



HP

JetDirect

Print Servers

HP JetDirect Print Servers

Models 610N (EIO)

Quick Start Guide

Read This First

Quick Start Guide

HP JetDirect Print Servers

Model 610N (EIO)

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J4169A

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Safety Considerations

Prior to the installation and use of this product, review all safety markings and instructions.



Instruction Manual Symbol. If the product is marked with this symbol, refer to the product manuals to protect the product from damage.

WARNING: Denotes a hazard that can cause injury.

CAUTION: Denotes a hazard that can damage equipment or data.

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

Grounding. This product is installed in a safety class 1 product that has a protective earthing terminal. There must be an uninterrupted safety earth ground from the main power source to the product's input wiring terminals, power cord or supplied power cord set. Whenever it is likely that the protection has been impaired, disconnect the power cord until the ground has been restored.

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Introduction

Thank you for purchasing the HP JetDirect print server! This guide provides information to install the HP JetDirect print server and quickly set up your network printer on Microsoft and Novell NetWare networks.

For Further Help

Documentation

For more details and advanced network configuration topics, refer to the documentation provided on the HP JetDirect CD-ROM (see Table 1.1). For instructions on viewing these documents, refer to “To View Documents on the CD-ROM” in Chapter 3.

Table 1.1 HP JetDirect CD-ROM Documentation

Documents on the CD	Document Contents
<i>HP JetDirect 610N Hardware Installation Guide</i>	Hardware installation instructions for the HP JetDirect print server, including: <ul style="list-style-type: none">● For selected printers, using the printer control panel to configure network settings● Hardware specifications and local declarations
<i>HP JetDirect 610N Print Server Administrator's Guide</i>	<ul style="list-style-type: none">● An overview of HP software solutions for network printer setup, including:<ul style="list-style-type: none">■ HP Web JetAdmin, a Web-based tool for managing network peripherals■ HP Internet Printer Connection software■ HP IP/IPX Printer Gateway for NDPS■ HP LaserJet Utility to set up printers on AppleTalk networks● TCP/IP Configuration options● Using LPD (Line Printer Daemon) services on the HP JetDirect print server● FTP Printing● Troubleshooting and HP JetDirect configuration page messages● Embedded Web Server to access configuration and management pages for the print server and device● HP JetDirect EIO Menu (for EIO printers with control panels)
<i>HP JetDirect Printer Installer for UNIX Software Installation Guide</i>	Network printer installation, configuration, and diagnostics information for HP-UX and Sun Solaris systems.

Release Notes

For important information on the HP JetDirect CD-ROM software, see the Release Notes and Readme files on the CD-ROM:

Item	Description
\README.txt	Contains general information for the software supplied on the HP JetDirect CD-ROM.
\HPJSI\COMMON\README.htm \HPJSI\COMMON\README.wri	Provides the latest information on the operation and use of the HP Install Network Printer wizard. Includes information for installing specific HP JetDirect-connected peripherals.

Other HP Utilities

For an overview of HP software solutions, see the “Software Solutions Table” in Chapter 3. For the latest information on these and other HP utilities, visit the HP Customer Care Center online at:

http://www.hp.com/support/net_printing



HP Customer Care

For direct support through HP Customer Care Online or By Phone, refer to the HP Customer Care information in Appendix B (page B-7).

Note

In the USA, call HP Customer Care at:
(208) 323-2551

For the most recent HP Customer Care telephone numbers and available services worldwide, visit HP Customer Care Online at:

http://www.hp.com/support/support_assistance

Year 2000 Compliance

Hewlett-Packard, the leader in network printing solutions, wants to ensure our customers are ready for success in the year 2000. For the latest information regarding year 2000, click on the Year 2000 link at the following web site:

http://www.hp.com/support/net_printing

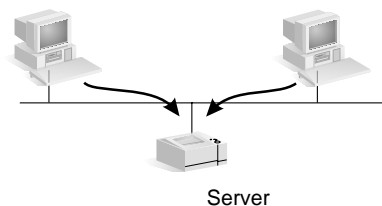
Network Printing Basics

Networks consist of computers connected together to share information and resources, such as printers. On a “client-server” network, client computers send print jobs to dedicated server computers that control the use of each printer. On a “peer-to-peer” network, dedicated servers are not used. Instead, each computer is configured to send print jobs to the printer directly.

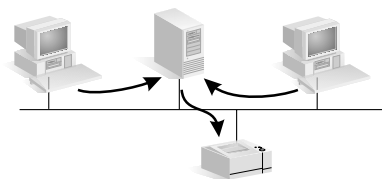
Network Printing Configurations

Client-server printing is typically used in medium to large networks where dedicated servers are used to manage printing needs of many users. Client-server networks use network operating systems (NOS) such as Novell NetWare and Microsoft Windows NT/2000 Server.

Peer-to-Peer printing



Client-Server printing



Peer-to-peer printing is more suitable for smaller networks. On peer-to-peer networks, users configure their Microsoft Windows 95/98/NT/2000 systems to print directly to the printer. Note that peer-to-peer printing can be configured on a client-server network. For example, a small workgroup might use peer-to-peer printing even though it is connected to an enterprise-wide client-server network.

Regardless of the network type (client-server or peer-to-peer), your computers and printers must use a common language, or “network protocol” to communicate with each other. The most common protocols are IPX (Internet Packet Exchange), made popular by Novell NetWare networks, and TCP/IP (Transmission Control Protocol/Internet Protocol), made popular by the Internet. The HP JetDirect print server supports these and other popular network protocols.

Setting Up Your Network Printer

Note

If you are on a network that uses TCP/IP, you must configure the print server with an IP address and other TCP/IP parameters as required. Check with your network administrator for a valid IP address and other required parameters.

