

## **ProCurve Network Management**

Getting Started Guide

ProCurve Manager Plus A powerful tool for complete network management

#### Identity Driven Manager The safe and simple way to

manage network policies





**ProCurve Manager Plus** 

Identity Driven Manager

The all-in-one solution for managing ProCurve networks



ProCurve Manager Plus

Identity Driven Manager

Getting Started Guide

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#### **Applicable Products**

ProCurve Manager ProCurve Manager Plus ProCurve Identity Driven Management

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## Introduction

ProCurve Manager (PCM) and ProCurve Manager Plus (PCM+) is a Windows-based network management solution shipped with all manageable 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 ProCurve networks.

The graphical interface in ProCurve Manager (PCM) 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.

ProCurve Network Management for OV-NT integrates with HP OpenView Network Node Manager (ver. 6.4, 6.41 or 7.01, 7.50) on Windows XP/2000 and 2003 to provide a robust solution for managing ProCurve network products in a multi-vendor environment.

ProCurve Identity Driven Manager (IDM) provides network security at the "edge" of the network. It extends the capabilities of 802.1x authentication, Web-authentication, and MAC-authentication with features for dynamically configuring access rights at the point where users access the network.

This document provides information on the following topics:

Installing ProCurve Manager version 2.0 and ProCurve Identity Driven Manager version 1.0 - page 5

Registering ProCurve Manager Plus - page 23

Registering ProCurve Identity Driven Manager - page XX

Customizing Your ProCurve Manager Plus – page 28

The ProCurve Manager Plus Features – page 29

Other documentation that is available with ProCurve Manager includes:

**Online Help:** Context specific and topical help is available everywhere from within the user interface for ProCurve Manager Plus. The help also includes a table of contents, index, and search capabilities.

**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 ProCurve Manager installation disk.

**ProCurve Identity Driven Manager User's Guide:** Detailed information for configuring network access groups and policies. This guide is accessible from the Help menu in the program (if IDM is installed) and is included as a PDF file on the ProCurve Manager installation disk.

## Purchasing ProCurve Manager Software

A 30-day free trial version of ProCurve Manager Plus (PCM+) and Identity Driven Management (IDM) software is included in the box with new ProCurve switches. Contact your HP sales representative or HP reseller to purchase PCM+ and IDM software. You can also go to the ProCurve Web site, <u>http://www.procurve.com</u> for more information.

 $\mathbf{2}$ 

## Installation Prerequisites

Before you can install the ProCurve network management products, check that your system meets the following prerequisites.

#### **ProCurve Manager and ProCurve Manager Plus**

Minimum Processor: 2 GHz Intel Pentium IV or equivalent

Minimum Memory: 1 GB RAM

Disk Space: 1 GB free hard disk space minimum.

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.

#### **ProCurve Manager for OV-NT Network Node Manager**

All of the system prerequisites listed for ProCurve Manager

HP OpenView Network Node Manager for Windows, versions  $6.4, \, 6.41, \, 7.01, \, {\rm or} \, 7.5.$ 

#### **ProCurve Identity Driven Manager (IDM)**

All of the system prerequisites listed for ProCurve Manager, plus an additional  $500 \mathrm{MB}$  free hard disk space.

Implementation of Microsoft's Internet Authentication Service, RADIUS authentication server on Windows 2000 or 2003 Server (Enterprise or Standard Edition)

Implementation of an access control method, using either MACauth, Web-auth, or 802.1x supplicant application.

For assistance with implementation of RADIUS and access control on your network, contact the ProCurve Elite Partner nearest you that can provide ProCurve Access Control Security solutions. You can find ProCurve Direct Elite partners on the web at:

http://hp.via.infonow.net/locator/us\_partner/index.jsp

**Note:** For proper display of the "live" device views in PCM, you need the Sun Java "J2SE Runtime Environment 5.0 (JRE)" or newer installed on the PCM server and/or client systems. This software is available from Sun Microsystems Web site (java.sun.com)

## Before Upgrading or Reinstalling PCM+

You must have version 1.5, or 1.6 of PCM+ installed prior to installing an upgrade version of PCM+ 2.0

During an upgrade installation (on a box that has PCM 1.5 or 1.6 installed) the PCM installer will launch a DB migration tool that will migrate configurations currently stored in the PCM database to the new 2.0 version database. This includes: policies, custom groups, users, devices, VLANs, and topologies. However, the existing policies in 1.5 or 1.6 versions, 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 version 2.0 (or newer) are single-purpose.

