



HP Print Server Appliance 4200 (J4117A)

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Product Overview

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Product Introduction



Figure 1: The HP Print Server Appliance 4200

The HP Print Server Appliance 4200 is a state-of-the-art device for managing and monitoring printing over a network. It is a network device that has been designed to provide a quick and easy way to add print capacity without affecting the general purpose server. It has several distinct advantages over conventional network printing configurations which can result in improved performance in both printing and file access. These [advantages](#) are discussed below.

Microsoft NT domain security, also known as [Microsoft NT Authentication and Authority](#), is a feature that allows administrators to easily authorize or restrict print administration and services to specific groups or users by using their existing username and password of the NT 4.0 domain. An NT domain is a logical grouping of network servers and other computers that share a common security and user account for each user. Users log on to the domain, not to individual servers in the domain

Installing printers on each client computer is required in order for clients to be able to print using the appliance. With the Microsoft Point and Print technology, printers are added to the appliance and associated with a factory-installed driver or a driver already added associated with a printer. Clients can be easily set up with access to that printer and its driver without having to install the driver again.

In a typical network, general purpose servers manage both the printing tasks and the file/application serving. The appliance handles the spooling and network traffic associated with printing, reducing the workload on the general purpose server.

When printing takes place at remote offices or other locations distant from the servers, the speed of printing can be degraded. A appliance installed in a remote office can dramatically increase printing performance by eliminating the need for print requests to travel from the remote office to the central site and back to a remote office printer.

An additional benefit is that if general purpose file/application servers go down, remote office users can still print many jobs directly, using the appliance.

Operation and Management

Once the appliance is configured, virtually no management tasks are required. However, system administrators can monitor print activity, manage the printers, or alter the configuration of the appliance from anywhere on the network using the appliance's web-based graphical user interface and a supported browser.

Product Description

The appliance contains a large disk drive for spooling print jobs from clients. Print jobs are stored on the disk drive. The number of print jobs is only limited by the disk space available on the appliance.

The appliance provides web-accessible printer management and configuration and spools print jobs from the following clients:

- Microsoft Windows 95
- Microsoft Windows 98
- Microsoft Windows 2000
- Microsoft Windows NT
- Microsoft Windows ME
- UNIX

Following are some main features of the appliance:

- Off-loads spooling from a UNIX or Windows NT server
- [Easy installation](#)
- Easy management
 - [Can be managed from any supported web browser on the network](#)
 - Virtually no management required once installed
- Supports APC uninterruptible power supplies (UPSs) (simple or basic signaling protocol)
- Increases performance of general purpose servers
- Easy replication of configuration and printer drivers across appliances
- Reduces network traffic

- Transparent to client users
- Easy to pre-configure before shipping to a remote office
- [Web configuration interface](#)
- Password security
- [Upgradable](#)
- Front panel LCD display and keypad
- 10/100Base-TX Ethernet network interface
- [Microsoft networking \(SMB over IP\)](#)
- Support for native Microsoft client printing tools
- Compatible with [Microsoft's Point and Print technology](#) (automatic driver download from the appliance to clients)
- [Windows NT Domain Integration](#)
- [Line Printer Daemon \(LPD\) support](#) for UNIX clients

Compatibility with HP Print Servers

The appliance will work with any HP print server with firmware version x.03 and above.

Compatibility with Other (Non-HP) Print Servers

Any print server that supports LPD should work with the appliance. The proper LPD remote queue name for the print server might have to be known. Many print servers will work without specifying a remote queue name (use the default HP PRINT SERVER setting); however, some require a special string in order to work. The LPD remote queue name can be obtained from the print server vendor.

Product Updates

When new firmware or other device-specific support information is available for the appliance, the appliance can be notified automatically. On the TCP/IP page, a field "Check for print server appliance firmware updates during each web login" can be checked to enable this feature. If this is checked and new firmware or support information is available, the picture of the applianceappliance image on the Overview page in the web interface will change.

This feature is enabled by default and can be disabled by unchecking this box. Each time an image is retrieved, it is logged like any other visit to HP's website. In addition, each request includes the serial number of the requesting unit. HP uses this to provide support information relative to the specific unit. No personally identifiable information such as user name, email address, or physical address is gathered as part of this process. HP does monitor web logs in order to understand our customers and improve our products. All web transactions are subject to HP's privacy policy which can be found at:<http://www.hp.com/country/us/eng/privacy.htm>.

Product Specifications

- [Model Number](#)
- [System Requirements](#)
- [Language Options](#)
- [Recommended Cables](#)
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Figure 1: The HP Print Server Appliance 4200

Model Number

Product	Model number
HP Print Server Appliance 4200	J4117A

System Requirements

The computer printing to the appliance must be running TCP/IP and have Microsoft Windows 95, 98, NT, 2000, or ME or other operating systems running LPD.

Language Options

The following localization options are available for the power cord:

Country	Option Code	Power Cord
U.S. Canada (excluding Quebec)	ABA	8120-6805
Europe, including: Austria Belgium Finland France Germany Italy Netherlands Norway Portugal Spain Sweden	401	8120-6802
Denmark	ACE	8120-6806
Switzerland	AR8	8120-6807
United Kingdom Singapore	ACC	8120-8709
South Africa	ACQ	8120-6808
Australia New Zealand	ABG	8120-6810
Hong Kong	AB5	8120-8709

Recommended Power Cords

Standard IEC-320 female power cord; terminated by male plug appropriate for country of use.

Supported Clients

Clients are networked PCs that submit print jobs to the appliance. The appliance can accept print jobs from the following clients:

- Windows 95
- Windows 98
- Windows NT 4.0
- Windows 2000
- Windows ME

- Any RFC 1179-compliant LPD client including (not all LPD implementations are RFC 1179-compliant):
 - HP-UX 10.x and above
 - Solaris
 - Linux
 - AIX 4.3 and above

Note: The Microsoft Point and Print feature for Windows NT and Windows 2000 is only supported on an x86 PC.

Note: The appliance supports SNMP MIB2.

Supported Printers

Any printer or print server that supports the LPD protocol should work with the appliance.

Supported Web Browsers

The following web browsers are supported:

- Netscape Navigator 4.01 or greater
- Microsoft (R) Internet Explorer 4.0 or greater (with update version SP1)

What Ships in the Box

The following are included in the box:

1. HP Print Server Appliance 4200
2. Quick Start Poster
3. Documentation CD-ROM
4. Rubber feet
5. Rackmount brackets
6. Power cable

Security Features

The appliance has a front panel password to prevent unauthorized front panel configuration. It also has a web administrator name and password, which are required to configure the device or manage printers (the default username is admin and the default password is admin). Additional web administrator accounts can be added.

The existing user account information of the NT 4.0 domain (name and password) is used; users or groups of users can be authorized to print through the appliance without requiring the creation of user accounts and passwords on the appliance.

For NT Domain networks, administrators can easily restrict print administration and services to specific groups or users. Valid access levels are:

- Print (print, pause, and delete your own print jobs)
- Manage Documents (print, pause, and delete other user's print jobs)
- Full Control (print, pause, and delete other user's print jobs, delete printers, and change security settings (using native NT tools))

- No Access

Physical Specifications

Attribute	Specification
Dimensions	441 millimeters (mm) (17.4 inches) W x 323 mm (12.7 inches) D x 63 mm (2.5 inches) H
Weight	4.6 kilograms (10.1 pounds)
Temperature	Operating: +5 degrees Celsius (C) to +40 degrees C (41 degrees Fahrenheit (F) to 104 degrees F) Non-operating: -40 degrees C to +70 degrees C (-40 degrees F to 158 degrees F)
Network connection	RJ-45
Serial port	DB-9 (supports all APC uninterruptible power supplies with a Simple Signaling cable (APC part # 940-0020B))
Acoustic noise	52 dB

Electrical Specifications

Attribute	Specification
Power requirements	120/240 VAC at 50/60 Hz
Power consumption	100-127 VAC/1.0A 200-240 VAC/.75A
Power connection	IEC-320

Environmental Specifications

Attribute	Specification
Relative humidity	80 percent at 40 degrees C (104 degrees F)
Temperature	(Operating) +5 degrees Celsius (C) (41 degrees Fahrenheit (F)) to +40 degrees Celsius (104 degrees F) (Non-operating) -40 degrees Celsius (-38 degrees F) to +70 degrees Celsius (158 degrees F)

Safety Certifications

Products comply with:

- IEC 950: (1991)+A1,A2,A3,A4/EN60950 (1992)+A1,A2,A3,A4
- UL 1950
- CSA 950

Getting Started

- [What Ships in the Box](#)
- [Steps for Installation and Configuration](#)
- [Hardware Installation](#)
- [Troubleshooting the Appliance](#)

What Ships in the Box

The following items ship with appliance. If something is missing from the box, please contact the HP Dealer or Reseller where the appliance was purchased.

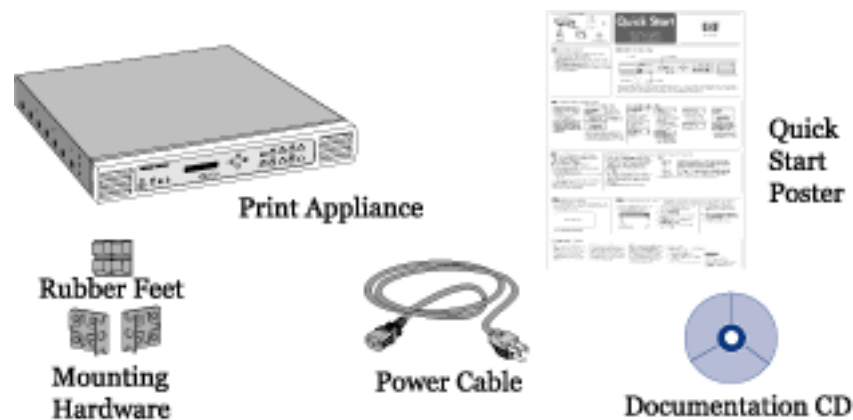


Figure 1: Contents of the box

Steps for Installation and Configuration

To install the appliance, complete these steps:

1. Unpack the appliance and make sure the six items are included in the box.
2. [Attach its rubber feet](#) for desktop, rack shelf, or under-printer installation. For rackmount installation, [click here](#).
3. [Connect the cables and components](#).
4. Configure the IP settings using the [front panel](#) (for the first time). The IP address can be changed through the web interface if desired.
5. Access the web interface.
6. Under Network Settings, complete the [TCP/IP Network Settings](#) page.
7. Also under Network Settings, complete the [Microsoft Networking Settings](#) page to identify the

WINS server address and the Windows NT domain or workgroup. For NT Domain security, complete the other fields on this page.

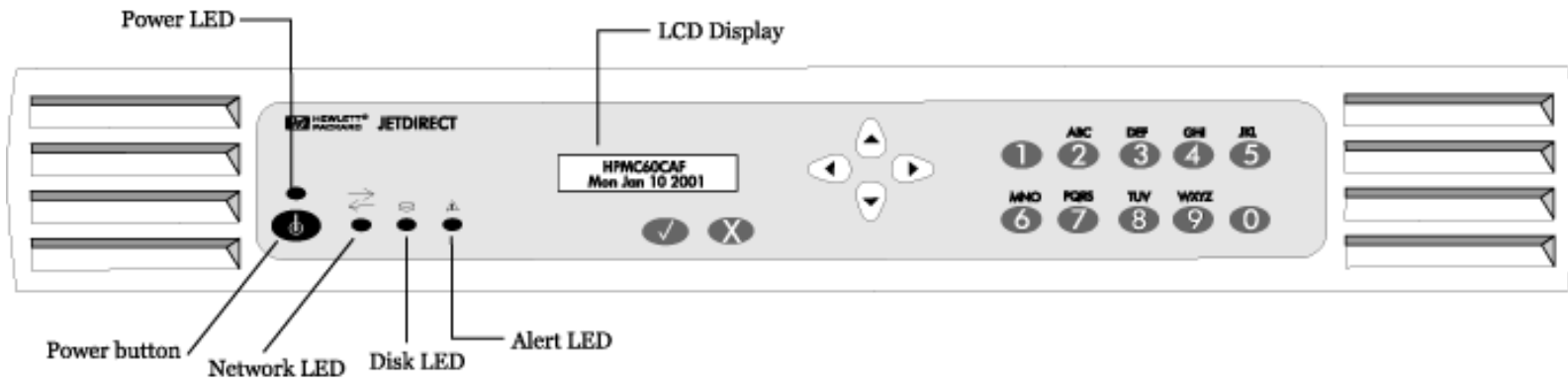
8. [Install printers on clients.](#)
9. [Back up the settings.](#)
10. Be sure to [register the appliance](http://www.hp.com/go/printappliance_registration) (http://www.hp.com/go/printappliance_registration).

Front Panel

The following activities can be performed from the front panel:





- [Start Up or Shut Down the Appliance](#)
- [Configure the IP Address for the Appliance](#)
- [Set or Change the Front Panel Password](#)
- [Troubleshoot the Appliance](#)

The front panel on the HP Print Server Appliance 4200 has the following components:



LEDs

There are four indicator lights (LEDs) on the front of the appliance. Understanding how the lights function is important for proper operation of the appliance. This document describes normal and problem LED status displays.

LED	LED Name	Description
	Power LED	ON when power is supplied to the appliance and it is turned on.
	Network Activity LED	LIT when there is a connection between the appliance and other network devices. BLINKS when there is network activity between the appliance and other network devices.
	Disk Activity LED	ON when there is disk activity on the appliance.
	Alert LED	OFF during normal operations (ON during bootup and shutdown).





Power Button - Starting Up and Shutting Down the appliance

Press the Power button to power up the appliance. The bootup process begins. When the device is powered on, the Power LED is lit. To turn off the appliance press the Power button and wait for about 20 seconds for the appliance to power down. The appliance performs an orderly shutdown.



If print jobs are printing when the appliance is powered down, the print jobs will not be completed. Jobs waiting to be printed will resume printing when the appliance is fully booted. If the appliance loses power unexpectedly and is not powered down, spooled print jobs that had not yet begun printing or print jobs that were in the middle of printing will resume printing when power is restored and the appliance is powered up again. If, however, the integrity of the appliance or print jobs are compromised, print jobs that were not spooled would have to be resent.

Front Panel Display





The LCD display has two rows of 16 characters or spaces. It is used to display the status of the appliance and to display configuration information entered at the front panel. The following arrow buttons are displayed on the front panel:

	Indicates that the menu can scroll.  scrolls up,  scrolls down.
	Indicates that choices can be toggled through.

Enter and Cancel Buttons

	Enter. Accept changes or begin an operation.
	Cancel changes or end an operation.

Direction Buttons




	Up. Press this button to return to the previous menu item or step of a procedure. If Enter hasn't been pressed, changes will not be applied.
	Down. Press this button to advance to the next menu item or step of a procedure.
	Left. When there is a choice of options (as indicated in the front panel display), press this button to toggle backward through the choices.
	Right. When there is a choice of options (as indicated in the front panel display), press this button to toggle forward through the choices.

Numeric Keypad

The numeric keypad has buttons for the numbers 0-9. Above the keys are letters of the alphabet, like the keypad on a telephone.

