Documentation for HP J6035A Jetdirect 175X External Print Server

10/100T, for USB printer ports

Contents

Installing the 175X print server

HP J6035A Jetdirect 175X External Print Server

Overview

1. Install hardware

Summary: To connect the printer to the network using the 175X print server, you will:

- connect the 175X to the network with a network cable,
- connect the 175X to the printer with the included USB cable,
- plug in the power adapter, and
- print a configuration (self-test) page.

Here are the detailed instructions.

2. Install software

- **For the basic procedure** to set up each Windows (95, 98, 2000, ME, NT 4.0) computer for printing on the networked printer:

  This default procedure involves installing printer drivers and other software and configuring network parameters . You will use the installation software on either the CD-ROM supplied with your printer or on the Jetdirect CD-ROM supplied with your print server, depending on your printer model.
  Here are the instructions.
  For more detailed information see www.hp.com/support/network-printer-CD.

- For the LPR/LPD (Line Printer Daemon) alternative printing method...

- For Macintosh setup, read the Jetdirect CD-ROM on a Macintosh system, select the file Network Printing.htm, and follow the

instructions for setting up network printing.

Steps to install the 175X print server hardware

1. Attach the print server to a 10Base-T (Ethernet) or 100Base-TX (Fast Ethernet) local area network by plugging a network cable into the RJ-45 connector on the rear end of the print server.

2. Attach the print server to the printer by plugging the Universal Serial Bus (USB) cable—shipped with the print server—into the USB connector on the front end of the print server and into the USB connector on the printer.

- **Caution! Unsupported USB Devices:**
  - HP4135A Jetdirect Connectivity Card
  - any USB hub
  - any USB-to-parallel converter
  - any USB cable extender

3. Plug the DC power cord from the power module—shipped with the print server—into the power connector on the rear end of the print server. Plug the power module into a power outlet.

   - **Caution!** Do not use the power module shipped with the 175X with any *other* products!

4. Verify the print server's LEDs:
   - The 10 or 100 LED on the rear end of the print server lights green to indicate the connection speed.

- The power/status LED ⏻ on the top front begins blinking and within 15 seconds is solid green, to indicate the server passed its self test.

- The USB LED on the top front indicates the USB-II connection status. See above.

(Interpreting the LEDs and diagnosing problems)

5. Verify the connection with the printer by printing a configuration (test) page:

   Press the test button on the rear end of the print server. The page should soon emerge from the attached printer.

(Interpreting the configuration page and diagnosing problems)

If the page does not appear on the printer, or if it is unreadable...

6. You can use the clip attached to the bottom of the print server to mount it to the printer or to a table or wall. Use either the supplied sticky tape or the mounting screw holes. Or you can pull off the clip.

Next, install software.

Note on pressing the test button (step 4):
If the configuration page does not print (or if it is unreadable), do the following steps to change the page description language (PDL) used.

1. Press and hold the test button.

   After about 3 seconds, the power/status LED changes to amber. Continue to hold the button until the power/status LED is flashing green. Then release the button.

2. Press the test button once again to request the configuration page.
3. Verify that a readable page is printed. Repeat these steps if necessary until you receive a configuration page you can read.

Tips on Getting Started

Background

Basically, installing a network printer is pretty straightforward:

- First, you set up your hardware. This involves setting up your printer, and then setting up a print server to connect the printer to your network.

- Then, you run the network printing software to install the printer on your computer.

The most difficult part of this procedure is usually just knowing where to start. If you have purchased your printer and print server separately, you probably have two sets of documentation and two installation CDs -- which do you use? The section below on *Which CD do I use?* should help you get started in the right place.

In addition, it's sometimes not immediately apparent where to find the printer driver that the installer needs. The section below on *Where do I find the printer driver?* provides some useful pointers.

Which CD do I use?

For newer HP LaserJet printers (January 2000 or later), including multifunction peripherals (MFPs) and All-in-One devices, you should use the CD supplied with the printer. This CD already includes network installation software. Following is a list of recent HP printers that integrate network installation software on their CD.

HP LaserJet printers and MFPs

- 1200, 1220 Series or newer
- 2200 Series or newer
- 3200 Series or newer
- 8150 Series or newer

HP Color LaserJet printers and MFPs

- 4500, 4550 Series or newer
- 8550 Series or newer
- 3150 Series or newer

HP Business Inkjet printers

- 2200, 2250 Series or newer

HP Designjet printers

- 500/800 Series
- 5000 Series or newer

HP Officejet printers and All-in-One peripherals

- OfficeJet G-Series
- OfficeJet K-Series

If you have one of the printers listed above, run the installer on the printer CD to install your network printer. You will not need to run the installer on the HP Jetdirect CD.

If your printer is not identified above, or you cannot locate your printer CD, you should:

- First, locate your printer's driver. (The instructions in the next section should help you.)
- Then, run the installer from the HP Jetdirect CD.
- If the installer asks for the driver, specify the location you found in the first step.

Note that if you use the HP Jetdirect CD for MFP or All-in-One devices, some features other than printing (such as scanning and faxing) may not be accessible. Use the printer CD to get all features.

Note: An HP Web Jetadmin CD-ROM may also be included with selected HP JetDirect products. HP Web Jetadmin is a feature-rich printer management tool. However, it is not required for network printer installation.

Where do I find the printer driver?

At some point late in the installation, the installer needs to have the printer driver to complete the installation. So at that point the installer may ask you where to find the driver. Knowing where to find the driver is usually the most subtle part of the installation.

Technically speaking, what you need is a driver that installs using a .INF information file (rather than installing by running a .EXE file) There are several alternatives for finding this driver and its .INF file:

- If you want to make sure of having the latest driver for your printer, you can download it from the Web. If your printer is an HP printer and you are running the installer in the *Autoconfigure network settings for me* mode, you can select the option to download a driver automatically from the Internet. The installer will search the HP support site for a driver for your printer and, if it finds one, will automatically download it and install it for you. If you don't select the option to download a driver automatically from the Internet, you can download one manually before you run the installer. The HP support site at http://www.hp.com/cposupport/software.html has current drivers for most HP printers.

- In many cases the driver is the same one that is used for a direct (non-networked) printer connection, and you can probably find the driver on the CD that came with the printer.

- You may be able to find the driver on your operating system disc. If the operating system is more recent than the printer, it probably includes a driver for that printer.

- If you previously had a direct connection from your computer to the same printer, the network printer installer may be able to use the driver that is already on your computer. (This can work if the installer can find your printer's .INF file on your computer.)

The installer takes the driver location you specify, finds the driver, and installs it in your system.

Interpreting the lights on the HP Jetdirect 175X print server

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HP Jetdirect 175X

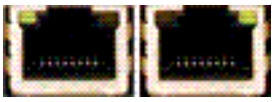
[Power/Status light](#)

[10 or 100 Link lights](#)

[USB light](#)

Power/Status Light

Light Behavior	Description
Off	Print server is not receiving power.
On solid green	Print server is on and ready.
Blinking slowly (green)	Print server receiving power but not ready; self-test may still be in process. Or, no network connection; check the 10 and 100 Link lights.
Blinking slowly (amber)	Fault occurred during self-test or operation. Contact HP.
Blinking quickly (green)	Print server is processing the configuration page.



10 or 100 Link Lights

Light Behavior	Description
Off	No network connection.
On solid green	Network connection is established at 10 Mb/s or at 100Mb/s.

USB Light

Light Behavior	Description
Off	USB is not operational. This is OK before the print server finishes starting up. After startup completes, this could indicate a faulty print server.
On solid green	USB is enabled and ready for use. This begins before the USB cable is connected.
Blinking (green)	Software fault occurred for the firmware. There is a valid USB device and connections, but the device is not supported. Make sure the attached device is a printer.