When upgrading from PCM version 1.5 or 1.6 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.

**NOTE:** Once you install PCM or PCM+ Version 2.0, you can not revert to the previously installed version. If you are uncertain if you want to upgrade to the 2.0 Version, it is best to install it on a system that does not have any ealier versions of PCM or PCM+ installed.

## **ProCurve Manager Install Instructions**

ProCurve Manager Plus software is available through two sources:

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

Both the client and the server parts of ProCurve Manager (PCM) and ProCurve Identity Driven Manager (IDM) are installed from the CD by this installation process.

## **Configuring Default User Settings**

During the installation process, the wizard will prompt you to configure the following PCM defaults and user settings. Use the following list to determine the setting you want to use prior to starting the installation process.

- 1. **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.
- 2. Initial Discovery settings To start the discovery of the network devices, you need to identify a **Start from device** by its IP address or DNS name. For the discovery process to take place most efficiently, this device should be a ProCurve switch that is centrally located in your network. Avoid using routing devices, non-ProCurve devices, or an "edge" device that is primarily connected to end nodes.
- 3. **SNMP settings** The PCM default uses SNMP V2 with Read and Write Community names of "public" to communicate with devices. The following table explains the options for setting SNMP versions that PCM uses to access devices. You can select both versions using the Primary, Secondary configuration if the device(s) support SNMPV2 and SNMPV3.

 $\mathbf{5}$ 

SNMPV2	Discovery uses only SNMPV2 to discover devices. Devices that do not support SNMPV2 will not be discovered.
SNMPV3	Discovery uses only SNMPV3 to discover devices. Devices that do not support SNMPV3 will not be discovered.
SNMPV2 and SNMPV3	Discovery initially uses SNMPV2 to discover devices. If communications fail, discovery attempts to communicate with the device with SNMPV3.
None	Secondary version is not configured on the device.

To change SNMP settings:

- a. Select the SNMP version to use. To use both V2 and V3 set the **Primary SNMP version** and **Secondary SNMP version** to use to communicate with devices on the network.
- b. Set the **SNMP timeout** parameter.
- c. Set the **SNMP retries** parameter. The maximum is 5.
- d. For SNMP V2:

Enter the Read Community name, using up to 16 alpha-numeric characters, except >, <, and spaces. Repeat to set the Write Community name.

- e. For SNMP V3 :
  - In the UserName field, type the USM user name. The name must be unique and cannot contain the > or < character.
  - Select the Authentication Protocol to use.
  - Enter the Authentication Password.
  - Select the **Privacy Protocol**
  - Enter the Privacy Password.

4. **CLI settings** - The default communications parameters for Command Line Interface (CLI) access from PCM to ProCurve devices. The default configuration uses Telnet, with the Username and Password set to "public."

To customize the CLI settings:

a. Use Telnet for CLI communication and disable SSH.

Use SSH for CLI communication and disable Telnet.

- b. Set the **Timeout** parameter. Maximum is 10 seconds.
- c. Set the Retries parameter. Maximum is 5 retries.
- d. Set User Credentials for use with Telnet or SSH settings:
  - Type the Manager login in the Mgr UserName field and the associated password in the Mgr Password field.
  - To set up an operator login, type the new operator user name in the **Opr UserName** field and the associated password in the **Opr Password** field.
- e. For SSH Credentials:
  - Select the Password Authentication or Key Authentication option.
  - For Password authentication, define the User Credentials that SSH will use to authorize communication with the device.
  - For Key authentication, enter the **Port** number to be used for CLI communication.
- **5.** Network Settings Enable the Use Proxy option if you use proxies for external web access. ProCurve Manager needs external web access to license the PCM software, to automatically register ProCurve devices, and to retrieve the latest ProCurve switch software versions.
  - a. **HTTP** Enter the **HTTP Proxy** and **Port** information.
  - b. SOCKS Enter the Socks Host and Port. For Socks v5 enter the Username and Password.

