens.
 - **Web UI (PR_93721)** - Scroll bar does not work in Web Status screen. In the web user interface, the Status screen does not display all ports.
-

Release H.07.56

Problems Resolved in Release H.07.56

- **Config (PR_1000216051)** — Returning a previously saved startup-configuration with "stack join (mac address)" to a member switch of the IP stack breaks the membership of that same stack. Commander hangs with member "mismatched".
 - **Open VLAN (PR_1000210932)** — open VLAN mode (Unauth VLAN) does not work with any Port-Security Learn-Mode
 - **Web (PR_80857)** — A problem with IE4 and WebAgent. Recompiled the Web Agent with a new Java Development Kit (1.2 - was 1.1)
-

Release H.07.57

Problems Resolved in Release H.07.57 (Never released).

- **FEC/CDP (PR_1000281734)** — CDP transmit and FEC Trunk negotiation removed.
- **LLDP (PR_1000296530 and PR_1000298044)** — Added LLDP protocol.
- **RSTP (PR_1000284653)** — Slow RSTP fail-over and fall-back time.

- **RSTP (PR_1000297195)** — The switch repeatedly flushes its MAC address table, resulting in intermittent flooding of all traffic.
 - **Web (PR_1000284653)** — When using the web user interface "IP Stack Management", and there are more than 100 potential Members present on a VLAN, the Switch will learn new potential Members, but delete previously learned Members.
-

Release H.07.81

- **FEC (PR_1000281715)** — Further work done to complete PR_1000281734, removal of FEC Trunk negotiation.

Releases H.07.58 to H.07.80 were never built.

Release H.07.82

- **Config (PR_1000306769)** — When an OS upgrade causes an FEC trunk to be converted, the following messages are logged:

```
[datestamp] mgr: Config file converted due to OS upgrade  
W [datestamp] mgr: FEC trunks not supported; see release notes
```
 - **Crash (PR_1000297510)** — When using the Web User Interface and the switch is set as commander for stacking, the switch may crash.
 - **IGMP (PR_1000291772)** — With IGMP enabled, and the 6108 switch acting as the IGMP Querier, the switch will flush any learned groups from its IGMP table, and will begin flooding all multicast traffic.
-

Release H.07.83

- **Menu (PR_1000306213)** — When using the Menu to create a trunk, the switch leaves the new trunk ports in a disabled state after a switch reboot.
 - **Menu (PR_1000318531)** — When using the Menu interface, the Switch hostname may be displayed incorrectly.
 - **SNMP (PR_1000315054)** — SNMP security violations appear in syslog after a valid SNMPv3 "get" operation..
 - **STP/RSTP/MSTP (PR_1000300623)** — In some cases STP/RSTP/MSTP may allow a loop, resulting in a broadcast storm.
-

- **STP (PR_1000307280)** — The command "show span" may display incorrect STP information.
-

Release H.07.84

Problems Resolved in Release H.07.85

- **CLI (PR_1000334412)** — Operator level can save Manager privilege level changes to the configuration.
- **CLI (PR_1000342461)** — When a trunk is configured on an uplink port, the command "show lldp info remote <port number>" reports incorrect information for the remote management address.
- **LLDP (PR_1000319356)** — LLDP does not discover CDPv2 devices.
- **LLDP (PR_1000322973)** — LLDP MIB values cannot be queried for through external MIB browsers; only the CLI "walkmib" command works.
- **SSHv2 (PR_1000320822)** — The Switch does not generate SSHv2 keys and may crash with a message similar to:

```
TLB Miss: Virtual Addr=0x00000000 IP=0x80593a30 Task='swInitTask'  
Task ID=0x821ae330 fp:0x00000000 sp:0x821adfb8 ra:0x800803f0  
sr:0x1000fc01.
```

Release H.07.85

Problems Resolved in Release H.07.85 (Never released).

- **Enhancement (PR_1000340292)** — Flash file system compaction improvements.
-

Release H.07.86

Release number H.07.86 was never released.

Release H.07.87

Problems Resolved in Release H.07.87

- **Daylight savings (PR_1000364740)** — Due to the passage of the Energy Policy Act of 2005, Pub. L. no. 109-58, 119 Stat 594 (2005), starting in March 2007 daylight time in the United States will begin on the second Sunday in March and end on the first Sunday in November.
-

Release H.07.88

Problems Resolved in Release H.07.88

- **RSTP (PR_1000401394)** — With RSTP running, when a dynamic LACP trunk is transitioned to either link-up or link-down, this action occasionally triggers RSTP instability within the switch. The instability can result in loops and broadcast storms .
 - **Link LED (PR_1000414382)** — A failed transceiver will not cause the Link LED of the affected port to blink.
 - **Crash (PR_1000407542)** — Attempting to change the spanning-tree protocol message from STP to RSTP or MSTP may cause the switch to crash with a message that is similar to:

```
PPC Bus Error exception vector 0x300: Stack-frame=0x063d5de0 HW  
Addr=0x4b5a697c IP=0x0064c648 Task='mSnmpCtrl' Task ID =0x63d5fe0fp:  
0x4b5a6978 sp:0x063d5ea0 lr
```
 - **STP/802.1x/LLDP/GVRP (PR_1000326251)** — STP (802.1D), RSTP, 802.1s (MSTP), 802.1x, LLDP and GVRP may not operate correctly under some circumstances.
-

Release H.07.89

Problems Resolved in Release H.07.89

- **RSTP (PR_1000405368)** — When the primary link goes down and then comes back online, traffic continues on the redundant link and does not shift back to the primary link.
-

Release H.07.90

Problems Resolved in Release H.07.90

- **Boot (PR_1000444132)** — The switch may fail to boot successfully, or it may possibly hang, when a third-party Mini-GBIC is installed.
-



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