Blinking (amber)	Might be a hardware fault (for example, a short-circuit, faulty cable, or a printer drawing too much power). To verify, disconnect the USB cable at the print server. Switch on the printer if it is off. Power cycle the print server (unplug it and plug it back in). Then reconnect the USB cable. If the USB light is now green and steady, then no problem remains. Otherwise, if the USB light is still blinking amber, then there may be a faulty component. Try these steps to determine which component might be causing the problem: ● Detach the USB cable and power cycle the print server (unplug it and plug it back in). If the USB LED is green and steady, then the print server is OK. If it is blinking amber, then the print server is faulty. ● Try reconnecting the USB cable to the print server only, and power cycle the print server (unplug it and plug it back in). If the USB LED is green and steady, then the cable is also OK. If it is blinking amber, then the cable may be faulty. ● Power cycle the printer and reconnect the USB cable to the printer. If the USB LED is green and steady, then the printer is also OK. If it is blinking amber, then the printer may be faulty.

Interpreting the configuration page

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The configuration page (also called a self-test page or configuration plot) for a print server displays messages, network statistics, and status for the print server. To print a configuration page, press the Test button on the print server.

An HP JetDirect configuration page can also be viewed over the network from a management utility (such as HP Web Jetadmin), or by accessing the embedded web server on the HP JetDirect print server.

Just click on any section of the configuration page below for detailed description of that section.

JetDirect Configuration (English - HPGL2)

General Information

Status:	I/O Card Ready
Model Number:	J6035A
Hardware Address:	080009123456
Firmware Version:	L.20.05
Port Select:	RJ45
Port Config:	100TX HALF
Manufacturing ID:	40194019F090f_
Date Manufactured:	05/2001
SNMP Set Cmty Name:	Specified

USB Printer 1 *

Device Name:	LaserJet 1200
Manufacturer:	Hewlett-Packard
Serial Number:	US16SK0KD
Communication Mode:	1284.4

Network Statistics

Total Packets Received:	12345678
Unicast Packets Received:	15001
Bad Packets Received:	40
Framing Errors Received:	0
Total Packets Transmitted:	50114
Unsendable Packets:	13
Transmit Collisions:	1003
Transmit Late Collisions:	0

TCP/IP

Status:	Ready
Host Name:	paradiselj
IP Address:	192.168.40.133
Subnet Mask:	255.255.248.0
Default Gateway:	192.168.40.1
Config By:	DHCP/TFTP
DHCP Server:	192.168.40.1
TFTP Server:	192.168.5.113
Config File: /export/client/stand/uxboot/jumbalaya.cfg	
Domain Name:	Not Specified
DNS Server:	192.168.40.2
WINS Server:	192.168.40.1
Syslog Server:	Not Specified
Idle Timeout:	90 sec
SLP:	Enabled
Access List:	Not Specified
Web JetAdmin URL:	Not Specified

IPX/SPX

Status:	Ready
Node Name:	NPI123456
Primary Frame Type:	Auto Select

Network	Frame Type	Rcvd
Unknown	EN_II	2
0000C400	EN_802.2	31903
Unknown	EN_SNAP	2
Unknown	EN_802.3	2

AppleTalk

Status:	Ready
Name:	HP LaserJet 1200 Series
Zone:	Saturn Zone
Type:	LaserWriter
Type:	HP LaserJet 1200
Network Number:	68521
Node Number:	21

General JetDirect Information

Provides general print server status and identification information.

Message	Description
Status	Current state of the print server. • I/O Card Ready: the print server has successfully connected to the network and is awaiting data. • I/O Card Initializing: the print server is initializing the network protocols. For more information, see the status line for each protocol on the configuration page. • I/O Card Not Ready: there is a problem with the print server or its configuration. An error code and message are displayed if the print server is not ready.
Model Number	The model number of the HP print server (for example, J6035A).
Hardware Address	The 12-digit hexadecimal LAN hardware (MAC) address of the print server installed in or attached to the printing device. This address is assigned by the manufacturer.
Firmware Version	The firmware revision number of the print server currently installed in the printer. The format is X.NN.NN, where X is a letter that depends on the HP print server model.
Port Select	Specifies the LAN port on the print server that has been detected for use: • None: the print server is not connected to the network. • RJ-45: the RJ-45 network port is connected.
Port Config	Identifies the link configuration of the RJ-45 LAN port on the print server: • 10BASE-T HALF: 10 Mbps, half-duplex • 10BASE-T FULL: 10 Mbps, full-duplex • 100TX HALF: 100 Mbps, half-duplex • 100TX FULL: 100 Mbps, full-duplex • Unknown: the print server is in an initialization state. • Disconnected: a network connection has not been detected. Check network cables.
Auto Negotiation	Identifies whether IEEE 802.3u Autonegotiation on the 10/100TX port is enabled (on) or disabled (off). On: the print server will attempt to automatically configure itself onto the network at the proper speed (10 or 100 Mbps) and mode (half or full duplex).
Manufacturing ID	The manufacturing identification code for use by HP Customer Care personnel.
Date Manufactured	Identifies the date of manufacture of the HP Jetdirect print server.
SNMP Set Cmty Name	Specifies whether an SNMP set community name has been configured on the print server. An SNMP set community name is a password for "write" access to SNMP control functions (SNMP SetRequests) on the print server. • Not Specified: an SNMP set community name has not been set. • Specified: a specific SNMP set community name has been set.
USB Printer 1 *	Heads the section for the USB printer class descriptor information supplied by the manufacturer of the printing device. The number and asterisk "1 *" indicates that the configuration and diagnostic pages will be printed on the printing device attached to print server port 1. See USB Port Information.

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USB Port Information

Provides the USB printer class descriptors for the device connected to the port.

Message	Description
Device Name	Name of the attached USB printing device, supplied by the manufacturer.
Manufacturer	Manufacturer of the attached printing device.
Serial Number	Serial number of the attached printing device.
Communication Mode	Current USB communication mode: ● 1284.4: IEEE standard protocol, a mode for printers and multi-function (All-in-One) devices that allows multiple channels of simultaneous print, scan, and status communication. ● MLC: HP-proprietary protocol for Multiple Logical Channels, a mode for printers and multi-function (All-in-One) devices that allows multiple channels of simultaneous print, scan, and status communication. ● Bidirectional: two-way printer communication, sending print data to the printing device and returning status information from the printing device. ● Unidirectional: one-way printer communication from computer to printing device. ● Device not found: connection of a printing device has not been detected. Check device and cable. ● Device not supported: the device connected is not a printer (for example, a camera).

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Network Statistics

Provides the current values for various network parameters monitored by the print server.

Message	Description
Total Packets Received	Total number of frames (packets) received by the print server without error. This includes broadcast, multicast packets, and packets specifically addressed to the print server. This number does not include packets specifically addressed to other nodes.
Unicast Packets Received	Number of frames specifically addressed to this print server. This does not include broadcasts or multicasts.
Bad Packets Received	Total number of frames (packets) received with errors by the print server.
Framing Errors Received	Maximum of CRC (Cyclic Redundancy Check) errors and framing errors. CRC errors are frames received with CRC errors. Framing errors are frames received with alignment errors. A large number of framing errors could indicate a cabling problem with your network.
Total Packets Transmitted	Total number of frames (packets) transmitted without error.

Unsendable Packets	Total number of frames (packets) not successfully transmitted because of errors.
Transmit Collisions	Number of frames not transmitted because of repeated collisions.
Transmit Late Collisions	Total number of frames not transmitted because a late collision occurred. A large number may indicate a cabling problem on the network.

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TCP/IP Protocol Information

Provides the current status and parameter values for the TCP/IP network protocols.

Message	Description
Status	Current TCP status: ● Ready: the print server is awaiting data over TCP/IP. ● Disabled: TCP/IP was manually disabled. ● Initializing: the print server is searching for the BOOTP server, or trying to get the configuration file through TFTP. An additional status message may also be displayed. An error code and message are displayed if the print server is not ready.
Host Name	The host name configured on the print server. It may be truncated. ● Not Specified: no host name was specified in a BOOTP response or TFTP configuration file. ● NPIxxxxxx: the default name is NPIxxxxxx, where xxxxxx represents the last six digits of the LAN hardware (MAC) address.
IP Address	The Internet Protocol (IP) address assigned to the print server. This is a required entry for its operation on a TCP/IP network. During initialization, a temporary value 0.0.0.0 is displayed. After two minutes, a default IP address 192.0.0.192 is assigned, which may not be a valid IP address for your network. ● Not Specified: an IP address is not assigned or the value is zero.
Subnet Mask	The IP subnet mask configured on the print server. During initialization, a temporary value 0.0.0.0 is displayed. Depending on configuration parameters, the print server may automatically assign a usable default value. ● Not Specified: a subnet mask is not configured.
Default Gateway	The IP address of the gateway used when sending packets off the local network. Only one default gateway may be configured. During initialization, a temporary value 0.0.0.0 is displayed. If not provided, the IP address of the print server is used. ● Not Specified: a default gateway is not configured.

