ProCurve Networking
HP Innovation

Installation and
Getting Started Guide

ProCurve Secure Access 700wl Series

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PROCURVE
SECURE ACCESS 700WL SERIES

INSTALLATION AND GETTING STARTED GUIDE

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Applicable Products

ProCurve Access Control Server 745wl	(J9038A)
ProCurve XL Access Controller Module	(J8162A)

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PREFACE

This preface describes the objective, audience, use, and organization of the *Installation and Getting Started Guide.* It also outlines the document conventions, related documentation, and support information.

Audience

The audience for this document is the network administrator who wants to enable network users to communicate using the 700wl Series system. This document is intended for authorized personnel who have previous experience working with network telecommunications systems or similar equipment. It is assumed that the personnel using this document have the appropriate background and knowledge to complete the procedures described in this document.

Document Objectives

This document contains procedural information describing the installation and configuration of the ProCurve Access Control Server 745wl and XL Access Controller Module. Each procedure is written in a task-oriented format consisting of numbered step-by-step instructions. In most cases, several procedures are required to complete one overall task. All procedures should be performed in the order they appear in this document, unless otherwise instructed.

This document also provides instructions for the creation of a basic configuration of the ProCurve Secure Access 700wl Series that allows a user to:

- Connect to the 700wl Series system (optionally using the PPTP secure protocol)
- Log in and be authenticated through the ProCurve 700wl Series built-in database
- Pass IP traffic and have access to network resources.

A system running with this configuration is suitable for basic evaluation or demonstration purposes.

Organization

This document is organized as follows:

Chapter 1— Introduction

This chapter gives an overview of the 700wl Series system installation procedure.

Chapter 2— Hardware Installation

This chapter describes the installation of the ProCurve Access Control Server 745wl. Installation of the XL Access Controller Module is described in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.

Chapter 3— Network Setup

This chapter describes the network configuration of the Access Control Server after it has been physically installed.

Chapter 4—Basic Configuration

This chapter leads you through the configuration of a basic system setup that includes user accounts and user authentication, as well as a PPTP gateway, and support for an external authentication service. such as LDAP.

Appendix A—Troubleshooting

This chapter presents troubleshooting procedures for the 700wl Series system.

Appendix B—LCD Display Description

This appendix describes the LCD display on the Access Control Server 745wl. The display can be used to view the system's network parameters, and to power down the system.

Appendix C—Technical Specifications, Safety and Compliance

This appendix describes the technical specifications of the system, and provides safety and compliance information.

Appendix D—Cable and Connector Specifications

This appendix describes the Serial Connector and the Standard Ethernet cables for use with the 700wl Series system.

Appendix E—Safety and EMC Regulatory Statements

This appendix describes safety and EMC regulatory information for the 700wl Series system.

Appendix F—Recycle Statements

This appendix describes Waste Electrical and Electronic Equipment (WEEE) information for the 700wl Series system.

Related Publications

The following publications provide additional information:

- ProCurve Secure Access 700wl Series Management and Configuration Guide
- ProCurve 700wl Series Release Notes
- *ProCurve Series 5300xl Switches Installation and Getting Started Guide*

Document Conventions

The following text conventions are used in this document:

Convention	Definition
Boldface Arial	Screen menus that you click to select, field names, and commands that you select are in boldface Arial.
Italic Palatino	New terms that are defined in the text, and emphasized terms are in italic Palatino.
`Courier`	Filenames and commands or text that you type are in `Courier`.

The following icons are used to alert you to important information:

Icon	Notice Type	Alerts you to...
None	Note	Helpful suggestions or information that is of special importance in certain situations.
None	Caution	Risk of personal injury, loss of system functionality, or loss of data.
	Warning	Risk of severe personal injury, system damage, or irrecoverable loss of data.

Support Information

See the ProCurve Networking web site at `www.procurve.com`. Click on **technical support** and select **support services** for a list of available support resources and options for contacting HP.

Compliance and Safety Notices

Technical specifications, safety information, and regulatory compliance statements can be found in Appendix C, "Technical Specifications". This information should be read thoroughly before installing the HP system equipment.

1 INTRODUCTION TO THE PROCURVE 700WL SERIES

This chapter gives a brief description of the installation procedures for ProCurve 700wl Series products. It consists of the following sections

Overview

Two products make up the ProCurve 700wl Series:

- ProCurve Access Control Server 745wl
- ProCurve XL Access Controller Module

The physical installation of the Access Control Server 745wl is described fully in Chapter 2, “Hardware Installation”. The hardware installation is always performed first, before the network installation. The XL Access Controller Module is installed in the 5300xl switches, and, therefore, its installation is described in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.

Centralized Administration of the 700wl Series system

Wireless network clients physically connect through Access Controller Modules, but authentication and rights administration for these clients is handled centrally from the Access Control Server. In addition, all configuration of the Access Controller Modules connected to the system is handled by the Administrative Console located in the Access Control Server. Once you have installed an Access Controller Module onto your network, you should not need to perform any administration functions directly on the Access Controller Module.

From the centralized Administrative Console on your Access Control Server you can perform the following configuration functions:

- Configure the 700wl Series system setup, including bridging, DHCP Network for NAT Clients, Forwarding of IP Address broadcasts, setting up HTTP proxies, configuring SNMP settings, and setting the system date & time
- Update the 700wl Series system software or return to a previous version
- Set up a Wireless Data Privacy policy for clients using VPN protocols
- Set up Authentication Policies for how users authenticate themselves to the system
- Set up Access Policies to control what users can do over the network

- Set up Identity Profiles to put users in groups that share the same access policies
- Set up Connection Profiles that allow you to specify different Access Policies for users based on location, time of day, VLAN tags, and Authentication Policies
- Set up redundant Access Control Servers to provide failover

Additionally, the Administrative Console provides functions for monitoring the status of the system components, as well as monitoring clients logged onto the system and their sessions.

Order of Network Installation

The order of installation depends on the complement of equipment you wish to install. There are two basic configurations, and for each, there is an order of network installation as follows:

- Access Control Server 745wl with at least one XL Access Controller Module
- Two redundant Access Control Server 745wls with at least one XL Access Controller Module

Access Control Server with One or More Access Controller Modules

If you are installing one Access Control Server 745wl and one or more XL Access Controller Modules, perform installation in the following order:

Step 1. Install the Access Control Server, following the steps in Chapter 2, "Hardware Installation" in this manual.

Step 2. Perform the network setup for the Access Control Server, following the steps in "Access Control Server Setup" on page 3-2.

Step 3. Install the Access Controller Modules following the steps in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.

Step 4. Once the Access Controller Modules are recognized by the Access Control Server and appear in the Access Control Server Administrative Console, perform any additional setup required, following the steps in"Completing the Installation" on page 3-15.

Redundant Access Control Servers with One or More Access Controller Modules

Step 1. Install each Access Control Server, following the steps in Chapter 2, "Hardware Installation" in this manual.

> ***Note:*** *It is strongly recommended that an Access Control Server 745wl be used as the secondary Access Control Server. If you use an Access Control Server 740wl as the redundant Access Control Server, transferring the primary 745wl workload to a secondary 740wl may result in the working integrity being compromised due to 740wl limitations.*

Step 2. Perform the network setup for each Access Control Server, following the steps in"Access Control Server Setup" on page 3-2.

Note the IP address and shared secret of the Access Control Server that you plan to designate as the Primary Access Control Server. Do not configure the Access Control Servers (yet) as redundant peers.

Step 3. Install the Access Controller Modules following the steps in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.

Configure the Access Controller Modules with the IP address and shared secret of the Primary Access Control Server.

Step 4. Once the Access Controller Module is recognized by the Primary Access Control Server and appears in the Access Control Server Administrative Console, perform any additional setup required, following the steps in *"Completing the Installation" on page 3-15.*

Step 5. On the Access Control Server that is to be the redundant (non-Primary) Access Control Server, set the shared secret to be the same as the Primary Access Control Server.

Step 6. On the Primary Access Control Server, configure redundancy, following the steps in Chapter 6, "Configuring the Network" in the *ProCurve Secure Access 700wl Series Management and Configuration Guide*.

Tools and Information Required

To perform network installation for an Access Control Server or Access Controller Module, the information defined in Table 1-1 may be required:

Note: *The information you gather here is required during configuration and is presented here as a reminder to find it before beginning the network installation.*

Table 1-1. Installation Parameters

Parameter	Form
Hostname (Fully-Qualified)	Not required. Must be fully-qualified if provided. Example: am21b.corp.com **Note:** A hostname is required only for Access Control Servers that will have a real Secure Socket Layer (SSL) certificate installed. If you install a signed SSL certificate, the hostname must match that on the SSL certificate.
Domain name	Defines the system's domain if a hostname is not provided. This is optional. Example: xyzcorp.com
IP address	Can be configured as a static IP address or can be obtained via DHCP. **Note:** The IP address of the Access Control Server will be needed to configure Access Controller Modules.
Subnet Mask	Defines the system's subnet range. Can be obtained via DHCP. Example: 255.255.255.0.
Gateway (router) IP address	Defines the default router. Can be obtained via DHCP.
Primary and Secondary DNS server IP addresses	Defines the location of the primary and backup DNS servers. Can be obtained via DHCP.

Table 1-1. Installation Parameters

Parameter	Form
Shared Secret	Secret key used to establish trust relationship between an Access Control Server and an Access Controller Module. Alphanumeric string. The same shared secret must be configured on each system.

Many of these parameters can be supplied by the DHCP server if the system is configured to obtain its IP address via DHCP. If the system is configured to use a static IP address, then all the parameters shown in the table must be provided when the system is configured for the network.

The following tools and equipment are required to install a 700wl Series system in a rack:

- Tape measure and level
- Number 2 Phillips screwdriver

HARDWARE INSTALLATION 2

This chapter describes the hardware installation of the ProCurve Access Control Server 745wl. (The XL Access Controller Module is installed in the 5300xl switches, and, therefore, its installation is described in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.) You must be sure that the site requirements are met and carefully follow the procedures described to physically install the equipment.

This chapter consists of the following sections:

Hardware Description

This section describes the hardware features of the Access Control Server 745wl, which is designed for high-performance, high-density wiring-closet applications. Figure 2-1 shows an Access Control Server 745wl.

Figure 2-1. Access Control Server 745wl

The Access Control Server 745wl consists of a chassis, power supply, fans, I/O ports, indicators, and switches. This unit has two RJ-45 connectors—one for the network uplink, used to connect the unit to the network, and one that is used for the redundant Access Control Server.

Figure 2-2 shows a front panel view of the Access Control Server 745wl.

Figure 2-2. Front panel view—Access Control Server 745wl

System Memory/Storage

The Access Control Server 745wl is equipped with a hard disk.

Chassis

The chassis is 17.00″ (43.2 cm) wide, 22.00″ (55.9 cm) deep, and 3.5″ (8.9 cm) high, which is 2 rack units (RU) high. It weighs approximately 35 lbs (15.9 kg). It can be rack-mounted using the front brackets provided.

Power Supply

TheAccess Control Server 745wl contains an auto voltage sensing power supply. Input is 100-220 volts, 2.5A, 50/60 Hz, with a measured 350 watts output.

Fans

Note: *For environmental specifications, see* *"Site Power Requirements and Heat Dissipation" on page 2-5.*

The system fan assembly provides cooling air for the internal chassis components. The fans exhaust warm air from the back and draw in cool air at the front. The Access Control Server 745wl monitors its internal fan speeds, internal chassis temperature, and power supply voltages. The status of these values are reported by system software.

I/O Ports

Table 2-1 summarizes the functional I/O ports on the Access Control Server 745wl.

Table 2-1. I/O Ports

Port Function	Description	Number of Ports
Network Uplink	RJ-45, 10Base-T/ 100Base-TX/1000Base-T	1
Serial Console	DB9, Serial Port	1

Controls and Indicators

Controls

There is only one control on the front of the chassis, a power button, labeled I/0. The power button is a momentary switch and is used to turn on the system.

Note: *The front panel power button should not be used to power off the system. Turning off the system should be performed through software.*

There is also a power supply switch on the rear of the Access Control Server 745wl, next to the power cord socket. This switch must be left in the On (I) position for the unit to be operational, and cannot be used to power on the system. When this switch is in the Off (0) position, the front panel power button will not function.

System Status Indicator

There is one system status LED indicator on the front of the chassis—Power (ON). ON is lit when the power supply is plugged into a live outlet, the rear panel On/Off switch is in the On position, and the power is turned on by the front panel On/Off button.

LCD Display

The LCD display can be used to view the system's network parameters, and to power down the system. The LCD display is located in the middle of the front panel of the Access Control Server 745wl. It is a 16-character by two-line display, with six buttons located to the right of the display (Figure 2-3).

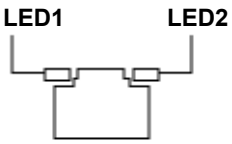
Figure 2-3. LCD Display

Appendix B, "LCD Display Description" describes the messages and operation of the LCD display panel.

Network Uplink Status Indicators

A detailed view of the network interface (uplink port) is shown in Figure 2-4.

Figure 2-4. Network Uplink port



The two LEDs, LED1 and LED2, provide information on the port speed and data connection state of the default network uplink port as shown in Table 2-2.

Table 2-2. Network uplink LED status

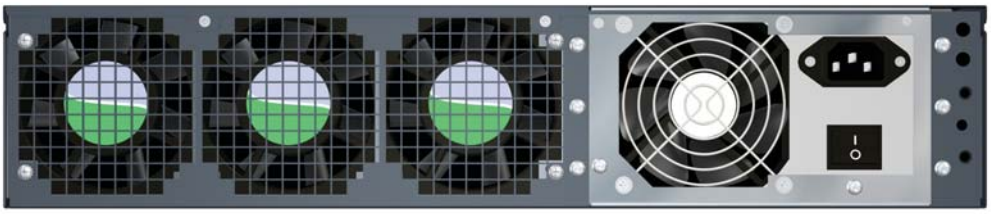
LED State	LED1 (Port Speed)	LED2 (Connection)
On	Green: 10 Mbps, 1000 Mbps Link	100 Mbps, 1000 Mbps Link
Off	100 Mbps Link and Activity	10 Mbps Link and Activity
Blinking	Green (Blink): 10 Mbps, 1000 Mbps Activity	100 Mbps, 1000 Mbps Link

Rear Chassis

Figure 2-5 shows the rear of the Access Control Server 745wl. There is one control on the rear of the chassis, a power switch. This switch cannot be used to power on the system. When this switch is in the Off (0) position, the front panel power button will not function.

Note: *The power switch must be left in the On (I) position for the unit to be operational.*

Figure 2-5. Rear chassis of an Access Control Server 745wl



Site Planning Checklist

Before installing an Access Control Server 745wl or XL Access Controller Module, you should evaluate the items in the following site planning checklist:

Space Evaluation

- Space and layout

- Floor covering
- Impact and vibration
- Lighting
- Maintenance access

Environmental Evaluation

- Ambient temperature
- Humidity
- Altitude
- Atmospheric contamination
- Airflow

Power Evaluation

- Input power type
- Proximity of receptacle to equipment
- UPS for power failures

Grounding Evaluation

- Circuit breaker size

Cable and Interface Equipment Evaluation

- Cable type
- Connector type
- Cable distance limitations
- Interface equipment (transceivers)

EMI Evaluation

- Distance limitations for signaling
- Site wiring
- RFI levels

Site Power Requirements and Heat Dissipation

Table 2-3 shows the site power requirements and heat dissipation for the Access Control Server 745wl.

Table 2-3. Site Power Requirements, Temperature and Heat Dissipation Parameters

Parameter	Value
AC Input Power (Watts)	170
Heat Dissipation (BTU/Hr.)	580
AC Input Current at 120 VAC (Amps)	1.4
AC Input Current at 240 VAC (Amps)	.70
Operating Temperature Range, ×C	5 to +50°C
Storage Temperature Range, ×C	-40 to +65°C
Humidity Range, non-condensing, percent	5 to 90

Installing a 700wl Series System

Unpacking

Carefully unpack the contents of the shipping containers, and save the containers and all packing materials. To save storage space, you may want to flatten the containers. Check that the following is included:

- Chassis
- Hardware and Accessories Kit
  - 12-24 x 5/8 inch Phillips pan-head bolts, zinc (quantity: 4)
  - 10-32 x 5/8 Phillips washer-head bolts, black (quantity: 4)
  - Mounting Slide Kit
  - U.S. power cord
  - AT null modem cable (DB-9 female/DB-9 female)
- Documentation Kit
  - Documentation CD-ROM
  - Software License Agreement
  - Software Release Notes
  - ProCurve Secure Access 700wl Series Installation and Getting Started Guide (this document)

If any of the above are missing, contact HP immediately and do not attempt installation.

Rack Mounting the Chassis

Each Access Control Server 745wl comes with a steel mounting kit suitable for mounting the chassis in a standard 19-inch (48.3 cm) equipment rack. Rack mounting instructions are included in the kit.

Due to the weight of the unit, we highly recommend using these rails to mount the unit. This unit is not suitable for mounting in racks with obstructions (such as a power strip) that could impair access to the device. The air space in the front and rear of system should be 6.00 inches minimum.

Caution: *Ground the chassis properly with the supplied power cord.*

Caution: *Be sure to position the power cord so that you can easily disconnect the chassis.*

Caution: *Do not install the chassis in an environment where the operating temperature might exceed 10 °C (104 °F).*

Caution: *Do not restrict air flow around the side and rear of the chassis. The air space in front and rear of system should be 6.00 inches minimum.*

Connecting Power to the Chassis

Follow these steps to connect power to the chassis:

Step 1. Before you connect the power supply to a power source, ensure that all site power and grounding requirements listed in "Site Power Requirements, Temperature and Heat Dissipation Parameters" on page 2-6 have been met.

Step 2. Plug the power cord into the rear of the chassis.

Step 3. Connect the other end of the power cord to an AC-power input source.

Caution: *Ground the chassis properly with the supplied power cord.*

Step 4. Be sure to position the power cord so that you can easily disconnect it from the chassis.

NETWORK SETUP

3

This chapter describes the network setup of your 700wl Series system on an existing network to allow interoperability and proper network security for all equipment.

It consists of the following sections:

Getting Started

The network configuration procedures in this chapter are performed after the hardware has been installed. Access Control Server installation is described in Chapter 2, "Hardware Installation", and Access Controller Module installation is described in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*. These network configuration procedures make a 700wl Series system (an Access Control Server and associated Access Controller Modules) usable on your network.

The Access Control Server must always be installed before any Access Controller Modules are installed.

700wl Series system components are configured and managed centrally from the Administrative Console that runs on the primary Access Control Server. Therefore, the initial network configuration includes only the steps necessary to make the component accessible from the Access Control Server Administrative Console.

- For an Access Control Server, you may be able to access the Administrative Console immediately upon connecting the unit to your network, as the unit is configured by default to request an IP address using the Dynamic Host Configuration Protocol (DHCP). If a DHCP server is reachable, and an address is assigned to the ProCurve unit, you can point your browser to that IP address and access the Administrative Console. You can determine the IP address by looking at the LCD panel on the front of the unit.