Use the numeric keypad to enter numeric values, such as IP address, subnet mask, etc., when configuring the appliance. The letters above the keys can be useful as a mnemonic aid when entering the device's password.

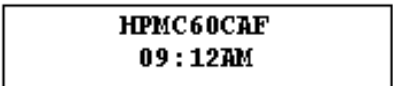
Making Entries

Use  and  on the front panel to move the cursor in the front panel display. Enter only numbers from the keypad. When the entry is complete, press .

Messages on the Front Panel

When the appliance is powered up, it executes a series of self tests. It then displays a series of messages, including "Booting... Configuring... Validating... Extracting... Formatting..." etc.

When the startup process is complete, the appliance displays a repeating series of normal operating messages.




HPMC60CAF
09:12AM

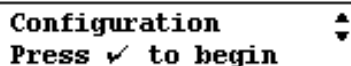
The first line of the display shows the appliance name which can be entered from the web interface during configuration (on the [Microsoft Networking Settings page](#)). If the name is not entered in the web interface, the default name, based on the device's MAC address, is displayed.



The second line of the display shows date, time, IP address, and firmware version in a repeating sequence.



Starting Front Panel Operation

There are two front panel operations: [Configuration](#) and [Password](#).

Press  once to begin front panel operations.



Configuration 
Press  to begin

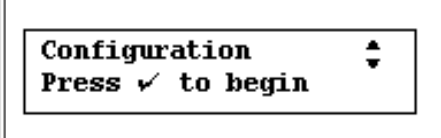
Press  again to go to the Change Configuration function. Press  to go to the [Change Password](#) function.



Setting or Changing the Front Panel Password

There are two types of passwords that can be set for the appliance: a front panel password (one per appliance) and an [administrator password](#) (can be multiple accounts, but there must be at least one), which enables access to the web interface to manage the appliance. The front panel password is discussed in this section.

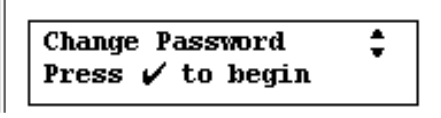
There is no front panel password until it is set. This password limits access to front panel functions. A password will prevent unauthorized configuration changes. After the front panel password is set, it must be entered before future configuration tasks can be performed at the front panel display.



To set or change the front panel password, press  once. The following screens are displayed:



Configuration 
Press 

Press .

Change Password 
Press 

Press .

<div data-bbox="50 100 440 184" style="border: 1px solid black; padding: 5px;"> New Password <input type="text"/> </div>	Enter a new password and press ✓ .
<div data-bbox="50 233 440 317" style="border: 1px solid black; padding: 5px;"> Retype Password <input type="text"/> </div>	Retype the new password and press ✓ .
<div data-bbox="50 359 440 443" style="border: 1px solid black; padding: 5px;"> Password set </div>	The front panel displays this message briefly.
<div data-bbox="50 506 440 590" style="border: 1px solid black; padding: 5px;"> Change Password ⬆ Press ✓ to begin ⬆ </div>	<p>Press ✕ to end the operation and the device will return to the display of normal operating messages.</p> <p>Or, after a moment, it will display normal operating messages.</p>

Configuring the IP Address Using the Front Panel

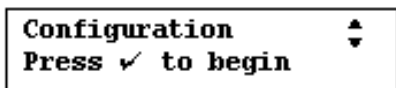
→ [Configuring the IP Address Manually](#)

→ [Configuring the IP Address Using DHCP](#)

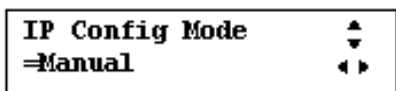
These procedures explain how to manually configure an Internet Protocol (IP) address on the appliance using the front panel. (The [TCP/IP page in the web interface](#) can also be used to do the same.) Configuring the IP address allows the appliance to route print tasks properly.

If the network does not use Dynamic Host Configuration Protocol (DHCP), use the [front panel](#) of the appliance to manually enter the IP address, subnet mask, and default gateway.

To begin configuring the IP address for the appliance, press ✓ once. The following screen is displayed:



Press ✓ again to go to the Change Configuration function. (Pressing ✕ starts the [Change Password](#) process.)








The display shows Manual mode. Press ⏪ or ⏩ to toggle between [DHCP](#) and [manual](#) modes.

Press ✕ to cancel the operation and go to the main display, or press ⏩ to continue the configuration process.

Configuring the IP Address Manually




In Manual mode, the following is displayed:

Display	Action

IP Address: ▲▼ 010.001.002.003	Use the number buttons on the front panel of the appliance to enter the IP address. Press  .
Subnet Mask: ▲▼ 255.000.000.000	Use the number buttons on the front panel of the appliance to enter the subnet mask. Press  .
Default Gateway: ▲▼ 010.001.002.003	Use the numbers on the front panel of the appliance to enter the default gateway. Press  .
Exit config ▲▼ Press ✓ to exit	Press  .
<input checked="" type="checkbox"/> Apply changes ▲▼ <input checked="" type="checkbox"/> Cancel changes	Press  .
Restarting Network...	After a moment, the appliance will resume displaying normal operating messages if the IP address entered is valid.

Configuring the IP Address Using DHCP

In DHCP mode, the following is displayed:

Display	Action
IP Config Mode ▲▼ DHCP ◀▶	The "=" will appear in the display.
IP Config Mode ▲▼ =DHCP ◀▶	Press  twice to display this message.
Exit config ▲▼ Press ✓ to exit	Press  .
<input checked="" type="checkbox"/> Apply changes ▲▼ <input checked="" type="checkbox"/> Cancel changes	Press  .
Restarting Network...	After a moment, the appliance will resume displaying normal operating messages.

Use the web interface to further configure the appliance. Refer back to the [Getting Started procedures](#), or refer directly to information about using the [web interface](#) to further configure the device.

Hardware Installation

- [Desktop/Rack Shelf/Under-Printer Installation](#)
- [Rackmount Installation](#)
- [Cable Connections](#)
- [Troubleshooting the Appliance](#)

This document explains how to connect the components of the appliance. When installing the hardware for the appliance, be certain to carefully follow all instructions to ensure the proper connection and function of the appliance.

Desktop/Rack Shelf/Under-Printer Installation

Use the following procedure to perform the desktop/rack shelf/under-printer installation:

CAUTION: For under-printer installation, the appliance can support printers that weigh up to 60 pounds. Do not place heavier printers on the appliance.

1. Turn the appliance so it rests on its top.
2. The appliance ships with a set of four self-adhesive rubber "feet" on a paper backing sheet. Remove each foot from the paper backing. Install each foot on the bottom of the appliance in the indentation provided. Press each foot firmly into place.
3. Turn the appliance over so it rests on its rubber feet.
4. Locate the appliance for easy access to a power source and network connection. It may be located on any solid surface, in a rack shelf, or under a printer.
5. [Connect cables](#).

Rackmount Installation

The appliance may be rack-mounted into industry-standard instrument/computer racks. The appliance is shipped with a pair of rack-mount brackets with four screws. There are also four screws for mounting the brackets to the appliance in the rack.

The appliance requires 1.5 rack units (RU) of vertical space. It does not require rails for rack mounting.

Note: The rackmount installation should be performed by an experienced individual, using appropriate tools, and exercising appropriate safety precautions.

Use the following procedure to perform the rackmount installation:

1. Attach the rackmount brackets to the sides of the appliance.

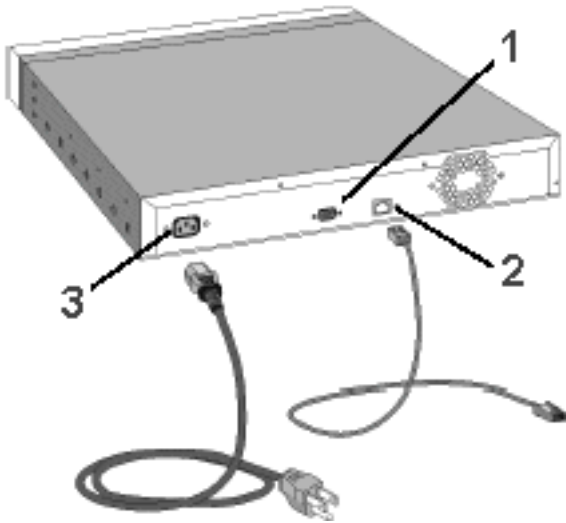
2. Position the appliance in the rack.
3. Install the appliance into the rack. Use all of the provided screws in both vertical rails of the rack.

Caution: To prevent unstable mounting of the appliance, Hewlett-Packard recommends using two screws per bracket.

4. Now the [cables should be connected](#).

Cable Connections

Use the following steps to connect the cables:



- 1. DB-9 Serial Port (supports all APC uninterruptible power supplies with a Simple Signaling cable (APC part # 940-0020B))
 - 2. RJ-45 Network Jack
 - 3. Power Receptacle
1. Connect a twisted pair network cable (not included) with an RJ-45 connector to the RJ-45 jack on the back of the appliance (see Figure 1, number 2).
 2. Connect the other end of the network cable to a network port.
 3. If using an APC uninterruptible power supply (UPS), connect a Simple Signaling cable from the UPS to the DB-9 serial port on the back of the appliance.

Note: The Simple Signaling cable is not included with the appliance or with the APC UPS. This cable can be ordered from APC (APC part # 940-0020B).

4. Connect the power cable to the power receptacle on the back of the appliance.

Note: Make certain that air flow is not restricted around the back of the unit.

5. Connect the other end of the power cable to a power source. If a UPS is being used, connect the power cable to the UPS.

6. Turn on the appliance by pressing the Power button on the front panel.

For initial installation, the IP address for the appliance can now be configured. Refer back to the [Getting Started procedures](#), or refer directly to information about [configuring IP addresses](#).

Web Interface for the Appliance

- [Supported Web Browsers](#)
- [Accessing the Web Interface](#)
- [Menu](#)
- [Overview Page](#)
- [Changing the Date and Time](#)

The appliance contains an embedded web server. The web server allows administrators to manage the configuration of the appliance, review the status of the device, and view print jobs from your web browser.

This document explains what can be configured through this interface and how to [access the web interface](#) on the appliance.

Supported Web Browsers

The following web browsers are supported:

- Netscape Navigator 4.01 or greater
- Microsoft (R) Internet Explorer 4.0 or greater (with update version SP1)

Accessing the Web Interface

Follow these steps to access the web interface:

1. Open the web browser.
2. In the Location field (Netscape Navigator) or Address field (Microsoft Internet Explorer), enter the IP address of the appliance, as displayed on the front panel liquid-crystal display (LCD) (for example: [http://10.1.2.3](#)).
Or, enter the DNS name of the appliance (if the DNS server has been configured with the correct name entry).
3. Enter the administrator name and password. (The default is "admin" for the username and "admin" for the password.) The [Overview page](#) is displayed with the menu on the left.

The [Overview page](#) displays general information about the appliance.

Menu

The menu is always displayed on the left side of the any displayed page in the web interface. Click on any of the following topics listed on the menu for more information:

General

- [Overview](#)
- [Date/Time](#)
- [Administrator Account](#)
- [Install Upgrade](#)
- [Restart Appliance](#)

Network Settings

- [TCP/IP](#)
- [Microsoft Networking](#)
- [LPD Settings](#)

Print Services

- [Printers](#)
- [Driver Management](#)

Backup/Restore

- [Backup Settings](#)
- [Restore Settings](#)

Overview Page

The following information is displayed on the Overview page:

Print Server Appliance Name	Name as entered on the Microsoft Networking Settings page under Network Settings.
IP Address	IP address for the appliance as entered on the TCP/IP page under Network Settings.
MAC Address	Hardware address for the appliance.
Serial Number	Serial number for the appliance.
Firmware revision	Firmware revision number currently on the appliance.
Printers	Number of printers currently managed by the appliance.

Jobs Pending

Number of print jobs waiting to be printed for all of the printers managed by the appliance.

Print Appliance Name:	HPMC60CAF	Printers:	0
IP Address:	10.1.2.3	Jobs Pending:	0
MAC Address:	00:60:B0:C6:0C:B3		
Serial Number:	SG1234567890		
Firmware Revision:	2.0.74		

HP Product HOME | Registration | Support | Feedback © 2001 Hewlett-Packard Company

Changing the Date and Time

Use the Date and Time Configuration page to set the date and time of the appliance.

Field Name	Description
Date	Enter the date in the format: mm/dd/yyyy. The complete year must be specified. Leading zeroes may be omitted. (For example: "1/1/1999" and "12/25/2001".)
Time	Enter the time in the format: hh:mm:ss. The seconds and leading zeroes may be omitted. (For example: "5:35" and "12:00:00".)
AM/PM	Use the drop-down box to select AM or PM. The 24-hour time format is not supported.
Time Zone	Select the appropriate time zone from the drop-down box.

Click Cancel to keep the time and date at their previous values, or click Apply to set the date and time.

→ [System Messages for Data and Time](#)

Configuring the Administrator Account

- [Administrator Accounts](#)
- [Using Native NT Tools for Administration](#)
- [Administrator Accounts Page](#)
- [Adding an Administrator Account](#)
- [Changing the Password for an Existing Administrator Account](#)
- [Deleting an Administrator Account](#)
- [Related System Messages](#)
- [Troubleshooting](#)

Administrator Accounts

Use the Administrator Accounts page to change passwords or add administrator account names. There can be multiple administrator accounts for the appliance, but all accounts have the same privileges. Any administrator can delete any other administrator's account, but the last administrator's account cannot be deleted.

The web passwords for the administrator accounts are stored on the appliance and are NOT synchronized with the NT domain controller, even if the administrator account is identical to the name of a user in the domain. Since the password used for web-based administration is sent over the network in clear text, it should be different from the one used for the NT domain.

Note: The administrator account name and password are not related to the front panel password of the appliance, which is set and changed through the [front panel](#).



Using Native NT Tools for Administration

When NT domain authentication is enabled, and the name of one of the appliance administrator accounts matches the name of a domain user, then that domain user can use the NT tools to manage the appliance, printers, and print jobs. All NT domain administrators can use NT tools to manage the appliance, even if a domain administrator does not have an administrator account for the appliance.

When NT domain authentication is not enabled, an administrator account must be configured through the web interface using the same name and password as the account used to log into the NT or Windows 2K workstation from which the native tools will be launched.

Administrator Accounts Page

The Administrator Accounts page lists all administrator accounts for the appliance.

Administrator Accounts Page	
Page Field Names	Description
Administrator Name	Lists all administrator accounts added to the appliance.
Administrator Properties 	After an administrator account has been added, click the icon for that account to change the password. The Administrator Properties page will be displayed.
Delete 	<p>(Available when there is more than one administrator account) After an administrator account has been added, click the icon for that account to delete it.</p> <p>To delete an administrator account, follow these steps:</p> <ol style="list-style-type: none"> 1. Log on to the web interface. 2. On the menu under General, click Administrator Accounts. 3. Click "Delete" next to the administrator account to delete. Two confirmation messages are displayed. 4. Click OK. The Administrator Accounts page will be displayed again.