Config By	Identifies how the print server obtained its IP configuration. ● BOOTP: automatic configuration via a BOOTP server. ● BOOTP/TFTP: automatic configuration via a BOOTP server and TFTP configuration file. ● DHCP: automatic configuration via a DHCP server. ● DHCP/TFTP: automatic configuration via a DHCP server and TFTP configuration file. ● RARP: automatic configuration via the Reverse Address Resolution Protocol. ● User Specified: manual configuration via Telnet, the printer's control panel, HP Web JetAdmin, embedded web server, or other method. ● Default IP: the default IP address was assigned. This address may not be a valid address for your network. ● Not Configured: the print server was not configured with IP parameters. Verify that TCP/IP is enabled, or check for error status.
BOOTP Server or DHCP Server or RARP Server	Displayed if BOOTP, DHCP, or RARP is used for TCP/IP configuration. It specifies the IP address of the system that responds to the print server's request for automatic TCP/IP configuration over the network. ● Not Specified: the configuration server's IP address could not be determined or was set to zero in the response packet.
BOOTP/DHCP Server	Displayed during initialization while the print server attempts to obtain its TCP/IP configuration from a BOOTP or DHCP server. The temporary address displayed is 0.0.0.0. ● Not Specified: the configuration server's IP address could not be determined or was set to zero in the response packet.
TFTP Server	The IP address of the system where the TFTP configuration file is located. During initialization, the temporary address 0.0.0.0 is displayed. ● Not Specified: a TFTP server has not been not been set.
Config File	The name of the print server's configuration file. The file pathname may be truncated to fit on two lines. ● Not Specified: a file was not specified in the BOOTP reply from the host.
Domain Name	The Domain Name System (DNS) name of the domain in which the print server resides (for example, support.company.com). It is not the fully qualified DNS name because the host printer name is not included (for example: printer1.support.company.com). ● Not Specified: a domain name has not been configured on the print server.
DNS Server	The IP address of the Domain Name System (DNS) server. ● Not Specified: a DNS server's IP address has not been configured on the print server.
WINS Server	The IP address of the Windows Internet Name Service (WINS) server. ● Not Specified: a WINS server's IP address has not been configured on the print server.
Syslog Server	The IP address of the syslog server configured on the print server. ● Not Specified: a syslog server has not been configured.
Idle Timeout	The timeout value expressed in seconds after which the print server closes an idle TCP print data connection. Acceptable values are integers between 0 and 3600 seconds. A value of zero turns off the timeout mechanism. The default value is 270 seconds.

SLP	Specifies whether the print server sends Service Location Protocol (SLP) packets used by system applications for automated installation. • Enabled: the print server sends SLP packets. • Disabled: the print server does not send SLP packets.
Access List	Identifies whether a host access control list is configured on the print server. A host access control list specifies the IPaddress of individual systems, or IP network of systems, that are allowed access to the print server and device. • Specified: a host access list is configured on the print server. • Not Specified: a host access list is not configured on the print server. All systems are allowed access.
Web JetAdmin URL	If the print server is found on the network by HP WebJetAdmin, the URL of the host system used for HP WebJetAdmin services is displayed. The URL is limited to two lines and may be truncated. • Not Specified: the URL of the HP WebJetAdmin host system could not be identified or is not configured.

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IPX/SPX Protocol Information

Provides the current status and parameter values for the IPX/SPX network protocols.

Message	Description
Status	Indicates the current IPX/SPX protocol status. • Ready: the print server is awaiting data over IPX/SPX. • Disabled: IPX/SPX was manually disabled. • Initializing: the print server is registering the node address or name. An additional status message may also be displayed. An error code and message are displayed if the print server is not ready.
Node Name	The IPX/SPX name of the print server. The default name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address. [Verify parameter location.]
Primary Frame Type	Specifies the frame type selection on the print server. • Auto Select: the print server automatically senses and limits the frame type to the first one detected. • EN_II: limits the frame type to IPX over Ethernet frames. All others will be counted and discarded. • EN_802.2: limits the frame type to IPX over IEEE 802.2 with IEEE 802.3 frames. All others will be counted and discarded. • EN_SNAP: limits the frame type to IPX over SNAP with IEEE 802.3 frames. All others will be counted and discarded. • EN_802.3: limits the frame type to IPX over IEEE 802.3 frames. All others will be counted and discarded.
Network	The first column *Network* indicates the network number associated with each protocol frame type used for communication between a server and the print server. • Unknown: the print server is still trying to determine which network number to use.

Frame Type *EN_II* *EN_802.2* *EN_SNAP* *EN_802.3*	The second column *Frame Type* identifies the frame type associated with each network number. Unless a specific frame type has been manually configured, the print server automatically determines the protocol frame type by listening to the network data being transferred over the network. • Disabled: a specific frame type for that network has been manually configured.
Rcvd	The third column *Rcvd* indicates how many packets have been received for each frame type.

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AppleTalk Protocol Information

Provides the current status and parameter values for the AppleTalk network protocols.

Message	Description
Status	Indicates the current AppleTalk configuration status. • Ready: the print server is awaiting data. • Disabled: AppleTalk was manually disabled. • Initializing: the print server is registering the node address or name. An additional status message may also be displayed. An error code and message are displayed if the print server is not ready.
Name	The name of the printer on the AppleTalk network. A number after the name indicates that there are multiple devices with this name, and this is the Nth instance of the name.
Zone	The name of the AppleTalk network zone on which the printer is located.
Type	The type of the printer being advertised on the network. Two types can be displayed.
Network Number	The AppleTalk Network Number on which the print server is currently operating.
Node Number	The AppleTalk Node Number that the print server chose for itself as part of its initialization sequence. Note: The AppleTalk phase 2 (P2) parameter is preconfigured on the print server.

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Error Messages

Error Code and Message	Description
02 LAN ERROR-INTERNAL LOOPBACK	During self-test, the print server detected an internal loopback test error. The print server may be faulty. If the error persists, replace the print server.
03 LAN ERROR-EXTERNAL LOOPBACK	The print server is incorrectly connected to your network or is defective. Make sure your print server is correctly attached to your network. In addition, check the cabling and connectors.

07 LAN ERROR- CONTROLLER CHIP	Check the network connections. If the connections are intact, run the power-on self-test: turn the printer off, then on again. If the error persists, replace the print server.
08 LAN ERROR- INFINITE DEFERRAL	There is a network congestion problem. Note: If the print server is not connected to the network, this error cannot occur.
09 LAN ERROR- BABBLE	Check the network connections. If the connections are intact, run the power-on self-test: turn the printer off, then on again. If the error persists, replace the print server.
0A LAN ERROR- NOSQE	Check the network connections. If the connections are intact, run the power-on self-test: turn the printer off, then on again. If the error persists, replace the print server.
0C LAN ERROR- RECEIVER OFF	There may be a problem with your network cabling or the print server. Check the cabling and connectors on your Ethernet network. If you cannot find a problem with your network cabling, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, there is a problem with the print server.
0D LAN ERROR- TRANSMITTER OFF	There may be a problem with your network cabling or the print server. Check the cabling and connectors on your Ethernet network. If you cannot find a problem with your network cabling, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, there is a problem with the print server.
0E LAN ERROR- LOSS OF CARRIER	Check the network connections. If the connections are intact, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, replace the print server.
10 LAN ERROR- UNDERFLOW	There may be a problem with your network cabling or the print server. Check the cabling and connectors on your network. If you cannot find a problem with your network cabling, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, there is a problem with the print server.
11 LAN ERROR- RETRY FAULTS	There is a problem with your network cabling or external network configuration. Verify operation of the hub or switch port.
12 LAN ERROR- NO LINKBEAT	With a 10Base-T or 100Base-TX port connected, Link Beat is not sensed. Check the network cable, and verify that the concentrator or hub is providing Link Beat.
13 NETWORK RECONFIG - MUST REBOOT	Reset or power cycle the print server to enable the new configuration values.
40 ARP DUPLICATE IP ADDRESS	The ARP layer has detected another node on the network using the same IP address as the print server. Extended error information below this message shows the hardware address of the other node.
41 NOVRAM ERROR	The print server cannot read the contents of its NOVRAM.