  If you want to assign a static IP address to the unit, you can connect a serial console to the unit's serial console port, and assign an IP address prior to connecting the unit to the network. Once you have provided the necessary addressing information, you can connect to the Administrative Console using a browser and complete the configuration.
- Management and configuration of an Access Controller Module is also performed from the centralized Administrative Console on the Access Control Server. However, for the Access Control Server and the Access Controller Module to communicate, the Access Controller Module must first be configured with the IP address of the Access Control Server, and the shared secret used to validate the Access Controller Module to its Access Control Server. Initial configuration is provided in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.

Access Control Server Setup

You can perform the initial network configuration of an Access Control Server in one of three ways:

- Connect a serial console to the Access Control Server's serial console port and use the Command Line Interface (CLI). See "Initial Configuration Using the CLI" on page 3-3 for detailed instructions.
- Connect the Access Control Server to your network, allowing it to get an IP address using the Dynamic Host Configuration Protocol (DHCP). Then connect to its Administrative Console with a web browser. See "Initial Configuration Using the Administrative Console" on page 3-8 for detailed instructions.
- Connect the Access Control Server to your network, allowing it to get an IP address using the Dynamic Host Configuration Protocol (DHCP). Then open an SSH connection and log into the CLI. The 700wl Series system supports SecureCRT 3.3 with the Auto Detect or Standard SSH server options. See "Connecting Using SSH" on page 3-6 for detailed instructions.

Configuration beyond basic network installation, specifically the process of customizing the function of a ProCurve 700wl Series system to a particular end-user environment, is not described in this manual. Configuration performed after initial network installation is described in the *ProCurve Secure Access 700wl Series Management and Configuration Guide*.

IP Addressing Considerations

An Access Control Server requires a stable IP address, so the Access Controller Modules under its control can readily identify and communicate with the server. You can either arrange for DHCP to always assign the same IP address to the Access Control Server, or you can manually enter a static IP address. Most commonly, a static IP address is used.

A 700wl Series system ships configured by default to obtain its IP address and other information from a Dynamic Host Configuration Protocol (DHCP) server. This means the system will attempt to obtain an IP address as soon as it is connected to the network and is powered up.

Note: *If you do not want the Access Control Server to attempt to use DHCP, you must configure its IP address before you connect it to the network for the first time. You can configure the Access Control Server without connecting it to the network using a serial console connected to the serial port.*

If you elect to obtain the Access Control Server IP address using DHCP, the Access Control Server can also obtain the hostname, domain name, subnet mask, and the IP addresses of the gateway, DNS servers, WINS server, and NTP server from the DHCP server. The information it receives depends on how you configured your DHCP server.

If you configure your DHCP server to assign the same IP address to the Access Control Server every time, then even after a factory reset (which clears all configuration changes and returns the system to its default settings) the Access Control Server will obtain the correct IP address upon a reboot. If you elect to use a static IP address, you will need to reconfigure the address after a factory reset.

To install an Access Control Server onto a network, you need the information shown in Table 3-1:

Table 3-1. Installation Parameters

Parameter	Description
Access Control Server hostname (optional)	Must be fully-qualified if provided. Example: am21b.corp.com
Domain name (optional)	Defines the Access Control Server's domain if a hostname is not provided. Example: corp.com
IP address	This can be assigned as a static IP address or can be obtained via DHCP (the default).
Subnet mask (Netmask)	Defines the Access Control Server's subnet range. Can be obtained via DHCP. Example: 255.255.255.0.
Gateway (default router) IP address	Defines the default router. Can be obtained via DHCP.
Primary and secondary DNS server IP addresses	Defines the location of the primary and backup DNS servers. Can be obtained via DHCP.
Access Control Server shared secret	Secret key used to establish trust relationship with an Access Controller Module. Alphanumeric string. The same shared secret must be configured on the Access Controller Module.

Initial Configuration Using the CLI

Note: *If you want your system to receive its IP address via DHCP, and you do not plan to reconfigure the uplink port, you can simply connect the unit to your network. By default a new unit requests an address via DHCP. You can then follow the instructions in the section "Initial Configuration Using the Administrative Console" on page 3-8.*

The remainder of this section assumes you plan to assign a static IP address to the unit.

You can connect a serial console to the Access Control Server's serial console port, and then configure the Access Control Server's network settings using the CLI.

You can use the CLI to perform both basic and advanced network configuration on an Access Control Server. However, it is recommended that management and configuration normally be done through the browser-based Administrative Console. Therefore, this section includes configuration of only those parameters necessary to allow the Access Control Server to be recognized and communicate on the network.

Note: *See Appendix A in the ProCurve Secure Access 700wl Series Management and Configuration Guide for full documentation of the commands available from the CLI.*

Connecting a Serial Console

To use the CLI, you must first connect a null modem serial cable from the serial port male DB-9 connector on the Access Control Server to a serial console. (Figure 3-1).

Figure 3-1. Connecting an Access Control Server to a Serial Console

Use a craft terminal or a computer with a terminal emulation application to access the CLI. You will need a serial cable with DB-9 female connectors on both ends to connect to the Access Control Server. A serial crossover cable with DB-9 female connectors is included in the accessory kit shipped with the unit. See Appendix D, "Cable and Connector Specifications" for the pinout specifications for this connector.

Configure the terminal session on your management computer as follows:

- Baud rate: 9600
- Data Bits: 8
- Parity: None
- Stop bits: 1
- Flow Control: None

Issuing Network Setup Commands from the Serial Console

After you have connected the serial console, follow these steps to configure the Access Control Server network parameters. These instructions assume you have not connected the unit to the network.

Step 1. Power up the Access Control Server. You will see a series of messages on the terminal emulator as the system boots and initializes itself.

At the end of the boot and initialization sequence you will see a prompt:

```
Serial Console
login:
```

Step 2. At the login prompt, enter *admin* as the login and then enter *admin* as the password.

```
login:admin
Password: xxxxx
```

The system then displays the command prompt:

```
HP ProCurve Access Control Server 700wl Series #<MAC address>
HP 700wl Series@[0.0.0.0]:
```

Step 3. To configure the system with a static IP address, enter the following commands:

`set ip <ip address> <netmask>`

`<ip address>` is the IP address you want to assign to the Access Control Server. Make sure you assign an IP address that is valid for use as a device address. For example, IP addresses ending in .0 (xxx.xxx.xxx.0) are normally used as broadcast addresses and should not be used as a device address.

`<netmask>` is the subnet mask that defines the subnet address range for the Access Control Server. It must be entered in the format xxx.xxx.xxx.xxx — for example, 255.255.255.0.

`set hostname <fully qualified hostname>`

The hostname must be a valid, fully qualified name that correctly resolves to the IP address you assign to this Access Control Server. This parameter is optional.

`set gateway <ip address>`

`<ip address>` is the address of the default router.

`set dns <primary dns ip address> <secondary dns ip address>`

The two DNS IP addresses are the addresses of your primary and secondary DNS servers. The secondary IP address is optional.

Step 4. Change the administrator login and password by entering the following command:

`set admin <login-name> <password> <password>`

You must enter the password twice.

The built-in administrator logon cannot be deleted.

Step 5. Set the shared secret the Access Controller Modules will use to validate themselves to the Access Control Server as follows:

`set sharedsecret <secret> <secret>`

You must enter the shared secret twice.

Step 6. Connect the Access Control Server Network Uplink port to your network (Figure 3-2).

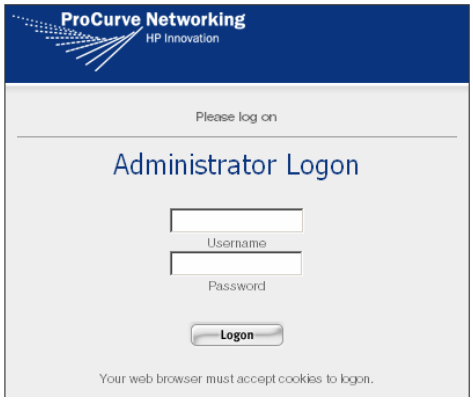
Figure 3-2. Connecting the Access Control Server to the Network

Step 7. Verify that you can access the Administrative Console from a browser running on a computer system connected to your network by entering the IP address of the unit:

```
http://<ip address>
```

The Administrator Logon page should appear (see Figure 3-3).

Figure 3-3. Administrator Logon



Step 8. Log on using the username and password you set in Step 4.

Step 9. You can now use the browser-based Administrative Console to complete the configuration of other settings such as advanced network features, session logging, SNMP management, the HTTP proxy feature, Wireless Data Privacy settings, and setting up authentication and access policies for client network access. For example, see Step 18 on page 3-13 in the section"Initial Configuration Using the Administrative Console" for information on setting the system date, time and time zone.

See the *ProCurve Secure Access 700wl Series Management and Configuration Guide* for detailed information on the features of the Administrative Console.

Connecting Using SSH

To use SSH to access the CLI, you must first connect an Ethernet cable from the uplink port on the Access Control Server to the network. (Figure 3-2). The 700wl Series system supports SecureCRT 4.05 with the Auto Detect or Standard SSH server options.

Issuing Network Setup Commands Using SSH

After you have connected the Access Control Server to the network, follow these steps to configure the Access Control Server network shared secret. These instructions assume you have used DHCP to obtain the IP address and other network parameters depending on how you have configured your DHCP server. The Access Control Server ships configured by default to obtain its IP address and other information from a DHCP server.

Step 1. Power up the Access Control Server. After the Access Control Server has completed its initialization, start an SSH tunnel using the IP address displayed in the LCD panel and *admin* as the login.

Step 2. You will be prompted to enter the password, enter *admin* as the initial password.

```
Password: xxxxx
```

The system then displays the command prompt:

```
HP ProCurve Access Control Server 700wl Series #<MAC address>
HP 700wl Series@[0.0.0.0]:
```

Note: *The IP address of the Access Control Server will be reflected in the prompt instead of the 0.0.0.0 address.*

Step 3. Change the administrator login and password by entering the following command:

```
set admin <login-name> <password> <password>
```

You must enter the password twice. The built-in administrator logon cannot be deleted.

Step 4. Set the shared secret the Access Controller Modules will use to validate themselves to the Access Control Server as follows:

```
set sharedsecret <secret> <secret>
```

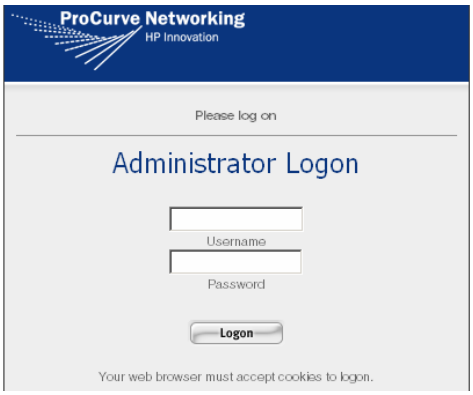
You must enter the shared secret twice.

Step 5. Verify that you can access the Administrative Console from a browser program running on a computer connected to your network by entering the IP address of the unit:

```
http://<ip address>
```

The Administrator Logon page should appear (see Figure 3-4).

Figure 3-4. Administrator Logon



Step 6. Log on using the username and password you set in Step 3.

Step 7. You can now use the browser-based Administrative Console to complete the configuration of other settings such as advanced network features, session logging, SNMP management, the HTTP proxy feature, Wireless Data Privacy settings, and setting up authentication and access policies for client network access.

For example, see Step 18 on page 3-13 in the section “Initial Configuration Using the Administrative Console” for information on setting the system date, time and time zone.

See the *ProCurve Secure Access 700wl Series Management and Configuration Guide* for detailed information on the features of the Administrative Console.

Initial Configuration Using the Administrative Console

If you want to perform network installation of your Access Control Server using the browser-based Administrative Console, you must connect to the Access Control Server over the network. This requires that you know the IP address (or valid hostname) of your Access Control Server. Since the Access Control Server by default requests an IP address from a DHCP server, you can use the IP address assigned by the DHCP server to connect to the Administrative Console.

Before you connect your Access Control Server to the network, you can configure the DHCP server to provide a fixed IP address to the Access Control Server. The DHCP server can also provide the netmask, default gateway (router) IP address, and primary and secondary DNS IP addresses. You will only need to change the administrator user ID and password (strongly recommended) and configure the shared secret that enables Access Controller Modules to communicate with the Access Control Server.

If you cannot or do not wish to configure your DHCP server to provide a known address, then in order to connect to the Access Control Server you must determine the IP address supplied by DHCP. The easiest way to do this is by looking at the LCD display on the Access Control Server. The LCD alternates the display of the IP address with the display of the date/time and software version number.

If you do not have access to the Access Control Server itself, you can find the IP address by examining the logs on your DHCP server to determine which address was given to the Access Control Server. An alternate method is to connect a serial console as described in "Initial Configuration Using the CLI", and note the IP address that is contained as part of the CLI prompt.

To perform the initial configuration using the Administrative Console, do the following:

Step 1. Connect the Access Control Server Network Uplink port to your network (Figure 3-2).

Step 2. Point a web browser to the Access Control Server by entering a URL of the form:

`http://<ip address>`

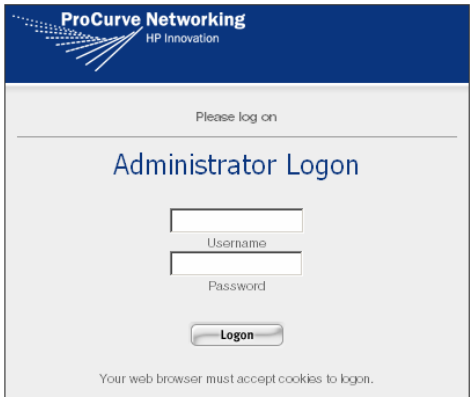
where `<ip address>` is the address assigned to the Access Control Server, or

`http://<fully-qualified hostname>`

if your DNS server is set to resolve the hostname to the IP address provided by your DHCP server.

The Administrator Logon page appears (Figure 3-5).

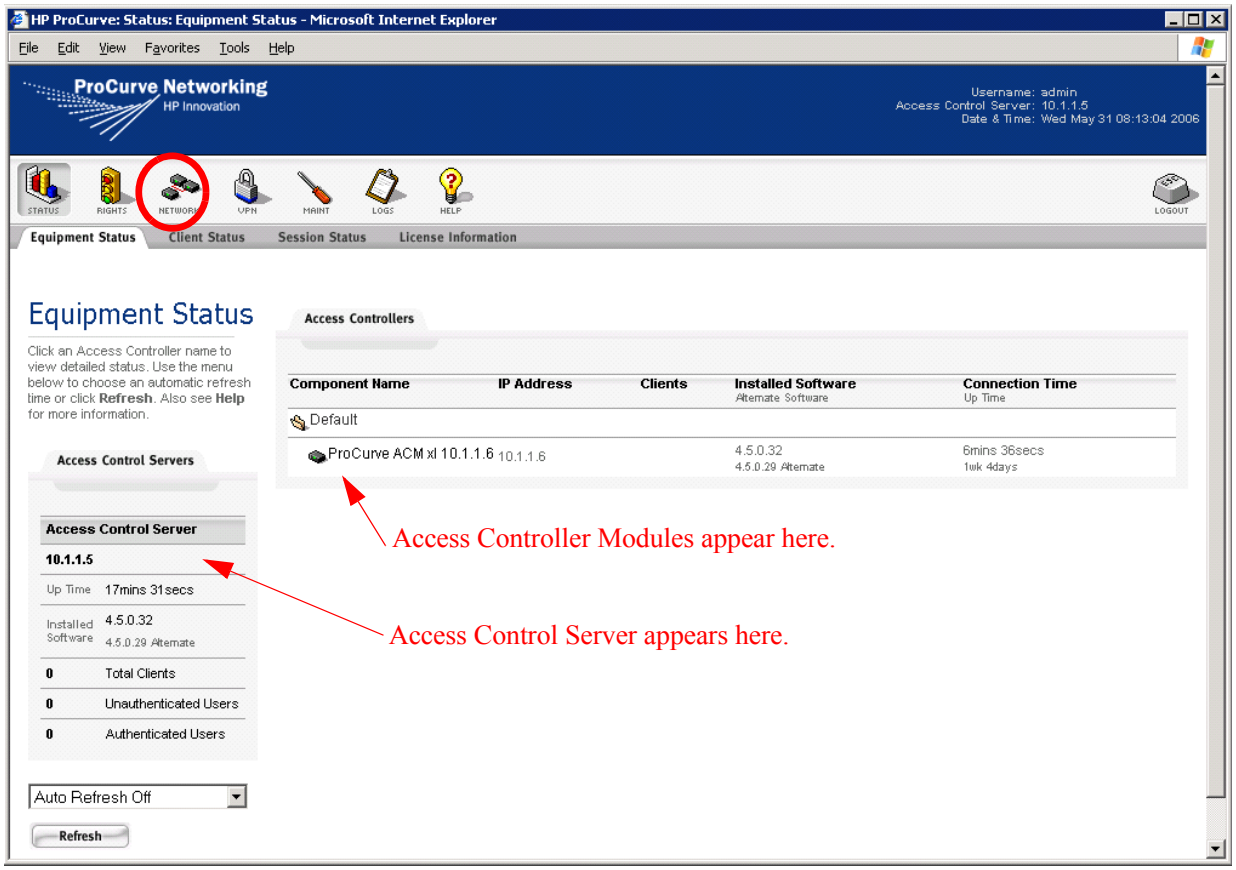
Figure 3-5. Administrator Logon



Step 3. For both the username and password, enter *admin*, and click **Logon**. The initial Administrative Console page appears, as shown in Figure 3-6.

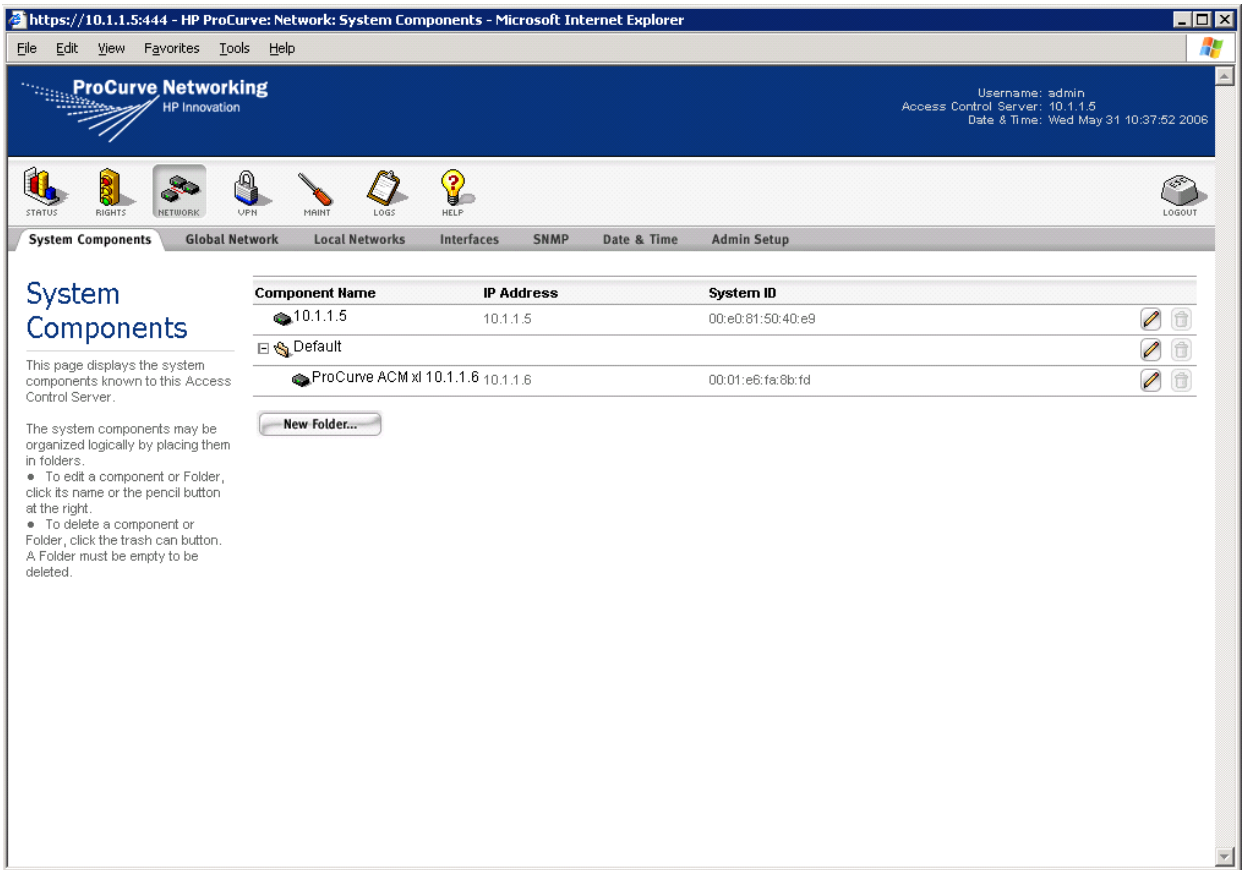
The Access Control Server will be displayed in the left panel of the page.