The HP JetDirect CD-ROM contains software to quickly set up your printer for the network environments summarized below.

Network	System	HP JetDirect CD-ROM Software
Microsoft networks (IP or IPX)	Windows 95/98, Windows NT 4.0, Windows 2000	Use the HP Install Network Printer wizard (see Chapter 3) for client-server or peer-to-peer (direct-mode) printing. For client-server networks, share the printer on the server.
Novell NetWare NDS or Bindery networks (Queue Server Mode only) (IPX)	Windows 95/98, Windows NT 4.0, Windows 2000	Use the HP Install Network Printer wizard (see Chapter 3) to set up the appropriate queues on the NetWare server and JetDirect print server.
UNIX networks (IP)	HP-UX, Sun Solaris	Use the HP JetDirect Printer Installer for UNIX (see the documentation and release notes on the CD-ROM)

See Chapter 3 in this guide for other available HP solutions.

For additional printer setup options and more information, see the *HP JetDirect Print Servers Administrator's Guide* included on the HP JetDirect CD-ROM.

Supported Network Environments

Supported Network Protocols	Network Printing Environments*
TCP/IP	Microsoft Windows 95, 98, NT, 2000 NDPS 2 and NEPS (via Novell NetWare 5.x) HP-UX (10.20, 11.x) (HP 9000 Series 700/800) Solaris (2.5, 2.5.1, 2.6, 7) (SPARCsystems only) RedHat Linux 6.x SuSE Linux 6.3 MPE/iX** SCO UNIX v/386** IBM AIX 3.2.5 and later** Other operating systems that support LPD (line printer daemon), including IBM OS/2 Warp**, Mac OS 8.1** Internet printing over IPP (Internet Printing Protocol), Windows NT 4.0, Windows 2000
IPX/SPX and compatible	Novell NetWare (3.2, 4.x, 5.x) NDPS 2 and NEPS (via Novell NetWare 4.11, 4.2, 5.0, 5.1) Microsoft Windows 95, 98, NT, 2000
AppleTalk	Apple Mac OS, System 7.5 and above (EtherTalk only)
DLC/LLC	Artisoft LANtastic Powersuite** Microsoft Windows NT 4.0**
<p>* See the current HP JetDirect product data sheets for the most current HP network systems and versions. For operation with other network environments, consult your system vendor or authorized HP dealer.</p> <p>**Contact your network system vendor for software, documentation, and connectivity support.</p>	

Note

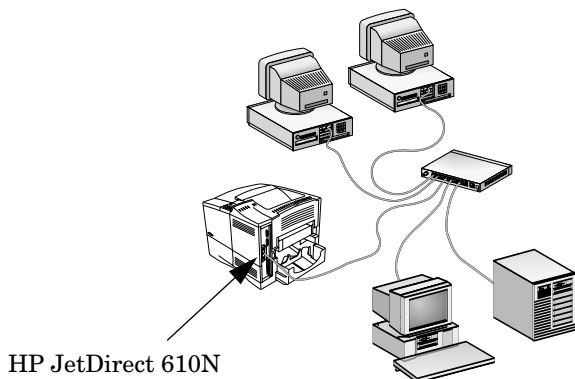
HP software solutions that are available for supported networks are summarized in Chapter 3 of this guide.

Installing 610N (EIO) Internal Print Servers

Introduction

The HP JetDirect 610N family of internal print servers are network interface cards for HP Enhanced I/O (EIO) printers, MFPs (multifunction peripherals), and other peripherals. With an HP JetDirect print server, you can connect and share your printer anywhere on your network and print at network speeds.

A typical network using an HP JetDirect print server is illustrated below. The card must first be installed into the printer and connected to the network. Then, you must configure the card for network operation.



CAUTION

HP JetDirect cards contain electronic components that can be damaged by static electricity through electrostatic discharge (ESD). To prevent ESD damage, maintain frequent contact with any bare sheet metal surface on the printer. A grounding wrist strap (or similar device) is useful for this purpose. Handle the card carefully at all times. Avoid touching electronic components or circuit paths.

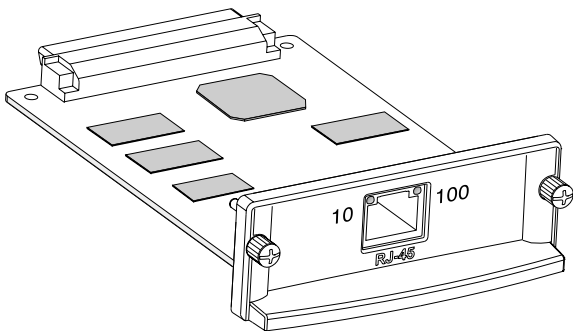
Installation Procedures

1. Identify Your HP JetDirect 610N Internal Print Server.

Remove the HP JetDirect card from its packaging and verify that you have the correct card for your network.

HP J4169A for Fast Ethernet (10/100Base-TX) networks

Provides an RJ-45 connector (unshielded twisted-pair cable). For 100Base-TX, use Category 5 cable.



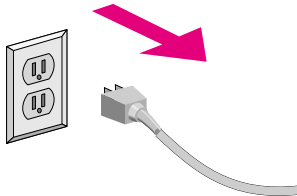
2. Before Installing the Card, Verify That Your Printer Works.