The screenshot shows the HP Print Server Appliance web interface. The top navigation bar includes the HP logo and the text 'hp print server appliance' with a 'Help' link. A left-hand navigation menu is organized into sections: GENERAL (with sub-items: Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (with sub-items: TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (with sub-items: Printers, Driver Management), and BACKUP/RESTORE (with sub-items: Backup Settings, Restore Settings). The 'Administrator Account' menu item is highlighted. The main content area, titled 'Administrator Accounts', features a table with two columns: 'Administrator Name' and 'Administrator Properties'. The 'admin' user is listed in the 'Administrator Name' column, and a small icon is shown in the 'Administrator Properties' column. Below the table are three buttons: '+ add user', 'refresh', and '? help'. The footer of the page includes 'HP Product HOME | Registration | Support | Feedback' and '© 2001 Hewlett-Packard Company'.

To access the Administrator Accounts page, follow these steps:

CAUTION: If all administrator passwords are forgotten, the only way to gain access to the appliance is to [reset the appliance](#) to factory defaults (using the front panel). After the appliance is reset to factory defaults, all configuration information will be lost including network settings, printers, and possibly revert to a previous version of the firmware.

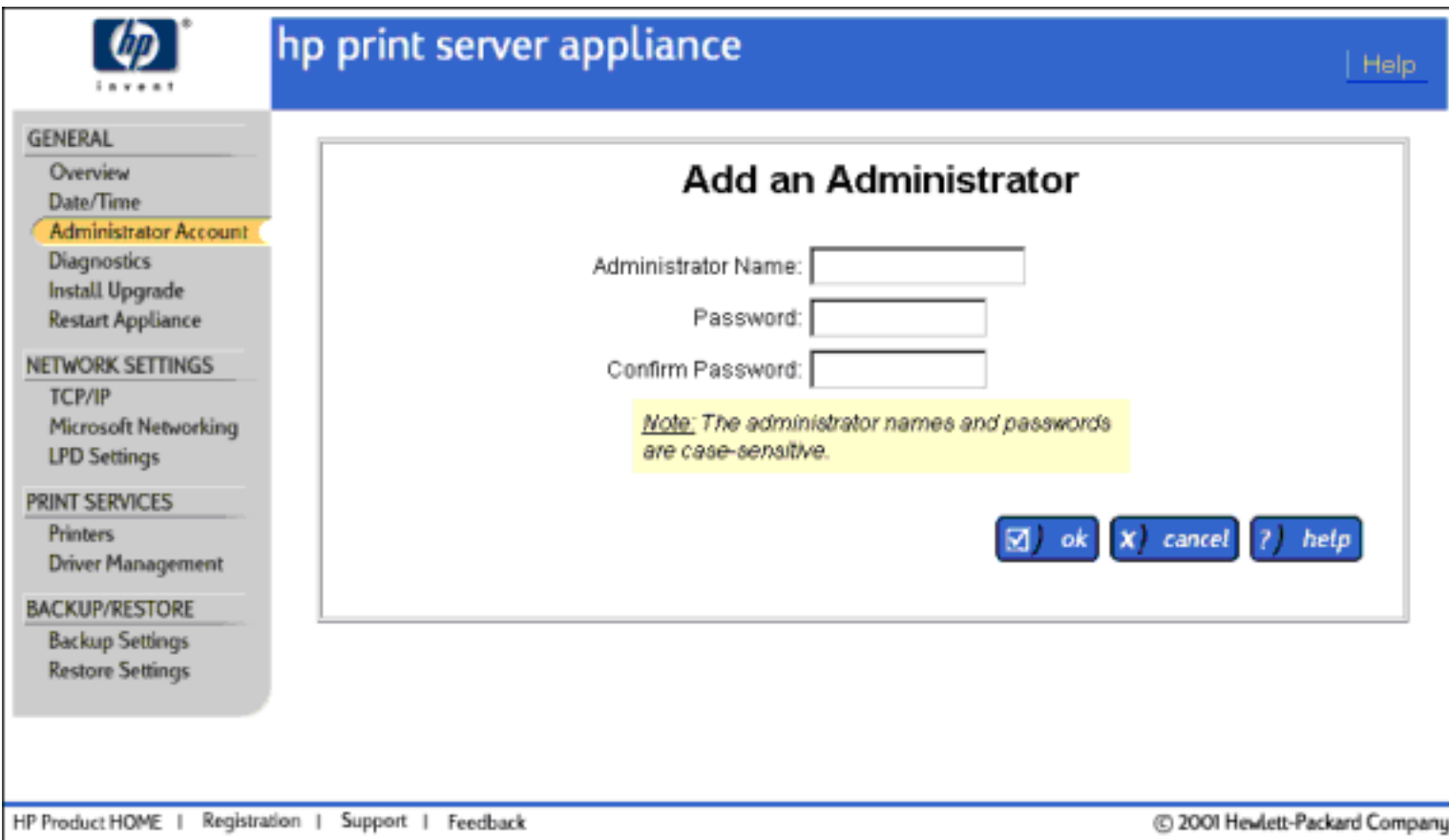
1. Log on to the web interface. (The default is "admin" for the username and "admin" for the password.)
2. On the menu under General, click Administrator Accounts. The Administrator Accounts page is displayed.

Adding an Administrator Account

Additional administrator accounts can be added on the Add an Administrator page:

Add an Administrator Page	
Page Field Names	Description
Administrator Name	Enter the new administrator name (must be unique for the appliance). The administrator name is case sensitive and can contain alphanumeric characters and the following special characters: ~ ` ! @ \$ % ^ () - _ { } ..

Password	Enter the password. The password is case sensitive and can contain alphanumeric characters and the following special characters: ~ ` ! @ \$ % ^ () - _ { } .. Note: The appliance will accept a null or blank password.
Confirm Password	Enter the password again to confirm it (if there is a password). Then click OK to add this administrator to the appliance.



The screenshot shows the HP Print Server Appliance web interface. The top navigation bar includes the HP logo, the text "hp print server appliance", and a "Help" link. A left-hand menu is organized into sections: GENERAL (Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (Printers, Driver Management), and BACKUP/RESTORE (Backup Settings, Restore Settings). The "Administrator Account" menu item is highlighted. The main content area displays the "Add an Administrator" form, which includes three input fields: "Administrator Name:", "Password:", and "Confirm Password:". A yellow note box below the fields states: "Note: The administrator names and passwords are case-sensitive." At the bottom right of the form are three buttons: "ok" (with a checkmark icon), "cancel" (with an 'x' icon), and "help" (with a question mark icon). The footer of the page contains "HP Product HOME | Registration | Support | Feedback" on the left and "© 2001 Hewlett-Packard Company" on the right.

To add an administrator account, follow these steps:

1. Log on to the web interface.
2. On the menu under General, click Administrator Accounts. The Administrator Accounts page is displayed.
3. Click "Add User". The Add an Administrator page is displayed.
4. Complete the fields as described below.
5. Click OK. The message "Administrator Account Added" is displayed.

Changing the Password for an Existing Administrator Account

The password for an existing administrator account can be changed on the Administrator Properties page:

1. Log on to the web interface.
2. On the menu under General, click Administrator Accounts. The Administrator Accounts page is displayed.
3. Click the "Administrator Properties" button next to the administrator account to change. The Administrator Properties page for that account is displayed.
4. Type the new password in the New Password field.
5. Repeat the password in the Confirm New Password field.
6. Click OK. The Administrator Accounts page will be displayed.

The screenshot shows the HP Print Server Appliance web interface. The top navigation bar is blue with the HP logo on the left, the text "hp print server appliance" in the center, and a "Help" link on the right. A left-hand menu is visible, with categories: GENERAL (Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (Printers, Driver Management), and BACKUP/RESTORE (Backup Settings, Restore Settings). The "Administrator Account" item is highlighted. The main content area is titled "Administrator Properties" and contains the following text: "To change this administrator's password, enter a new password and confirm it. Then press the OK button." Below this text are two input fields: "Administrator Name: admin" and "New Password:" followed by a text box, and "Confirm New Password:" followed by another text box. A yellow note box contains the text: "Note: If you change the password of the account you are currently using, you will be asked to reconnect using the new password." At the bottom right of the form are three buttons: "ok" (with a checkmark icon), "cancel" (with an X icon), and "help" (with a question mark icon). The footer of the page includes "HP Product HOME | Registration | Support | Feedback" on the left and "© 2001 Hewlett-Packard Company" on the right.

Once the administrator account name and password have been changed, the current browser session is no longer authenticated. Re-connect to the appliance, using the new administrator account name and password.

TCP/IP

- [TCP/IP Network Settings](#)
- [Configuring the Appliance Using the Web Interface](#)
- [Related System Messages](#)
- [Troubleshooting the Appliance](#)

TCP/IP Network Settings

The TCP/IP Network Settings page is accessible under Network Settings on the menu. On this page, administrators can configure:

- the IP address
- subnet mask
- gateway
- Domain Name Server (DNS) address
- DNS Domain Name

The screenshot displays the HP Print Server Appliance web interface. The top navigation bar includes the HP logo, the text "hp print server appliance", and a "Help" link. A left-hand menu lists various settings categories: GENERAL (Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (Printers, Driver Management), and BACKUP/RESTORE (Backup Settings, Restore Settings). The "TCP/IP" option is highlighted. The main content area is titled "TCP/IP Network Settings" and contains the following configuration options:

- Obtain an IP Address automatically using DHCP
- Manually specify IP information:
 - IP Address:
 - Subnet Mask:
 - Default Gateway:
 - Domain Name Server (DNS) Address:
 - DNS Domain Name (e.g. mydomain.com):
- Check for print server appliance firmware updates from hp.com during each web login. Find out more about HP's [privacy policy and this feature](#).

At the bottom right of the settings area are three buttons: "apply" (with a checkmark icon), "reset" (with a circular arrow icon), and "help" (with a question mark icon).

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Field Name	Description
Obtain an IP address automatically using DHCP	Select this option for the appliance to be automatically configured using Dynamic Host Configuration Protocol (DHCP). Ensure that a valid DHCP server and address leases are available. If DHCP was chosen, the IP address, subnet mask, and default gateway will be automatically configured.
Manually specify IP information	Select this option to manually specify the IP address information for the appliance. Each field must be entered manually.
IP address	Enter an IP address without leading zeroes (for example: "10.1.2.3").
Subnet mask	Enter a subnet mask (for example: "255.0.0.0").
Default gateway	Enter the IP address of the default gateway used to access other networks or subnets. This enables the appliance to communicate with devices (such as printers and PCs) on different subnets. If a gateway is not available, or if the address of the gateway is unknown, enter the same IP address used for the appliance, or leave this field blank (or empty).
Domain Name Server (DNS) Address	The DNS enables network resources (such as PCs and printers) to be specified by their friendly names instead of their IP addresses. In order to use this functionality, specify the DNS server by its IP address, not by its friendly name. Once the DNS is specified, use friendly names across other configuration areas of the appliance (such as the queue configuration screen). If the network does not have a DNS, leave this field blank (or empty).
DNS Domain Name	The DNS domain name. For example, a server named mail.hp.com (hp.com is the DNS name and mail is the hostname). The domain name must match standard naming conventions. The name must be alphanumeric. It may also contain dashes (-) (for example : mycompany.com). If the network does not have a DNS domain name, "defaultdomain" is entered as the default.

Check for Print Server Appliance firmware updates during each web login

The Overview page can display [new information](#) regarding the appliance if this box is checked.

Configuring the Appliance Using the Web Interface

1. At a workstation, [access the web browser](#).
2. Log on to the appliance as an [administrator](#) (The default is "admin" for the username and "admin" for the password.)
3. Complete the TCP/IP Network Settings screen. See the description of the fields (above) for more information.
4. Click Apply.

After this screen has been completed, complete the [Microsoft Networking Settings page](#) to identify the WINS server address and the Windows NT domain or workgroup. For the Windows NT domain security feature, complete the other fields on that page.

Microsoft Networking Settings

- [Microsoft Networking Settings Page](#)
- [Microsoft NT Domain Security Features](#)
- [Adding the Appliance to a Domain](#)
- [Enabling and Disabling Microsoft NT Domain Security](#)
- [Granting Access or Authority to Groups](#)
- [Related System Messages](#)
- [Troubleshooting the Appliance](#)

Microsoft Networking Settings Page

The Microsoft Networking Settings page is accessible under Network Settings on the menu. On this page, administrators can:

- change the appliance name
- identify the WINS server address
- identify the Windows NT domain or workgroup
- enable Microsoft NT Domain security

Field Name	Description
Print Server Appliance Name	<p>Enter a name for the appliance. The appliance name will be displayed:</p> <ul style="list-style-type: none"> ● In the Network Neighborhood on each client workstation. The Network Neighborhood is visible from Microsoft Windows Explorer. ● On the Overview page in the web interface for the appliance ● On the front panel of the appliance. <p>If the network uses DNS to identify network resources, this name should match the DNS name. Otherwise, any name will work.</p> <p>The name may contain up to 220 alphanumeric characters. It may also contain dashes (-) and periods (.).</p>

WINS Server Address	<p>(Windows Internet Name Server) Enables network resources (such as PCs and printers) to be specified by their friendly names instead of their IP addresses. In order to use this functionality, specify the WINS server by its IP address, not by its friendly name. Once the WINS server is specified, use friendly names across other configuration areas of the appliance (such as the queue configuration screen).</p> <p>If the network does not have a WINS server configured, leave this field blank. Without a WINS server configured, Windows 95, 98, and ME clients may be unable to print to a appliance located on a different subnet. NT domain integration may behave unpredictably if this field is blank.</p>
Windows NT Domain or Workgroup	Specify the Windows NT domain or workgroup this appliance belongs to. The appliance will appear under this name in Network Neighborhood.
Enable NT Domain Authentication	Check this box to enable NT domain security for the appliance. Uncheck the box to disable NT domain security. (The default is disabled.)
Domain Membership Status	The current status of the appliance's membership in the NT domain.
Automatically discover NT Domain Controllers	Select this to automatically discover the NT domain controller for the domain or workgroup as specified above in the "Windows NT Domain or Workgroup" field.
Manually specify NT Domain Controllers	Select this to manually specify the domain controllers.
Domain Controller	Enter the domain controller's name or IP address to be added to the list of Configured Domain Controllers; use the Add button to add it to the list.

Specified Domain Controllers	List of specified domain controllers to use for username and password validation. The print appliance will try to communicate with the first domain controller in the list. If the print appliance cannot communicate with the first one, it will then try the second domain controller in the list, and so forth. Use the Move Up and Move Down buttons to reorder the domain controller names in the list. Use the Remove button to take a domain controller off the list. (This is only valid when in manual mode.)
Create account in the NT Domain for this device	Check this to create a new computer account for the appliance in the NT domain; then enter the domain administrator username and password below.
Domain Administrator Name	A valid administrator's name as stored on the NT Domain Controller.
Domain Administrator Password	A valid administrator's password as stored on the NT Domain Controller.

hp print server appliance Help

Microsoft Networking Settings

Print Appliance Name:

WINS Server Address:

Windows NT® Domain or Workgroup:

Enable NT Domain Authentication

Automatically discover NT Domain Controllers

Manually specify NT Domain Controllers

NT Domain Controller:

Specified NT Domain Controllers:

NT Domain Membership Status: **NOT JOINED**

Create an account for this device in the NT Domain

NT Domain Administrator Name:

NT Domain Administrator Password:

Enable shared drive to store printer device drivers

GENERAL

- Overview
- Date/Time
- Administrator Account
- Diagnostics
- Install Upgrade
- Restart Appliance

NETWORK SETTINGS

- TCP/IP
- Microsoft Networking**
- LPD Settings

PRINT SERVICES

- Printers
- Driver Management

BACKUP/RESTORE

- Backup Settings
- Restore Settings

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To complete the Microsoft Networking Settings page, follow these steps:

1. At a workstation, [access the web browser](#) and enter the IP address for the appliance.
2. Log on to the appliance as an [administrator](#). (The default is "admin" for the username and "admin" for the password.)
3. Under Network Settings on the menu, select Microsoft Networking Settings. (See the [description of the fields](#) above for more information.)
4. Complete the [Print Server Appliance Name](#) field.
5. Complete the [WINS Server Address](#) field.
6. Complete the [Windows NT Domain or Workgroup](#) field.