**Automatic Traffic Configuration** - Enabling this option will automatically configure Traffic Management to monitor inter-switch communication using data obtained during the discovery process. You will then receive traffic utilization information without having to manually configure the Traffic monitor.

- The Sampling option configures all discovered interconnect links to monitor with sFlow or XRMON (EASE) technology.
- The **Stats** option configures interconnect links to monitor with RMON technology.

For additional information on using Traffic Management features, refer to the *ProCurve Manager Network Administrator's Guide*.

**Automatic Updates** - Select the option you want to use for automatically installing ProCurve software updates.

- **Download and install automatically** PCM checks the HP Web site for updates and install them automatically. By default, automatic updates are scheduled for the first day of every month.
- Notify if updates are available PCM checks the HP Web site for updates and logs an event message for every update available for download. Review the PCM event log to identify updates and install them manually. Automatic update events are named "Automatic Updates" and are a "minor" severity level.
- **Disable automatic updates** Do not use the automatic update feature.

To accept the default User settings provided with PCM, simply click the **Next** button to continue to the next window. You can change the settings at a later time using the Preferences options in PCM. See the *ProCurve Manager Network Administrator's Guide* for details.



## Using the PCM Install Wizard

Insert the product CD into the CD ROM drive in the computer that you are using as the network management station. The program will auto install using the PCM Install Wizard. If, for whatever reason, the auto install doesn't work, run the **Install.exe** program from the CD ROM drive.



In each window,

- Click Next to continue to the next step in the install process.
- Click **Previous** to return go back one window (step) in the process.
- Use **Cancel** to exit the install process.

**NOTE:** Once you install PCM or PCM+ Version 2.0, you can not revert to the previously installed version. If you are uncertain if you want to upgrade to the 2.0 Version, it is best to install it on a system that does not have any ealier versions of PCM or PCM+ installed.

#### License Agreement:



You must click the "I accept..." option to continue.

#### Readme:



Use the scroll bar to review all of the "readme" notes.



Configuration Detection:



The PCM install script will auto-detect the system configuration and determine the appropriate PCM software option, either PCM 2.0 standard, or the PCM-NNM 2.0 version.

**Note:** To install PCM-NNM, you must already have OV-NNM installed on your system. Otherwise, the standalone PCM version will be installed.

To install IDM, you must already be using RADIUS for authentication. IDM cannot be installed unless the RADIUS server is detected during the Configuration Detection step.

When the configuration detection process completes, the recommended PCM features for installation on your network displays.

Click Next to continue to the Choose Install Set window.



#### PCM Features Recommendation



#### Choose Install Set



The Install Set indicates the software that will be installed. Click the checkbox to select additional options or cancel an install option.



#### Install Location:

HP ProCurve Network Manage	ment Software		-1212
		Choose	Install Folder
M Introduction	Where Would You Like	r to install?	
License Agreement	C:\Program Files\Hewlett	Packard\PNM	
Readme		Restore Default Folder	Choose
Z Current Configuration Det			
Choose Install Set			
D Choose Install Folder			
• Pre-screeners summer			
D Cherry Manager			
👀 Confida e Mear de ango			
••• manu - province			
6			
	9		
Instantinywhere by Zerp G			
Cancel		Previous	Next

Click **Next** to accept the default install location.

To install PCM in an alternate location, use the **Choose** button, or type in the installation directory path, then click **Next**.

#### Pre-Install Summary:



Review the installation summary, then click **Install** to continue with the installation process.

The Installing ProCurve Manager window displays, and provides progress indicators for the file installation process.

**Note:** Once the Installation Wizard begins the process of installing the PCM files on your system, you cannot safely cancel the installation. You must wait until the installation process is complete, then uninstall PCM using the "Add/Remove Programs" function via the Windows Control Panel.

If you do cancel the installation while files are being copied to your system, PCM may not be able to uninstall the files, or properly reinstall over the existing files.



#### **Installing Files**



Configure User Settings

HP Profiliation Mellowerk Masserger	nerd Software
	Setup Administrator password
Introduction Ucense Agreement Readme Current Configuration Det	It is recommended that you change the password for the default Administrator user.
Choose Install Set Choose Install Folder Pre-Installation Burnmary Installing Chata Migration Configure User Settings	User Administrator Password Conten Password
	Warning: Be sure to make a note of this password and keep it in a safe place. If you forgat the password, it may not be possible access the product
notaliAnywhere by Zera O	Province Next

Refer to "Configuring Default User Settings" on page 5 to review the User Settings to configure during installation.