42 INVALID IP ADDRESS	The IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
43 INVALID SUBNET MASK	The IP subnet mask specified for the print server (through BOOTP) is an invalid subnet mask. Check your Bootptab file for proper entries.
44 INVALID GATEWAY ADDRESS	The default gateway IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
45 INVALID SYSLOG ADDRESS	The syslog server IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
46 INVALID SERVER ADDRESS	The TFTP server IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
47 INVALID TRAP DEST ADDRESS	One of the SNMP trap (Trap PDU) destination IP addresses specified for the print server (through TFTP) is an invalid IP address for specifying a single node. Check your TFTP configuration file.
48 CF ERR - FILE INCOMPLETE	The TFTP configuration file contained an incomplete last line that did not end in a new line character.
49 CF ERR - LINE TOO LONG	A line being processed in the TFTP configuration file was longer than the print server could accept.
4A CF ERR - UNKNOWN KEYWORD	A TFTP configuration file line contained an unknown keyword.
4B CF ERR - MISSING PARAMETER	A line in the TFTP configuration file was missing a required parameter.
4C CF ERR - INVALID PARAMETER	A line in the TFTP configuration file contained an invalid value for one of the parameters on that line.
4D CF ERR - ACCESS LIST EXCEEDED	The TFTP configuration file specified too many access list entries using the "allow:" keyword.
4E CF ERR - TRAP LIST EXCEEDED	The TFTP configuration file specified too many trap destination list entries using the "trap-destination:" keyword.
4F TFTP REMOTE ERROR	The TFTP transfer of the configuration file from the host to the print server failed with the remote host sending a TFTP ERROR packet to the print server.

50 TFTP LOCAL ERROR	The TFTP transfer of the configuration file from the host to the print server failed with the local print server encountering some form of inactivity timeout or excessive retransmissions situation.
51 TFTP RETRIES EXCEEDED	The overall retrying of the TFTP transfer of the configuration file from the host to the print server has exceeded a retry limit.
52 BAD BOOTP/DHCP REPLY	An error was detected in the BOOTP or DHCP reply that the print server received. The reply either had insufficient data in the UDP datagram to contain the minimum BOOTP/DHCP header of 236 bytes, had an operation field that was not BOOTPREPLY(0X02), had a header field that did not match the print servers hardware address, or had a UDP source port that was not the BOOTP/DHCP server port (67/udp).
53 BAD BOOTP TAG SIZE	The tagsize in a vendor specific field in the BOOTP reply is either 0, or greater than the remaining number of unprocessed bytes in the vendor specified area.
54 BOOTP/RARP IN PROGRESS	The print server is currently in the process of obtaining its basic IP configuration information through BOOTP/RARP.
55 BOOTP/DHCP IN PROGRESS	The print server is currently in the process of obtaining its basic IP configuration information through BOOTP/DHCP, and has not detected any errors.
56 DHCP NAK	The print server received a negative acknowledgment message from the DHCP server in response to a configuration request.
57 UNABLE TO CONNECT DHCP SVR	The print server had received IP parameters from a DHCP server, but communication with the DHCP server has been lost. Check status of the DHCP server. If an infinite lease was assigned, the print server will use the IP address of the most recent DHCP server used, but operation may be degraded until a DHCP server responds.
58 POSTSCRIPT MODE NOT SELECTED	The printer does not support AppleTalk or AppleTalk extensions.
59 INCOMPLETE F/W - MUST DOWNLOAD	Firmware download message. Currently downloading firmware to the print server, or the download did not complete properly.
5A TURN PRINTER OFF/ON	Firmware download message. Download of firmware is complete. Power cycle the print server.
83 DISCONNECTING FROM SERVER	The server has been shut down because of a configuration change or reset request. This message automatically clears after a few seconds, unless the printer is off line, is in an error state, or is servicing another I/O port or another network protocol.

Configuring the 175X print server for your network

HP J6035A Jetdirect 175X External Print Server

Basic tool

The installation wizard supplied by HP—HP Install Network Printer Wizard for Windows—includes both software installation and configuration for your network. it handles the configuration for most supported networks.

To use the wizard to install the networked printer on this computer, return to the initial screen for this CD, select the [Install] button, and follow the instructions there. Help is included. When finished there, this computer is ready to use the printer.

Beyond the basics

- Auto-configuration of TCP/IP services using DHCP or BOOTP
- Configuring additional features:
  - Using the embedded web server as a configuration tool
  - Using HP Web JetAdmin for configuration and management
  - Using SNMP with your configuration and management tools
- An alternative printing method: LPD (Line Printer Daemon)
- Reference information:
  - IP configuration methods summary
  - Moving the print server to another IP network
  - IP port numbers
  - Default configuration details
  - Configuration security summary

Configuring additional features

Your network may use some special features or printing methods, listed below, beyond the basic configuration handled by the installation wizard. Configuring your print server for these features involves configuration procedures beyond or in place of the installation wizard.

DHCP or BOOTP for auto-configuration of TCP/IP services:

These services are used to obtain IP configuration data to print servers on the network, partially or wholly replacing the manual configuration using wizards, utilities, and the other real-time tools described on this page. The installation sequence for DHCP or BOOTP setup:

1. Set up the DHCP or BOOTP service. Refer to procedure.
2. Install the hardware; power on the print server. Refer to procedure.
3. For Windows computers, run the Install Network Printer wizard on each client to load driver and set up the print path. Return to the initial screen for this CD, and select the [Install] button for the Install Network Printer wizard.

LPD (Line Printer Daemon)

an alternative printing method you may be using on your network

Other tools for network configuration and for device management

After using the HP-recommended setup procedure, you can use the additional tools listed below make configuration changes and additions, and to to monitor the networked printer.

Notes:

- Making network address changes might break the print path set up by the wizard.

- When moving an HP Jetdirect print server configured with an IP address to a new network, follow these instructions.

Embedded web server

HP Web JetAdmin: Used to install, configure, and/or monitor the networked printer; this software is available at http://www.hp.com/support/net_printing.

SNMP: Used for Jetdirect device monitoring & configuration:

> Simple Network Management Protocol (SNMP) management applications can configure and monitor HP Jetdirect print servers. Also, The HP-Jetdirect-specific MIB (Management Information Base) is MIB-II compliant; it is available upon request to the HP Customer Care Center.

Default configuration

Fresh from the factory, before any configuration is changed by a user, the HP Jetdirect 175X Print Server has a default configuration for TCP/IP and for IPX peer-to-peer printing (called IPX direct mode). When power is applied in this factory-default state:

> **TCP/IP:**
> The print server sends out several BOOTP requests and one RARP request. If there is no reply, the print server sends out several DHCP requests. If there is no reply, then the print server uses the default IP address of 192.0.0.192 to appear on the network ready for manual configuration by a user (using the Install Network Printer wizard or any of the other configuration methods--see configuration).
>
> **IPX:**
> The print server tries to determine and use the IPX network number. It is then ready for further configuration by a user (using the Install Network Printer wizard or any of the other configuration methods--see configuration).
>
> **Note: The HP Jetdirect 175X does not support Novell NetWare, only peer-to-peer printing (IPX direct mode).**

When power is cycled thereafter, the configuration remains as set previously.
For **IPX**, the network number is reassigned automatically.
For **TCP/IP**, one of the following:

- If a BOOTP reply set the print server's IP configuration previously, BOOTP replies continue to be sent when power is cycled. If no reply is received, factory default sequence continues, as described above.
- If a DHCP reply set the print server's IP configuration previously, DHCP requests continue to be sent indefinitely.
- If any configuration changes were made manually by a user, then this manual configuration continues to be used.
- If none of the above have been set, the factory default sequence is used, as described above.

