

# HP ProCurve Manager Plus

## Getting Started Guide



The all-in-one solution  
for managing HP ProCurve  
networks



invent



---

# HP ProCurve Manager Plus

## Getting Started Guide

**© Copyright 2003-2004 Hewlett-Packard Development Company, L.P.  
All Rights Reserved**

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

## **Publication Number**

5990-5996

Version 2, June 2004

## **Applicable Products**

HP ProCurve Manager)

HP ProCurve Manager Plus

## **Disclaimer**

The information contained in this document is subject to change without notice.

HEWLETT-PACKARD COMPANY MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Hewlett-Packard assumes no responsibility for the use or reliability of its software on equipment that is not furnished by Hewlett-Packard.

# Introduction

HP ProCurve Manager is a Windows-based network management solution shipped with all manageable HP ProCurve devices. It provides all of the tools you need to effectively manage your network: mapping and polling capabilities, device auto-discovery and topology, tools for device configuration and management, monitoring network traffic, and alerts and troubleshooting data for HP ProCurve networks.

The graphical interface in HP ProCurve Manager provides a streamlined method for reviewing network activity and device information. It also provides a simplified interface for managing and configuring the network and devices, with easy access to device Web Agents and the Command Line Interface.

**This document** provides information on the following topics:

- Installing HP ProCurve Manager Plus – page 3
- Registering HP ProCurve Manager Plus – page 11
- Customizing Your HP ProCurve Manager Plus – page 19
- The HP ProCurve Manager Plus Features – page 20

**Other documentation** that is available with HP ProCurve Manager Plus includes:

- **Online Help** – context specific and topical help is available everywhere from within the user interface for HP ProCurve Manager Plus. The help also includes a table of contents, index, and search capabilities.
- **HP ProCurve Manager Network Administrator's Guide** – detailed information about all of the program's features and uses. This guide is accessible from the Help menu in the program and is included as a PDF file on the HP ProCurve Manager Plus installation disk.

# HP PCM and PCM+ Specifications

- Minimum Processor: 500 MHz Intel Pentium III or equivalent
- Recommended Processor: 800 MHz Intel Pentium III or equivalent
- Minimum Memory: 256 MB RAM
- Recommended Memory: 512 MB RAM
- Disk Space: 200 MB free hard disk space minimum, 500MB recommended.
- Supported Operating System:
  - MS Windows 2003
  - MS Windows XP Pro (Service Pack 1 or better)
  - MS Windows 2000  
(Server, Advanced Server, or Pro with Service Pack 4 or better)

Additional processing power and additional disk space may be required for larger networks, and to support extensive traffic monitoring.

# Installing HP ProCurve Manager Plus

HP ProCurve Manager Plus is available through two sources:

1. as a free 30-day trial copy delivered in the box when you purchase managed HP ProCurve switches
2. purchased from your HP ProCurve reseller

Both the client and the server parts of HP ProCurve Manager Plus (PCM+) are installed from the CD by this installation process.

To install PCM+, simply insert the product CD into the CD ROM drive in the computer that you want to use for your network management station. The program will auto install. If, for whatever reason, the auto install doesn't work, run the **Install.bat** program from the CD ROM drive.

Follow the instructions on the PCM installation wizard screens. The wizard will pop up several windows into which you must enter the following initial setup information:

- **Administrator password** – though it is not required, for the security of your network, it is strongly advised that you put a password on the Administrator login.
- **Initial Network Discovery settings** – to start the discovery of the network devices, you need to identify a starting device by its IP address or DNS name. For the discovery process to take place most efficiently, this device should be centrally located in your network, not an “edge” device that is primarily connected to end nodes.
- **Default SNMP Read and Write Community Names and Telnet Username and Password** – by default, the Read and Write Community names are “public”. Change these if you are using a different SNMP Community name in your network. Also, for certain configuration management features to operate correctly, you must specify the default Telnet username and password (if used).

- **HTTP Proxy** – HP ProCurve Manager Plus needs external web access to retrieve the latest switch software files for HP ProCurve network devices from the HP ProCurve web site. If you are using an HTTP proxy for external web access, enter the proxy and port information.