To accept the defaults provided with PCM, simply click the **Next** button to continue to the next window. You can change the settings at a later date using the Preferences options in PCM. See the *ProCurve Manager Network Administrator's Guide* for details.

When you complete the user settings configuration, an installation summary window displays.





Use the scroll bar to review the configuration information.

Click **Previous** to go back through the User Setting configuration windows to revise the settings.

Click Next to complete the installation process.

In the final window click Done to exit the installation wizard.



## **PCM Installation Notes**

When installing the "PCM for NNM" module, you will be prompted only for Traffic Management and Proxy settings. The remaining installation parameters are configured based on existing settings in NNM.

#### **One Network Management Program per Computer**

The PCM installation process will determine if you are running OpenView Network Node Manager and configure the PCM installation appropriately to install the PCM for HP OV-NT Network Node Manager application.

Because of resource conflicts that will occur if you have any other 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 (except HP OV-NT Network Node Manager) from your computer before installing ProCurve Manager or ProCurve Manager Plus.

#### **Adding PCM Remote Client Stations**

When you install ProCurve Manager, 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 **http://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 ProCurve Manager servers in the network, when you install a remote client, you will 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 **ProCurve Manager**, and then **ProCurve Manager Server**.

#### **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 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:** 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:

- 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.

#### 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, that is also running some network tunneling software such as a VPN client. In this situation 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 a multi-homed system is shown below:



Figure 1. Example Multi-homed Computer



**The Situation:** When 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 is directed to the selected network interface.

In the diagram above, if the ProCurve Manager client application attaches itself to the 166.3.4.5 interface, and the ProCurve Manager server is running on the server on the right (somewhere on the 15.255.120.\* network), the client cannot connect successfully to the server.

**The Solution:** Edit the ProCurve Manager configuration file to correct this situation using the following procedure:

- Find the commIpAddr.txt file in the config directory under the client or server directory. For the client, the default file path is: C:\Program Files\Hewlett-Packard\PNM\client\config.
   On the server, the default file path is: C:\Program Files\Hewlett-Packard\PNM\server\config.
- 2. Using a text-based editor (such as Notepad), enter the IP address of the interface you want PCM to attach to. For the network illustrated above, you would enter **15.255.120.25** as the first line of the file.
- 3. Save your changes.
- 4. Restart the PCM client and server. For the server, you must restart the PCM (PNM) service from the Services control panel.

## **IDM Installation Notes**

You can select to install the IDM 1.0 application at the same time you install the PCM application, or install it at a later time from the PCM 2.0 CD.

#### **Configuring IDM Agent Access**

When you select the IDM option during the PCM installation, the IDM module is installed on the target system. To complete the installation process you need to install the IDM agent on your RADIUS server(s). This is similar to the process for adding PCM remote client stations, described on page 17.

**Note:** Before installing the IDM Agent on the RADIUS server, you must first configure the PCM server to allow access from RADIUS server. This is similar to the process for "Configuring Client/Server Access Permissions" described on page 18. You must add an entry for the IP address of the RADIUS server to the **access.txt** file on the PCM server.

To install the IDM Agent on a RADIUS server, start a web browser such as Microsoft Internet Explorer on the RADIUS server. For the URL, type in the IP address of the PCM server computer, followed by a colon and the port ID 8040. For example, if the IP address of the PCM server computer is 10.15.20.25, then on the RADIUS server, enter http://10.15.20.25:8040 on the web browser address line. Select the IDM Agent option. In the install scripts page that appears, select the IDM Agent to download it to the RADIUS server system.

Run the Install.exe that is downloaded to the RADIUS server. The Install Wizard guides you through the installation process. During the installation process, you will be prompted to enter the IP Address for the IDM Server, which is the same as the PCM Server. This is needed to establish communication between the IDM Agent on the RADIUS server, and the IDM (server) application that is included on the PCM Server.