HP LaserJet 4000 series printers		HEWLETT PACKARD
Configuration Page		
Printer Information	Memory	
Product Name: HP LaserJet Printer Name: HP LaserJet 5 Printer Number: 7 Forwarder Number: 5483333333 Printer Serial Number: 1100010001 Firmware Revision: 010011 0001.0 MMS Time-out: 40 seconds Page Count: 0 Pages Since Last Maintenance: 0	Total Memory: 4 Mbytes MMS Size: 2.40 JDS Buffering: - 826 bytes (Allocated of 108K bytes Available) Reserved SDRAM: Additional Memory needed to Disable: 4 Mbytes	
Installed Personalities and Options	Security	
ML (13961325) PCL (13961325) PS (13961325) SMB Slot 1: 8 pin/4 pin DIMM SMB Slot 2: Empty SMB Slot 3: Empty EIO 1: Empty EIO 2: Unsupported (Class Code F603C)	Control Panel Lock: NONE Control Panel Password: DISABLED	
Event Log	Paper Trays and Options	
Number of Entries in Size: 0 Maximum Number of Entries: 30 Event Log Is Empty	Default Paper Size: LETTER Tray 2 (L1110)	

Print a Printer Configuration Page.

For instructions, refer to your printer manuals.

3. Turn Your Printer Off and Unplug the Power Cord.

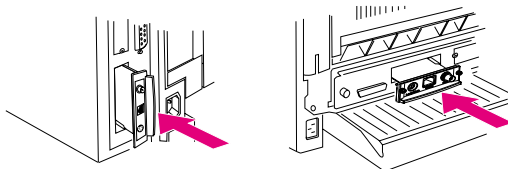


4. Insert the Card and Connect the Network Cables.

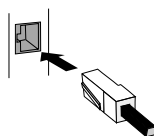
Note

Some printers have multiple EIO (Enhanced I/O) slots. You can install the HP JetDirect card into any EIO slot.

Insert card into any EIO slot.



Connect network cables.



5. Verify That the Card Is Operating Properly.

EIO 2 - JetDirect Page

HP JetDirect Configuration		
Status:	I/O Card Ready	Port Conf
Model Number:	J4169A	Auto Negc
Hardware Address:	0060B0C61C69	Manu. Date
Firmware Version:	x.20.00	SNMP Set
Port Select:	RJ45	

Network Statistics		
Total Packets Received:	60691	Total Pac
Unicast Packets Received:	32	Unsendabl
Bad Packets Received:	0	Transmit
Framing Errors Received:	0	Transmit

Protocol Information		
TCP/IP		
Status:	Ready	Status:
		NOT COA
Host Name:	mdh_herc	Node Name
IP Address:	13.22.2.2	Netware
Subnet Mask:	255.0.0.0	NDS Tree
Default Gateway:	13.22.2.2	

Print or Display JetDirect Configuration.

- For HP LaserJet printers, a *JetDirect Configuration page* will print when you print the printer's configuration page.

Check the JetDirect Configuration page and verify that an "I/O CARD READY" message appears.

- For other peripherals, refer to the peripheral's documentation.

Note

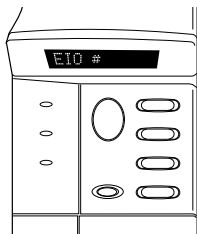
If other messages appear, see the *HP JetDirect 610N Print Servers Administrator's Guide* on the HP JetDirect CD-ROM.

6. Configure the Card for Network Operation.



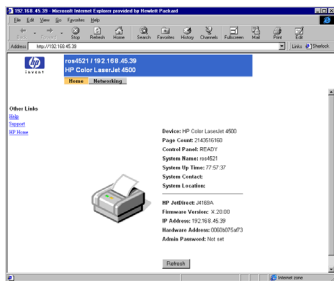
You can use the installation and configuration software on the HP JetDirect CD-ROM.

Refer to Chapter 3.



For many HP printers, you can use the printer's control panel to configure basic network parameters.

Refer to the "HP JetDirect EIO Control Panel Menu" section in this chapter.



If the JetDirect card has been configured with an IP address, you can use a supported Web Browser for advanced configuration.

Use the IP address as the URL. For information about HP's Embedded Web Server, see the *HP JetDirect 610N Print Server Administrator's Guide* on the HP JetDirect CD-ROM.

HP JetDirect EIO Control Panel Menu

You can configure basic network parameters on an HP JetDirect EIO print server from the control panel on supported peripherals. For specific instructions on using your peripheral's control panel to access the JetDirect EIO menu, refer to your peripheral's documentation. The EIO menu items are specified in Table 2.1.

Table 2.1 HP JetDirect EIO Control Panel Menu (1 of 2)

JetDirect Menu Item	Description
CFG NETWORK=NO*	Selects whether or not you want to access the JetDirect menu items. NO* (default) indicates you do not want to access the menu. You must change this to YES* each time you want to access the JetDirect EIO menu.
IPX/SPX=ON* DLC/LLC=ON* TCP/IP=ON* ATALK=ON*	Identifies whether the protocol stack is enabled or disabled. The default is ON*. Change this to OFF* to disable this protocol.
CFG IPX/SPX=NO*	Selects whether you want to access the IPX/SPX menu and set IPX/SPX protocol parameters. NO* (default) bypasses the menu, YES* allows access to the menu. In the IPX/SPX menu, you can specify the <i>Frame Type</i> parameter used on your network. <ul style="list-style-type: none">■ The default is AUTO, to automatically set and limit the frame type to the one detected.■ For Ethernet cards, frame type selections include EN_8023, EN_II, EN_8022, EN_SNAP.