## Before Upgrading or Reinstalling PCM+

If you are reinstalling HP ProCurve Manager or upgrading to a higher version, back up the **PNM\server\db\solid.db database** file before beginning the installation wizard. This lets you back out to the previous version if necessary and prevents the existing database from being lost or corrupted during database migration.

During an upgrade installation (on a box that has PCM 1.0 installed) the PCM installer will launch a DB migration tool that will migrate configurations currently stored in the PCM 1.0 database to the new 1.5 version database. This includes: policies, custom groups, users, devices, VLANs, and topologies. However, the existing policies in 1.0, which may contain a mix of settings for STP, Community Names, Authorized Managers, and Trap Receivers, will be divided into a single policy for each type since the policies in PCM 1.5 are single-purpose.

# Installation Notes

## One Network Management Program per Computer

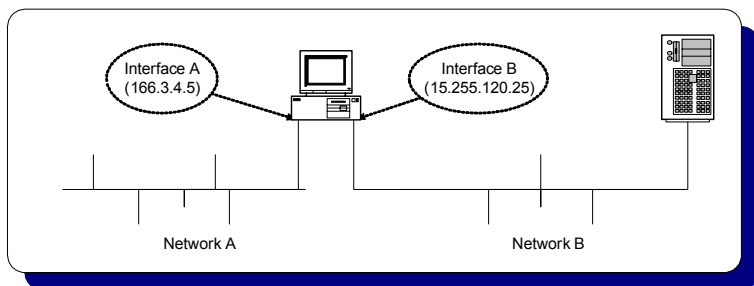
Because of resource conflicts that will occur if you have multiple network management tools running on the same computer, for example during discovery of the network devices, make sure you uninstall any other network management programs from your computer before installing HP ProCurve Manager or HP ProCurve Manager Plus.

## Using PCM on multi-homed computers

A **multi-homed** system is a server or PC that has more than one IP address. Generally this occurs when more than one network card is installed in the computer, but there are other ways that a computer can be multi-homed. Here are a few of the situations that meet this definition:

1. A computer with two or more network adaptors.
2. A computer with a traditional Ethernet network adaptor, plus a wireless adaptor.
3. A computer with only one network adaptor, but that is running some network tunneling software such as a VPN client. Generally what happens in this situation is that the computer appears to have two network interfaces (each with its own IP address). But in reality the system only has one physical adaptor, and the VPN client software emulates a second adaptor (while using the original adaptor under the covers).

An example of such a multi-homed system is shown below:



**Figure 1. Example Multi-homed Computer**

**The Situation:** When HP ProCurve Manager (either client or server) starts up, it attaches itself to the primary network interface of the computer. All network traffic between the client and server will be directed to the selected network interface.

In the diagram above, if the HP ProCurve Manager client application attaches itself to the 166.3.4.5 interface, and the HP ProCurve Manager server is running on the server on the right (somewhere on the 15.255.120.\* network), there is no way that the client will ever connect successfully to the server.

**The Solution:** HP ProCurve Manager has a configuration file that you can change to correct this situation. To setup this file, follow these steps:

1. Find the **commIpAddr.txt** file. This file exists in the **config** directory under the **client** or **server** directory. For the client, if you have installed the program in the default directory, this file exists in: **C:\Program Files\Hewlett-Packard\PNM\client\config**. On the server, this file exists in: **C:\Program Files\Hewlett-Packard\PNM\server\config**.
2. Edit the file with a text-based editor (such as Notepad or Wordpad), and enter the IP address of the interface you want the application to attach to. For example for the network illustrated above, you would add the entry **15.255.120.25** as the first line of the file.

3. Save your changes.
4. Restart the application. If this is the ProCurve Manager client, just restart the application. If this is the ProCurve Manager server, you must restart the service from the Services control panel.

## Adding Remote Client Stations

When you install HP ProCurve Manager Plus, both the server and client functions are installed on the computer. You can also install the client function on any number of other computers in your network that have network access to the server computer.

---

**Note:** Before installing remote client stations, you must first configure the server to allow access from each new client station. For more information, see “Configuring Client/Server Access Permissions” on the next page.

---

To install the client on another computer, simply start a web browser such as Microsoft Internet Explorer on the computer. For the URL, type in the IP address of the server computer followed by a colon and the port ID 8040. For example, if the IP address of the server computer is 10.15.20.25, then you would enter **10.15.20.25:8040** on the web browser address line. The client installation wizard will then guide you through the client installation.