The IDM Agent can only be installed on a system with the RADIUS server configured. If the RADIUS server is not found on the system, the IDM Agent installation displays an error message, and the installation process is aborted.

# Registering Your ProCurve Manager Software

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

The process is similar for using IDM. That is, until you have registered the IDM application, you will get the expiring license warning.



Figure 2. ProCurve Expiring License warning dialogue

Click No, Continue to close the dialogue and just start the program. Click OK to launch the Licensing administration screen.

The registration process described in the following pages is the same for both the PCM+ and IDM software.

- 1. Contact your HP Sales Representative or HP Reseller to purchase the PCM+ and IDM software. You will receive a Registration ID for the purchased software—either on the Software CD case, or a separate registration card sent with the purchase information.
- 2. Go to the Licensing window in PCM [Preferences Licensing and Support Licensing]. Write down the Installation Identifier for the software as it appears in the upper left corner of the window. You can also leave this window open and use the "copy and paste" functions to enter the Install ID in the My ProCurve software registration window.



- 3. Click the Register button to go to the PCM registration web site.
- 4. If this is an upgrade, log in with your My ProCurve ID and password. If you are a new user, click the "Register Here" button, and then enter the required information to create a user account, including user name, password, company name, and E-mail address.
- 5. In the Registration window:
  - a. select the product to register from the Product Type pull-down menu.
  - b. enter the Registration ID, found on the back of the software CD case, or on the registration card you received when you purchased the software.
  - c. enter the Installation Identifier (from the Licensing window in PCM).
  - d. Click the Generate License button.

The window is refreshed and the registration information, including your License key is displayed. The license key is also sent to you via e-mail.

- e. To get the license key for the next software package, click Generate Another License and repeat the process in step 5, above.
- 6. When you receive the License key, go back to the Licensing window in PCM.

Enter the License key number in the Add license field, then click Add.

To avoid data entry errors, you can copy and paste the number from the e-mail or My ProCurve (My Software) Web page.

**NOTE:** You must first purchase a copy of ProCurve Manager Plus and,/or Identity Driven Manager to get the Registration ID. You do not need to re-install the software from the purchased CD, but you need the Registration ID to complete the registration process.

The entire registration and licensing process, including samples is shown in the following pages.



 Go to the Licensing window, available from the Preferences menu. Preferences can be accessed from the PCM Tools menu or by clicking on the Preferences icon in the PCM global tool bar.

	Licensing						
Automatic Updates     Configuration Mane     Device Access	Installation Identifier 1321b856			Number of discovered devices 0			
Discovery	Product V	Туре	Serial No	Base	Expires	Valid for	ProdVer
Events     Network Settings     Network Settings     Reports     SMTP Profiles     Status Poling     Syslog Events     Traffic     UserManager     Licensing and Support	ProCurve Manager Plus	Instal	50	V	May 21, 2005	1000 Devices	1
	Add license						
UserManager     Licensing and Support							

Figure 3. ProCurve License Administration window

To register the ProCurve Manager Plus or IDM software:

- 2. Write down the Installation Identifier in the upper left corner of the screen, or select and copy (Ctrl+c) the text.
- 3. Click Register... to go to the My ProCurve registration Web site.



Figure 4. My ProCurve Login page

4. Sign in with your My ProCurve ID and password.

If you are a new user, click the "Register Here" button, and then enter the required information to create an account. Click Submit to continue.

My Profile My Produc	a Wy Segment My Selfwa	-		+ Jager Di
<ul> <li>Frequently Asked Que</li> <li>Export My Softwares U</li> </ul>	itlema (FAQ) at	ŝ	We offer free answer any t about our pro a Call Me No	network designs and can puestions you may have iducts. W
Please register you Otlan your permanent loer products also require a reg	In ProCurve software a se for al Procurie sufficiente. Al Istration Id, which can be found	nd obtain your I entrivere products re I on the CD case of Re	licenses here. quire a unique install spisitiation card	id for regetrator, Nost
Please register you Ottain your permanent loer products also require a reg Product Type	In ProCurve software a set for all Procurve software. All Istration Id, which can be true - Registration Id#	nd obtain your I software products re I on the CD case or Re	licenses here. cure a unique Install operation card	id for repairator, Most
Please register you Otten your semanent loer anticide elle resulte e reg Product Type Product Danager Plus	In ProCurve software a se for at Procurie software. At stration id, which can be foun - Registration Id# - Help me find my ragis	nd obtain your eaflware products re d in the CD case or Re dration id	licenses here, pure a unique install pistraten card · Install Id#	Id he regaliater. Nast Description Generate License
Please register you Otten your permanent loar andructs also results a Hig Product Type Product Manager Plus Page 1 of 1	In ProCurve software a set for all Procure software. All Station is, which can be true Registration IdR All All All All All All All All All All	nd obtain your I sefficiare products in I on the CD case or Ri dration 32	licenses here. pure a unique install petraten card · Install Id# Display Display	Id for repainter. Maar Description Cell Generation Location