Table 2.1 HP JetDirect EIO Control Panel Menu (2 of 2)

JetDirect Menu Item	Description
CFG TCP/IP=NO*	<p>Selects whether you want to access the TCP/IP menu and set TCP/IP protocol parameters. NO* (default) bypasses the menu, YES* allows access to the menu. In the TCP/IP menu, you can specify BOOTP=YES* or DHCP=YES* for TCP/IP parameters to be automatically configured by a BootP or DHCP server when the printer is turned on.</p> <p>If you specify BOOTP=NO and DHCP=NO, you can manually set the following TCP/IP parameters from the control panel:</p> <ul style="list-style-type: none">■ Each byte of the IP address (IP)■ Subnet Mask (SM)■ Syslog Server (LG)■ Default Gateway (GW)■ Idle Timeout period (default is 90 seconds, 0 disables the timeout)
CFG LINK=NO*	<p>Selects whether you want to manually configure the HP JetDirect 10/100TX print server's network link speed and communication mode. The settings must match the network.</p> <p>NO* bypasses the link configuration menu.</p> <p>YES* accesses the link configuration menu. The link configuration menu allows you to set the following values:</p> <p>AUTO* (default): the print server will automatically configure itself to match the network's link speed and communication mode.</p> <p>10T HALF: 10 Mbps, half-duplex mode.</p> <p>10T FULL: 10 Mbps, full-duplex mode.</p> <p>100TX HALF: 100 Mbps, half-duplex mode.</p> <p>100TX FULL: 100 Mbps, full-duplex mode.</p>

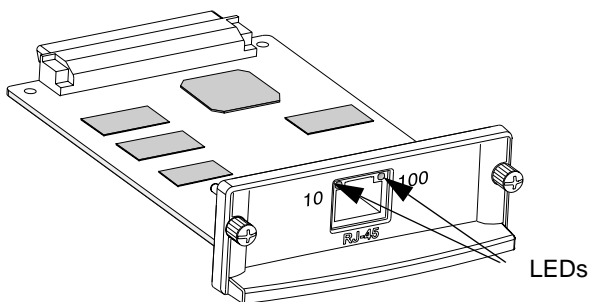
Resetting to Factory Defaults

You can restore default values by performing a cold reset on your printer (see your printer documentation for instructions). To perform a cold reset on many HP LaserJet printers, turn off the printer and then hold down **Go** as you turn the printer back on.

CAUTION

This restores both your printer and JetDirect configuration to their factory default values.

Verifying Link Operation (HP J4169A)



On the HP JetDirect 610N 10/100Base-TX card, there are LEDs on the network connector that indicate the operating speed (10Mbps or 100Mbps).

If the 10 (left) LED is...	And the 100 (right) LED is...	Then the print server has...
Off	Off	No link established. The print server is not communicating on the network.
On	Off	Link established at 10 Mbps.
Off	On	Link established at 100 Mbps.

Note The HP JetDirect 10/100Base-TX print server may require up to 10 seconds to establish a link to the network.

If the print server fails to link, you can manually configure the print server to operate at the network's link speed and communication mode. You must be certain of the link speed and duplex setting at which the network hub or switch is operating. The print server can be manually set from the printer's control panel by accessing the HP JetDirect EIO menu.

What To Do Next

To set up your computers for printing using the software supplied on the HP JetDirect CD-ROM, proceed to Chapter 3.

For other printing setup options, see the HP software solutions summary in Chapter 3, or visit HP Customer Care Online at:

http://www.hp.com/support/net_printing

HP Software Solutions

HP provides a variety of software solutions to set up or manage your HP JetDirect-connected network device. For general information about the software, see Table 3.1 on page 3-7.

For advanced configuration and troubleshooting topics, see the *HP JetDirect Print Server Administrator's Guide* for this product on the HP JetDirect CD-ROM.

Using the HP JetDirect CD-ROM

The HP JetDirect CD-ROM contains software, documentation, registration, and licensing information for your HP JetDirect print server.

Using this CD-ROM on supported systems, you can do the following:

- Quickly set up your printer for printing
- View documentation for your print server
- Register your print server via the Internet

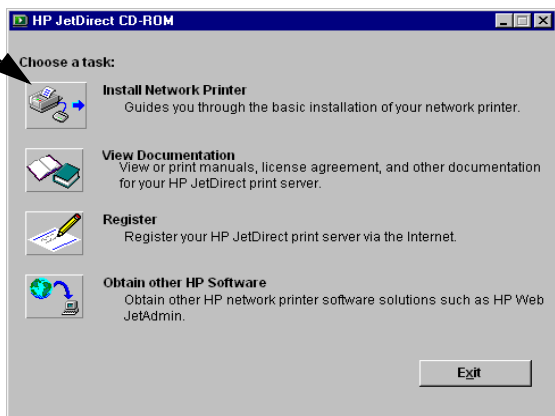
Microsoft or Novell NetWare Networks

The HP JetDirect CD-ROM installation utility supports Windows 95, 98, NT 4.0, and 2000 systems only. To run the utility, proceed as follows:

1. Insert the CD-ROM into your CD-ROM drive.
2. Wait for the installation utility to start automatically. If necessary, run SETUP.EXE from the root directory of the HP JetDirect CD-ROM.

Select the option you desire and follow the instructions on the screen.

Launches the
HP Install Network Printer wizard



To Use the HP Install Network Printer Wizard

To quickly set up your print server and system for network printing, use the Install Network Printer wizard.

Note

The Install Network Printer wizard can be used in most environments. Note the following exceptions:

- Windows 3.1x and NT 3.51 environments are not supported.
- For HP DesignJet printers and selected All-In-One products, use the installation utilities and instructions that came with the product.