Resetting the print server to factory defaults

This factory-default reset procedure is sometimes called a “cold reset” or a “cold boot”. When done, the print server responds exactly like it was fresh from the factory.

TCP/IP notes for reference

Ports for IP access to the Jetdirect print server

BOOTP, DHCP	UDP port 67, 68
TFTP	UDP port 69
SNMP	UDP port 161
FTP *[Not supported for 175X]*	TCP port 20, 21
Telnet	TCP port 23
embedded web server	TCP port 80
LPD	TCP port 515

IPP *[Not supported for 175X]*	TCP port 631
Install Network Printer Wizard (raw IP printing)	TCP port 9100 (HP proprietary)

Ways to configure an IP address on the print server

The HP Install Network Printer Wizard for Windows—the installation wizard supplied and recommended by HP—configures IP for you or lets you do it. The wizard.

You can automatically configure IP over the network each time the print server is powered up by using BOOTP (Bootstrap Protocol) or DHCP (Dynamic Host Configuration Protocol). Auto-configuration.

You can manually configure IP using various configuration and management tools, such as the embedded web server. Configuration tools.

If the print server does not receive its IP configuration within a couple of minutes, a default IP address is automatically assigned (until changed by another method): 192.0.0.192. This address is not a valid IP address for your network but can be used to initially access the print server using the embedded web server. However, to access it by the default IP address, you must temporarily either isolate both your computer and the print server to the same hub, or establish a route to the print server and change the print server's configuration to one that matches your network. Then you can use the embedded web server on that computer to access the print server by the default IP address—and then reconfigure IP, or anything else.

Moving the print server to another network

When moving an HP Jetdirect print server confitured with an IP address to a new network, ensure that the IP address does not conflict with addresses on the new network.

1. First, do one of the following:
    - Change the IP address to one usable on the new network.
    - Erase the current IP address and configure another address

after you are installed on the new network.

2. Then reset the print server to factory defaults: instructions
3. Finally, do one of the following:
   - If the print server was configured using BOOTP or DHCP, edit the appropriate system files with updated settings. If the current BOOTP server is not reachable, you may need to locate and configure a different BOOTP server.
   - If the IP address and other parameters were manually set, then manually reconfigure them.

Configuration Security

The print server provides security features that can help to minimize unauthorized access to network configuration parameters.

> **Caution:**
> Full security in printing environments consists of system authentication (for both servers and clients), data integrity and privacy, and printer access control. High levels of network printing security may require a coordinated implementation of network system applications, encryption, and infrastructure controls. The prevention of unauthorized access to HP Jetdirect print server configuration parameters cannot be guaranteed.

Security features

- **IP administrative password**
  - Used by the embedded web server to control access to print server configuration parameters.
  - Up to 16 alphanumeric characters may be used.
  - Configured along with a username, such as admin, administrator, root, supervisor, laserjet, etc.
  - Configured on the print server using the embedded web server (Security, Admin Password parameter).
- **IP host access list**

- Specifies up to 10 host systems, nor networks of host systems, that are allowed access to the print server and the attached networked printing device.
- Access is generally limited to host systems specified in the list. However, if the list is empty, then all hosts are allowed access. Also, host systems that use HTTP (via the embedded web server) are not checked against entries in the access list and are allowed access.
- Configured on the print server using the embedded web server (Security, Access Control parameter) or management software.

- **SNMP Set Community Name (IP and IPX)**
  - Acts as a password on the print server to allow incoming SNMP Set commands (from management software, for example) to write (*set*) configuration parameters on the print server.
  - The factory-default Set Community Name is “public” or “internal”. For a user-assigned Set Community Name, authentication of SNMP Set commands will require that they contain the user-assigned name.
  - Authentication of SNMP Set commands are further restricted to systems identified on the host access list.
  - Configured on the print server using the embedded web server (Network Settings, SNMP, Set Community Name parameter) or management application services.

- **HP Web JetAdmin password**
  - Configured on the print server using HP Web JetAdmin and an HP-proprietary SNMP MIB (Management Information Base) object. For instructions, refer to your online help for HP Web JetAdmin. See also SNMP notes.

Examples of Access Control Settings

Settings	Level of Access Control

• Embedded web server enabled • Administrative password not set • Host access list empty	**No access control.** If the embedded web server is enabled on the print server, any system can access the print server configuration parameters through that tool.
• HP Web JetAdmin password set • User-specified SNMP Set Community Name set	**Limited access control.** HP Web JetAdmin users may access the parameters with: • HP Web JetAdmin password, and • SNMP Set Community Name But access via the embedded web server may be unrestricted.
• Administrative password set • Host access list contains entries	**Limited access control.** If the administrative password is known, access is limited to: • systems specified in the host access list, or • systems that use HTTP (embedded web server)

• Administrative password set • HP Web JetAdmin password set • User-specified SNMP Set Community Name set • Host access list contains entries	**Significant access control.** Access to the parameters in all tools is password protected: requiring the administrative password, or from an HP Web JetAdmin system, the HP Web JetAdmin password and the SNMP Set Community Name.

Using BOOTP and DHCP

HP J6035A Jetdirect 175X External Print Server

You can have TCP/IP automatically configured on the print server using either BOOTP (Bootstrap Protocol) or DHCP (Dynamic Host Configuration Protocol, RFC 2131/2132) services, on servers with certain operating systems. With either protocol, network configuration data is downloaded from that server over the network to the print server, so that the print server automatically obtains its IP address and other IP configuration.

For DHCP, the print server also registers its name with any RFC 1001 and 1002-compliant dynamic name services—as long as a WINS (Windows Internet Naming Service) server IP address has been specified.

Automatically downloading configuration data has the following benefits:

- *Ease of HP Jetdirect print server configuration.* Complete network configuration can be automatically downloaded each time the print server is powered on.
- *Ease of configuration management.* Network configuration parameters for the entire network can be in one location.
- *Enhanced configuration control of the print server.* Configuration by other methods is limited to select parameters.

When the print server is powered on, it broadcasts requests that contains its hardware address. A server daemon searches servers for configuration data with a matching hardware address, and if successful, sends the corresponding configuration data to the print server as a reply.

The factory-default state of the HP Jetdirect print server is to request its configuration data using BOOTP requests first, and if no BOOTP reply is received, then to request its configuration data using DHCP requests.

> **Note:** If the print server and the BOOTP or DHCP server are located on different subnets, IP configuration may fail unless the routing device supports "BOOTP Relay" (allows the transfer of requests between subnets).

Other ways to configure IP

Procedures

- BOOTP:
  - Setting up the BOOTP server on specific operating systems
  - Configuring the print server for BOOTP auto-configuration
- DHCP:
  - Setting up the DHCP server on specific operating systems
  - Configuring the print server for DHCP auto-configuration
- Changing the BOOTP/DHCP configuration method

Setting up the BOOTP server

> **For systems using NIS (Network Information Service):** If your server uses NIS, you may need to rebuild the NIS map with the BOOTP service before performing the BOOTP configuration steps. Refer to your system documentation.

The procedure to set up the DHCP server depends on the operating system on that system. (It may be a system other than those using the HP Jetdirect print services.)

Windows 2000 or NT servers:

On Windows NT or 2000 server systems, use the Microsoft DHCP utilities to set up print server configuration through BOOTP.

- When you use the Windows NT DHCP procedure (with the finite lease duration and adding a reservation in step 8), the resulting service will respond to a BOOTP requests as well as to DHCP requests from the print server.
- When you use the Windows 2000 DHCP procedure, the resulting service will respond to BOOTP requests when you select

BOOTP only or Both in step 11d.