Figure 3-6. Initial Administrative Console Page (Equipment Status)



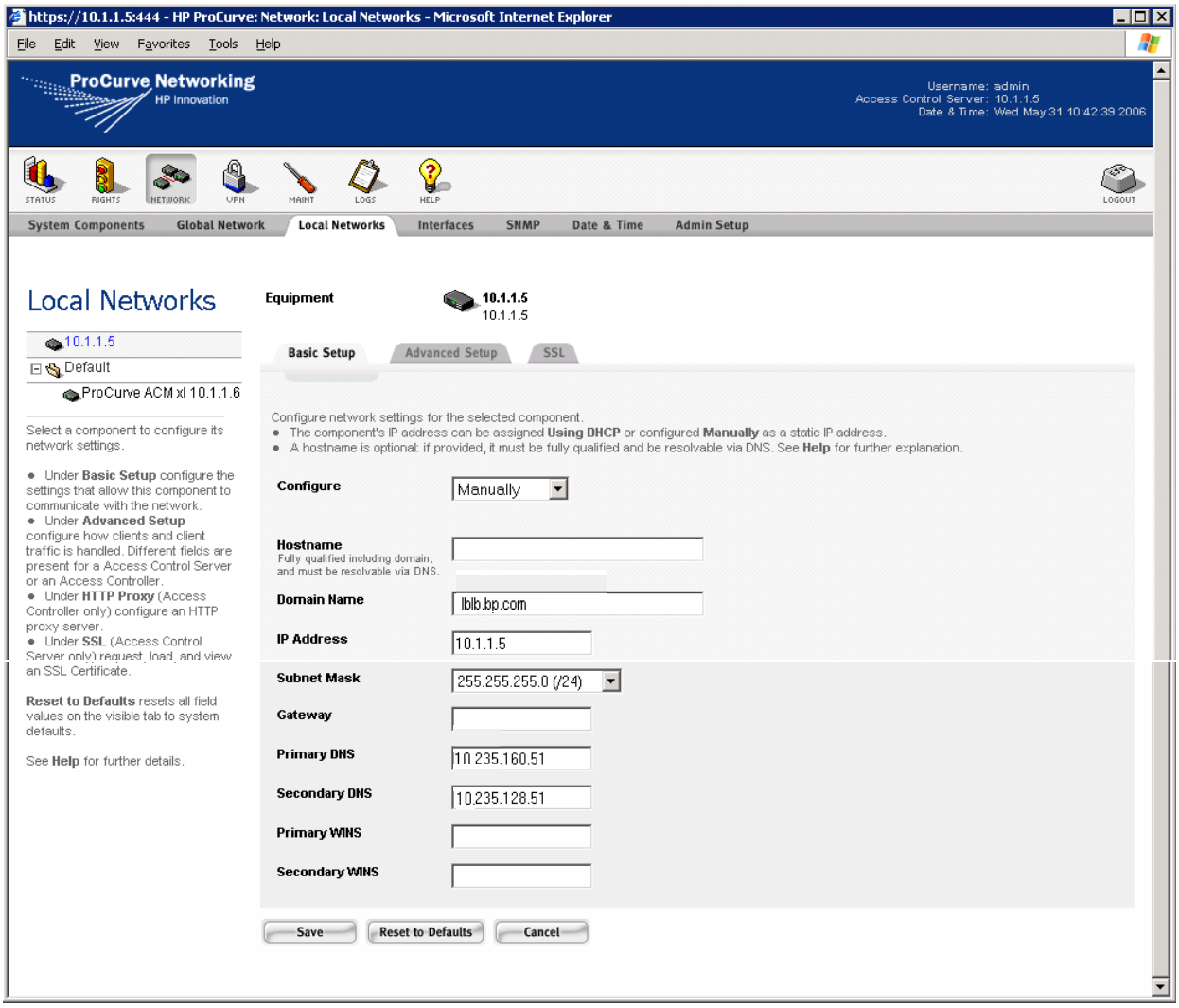
Step 4. Click the **NETWORK** button. The System Components page appears, as shown in Figure 3-7.

Figure 3-7. System Components Page



Step 5. Click the **Local Networks** tab below the navigation bar. This brings up the Local Networks page (see Figure 3-8).

Figure 3-8. Local Networks Page



Step 6. If appropriate, enter a fully-qualified hostname for this Access Control Server.

Step 7. Enter the name of the domain in which this Access Control Server resides.

Step 8. To use DHCP to obtain an IP address for this unit, select **Using DHCP** from the **Configure** drop-down list.

When **Configure** is set to **Using DHCP**, you cannot change the IP Address, Subnet Mask, or Gateway. You can change the DNS and WINS server IP addresses, if necessary.

If your DHCP server is configured appropriately, the IP address, subnet mask (netmask), gateway, and primary and secondary DNS addresses will already be filled in.

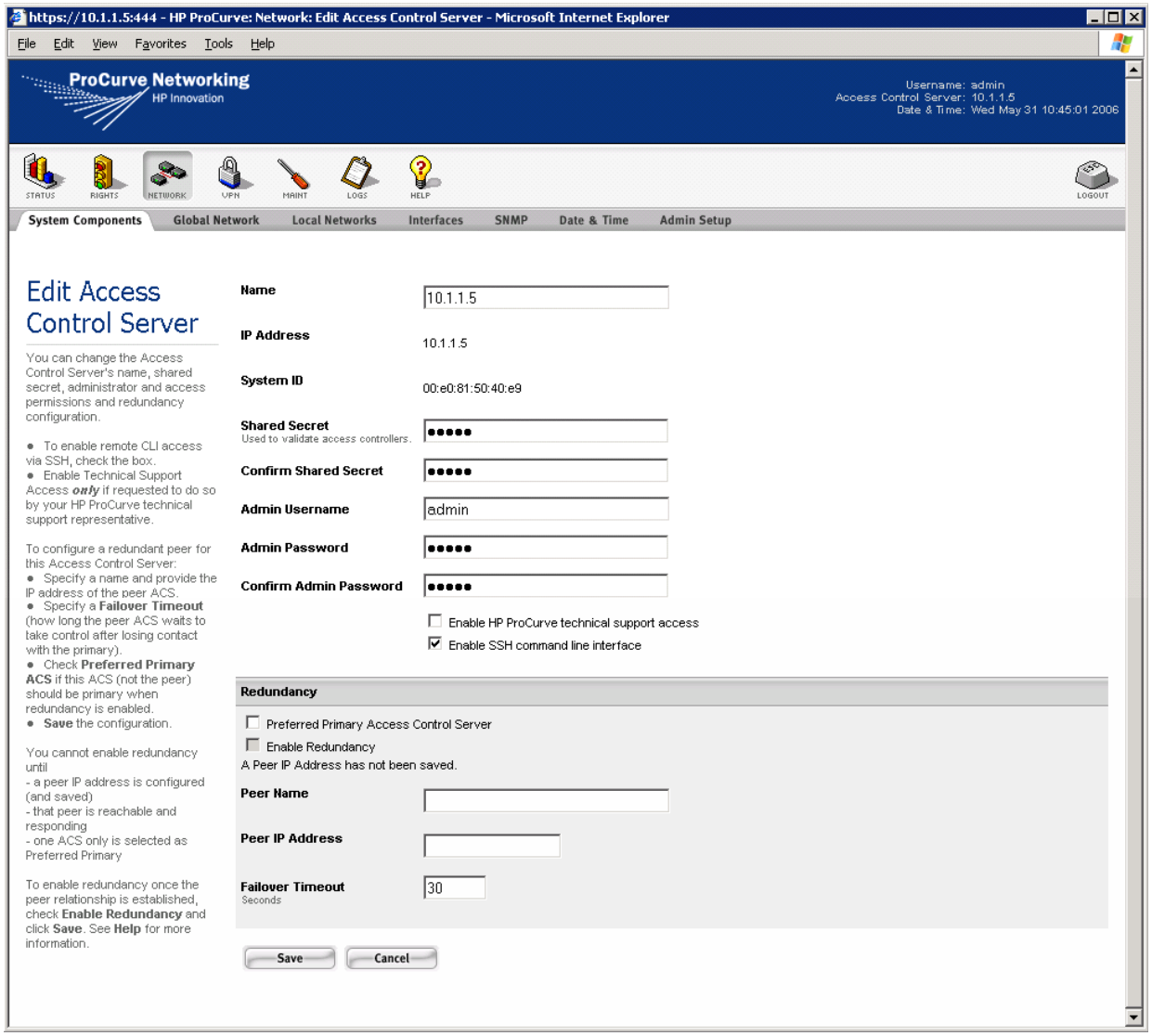
Step 9. To set a static IP address, select **Manually** from the **Configure** drop-down list, then type the IP Address and other values, as appropriate, in the fields on this page.

Step 10. Click **Save**.

Step 11. Return to the System Component page (Figure 3-7), and in the **Component Name** column, click the IP address link for the Access Control Server.

The Edit Access Control Server page appears (Figure 3-9).

Figure 3-9. Edit Access Control Server Page



Step 12. To give the Access Control Server a descriptive name, replace the IP address in the **Name** field with the name you want to use.

Step 13. In the **Shared Secret** field, type the shared secret that Access Controller Modules will use to validate themselves to this Access Control Server.

Step 14. Retype the shared secret in the **Confirm Shared Secret** field.

Step 15. Change the administrator username and password by typing a new username and password, and confirming the new password in the appropriate fields.

Step 16. If you want to allow remote access to the CLI on this unit via a remote SSH client, leave the check in the **Enable SSH command line interface** box (this is the default). To disable remote access, uncheck the box.

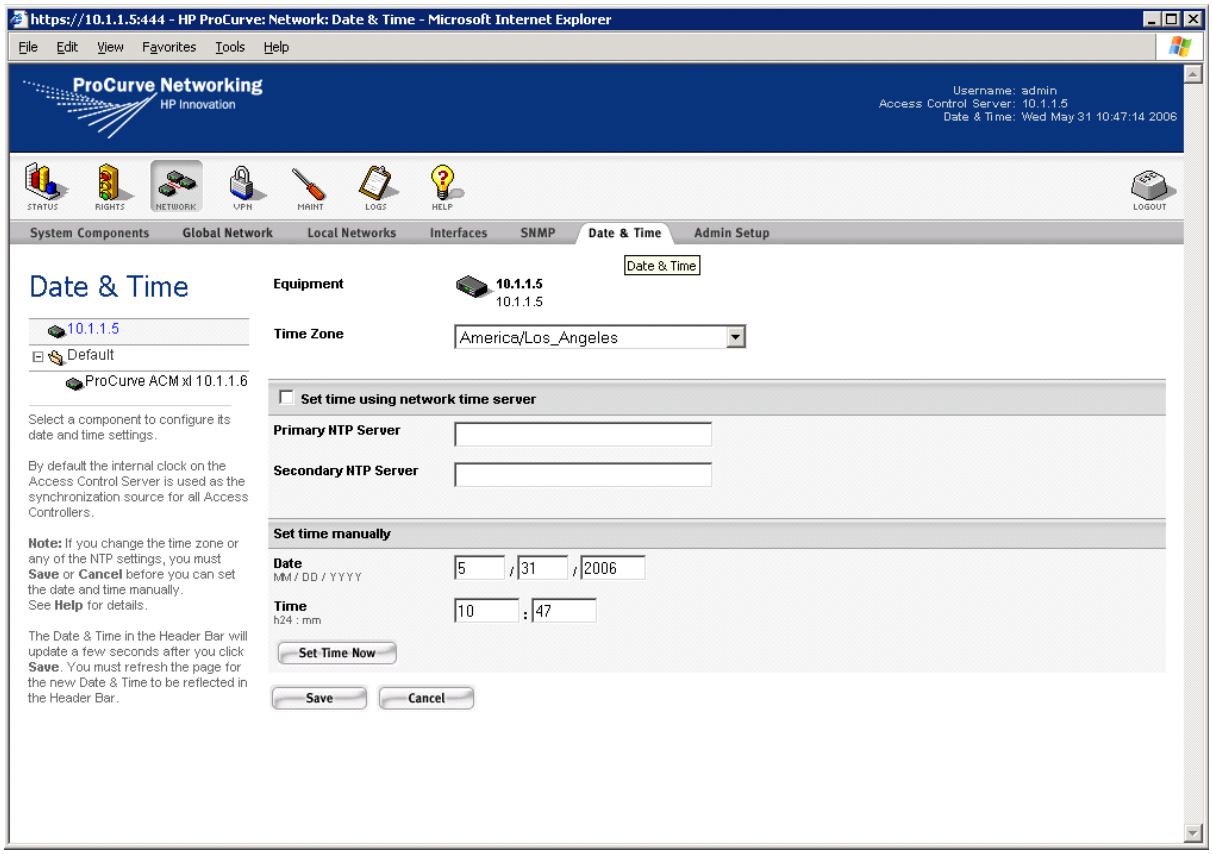
Enable technical support access only if requested to do so by an authorized ProCurve support engineer.

Step 17. Click **Save**.

Note: *You must enter and confirm a shared secret—the 700wl Series system does not let you save this configuration without one.*

Step 18. To set the system date and time, and time zone if necessary, click the **Date & Time** tab. The Date & Time page appears (see Figure 3-10).

Figure 3-10. Date & Time Page



Step 19. To set the time zone, select the appropriate setting from the **Time Zone** drop-down list.

Step 20. To configure an NTP server, click the **Set time using network time server** check box, and type the IP address of a primary and (optionally) a secondary NTP server.

Step 21. Click **Save**.

Step 22. To set the date and time immediately, select the appropriate values and click **Set Time Now**.

Note: *You cannot set the time zone or NTP server in the same operation as manually setting the time.*

Note: *If you are using NTP to get the date and time, the underlying GMT/UTC time difference between the Access Control Server and its associated Access Controller Modules should be less than 900 seconds for the clocks to be synchronized. A variance in (GMT/UTC) time between the Access Control Server and the Access Controller Module clocks greater than 900 seconds generally cannot be synchronized by NTP without rebooting the Access Controller Module. Having Access Controller Module and Access Control Server clocks start off with a high initial variance is not recommended.*

There may be a delay of several minutes before all 700wl Series system units are initially synchronized.

This completes the basic configuration of an Access Control Server. You can now configure Access Controller Modules to communicate with this Access Control Server using the IP address and shared secret set in the previous steps.

To complete the configuration of the 700wl Series system, you will need to configure other settings such as advanced network features, session logging, SNMP management, the HTTP proxy feature, wireless data privacy settings, and set up authentication and access policies for client network access.

See the *ProCurve Secure Access 700wl Series Management and Configuration Guide* for detailed information on the features of the Administrative Console.

Access Controller Module Setup

Configuration of an Access Controller Module is done primarily through the Administrative Console running on the Access Control Server. However, in order for an Access Controller Module to be recognized by the Access Control Server, the Access Controller Module must be configured with the Access Control Server's IP address and shared secret. Until this is done, the Access Control Server and Access Controller Module will not be able to communicate. Therefore, the initial configuration must be done through the CLI, as explained in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*. Because an Access Controller Module does not provide its own browser-based Administrative Console, it is managed through the Access Control Server.

IP Addressing Considerations

An Access Controller Module requires a stable IP address so that the Access Control Server can readily identify and communicate with it. Set up a static IP address for an Access Controller Module using the CLI, as explained in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*. A static IP address must be reconfigured after a factory reset.

To install an Access Controller Module onto a network, you need the information shown in Table 3-2.

Table 3-2. Installation Parameters

Parameter	Description
Access Controller Module IP address	This is assigned as a static IP address.
Subnet mask (Netmask)	Defines the Access Control Server's subnet range. Can be obtained via DHCP. Example: 255.255.255.0.
Gateway (default router) IP address	Defines the default router. Can be obtained via DHCP.
Primary and secondary DNS server IP addresses	Defines the location of the primary and backup DNS servers. Can be obtained via DHCP.
Access Control Server IP Address	The IP address of the Access Control Server that will manage this Access Controller Module. In an environment with redundant Access Control Servers, this must be the IP address of the Primary Access Control Server.
Access Control Server shared secret	Secret key used to establish trust relationship between the Access Control Server and an Access Controller Module. Alphanumeric string. This must match exactly the shared secret configured on the Access Control Server.

Initial Configuration Using the CLI

Because an Access Controller Module does not provide its own browser-based Administrative Console, the initial system configuration must be done using the CLI, as explained in the *ProCurve Series 5300xl Switches Installation and Getting Started Guide*.

Note: *See Appendix A in the "ProCurve Secure Access 700wl Series Management and Configuration Guide" for a complete list of CLI commands.*

Completing the Installation

You can complete the configuration of your Access Controller Module through the Administrative Console.