7. If the security feature for Windows NT authentication and authority is being used, complete the other fields on this page.
8. Click Apply.

Hewlett-Packard recommends [backing up the settings](#) after this page is completed.

Microsoft Windows NT Domain Security Features

Microsoft NT domain security is a feature that allows administrators to easily authorize or restrict print administration and services to specific groups or users by using their existing username and password of the NT 4.0 domain. An NT domain is a logical grouping of network servers and other computers that share a common security and user account for each user. Users log on to the domain, not to individual servers in the domain.

The NT domain security feature provides the following features:

- Seamless integration for the print client user (the native tools for printing and managing personal documents work the same as they do with Microsoft NT spoolers).
- Assignment of permissions are on a per-printer basis.
- Disabling and enabling NT domain security and authority without losing configuration information.
- Setting or changing permissions using the web interface or native NT tools.
- Specifying selected groups that can have one of the following four permission levels for each printer, using native NT tools:
 - Print (print, pause, and delete your own print jobs)
 - Manage Documents (pause and delete other user's print jobs)
 - Full Control (print, pause, and delete other user's print jobs, delete printers, and change security settings)
 - No Access
 - Special Access (for some Windows 2000 permissions that do not map directly to the above four permission levels)

Adding the Appliance to a Domain

There are two ways to add the appliance to a domain:

- Complete the fields on the [Microsoft Networking Settings page](#). Set the appliance name and then, at a minimum, complete the following fields:
 1. "Create account in the NT Domain for this device"
 2. "Domain Administrator Name"
 3. "Domain Administrator Password"

OR

- Create a machine account on the domain controller using Server Manager.
 1. Log on to the NT server as an NT administrator.
 2. Add the appliance to the domain using the Server Manager.
 3. Log on to the appliance as Appliance Administrator using the appliance's web interface. (The default is "admin" for the username and "admin" for the password.)
 4. Set the NT domain name on the [Microsoft Networking Settings page](#) by completing the "Windows NT or Workgroup" field.

Enabling and Disabling Microsoft NT Domain Security

The administrator can, at any time, turn on or off NT domain security. If NT domain security is on and the appliance cannot communicate with the domain controller over the network, users will not be able to print using the appliance. The administrator can turn off NT domain security, which would enable users to continue printing although no security will be enforced. To disable NT domain security, access the [Microsoft Networking Settings page](#), and make sure the box for "[Enable NT Domain Authentication](#)" is not checked.

The administrator accounts on the appliance are locally managed administrator accounts and are always accessible through the web interface.

Granting Access or Authority to Users and Groups

On the Printer Properties - [Security page](#), assign domain users and/or groups [appropriate access](#) for that printer. The NT Users/Groups list box contains all of the group or user names within the selected NT domain. Select from this list to grant access to the printer and click Add. After the group has been granted access, its name will be moved from the NT Users/Groups list box to the Current Assignments list box.

The web passwords for the administrator accounts are stored on the appliance and are NOT synchronized with the NT domain controller, even if the administrator account is identical to the name of a user in the domain. Since the password used for web-based administration is sent over the network in clear text, it should be different from the one used for the NT domain.

When NT domain authentication is not enabled, an administrator account must be configured through the web interface using the same name and password as the account used to log into the NT or Windows 2K workstation from which the native tools will be launched.

LPD Settings

- [LPD Settings](#)
- [Configuring LPD Printing](#)
- [System Messages for LPD Settings](#)
- [Troubleshooting the Appliance](#)
- [Configuring Printing for UNIX Clients](#)

This feature enables the Line Printer Daemon (LPD) protocol (sometimes referred to as "BSD compatible" network printing) to spool and control print jobs on the appliance from any RFC 1179-compliant LPD client including (not all LPD implementations are RFC 1179-compliant):

- HP-UX 10.x and above
- Solaris
- Linux
- AIX 4.3 and above

LPD print jobs are visible to Windows clients, but Windows users cannot manage (pause, resume, restart or cancel) them unless that user has the appropriate administrative rights on the appliance.

Both UNIX and Windows clients can simultaneously print to the same printer regardless of whether a printer driver has been associated with with printer.

As a default, LPD printing is enabled for all hosts. Administrators can restrict printing to a certain set of hosts, if desired.

Note: The appliance does not process control files for printing options such as number of copies. Instead it will pass this information straight through to the target device and the target device may choose to handle or ignore these options.

LPD Settings

On the LPD Settings page, the administrator can enable or disable LPD printing.

Field Name	Description
Disable LPD printing	Disables LPD printing and print job management from any and all hosts.
Enable LPD printing from ALL hosts	Enables LPD printing and print job management from any and all hosts (default).

Enable LPD printing from specified hosts	Enables LPD printing and print job management from the hosts entered in the Host Names list on this screen. If this is selected, the fully qualified domain name or IP address of each computer system using LPD must be entered. (Without the fully qualified name, this will not work.)
Host Name or IP Address	Enter the hostname or IP address to be added to the "Specified Hosts" list. This field is only active when "Enable LPD printing from specified hosts" is selected. For example, hostname.domain.com or 1.160.10.240.
Specified Hosts	Host names permitted to print and manage print jobs using LPD. This field is active only when "Enable LPD printing from specified hosts" is selected.

hp print server appliance [Help](#)

LPD Settings

Disable LPD printing
 Enable LPD printing from ALL hosts
 Enable LPD printing only from specified hosts

Host Name or IP Address:

Specified LPD Hosts:

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Configuring LPD Printing

To enable or disable LPD printing, follow these steps:

1. Log on to the [Administrator page](#) of the web interface.
2. On the menu, under Network Settings click LPD Settings.
3. Complete the fields as described above.

Managing Printers

- [Printers Option](#)
- [Adding a Printer](#)
- [Deleting a Printer](#)
- [Viewing and Managing Print Jobs](#)
- [Printer Properties](#)
- [Printer Drivers](#)
- [Installing Printers on Clients](#)
- [Related System Messages](#)
- [Troubleshooting the Appliance](#)





Printers Option

After Printers is selected from the menu in the web interface, the Printers page is displayed. On this page, administrators can:

- [view and manage print jobs](#)
- [add printers](#)
- [modify existing printers](#)
- [delete a printer \(and all of its jobs\)](#)

Printers Page

Field Names	Description
Printer Name	<p>Name of the printer as entered in the Printer Name field on the Add Printer page in the web interface. This name is displayed in Network Neighborhood as an available printer configured on the appliance. The printer name can be up to 79 characters long, including alphanumeric characters and the following special characters: _ - . ?</p> <p>(Printer names longer than 12 characters might cause problems with Windows 9x and ME or MS-DOS clients. Various LPD implementations might also have length restrictions.)</p>
IP Address or Hostname	<p>IP address or hostname of the printer that will be servicing the print jobs in this queue. This may be the IP address or the DNS name of the network printer. In order to use the DNS name, a DNS server address must be configured on the appliance in the Microsoft Networking Settings page.</p>

Status	<p>Status of the printer:</p> <ul style="list-style-type: none"> ● Active: indicates the printer is available and ready to print if a print job is sent to it ● Paused: the administrator has paused printing for this specific printer
Jobs	<p>Number of print jobs waiting to be printed on the corresponding printer.</p>
Printer Properties 	<p>Displays the Printer Properties - General page. Use this page to:</p> <ul style="list-style-type: none"> ● display and/or modify the properties of a selected printer, including the printer's name, IP address, or description ● pause and resume printing from the printer ● print a test page
View Jobs 	<p>View print jobs for a specific printer. The Print Jobs page will be displayed.</p>
Delete Printer 	<p>To delete a printer from the appliance, follow these steps:</p> <ol style="list-style-type: none"> 1. Find the printer to delete from the appliance and click  on that same line. 2. The message, "Are you sure you want to delete the printer and all of its print jobs?" is displayed. 3. Click OK. The selected printer and all of its print jobs will be deleted. <p>Or, delete a printer through Network Neighborhood:</p> <ul style="list-style-type: none"> ● Find the appliance in Network Neighborhood. ● Open the Printers folder. ● Right-click on the printer and click Delete. ● Highlight the printer and press the Delete key on your keyboard.

The screenshot shows the HP Print Server Appliance web interface. The top navigation bar includes the HP logo, the text "hp print server appliance", and a "Help" link. A left-hand menu is organized into sections: GENERAL (Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (Printers, Driver Management), and BACKUP/RESTORE (Backup Settings, Restore Settings). The "Printers" option is highlighted.

The main content area is titled "Printers" and contains a table with the following data:

Printer Name	IP Address or Host Name	Status	Jobs	Printer Properties	View Jobs	Delete Printer
NewPrinter	10.2.4.6	Active	0			

Below the table are three buttons: "+ add printer", "refresh", and "? help".

The footer contains the text "HP Product HOME | Registration | Support | Feedback" on the left and "© 2001 Hewlett-Packard Company" on the right.

Adding a Printer to the Appliance

There is no limit to the number of printers that can be added to the appliance. However, printing performance may degrade if there are many heavy-use printers on the appliance.

Both UNIX and Windows clients can simultaneously print to the same printer. UNIX clients ignore any Windows driver selections.

The following printer drivers are factory-installed. These drivers, and any others that have been added to the appliance, can be associated with a printer on the appliance.

- HP LaserJet 4 series printers
- HP LaserJet 5 series printers
- HP LaserJet 6 series printers
- HP LaserJet 4000 series printers
- HP Color LaserJet 4500 series printers
- HP LaserJet 5000 series printers
- HP LaserJet 8000 series printers
- HP Color LaserJet 8500 series printers

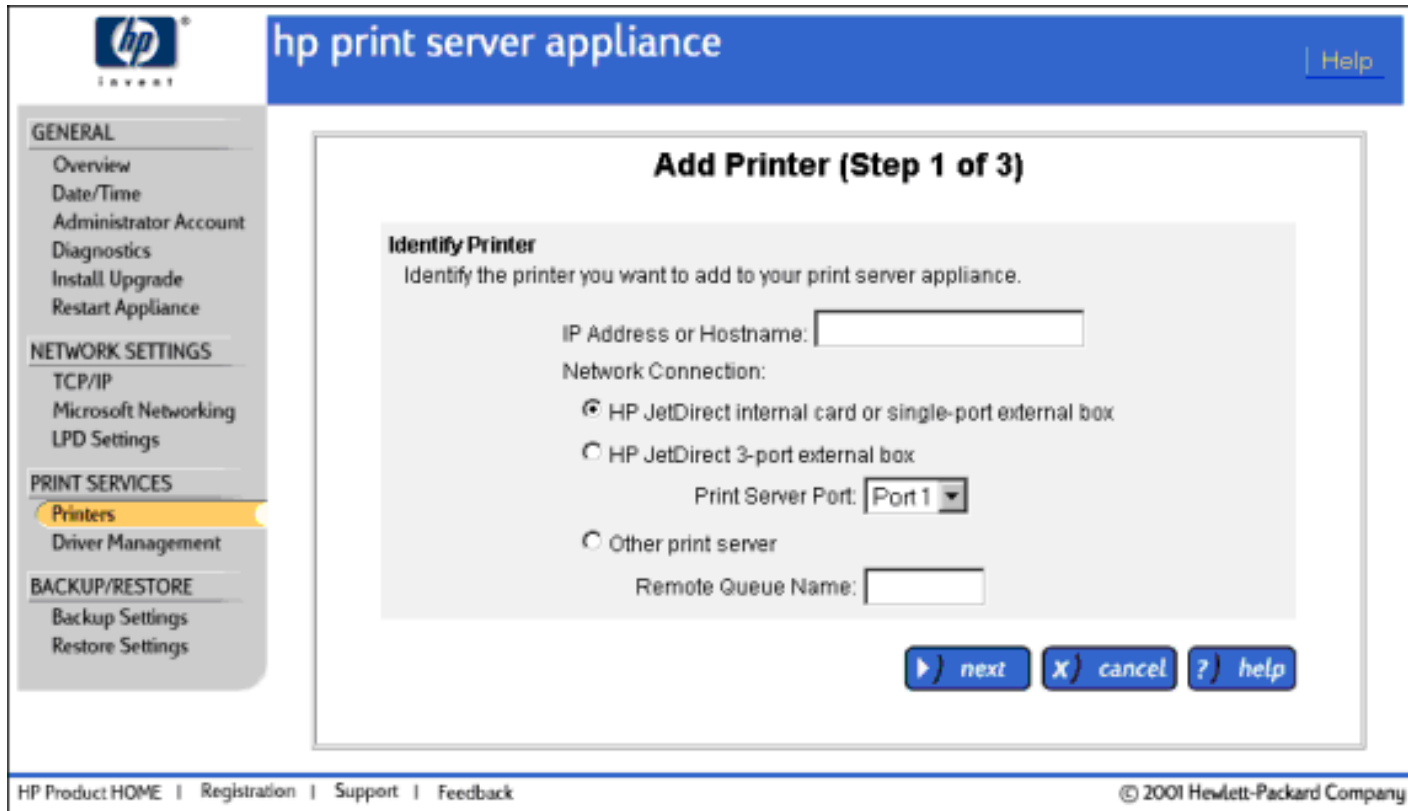
After the printer has been added to the appliance, a new printer driver can be added through [Network Neighborhood](#).

To add a printer, follow these step:

1. Select Printers under Print Services on the menu.
2. Click "Add Printer". The following three pages will be displayed:

- **Identify Printer:** Enter the IP address or hostname and the network connection for the printer being added.

Identify Printer Page	
Field Names	Description
IP Address or Hostname	<p>IP address or hostname of the printer that will be servicing the print jobs in this queue. This may be the DNS name or the IP address of the network printer (for example, hpprinter.mycomputer.com or 192.0.0.192) . In order to use the DNS name, a DNS server address must be configured on the appliance in the TCP/IP Network Settings page.</p> <p>The name must be alphanumeric and can contain dashes (-) and periods (.).</p>
Network Connection:	<ul style="list-style-type: none"> ■ HP JetDirect internal card or single-port external box: Select this if the printer has an internal HP JetDirect print server card, or is connected to an external single-port HP JetDirect print server. ■ HP JetDirect 3-port external box: Some external HP print servers support more than one printer (for example, the HP JetDirect 500X). For these cases, choose which port the printer is connected to. ■ Other print server: Select this option if the target print server is not an HP JetDirect print server. Many print servers will work with the default selections of Hewlett-Packard JetDirect Print Server selected. If, however, the print jobs do not appear on the printer, select this option and complete "Remote Queue Name" with the remote queue name recommended by the print server manufacturer. Refer to the lpr or UNIX printing section of the print server manual.