For the latest information, refer to the following release note on the HP JetDirect CD-ROM:

\HPJSI\COMMON\README.htm, or
\HPJSI\COMMON\README.wri

-
1. From the CD-ROM installation utility's main screen, select **Install Network Printer** and follow the instructions displayed.
 2. Click **Help** on each screen for additional instructions.
 3. When prompted, print a test page to verify printer setup.

If the test page successfully prints, then you have completed printer setup on this computer system. For client-server networks, you must now use the system utilities available for your network to set up each network client that will access this printer.

If the test page fails to print, perform the troubleshooting tasks displayed by the wizard. Click **Help** for more information. For detailed troubleshooting information, read the *HP JetDirect Print Server Administrator's Guide* for this product (see "To View Documents on the CD-ROM").

UNIX Networks

For HP-UX and Sun Solaris systems, use the *HP JetDirect Printer Installer for UNIX* software provided on the HP JetDirect CD-ROM. The software is located in the directory /UNIX of the CD-ROM.

For detailed installation instructions and other information, read the text and documentation files provided in the /UNIX directory of the CD-ROM.

For HP JetDirect troubleshooting and configuration page messages, read the *HP JetDirect Print Server Administrator's Guide* for this product (see "To View Documents on the CD-ROM").

Apple Mac OS Networks

For AppleTalk networks, use the *HP LaserJet Utility* provided on the HP JetDirect CD-ROM. To install the software, follow these steps:

1. Insert the CD-ROM into the CD-ROM drive and wait for the HP JetDirect CD-ROM icon to appear on the screen.
2. Double-click the HP JetDirect icon to display the items in the JetDirect window.
3. Double-click the HP LaserJet software installation icon for the language you want. Then follow the instructions on the screen.

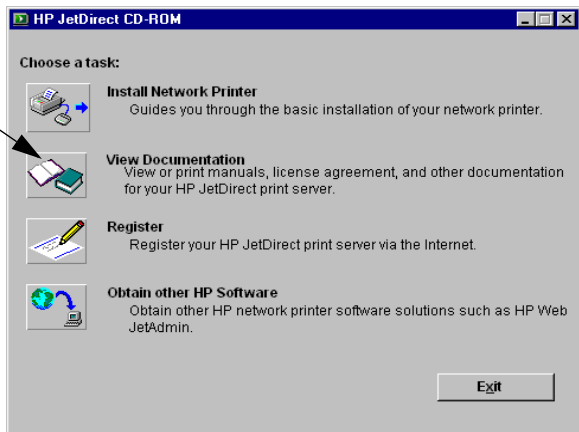
To run and use the software, refer to the help files provided with the software. For more information, read the *HP JetDirect Print Server Administrator's Guide* for this product supplied on the CD-ROM.

To View Documents on the CD-ROM

Several HP JetDirect print server documents, including the *HP JetDirect Print Server Administrator's Guide*, are provided on the CD-ROM in Adobe Acrobat Reader format (*.pdf files). For supported Windows systems, these documents can be accessed using the CD-ROM utility.

1. Insert the CD-ROM into your CD-ROM drive.
2. Wait for the installation utility to start automatically. If necessary, run SETUP.EXE from the root directory of the HP JetDirect CD-ROM.
3. Select **View Documentation**. The Acrobat Reader will run and will display the HP JetDirect Documentation home page.

Select this option



Note

If the required version of the Adobe Acrobat Reader is not installed, the CD-ROM installation utility will request permission to install it.

4. Click on the document that you want to view.

Note

For other supported operating systems, you can access the documentation files directly from the `\manuals` directory on the CD-ROM. The Adobe Acrobat Reader for your system must be installed and available on your system. If you have difficulty viewing documents, upgrade to the latest released version of Acrobat Reader available from Adobe Systems Incorporated.

Software Solutions Table

The following table will help you determine which software is best for you:

Table 3.1 HP Software Solutions (1 of 3)

Operating Environment	Function	Remarks
Install Network Printer Wizard (Windows)		
Windows 95, 98 Windows NT 4.0, 2000 NetWare 3.x, 4.x, 5x	Install a single network printer on a peer-to-peer or client-server network	Simple printer installation Runs from CD-ROM Installable version that runs from system disk is available More information: http://www.hp.com/support/net_printing
HP JetDirect Printer Installer for UNIX		
HP-UX 10.20, 11.x Solaris 2.5.x, 2.6, 7 TCP/IP	Install a single network printer on a supported UNIX network	More information: http://www.hp.com/support/net_printing

Table 3.1 HP Software Solutions (2 of 3)

Operating Environment	Function	Remarks
HP Web JetAdmin (Internet access required)		
<p>Windows NT 4.0, 2000 HP-UX Solaris Red Hat, SuSE Linux NetWare*</p> <p>*Supports queue creation (NetWare) and peripheral management from HP Web JetAdmin hosted on Windows NT 4.0, 2000</p>	<p>Remote installation, configuration, and management of HP JetDirect-connected print servers, non-HP printers that support the standard MIBs, and printers with embedded web servers</p> <p>Alerts and consumables management</p> <p>Remote firmware upgrades for HP JetDirect print servers</p> <p>Asset tracking and utilization analysis</p>	<p>HP's preferred solution for ongoing management and installation of multiple printers-anywhere on your intranet</p> <p>Browser-based management</p> <p>More information: http://www.hp.com/support/net_printing</p>
Internet Printer Connection		
<p>Windows NT 4.0, 2000 (Intel) TCP/IP only</p> <p>Note: Microsoft Internet Printing software is also integrated with Windows 2000</p>	<p>Print path configuration between your system and an HP JetDirect-connected printer over the Internet via the Internet Printing Protocol (IPP)</p>	<p>Allows economical distribution of high-quality hardcopy documents over the Internet, replacing fax, mail, and overnight services</p> <p>Requires HP JetDirect print server (firmware version X.07.17 or later)</p> <p>More information: http://www.hp.com/support/net_printing</p>