Note: *Beyond the basic setup, all Access Controller Module configuration must be done through the Access Control Server Administrative Console.*

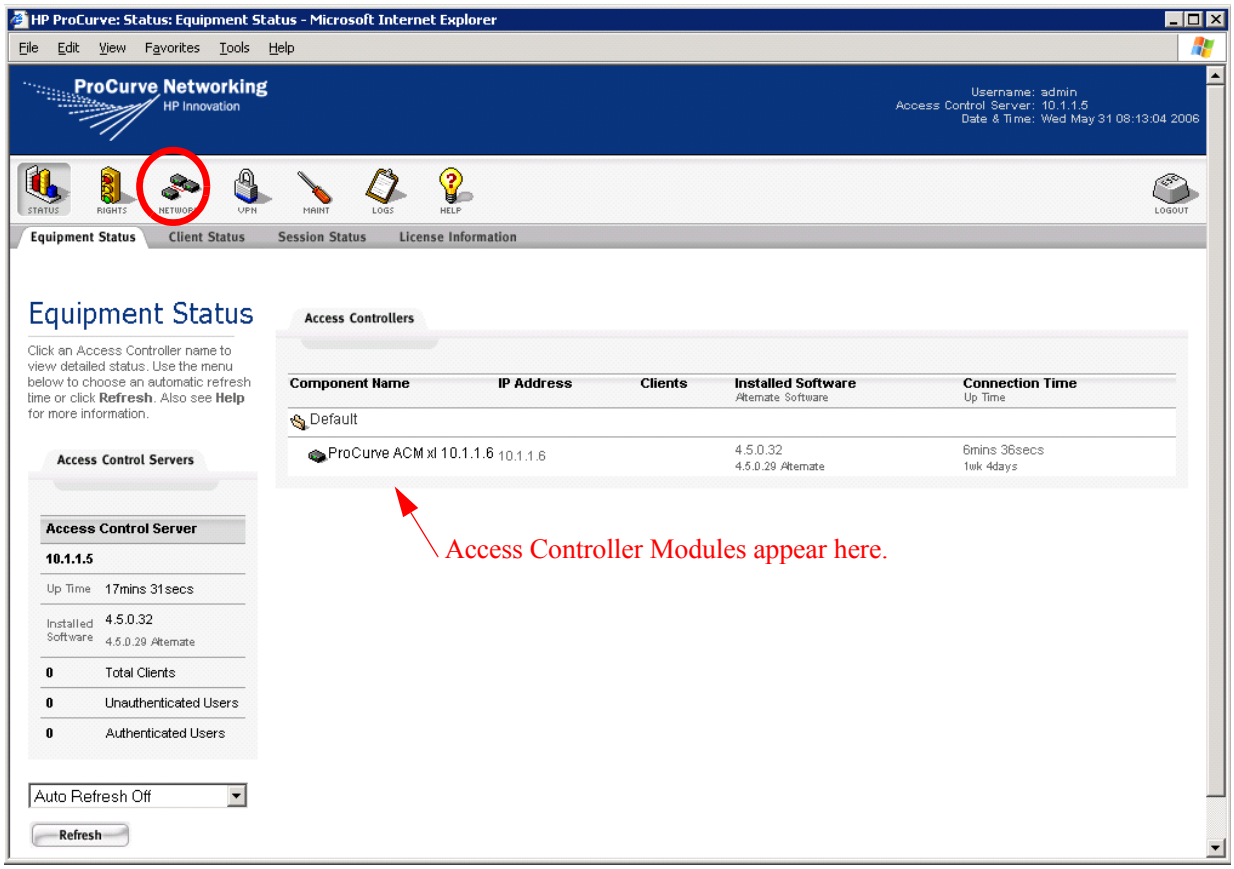
Once the Access Controller Module is initially configured using the CLI, the Access Controller Module should initiate communication with the Access Control Server. Once this has occurred, the Access Controller Module should appear as a system component in the Access Control Server's Administrative Console.

Note: *You can access online Help from within the Administrative Console at any time by clicking the* **HELP** *button. This displays a separate window containing Help about the page you are viewing.*

Step 1. Point your browser to the IP address of the Access Control Server, and log on to the Administrative Console.

Step 2. When the initial Administrative Console page appears (the Equipment Status page shown in Figure 3-11), verify that this Access Controller Module appears in the list of Access Controller Modules.

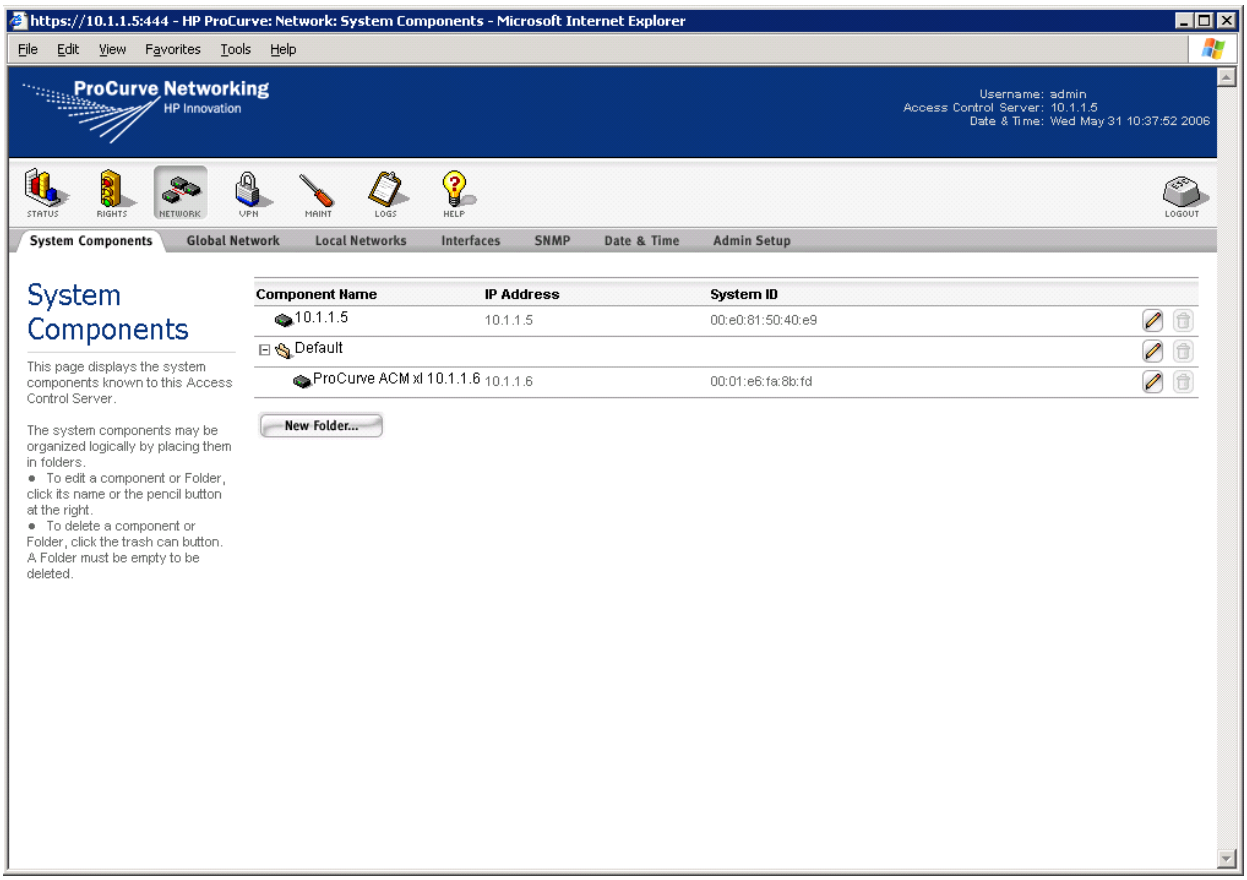
Figure 3-11. Initial Administrative Console Page (Equipment Status)



Step 3. You can now use the Administrative Console to complete the Access Controller Module configuration, such as setting the system time and date, and configuring other necessary settings:

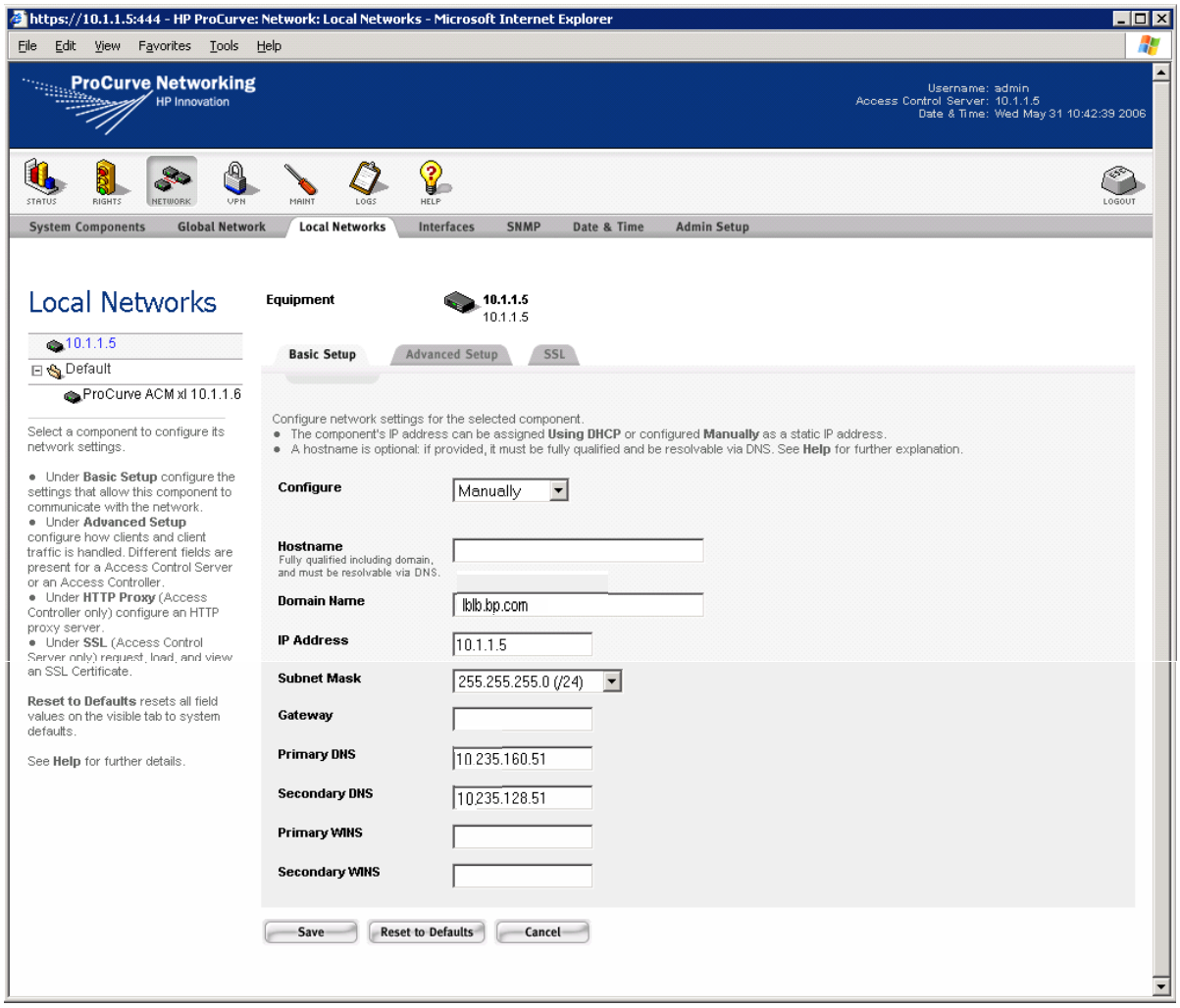
a. Click the **NETWORK** button. The System Components page appears, as shown in Figure 3-12.

Figure 3-12. System Components Page



b. Click the **Local Networks** tab below the Navigation bar. This brings up the Local Networks page (see Figure 3-13).

Figure 3-13. Local Networks Page



c. From the System Components List in the left panel under the Local Networks heading, select the Access Controller Module you just installed. The **Basic Setup** page is displayed.

d. Verify that the information for the Access Controller Module is correct, or enter additional settings as necessary. From the **Advanced Setup** sub-tab you can configure Bridging, IP broadcast forwarding, and client polling; from the **SSL** sub-tab you can configure the address of a proxy server for HTTP requests.

e. Click **Save** to save any changes you have made to any of the sub-tabs on this page.

Step 4. Complete the installation by connecting one or more wireless access points to the Access Controller Module ports on the 5300xl switch, using standard (either crossover or straight-through) 10Base-T/100Base-TX Ethernet cables.

See the *ProCurve Secure Access 700wl Series Management and Configuration Guide* for detailed information on the features of the Administrative Console.

See the next chapter, “Basic Configuration” for instructions on configuring your 700wl Series system with a demonstration user account, setting up wireless data privacy using PPTP, and allowing a user to connect to the system as the demonstration user.

BASIC CONFIGURATION 4

This chapter will help you accomplish the following:

- Create a demonstration user account that can log on and be authenticated through the 700wl Series system built-in user database
- Configure the 700wl Series system as a VPN gateway using PPTP encryption
- Configure a Windows client system to establish a network connection using the PPTP protocol
- Connect to the 700wl Series system as a client using the PPTP protocol, and authenticate the demonstration user against the built-in database
- (Optional) Configure the 700wl Series system to use a RADIUS server for user authentication, and log on a user that can be authenticated by the RADIUS server.

This chapter includes the following sections:

Procedure Overview

This chapter assumes that you have installed an Access Control Server and an Access Controller Module and have performed the basic configuration following the instructions in the previous chapters. It assumes you have verified that the Access Controller Module appears in the Access Control Server's Administrative Console.

To accomplish the objectives of this chapter, the instructions lead you through the following steps:

Step 1. Create a demonstration user account (username and password) in the Rights Manager's built-in database.

Step 2. Directly connect a Windows client to the 700wl Series system through an Access Controller Module downlink port.

Step 3. Log the user on using the default browser-based logon page.

The user should have full IP access to the network. This shows that the user can successfully connect to the system and gain network access.

Step 4. Configure the 700wl Series system to act as a VPN gateway using PPTP encryption.

Step 5. Configure the Windows client to establish a PPTP connection with the 700wl Series system.

Step 6. Connect the client to the 700wl Series system using the PPTP connection process.

The user should have full IP access to the network. Again, this shows that the client can connect to the system and gain access to the network.

Step 7. (Optional) Configure the 700wl Series system to use a RADIUS server for user authentication.

Step 8. (Optional) Verify that the RADIUS Authentication Service is set up correctly using the **Trace Transaction** feature.

Step 9. (Optional) Log on using a user account known to the RADIUS authentication server, and verify network access.

The following procedures can be performed using an Access Control Server.

Preparation

Before you begin the system configuration process, review the following list to make sure you have the required components available and configured as specified:

- A management workstation running the Windows IE 6 or Netscape 7.1 browser, to be used to perform configuration tasks on the 700wl Series system.
- One Windows-based PC or Laptop preset to obtain an IP address automatically (via DHCP). This system will be used to function as a client once the configuration is complete.
- One standard Ethernet cable to connect the PC/laptop to an Access Controller Module downlink port.
- (Optional) One RADIUS server. You must configure the RADIUS server to accept authentication requests from the Access Control Server, which acts as a RADIUS client. A user account must be created in the RADIUS database. Please consult the *ProCurve Secure Access 700wl Series Management and Configuration Guide* for more information on other supported external authentication servers.

Note: *If you want to use the same PC or laptop as both the management station and a demonstration client, you will need to alternately connect it either to the network (for use as a management station) or to an Access Controller Module downlink port (for use as a client). You will also need to force a renewal of your IP configuration each time you move from one connection to the other.*

Creating a User Account in the Built-In Database

In order for a user to log in, the 700wl Series system must be able to authenticate the user through some authentication service. The simplest form of authentication service is the built-in database included in the 700wl Series system Rights Manager. In this step, you add a user to the built-in database so you can log on to your network as that user through the 700wl Series system.

Step 1. Point your browser to the IP address or hostname of your Access Control Server, and log on to the Administrative Console.

Step 2. From the initial page, click the **RIGHTS** button to go to the Rights Manager.

The Rights Setup page appears.

Step 3. Click the **Identity Profiles** tab below the Navigation bar.

The Identity Profiles page appears, showing a list of the currently-defined Identity Profiles.

Step 4. Click the **Users** link in the left panel of the page.

The Users page appears, with an empty Users list.

Step 5. Click the **New User** button.

The New User page appears.

Step 6. Enter the following information:

- **Name:** A descriptive name, such as *Demonstration User*. This is **not** the logon name.
- **Username/MAC Address**: *Demo* (or a different user name). This is the logon name. Do **not** check the MAC Address User check box.
- **Password**: *password* (or any password you like)
  Confirm Password: must be the same as that entered into the first password field.

Step 7. Click **Save**.

User Authentication Through the Default Logon Page

In this step, you connect your Windows PC to an Access Controller Module downlink port and log onto your network using the username and password you added to the built-in database. If this is successful, you should be able to access the Internet and other resources on your network as normal.

Note: *If you are using the same Windows PC as a client that you have been using for configuration, and the PC's network interface is configured to use a static IP address, you must change its properties so that it will obtain an IP address automatically using DHCP.*

Step 1. Plug the Ethernet cable from your PC into one of the Access Controller downlink ports.

If you are using the same PC as both a client and a management station, you must release the existing IP configuration (in Windows) from the network interface of the PC as follows:

From the Windows **Start** menu, click **Run** then enter the command:

```
ipconfig /release
```

Step 2. Power on the PC to obtain a new IP configuration from DHCP through the Access Controller, or do the following:

From the **Start** menu, click **Run**, then enter the command:

```
ipconfig /renew
```

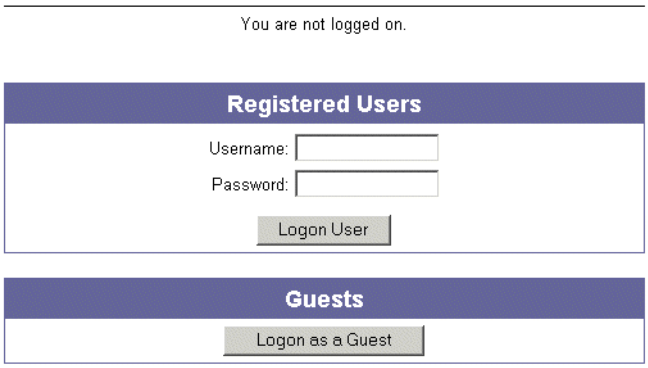
The PC should receive an IP address in the 42.x.x.x range.

Step 3. Start your web browser and go to any web site. After a moment the web browser will display the ProCurve 700wl Series Logon page (Figure 4-1).

Note: *It may be necessary to remove any proxy configuration to successfully connect to the Logon Page.*

Note: *The 700wl Series system comes with a self-signed SSL certificate. As a result, the client browser may display a security alert warning that the certificate is not from a trusted source. Click* ***Yes*** *to proceed.*

Figure 4-1. ProCurve 700wl Series User Logon Page



Step 4. Enter *demo* and *password*, or the username and password you created, in the Username and Password text boxes and click **Logon User**.

At this point, the web page you requested should appear, and you should be able to access the network normally.

To prepare for logging on again using the PPTP connection interface, log the client off the 700wl Series system, as shown in the following steps.

Step 5. Set your web browser to the URL `http://1.1.1.1`. The ProCurve Logon window appears, showing the user as logged on, and displaying a **Logoff** button at the top right of the window.

Step 6. Click the **Logoff** button to log the client off the system.