- **Printer (Queue) Name:** Enter the printer name and description.

Printer (Queue) Name Page	
Field Names	Description
Printer Name	The printer name is displayed in Network Neighborhood as a printer configured on the appliance. It can be up to 79 characters long, including alphanumeric characters and the following special characters: _ - + , . (Printer names longer than 12 characters might cause problems with Windows 9x and ME or MS-DOS clients. Various LPD implementations might also have length restrictions.)
Printer Description (optional)	Description of the printer.
Hide this printer in Network Neighborhood	Select this option to hide this printer's name in Network Neighborhood for clients. (This does not prevent the printer from being used, just from being displayed in Network Neighborhood.)

<p>Print Banner Page with each print job</p>	<p>Select this option to insert a banner page at the beginning of each print job. (The contents of the banner page are not configurable.)</p>
--	---

○ **Printer Driver for Windows Point and Print Clients:**

Select the printer driver for the printer being added.

<p align="center">Printer Drivers for Windows Point and Print Clients Page</p>	
<p>Field Names</p>	<p>Description</p>
<p>Client Printer Driver</p>	<p>Displays all printer drivers currently installed on the appliance, and highlights the driver currently associated with the specified printer. To change the driver for the printer, highlight a different driver and click Apply.</p>

Note: If the printer driver for the printer is not displayed in the drop down list on this page, select "HP LaserJet 4". Then follow [these steps to add the printer driver and associate it with the printer just added](#).

Note: After the appliance has been configured and drivers have been associated with printers, the configuration should be [backed up](#).

Viewing and Managing Print Jobs

Use the Print Jobs page to view the jobs for a selected printer:

Print Jobs Page	
Field Names	Description
File Name	Name of the file(s) or print job(s) for this printer.
User	Name of the client user who submitted each print job.
Size	Size of the print job (in bytes).

Status

Status of the print job:

- Printing: currently printing on the printer
- Paused: user paused the print job
- Spooling: job is being spooled to the appliance by a client
- Queued: job is queued and is waiting to be printed
- Unknown: error occurred; unknown status
(the user should delete the print job with this status)

hp print server appliance [Help](#)

Print Jobs - NewPrinter

File Name	User	Size	Status
Q3report.doc	joe_marketing	514.3kB	printing
regional_sales.xls	jill_sales	182.7kB	queued
training.ppt	dale_training	12.52MB	queued

ok refresh help

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1. Under Print Services on the menu, select Printers.
2. Find the appropriate printer and click "View Jobs" for that same line. The Print Jobs page is displayed.
3. To delete a print job, click on the line for the print job.
4. Click refresh to update the page or click OK to return to the Printers page.

Printer Properties

The following tabs are available at the top of the page when Printer Properties is selected for a printer:

- [General](#) (default)
- [Drivers](#)
- [Security](#)

Printer Properties - General Page

The General page appears when "Printer Properties" is selected on the Printers page for a specific printer. Use this page to:

- display and/or modify the properties of a selected printer, including the printer's name, IP address, or description
- pause and resume printing from the printer
- print a test page

Printer Properties - General Page	
Field Names	Description
IP Address or Hostname	IP address or hostname of the printer that will be servicing the print jobs in this queue. This may be the DNS name or the IP address of the network printer (for example, hpprinter.mycomputer.com or 192.0.0.192) . In order to use the DNS name, a DNS server address must be configured on the appliance in the Network Settings page. The name must be alphanumeric and can contain dashes (-).
Printer Description (optional)	Description of the printer.
Network Connection:	<ul style="list-style-type: none"> ● HP JetDirect internal card or single-port external box: Select this if the printer has an internal HP JetDirect print server card, or is connected to an external single-port HP JetDirect print server. ● HP JetDirect 3-port external box: Some external HP print servers support more than one printer (for example, the HP JetDirect 500X). For these cases, choose which port the printer is connected to. ● Other print server: Select this option if the target print server is not an HP JetDirect print server. Many print servers will work well with the default selections of Hewlett-Packard JetDirect Print Server. If, however, the print jobs do not appear on the printer, select this option and complete "Remote Queue Name" with the remote queue name recommended by the print server manufacturer. Refer to the lpr or UNIX printing section of the print server manual.
Hide this printer in Network Neighborhood	Select this to hide this printer's name in Network Neighborhood for clients. (This does not prevent the printer from being used, just from being displayed in Network Neighborhood.)
Print a banner page with each print job	Select this to print a banner page preceding every print job. (The contents of the banner page are not configurable.)
Pause printing from this printer	Check this box to pause printing from this printer. To resume printing from this printer, clear this box.

The screenshot shows the 'Printer Properties' dialog box for an HP print server appliance. The 'General' tab is active, displaying the following information:

- Printer Name:** NewPrinter
- IP Address or Hostname:** 10.2.4.6
- Printer Description (optional):** (empty text box)
- Network Connection:**
 - HP JetDirect internal card or single-port external box
 - HP JetDirect 3-port external box
 - Other print server
- Print Server Port:** Port 1 (dropdown menu)
- Remote Queue Name:** (empty text box)
- Hide this printer in *Network Neighborhood*
- Print a banner page with each print job
- Pause printing from this printer

Buttons at the bottom include 'print test page', 'ok', 'cancel', and 'help'. The left sidebar shows navigation options like 'GENERAL', 'NETWORK SETTINGS', 'PRINT SERVICES', and 'BACKUP/RESTORE'. The footer contains 'HP Product HOME | Registration | Support | Feedback' and '© 2001 Hewlett-Packard Company'.

To make any changes to this page, follow these steps.

1. Under Print Services on the menu, select Printers.
2. Click Printer Properties for the printer.
3. If desired, make any changes to the printer's properties.
4. If desired, click "Print Test Page" to print a test page. For more information about test pages, see [Diagnostics](#) (under General on the menu).
5. Click OK. The Printers page is displayed again.

Printer Properties - Drivers Page

The Printer Properties - Drivers page appears when "Printer Properties" is selected for a printer, and then the Drivers tab at the top of the page is selected.

The Drivers page displays all printer drivers that are installed on the appliance. A different printer driver can be selected in the list of already installed drivers for the specified printer. (See also [Printer Driver Management](#).)

Printer Properties - Drivers Page

Field Name	Description
Printer Name	Name of the printer as entered in the Printer Name field on the Add Printer page in the web interface. This name is displayed in Network Neighborhood as an available printer configured on the appliance.
Client Printer Driver	Displays all printer drivers added to the appliance, and highlights the driver currently associated with the specified printer. To change the driver for the printer, highlight a different driver and click OK.

hp print server appliance [Help](#)

GENERAL

- Overview
- Date/Time
- Administrator Account
- Diagnostics
- Install Upgrade
- Restart Appliance

NETWORK SETTINGS

- TCP/IP
- Microsoft Networking
- LPD Settings

PRINT SERVICES

- Printers**
- Driver Management

BACKUP/RESTORE

- Backup Settings
- Restore Settings

Add Printer (Step 3 of 3)

Printer Driver for Windows Point and Print Clients

Select a driver for this printer. When Windows clients install this printer, the printer driver for their operating system will be automatically downloaded to their PC.

Client Printer Driver: **HP Color LaserJet 4500 PCL 5c (9X/NT)**

Note: The list above contains the printer drivers that are currently installed on this print server appliance. If the driver for your printer is not shown, select the closest match. Then, after finishing, add the real driver by accessing the printer's Properties page through *Network Neighborhood*. (See help for more details.)

back finish cancel help

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Printer Properties - Security Page

The Printer Properties - Security page appears when "Printer Properties" is selected for a printer and then the Security tab at the top of the page is clicked. The Security page shows printer security information if NT Domain security is enabled (an NT domain is specified on the [Microsoft Networking Settings page](#)).

Note: Microsoft Windows 2000 permissions that do not map directly to the four access levels of Windows NT (Print, Manage, Full Control, and No Access) appear as "Special Access".

Printer Properties - Security Page	
Field Name	Description
List Names from	The drop-down list contains names of the primary domain and all trusted domains.

Type of Access	Lists possible access rights that can be assigned to users and/or groups. Highlight the desired access level and then select the user(s) and/or group(s) in the NT Group field.
NT Groups	Shows all of the NT groups on the domain specified in the above field. To show users also, click Show Users. After the Type of Access is selected, rights can be assigned to a group or user. Highlight the group or user and click Add. The user or group will be added to the list shown under Current Assignments with the level of access indicated. (To highlight multiple groups/users, use the Control or Shift key.)
Current Assignments	Lists all groups and/or users with their access rights. Valid access levels are: <ul style="list-style-type: none"> ● Print (print, pause, and delete your own print jobs) ● Manage Documents (print, pause, and delete other user's print jobs) ● Full Control (print, pause, and delete other user's print jobs, delete printers, and change security settings (using native NT tools)) ● No Access ● Special Access (for some Windows 2000 permissions that do not map directly to the above four permission levels)

The screenshot shows the HP Print Server Appliance web interface. The main header is "hp print server appliance" with an HP logo and a "Help" link. A left sidebar contains navigation menus for GENERAL, NETWORK SETTINGS, PRINT SERVICES (highlighted), and BACKUP/RESTORE. The main content area is titled "Printer Properties" and has three tabs: General, Drivers, and Security (selected). The printer name is "NewPrinter". A dropdown menu shows "List Names from: WORKGROUP". Under "NT Groups", there is a list of groups: Everyone, WORKGROUP\Domain Admins, WORKGROUP\Domain Guests, and WORKGROUP\Domain Users. To the right of this list are "add" and "remove" buttons. The "Current Assignments" list contains "Everyone (Print)". Below the lists is a "show users" button. At the bottom, the "Type of Access" dropdown is set to "Print". At the very bottom of the interface are "ok", "cancel", and "help" buttons.

Printer Drivers

- [Printer Driver Management](#)
- [Adding New Drivers to the HP Print Server Appliance](#)
- [System Messages](#)

Printer Driver Management

- [System Messages for Driver Management](#)

Printer drivers are factory-installed, or they might already be loaded from a previously-added printer. (Drivers can also be loaded after the printer is added to the appliance through [Network Neighborhood](#).) Drivers that have been factory-installed support the following printers:

- HP LaserJet 4 series printers
- HP LaserJet 5 series printers
- HP LaserJet 6 series printers
- HP LaserJet 4000 series printers
- HP LaserJet 4500 series printers
- HP LaserJet 5000 series printers
- HP LaserJet 8000 series printers
- HP LaserJet 8500 series printers

All printer drivers added to the appliance are displayed on the Driver Management page. These drivers can also be deleted on this page.

Driver Management Page	
Field Name	Description
Shows installed printer drivers for	Specify an operating system to display printer drivers for that operating system only. Or, select "All Operating Systems" to display all printer drivers installed on the appliance.
Printer Drivers	List the printer drivers for the operating system specified above, or lists all printer drivers if "All" is chosen.

The screenshot displays the 'hp print server appliance' web interface. The main content area is titled 'Driver Management'. At the top, there is a dropdown menu set to 'All Operating Systems'. Below this is a list of 'Printer Drivers' with the following entries:

- HP Color LaserJet 4500 PCL 5c (9x) ****IN USE****
- HP Color LaserJet 4500 PCL 5c (NT) ****IN USE****
- HP Color LaserJet 4500 PS (9x)
- HP Color LaserJet 4500 PS (NT)
- HP LaserJet 2100 Series PCL 6 (9x)
- HP LaserJet 2100 Series PCL 6 (NT)
- HP LaserJet 2100 Series PS (9x)
- HP LaserJet 2100 Series PS (NT)
- HP LaserJet 4 (9x)
- HP LaserJet 4 (NT)

To the right of the list is a blue button labeled 'remove'. At the bottom right of the list area is a blue button labeled 'help'. The left sidebar contains the following menu items:

- GENERAL
 - Overview
 - Date/Time
 - Administrator Account
 - Diagnostics
 - Install Upgrade
 - Restart Appliance
- NETWORK SETTINGS
 - TCP/IP
 - Microsoft Networking
 - LPD Settings
- PRINT SERVICES
 - Printers
 - Driver Management**
- BACKUP/RESTORE
 - Backup Settings
 - Restore Settings

The footer of the page contains the text: 'HP Product HOME | Registration | Support | Feedback' on the left and '© 2001 Hewlett-Packard Company' on the right.

1. To access the Driver Management page, select Driver Management under Print Services on the menu.
2. Select the operating system for the driver(s) to be viewed or deleted (or select "All"). The corresponding drivers are displayed in the Print Drivers list box.
3. If desired, highlight the printer driver to delete.
4. To delete a driver, click Remove.

Note: A driver cannot be deleted if it is currently associated with a printer. The HP LaserJet 4 printer driver can never be deleted.

Adding New Drivers to the Appliance

→ [System Messages for Driver Management](#)

The appliance comes preloaded with numerous HP printer drivers. While these will cover most needs, other drivers might be required. This section discusses the procedure for adding drivers to the appliance.

The first step is to create a printer on the appliance and the second is to update the driver from a Windows NT or Windows 2000 client. After a driver has been added using this procedure, the driver will be available to printers subsequently created from within the web interface.

Step 1: Create a Printer on the Print Server Appliance

The first step to adding a driver that is not already on the appliance is to create a printer using the standard steps. You should web into the appliance and select the Printers page.

hp print server appliance [Help](#)

Printers

Printer Name	IP Address or Host Name	Status	Jobs	Printer Properties	View Jobs	Delete Printer
NewPrinter	10.2.4.6	Active	0			

[+ add printer](#) [refresh](#) [? help](#)

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At the Printers page, select "Add Printer". Complete the IP Address or Hostname and then click Next. This page allows you to select which driver should be associated with the printer just created. The drivers in the pull-down list are ones that have already been loaded onto the appliance. Once a driver has been loaded onto the appliance, it can be associated with any number of printers. If the driver for your printer is not listed, select the HP LaserJet 4 driver since that will work with the majority of HP LaserJet printers. Click "Finished" after the driver has been chosen.

hp print server appliance [Help](#)

Add Printer (Step 2 of 3)

Printer (Queue) Name
Enter a name for this printer. This is the name others will see when they browse to the Printers folder of this appliance using *Network Neighborhood*.

Printer Name:

Printer Description (optional):

Hide this printer in *Network Neighborhood*

Print a banner page with each print job

[back](#) [next](#) [cancel](#) [? help](#)

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Step 2: Adding the Driver from the Printer's Property Page in Network Neighborhood

Now that the printer has been created you must find the printer in Network Neighborhood from either a Windows NT 4.0 or Windows 2000 system.



Network Neighborhood Browser view of a Printer

Once the printer is located, right mouse button click on it and select Properties. A warning might be displayed if the driver for that printer is not installed on your system. **Do not install the driver.**

Windows NT 4.0

When the Property page appears, select "New Driver" and follow the dialog that appears

Network Neighborhood Printer Properties Page

Windows 2000

When the Property page appears, select the "Advanced" tab at the top:

Network Neighborhood Printer Properties Page

From the "Advanced" tab, select "New Driver" and follow the "Add Driver Wizard". Once the wizard is finished, the driver will be loaded onto the appliance and associated with the printer. The driver can also be used for any printers created on the appliance.

