Read Me First

for the HP ProCurve Series 4100gl Switches – Software Version G.07.xx

Contents

About Your HP ProCurve Series 4100gl Switch Manual Set

The switch manual set includes the following:

Document	Available on the HP ProCurve Web Site	Shipped With the Switch
Read Me First (this document)[1]	Yes	Hardcopy
Installation and Getting Started Guide[1]	Yes	Hardcopy and CD[2]
Management and Configuration Guide[1]	Yes	CD[2]
Access Security Guide[1]	Yes	CD[2]
Release Notes (for software updates)[1]	Yes	CD[2]

[1]The latest edition is always available in PDF format and downloadable at **http://www.hp.com/go/hpprocurve**.
[2]The *Product Documentation CD-ROM* shipped with your switch.

How To Read or Print Manuals Included On the CD-ROM

To access manuals included on the CD (in PDF format), use the Adobe® Acrobat® Reader. For PCs, you will need version 4.0 (or greater) of the Reader. If you do not already have this version on your PC, you can download it from the Adobe web site at **http://www.adobe.com**.

For MAC and UNIX® Platforms. You can download a Reader from the Adobe web site at **http://www.adobe.com**.

Software Updates Are *Free*!

Hewlett-Packard provides free software updates on the HP ProCurve web site for your Series 4100gl Switch. To access the software updates, go to the HP ProCurve web site at **http://www.hp.com/go/hpprocurve,** then click on **software updates** to go to the "HP ProCurve Networking Software updates" page.

Register for Automatic Notification of Updates. From the HP ProCurve web site click on **technical support**. Under "Additional support" click on S**oftware notification registration** and follow the instructions on that page for how to receive automatic email update notices.

To determine whether you have the latest software, you can compare the software version that is available on the web site with the version that is currently installed on your switch. Follow the instructions below to determine the current software version on your switch.

To Determine the Current Software Version in Your Switch. FUse any of the following methods to view the version:

■   Start a console session with the switch. In the console login screen (the first screen displayed), the **Firmware revision** line under the switch name shows the software version.

■   If you already have a console session going, at the prompt enter the **show version** command. The resulting display lists the current software version.

■   In the web browser interface, click on the **Identity** tab. The current software version is listed as the **revision** number in the **Version** line.

Your *Free* Ticket to Proactive Networking!

HP ProCurve Manager and HP ProCurve Manager Plus are breakthroughs in network management software that give you more network with less work. For more information, visit the HP ProCurve web site at   **http://www.hp.com/go/hpprocurve** and click on **products index** (in the sidebar), then locate HP ProCurve Manager and Manager Plus under the **Network management** bar.

Saving the Configuration After Installing or Exchanging a Module

The following cases automatically result in a change to the running-configuration on your switch:

- If you replace a module with another module of a different type and then reboot the switch
- If you install a module in a slot that has not previously been used (including when you install a module and apply power to the switch for the first time)

If you want to save such changes to permanent memory (startup-configuration), use switch console CLI interface and enter the **write memory** command. This causes the switch to use the current hardware configuration after subsequent reboots. (The switch always reboots from the startup-configuration.)

If you do not save hardware changes to the startup-configuration, you will be prompted with the following message (to save the configuration) the next time you use the reboot or reload commands, or if you move from the CLI to the Menu interface:

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

Note that if you exchange module types in a slot and reboot the switch, but do not save the configuration, you can restore the switch to its prior configuration state by re-installing the original module type in the slot and rebooting the switch again. This is because the switch operates by using the running-config, but reboots from the startup-config.

Replacing a module with another module of the same type in the same slot does not affect the switch configuration and it is not necessary to save the configuration.

For more information on switch memory, including the startup-config and running-config memories, refer to the *Management and Configuration Guide* on the *Documentation CD-ROM* included with your switch.

Transceiver Operation Notes

There are five different kinds of transceivers, including the Gigabit Stacking Transceiver that comes in the Gigabit Stacking Kit (J4116A), that can be installed in the HP ProCurve Switch Gigabit Transceiver gl Module (J4864A). This module can be used with your Series 4100gl Switch.

The transceivers can be "hot swapped". That is, they can be installed, removed, and exchanged after the Gigabit Transceiver gl Module is already installed in the switch and powered on. The details on installing the transceivers can be found in the *Installation Guide* that comes with the transceivers or the Gigabit Stacking Kit.

The following table lists some specifics about the way your Series 4100gl Switch handles the configuration of the transceiver port when first installing a transceiver, and when replacing or exchanging the transceiver.