---

**Note:** If you have multiple HP ProCurve Manager servers in the network, when you install a remote client, you will be prompted to select the server to which you want the client to attach. This server will be used each time the client program is launched. You can change the server that is being accessed by selecting the “ProCurve Manager Server Discovery” option that was included when you installed the client. From your computer’s Windows Start button, select **Programs**, then **HP ProCurve Manager**, and then **ProCurve Manager Server Discovery**.

---

## Configuring Client/Server Access Permissions

**The Situation:** The ProCurve Manager server maintains a list of authorized clients that are permitted to log into the server. By default, when the HP ProCurve Manager server is installed, the only client allowed to log in is the client on the same system as the server—that is, no remote clients are allowed.

**The Solution:** HP ProCurve Manager server has a configuration file that can easily be configured to allow access to any set of actual or potential clients. There are two ways that this file can be configured, depending on what you know about the clients that need to connect.

- **IP addresses.** The **access.txt** file can be configured with a list of IP addresses specifying the clients that are authorized to log into the server. The file may contain as many addresses as needed, one IP address per line; or you may configure IP addresses with wildcards. DNS names are also allowed in the file, including DNS names with wildcards (this is useful for DHCP environments where a system's DNS name remains unchanged, although it's actual IP address may change from time to time). For example, below is an example of a valid **access.txt** file:

```
15.255.124.84
15.29.37.*
10.*.*.*
*.rose.hp.com
system1.hp.com
```

To add an entry, open the **access.txt** file, which can be found in the config directory (**C:\Program Files\Hewlett-Packard\PNM\server\config**). Be sure to edit the file using a text-based editor such as Notepad or Wordpad. Edit the file as necessary, one entry per line, then save it. It is NOT necessary to restart the server; the changes will take effect immediately.

- **Passwords.** There are situations where it is not possible to know ahead of time what IP address a potential client will have. This is particularly the case in situations where the client comes in through some sort of VPN, where the IP address of the client is assigned externally. To solve this problem it is possible to add client passwords to the **access.txt** file that correspond to specially

configured clients. Note that even though you will be modifying the same **access.txt** file as for the IP Address method (above), the two mechanisms can freely co-exist—that is, the **access.txt** file can contain a combination of IP addresses and passwords. To enable password access for a particular client, follow the following instructions:

- a. Edit the **access.txt** file as described above, but instead of entering IP addresses or DNS names, just enter a selected password (on a line by itself). Save the file. It is not necessary to restart the server.
- b. On the client (the client must already be installed), you must edit the **Riptide.cfg** file. This file exists in the config directory of the client (**C:\Program Files\Hewlett-Packard\PNM\client**). This file already has several entries in it. You must add a line similar to the following:

```
PASSWORD=yourpassword
```

Do not change any of the other entries in the file, as they are necessary for the correct operation of the client.

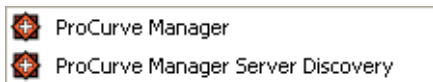
A sample **Riptide.cfg** file, once edited with the password “procurve”, would look like this:

```
LEASE_LENGTH = 40000
TRACING_PROPERTY_KEY = CoreServices.Main
MANUFACTURER = Hewlett-Packard
SERVICE_NAME = Typhoon
COMPONENT_DB = config/Components.prp
TRACING_DBFILE = config/Loggers.prp
NETWORK_DELAY = 25000
VERBOSE = true
PASSWORD=procurve
```

- c. Once you have saved the **Riptide.cfg** file, start the client and enter the address of the server in the “Direct address” field of the server search dialog. The client should now connect successfully to the server.

# Starting HP ProCurve Manager

After completing the installation, you can start HP ProCurve Manager from the Windows Start menu. The program is located under Programs -> HP ProCurve Manager. There are two items under that structure:



Click on **ProCurve Manager** to run the program. You can create a short cut on your Windows desktop for convenience when starting the program the next time.