Installing Printers on Clients

- [Installing Printers on Microsoft Clients \(the Microsoft Point and Print feature\)](#)
- [Configuring Printing for UNIX Clients](#)
- [Troubleshooting the Appliance](#)

Installing printers on each client computer is required in order for clients to be able to print using the appliance.

Note: Hewlett-Packard recommends verifying installation with one client computer before configuring more clients. This will confirm operation. It is easier to troubleshoot settings on one client computer than on many.

Installing Printers on Microsoft Clients (the Microsoft Point and Print feature)

Use one of the following procedures to install printers on each client computer (this feature is only supported on an x86 PC running Microsoft Windows 9x, ME, NT, or 2K):

1. Check the following:
 - The appliance is installed on the network and properly configured.
 - Each client workstation is connected to the network.
 - The printers are set up and turned on.
2. On the client workstation, click Tools in Microsoft's Explorer and select "Find... Computer". Enter the name or IP address of the appliance. Or, find the appliance in the Network Neighborhood.
3. Open the Printers folder.
4. Right-click on the printer to install.
5. Select Install from the drop-down menu.
6. For Windows NT and 2000 clients, driver installation is complete. For Windows 95, 98, and ME clients, a wizard will ask several things (for example, "Do you want to print from DOS", etc.).

Or, add the printer using the following steps:

1. Make sure that the appliance is installed and that the printers are set up and turned on. Be sure the client workstation is connected to the network.

2. On the client workstation, click Start from the Taskbar. Click Settings, and then click Printers.
3. Double-click the Add Printer icon.
4. Select the Network printer server radio button
5. Select the appliance and printer from the list box. Or, enter the Universal Naming Convention (UNC) path (for example: "\\spooler1\printer1"). See Microsoft documentation for more information about UNC. Click OK.
6. Answer subsequent questions to complete the driver installation.

Configuring Printing for UNIX Clients

The following topics are discussed in the section:

- [configuring print queues for BSD-like systems](#)
- [configuring print queues using SAM \(HP-UX systems\)](#)
- [printing a test file](#)

A print queue must be set up for each printer or printer personality (text, PCL, or PostScript) used.

If printing text documents from UNIX clients to an HP JetDirect print server, a special queue must be configured on the appliance. First add the printer through the [Printers page](#) in the web interface. On the Identify Printer page, for connectivity select Other and then specify the remote queue name. For the remote queue name on the target printer, TEXT must be specified (or TEXT2, TEXT3 for multi-port JetDirect print servers). This must be done even though the target printer is an HP JetDirect device. Use the normal print queue when printing jobs that have been formatted with a printer-specific page description language such as PDL (like PostScript) or PCL.

Configuring Print Queues for BSD-like Systems

If the printer supports automatic language switching, the application may select the printer language via commands embedded in the print data.

Make sure users know the printer names for the printers, since they will have to enter those names on the command line for printing.

Following is an example of configuring print queues for BSD-like systems (for example, Linux):

1. Edit the `/etc/printcap` file to include the following entries:

```
printer_name:\
:lp=:\
:rm=print_appliance_name:\
:rp=remote_printername_argument:\ (this should be the same as the
printer name on the appliance)
:lf=/var/spool/lpd/error_log_filename:\
:sd=/var/spool/lpd/printername:\
:sh:
```

where `printer_name` is the name of the printer on the local computer. ,
`print_appliance_name` identifies the printer on the network, and
`remote_printername_argument` is the print queue designation on the appliance.

For more information on `printcap`, see the `printcap` man page in the UNIX documentation.

2. Create the spooling directory by making the following entries. As the root user, enter:

```
cd /var/spool/lpd
mkdir printername
chown root printername
chgrp lp printername
chmod 755 printername
```

where `printername` is the name of the printer on the local computer.

Configuring Print Queues Using SAM (HP-UX Systems)

On HP-UX systems, the SAM utility can be used to configure remote print queues for printing.

Before the SAM program is executed, select an IP address for the appliance and set up an entry in the `/etc/hosts` file on the system running HP-UX. (This is not required if DNS is configured.)

1. Start the SAM utility as a super user.
2. Select "Printers/Plotters" from the Peripheral Devices menu.
3. Select "LP Spooler".
4. Select "Printers/Plotters" from the Printers/Plotters menu.
5. Select Action from the top menu and then select "Add Remote Printer or Plotter".
6. Complete the "Add Remote Printer/Plotter" screen.
 - The "Printer Name" field should be the local printer name.
 - Be sure to check the box "Remote Printer is on a BSD System".
7. Click OK.
8. Select Exit from the List menu.
9. Exit SAM.

Printing a Test File

To verify that the printer and appliance connections are correct, print a test file.

1. At the UNIX prompt enter:

```
lp -dprintername file_name
```

or on a BSD-like system:

```
lpr -Pprintername file_name
```

where *printername* is the name of the printer as added to the appliance, and *file_name* is the file to be printed.

2. To get print queue status, type the following at the prompt:

```
lpstat printername
```

or on a BSD-like system:

```
lpq -Pprintername
```

where *printername* is the designated printer.

Example: `lpq -Pappliancel`

Backing Up, Restoring, Resetting, Rebooting, and Upgrading the Appliance

- [Backing Up Network Settings and Printer Information](#)
- [Restoring Network Settings and Printer Information](#) (Using the Web Interface)
- [Resetting the Appliance to Factory Defaults](#) (Using the Front Panel)
- [Rebooting \(or Restarting\) the Appliance](#)
- [Upgrading the Firmware on the Appliance](#)
- [Troubleshooting the Appliance](#)

Backing Up Network Settings and Printer Information

Saving the configuration parameters makes it easy to restore those parameters if the appliance must be replaced or if its configuration values are accidentally changed or lost. Use the Backup Settings page to save the following configuration parameters:

- administrator account usernames and passwords
- network settings
- printer information
- printer drivers

Use the following procedure to save the configuration parameters:

1. On the menu under Backup/Restore, select Backup Settings.
2. Click Save Settings to begin the process. A File Download window appears.
3. At the next screen, click Save This File to Disk and click OK. A Save As dialog box appears.
4. Choose a file name, drive, and directory to hold the saved configuration.
5. Click Save. The saved configuration is in binary format and cannot be edited using a text editor.

Now there is a backup file for the appliance, settings can be restored if required (see the next section).

Restoring Network Settings and Printer Information (Web Interface)

If configuration values have been accidentally changed or lost, a previously saved copy of the configuration parameters can be restored to the appliance. This technique can also be used to replace a appliance. A copy of the configuration parameters is saved while the appliance's settings and files are being [backed up](#).

Use the following procedure to restore backup settings:

1. On the menu under Backup/Restore, select Restore Settings.

2. Select the settings to restore:

- Administrator Accounts (restores all administrator accounts previously added and saved in the backup of the appliance)
- Print Server Appliance Network Settings (restores all appliance address and name information)
- Printers and Printer Client Drivers: (restores all printer definitions and [factory-installed drivers](#) plus any added to the appliance for the [Microsoft Point and Print feature](#))

3. Type the full path and file name of the saved configuration in the "Configuration File" field. Or, click Browse to locate and select the file.

4. Click Restore Settings to begin the restore process.

-OR-

Click Cancel to return to the Restore Settings page without restoring the configurations.

5. The Restore Configuration Successful window appears. Click OK.

→ [System Messages for Restoring the Settings on the Appliance](#)

Resetting the Appliance to Factory Defaults (Front Panel)

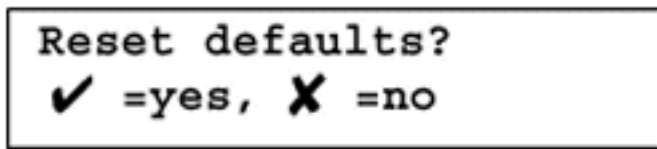
Once the appliance is configured, the configuration settings are retained in memory unless they are manually reset to factory defaults through the front panel of the appliance. This procedure will reset the appliance to its factory defaults. All configuration information will be lost, including network settings, queues, and any firmware upgrades. The administrator account name and password will be reset to factory defaults.

Note: If the appliance is reset to factory defaults, factory-installed drivers will be restored. All other drivers will be lost.

1. Make sure queues are empty and no printing activity is taking place.
2. Press the Power button on the front panel of the appliance to turn it off.

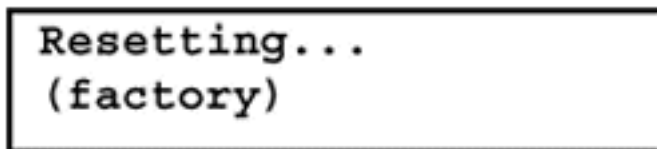
CAUTION: Do not simply disconnect the power cord. Data may be lost. Spooled print jobs that have not yet begun printing will not be lost, but there is no guarantee about the integrity of print jobs in the process of being submitted to the appliance at the time the power was removed.

3. Turn on the appliance again by pressing the Power button.
4. During the restart sequence, when the front panel display reads "Configuring," press ▼. The following message is displayed:



5. Press **✓** to reset the appliance to its factory defaults. Press **✗** to cancel the restart process and retain all current configuration information. The appliance will then finish restarting.

If **✓** was pressed and the factory default settings are being restored, the following message will be displayed during restart:



→ [System Messages for Restarting the Appliance](#)

Restarting (or Rebooting) the Appliance

Use the Restart Appliance feature to reboot the appliance. Before restarting the appliance, read the following:

- The restart process will take from three to six minutes. During this time, the appliance is not available for use and the connection to this browser session may be lost.
- Any print jobs actively being spooled from client users to the appliance will probably be lost and must be reprinted.
- Any print jobs currently spooled on the appliance will be retained.
- Any print jobs currently being de-spooled from the appliance to the printers may be restarted (automatically) once the appliance is ready to function.

Follow these steps to restart the appliance:

1. Under General on the menu, click "Restart Appliance".
2. Click Restart to begin the reboot process.

Upgrading the Firmware on the Appliance

Before installing an upgrade, save the current configuration of the appliance using the [Backup Settings feature](#).

CAUTION: This information should be automatically saved on the appliance, but if a catastrophic event occurs during the upgrade (for example, a power failure), it is possible that the configuration may be lost. This step is precautionary.

Use the following procedure to install an upgrade:

1. Download the firmware image from the HP support website [HP support website](#) and save it on a local hard drive or CD (<http://www.hp.com/cposupport>). The exact file location will be needed for

step 4.

2. Access the appliance's web interface and click Install Upgrade (under General on the menu).
3. On the Install Upgrade page, type the complete path to the firmware image on the local hard drive (for example, "C:\TEMP\UPGRADE.HP") or click Browse to find the firmware image downloaded in step 2.
4. Click Install Upgrade to upload the file to the appliance.
5. Restart the appliance immediately by selecting [Restart Appliance](#) under General on the menu. The restart process takes several minutes. During this time, ensure that power is not removed from the appliance. On the appliance's front panel, a series of messages will appear, including "Shutdown in progress ... Booting ... Configuring ... Verifying ... Validating ... Uncompressing ... Extracting ..." and so on. The standard display will appear when the appliance has been restarted.
6. When the appliance is ready to function, re-enter the network address if necessary. If no errors occur during the upgrade process, this is not necessary. All configuration information is retained.

→ [System Messages for Upgrading the Firmware](#)

Diagnostics (Configuration Summary)

[→Troubleshooting the Appliance](#)

Viewing and Printing Diagnostics From the Web Interface

This document explains how to view and print the diagnostics and configuration parameters about the appliance from the web interface. Diagnostics are shown on the Configuration Summary page. To access this page, select Diagnostics (under General) on the menu. This page can be printed using the print function of the browser.

The Configuration Summary page has the following sections:

[→General Information on the Configuration Summary Page](#)[→TCP/IP Network Configuration Information](#)[→Microsoft Networking Configuration Information](#)[→LPD Configuration Information](#)[→Printer Information](#)[→Installed Printer Drivers Information](#)[→Network Statistics Information](#)

General Information on the Configuration Summary Page

Parameter	Description
Model Name	HP Print Server Appliance 4200
Model Number	Model number of the appliance.
Current Firmware Revision	Current version of firmware running on this appliance.
Base (Factory) Firmware Revision	Version of firmware that the appliance would be rolled back to if it was reset to factory defaults .
BIOS Version	Version of the BIOS on the device.
Manufacturing Date Code	Manufacturing information for use by the factory.
Serial Number	Serial number of this unit.
Operating System Restored	Date and time of last restore.
Data Area Restored	Date and time of last restore.
Spool Area Restored	Date and time of last restore.

TCP/IP Network Configuration Information

Parameter	Description
IP Configuration Mode	How this unit was configured (manual or DHCP).
IP Address	IP address of this appliance.

Subnet Mask	IP subnet mask of this appliance.
Default Gateway	Default gateway of this appliance.
Domain Name Server (DNS) Address	IP address of the DNS server.
DNS Domain Name	Name of the IP domain to which this appliance belongs.

Microsoft Networking Configuration Information

Parameter	Description
Appliance Name	Name of the appliance.
Windows NT Domain or Workgroup	Microsoft (R) domain or workgroup on which this appliance is.
WINS Server Address	IP address of the WINS server.
NT Domain Authentication	Status of NT Domain authentication (checked is enabled or "on").
NT Domain Membership Status	Current status of the appliance's membership in the NT domain.
Domain Controller Auto Discovery	Status of auto discovery (checked is enabled or "on").
Specified Domain Controllers	List of domain controllers.

LPD Configuration Information

Parameter	Description
LPD Printing Mode	Status of LPD printing (checked is enabled or "on").
Specified LPD Hosts	List of host names permitted to print and manage print jobs using LPD.

Printers Information

This section consists of two lines:

- The first line lists the printer name, the IP address or hostname, the remote queue name, drivers the printer is bound to, the number of print jobs in the queue, and the printer status.
- The second line lists the security rights for the printer (who can print and at what level of access).

Installed Printer Drivers Information

This section lists the printer drivers installed on this appliance.

Network Statistics Information

Parameter	Description
MAC Address	Unique network hardware address for this appliance.
Total Packets Received	Total number of network packets this unit has received since the last reboot.
Total Packets Transmitted	Total number of network packets this unit has transmitted since the last reboot.

Bad Packets Received	Total number of improperly formatted network packets received since the last reboot. A large number of bad packets may indicate network problems.
Received Packets Dropped	Number of packets dropped since the last reboot because the receive buffer is full.
Framing Errors Received	Number of improperly formatted frames received since the last reboot.
Transmit Packet Errors	Total number of errors that occurred since the last reboot while attempting to transmit.
Transmit Packet Dropped	Number of packets dropped since the last reboot while attempting to transmit because the receive buffer is full.
Transmit Packet Overruns	Number of packets dropped since the last reboot while attempting to transmit because the receive buffer is full.
Transmit Collisions	Number of attempted transmit packets dropped since the last reboot because of excessive collisions.

To refresh this page, click Refresh.

System Messages

System messages are listed for each page in the web interface:

- General:
 - [Date / Time](#)
 - [Administrator Account](#)
 - [Install Upgrade](#)
 - [Restart Appliance](#)

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- Print Services
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Date / Time Page

Message

Explanation / Remedy

Invalid Date

Retype the date in mm/dd/yyyy format.