UNIX servers:

A BOOTP server running UNIX must be set up with the BOOTP daemon bootpd, and must be set up with the /etc/bootptab configuration file. The configuration data in the /etc/bootptab file must be properly entered.

Example of a /etc/bootptab file entry for an HP Jetdirect print server:

```
picasso:\
  :hn:\
  :ht=ether:\
  :vm=rfc1048:\
  :ha=0001E6123456:\
  :ip=192.168.45.39:\
  :sm=255.255.255.0:\
  :gw=192.168.40.1:
```

A colon (:) indicates the end of a field, and a backslash (\) indicates that the entry is continued on the next line. Spaces are not allowed between the characters on a line. Names, such as host names, must begin with a letter and can contain only letters, numbers, periods (for domain names only), and hyphens. The underline character (_) is not allowed. Refer to your systems documentation for more information.

bootptab file entries

Note that the configuration data contains “tags” to identify the various HP Jetdirect parameters and their settings. The tags are identified in the table below.

nodename	The name of the peripheral device. Identifies an entry point to a list of parameters for the specific peripheral device. Must be the first field in an entry. (In the example above, nodename is picasso.)
hn	The host name tag. This tag does not take a value but causes the BOOTP daemon to download the host name to the print server. The host name will be printed on the Jetdirect configuration page, or returned on an SNMP sysName request by a network application.
ht	The hardware type tag. For the HP Jetdirect print server, set this to ether (for Ethernet). Must precede the ha tag.
vm	The BOOTP report format tag (required). Set this to rfc1048.

ha	The hardware address tag. The hardware (MAC) address is the link-level or station address of the HP Jetdirect print server. It can be found on the Jetdirect configuration page as the Hardware Address, and also printed on a label attached to the print server.
ip	The IP address tag (required). This will be the print server's IP address.
gw	The gateway IP address tag. This address identifies the IP address of the default gateway (router) that the HP Jetdirect print server will use for communications with other subnets.
sm	The subnet mask tag. The subnet mask will be used by the print server to identify the portions of an IP address that specify the network/subnetwork number and the host address.
T151	A BOOTP-only tag. Specifies value "bootp-only" to ensure other dynamic configuration methods (such as DHCP) are not used.

Configuring the print server for BOOTP configuration

The factory-default state of the HP Jetdirect print server allows it to use BOOTP services automatically, so no further action is necessary.

How the default configuration works

Changing the BOOTP/DHCP configuration method

Setting up the DHCP server

The procedure to set up the DHCP server depends on the operating system on that system. (It may be a system other than those using the HP Jetdirect print services.)

- UNIX
- Windows NT 4.0
- Windows 2000

UNIX servers:

For instructions on setting up DHCP on UNIX systems, see the `bootpd` man page.

On HP-UX systems, a sample DHCP configuration file dhcptab may be located in the /etc directory. Since HP-UX presently does not provide Dynamic Domain Name Services (DDNS) for its DHCP implementations, HP recommends that you set all print server lease durations to *infinite*. This ensures that the print server IP addresses remain static until dynamic name services are provided.

Windows NT 4.0 servers:

You will set up a pool--*scope*-- of IP addresses that the server can assign or lease to a requester.

> **Note:** To avoid problems resulting from IP addresses that change, HP recommends that all print servers be assigned IP addresses with infinite leases or reserved IP addresses.

NT Procedure:

> **Note:** In addition to the general steps provided here, see also the instructions supplied with your DHCP software.

1. On the Windows NT server, open the Program Manager window and double-click the Network Administrator icon.
2. Double-click the DHCP Manager icon to open this window.
3. Select Server and select Server Add.
4. Type the server IP address, then click [OK] to return to the DHCP Manager window.
5. In the list of DHCP servers, click on the server you have just added, then select Scope and select Create.
6. Select Set up the IP Address Pool. In the IP Address Pool section, set up the IP address range by entering the beginning IP address in the Start Address box and entering the ending IP address in the End Address box. Also enter the subnet mask for the subnet to which the IP address pool applies. The starting and ending IP addresses define the end points of the address pool assigned to this scope.

   Note: If desired, you can exclude ranges of IP addresses within a

scope.

7. In the Lease Duration section, select Unlimited, then select [OK].

   HP recommends that all print servers be assigned *infinite* leases to avoid problems resulting from IP addresses that change. Be aware, however, that selecting an unlimited lease duration for the scope (as described above) causes all clients in that scope to have infinite leases.

   If you want clients on your network to have *finite* leases, you can instead set the duration to a finite time, but you should configure all print servers as reserved clients for the scope.

8. **If** you have set Lease Duration to Unlimited in the previous step, then skip now to the next step 9.
   If you have set Lease Duration to a finite time, then continue with this step:

   Select Scope and select Add Reservations to set up your print servers as reserved clients. For each print server, perform the following steps in the Add Reserved Clients window to set up a reservation for that print server:

   . Type the selected IP address.

   b. Obtain the hardware (MAC) address from the configuration page, and type this address in the Unique Identifier box.

   c. Input a client name.

   d. Select Add to add the reserved client. To delete a reservation, in the DHCP Manager window, select Scope and select Active Leases. In the Active Leases window, click on the reservation you want to delete and select [Delete].

9. Select Close to return to the DHCP Manager window.

10. **If** you do *not* plan to use WINS (Windows Internet Naming Service), then skip now to the next step 11.
    If you plan to use WINS (Windows Internet Naming Service), then continue with this step:

    . From the DHCP Manager window, select DHCP Options and select one of the following:

Scope: if you want name services only for the selected scope.
Global: if you want name services for all scopes.

b. Add the server to the Active Options list. In the DHCP Options window, select WINS/NBNS Servers (044) from the Unused Options list. Select [Add]; then select [OK].

   A warning may appear requesting that you set the node type. You will do this in step 10d below.

c. Now provide the IP address of the WINS server as follows:

   i. Select Value, then Edit Array.

   ii. From the IP Address Array Editor, select Remove to delete any undesired addresses previously set. Then type in the IP address of the WINS server and select [Add].

   iii. Once the address appears in the list of IP addresses, select [OK]. This returns you to the DHCP Options window. If the address you have just added appears in the list of IP addresses (near the bottom of the window) continue to step 10d below. Otherwise, retry step 10c.

d. In the DHCP Options window, select WINS/NBT Node Type (046) from the Unused Options list. Select [Add] to add the node type to the Active Options list. In the Byte box, input 0x4 to indicate a mixed node, and select [OK].

11. Click [Close] to exit to the Program Manager.

Windows 2000 servers:

You will set up a pool--*scope*-- of IP addresses that the server can assign or lease to a requester.

Note: To avoid problems resulting from IP addresses that change, HP recommends that all print servers be assigned IP addresses with infinite leases or reserved IP addresses.

2000 Procedure:

Note: In addition to the general steps provided here, see

also the instructions supplied with your DHCP software.

1. Run the Windows 2000 DHCP manager utility: Click Start, Settings, Control Panel. Open the Administrative Tools folder and run the DHCP utility.
2. In the DHCP window, locate and select your Windows 2000 server in the DHCP tree.

   If your server is *not* listed in the tree, select DHCP and click the Action menu to add the server.
3. After selecting your server in the DHCP tree, click the Action menu and select New Scope. This runs the Add New Scope wizard.
4. In the Add New Scope wizard, click [Next].
5. Enter a name and description for this scope, then click [Next].
6. Enter the range of IP addresses for this scope (beginning IP address and ending IP address). Also, enter the subnet mask. Then click [Next].

   Note: If subnetting is used, the subnet mask defines which portion of an IP address specifies the subnet and which portion specifies the client device.
7. If applicable, enter the range of IP addresses within the scope to be excluded by the server. Then click [Next].
8. Set the IP address lease duration for your DHCP clients. Then click [Next].

   HP recommends that all print servers be assigned reserved IP addresses. You can do this after you set up the scope, as step 11 below.
9. HP recommends that you select [No] to configure DHCP options for this scope later, and then click [Next].