Table 3.1 HP Software Solutions (3 of 3)

Operating Environment	Function	Remarks
HP IP/IPX Printer Gateway		
NetWare 4.11, 4.2, 5.0, 5.1	Simplified installation, printing, and bidirectional management of HP JetDirect-connected printers under Novell Distributed Print Services (NDPS) Allows automatic discovery and installation of HP JetDirect-connected printers into NDPS via IPX	Frees up user licenses Allows disabling of SAPs to reduce network traffic For IPX printing, requires HP JetDirect firmware version X.03.06 or later More information: http://www.hp.com/support/net_printing
HP LaserJet Utility for Mac OS		
Mac OS 7.5 or later	Installation and management of HP JetDirect-connected printers	More information: http://www.hp.com/support/net_printing

Regulatory Statements

FCC Statement (U.S.A)

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.

FCC Class A for J4169A Ethernet or IEEE 802.3/802.3u. 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) network.

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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

European Community

When used with Ethernet, IEEE 802.3/802.3u 10/100Base-TX configurations, this equipment complies with EN55022 Class A. 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.

Declarations of Conformity. The Declarations of Conformity comply with ISO/IEC Guide 22 and EN45014. They identify the product, the manufacturer's name and address, and the applicable specifications that are recognized in the European Community. For each Declaration of Conformity, see the *HP JetDirect Hardware Installation Guide* for this product on the HP JetDirect CD-ROM.

Acoustic Noise.

Not applicable

Electromagnetic Emissions.

FCC part 15 Class A (U.S.A.), ICES-003 (Canada), VCCI Class 1 (in Japan), CISPR-22/EN55022 Class A, CNS 13438 (Taiwan), AS/NZS 3548 (Australia/New Zealand), GOST 29216 (Russia)

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

NOM-019-SCFI-1994 and NOM-001-SCFI-1993

Canada.

Complies with Canadian EMC Class-A requirements.

Australia.



This equipment complies with Australian EMC requirements.

Japan: VCCI Class A.

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

RRL Statement (Korea).

사용자 안내문 : A 급기기

이 기기는 업무용으로 전자파 적합등록을 받은 기기 이오니, 판매자 또는 사용자는 이점을 주의하시기 바라며, 만약 잘못 구입하셨을 때에는 구입한 곳에서 비업무용으로 교환하시기 바랍니다.

Taiwan Class A.

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

Chinese Safety Statement

HP 网络产品使用安全手册

使用须知

欢迎使用惠普网络产品，为了您及仪器的安全，请您务必注意如下事项：

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

警告

为防止火灾或触电事故，请不要将该机放置于淋雨或潮湿处。

安装

安装辅助管理模块，请参看安装指南。

保修及技术支持

如果您按照以上步骤操作时遇到了困难，或想了解其它产品性能，请按以下方式与我们联系。

如是硬件故障：

1. 与售出单位或当地维修机构联系。
2. 中国惠普有限公司维修中心地址：
北京市海淀区知春路49号希格玛大厦
联系电话：010-62623888 转 6101
邮政编码：100080

如是软件问题：

1. 惠普用户响应中心热线电话：010-65645959
2. 传真自动回复系统：010-65645735

Warranty Service and Customer Care

HEWLETT-PACKARD LIMITED WARRANTY STATEMENT

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP JetDirect 610N Print Server (J4169A)	1 year

1. HP warrants to you, the end-user customer, that HP hardware, accessories and supplies will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products that prove to be defective. Replacement products may be either new or equivalent in performance to new.

2. HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for a period of NINETY (90) DAYS, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the NINETY (90) day period, HP will replace software that does not execute its programming instructions due to such defects.

3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.

7. HP will be liable for damage to tangible property per incident up to the greater of \$300,000 or the actual amount paid for the product that is the subject of the claim, and for damages for bodily injury or death, to the extent that all such damages are determined by a court of competent jurisdiction to have been directly caused by a defective HP product.

8. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT

AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Your Authorized Dealer

If you encounter difficulty, begin by contacting the person who sold you the HP JetDirect print server to you. Your HP Authorized Dealer will be familiar with your requirements and can provide assistance.

During the warranty period, HP will replace the unit at no charge provided the defective unit is returned. You may return the unit to your HP Authorized Dealer or your local HP Sales and Service Office representative. *Be sure to include a copy of your purchase receipt.*

For warranty service on HP JetDirect products, call the HP Customer Care Center. When calling, please have the following information ready:

- HP JetDirect product you are calling about.
- Model number of the product.
- Serial number of the product.
- Complete description of the problem.
- Proof of purchase of your product.
- Your shipping address.

The HP Customer Care representative will help you with troubleshooting, and advise you on warranty service.

Service Billing (Out of Warranty)

When ordering a replacement unit for out-of-warranty service, you may be charged a repair cost. See your HP Authorized Dealer or your local HP Sales and Service Office representative. Or, you can call HP at (800) 227-8164 (USA only).

Service Outside the USA

Customers outside the USA should contact their HP Authorized Dealer or HP Sales and Service Office to obtain information on prices, exchange unit availability and instructions.

Hewlett-Packard Year 2000 Warranty

Subject to all of the terms and limitations of the HP Limited Warranty Statement provided with this HP Product, HP warrants that this HP Product will be able to accurately process date data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000, including leap year calculations, when used in accordance with the Product documentation provided by HP (including any instructions for installing patches or upgrades), provided that all other products (e.g. hardware, software, firmware) used in combination with such HP Product(s) properly exchange date data with it. The duration of the Year 2000 warranty extends through January 31, 2001.