Table 1. Considerations When Installing, Replacing, and Exchanging Transceivers

Action	Replacing a Transceiver with Another of the Same Type	Exchanging a Transceiver with Another of a Different Type	Installing a Transceiver in a Previously Unused Slot[6]
1. Verify that port configuration is satisfactory for the new transceiver.	No[1]	Yes[2]	Yes[4]
2. Execute **write memory** [3]	Not necessary for this option.[1]	Yes	Yes

[1] Uses the same configuration as the previous transceiver.

[2] See "Verifying a Satisfactory Port Configuration", below.

[3] See "Transceiver Changes and Switch Memory" on page 5.

[4] Uses the default port settings. You should verify that these are the settings you want in the port configuration.

[5] A "previously unused slot" means an empty transceiver (or module) slot that is in the factory default configuration. After a slot has been used and **write memory** executed, you can return a slot to "unused" status by removing the transceiver (or module) and returning the switch to its factory default configuration (by using the **erase startup-config** command or the Clear/Reset button combination described in the switch's *Installation and Getting Started Guide*).

Verifying a Satisfactory Port Configuration

When you replace a transceiver with another transceiver of a different type and then execute the write memory command, the switch configures the port on the new transceiver with the default mode (speed and duplex) settings used for new transceiver type. However, the switch also retains other port-specific configuration settings, such as trunking, Spanning Tree Protocol (STP), and VLAN values. For this reason you should verify that the current configuration for a port affected by a change in transceiver type does not create potential network problems. For example:

- Changing the transceiver type for a trunked port without ensuring that the mode settings for the port match other ports in the same trunk can result in a mode mismatch.

- If STP is enabled on the switch, then changing the transceiver type for a port without reconfiguring the cost or priority settings for that port can unfavorably affect how the switch uses that port in the STP environment.

- If the port was configured with non-default VLAN settings before changing transceiver types, then you should ensure that these settings support your intended use of the port after installing the new transceiver type.

Transceiver Changes and Switch Memory

Use the **write memory** command to save the current configuration to permanent memory (startup-config) if you want the switch to use the current hardware configuration after subsequent reboots. Otherwise, you will be prompted with the following message (to save the configuration) the next time you use the reboot or reload commands, or if you move from the CLI to the Menu interface:

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

Note that if you exchange transceiver types in a module and reboot the switch, but do not save the configuration, you can restore the switch to its prior configuration state by re-installing the original transceiver type in the module and rebooting the switch again. This is because the switch operates using the running-configuration, but reboots from the startup-configuration. For more information on switch memory, including the startup-config and running-config memories, refer to the *Management and Configuration Guide* on the *Documentation CD-ROM* included with your switch.

For more information on transceivers and the transceiver module, see the documentation provided with the transceivers and the module and also available on the *Documentation CD-ROM* provided with your HP Series 4100gl Switch. For the latest version of HP switch documentation, visit **http://www.hp.com/go/hpprocurve**. (Click on **technical support**, then **Product manuals**.)

Transceiver Configuration Notes

N o t e

In the following text, any mention of negotiation of "flow control" assumes that flow control is **Enabled** for the port, which allows the negotiation. In the default configuration, flow control is disabled, but can be enabled through the switch console.

Default Configuration for Transceivers. The default configurations for the following high-speed transceivers, which can be installed in your Series 4100gl Switch, are as follows:

- Gigabit-SX and Gigabit-LX transceivers — **Auto**. The speed and communication mode are set at 1000 Mbps and full duplex, according to the standards, and the switch auto-negotiates flow control with the connected device.

- 100-FX — **100/Full**. The port has a fixed configuration of 100 Mbps, full duplex.

- 100/1000-T — **Auto**. The communication mode is set at full duplex, the switch auto senses the link speed, and auto negotiates the flow control and the port MDI/MDI-X operation.

Connecting the Transceivers to Devices with Fixed Configurations. For some older network devices, including some older HP ProCurve devices, the default for the Gigabit-SX and -LX ports is a fixed configuration, for example 1000 Mbps/Full Duplex, or is otherwise different from these default configurations for the transceivers. As a result, those devices may not connect properly to your Series 4100gl Switch; you will not get a link. Additionally, if you connect the 100/1000-T Transceiver, in its default configuration, to another device that has *any* fixed (non-Auto) configuration, you will not get a link.

In summary, this is how the transceivers behave if connected to a device with a *fixed* configuration:

- 100-FX Transceiver — a good connection to a 100 Mbps/full duplex device; a link but very poor performance if connecting to a 100 Mbps/half duplex device because of the resulting duplex mismatch between your switch and the connected device.

- Gigabit-SX and Gigabit-LX Transceivers — no link unless the transceiver configuration is modified to match the fixed configuration of the connected device; these devices operate only at full duplex according to the standards.