   If you want to configure DHCP options *now*:

   . Select [Yes] and click [Next].

   b. If desired, specify the IP address of the router (or default gateway) to be used by clients. Then click [Next].

   c. If desired, specify the Domain Name and DNS (Domain Name System) servers for clients. Click [Next].

   d. If desired, specify WINS server names and IP addresses.

Click [Next].

e. Select [Yes] to activate the DHCP options now, and click [Next].

10. You have successfully set up the DHCP scope on this server. Click [Finish] to close the wizard.
11. To configure your print server with a reserved IP address within the DHCP scope:

    . In the DHCP tree, open the folder for your scope and select Reservations.

    b. Click the Action menu and select New Reservation.

    c. Enter the appropriate information in each field, including the reserved IP address for your print server. (Note: the hardware {MAC} address for your print server is available on the Jetdirect configuration page.)

    d. Under "Supported types", select DHCP only, then click [Add]. This results in a DHCP configuration.

    Note: Selecting Both or BOOTP only results in a BOOTP configuration due to the sequence in which HP Jetdirect print servers initiate configuration protocol requests.

    e. Specify another reserved client, or click [Close]. The reserved clients added will be displayed in the Reservations folder for this scope.

12. Close the DHCP manager utility.

Configuring the print server for DHCP configuration

Once a DHCP server is set up (according to the previous section), the factory-default state of the print server requires no further action for print server configuration.

How the default configuration works

Changing the BOOTP/DHCP configuration method

Other configuration tools that include IP configuration, such as the embedded web server, allow you to disable BOOTP and/or DHCP auto-configuration. In each of these tools, three possible settings for the configuration method are provided; each of the settings has the effect of disabling others, as follows:

- **BOOTP**

  The print server automatically releases any names and IP addresses associated with the DHCP server and re-initializes the TCP/IP protocol for the print server (unless a BOOTP configuration is currently in effect). At this point, TCP/IP is unconfigured, and the print server begins to send —even before power is cycled—BOOTP requests to acquire new IP configuration information. If no BOOTP reply is received, the IP address remains at the factory default 192.0.0.192. DHCP is disabled.

  After power to the print server is cycled, only BOOTP requests are sent and only BOOTP replies are processed. Any configuration of IP parameters done manually is ignored.

- **DHCP**

  The print server automatically releases any names and IP addresses associated with the BOOTP server and re-initializes the TCP/IP protocol for the print server (unless a BOOTP configuration is currently in effect). At this point, TCP/IP is unconfigured, and the print server begins to send—even before power is cycled— DHCP requests to acquire new IP configuration information. If no DHCP reply is received, the IP address remains at the factory default 192.0.0.192. BOOTP is disabled.

  After power to the print server is cycled, only DHCP requests are sent and only DHCP replies are processed. Any configuration of IP parameters done manually is ignored.

- **Manual**

  BOOTP and DHCP are disabled.

You should proceed to manually set all of the IP configuration parameters, including IP address, subnet mask, default gateway, and idle timeout. You can use the settings available in the same tool you are using.

Caution:
If the print server is switched from using an address allocated by a DHCP server to using a manually assigned address, that manually assigned address should be outside any DHCP range used for other devices on the network. An alternative is to tell the DHCP server that the print server's address is fixed so that it will never be allocated to another client.

Returning to factory defaults

You can return the print server to its factory-default state (also called "cold reset") by using the factory-default reset procedure.

Setting up LPD (LPR) Printing

HP J6035A Jetdirect 175X External Print Server

The HP Jetdirect print server contains an LPD (Line Printer Daemon) server module to support LPD printing. Other terms for these services are “LPR (Line Printer Request)”, from the perspective of the printing clients, “BSD printing”, and “Print Services for UNIX”. These refer to the protocol and programs associated with line-printer spooling services that may be installed on various TCP/IP systems. For the HP Jetdirect 175X Print Server, these systems include Windows NT 4.0, Windows 2000, and Mac OS.

The LPD programs include the following:

Program Name	Purpose of Program
lpr	*Line Printer Request:* Queues jobs for printing
lpq	*Line Printer Queues:* Displays print queues
lprm	*Line Printer Remove:* Removes jobs from print queues
lpc	*Line Printer Control:* Controls print queues
lpd	*Line Printer Daemon:* Scans and prints the files if the specified printer is connected to the system. If the specified printer is connected to another system, this process forwards the files to an lpd process on the remote system where the files are to be printed.

Prerequisites:

- An operating system that supports LPD printing—any host implementation of LPD that complies with the RFC 1179 document
- “Administrator” access to your system
- Printer properly connected to the network through the print server —*done in step 1 of the initial setup below*
- IP parameters configured on the print server —*done in step 2 of the initial setup below*
- Read the hardware address (also called MAC, LAN, or station

address) of the print server, either from a label on the print server device or from the configuration page you print as the last step in the hardware installation procedure—*done in step 1 of the initial setup below*

Setup sequence:

1. Install hardware; power on the print server. Refer to procedure.
2. Configure TCP/IP parameters on the print server. Refer to summary of methods.
3. Find the driver for your printer and install it.
4. Create a TCP/IP port and connect it to the driver. You can use Microsoft LPR port, for example.
5. Do LPD setup procedure for the Windows or Macintosh client:
   - LPD on Windows NT or 2000 systems
   - LPD on Mac OS systems

Setting up LPD on Windows NT/2000 systems

Note: Make sure you have done the LPD prerequisites.

LPD (Line Printer Daemon) setup involves setting up the print queues, creating a port for printing, and verifying the setup on the system. The procedure depends on the operating system:

- Windows NT 4.0 LPD setup procedure
- Windows 2000 LPD setup procedure

Reference on queues

In the procedure below you will set up a print queue for each printer or printer personality (PCL or PostScript) used on each system. Also, different queues are required for formatted and unformatted files. You can use the queue names listed in the following table.

raw	no processing
text	carriage return added
auto	automatic

Meaning of the queue names: The line printer daemon treats data in the *text* queues as unformatted or ASCII text, and adds a carriage return to each line before sending it to the printer. (Note that the actual observed behavior is that a PCL line termination command (value of 2) is issued at the beginning of the job.) The line printer daemon treats data in the *raw* queues as formatted files in PCL, PostScript, or HP-GL/2 languages and sends the data without change to the printer. Data in the *auto* queues will be automatically processed as “text” or “raw”, as appropriate. If the queue name is not one of the above, the HP Jetdirect print server assumes it to be *raw1*.

The procedure depends on whether the system runs Windows NT 4.0 or Windows 2000.

Windows NT 4.0 LPD setup procedure

Along with these general instructions, see your system documentation for information on configuring these systems.

The process consists of these parts:

. Installing TCP/IP software if not already installed

B. Configuring the networked printer with the queue and port

C. Verifying the configuration

A. Installing TCP/IP software

This procedure lets you check whether you have TCP/IP installed on your Windows NT system, and to install the software if necessary. **Note:** You may need your Windows System distribution files or CD-ROMs to install TCP/IP components.

1. Check whether you have Microsoft TCP/IP Printing protocol and TCP/IP printing support. Click Start, Settings, Control Panel. Double-click Network. In the resulting Network dialog box, check under the Protocols tab for TCP/IP Protocol and under the Services tab for Microsoft TCP/IP Printing.

   If both are listed, the necessary software is already installed. (Skip to “B. Configuring the networked printer”).
   If not, continue to the next step.

2. To install the software, click the [Add] button for each tab and

install the TCP/IP Protocol and the Microsoft TCP/IP Printing service. Follow the instructions on the screen. When prompted, type the full path to the Windows NT distribution files (you may need your Windows NT workstation or server CD-ROM).

3. You may be automatically prompted for the TCP/IP configuration values. If not, select the Protocols tab in the Networks window and select TCP/IP Protocol. Then click [Properties].
    - If you are configuring a Windows server, type the IP address, default gateway address, and subnet mask in the appropriate spaces.
    - If you are configuring a client, check with your network administrator to learn whether you should enable automatic TCP/IP configuration or whether you should type a static IP address, default gateway address, and subnet mask in the appropriate spaces.
4. Click [OK] to exit.
5. If prompted, exit Windows and restart your computer for the changes to take effect.