The date must be in mm/dd/yyyy format.

Invalid Time

Retype the time in hh:mm:ss format.

The time must be entered in the format hh:mm:ss.

The necessary information to set the date and time was not found. The date and/or time fields are blank.

Complete both fields and click Apply.

Invalid Time/Date

The date and/or time fields contain non-numeric character(s).

Your date and time settings have been applied

The date and/or time fields may only contain numbers and the specified separator characters. Re-enter the date and/or time using the correct format and characters.

Confirmation message.

Administrator Account

Message

Invalid Administrator Name

The Administrator Name must be alphanumeric and can contain the following special characters:

~ ` ! @ \$ % ^ () - + { } ' .

Invalid password

The password can be alphanumeric with any of the following special characters:

~ ` ! @ \$ % ^ () - + { } ' .

Passwords don't match

The password and confirmation do not match.

The administrator account name and password changes have been applied

Explanation / Remedy

Retype the administrator name.

Retype the password.

Retype the password and confirmation password. Make sure the passwords entered in both fields are the same.

Confirmation message.

Install Upgrade

Message

Please enter a valid path to the upgrade file, or click Browse to find the saved upgrade file.

No file was provided with the upgrade request.

The specified file is not a valid print server appliance upgrade file.

Explanation / Remedy

When attempting to upgrade, no upgrade file was specified. Type the complete path to the firmware image (for example, "C:\TEMP\UPGRADE.HP") or click Browse to find the saved firmware image.

No upgrade file was transferred to the appliance. Retype the complete path to the firmware image (for example, "C:\TEMP\UPGRADE.HP") or click Browse to find the saved firmware image. If the filename is unknown, access HP's website and download the upgrade image (<http://www.hp.com/cposupport>).

Retype the complete path to the firmware image (for example, "C:\TEMP\UPGRADE.HP") or click Browse to find the saved firmware image.

An I/O Error occurred while transferring the file.

The specified filename is not a valid upgrade file. Retype the filename and try again.

The upgrade file has been transferred successfully. You will need to restart your print server appliance for the upgrade to take effect.

Confirmation message.

Restart Appliance

Message

The restart of the print server appliance has begun. This system restart will take approximately 5-10 minutes. There will not be any web notification that the system has been restarted.

Explanation / Remedy

Confirmation message.

TCP/IP

Message

Invalid IP Address

The IP address must be in the format xxx.xxx.xxx.xxx.

Explanation / Remedy

IP addresses are written as four numbers separated by periods, where the first number is between 1 and 255 and the other three numbers are between 0 and 255. Retype the IP address in the format xxx.xxx.xxx.xxx.

Invalid Subnet Mask

The subnet mask must be in the format xxx.xxx.xxx.xxx.

Subnet masks are written as four numbers separated by periods, where the first number is between 1 and 255 and the other three numbers are between 0 and 255. Subnet masks must be well formed to match your network. Retype the subnet mask in the format xxx.xxx.xxx.xxx.

Invalid Gateway Address

The gateway address must be in the format xxx.xxx.xxx.xxx. If the gateway address is unknown, use the appliance's IP address.

Gateway addresses are written as four numbers separated by periods, where the first number is between 1 and 255 and the other three numbers are between 0 and 255. Retype the gateway address in the format xxx.xxx.xxx.xxx. If the address is unknown, use the appliance's IP address.

Invalid DNS Server Address

The DNS server address address must be in the format xxx.xxx.xxx.xxx.

Retype the DNS server address in the xxx.xxx.xxx.xxx format.

Note: This must be the server's IP address, not its friendly name. If the network does not have a DNS server, leave this field blank.

Invalid Domain Name

The DNS Domain Name must be alphanumeric with no spaces. Dashes (-) and periods (.) are acceptable.

Restarting network, please wait
You network settings have been updated

Retype the DNS Domain Name. Use only alphanumeric characters with no spaces. Dashes (-) and periods (.) are acceptable.

Confirmation message.

Microsoft Networking Settings

Message

Invalid Appliance Name

The appliance name must be alphanumeric. Dashes (-) are acceptable. It can be up to 12 characters long.

Invalid WINS Server Address (wins address)

The WINS server address must be in the format xxx.xxx.xxx.xxx.

Invalid Workgroup Name (workgroup)

Invalid Domain Controller

Domain controller names must be alphanumeric with no spaces. Dashes (-) and periods (.) are acceptable.

You must specify your domain administrator name and password to join the NT domain.

Your Microsoft networking settings have been updated

Explanation / Remedy

Retype the appliance name.

WINS server addresses are written as four numbers separated by periods, where the first number is between 1 and 255 and the other three numbers are between 0 and 255. Retype the WINS server address in the format xxx.xxx.xxx.xxx.

The workgroup name entered is not valid. Retype the workgroup name.

Retype the Domain Controller Name, using only alphanumeric characters with no spaces. Dashes (-) and periods (.) are acceptable.

Specify the Domain Administrator Name and Domain Administrator Password.

Confirmation message

LPD Settings

Message

Invalid Hostname

Hostnames must be alphanumeric characters with no spaces. Dashes (-) and periods (.) are acceptable.

Your LPD printing settings have been updated

Explanation / Remedy

Retype the hostname using only alphanumeric characters with no spaces. Dashes (-) and periods (.) are acceptable.

Confirmation message

Printers

Message

Explanation / Remedy

Invalid printer name

The printer name can be up to 79 characters long, including underscores (_) dashes (-) periods (.) and question marks (?).

The IP Address you entered (address) is the address of this appliance. Please enter the name or IP address for the printer you wish to add.

Invalid Printer Description

Printer descriptions can contain alphanumeric characters, spaces, dashes (-), underscores (_), plus signs (+), commas (,), and periods (.).

Invalid Printer Address

The printer address must be an IP address or a hostname. IP address must be in the format xxx.xxx.xxx.xxx. Hostnames must be alphanumeric with no spaces. Dashes (-) and periods (.) are acceptable.

You must specify the remote queue name for this printer.

You must specify a printer name for this printer.

You must specify the address of this printer.

A printer already exists with the name (name).

Changes have been made to the print queue. Please apply these changes before printing a test page.

A print server appliance test page has been queued to the (queue) printer queue.

Retype the printer name.

Each printer on the network has a unique IP address. This may be the printer's IP address or its DNS hostname. If a DNS hostname is being used, a DNS server address must be specified for the appliance on the TCP/IP page under Network Settings.

The Printer Description field is optional. If completed, it can only contain alphanumeric characters, spaces, dashes (-) underscores (_) plus signs (+), commas (,) and periods (.).

Printer addresses use the same format as IP addresses or hostnames. Retype the printer address using the appropriate format.

For IP addresses: xxx.xxx.xxx.xxx where the first number is between 1 and 255 and the other three numbers are between 0 and 255.

For hostnames, use only alphanumeric characters with no spaces. Dashes (-) and periods (.) are acceptable.

When "Other print server" is selected, the "Remote Queue Name" field must be completed. Specify the "Remote Queue Name" of this printer.

The printer name can be up to 12 characters long, including underscores (_).

The printer address can only contain alphanumeric characters, spaces, dash (-) underscore (_) plus sign (+) ampersand (&), comma (,) and period (.).

Each printer must have a unique name. Retype the name and make sure it's different from any other printer name on this appliance.

An attempt was made to print a test page before applying the changes made on the printer Properties - General page.

Confirmation message after the "Print Test Page" button was pressed.

Attempts to print to the printer failed.

A configuration (test) page was requested but LPR was not able to print the job on the selected printer. The disk space might be full, or the printer might be off or offline.

The printer you selected was not found.

An attempt was made to print to a printer that does not exist.

Driver Management

Message

Are you sure you want to remove the following drivers...?

Explanation / Remedy

One or more drivers were selected and the "Remove" button was pressed. Confirm removal or cancel the operation.

The HP LaserJet 4 printer driver is essential and cannot be deleted.

The HP LaserJet 4 printer driver is a default driver and cannot be deleted.

The following drivers are in use and cannot be deleted.... To delete these drivers, you must either delete the printers that use them, or associate a different driver with those printers.

An attempt was made to remove a driver that is currently associated with one or more printers.

Restore Settings

Message

Please enter a valid path to the configuration file, or click Browse to find the saved configuration file.

Explanation / Remedy

When attempting to restore settings, no configuration file was specified. Type the complete path to the configuration file (for example, "C:\TEMP\CONFIG.HP") or click Browse to find the saved file.

The specified file is not a valid print server appliance configuration file.

Retype the complete path to the configuration file (for example, "C:\TEMP\CONFIG.HP") or click Browse to find the saved file.


The configuration file was successfully restored on this appliance.

Confirmation message after restore.

Troubleshooting

- [Hardware Problems](#)
- [Web Interface Configuration Problems](#)
- [Client Setup Problems](#)
- [Printing Problems](#)
- [Indicator Lights \(LEDs\)](#)
- [System Messages](#)

Hardware Problems

Num.	Condition	Possible Cause/Solution
1	The appliance does not power up.	Bad power cable or AC outlet. Replace cable and/or verify that the outlet is working properly. If the outlet and cable are good, contact HP in order to replace the unit.
2	I select DHCP and initialization continues. However, "DHCP No Reply, Press  to continue" appears on the LCD display.	<ul style="list-style-type: none"> ● The RJ-45 network cables are not connected. Securely connect the network cables. If the cable is securely connected, the network LED should blink when their is traffic on that network segment ● A DHCP server could not be found on the network. Verify DHCP server configuration.
3	The Power On LED is lit, but the Network LED does not light.	<ul style="list-style-type: none"> ● The RJ-45 network cables are not connected. Securely connect the network cables. ● The cable may be faulty. See if another device can communicate on the network using the same cable. ● Verify the hub or switch is connected and is working properly.
4	The Alert LED is lit.	<ul style="list-style-type: none"> ● The appliance is not fully booted. Wait for the bootup process to complete. ● A critical defect has been detected. Power cycle the unit to see if this corrects the problem. ● If the Alert LED stays lit, contact HP.

<p>5</p>	<p>I can't locate the appliance on the network.</p>	<ul style="list-style-type: none"> ● Make sure the appliance is configured with an IP address, a subnet mask, and a default gateway. ● Make sure the Network LED is lit. ● The RJ-45 network cables are not connected. Securely connect the network cables. ● A network hub has lost AC power. Re-establish AC power to the hub. ● The appliance is not powered up. Power up the appliance on and let it boot up. <p>For alternative causes/solutions, see Client Setup Problems below.</p>
<p>6</p>	<p>We had a power outage. What do I need to do to recover?</p>	<p>At the time the outage occurred:</p> <p>Jobs that were spooled but not yet printing may need to be sent again from the client PC, after the appliance has been normally powered up again. These jobs should require no action, as they will print after the appliance is powered up again.</p> <p>Jobs in the middle of printing will resume printing when the appliance is powered up again.</p> <p>Jobs that were not yet spooled need to be resent.</p> <p>If print operations do not appear normal (new jobs do not spool correctly) after the outage, then power off the appliance and power it back up again.</p> <p>After a power outage or any other improper shutdown, the appliance may experience so many errors in its file system that it rebuilds the disk from the default image. The printers, network configuration, and drivers will be not be automatically restored. The configuration must be restored manually using the Restore functionality with the last configuration manually backed up.</p>

Network Problems

Num.	Condition	Possible Cause/Solution

1	I can't find the appliance in Network Neighborhood.	<p>Make sure the appliance is configured with an IP address, a subnet mask, and a default gateway.</p> <p>See if the appliance can be pinged using its IP address. If so, then the problem is with Microsoft Networking. A delay of up to an hour may be required after first installing (or changing the appliance's name) before it appears in Network Neighborhood. If the PC is on the same network segment as the appliance, use the "Find Computer" tool located on the Start Menu. If there is a WINS server on the network, both the PC and the appliance should be configured with its address. A WINS server is critical for any environment with more than one network segment.</p> <p>If the appliance cannot be pinged, the problem is with the TCP/IP connectivity. The source of this problem could be that the appliance's TCP/IP configuration is wrong, the PC's TCP/IP configuration is wrong, or a piece of network equipment between the PC and appliance.</p>
2	I can't print a test page from the appliance to a printer.	<ul style="list-style-type: none"> ● Incorrect printer IP address or DNS name. Verify or correct the IP address. ● Duplicate appliance IP address. Verify or correct the IP address. ● Printer is offline or not present on the network. Verify network connectivity by pinging the printer and then place the printer online.

Web Interface Problems

Num.	Condition	Possible Cause/Solution
1	I get browser errors when trying to access the appliance.	A browser that is not supported or has known limitations may be in the problem. Check the supported web browsers to see if the browser is supported.

Client Setup Problems

Num.	Condition	Possible Cause/Solution

1	I can't locate the printer from the client.	The client is on a different subnet than the appliance. Verify that WINS is configured correctly in "Network Settings". The Network Neighborhood browser has not yet updated. Try accessing the appliance by selecting Start from the task bar, and select Find and Computer.
2	How do I know the printer driver I installed on the appliance was installed on the client? Or how can I tell whether the updated driver I installed on the appliance was successfully installed?	An updated driver will be copied to the client if the driver has the same name and a newer version or date. You can verify this by printing a test page from the client. The test page will list all the files associated with the driver along with version information.

Printing Problems

Num.	Condition	Possible Cause/Solution
1	I can't print from a client to the intended printer, although I have done so previously.	<ul style="list-style-type: none"> ● The selected printer may be paused. Unpause the printer. ● Wait a moment and then resend the print job, which should then be printed successfully. ● Go to the Printers Management Page and see if any print queues have an inordinate number of jobs waiting to be printed. If the jobs do not seem to be printing, delete a few and try sending a new job. ● If NT Domain Security is enabled, the security settings may have changed. Verify that the user has authority to print. This can be done from the web management interface by selecting Printers->Printer Property Page-> Security. By default, the group "Everyone" has permission to print. If "Everyone" does not have permission to print, add it. ● The appliance may be unable to communicate with a domain controller in order to verify the clients ID and password. Check the "Domain Membership Status" field on the "Microsoft Networking Settings" page to verify that the appliance can communicate with the domain controller.