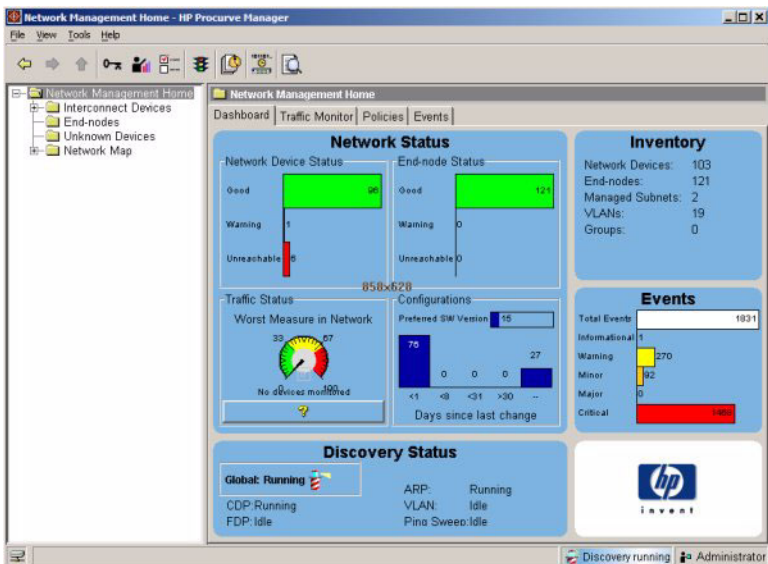
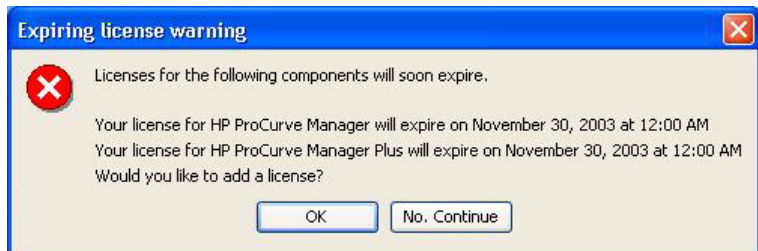


Figure 2. PCM Start-up display

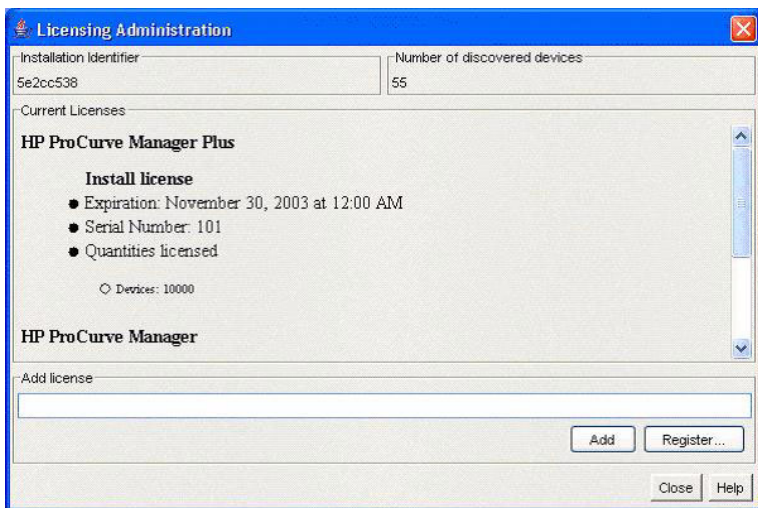
## Registering Your HP ProCurve Manager Plus

The HP ProCurve Manager installation CD includes a fully operable version of the PCM application, and a 30 day trial version of the PCM+ application. Until you have registered your PCM+, an Expiring License warning will be displayed each time you log in, similar to the following.




**Figure 3. HP ProCurve Expiring License warning dialogue**

Click **No, Continue** to close the dialogue and just start the program. Click **OK** to launch the License Administration dialogue.



**Figure 4. HP ProCurve License Administration dialogue**

You can also get to this screen from the Preferences window which can be accessed from the PCM Tools menu or by clicking on the Preferences icon in the tool bar. 

To register the HP ProCurve Manager Plus software:

1. Make a note of the Installation Identifier in the upper left corner of the screen and of the Registration ID that is printed on the front of the HP ProCurve Manager Plus CD.