Local Warranty Statements

Australia and New Zealand

For consumer transactions in Australia and New Zealand: The warranty terms contained herein except to the extent lawfully permitted, do not exclude, restrict, or modify and are in addition to the mandatory statutory rights applicable to the sale of this product to you.

Argentina

Certificado de Garantía

Hewlett-Packard Argentina, S.A.
Montañeses 2150
1428 Buenos Aires
Argentina
Tel. 787-7100

<i>Producto:</i>	HP JetDirect 610N Print Servers
<i>Modelo:</i>	J4169A
<i>No. de serie:</i>	
<i>Fecha de entrega:</i>	
<i>Vigencia de la garantía:</i>	Uno (1) Año
<i>Extension de la garantía:</i>	

A. Cobertura de la garantía:

1. Hewlett-Packard Argentina, S.A. (HPA) garantiza al cliente (usuario final) que el producto al que se refiere esta garantía estará libre de defectos de fabricación y de mano de obra por el término antes indicado contando desde la fecha de compra del producto por parte del usuario final original a un distribuidor o comercializador debidamente autorizado por HPA.

2. La presente garantía cubre únicamente aquellos defectos que surgiesen como resultado del uso normal del producto y no por aquellos que resultasen de:

a. Mantenimiento inapropiado o inadecuado o mantenimiento, alteración o reparación realizados por personal no autorizado por HPA; b. Uso de software, accesorios, soportes, suministros, consumibles o interfaz no suministrados por HPA; c. Modificaciones no autorizadas o uso indebido; d. Operación fuera de las especificaciones ambientales para el producto, incluyendo abuso del ciclo de trabajo o uso de cargas de conmutadores sin protección contra sobretensiones; e. Uso de medios de impresión o tarjetas de memoria no soportados; f. Lugar de uso o mantenimiento inapropiados; g. Daños durante el traslado; o h. Cualquier violación de las condiciones de uso, instalación y mantenimiento necesarias especificadas en el Manual de Operaciones.

3. Si el cliente (usuario final), durante el periodo de garantía, pusiera en conocimiento de HPA la existencia de los defectos definidos anteriormente, HPA podrá, según prefiera, reparar o reemplazar el producto si está averiado. Cualquier producto de reemplazo será nuevo o como nuevo. En caso que al momento del reemplazo no hubiese disponible un producto idéntico al reemplazado (ya sea por discontinuación de su producción, falta de stock o por cualquier otra causa), HPA se reserva el derecho de suministrar un producto de prestaciones o funcionalidad por lo menos iguales a las del producto reemplazado. Si luego de un plazo razonable, no fuese posible para HPA reparar o reemplazar el producto, el cliente tendrá derecho, como única compensación, al reintegro del precio de compra, contra la devolución del producto a HPA.

B. Limitación de la garantía:

1. NI HPA, NI NINGUNA ENTIDAD O PERSONA DIRECTA O INDIRECTAMENTE VINCULADA O RELACIONADA CON HPA: A) OFRECEN NINGUNA OTRA GARANTÍA DE NINGUNA ÍNDOLE, EXPRESA O IMPLÍCITA, ORAL O ESCRITA, RESPECTO AL PRODUCTO AL QUE SE REFIERE ESTA GARANTÍA; O B) FORMULAN NINGUNA GARANTÍA IMPLÍCITA DE COMERCIALIZACIÓN O ADECUACIÓN DEL PRODUCTO PARA UN PROPOSITO DETERMINADO.

HPA NO OFRECE NINGUNA GARANTÍA DE QUE LA OPERACIÓN DE SUS PRODUCTOS SERÁ ININTERRUMPIDA O LIBRE DE ERRORES.

C. Exoneración de responsabilidad:

EXCEPTUANDO LAS OBLIGACIONES EXPUESTAS EN ESTE CERTIFICADO DE GARANTÍA, BAJO NINGUNA CIRCUNSTANCIA HPA SERÁ RESPONSABLE DE CUALQUIER DAÑO DIRECTO O INDIRECTO (INCLUYENDO SIN LIMITACIÓN, PERDIDA DE DATOS O LUCRO CESANTE) O POR CUALQUIER DAÑO O PERJUICIO QUE SEA CONSECUENCIA DIRECTA, INDIRECTA O REMOTA DEL USO O MAL FUNCIONAMIENTO DEL PRODUCTO, CUALQUIERA QUE SEA EL FUNDAMENTO DEL RECLAMO (CONTRACTUAL, EXTRACONTRACTUAL O LEGAL).

LOS REMEDIOS DESCRITOS EN ESTA GARANTÍA SON LOS ÚNICOS Y EXCLUSIVOS.

D. Condiciones particulares:

E. Reparaciones:

Las reparaciones se llevarán a cabo en los centros autorizados de servicio en Argentina, contra la presentación del producto, este Certificado de Garantía y la factura original de compra del producto, en el caso de impresoras presentar la HP Print Server.

México

Póliza de Garantía

Hewlett-Packard de México, S.A. de C.V. con domicilio en:
Prolongación Reforma No. 470
Col. Lomas de Sta. Fe, 01210
Delegación Alvaro Obregón
Tel. 326 46 00

Garantiza este producto por el término de doce meses en todas sus partes y mano de obra contra cualquier defecto de fabricación y funcionamiento a partir de la fecha de entrega al consumidor final. En el caso de productos que requieran de enseñanza o adiestramiento en su manejo o en su instalación, a partir de la fecha en que hubiese quedado operando normalmente el producto después de su instalación en el domicilio que señale el consumidor.