PPTP Gateway Configuration

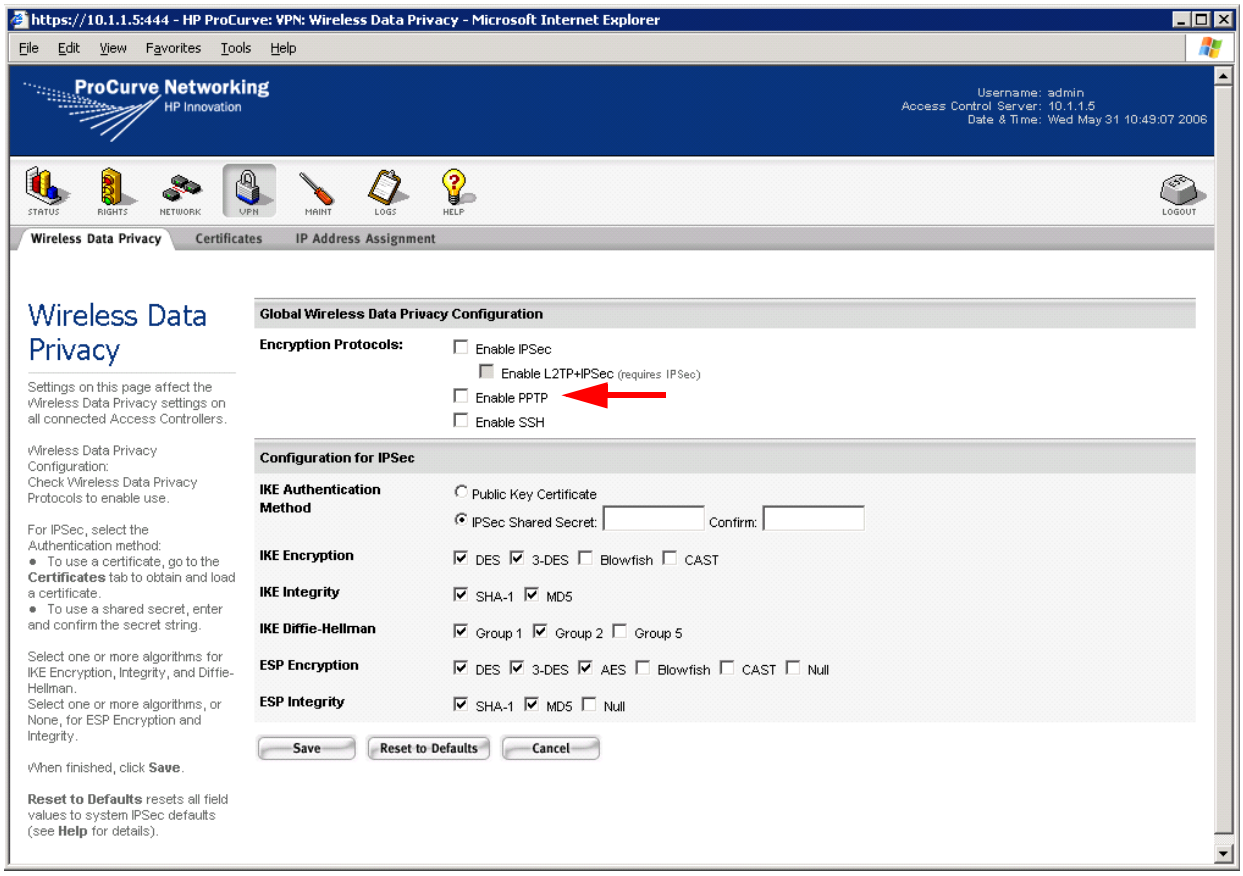
This step configures the 700wl Series system to act as a VPN termination for PPTP. After configuring the PPTP client on your PC (see “PPTP Client Configuration” on page 4-8), you should be able to logon to the network via the PPTP connection interface.

The steps below have you change the setting for the default Authenticated Access Policy so that it uses PPTP. Optionally, you can set up a new Access Policy to use PPTP. See the *ProCurve Secure Access 700wl Series Management and Configuration Guide* for further details, if needed.

Step 1. From your management station, point your browser to the IP address or hostname of your Access Control Server, and logon to the Administrative Console. The initial page of the Administrative Console appears.

Step 2. Click the **VPN** button to go to the Wireless Data Privacy configuration page (see Figure 4-2).

Figure 4-2. Enabling PPTP for the 700wl Series system



Step 3. Under **Encryption Protocols**, put a check mark in the **Enable PPTP** check box, then click **Save**.

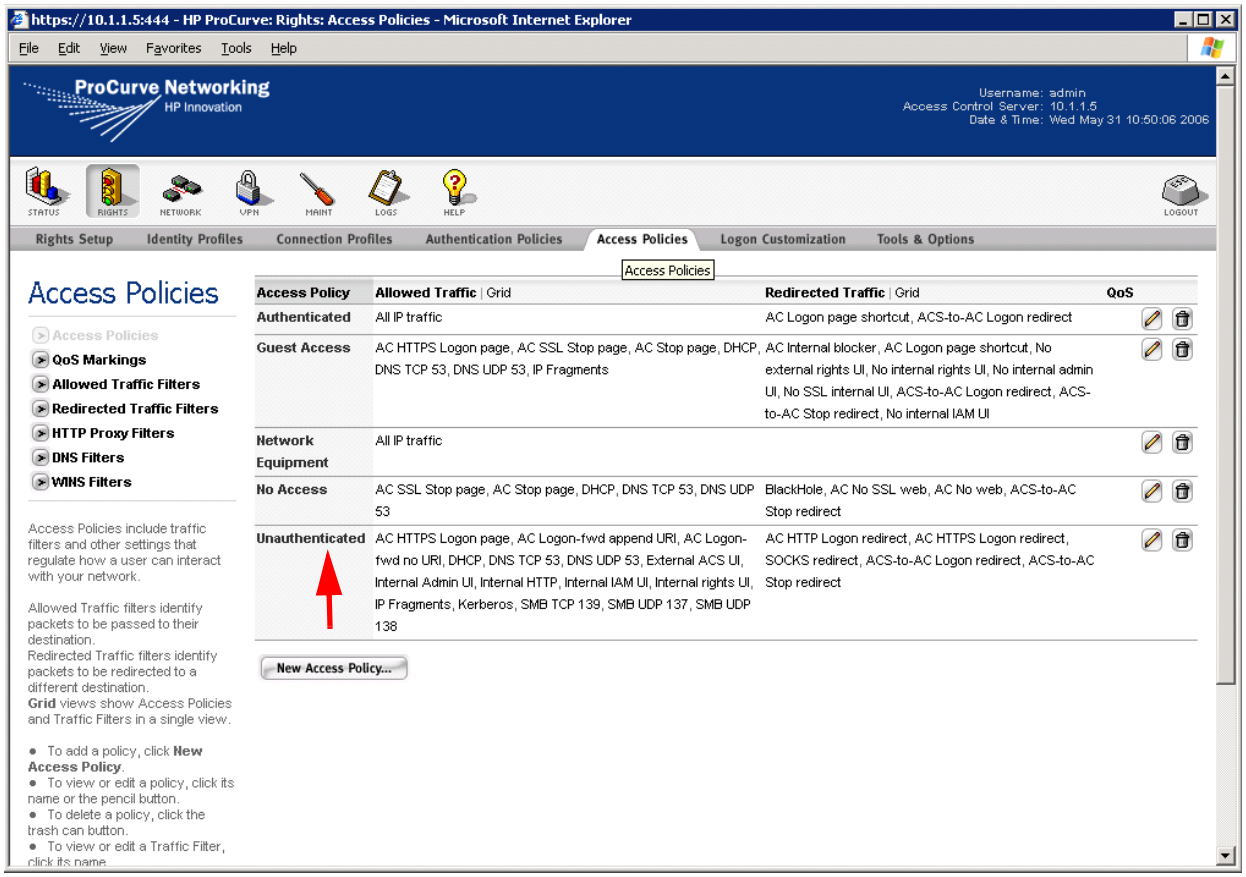
Configuring Access Policies for Encryption

The next step is to configure the appropriate Access Policies to allow the use of encryption. You must allow encryption for the "Unauthenticated" Access Policy so that an unknown client using encryption can connect to the 700wl Series system, and you must enable encryption for the relevant Access Policy that will take effect once the client has been successfully authenticated—in this case, the "Authenticated" Access Policy.

Step 1. From the Navigation toolbar, click the **RIGHTS** button to go to the Rights Manager.

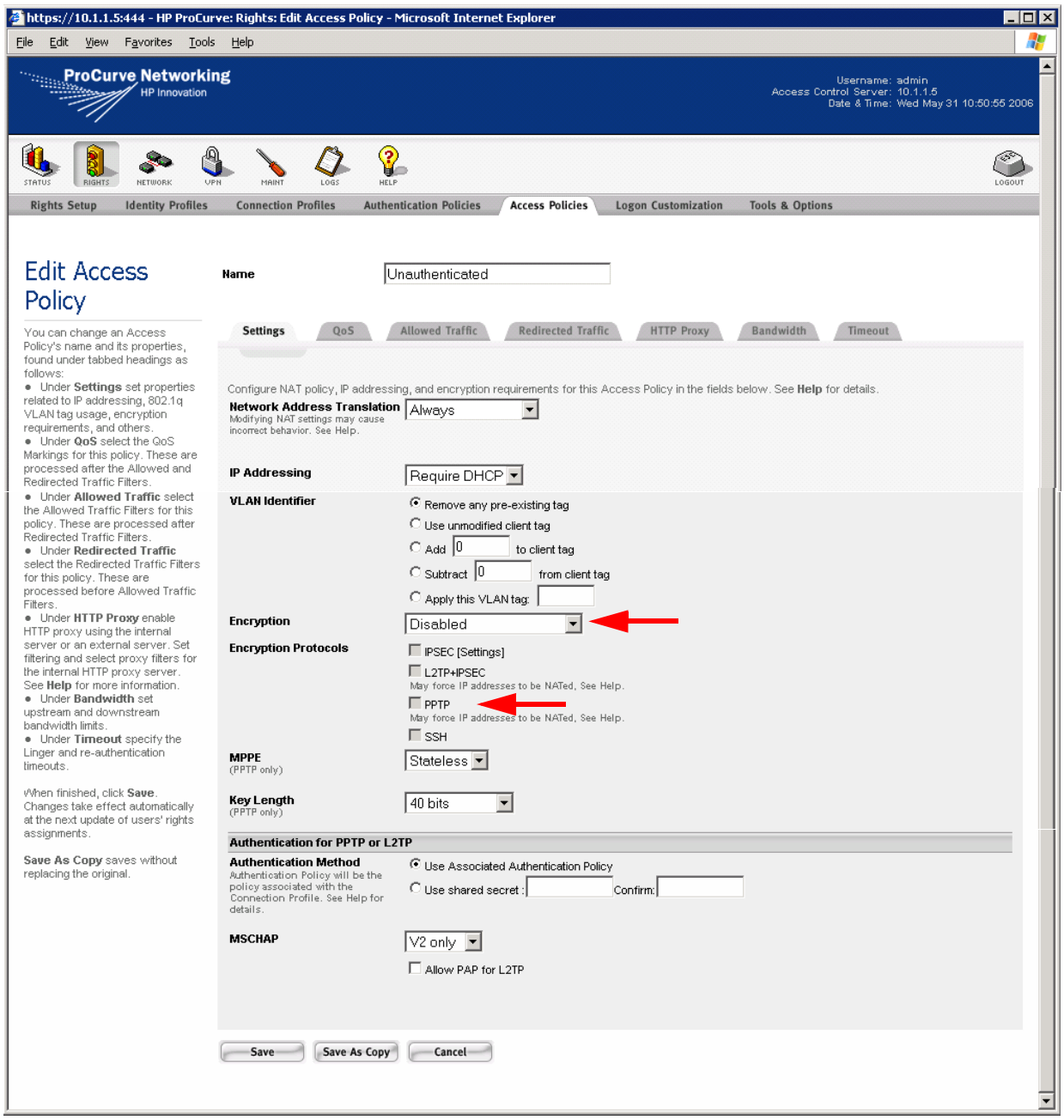
Step 2. Click the **Access Policies** tab to go to the Access Policies page, as shown in Figure 4-3.

Figure 4-3. Access Policies page



Step 3. Click on the name **Unauthenticated** in the list of Access Policies to bring up the Edit Access Policy page for the Unauthenticated Access Policy. See Figure 4-4.

Figure 4-4. Edit Unauthenticated Access Policy Page



Step 4. From the Encryption drop-down list, select **Allowed, but not required**.

Step 5. Under **Encryption Protocols**, put a check mark in the **PPTP** check box. Leave the other settings as they are.

Step 6. Click **Save** to save your changes to the Unauthenticated Access Policy. You will be returned to the Access Policies page.

Step 7. Select the Authenticated Access Policy and make the same changes (Steps 4 through 7).

Now users will be able to log on either with PPTP or without encryption. In order to use PPTP, the client must be configured to use PPTP, as described in the following section.

PPTP Client Configuration

This next set of steps configures the PPTP client on the Windows PC. These instructions are for Windows XP, but the process is similar for Windows 2000.

Step 1. Open the Network Connections window:

- Click the **Start** button and select **Control Panel**.
- From the Control Panel window, double-click **Network Connections**.

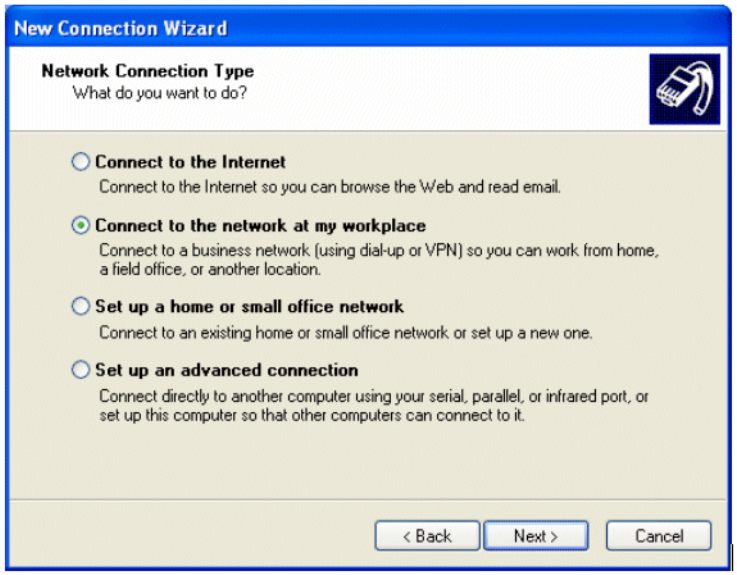
The Network Connections dialog box appears.

Step 2. Click the **New Connection Wizard** link on the Network Connections dialog box.

The New Connection Wizard window appears.

Step 3. Click **Next** to go to the Network Connection Type dialog box.

Figure 4-5. Connection Wizard—Network Connection Type



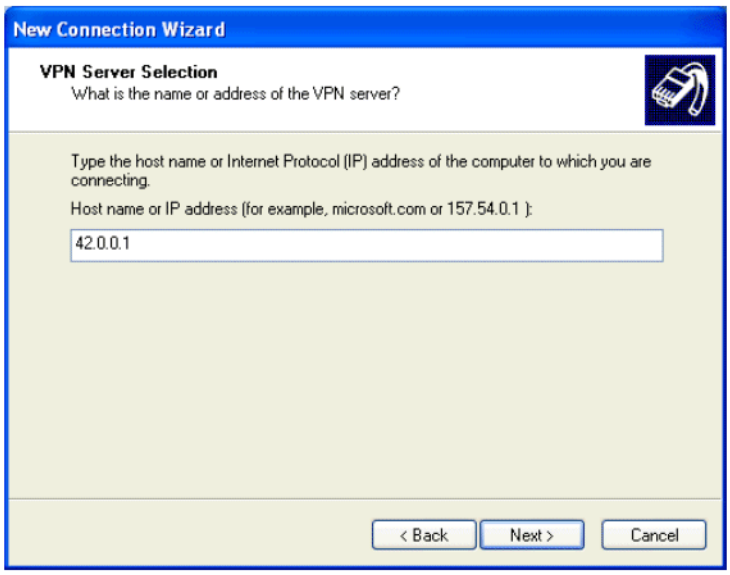
Step 4. Select the **Connect to the network at my workplace** option and then click **Next**.

Step 5. Select the **Virtual Private Network** connection option. Click **Next**.

Step 6. Enter the desired connection name in the **Company Name** text box and then click **Next**.

Step 7. You should now be at the VPN Server Selection dialog box. Enter `42.0.0.1` in the **Host name or IP address** text box and then click **Next**.

Figure 4-6. Connection Wizard—VPN Server Selection



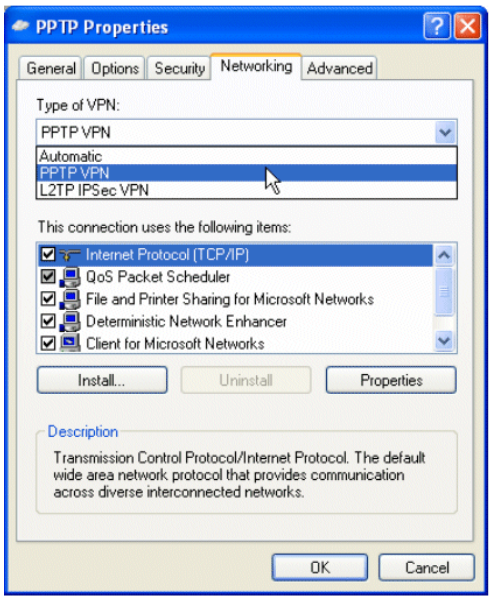
Step 8. The Completing the New Connection Wizard dialog box appears. You may choose to add a shortcut to this connection on the desktop, then click Finish

An icon representing the new connection appears in the Network Connections window under the Virtual Private Network section. In addition, the Sign-on dialog box should appear on the screen; if it does not, double-click the new connection icon.

Figure 4-7. Connection Sign-On Dialog Box

Step 9. Click **Properties** to open the connection's properties dialog box.

Figure 4-8. Connection Dialog Box—PPTP Properties



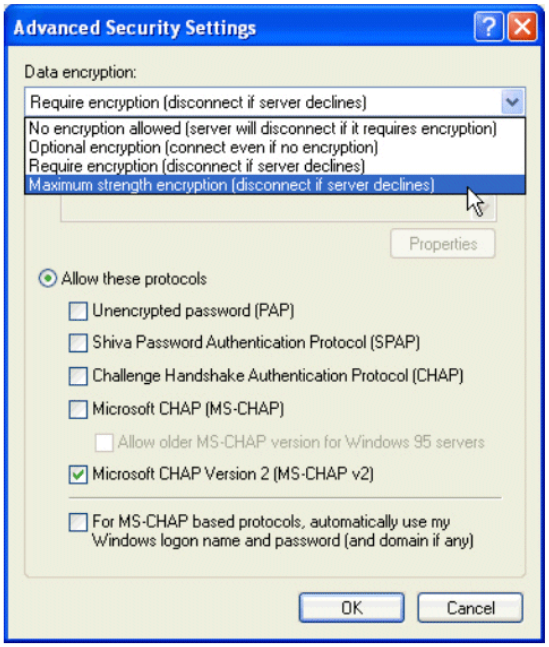
Step 10. Click the **Networking** tab to specify the type of VPN.

Step 11. Select **PPTP VPN** from the drop-down list for **Type of VPN**. Make sure that Internet Protocol (TCP/IP) is selected.

Step 12. Click the **Security** tab to customize the security protocols.

Step 13. Select **Advanced (custom settings)** on the Security tab and click **Settings**. The Advanced Security Settings dialog box appears. See Figure 4-9.

Figure 4-9. Connection Dialog Box—Advanced Security Settings



Step 14. Deselect the Microsoft CHAP (MS-CHAP) protocol option (this protocol is selected by default). Leave Microsoft CHAP Version 2 selected. Only MS-CHAP v2 is set for use with the Authenticated Access Policy.