<p>2</p>	<p>I have not been able to print from any client to the intended printer.</p>	<ul style="list-style-type: none"> ● The IP address or printer name may not be correctly configured for the desired printer. Verify that the appliance can print to the printer by using the "print test page" functionality of the printer property page in the web interface of the appliance. If the test page does not print, there is a problem in the communication between the appliance and the printer. See more information about TCP/IP network settings or Microsoft network settings. ● The appliance may be unable to communicate with a domain controller in order to verify the clients ID and password. Check the "Domain Membership Status" field on the "Microsoft Networking Settings" page to verify that the appliance can communicate with the domain controller. ● If NT Domain Security is enabled, the security settings may have changed. Verify that the user has authority to print. This can be done from the web management interface by selecting Printers->Printer Property Page-> Security. By default, the group "Everyone" has permission to print. If "Everyone" does not have permission to print, add it. ● If NT Domain Security is enabled, verify that the group "Everyone" exists in the domain.
<p>3</p>	<p>The printer's Property page in Network Neighborhood does not work properly. An error message appears whenever a change is accepted.</p>	<p>The user you are logged in as may not have the appropriate permissions to perform the operation. For NT Domain security, verify that the user you are logged in as is a member of the "Domain Admins" group. If you are not using NT Domain security, verify that there is an administrator account on the appliance with the same name and password as the user that you are logged in as.</p>
<p>4</p>	<p>A printer had to be taken off the network for repair, and it was replaced by one having a different IP address. Print jobs reach the queue but never print.</p>	<p>Open a web browser, point it at the appliance, and select the Printers page. Select the Printer Property page for that printer. Change the IP address or DNS host name for the printer and select Apply. If the printer was stopped in the middle of a print job, that job will be lost, but any other jobs in the queue will now print to the new printer.</p>


5	The appliance is set up to use DHCP. When I powered it off and then powered it back up again, DHCP reassigned it to a different IP address than it had previously. Now the clients can no longer print. How can I avoid this?	Use a WINS server along with DHCP, so that when the appliance powers up it will always be reassigned the same IP address. If you are not using WINS, you may alternatively set the appliance IP address manually and have the DHCP administrator select an IP Address Pool range which excludes the appliance address. Or, have the DHCP administrator supply the appliance with an "infinite lease" duration for its assigned IP address.
6	I changed the printer name and now the clients cannot print.	Use the Windows Add Printer wizard at the clients and enter or browse to the new printer name. Also, delete the client's old printer driver which referred to the previous printer name.
7	The status of a print job is "Unknown" on the Print Jobs page in the web interface.	Delete the print job and resend it.

Indicator Lights (LEDs)

There are four indicator lights (LEDs) on the front of the appliance.

LED Normal Conditions

LED	LED Name	Description
	Power LED	ON when power is supplied to the appliance and it is turned on.
	Network Activity LED	LIT when there is a connection between the appliance and other network devices. BLINKS when there is network activity between the appliance and other network devices.
	Disk Activity LED	ON when there is disk activity on the appliance.

	Alert LED	OFF during normal operations (ON during bootup and shutdown).
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LED Problem Conditions

Condition	Possible Cause/Solution
Power LED is not lit.	Power failure. Restore AC power. Bad power cord or power cord unplugged. Verify and replace cord.
Network LED never blinks.	Network connection is bad. Verify network cable connections, replace cable.
Alert LED remains lit after bootup is completed.	Critical failure is detected. Note the message on LCD front panel. Power cycle the unit. If the problem persists, contact HP.

Frequently Asked Questions

1. [Is there a maximum size print job I can send to the appliance?](#)
2. [How does the appliance work with my existing print spooling strategy?](#)
3. [What is the Microsoft Point and Print feature and how does it work?](#)
4. [What happens if the appliance experiences an unplanned power interruption?](#)
5. [What happens if I power down the appliance?](#)
6. [How do I connect an uninterruptible power supply \(UPS\)?](#)
7. [How does an uninterruptible power supply \(UPS\) work with the appliance when the power fails?](#)
8. [Can I use Web JetAdmin to manage my appliance?](#)
9. [Can the appliance accept print jobs from UNIX clients?](#)
10. [Can I print over my network using Novell as the network OS?](#)
11. [We use proxies on our networks for web browser traffic. Can the appliance be used?](#)
12. [Does the appliance support bootp or rarp?](#)
13. [Can the appliance be configured via TELNET?](#)
14. [What is the limit on the number of jobs that can be spooled?](#)
15. [How are print jobs sent to the appliance?](#)
16. [How are print jobs sent from the appliance to the printer?](#)
17. [Is the appliance compatible with non-HP print servers?](#)
18. [What kind of security does the appliance employ?](#)
19. [My DHCP server automatically assigned an IP address to a new printer I've added to the network. Where do I find that address?](#)
20. [How do I store new printer drivers on the appliance?](#)

Answers

1. **Is there a maximum size print job I can send to the appliance?**

The appliance can process print jobs up to a maximum size of 2GB.

2. **How does the appliance work with my existing print spooling strategy?**

It can offload printing tasks from servers and localize print traffic at remote sites. For details, see the

[product overview](#).

3. **What is the Microsoft Point and Print feature and how does it work?**

Point and Print is a Microsoft term to describe the automatic installation of drivers on the printer client. It involves two steps. The first step is [installing a shared driver](#) on a network print server or print server appliance. The second step is "pointing" to the print server or appliance from a network client for driver installation on the client. This process is also sometimes described as a network installation of a printer driver.

4. **What happens if the appliance experiences an unplanned power interruption?**

After a power outage the appliance will automatically recover and rebuild its settings as necessary. To reduce the chance of data loss, the appliance can be connected to a UPS. (See questions 7 and 8 below.)

Print jobs that were printing and print jobs that were spooled but not printing will automatically resume when the appliance is powered up again. Print jobs that had not been spooled yet need to be resent.

Loss of power could initially cause corruption of the data on the appliance hard disk. However, the appliance is designed to make internal data loss unlikely, since the corrupted data will be automatically corrected during its next uninterrupted bootup.

It is always a good idea to have a [backup](#) of the settings and files in case they need to be [restored](#).

After a power outage or any other improper shutdown, the appliance may experience so many errors in its file system that it rebuilds the disk from the default image. The printers, network configuration, and drivers will be not be automatically restored. The configuration must be restored manually using the [Restore](#) functionality with the last configuration manually [backed up](#).

5. **What happens if I power down the appliance?**

The appliance will not be available on the network. Print jobs that were printing and print jobs that were spooled but not printing will automatically resume when the appliance is powered up again. Print jobs that had not been spooled yet need to be resent.

6. **How do I connect an uninterruptible power supply (UPS)?**

The appliance supports APC UPSs only in the Simple Signaling mode with a Simple Signaling cable (APC part # 940-0020B). Connect the UPS cable to the connector labeled UPS on the back of the appliance.

Note: The Simple Signaling cable is not included with the appliance or with the APC UPS. This cable can be ordered from APC (APC part # 940-0020B).

7. **How does an uninterruptible power supply (UPS) work with the appliance appliance when the power fails?**

The UPS communication cable enables the UPS to signal the appliance to perform an orderly

shutdown after a delay of about 60 seconds in the event of a power failure. During an orderly shutdown, processes are closed and data is saved. No configuration is necessary to enable UPS support, other than simply connecting the DB-9 cable.

8. Can I use Web JetAdmin to manage my appliance?

No. However, Web JetAdmin will be able to discover a configured appliance and allow the embedded web server to be launched from the Web JetAdmin interface.

9. Can the appliance accept print jobs from UNIX clients?

Print jobs are accepted from HP-UX, Solaris, and any other RFC 1179-compliant LPD clients.

10. Can I print in a Novell environment?

Yes. If the Microsoft client is loaded and the IP address is properly configured on the client and printer, then the appliance can be used. However, the appliance will not appear as a Bindery object or as an NDS object on the Novell server.

11. We use proxies on our networks for web browser traffic. Can the appliance be used?

Yes. Web browsers used to interface with the appliance may be easily configured to support this. For details, see the web browser's documentation.

12. Does the appliance support bootp or rarp?

No. But the appliance does support DHCP.

13. Can the appliance be configured via TELNET?

No. The configuration methods are DHCP, front panel, and web browser.

14. What is the limit on the number of jobs that can be spooled?

Up to 10,000 jobs can be spooled at a time, which might be further restricted by the disk space available on the appliance.

15. How are print jobs sent to the appliance?

Clients send print jobs via SMB to the appliance. SMB stands for Server Message Block and it is the normal Microsoft networking protocol.

16. How are print jobs sent from the appliance to the printer?

The appliance uses LPD to send the print job to the printer.

17. Is the appliance compatible with non-HP print servers?

Yes. Any print server that supports LPD should work with the appliance. You may have to know the proper LPD remote queue name for the print server. Many print servers will work without specifying a remote queue name (use the default HP PRINT SERVER setting); however, some require a special string in order to work. The LPD remote queue name can be obtained from the print server vendor.

18. What kind of security does the appliance employ?

The appliance has a front panel password to prevent unauthorized front panel configuration. It also has a web password required to configure the device or manage print queues. The appliance also supports [NT domain security](#).

19. My DHCP server automatically assigned an IP address to a new printer I've added to the network. Where do I find that address?

You can either print out a printer test page, or access the DHCP server to display the scope of Active Leases.

20. How do I store new printer drivers on the appliance?

The appliance comes preloaded with numerous HP printer drivers. While these will cover most needs, other drivers might be required. This section discusses the procedure for adding drivers to the appliance.

The first step is to create a printer on the appliance and the second is to update the driver from a Windows NT or Windows 2000 client. After a driver has been added using this procedure, the driver will be available to printers subsequently created from within the web interface.

Step 1: Create a Printer on the Print Server Appliance

The first step to adding a driver that is not already on the appliance is to create a printer using the standard steps. You should web into the appliance and select the Printers page.

The screenshot shows the HP print server appliance web interface. The top navigation bar is blue with the HP logo and the text "hp print server appliance". A "Help" link is in the top right. On the left is a grey sidebar menu with categories: GENERAL (Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (Printers, Driver Management), and BACKUP/RESTORE (Backup Settings, Restore Settings). The "Printers" item is highlighted in yellow. The main content area is titled "Printers" and contains a table with the following data:

<u>Printer Name</u>	<u>IP Address or Host Name</u>	<u>Status</u>	<u>Jobs</u>	<u>Printer Properties</u>	<u>View Jobs</u>	<u>Delete Printer</u>
NewPrinter	10.2.4.6	Active	0			

Below the table are three buttons: "+ add printer", "refresh", and "? help". At the bottom of the page, there is a footer with links: "HP Product HOME | Registration | Support | Feedback" and a copyright notice: "© 2001 Hewlett-Packard Company".

At the Printers page, select "Add Printer". Complete the IP Address or Hostname and then click Next. This page allows you to select which driver should be associated with the printer just created. The drivers in the pull-down list are ones that have already been loaded onto the appliance. Once a driver has been loaded onto the appliance, it can be associated with any number of printers. If the driver for your printer is not listed, select the HP LaserJet 4 driver since that will work with the majority of HP LaserJet printers. Click "Finished" after the driver has been chosen.

The screenshot shows the HP print server appliance web interface. At the top left is the HP logo with the word 'invent' below it. The main header is 'hp print server appliance' in a blue bar, with a 'Help' link on the right. A left-hand navigation menu is visible, with categories: GENERAL (Overview, Date/Time, Administrator Account, Diagnostics, Install Upgrade, Restart Appliance), NETWORK SETTINGS (TCP/IP, Microsoft Networking, LPD Settings), PRINT SERVICES (Printers, Driver Management), and BACKUP/RESTORE (Backup Settings, Restore Settings). The 'Printers' link is highlighted. The main content area is titled 'Add Printer (Step 2 of 3)'. It contains a section for 'Printer (Queue) Name' with the instruction: 'Enter a name for this printer. This is the name others will see when they browse to the Printers folder of this appliance using *Network Neighborhood*.' Below this are two input fields: 'Printer Name:' and 'Printer Description (optional):'. There are two checkboxes: 'Hide this printer in *Network Neighborhood*' and 'Print a banner page with each print job'. At the bottom of the form are four buttons: 'back', 'next', 'cancel', and 'help'. The footer contains 'HP Product HOME | Registration | Support | Feedback' on the left and '© 2001 Hewlett-Packard Company' on the right.

Step 2: Adding the Driver from the Printer's Property Page in Network Neighborhood

Now that the printer has been created you must find the printer in Network Neighborhood from either a Windows NT 4.0 or Windows 2000 system.



Network Neighborhood Browser view of a Printer

Once the printer is located, right mouse button click on it and select Properties. A warning might be displayed if the driver for that printer is not installed on your system. **Do not install the driver.**

Windows NT 4.0

When the Property page appears, select "New Driver", and follow the dialog that appears



Network
Neighborhood Printer Properties Page

Windows 2000

When the Property page appears, select the "Advanced" tab at the top:



Network Neighborhood Printer Properties Page

From the "Advanced" tab, select "New Driver" and follow the "Add Driver Wizard". Once the wizard is finished, the driver will be loaded onto the appliance and associated with the printer. The driver can also be used for any printers subsequently created.

Contact HP

- [General Information](#)
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HP Product	Duration of Limited Warranty
HP Print Server APpliance 4200 (J4117A) HP JetDirect 4000 Print Appliance (J4107A)	1 year

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Regulatory Statements

FCC Statement (USA)

General Information. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by the Hewlett-Packard Company may cause interference and void the FCC authorization to operate this equipment.

The Federal Communications Commission has prepared a booklet titled Interference Handbook (1986), which may be helpful to you. This booklet (stock number 004-000-004505-7) may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

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 in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications.

Installing this equipment in an FCC Level B product results in an FCC Level A Composite System (as defined in the FCC Rules and Regulations) when attached to an Ethernet (IEEE 802.3/802.3u) or Token Ring (IEEE 802.5) network.

European Community

This is a class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Electromagnetic Emissions

FCC part 15 Class A (U.S.A.), ICES-003 (Canada), CISPR-22/EN55022 Class A, AS/NZS 3548 (Australia/New Zealand).

Note: For EU compliance, see the Declaration of Conformity.

Safety

Products comply with:

- IEC 950: (1991)+A1,A2,A3,A4/EN60950 (1992)+A1,A2,A3,A4
- UL 1950
- CSA 950

Australia



This equipment complies with Australian EMC requirements.

Canada

This equipment complies with Canadian EMC Class-A requirements.

Declaration of Conformity

DECLARATION OF CONFORMITY according to ISO/IEC Guide 22 and EN45014

Manufacturer's Name: Hewlett-Packard Company

Manufacturer's Address: 8000 Foothills Blvd.
Roseville, CA 95747-5677
U.S.A.

declares that the product:

Product Name:

HP Print Server Appliance 4200 (Model Number J4117A)
HP JetDirect 4000 Network Print Appliance (Model Number: J4107A)

conforms to the following Product Specifications:

Safety: EN60950 (1992) +A1,A2,A3,A4,AII / IEC 950 (1991) +A1, A2, A3, A4

EN60825-1 (1994) / IEC 825-1 (1993), Class 1
GB 4943 (1995)

EMC: EN 55022 (1998) / CISPR-22 (1997) Class A
GB 9254 (1988)

EN 55024 (1998)
IEC 61000-4-2 (1995); EN 61000-4-2 (1995)
IEC 61000-4-3 (1995); EN 61000-4-3 (1996)
IEC 61000-4-4 (1995); EN 61000-4-4 (1995)
IEC 61000-4-5 (1995); EN 61000-4-5 (1995)
IEC 61000-4-6 (1996); EN 61000-4-6 (1996)
IEC 61000-4-8 (1993); EN 61000-4-8 (1993)
IEC 61000-4-11 (1994); EN 61000-4-11 (1994)
EN61000-3-2 (1995)
EN61000-3-3 (1995)
FCC Title 47 CFR, Part 15 Class A

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carries the CE marking accordingly. Shielded cables are recommended to meet the above specifications.

Tested with Hewlett-Packard Co. products only.

Roseville, February, 10, 2001



Mark Vigeant, Product Regulations Manager

European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department TRE, Herrenberger Strasse 130, D-71034 Böblingen (FAX:+49-7031-14-3143).

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Our method of protecting your rights has two steps: (1) copyright the library, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the library

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The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary General Public License rather than by this special one.

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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