**Note:** If you are attempting to register HP ProCurve Manager Plus from the CD that came in the box with your HP ProCurve networking device, you must first purchase a copy of HP ProCurve Manager Plus from your networking reseller to get the Registration ID. *You do not need to re-install the software from the purchased CD, but you need the Registration ID from that CD.*

2. Click **Register** to go to the HP ProCurve Registration Web site.

[HP ProCurve Networking](#)

## HP ProCurve Networking

### HP ProCurve Manager Registration

Obtain your permanent license for HP ProCurve Manager or your purchased copy of HP ProCurve Manager Plus

Note: In order to register your PCM product you will first need to obtain an [Installation Identifier](#). For PCM+ registration you will need both an Installation Identifier and the Registration ID located on the back of your CD case.

### new users

New users, please [click here to register](#).

### registered users

Already registered? Please enter your username and password, then click **finish**.

Username:

Password:

**finish»**

#### ProCurve Licensing

- > [login/password reminder](#)
- > [Register](#)

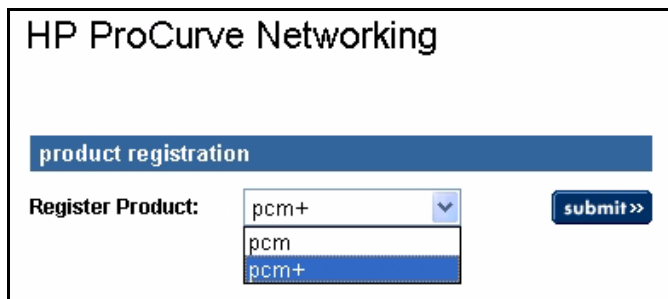
#### Support

- > In the US & Canada, call 1 800-474-8838 or email
- > For other countries, contact hp

**Figure 5. New User selection screen**

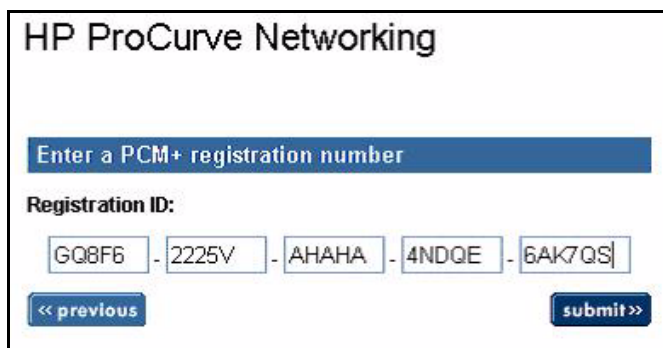
3. Click the link under the “new users” section of the page to display the “User Information” page.
4. On the next screen that is displayed, fill in all of the fields with your information. The fields with bold lettered titles are the required fields. Then click **finish** to continue.

The “Product Registration” page is then displayed.



**Figure 6. Product registration page**

5. Select PCM+ from the pull down menu, then click **submit**.  
The “Enter a PCM+ registration number” window is displayed.



**Figure 7. Entering a PCM+ registration number**

6. Type in the Registration ID from your PCM+ software CD, then click **submit**.

The “Register Software” window is then displayed.

**Note:** If you are registering just PCM (not PCM+), step 5 is skipped. You enter only an Install ID as shown in the next step.

# HP ProCurve Networking

Please enter your software registration information.  
When your information is complete, click **finish**.

**register software**

Registration ID: GQ8F6-2225V-AHAHA-4NDQE-6AK7QS

- Enter a new **Install ID**

Install ID:

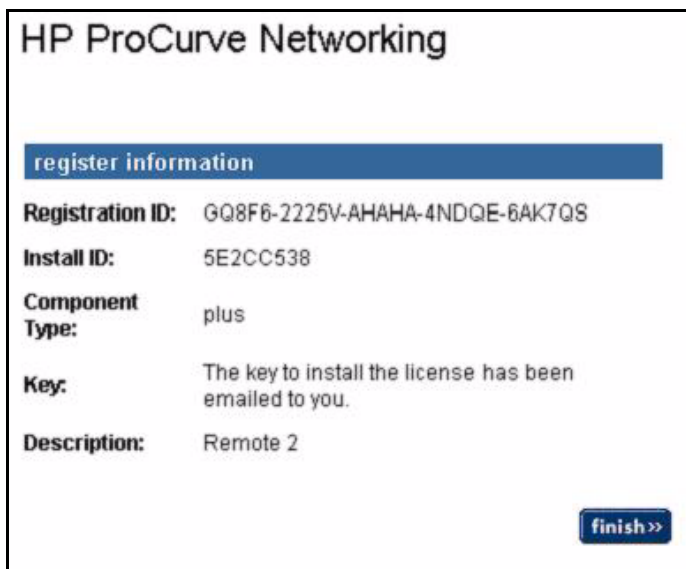
Re-enter Install ID:

Description:

**Figure 8. Register software screen**

7. Type in the Install ID as shown in the PCM Licensing Administration dialogue (see figure 3). Re-enter the Install ID, to make sure it is correct. You can also enter a short description of this copy of the software, to identify the PC that it is being installed on, for example. Then click **finish**.

The “Register Information” window is displayed.



**Figure 9. Register information screen**

8. Review the information to make sure it is correct, then click **finish**.

HP ProCurve Manager Plus will automatically send a license key to the email address you gave in the “User Information” window, similar to the message show in Figure 10.

The “Product Registration” window is then displayed.

## HP ProCurve Networking

product registration

Register Product:

[Click Here](#) - to receive an email of all your product keys.

---

**Install ID:** 5E2CC538    **Description:** Remote 2

---

**Registration ID:**  
 GQ8F6-2225V-AHAHA-4NDQE-6AK7QS    **Feature:** plus

**Figure 10. Chance to register another product**

9. Select another product to register, or close the registration window. It is not necessary to click on the “Click Here” hot spot. The license key has already been emailed. The message will look something like the following example:

```

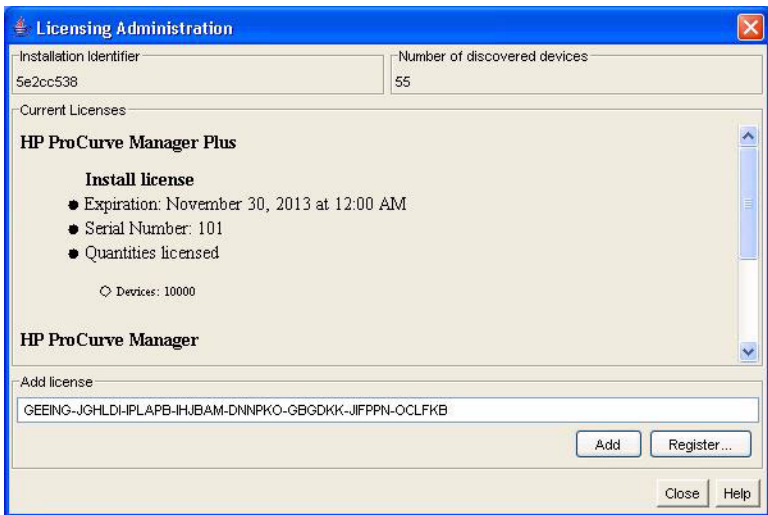
Thank you for registering HP ProCurve Manager. To activate your
license, simply enter the license Key provided in the table below.
Please refer to the HP ProCurve Manager Installation Guide for step
by step instructions.

Important Note: The license key directly correlates with your
Installation ID. Please ensure that the Installation ID listed
below matches that of your HP ProCurve Management Server. Again,
please refer to the HP ProCurve Installation Guide for detailed
information.

Feature: plus
Install ID: 5E2CC538
Description: Remote 2
Key: GEEING-JGHLDI-IPLAPB-IHJBAM-DNNPKO-GBGDKK-JIFPPN-OCLFKE
  
```

**Figure 11. Sample email message with registration key**

10. You can copy and paste the License key into the PCM “Licensing Administration” dialogue, as shown in the next screen.



**Figure 12. Adding the license key**

11. Click “Add” and the registration information on the screen will be updated to show that your product is registered for 10 years.

Now you can proceed with your login.

# Customizing Your HP ProCurve Manager Plus

Several default settings were established during installation of your HP ProCurve Manager Plus. You may want to customize these settings and take advantage of some additional options.