Step 15. In the Data Encryption drop-down list, select **Maximum strength encryption (disconnect if server declines)**. This sets the length of the encryption key to 128 bits.

Step 16. Click **OK** to go back to the connection's properties dialog box.

Step 17. Click **OK** to go back to the Properties dialog box.

Step 18. Click **OK** to close the Connect dialog box.

User Authentication Via PPTP Connection

Before starting the VPN connection, make sure your system has established a network connection with the Access Control Server. You can use the `ipconfig` command to verify the IP settings or use the `ipconfig /renew` command to obtain an IP address from the Access Control Server.

Step 1. Open the PPTP connection you created in "PPTP Client Configuration" on page 4-8 by using the shortcut on your desktop or open the connection from the Network Connections dialog box in the Control Panel.

The Connect dialog box appears.

Step 2. Type *demo* and *password*, or the user name and password you created in the built-in database, in the **User name** and **Password** text boxes, and click **Connect** to connect.

You may choose to save this user name and password for future use by checking the **Save Password** check box before clicking **Connect**.

After the connection is successful, the connection icon appears in the system tray on the lower-right corner of your screen as shown in Figure 4-10.

Figure 4-10. Connection Icon

External Authentication Service Configuration

If you use an external RADIUS authentication service and your user account already exists in the RADIUS server's database, you can configure the 700wl Series system to authenticate using the RADIUS server rather than the built-in database.

Once you have successfully completed this configuration, you should be able to log on to the network through the 700wl Series system using any legitimate user name and password recognized by your RADIUS server.

Note: *Your RADIUS server must be configured to recognize the Access Control Server as a RADIUS client.*

To configure the Rights Manager to use a RADIUS server for authentication, do the following:

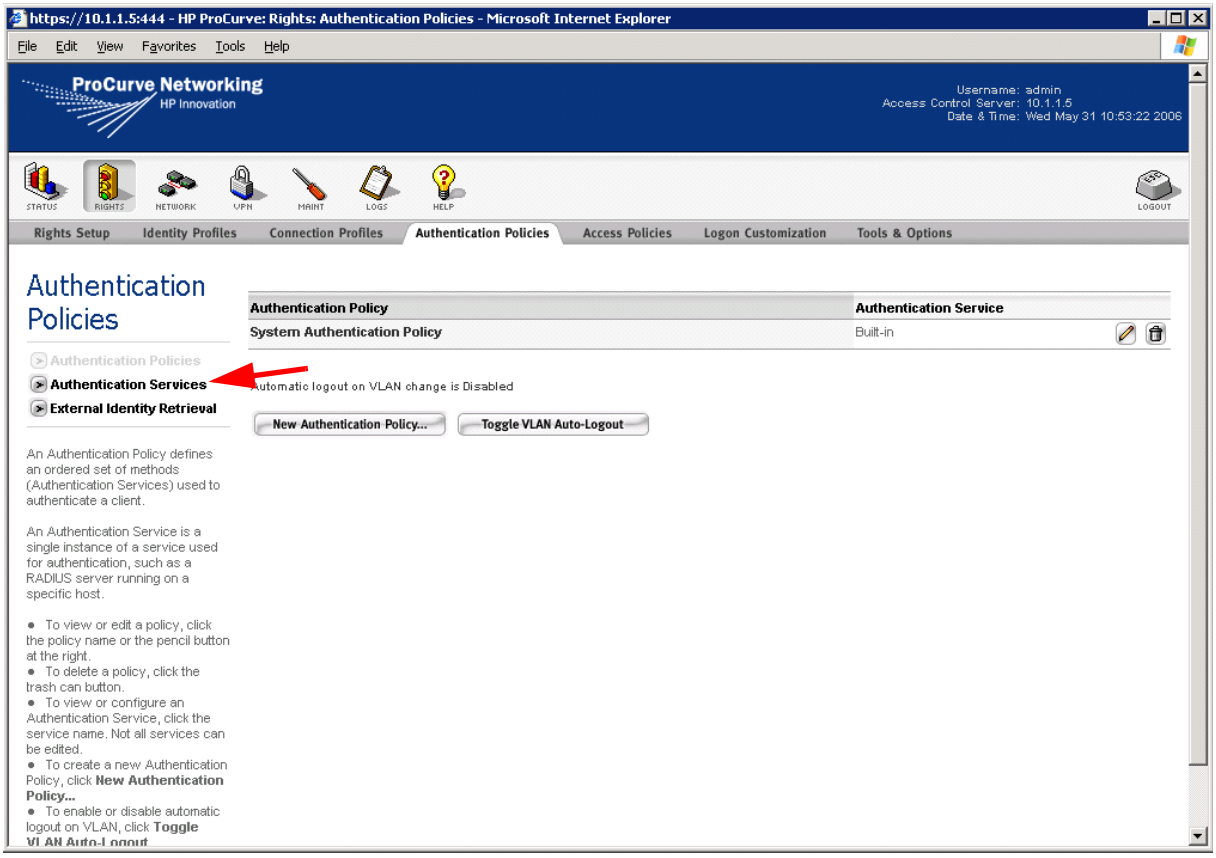
Step 1. From your management station, point your browser to the IP address or hostname of your Access Control Server, and logon to the Administrative Console.

The initial page of the Administrative Console appears.

Step 2. Click the **RIGHTS** button to go to the Rights Manager.

Step 3. Click **Authentication Policies** tab to go to the Authentication Policies page (Figure 4-11).

Figure 4-11. Authentication Policies Page

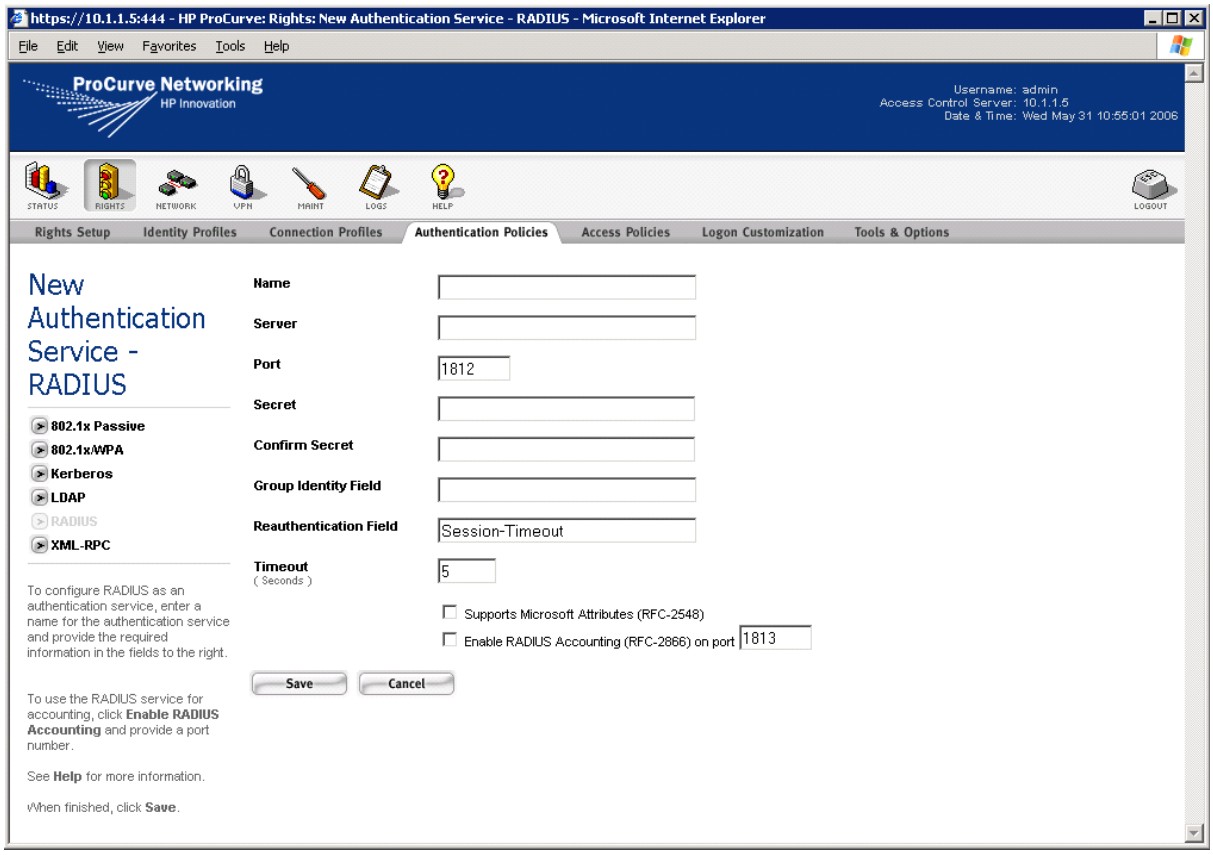


Step 4. Click the **Authentication Services** link in the left panel.
The Authentication Services page appears.

Step 5. Click **New**.
The New Authentication Service—LDAP page appears.

Step 6. Click the **RADIUS** link to display the New Authentication Service—RADIUS page (Figure 4-12).

Figure 4-12. New RADIUS Authentication Service



Step 7. Type the required information into the appropriate fields.

- Enter a **Name** for this authentication service.
- Enter the **Server** and **Port** information for your RADIUS server.
- Enter the **Secret** that matches the RADIUS server secret, and enter it again in **Confirm Secret**.
- Leave the **Group Identity Field** blank. This field is used to specify the name of a RADIUS attribute that contains group information used to assign the authenticated user to an Identity Profile.

  If you elect to use this field, you must also create an Identity Profile to match the group name that will be returned, and then add a row to the Rights Assignment Table to associate an Access Policy with that Identity Profile.
- You can leave the default attribute name for the **Reauthentication Field**. This field refers to the name of a RADIUS attribute that specifies the duration (in seconds) after which the client is forced to reauthenticate.
- Enter the authentication time-out period (in seconds) in **Timeout**, or leave the default.

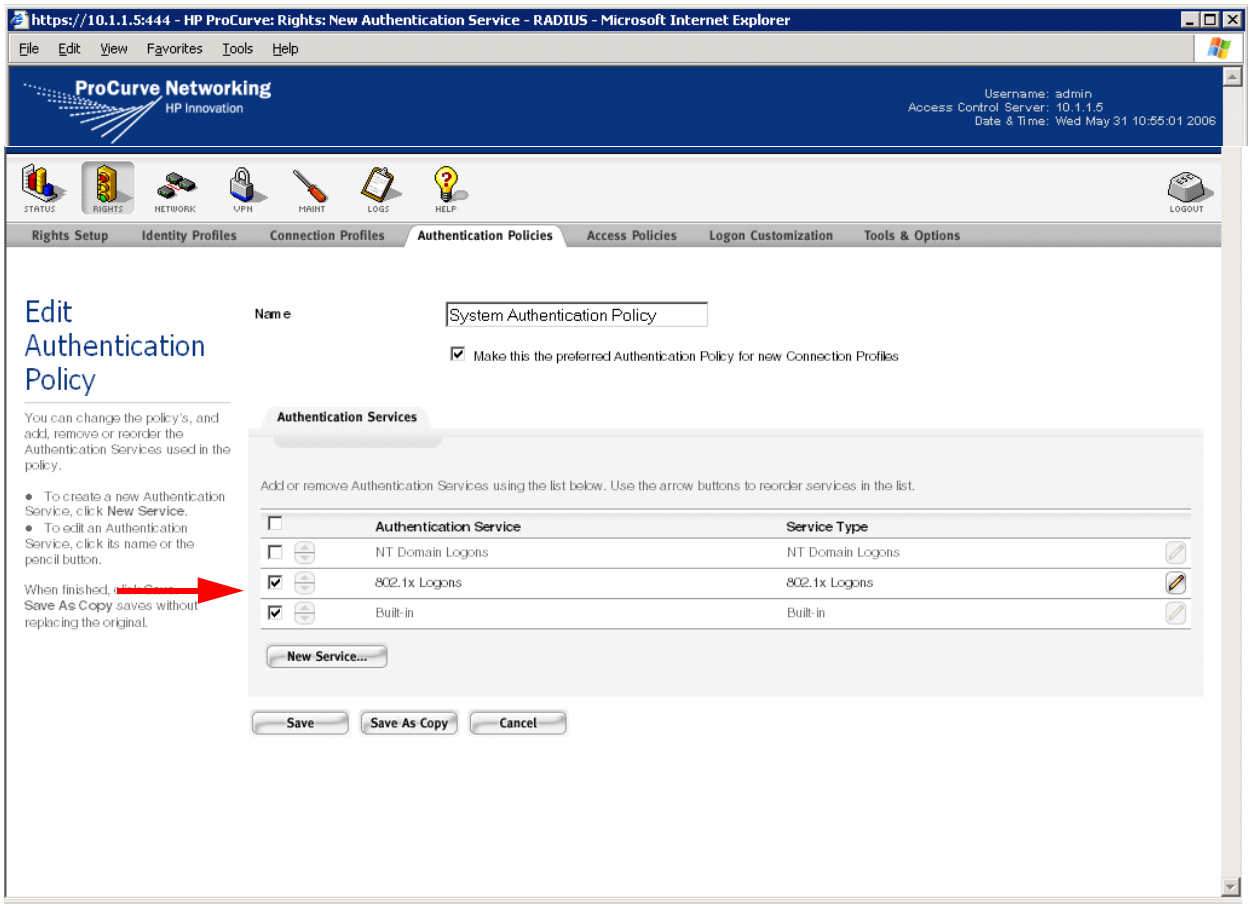
Step 8. Click **Save**. The Authentication Services page will reappear.

Step 9. Click the **Authentication Policies** link in the left panel. The Authentication Policies page will appear.

Step 10. Click **System Authentication Policy** in the Authentication Policies table to display the Edit Authentication Policy page (Figure 4-13).

The newly added authentication service appears at the bottom of the list of available Authentication Services for the System Authentication Policy.

Figure 4-13. Edit Authentication Policy Page



Step 11. Use the row up/down buttons to move the newly added RADIUS service ahead of the Built-in service, and put a check next to this service. (Leave the Built-in service checked as well.)

Step 12. Click **Save**.

The new RADIUS authentication service will now be the first service used to authenticate users who are being authenticated by the System Authentication Policy. The System Authentication Policy is used by the default Connection Profile "Any."

Note: *After you complete this step you will still be able to log in using the "demo" user name, because the built-in database will still be searched if the user was not authenticated by the RADIUS server.*

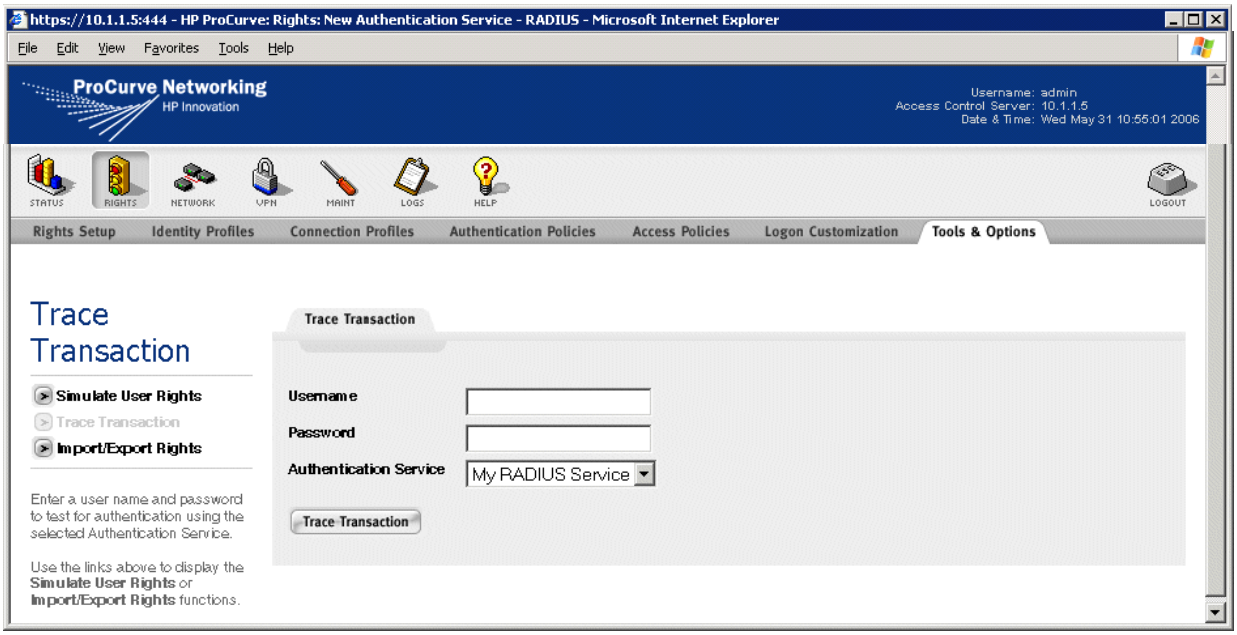
Verify the External Authentication Service

This procedure verifies that your RADIUS server will correctly authenticate users:

Step 1. Click the **RIGHTS** button to go to the Rights Manager.

Step 2. Click the **Tools & Options** tab, then click the **Trace Transaction** link in the left panel. The Trace Transaction page appears, as shown in Figure 4-14.

Figure 4-14. Trace Transaction Page



Step 3. Enter a known user name and password into **Username** and **Password**.

Step 4. Make sure the RADIUS authentication service you created is selected in the Authentication Service drop-down list and click **Trace Transaction**.

This function displays both the information sent to the Authentication Service and the returned results. If something is incorrect, the Results Parameters will indicate an error. Possible reasons for the error include:

- Invalid Username or Password or both
- RADIUS authentication service is not configured correctly
- RADIUS Server does not recognize the Access Control Server

If an error occurs, return to "External Authentication Service Configuration" on page 4-11 and verify the RADIUS server configuration. Make sure to use a legitimate user name and password recognized by the RADIUS server to test the RADIUS server.

If the RADIUS service works correctly, you should now be able to log the user off by going to URL `http://1.1.1.1` and log on again as a valid RADIUS user.

TROUBLESHOOTING

A

This chapter presents troubleshooting procedures for the 700wl Series system. Table A-1 shows the symptoms, probable cause and recommended action for a non-responsive unit.

Table A-1. Troubleshooting Guide

Symptom(s)	Probable Cause	Recommended Action
Power LED Off	No Power	Check power cord and AC outlet
Power LED on but fans not running	Defective Fan	Replace Fan
Unit inaccessible from customer network after configuration	Incorrect Cabling	1. Use straight-through Ethernet Cable 2. Ensure connectivity to network
Unit inaccessible from management system after configuration	Incorrect configuration	Access system through network uplink, check configuration. Check in particular that IP address and hostname are correct, and that hostname agrees with IP address.
	Incorrect network configuration	1. Check default router 2. Check DNS server configuration 3. Check subnet mask 4. Check configuration of unit to use DHCP or static ip address
	If all else fails	1. Reboot using command line interface 2. Restart management system 3. Restore to factory defaults and start over
Can't get to Access Control Server Administrative Console	Incorrect password	1. Check configuration, particularly passwords 2. Reset to factory defaults

Table A-1. Troubleshooting Guide (Continued)

Symptom(s)	Probable Cause	Recommended Action
No traffic through access point	No connection	1. Check cabling to access point. 2. Use cross-over cable if required 3. Check power to Access Point
	Access point requires server for WEP Key	Create Identity Profile for MAC address of access point that allows this traffic for each access point.
	Access Point requires configuration	If Access point uses static IP or wants a dynamic IP address from network DHCP server, make sure 700wl Series system system is not doing NAT for Access Point (create Identity Profile for MAC address of Access Point that allows Real IP Mode)
No initial web page	Access Controller Module sees no web request	Use a browser to request http://1.1.1.1
	Browser problems	Internet Explorer 5.01 with DLL schannel.dll version 4.86.1959.1877 is known to have broken SSL
		Certain downrev versions of MAC OS/X browsers have broken SSL

LCD DISPLAY DESCRIPTION

B

This appendix describes the LCD display on the Access Control Server. The display can be used to view the system's network parameters, and to power down the system. This appendix contains the following sections:

Display Description

The LCD display is located in the middle of the front panel of the Access Control Server. It is a 16-character by two-line display, with six buttons located to the right of the display.