CONDICIONES :

1. Centros de Servicio, Refacciones y Partes:

Para hacer efectiva esta garantía, no podrán exigirse mayores requisitos que la presentación de esta póliza junto con el producto en el lugar donde fue adquirido o en el centro de servicio ubicado en el domicilio de la parte superior de esta hoja, el mismo en el que se pueden adquirir refacciones y partes.

2. Cobertura:

La Empresa se compromete a reparar o cambiar el producto, así como las piezas y componentes defectuosos del mismo, sin ningún cargo para el consumidor. Los gastos de transportación que se deriven de su cumplimiento serán cubiertos por Hewlett-Packard de México, S.A. de C.V.

3. Tiempo de Reparación:

El tiempo de reparación en ningún caso será mayor a treinta días contados a partir de la recepción del producto en cualquiera de los sitios en donde pueda hacerse efectiva la garantía.

4. Limitaciones:

Esta garantía no es válida en los siguientes casos:

- Cuando el producto ha sido utilizado en condiciones distintas a las normales.
- Cuando el producto no ha sido operado de acuerdo con el instructivo de uso proporcionado en el idioma español.
- Cuando el producto ha sido alterado o reparado por personas no autorizadas por Hewlett-Packard de México, S.A. de C.V.

Producto: HP JetDirect Internal Print Servers		Marca Hewlett-Packard		Modelo J4169A			
No. de Serie			Nombre del Distribuidor				
Dirección: (Calle, Número, Colonia o Poblado, Delegación o Municipio)							
C.P.		Ciudad		Estado		Teléfono	
Fecha de entrega o instalación							

Notas:

El consumidor podrá solicitar que se haga efectiva la garantía ante la propia casa comercial donde adquirió el producto siempre y cuando el fabricante o importador no cuente con talleres de servicio.

En caso de que la presente garantía se extraviara, el consumidor puede recurrir a su proveedor para que se le expida otra póliza de garantía, previa presentación de la nota de compra o factura respectiva.



HP Customer Care



HP Customer Care Online

Click your way to a quick solution! The HP web site

http://www.hp.com/support/net_printing

is a great place to start for answers to questions about your HP JetDirect print server – 24 hours a day, 7 days a week.

Software, Driver, and Firmware Upgrades. Hewlett-Packard offers downloadable firmware upgrades for HP JetDirect print servers with internal Flash memory. The electronic upgrades are available on the World Wide Web and various online services.

Current information about drivers, software versions, and HP JetDirect firmware upgrades are available through the following areas:

World Wide Web	Access HP's Customer Care Center online at: http://www.hp.com/support/net_printing
America Online	Receive drivers and upgrades by downloading them to your computer from the HP Forum.
HP Distribution Center	Order drivers and upgrades for HP printers by calling the HP Distribution Center at (805) 257-5565 (USA only).
FTP Site	Download printer drivers and upgrades from HP's anonymous FTP site at: ftp.hp.com/pub/networking/software



HP Customer Care Forum

Go online, anytime, and you'll also find helpful user forums – a great source of ideas and suggestions for using your HP JetDirect print server. You can access the user forum directly from:

<http://www.hp.com/go/forums>

and select **Network Printing Support Forum**.



HP Customer Care By Phone

Highly trained technicians at our HP Customer Care Center are ready to take your call. See Table B.1.

Note

In the USA, call HP Customer Care at:

(208) 323-2551

For the most recent HP Customer Care telephone numbers and available services worldwide, visit HP Customer Care Online at:

http://www.hp.com/support/support_assistance

Note

Telephone fees are the responsibility of the caller. Rates may vary. Contact your local telephone company for current rates.

Table B.1 HP Customer Care By Phone

Australia	+ 61 3 8877 8000	Malaysia	+ 60 (3) 295 2566
Austria	+ 43 (0)7114 201080	Mexico	01 800 472 6684
Belgium (Dutch)	+ 32 (0)2 626 8806	Netherlands	+ 31 (0)20 606 8751
Belgium (French)	+ 32 (0)2 626 8807	New Zealand	+ 64 (9) 356 6640
Canada	905 206 4663	Norway	+ 47 22 11 6299
China	+ 86 (0)10 6564 5959	Penang	1 300 88 00 28
Czech Republic	+ 42 (0)2 6130 7310	Philippines	+ 63 (2) 867 3551
Denmark	+ 45 39 29 4099	Poland	+ 48 22 519 06 00
Finland	+ 358 (0)203 47 288	Portugal	+351 21 3176333
France	+ 33 (0)1 43 62 34 34	Russian Federation	+7 095 797 3520 (Moscow)
Germany ¹	+ 49 (0)180 52 58 143	Singapore	+ 65 272 5300
Hong Kong	800 96 7729	Spain	+ 34 902 321 123
Hungary	+36 (0)1 382 1111	Sweden	+ 46 (0)8 619 2170
India	+ 91 11 682 6035	Switzerland	+ 41 (0)848 80 11 11
Indonesia	+ 62 (21) 350 3408	Taiwan	+ 886 (2) 2717 0055
Ireland	+ 353 (0)1 662 5525	Thailand	+ 66 (2) 661 4000
Israel	+ 972 (0)9 9524848	Turkey	+ 90 212 221 69 69
Italy	+ 39 02 264 10350	English International (UK)	+ 44 (0)207 512 52 02
Japan	+ 81 3 3335 8333	USA	208 323 2551
Korea	+ 82 (2) 3270 0700	Vietnam	+ 84 (0)8 823 4530
For all other countries, contact your reseller.			
¹ For Germany, contact your local telephone company for current rates.			



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