Figure 5. My Software registration page



- 5. Select the product to register from the Product Type pull-down menu.
- 6. Enter the Registration ID, found on the back of the software CD case, or on the registration card you received when you purchased the software.
- 7. Enter the Installation Identifier (from the Licensing window in PCM).
- 8. Click the **Generate License** button.

The window is refreshed and the registration information, including your **License key** is displayed. The license key is also sent to you via e-mail.

To get the license key for the next software package, click Generate Another License and repeat the process in step 5, above.

9. The License e-mail message will look something like the following example:

And the second state of the second state of the second state of
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-OCLFKB

#### Figure 6. Sample E-mail message with PCMplus License key

10. When you receive the License key, go to the Licensing window in PCM.

Enter the License key number in the Add license field, then click Add. To avoid data entry errors, you can copy and paste the number from the e-mail or My ProCurve (My Software) Web page.

The screen is updated to show that your product is registered.

11. Select another product to register, or close the Licensing window.

## **Customizing ProCurve Manager**

Several default settings were established during installation of your ProCurve Manager application. 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** – 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** – 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 ProCurve Manager Plus displays network event information and network traffic information.

**Automatic Traffic Configuration** – ProCurve Manager Plus lets you automatically configure network traffic monitoring using sampling or statistics.

For more information on these topics, please see the **ProCurve Manager 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 customizing tasks. You can also refer to the *ProCurve Network Administrator's Guide* available in PDF format on the installation CD.



## **ProCurve Manager Features**

ProCurve Manager offers the basic functionality required by most IT organizations for network management. For more detailed information on these features and their uses, please see the *ProCurve Manager Network Administrator's Guide* that is included on the product CD.

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

**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 messages to your workstation, or take other actions (issue commands).

**Import/Export Subnet and Device Files.** The Import/Export tool lets you import Device and Subnet data from a .CSV (comma delimited) file into PCM, or export Device and Subnet data from PCM to a .CSV file, for use in other applications.

**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.

**SNMP V3 and SSH support:** You can configure PCM to support the use of SNMP V3 and SSH for device access and management, and for communications between PCM and ProCurve devices.

## **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.

**Configuration Templates:** The Configuration manager also provides the ability to create a Device configuration "Template" for each device type in the network. You can use a Configuration Template policy to automatically apply the Template to similar device types. Templates can also be used to



automatically configure new ProCurve devices when they are discovered by PCM, thus simplifying configuration and management as your network expands.

**Group and Policy Management:** The PCM+ Group and Policy management features allow you to create device groups and define 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.

**Event Driven Policies:** You can create a Policy to be launched when a specific event is generated. Then configure an Alert to execute the policy automatically based on the defined events in PCM.

**Device Software Updates:** The Software Version Update tool allows you to automatically update devices and obtain new ProCurve device software images from HP. You can also schedule software version updates across groups of devices–when it is most convenient for your network.

Automatic Device Registration: You can set the PCM+ Licensing preference to automatically register new ProCurve devices with HP Support.

**Network Consistency Checking:** With the Network Consistency wizard you can check to make sure that the network connections between devices are configured correctly.

**Configurable Integration Platform:** You can use the CIP (Configurable Integration Platform) to:

- Create and manage "User-defined devices," that is other ProCurve or non-ProCurve devices not found through auto-discovery.
- Create user-defined "Actions" and "Triggers" to launch 3rd-party applications from within the PCM+ GUI.
- Receive and process traps, and log events for user-defined devices and to log events from OV-NNM.

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