Figure B-1. LCD Controls

Button Functionality

Up and Down Arrows

These arrows allow the user to navigate between menus.

Left and Right Arrows

These arrows pressed together will initiate a SHUTDOWN. They are only available in the SHUTDOWN submenu.

Checkmark

The checkmark acts as a selection for a particular menu. When the checkmark is pressed, the display goes into a submenu. Currently only SHUTDOWN has a submenu.

The X

This button cancels the current menu.

Powering On and System Boot

At power-on, the display remains blank until the system has initialized itself and displays *Status: Initializing*.

The system then goes to the default display within a few seconds.

Default Display

Once the system has finished booting, the LCD will alternate between displaying the system type, for example *700wl Series*, the hardware number, for example *745wl* and the uptime in days, hours and minutes (*ddd hh:mm*) and the IP address.

Main Menus

When the default display is showing, repeatedly pressing the up or down arrow buttons will cycle through the Main Menus of the display. The following lists the menus and what is displayed:

- IP: <*IP ADDRESS*>
- NETMASK: <*NETMASK*>
- MAC: <*MAC ADDRESS*>
- GATEWAY: <*GATEWAY IP*>
- DNS: <*DNS IP ADDRESS*>
- DATE & TIME: <*CURRENT TIME and DATE*>
- S/W VERSION: <*CURRENT SOFTWARE VERSION*>
- STATUS: <*CURRENT STATUS*>

  Status can be one of the following:

  — **Rebooting**. This status is when the system has been reset from the CLI.

  — **Running**. Normal running state.

  — **Upgrading**. During S/W upgrades.

  — **Initializing**. When the LCD daemon starts for the first time after bootup.

  — **Error**. When the LCD daemon fails to read the status file on disk.

  — **Invalid**. When status is in an unrecognized state.

- SHUTDOWN?

  Pressing the Checkmark button, the display becomes: ARE YOU SURE?

  This command will reset the system when the proper key sequence is pushed (press left and right buttons simultaneously).

System Shutdown

Pressing the up or down arrow button selects the SHUTDOWN? menu. This allows you to shut down and power off the system. After pressing the checkmark button, ARE YOU SURE? displays.

If you are sure you want to shut down and power off the system, press left and right buttons simultaneously. Otherwise, press the X button, and the display returns to the main display.

A system can take up to 30 seconds to perform the shutdown and power-off sequence.

C

TECHNICAL SPECIFICATIONS, SAFETY AND COMPLIANCE

This appendix describes the technical specifications for the ProCurve 700wl Series. This appendix includes the following sections:

Technical Specifications

Environmental Ranges

Operating Temperature Range	5 to +50°C
Storage Temperature Range	-40 to +65°C
Humidity Range, non-condensing	5% to 90%
Operating Altitude	Up to 10,000 ft. (3000 m)
Storage Altitude	Up to 15,000 ft. (4570 m)

Power Requirements

AC Voltage	100-240 VAC
Power Supply Rating	6.3A max
Frequency Range	50/60 Hz
Heat Dissipation	580 BTU/Hr
Power Consumption (Nominal)	170W

Physical Dimensions

Weight	30 to 40 pounds (13.6 - 18.1 kg)
Height	3.5 in. (8.9 cm)
Width	17.0 inches (43.2 cm)
Depth	22 inches (55.9 cm)

Safety and Regulatory Compliance

Safety Standards

UL 60950 - 1:2001
CAN/CSA 22.2 No. 60950

EMC Compliance

FCC Part 15 Class A
CE
EN 55022 (1998) Class A
EN 61000-3-2 (2000)
EN 61000-3-3 (1995)

Physical Interface

To the Access Control Server	RJ45 10/100/1000 Base-T
Downlink Interfaces	2-port 10/100/1000 Copper Ethernet card 2-port 1000 Base SX Fiber card (LC connector) 1-port 1000 Base LX Fiber card (LC Connector)
Management Console port	DB-9, male
Encryption Acceleration Card	
LEDs	Power
Management Display	2-line LCD

CABLE AND CONNECTOR SPECIFICATIONS D

This appendix describes the console port and the standard Ethernet cables to be used. This appendix contains the following sections:

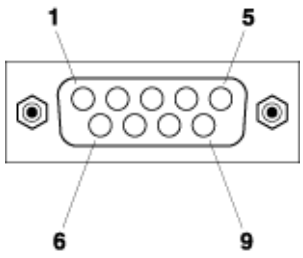
Serial Console Port

Table D-1 shows the pin assignments for the DB-9 serial console port, and Figure D-1 shows the pin configuration. The console port is configured as an EIA/TIA-232 data terminal equipment (DTE) adapter. If you are connecting a console device such as a laptop, you must use a serial crossover cable (null modem cable).

Table D-1. Pin Assignments for Console Port

Pin	Assignment	Symbol
1	Data Carrier Detect	DCD
2	Receive Data	RXD
3	Transmit Data	TXD
4	Data Terminal Ready	DTR
5	Signal Ground	GND
6	Data Set Ready	DSR
7	Request to Send	RTS
8	Clear to Send	CTS
9	Ring Indicator	RI

Figure D-1. Console Port Pin Configuration



10/100 Downlink Ethernet Cables

Table D-2 shows the RJ-45 pin assignments for 10/100 Ethernet cables.

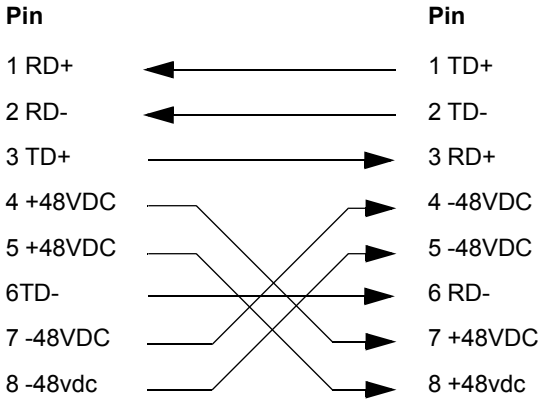
Table D-2. Pin Assignment for Ethernet Cables

Pin Number	Standard Ethernet
1	Incoming Data + (RD+)
2	Incoming Data - (RD-)
3	Outgoing Data + (TD+)
4	No Connection (NC)
5	No Connection (NC)
6	Outgoing Data - (TD-)
7	No Connection (NC)
8	No Connection (NC)

Power Crossover Connector

Figure D-2 shows the schematic for a power crossover connector. In normal circumstances a crossover connector should not be required. However, if for any reason you need to plug a +48VDC (IEEE 802.3af) device into a -48VDC (Cisco-compatible) port, or vice versa, you will need to use a crossover connector.

Figure D-2. Pin assignment for a power crossover connector.



SAFETY AND EMC REGULATORY STATEMENTS

E

Safety Information

Documentation reference symbol. If the product is marked with this symbol, refer to the product documentation to get more information about the product.

WARNING A WARNING in the manual denotes a hazard that can cause injury or death.

CAUTION A CAUTION in the manual denotes a hazard that can damage equipment.

Do not proceed beyond a WARNING or CAUTION notice until you have understood the hazardous conditions and have taken appropriate steps.

Grounding

These are safety class I products and have protective earthing terminals. There must be an uninterruptible safety earth ground from the main power source to the product's input wiring terminals, power cord, or supplied power cord set. Whenever it is likely that the protection has been impaired, disconnect the power cord until the ground has been restored.

For LAN cable grounding:

- If your LAN covers an area served by more than one power distribution system, be sure their safety grounds are securely interconnected.
- LAN cables may occasionally be subject to hazardous transient voltages (such as lightning or disturbances in the electrical utilities power grid). Handle exposed metal components of the network with caution.

Shielded Signal Cables

Use only shielded cables for connecting peripherals to any HP ProCurve 700wl Series device to reduce the possibility of interference with radio communications services. Using shielded cables ensures that you maintain the appropriate EMC classification for the intended environment.

Pluggable Equipment

For pluggable equipment, the socket outlet shall be installed near the equipment and shall be easily accessible.

Servicing

There are no user-serviceable parts inside these products. Any servicing, adjustment, maintenance, or repair must be performed only by service-trained personnel.

Note for Service Personnel

Caution: *There is a danger of a new battery exploding if it is incorrectly installed. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.*

Informations concernant la sécurité

Symbole de référence à la documentation. Si le produit est marqué de ce symbole, reportez-vous à la documentation du produit afin d'obtenir des informations plus détaillées.

WARNING Dans la documentation, un WARNING indique un danger susceptible d'entraîner des dommages corporels ou la mort.

CAUTION Un texte de mise en garde intitulé CAUTION indique un danger susceptible de causer des dommages à l'équipement.

Ne continuez pas au-delà d'une rubrique WARNING ou CAUTION avant d'avoir bien compris les conditions présentant un danger et pris les mesures appropriées.

Cet appareil est un produit de classe I et possède une borne de mise à la terre. La source d'alimentation principale doit être munie d'une prise de terre de sécurité installée aux bornes du câblage d'entrée, sur le cordon d'alimentation ou le cordon de raccordement fourni avec le produit. Lorsque cette protection semble avoir été endommagée, débrancher le cordon d'alimentation jusqu'à ce que la mise à la terre ait été réparée.

Mise à la terre du câble de réseau local:

- si votre réseau local s'étend sur une zone desservie par plus d'un système de distribution de puissance, assurez-vous que les prises de terre de sécurité soient convenablement interconnectées.
- Les câbles de réseaux locaux peuvent occasionnellement être soumis à des surtensions transitoires dangereuses (telles que la foudre ou des perturbations dans le réseau d'alimentation public). Manipulez les composants métalliques du réseau avec précautions.

Aucune pièce contenue à l'intérieur de ce produit ne peut être réparée par l'utilisateur. Tout dépannage, réglage, entretien ou réparation devra être confié exclusivement à un personnel qualifié.

Attention: *Ce produit contient une pile au Lithium remplacable. Risque d'explosion si la pile est remplacee par un modele incorrect. Disposez des piles usagees selon les instructions.*

Hinweise zur Sicherheit

Symbol für Dokumentationsverweis. Wenn das Produkt mit diesem Symbol markiert ist, schlagen Sie bitte in der Produktdokumentation nach, um mehr Informationen über das Produkt zu erhalten.

WARNING Symbol für Dokumentationsverweis. Wenn das Produkt mit diesem Symbol markiert ist, schlagen Sie bitte in der Produktdokumentation nach, um mehr Informationen über das Produkt zu erhalten.

CAUTION Symbol für Dokumentationsverweis. Wenn das Produkt mit diesem Symbol markiert ist, schlagen Sie bitte in der Produktdokumentation nach, um mehr Informationen über das Produkt zu erhalten.

Fahren Sie nach dem Hinweis WARNING oder CAUTION erst fort, nachdem Sie den Gefahrenzustand verstanden und die entsprechenden Maßnahmen ergriffen haben.

Dies ist ein Gerät der Sicherheitsklasse I und verfügt über einen schützenden Erdungsterminal. Der Betrieb des Geräts erfordert eine ununterbrochene Sicherheitserdung von der Hauptstromquelle zu den Geräteingabeterminals, den Netzkabeln oder dem mit Strom belieferten Netzkabelsatz voraus. Sobald Grund zur Annahme besteht, daß der Schutz beeinträchtigt worden ist, das Netzkabel aus der Wandsteckdose herausziehen, bis die Erdung wiederhergestellt ist.

Für LAN-Kabelerdung:

- Wenn Ihr LAN ein Gebiet umfaßt, das von mehr als einem Stromverteilungssystem beliefert wird, müssen Sie sich vergewissern, daß die Sicherheitserdungen fest untereinander verbunden sind.
- LAN-Kabel können gelegentlich gefährlichen Übergangsspannungen ausgesetzt werden (beispielsweise durch Blitz oder Störungen in dem Starkstromnetz des Elektrizitätswerks). Bei der Handhabung exponierter Metallbestandteile des Netzwerkes Vorsicht walten lassen.

Dieses Gerät enthält innen keine durch den Benutzer zu wartenden Teile. Wartungs-, Anpassungs-, Instandhaltungs- oder Reparaturarbeiten dürfen nur von geschultem Bedienungspersonal durchgeführt werden.

Vorsicht: *Dieses Produkt enhalt eine wechselbare Lithium Batterie. Es besteht Explosionsgefahr wenn die Batterie durch einen falschen Typ ersetzt wird. Entsorgen Sie gebrauchte Batterien nach den Anweisungen.*

Considerazioni sulla sicurezza

Simbolo di riferimento alla documentazione. Se il prodotto è contrassegnato da questo simbolo, fare riferimento alla documentazione sul prodotto per ulteriori informazioni su di esso.

WARNING La dicitura WARNINGdenota un pericolo che può causare lesioni o morte.

CAUTION La dicituraCAUTION denota un pericolo che può danneggiare le attrezzature.

Non procedere oltre un avviso di WARNING o di CAUTIONprima di aver compreso le condizioni di rischio e aver provveduto alle misure del caso.

Questo prodotto è omologato nella classe di sicurezza I ed ha un terminale protettivo di collegamento a terra. Dev'essere installato un collegamento a terra di sicurezza, non interrompibile che vada dalla fonte d'alimentazione principale ai terminali d'entrata, al cavo d'alimentazione oppure al set cavo d'alimentazione fornito con il prodotto. Ogniqualvolta vi sia probabilità di danneggiamento della protezione, disinserite il cavo d'alimentazione fino a quando il collegaento a terra non sia stato ripristinato.

Per la messa a terra dei cavi LAN:

- se la vostra LAN copre un'area servita da più di un sistema di distribuzione elettrica, accertatevi che i collegamenti a terra di sicurezza siano ben collegati fra loro;
- i cavi LAN possono occasionalmente andare soggetti a pericolose tensioni transitorie (ad esempio, provocate da lampi o disturbi nella griglia d'alimentazione della società elettrica); siate cauti nel toccare parti esposte in metallo della rete.

Nessun componente di questo prodotto può essere riparato dall'utente. Qualsiasi lavoro di riparazione, messa a punto, manutenzione o assistenza va effettuato esclusivamente da personale specializzato.

Attenzione: *questo prodotto contiene batterie ricaricabili al Litio. Se vengono utilizzate delle batterie non adatte vi e' rischio di esplosione. Eliminare le batterie usate seguendo le istruzioni fornite a riguardo.*

Consideraciones sobre seguridad

Símbolo de referencia a la documentación. Si el producto va marcado con este símbolo, consultar la documentación del producto a fin de obtener mayor información sobre el producto.

WARNING Una WARNING en la documentación señala un riesgo que podría resultar en lesiones o la muerte.

CAUTION Una CAUTION en la documentación señala un riesgo que podría resultar en averías al equipo.

No proseguir después de un símbolo de WARNING o CAUTION hasta no haber entendido las condiciones peligrosas y haber tomado las medidas apropiadas.

Este aparato se enmarca dentro de la clase I de seguridad y se encuentra protegido por una borna de puesta a tierra. Es preciso que exista una puesta a tierra continua desde la toma de alimentación eléctrica hasta las bornas de los cables de entrada del aparato, el cable de alimentación o el juego de cable de alimentación suministrado. Si existe la probabilidad de que la protección a tierra haya sufrido desperfectos, desenchufar el cable de alimentación hasta haberse subsanado el problema.

Puesta a tierra del cable de la red local (LAN):

- Si la LAN abarca un área cuyo suministro eléctrico proviene de más de una red de distribución de electricidad, cerciorarse de que las puestas a tierra estén conectadas entre sí de modo seguro.
- Es posible que los cables de la LAN se vean sometidos de vez en cuando a voltajes momentáneos que entrañen peligro (rayos o alteraciones en la red de energía eléctrica). Manejar con precaución los componentes de metal de la LAN que estén al descubierto.

Este aparato no contiene pieza alguna susceptible de reparación por parte del usuario. Todas las reparaciones, ajustes o servicio de mantenimiento debe realizarlos solamente el técnico.

Curdado: *Este producto contiene pilas remplasables de Lithium. Riesgo de exposion si la pila es remplasada con el tipo incorrecto. Deseche la pilas usadas de accuerdo a las instrucciones.*

Safety Information (Japan)

安全性の考慮

安全記号

マニュアル参照記号。製品にこの記号がついている場合はマニュアルを参照し、注意事項等をご確認ください。

WARNING　マニュアル中の「WARNING」は人身事故の原因となる危険を示します。

CAUTION　マニュアル中の「CAUTION」は装置破損の原因となる危険を示します。

「WARNING」や「CAUTION」の項は飛ばさないで必ずお読みください。危険性に関する記載事項をよく読み、正しい手順に従った上で次の事項に進んでください。

これは安全性クラスIの製品で保護用接地端子を備えています。主電源から製品の入力配線端子、電源コード、または添付の電源コード・セットまでの間、切れ目のない安全接地が存在することが必要です。もしこの保護回路が損なわれたことが推測されるときは、接地が修復されるまで電源コードを外しておいてください。

LANケーブルの接地に関して:

- もし貴社のLANが複数の配電システムにより電力を受けている領域をカバーしている場合には、それらのシステムの安全接地が確実に相互に結合されていることを確認してください。
- LANケーブルは時として危険な過度電圧（例えば雷や、配電設備の電力網での障害）にさらされることがあります。露出した金属部分の取扱いには十分な注意をはらってください。

本製品の内部にはユーザーが修理できる部品はありません。サービス、調整、保守および修理はサービス訓練を受けた専門家におまかせください。

本製品には電源スイッチがありません。電源コードを接続したとき電源入となります。

CAUTION: この製品は交換可能なリチウム電池を使用しています。間違ったタイプに交換すると爆発の危険があります。使用済みの電池は説明書に従って処分して下さい。

Safety Information (China)

HP网络产品使用安全手册

使用须知

欢迎使用惠普网络产品，为了您及仪器的安全，请您务必注意如下事项：

1. 仪器要和地线相接，要使用有正确接地插头的电源线，使用中国国家规定 的 220V 电源。
2. 避免高温和尘土多的地方，否则易引起仪器内部部件的损坏。
3. 避免接近高温，避免接近直接热源，如直射太阳光、暖气等其它发热体。
4. 不要有异物或液体落入机内，以免部件短路。
5. 不要将磁体放置于仪器附近。

警告

为防止火灾或触电事故，请不要将该机放置于淋雨或潮湿处。

如果您按照以上步骤操作时遇到了困难，或想了解其它产品性能，请在以下网页上寻找相关信息：http://www.hp.com.cn

或联系我们

中国惠普有限公司
地址：北京建国路112号中国惠普大厦
电话： 010-65643888

注意: 此产品包括一可更换锂电池. 用错误型号电池更换会有爆炸危险. 务必按照说明处置用完的电池.