- 100/1000-T Transceiver — no link unless the transceiver configuration is modified to match the fixed configuration of the connected device, or the connected device is another HP ProCurve switch configured to either the **Auto-100** or **Auto-1000** options.

Make Sure the Configurations Match. Because of these default configuration and full-duplex considerations, for best operation, you should make sure that the devices connected to the transceiver ports are configured the same as the default configurations shown above. At a minimum, make sure the configurations match.

Mini-GBIC Operation Notes

Hot Swapping mini-GBICs. The Gigabit-SX and Gigabit-LX mini-GBICs that you can install in your HP ProCurve Switch gl mini-GBIC Module can be removed and installed after the module is installed in the switch and receiving power. You should disconnect the network cables from the mini-GBICs before hot swapping them.

When you replace a mini-GBIC with another mini-GBIC of a different type and then execute the **write memory** command in the switch console, the switch configures the port on the new mini-GBIC with the default mode (speed and duplex) settings used for new mini-GBIC type. The default mode for both the Gigabit-SX and Gigabit-LX mini-GBICs is **Auto**. Note that the switch retains other port-specific configuration settings, such as trunking, Spanning Tree Protocol (STP), and VLAN values that were configured for the previous mini-GBIC.

Connecting the mini-GBICs to Devices with Fixed Configurations. For some older network devices, including some older HP ProCurve devices, the default for the Gigabit-SX and -LX ports is a fixed configuration, for example 1000 Mbps/Full Duplex, or is otherwise different from these default

configurations for the mini-GBICs, which is **Auto**. As a result, those devices may not connect properly to your mini-GBIC port; you will not get a link. Because of these default configuration and full-duplex considerations, for best operation, you should make sure that the devices connected to the mini-GBIC ports are also configured to **Auto**. *At a minimum, make sure the configurations match.*

Gigabit-LH mini-GBIC Support. The Gigabit-LH mini-GBIC (J4860A) is now supported under the G.07.xx or later switch software version for any of your HP ProCurve Series 4100gl Switches.

Using Trunking with the Gig-T/GBIC gl Module

Valid trunking configurations using this module differ from those described in the *Management and Configuration Guide* shipped on the documentation CD that came with the switch, and the online Help provided in the console and web browser interfaces.

The trunking grouping for the Gig-T/GBIC gl Module is as follows:

Group1: 1-5, 7-11, 16

Group2: 6, 12-15, 17-22

Trunk groups must be created with ports from the same group, Group1 or Group2. See the *HP ProCurve Switch gl Modules Installation Guide* for more information.

Release G.07.41 (or greater) of the switch software is required in the HP ProCurve Series 4100gl Switches to support the HP ProCurve Gig-T/GBIC gl Module (J4098A).

Stack Management Issue

One of the features available on your Series 4100gl Switch is Stacking. You can connect up to 16 switches together to form the stack, and then manage them all through a single IP address. The switch that has the IP address is designated as the **stack commander**, and the other switches are configured as **stack members** and are accessed through the commander.This feature is also available on older HP ProCurve Switches including the Switch 1600M, the Switch 2424M, the Switch 4000M and Switch 8000M, the Series 2500 Switches, and the Switch 4108gl and Switch 4108gl Bundle that are running operation system version G.04.04 or older.

The problem. The older switches use a version of the feature that does not recognize your newer Series 4100gl Switches, but only when you use the switch web interface to perform your stack management. (A "newer switch" is any such switch running operating system version G.05.xx or later). If one of the older switches is configured as the stack commander, when you try to access a newer Series 4100gl Switch by selecting it in the **Stack Access** field on the web interface screen, you will get an error. The newer switch image will not be displayed.

The solution. If you encounter this problem, the solution is to configure the newer Series 4100gl Switch as the stack commander and configure the older switches as stack members.

For more information on this feature, please see the *Management and Configuration Guide* that is on the *Documentation CD* that came with your switch.

Time Zone Issue

Starting with the G.05.xx version of the switch operating system software, an error in configuration of the Time Zone for TimeP or SNTP configuration has been corrected. Previous switch software, for all HP ProCurve switches, used positive time offset values for time zones that are West of GMT and negative values for times zones that are East of GMT. The standards indicate that time zones West of GMT should be designated by negative offset values, and time zones East of GMT by positive values. Software version G.05.xx corrects this error, but if you use to the same values for indicating time zones as you did for previous HP ProCurve switches, the time will be set incorrectly. For example, for previous HP ProCurve switches, the US Pacific time zone was indicated by +480. With software version G.05.xx (or later), the US Pacific time zone must now be indicated by -480.