The customizable features include:

- **Managing user accounts** – you can change the password on the Administrator account, as well as adding other accounts and setting the passwords and security levels on these.
- **Set up the network discovery parameters** – HP ProCurve Manager Plus automatically discovers the devices in your network, lists them and displays them in network maps. You can modify how often the device discovery process occurs, manually add and remove subnets and devices from the discovery process, and change a number of other parameters that influence the discovery process.
- **Manage device configurations** – HP ProCurve Manager Plus has sophisticated tools for managing the configurations on your network devices. You can configure some of the parameters of the configuration management capabilities.
- **Set up Events/Statistics** – there are a number of parameters that you can configure that influence how HP ProCurve Manager Plus displays network event information and network traffic information.

For more information on these topics, please see the **HP ProCurve Manager Plus online help system**. There is a topic in the help called “Getting Started” that provides more information on these topics and has links to other help topics that give you detailed information for performing these customization tasks. You can also refer to the *HP ProCurve Network Administrator’s Guide* available in .pdf format on the installation CD.

# The HP ProCurve Manager Features

HP ProCurve Manager offers the basic functionality required by most IT organizations for network management. HP ProCurve Manager Plus includes all the features listed on this page, as well as the advanced features on the next page. For more detailed information on these features and their uses, please see the *HP ProCurve Manager Network Administrator's Guide* that is included on the product CD.

**Network status summary.** Upon boot-up, a Network Status screen displays high-level information on network devices, end nodes, events, and traffic levels, all on one screen. From here, you can drill down on any one of these areas to get specific details.

**Alerts and troubleshooting.** An Events Summary displays alerts and categorizes them by severity, making it easier to track where bottlenecks and issues exist in the network. Alert details provides information on the problem, even down to the specific port. You can also configure Alerts related to critical or serious events to be forwarded to e-mail, send pop-up messages to a console or workstation, or take other actions (issue commands).

**Automatic device discovery:** Customized for fast discovery of all HP ProCurve manageable network devices. You can also define specific IP subnets and VLANs on which to perform discovery.

**Network Topology and mapping:** Automatically creates a map of discovered network devices. Maps are color-coded to reflect device status and can be viewed at multiple levels (physical view, subnet view, or VLAN view).

**Device management:** Many device-focused tasks can be performed directly by the software, or you can access web and command-line interfaces with the click of a button to manage individual devices from inside the PCM Client.

# HP ProCurve Manager Plus Features

The ProCurve Manager Plus (PCM+) package includes all of the functionality of PCM, along with advanced functionality that can dramatically improve the performance of an IT organization.

**Network Traffic Analysis:** The Traffic Monitor helps you collect, measure, and analyze data about enterprise network traffic. Traffic Monitor allows you to quickly identify issues, isolate problems, and optimize resource usage.

The Traffic Monitor interface provides detailed information on traffic throughout the network. Leveraging enhanced traffic analysis protocols such as extended RMON and sFlow, you can monitor overall traffic levels, network segments with the highest traffic, or even the top users within a network segment.

**VLAN Management:** The VLAN Manager in PCM+ provides a single tool to create, track, and manage VLANs on your network. The VLAN management interface lets you create and assign VLANs across the entire network, without having to access each network device individually. The VLAN Manager also provides Wizards for creating VLANs, and modifying VLAN configuration, significantly reducing the likelihood of error in working with VLANs.

**Configuration Management:** The Configuration Manager in PCM+ automatically tracks and logs configuration changes. You can archive configurations, then apply an archived configuration to one or many devices. Configurations can also be compared over time or between two devices, with differences automatically highlighted for you.

This functionality helps significantly decrease unplanned network downtime and reduce the number of repetitive, configuration tasks that consume hours of your valuable time.

**Group and Policy Management:** The PCM+ Group and Policy management features allow you to create device groups and set group policies for managing all devices in the group. In addition, you can use the Policy

Manager to automatically apply pre-defined configurations across a group of devices, or to any new devices that are added to the network. New in this release, Policies can be scheduled for regular enforcement, or to automatically apply updates at times when it will have the least impact on network operations.

**Device firmware updates:** The Firmware Update tool allows you to automatically update devices and obtain new device firmware images from HP. You can also configure scheduled firmware updates across large groups of devices—when it is most convenient for your network.



The information in this document  
is subject to change without notice.

© Copyright 2004,  
Hewlett-Packard Development Company, L.P.  
Reproduction, adaptation, or translation  
without prior written permission is prohibited  
except as allowed under the copyright laws.

Printed in Singapore  
June 2004

Manual Part Number  
5990-5996



i n v e n t