EMC Regulatory Statements

U.S.A.

FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area may cause interference in which case the user will be required to correct the interference at his own expense.

Canada

This product complies with Class A Canadian EMC requirements.

Australia/New Zealand

This product complies with Australia/New Zealand EMC Class A requirements.

Japan

VCCI Class A

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Korea

사용자 안내문 : A 급기기

이기기는 업무용으로 전자파 적합등록을 받은 기기이오니, 판매자 또는 사용자는 이점을 주의하시기 바라며, 만약 잘못 구입하셨을 때에는 구입한 곳에서 비업무용으로 교환하시기 바랍니다.

BSMI

警告使用者：這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Regulatory Model Identification Number

For regulatory identification purposes, the ProCurve Secure Access 700wl Series system components (Access Controller 720wl, Access Control Server 740wl, 745wl, Integrated Access Manager 760wl) are assigned a Regulatory Model Number. The Regulatory Model Number for these components areRSVLC-0206 and RSVLC-0601.

This regulatory number should not be confused with the marketing name or product numbers (J8153A, J8154A, J8155A, J9038A)

European Community

DECLARATION OF CONFORMITY
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Hewlett-Packard Company

Manufacturer's Address: 8000 Foothills Blvd.
Roseville, CA 95747-5502
U.S.A.

declares, that the product

Product Name: HP ProCurve Access Controller 720wl
HP ProCurve Access Control Server 740wl
HP ProCurve Integrated Access Manager 760wl

Model Number(s): J8135A, J8154A, J8155A

Regulatory Model: RSVLC-0206

Product Options: All

conforms to the following Product Specifications:

Safety: IEC 60950:1991 + A1, A2, A3, A4 / EN 60950:1992 + A1, A2, A3, A4, A11
IEC 60825-1:1993 / EN 60825-1:1994 + A11, Class 1 (Laser/LED)

EMC: CISPR 22:1997 / EN 55022:1998 Class A[1]
CISPR 24:1997 / EN 55024:1998
IEC 61000-3-2:1995 / EN 61000-3-2:1995 +A1, A2
IEC 61000-3-3:1994 / EN 61000-3-3:1995 +A1

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC, the EMC Directive 89/336/EEC and carries the CE marking accordingly.

1) The Product was tested in a typical configuration with system peripherals from several manufacturers.

Roseville, June 12, 2003

Mike Avery, Regulatory Engineering Mgr.

European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE, Herrenberger Straße 140, D-71034 Böblingen (FAX: + 49-7031-14-3143)

DECLARATION OF CONFORMITY

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Hewlett-Packard Company

Manufacturer's Address: 8000 Foothills Blvd.
Roseville, CA 95747-5502
U.S.A.

declares, that the product

Product Name: HP ProCurve Access Control Server 745wl

Model Number(s): J9038A

Regulatory Model: RSVLC-0601

Product Options: All

conforms to the following Product Specifications:

Safety: EN 60950-1:2001 / IEC 60950-1:2001
EN 60825-1:1994 + A1+A2 / IEC 60825-1:1993 +A2, Class 1 Laser

EMC: EN 55022(1998) +A2(2003) / CISPR-22 (1997) +A2(2002) Class A
EN55024 +A1(2001) +A2(2003) / CISPR-24 (1997) + A1, A2
EN 61000-3-2 (2000) / IEC 61000-3-2 (2001) Harmonics
EN 61000-3-3 +A1(2001) / IEC 61000-3-3 (1994) +A1 Flicker

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC, the EMC Directive 89/336/EEC and carries the CE marking accordingly.

1) The Product was tested in a typical configuration with system peripherals from several manufacturers.

Roseville, June 1, 2006

Mike Avery, Regulatory Engineering Mgr.

European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE, Herrenberger Straße 140, D-71034 Böblingen (FAX: + 49-7031-14-3143)

RECYCLE STATEMENTS

F

Waste Electrical and Electronic Equipment (WEEE) Statements

Disposal of Waste Equipment by Users in Private Household in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Likvidace zařízení soukromými domácími uživateli v Evropské unii

Tento symbol na produktu nebo balení označuje výrobek, který nesmí být vyhozen spolu s ostatním domácím odpadem. Povinností uživatele je předat takto označený odpad na předem určené sběrné místo pro recyklaci elektrických a elektronických zařízení. Okamžité třídění a recyklace odpadu pomůže uchovat přírodní prostředí a zajistí takový způsob recyklace, který ochrání zdraví a životní prostředí člověka. Další informace o možnostech odevzdání odpadu k recyklaci získáte na příslušném obecním nebo městském úřadě, od firmy zabývající se sběrem a svozem odpadu nebo v obchodě, kde jste produkt zakoupili.

Bortskaffelse af affald fra husstande i den Europæiske Union

Hvis produktet eller dets emballage er forsynet med dette symbol, angiver det, at produktet ikke må bortskaffes med andet almindeligt husholdningsaffald. I stedet er det dit ansvar at bortskaffe kasseret udstyr ved at aflevere det på den kommunale genbrugsstation, der forestår genvinding af kasseret elektrisk og elektronisk udstyr. Den centrale modtagelse og genvinding af kasseret udstyr i forbindelse med bortskaffelsen bidrager til bevarelse af naturlige ressourcer og sikrer, at udstyret genvindes på en måde, der beskytter både mennesker og miljø. Yderligere oplysninger om, hvor du kan aflevere kasseret udstyr til genvinding, kan du få hos kommunen, den lokale genbrugsstation eller i den butik, hvor du købte produktet.

Seadmete jäätmete kõrvaldamine eramajapidamistes Euroopa Liidus

See tootel või selle pakendil olev sümbol näitab, et kõnealust toodet ei tohi koos teiste majapidamisjäätmetega kõrvaldada. Teie kohus on oma seadmete jäätmed kõrvaldada, viies need elektri- ja elektroonikaseadmete jäätmete ringlussevõtmiseks selleks ettenähtud kogumispunkti. Seadmete jäätmete eraldi kogumine ja ringlussevõtmine kõrvaldamise ajal aitab kaitsta loodusvarasid ning tagada, et ringlussevõtmine toimub viisil, mis kaitseb inimeste tervist ning keskkonda. Lisateabe saamiseks selle kohta, kuhu oma seadmete jäätmed ringlussevõtmiseks viia, võtke palun ühendust oma kohaliku linnakantselei, majapidamisjäätmete kõrvaldamise teenistuse või kauplusega, kust Te toote ostsite.

Laitteiden hävittäminen kotitalouksissa Euroopan unionin alueella

Jos tuotteessa tai sen pakkauksessa on tämä merkki, tuotetta ei saa hävittää kotitalousjätteiden mukana. Tällöin hävitettävä laite on toimitettava sähkölaitteiden ja elektronisten laitteiden kierrätyspisteeseen. Hävitettävien laitteiden erillinen käsittely ja kierrätys auttavat säästämään luonnonvaroja ja varmistamaan, että laite kierrätetään tavalla, joka estää terveyshaitat ja suojelee luontoa. Lisätietoja paikoista, joihin hävitettävät laitteet voi toimittaa kierrätettäväksi, saa ottamalla yhteyttä jätehuoltoon tai liikkeeseen, josta tuote on ostettu.

Élimination des appareils mis au rebut par les ménages dans l'Union européenne

Le symbole apposé sur ce produit ou sur son emballage indique que ce produit ne doit pas être jeté avec les déchets ménagers ordinaires. Il est de votre responsabilité de mettre au rebut vos appareils en les déposant dans les centres de collecte publique désignés pour le recyclage des équipements électriques et électroniques. La collecte et le recyclage de vos appareils mis au rebut indépendamment du reste des déchets contribue à la préservation des ressources naturelles et garantit que ces appareils seront recyclés dans le respect de la santé humaine et de l'environnement. Pour obtenir plus d'informations sur les centres de collecte et de recyclage des appareils mis au rebut, veuillez contacter les autorités locales de votre région, les services de collecte des ordures ménagères ou le magasin dans lequel vous avez acheté ce produit.

Entsorgung von Altgeräten aus privaten Haushalten in der EU

Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass das Produkt nicht über den normalen Hausmüll entsorgt werden darf. Benutzer sind verpflichtet, die Altgeräte an einer Rücknahmestelle für Elektro- und Elektronik-Altgeräte abzugeben. Die getrennte Sammlung und ordnungsgemäße Entsorgung Ihrer Altgeräte trägt zur Erhaltung der natürlichen Ressourcen bei und garantiert eine Wiederverwertung, die die Gesundheit des Menschen und die Umwelt schützt. Informationen dazu, wo Sie Rücknahmestellen für Ihre Altgeräte finden, erhalten Sie bei Ihrer Stadtverwaltung, den örtlichen Müllentsorgungsbetrieben oder im Geschäft, in dem Sie das Gerät erworben haben

Απόρριψη άχρηστου εξοπλισμού από χρήστες σε ιδιωτικά νοικοκυριά στην Ευρωπαϊκή Ένωση

Το σύμβολο αυτό στο προϊόν ή τη συσκευασία του υποδεικνύει ότι το συγκεκριμένο προϊόν δεν πρέπει να διατίθεται μαζί με τα άλλα οικιακά σας απορρίμματα. Αντίθετα, είναι δική σας ευθύνη να απορρίψετε τον άχρηστο εξοπλισμό σας παραδίδοντάς τον σε καθορισμένο σημείο συλλογής για την ανακύκλωση άχρηστου ηλεκτρικού και ηλεκτρονικού εξοπλισμού. Η ξεχωριστή συλλογή και ανακύκλωση του άχρηστου εξοπλισμού σας κατά την απόρριψη θα συμβάλει στη διατήρηση των φυσικών πόρων και θα διασφαλίσει ότι η ανακύκλωση γίνεται με τρόπο που προστατεύει την ανθρώπινη υγεία και το περιβάλλον. Για περισσότερες πληροφορίες σχετικά με το πού μπορείτε να παραδώσετε τον άχρηστο εξοπλισμό σας για ανακύκλωση, επικοινωνήστε με το αρμόδιο τοπικό γραφείο, την τοπική υπηρεσία διάθεσης οικιακών απορριμμάτων ή το κατάστημα όπου αγοράσατε το προϊόν.

Készülékek magánháztartásban történő selejtezése az Európai Unió területén

A készüléken, illetve a készülék csomagolásán látható azonos szimbólum annak jelzésére szolgál, hogy a készülék a selejtezés során az egyéb háztartási hulladéktól eltérő módon kezelendő. A vásárló a hulladékká vált készüléket köteles a kijelölt gyűjtőhelyre szállítani az elektromos és elektronikai készülékek újrahasznosítása céljából. A hulladékká vált készülékek selejtezéskori begyűjtése és újrahasznosítása hozzájárul a természeti erőforrások megőrzéséhez, valamint biztosítja a selejtezett termékek környezetre és emberi egészségre nézve biztonságos feldolgozását. A begyűjtés pontos helyéről bővebb tájékoztatást a lakhelye szerint illetékes önkormányzattól, az illetékes szemételtakarító vállalattól, illetve a terméket elárusító helyen kaphat.

Smaltimento delle apparecchiature da parte di privati nel territorio dell'Unione Europea

Questo simbolo presente sul prodotto o sulla sua confezione indica che il prodotto non può essere smaltito insieme ai rifiuti domestici. È responsabilità dell'utente smaltire le apparecchiature consegnandole presso un punto di raccolta designato al riciclo e allo smaltimento di apparecchiature elettriche ed elettroniche. La raccolta differenziata e il corretto riciclo delle apparecchiature da smaltire permette di proteggere la salute degli individui e l'ecosistema. Per ulteriori informazioni relative ai punti di raccolta delle apparecchiature, contattare l'ente locale per lo smaltimento dei rifiuti, oppure il negozio presso il quale è stato acquistato il prodotto.

Nolietotu iekārtu iznīcināšanas noteikumi lietotājiem Eiropas Savienības privātajās mājsaimniecībās

Šāds simbols uz izstrādājuma vai uz tā iesaiņojuma norāda, ka šo izstrādājumu nedrīkst izmest kopā ar citiem sadzīves atkritumiem. Jūs atbildat par to, lai nolietotās iekārtas tiktu nodotas speciāli iekārtotos punktos, kas paredzēti izmantoto elektrisko un elektronisko iekārtu savākšanai otrreizējai pārstrādei. Atsevišķa nolietoto iekārtu savākšana un otrreizējā pārstrāde palīdzēs saglabāt dabas resursus un garantēs, ka šīs iekārtas tiks otrreizēji pārstrādātas tādā veidā, lai pasargātu vidi un cilvēku veselību. Lai uzzinātu, kur nolietotās iekārtas var izmest otrreizējai pārstrādei, jāvēršas savas dzīves vietas pašvaldībā, sadzīves atkritumu savākšanas dienestā vai veikalā, kurā izstrādājums tika nopirkts.

Vartotojų iš privačių namų ūkių įrangos atliekų šalinimas Europos Sąjungoje
Šis simbolis ant gaminio arba jo pakuotės rodo, kad šio gaminio šalinti kartu su kitomis namų ūkio atliekomis negalima. Šalintinas įrangos atliekas privalote pristatyti į specialią surinkimo vietą elektros ir elektroninės įrangos atliekoms perdirbti. Atskirai surenkamos ir perdirbamos šalintinos įrangos atliekos padės saugoti gamtinius išteklius ir užtikrinti, kad jos bus perdirbtos tokiu būdu, kuris nekenkia žmonių sveikatai ir aplinkai. Jeigu norite sužinoti daugiau apie tai, kur galima pristatyti perdirbtinas įrangos atliekas, kreipkitės į savo seniūniją, namų ūkio atliekų šalinimo tarnybą arba parduotuvę, kurioje įsigijote gaminį.

Verwijdering van afgedankte apparatuur door privé-gebruikers in de Europese Unie
Dit symbool op het product of de verpakking geeft aan dat dit product niet mag worden gedeponeerd bij het normale huishoudelijke afval. U bent zelf verantwoordelijk voor het inleveren van uw afgedankte apparatuur bij een inzamelingspunt voor het recyclen van oude elektrische en elektronische apparatuur. Door uw oude apparatuur apart aan te bieden en te recyclen, kunnen natuurlijke bronnen worden behouden en kan het materiaal worden hergebruikt op een manier waarmee de volksgezondheid en het milieu worden beschermd. Neem contact op met uw gemeente, het afvalinzamelingsbedrijf of de winkel waar u het product hebt gekocht voor meer informatie over inzamelingspunten waar u oude apparatuur kunt aanbieden voor recycling.

Pozbywanie się zużytego sprzętu przez użytkowników w prywatnych gospodarstwach domowych w Unii Europejskiej
Ten symbol na produkcie lub jego opakowaniu oznacza, że produktu nie wolno wyrzucać do zwykłych pojemników na śmieci. Obowiązkiem użytkownika jest przekazanie zużytego sprzętu do wyznaczonego punktu zbiórki w celu recyklingu odpadów powstałych ze sprzętu elektrycznego i elektronicznego. Osobna zbiórka oraz recykling zużytego sprzętu pomogą w ochronie zasobów naturalnych i zapewnią ponowne wprowadzenie go do obiegu w sposób chroniący zdrowie człowieka i środowisko. Aby uzyskać więcej informacji o tym, gdzie można przekazać zużyty sprzęt do recyklingu, należy się skontaktować z urzędem miasta, zakładem gospodarki odpadami lub sklepem, w którym zakupiono produkt.

Descarte de Lixo Elétrico na Comunidade Européia
Este símbolo encontrado no produto ou na embalagem indica que o produto não deve ser descartado no lixo doméstico comum. É responsabilidade do cliente descartar o material usado (lixo elétrico), encaminhando-o para um ponto de coleta para reciclagem. A coleta e a reciclagem seletivas desse tipo de lixo ajudarão a conservar as reservas naturais; sendo assim, a reciclagem será feita de uma forma segura, protegendo o ambiente e a saúde das pessoas. Para obter mais informações sobre locais que reciclam esse tipo de material, entre em contato com o escritório da HP em sua cidade, com o serviço de coleta de lixo ou com a loja em que o produto foi adquirido.

Likvidácia vyradených zariadení v domácnostiach v Európskej únii
Symbol na výrobku alebo jeho balení označuje, že daný výrobok sa nesmie likvidovať s domovým odpadom. Povinnosťou spotrebiteľa je odovzdať vyradené zariadenie v zbernom mieste, ktoré je určené na recykláciu vyradených elektrických a elektronických zariadení. Separovaný zber a recyklácia vyradených zariadení prispieva k ochrane prírodných zdrojov a zabezpečuje, že recyklácia sa vykonáva spôsobom chrániacim ľudské zdravie a životné prostredie. Informácie o zberných miestach na recykláciu vyradených zariadení vám poskytne miestne zastupiteľstvo, spoločnosť zabezpečujúca odvoz domového odpadu alebo obchod, v ktorom ste si výrobok zakúpili.

Odstranjevanje odslužene opreme uporabnikov v zasebnih gospodinjstvih v Evropski uniji
Ta znak na izdelku ali njegovi embalaži pomeni, da izdelka ne smete odvreči med gospodinjske odpadke. Nasprotno, odsluženo opremo morate predati na zbirališče, pooblaščeno za recikliranje odslužene električne in elektronske opreme. Ločeno zbiranje in recikliranje odslužene opreme prispeva k ohranjanju naravnih virov in zagotavlja recikliranje te opreme na zdravju in okolju neškodljiv način. Za podrobnejše informacije o tem, kam lahko odpeljete odsluženo opremo na recikliranje, se obrnite na pristojni organ, komunalno službo ali trgovino, kjer ste izdelek kupili.

Eliminación de residuos de equipos eléctricos y electrónicos por parte de usuarios particulares en la Unión Europea

Este símbolo en el producto o en su envase indica que no debe eliminarse junto con los desperdicios generales de la casa. Es responsabilidad del usuario eliminar los residuos de este tipo depositándolos en un "punto limpio" para el reciclado de residuos eléctricos y electrónicos. La recogida y el reciclado selectivos de los residuos de aparatos eléctricos en el momento de su eliminación contribuirá a conservar los recursos naturales y a garantizar el reciclado de estos residuos de forma que se proteja el medio ambiente y la salud. Para obtener más información sobre los puntos de recogida de residuos eléctricos y electrónicos para reciclado, póngase en contacto con su ayuntamiento, con el servicio de eliminación de residuos domésticos o con el establecimiento en el que adquirió el producto.

Bortskaffande av avfallsprodukter från användare i privathushåll inom Europeiska Unionen

Om den här symbolen visas på produkten eller förpackningen betyder det att produkten inte får slängas på samma ställe som hushållssopor. I stället är det ditt ansvar att bortskaffa avfallet genom att överlämna det till ett uppsamlingsställe avsett för återvinning av avfall från elektriska och elektroniska produkter. Separat insamling och återvinning av avfallet hjälper till att spara på våra naturresurser och gör att avfallet återvinns på ett sätt som skyddar människors hälsa och miljön. Kontakta ditt lokala kommunkontor, din närmsta återvinningsstation för hushållsavfall eller affären där du köpte produkten för att få mer information om var du kan lämna ditt avfall för återvinning.

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