B. Configuring the networked printer

Set up the default printer by performing the following steps.

1. Click Start, Settings, Printer. The Printers window opens.
2. Double-click Add Printer.
3. Select My Computer, then click [Next].
4. Click Add Port.
5. Select LPR Port, and click New Port.
6. In the Name or address of server providing lpd box, enter the IP address or name of the HP Jetdirect print server.

    Note: NT clients can enter the IP address or name of the NT server that is configured for LPD printing.
7. In the Name of printer or print queue on that server box, enter the queue name in lower case (raw, text, or auto, etc.). Then click [OK]. (See the description of queues above. *Text* files are treated as unformatted text or ASCII files. *Raw* files are treated as formatted files in PCL, PostScript, or HP-GL/2 printer

languages.)

8. Ensure that the port is selected in the Add Printer list of the available ports, then click [Next].
9. Follow the remaining instructions on the screen to complete the configuration.

Installation note: If the LPD printer on the NT server is shared, Windows clients can connect to the printer on the NT server using the Windows Add Printer utility in the Printers folder.

C. Verifying the configuration

From within Windows NT, print a file from any application. If the file prints correctly, the configuration was successful. If the print job is not successful, try printing directly from DOS using the following syntax:

```
lpr -S<ipaddress> -P<queuename>
filename
```

where:
`<ipaddress>` is the IP address of the print server,
`<queuename>` is the name `raw` or `text`,
`<filename>` is the file you wish to print.

If the file prints correctly, the configuration was successful. If the file does not print, or prints incorrectly, see Troubleshooting.

Back to start of NT 4.0 setup procedure
Back to start of entire LPD setup

Windows 2000 LPD setup procedure

Along with these general instructions, see your system documentation for information on configuring these systems.

The process consists of these parts:

. Installing TCP/IP software if not already installed
B. Configuring the networked printer with the queue and port

A. Installing TCP/IP software

This procedure lets you check whether you have TCP/IP installed on your Windows 2000 system, and to install the software if necessary. **Note:** You may need your Windows System distribution files or CD-ROMs to install TCP/IP components.

1. Check whether you have Microsoft TCP/IP Printing protocol and TCP/IP printing support. Click Start, Settings, Control Panel. Double-click the Network and Dial-up Connections folder. Select the Local Area Connection for your network, then click the File menu and select [Properties].

   If Internet Protocol (TCP/IP) is listed and enabled in the list of components used by this connection, the necessary software is already installed. (Skip to "B. Configuring the networked printer").
   If not, continue to the next step.

2. To install the software, in the Local Area Connection Properties window, click Install. In the Select Network Component Type window, select Protocol and click [Add] to add the Internet Protocol (TCP/IP).

   Follow the instructions on the screen.

3. Enter TCP/IP configuration values for the computer: On the General tab in the Local Area Connection Properties window, select Internet Protocol (TCP/IP) and click [Properties].

   - If you are configuring a Windows server, type the IP address, default gateway address, and subnet mask in the appropriate spaces.
   - If you are configuring a client, check with your network administrator to learn whether you should enable automatic TCP/IP configuration or whether you should type a static IP address, default gateway address, and subnet mask in the appropriate spaces.

4. Click [OK] to exit.

5. If prompted, exit Windows and restart your computer for the changes to take effect.

B. Configuring the networked printer

Set up the default printer by performing the following steps.

1. Verify that Print Services for Unix is installed, since it is required for LPR port availability:

    . Click Start, Setup, and Control Panel. Double-click the Network and Dial-up Connections folder.

    b. Click the Advanced menu and select Optional Networking Components.

    c. Select and enable Other Network File and Print Services.

    d. Click [Details], and verify that Print Services for Unix is enabled. If not, enable it.

    e. Click [OK], and then [Next].

2. Open the Printers folder (from the desktop, click Start, Settings, and Printers).

3. Double-click Add Printer. From the Add Printer Wizard's welcome screen, click [Next].

4. Select Local printer, and disable automatic detection for Plug and Play printer installation. Click [Next].

5. Choose Create a new port, and select LPR Port. Click [Next].

6. In the Add LPR compatible printer window, enter the DNS name or IP address of the HP Jetdirect print server.

7. Still in the Add LPR compatible printer window, enter in lower case raw, text, auto, or binps, etc., for the name of the printer or print queue on the HP Jetdirect print server. (See the description of queues above. *Text* files are treated as unformatted text or ASCII files. *Raw* files are treated as formatted files in PCL, PostScript, or HP-GL/2 printer languages.)

    Then click [OK].

8. Select the Manufacturer and Printer model. (If necessary, click Have Disk and follow the instructions to install the printer driver.) Click [Next].

9. Choose to keep the existing driver, if prompted. Click [Next].

10. Enter a printer name, and choose whether this printer will be the

default printer. Click [Next].

11. Choose whether this printer will be available to other computers. If shared, enter a share name that identifies the printer to other users. Click [Next].
12. If desired, enter a location and other information for this printer. Click [Next].
13. Choose whether to print a test page, and click [Next].
14. Click [Finish] to close the wizard.

Installation note: If the LPD printer on the Windows 2000 server is shared, Windows clients can connect to the printer on the 2000 server using the Windows Add Printer utility in the Printers folder.

Back to start of Windows 2000 setup procedure
Back to start of entire LPD setup

Setting up LPR/LPD on Macintosh systems

HP J6035A Jetdirect 175X External Print Server

The setup for LPD (Line Printer Daemon), also known as LPR (Line Printer Request), involves setting up the print queues and creating a port for printing.

Prerequisites:

- Mac OS v.8.6 or higher
- LaserWriter 8, version 8.5.1 or higher
- Desktop Printer Utility 1.0 or higher
- Also verify the general LPD prerequisites.

Reference on queues

In the procedure below you will set up a print queue for each printer or printer personality (PCL or PostScript) used on each system. Also, different queues are required for formatted and unformatted files. You can use the queue names listed in the following table.

raw	no processing
text	carriage return added
auto	automatic

Meaning of the queue names: The line printer daemon treats data in the *text* queues as unformatted or ASCII text, and adds a carriage return to each line before sending it to the printer. (Note that the actual observed behavior is that a PCL line termination command (value of 2) is issued at the beginning of the job.) The line printer daemon treats data in the *raw* queues as formatted files in PCL, PostScript, or HP-GL/2 languages and sends the data without change to the printer. Data in the *auto* queues will be automatically processed as “text” or “raw”, as appropriate. If the queue name is not one of the above, the HP Jetdirect print server assumes it to be *raw1*.

Setup procedure

Along with these general instructions, see your system documentation. Also search for “LPR printing” at Apple Computer's Tech Info Library web site at http://til.info.apple.com.

The process consists of these parts:

. Assigning an IP address to the printer networked via the print server

B. Configuring the Mac OS system for LPR printing

A. Assigning an IP address

Before you can set up a printer for LPR printing, you must assign an IP address to the printer networked via the print server, as follows.

1. Double-click HP LaserJet Utility in the HP LaserJet folder.
2. Click the [Settings] button.
3. Select TCP/IP from the scrolling list and then click [Edit].
4. Select the desired option. You can automatically obtain the TCP/IP configuration from either the DHCP server or the BOOTP server, or you can manually specify the TCP/IP configuration.

B. Configuring the Mac OS system

1. Launch the Desktop Printer Utility.
2. Select Printer (LPR) and click [OK].
3. In the PostScript Printer Description (PPD) File section, click [Change...] and select the PPD for your printer.
4. In the Internet Printer or the LPR Printer section, depending on your version of the Desktop Printer Utility, click [Change...].
5. Enter the printer server's IP address or domain name for Printer Address.
6. Enter the queue name, if used. Otherwise, leave it blank.

   Note: The queue name is typically raw. (See the description of queues above.)
7. Click [Verify] to verify that the printer was found.

8. Click [OK] or [Create], depending on your version of the Desktop Printer Utility.
9. Go to the File menu and select Save or use the resulting save dialog, depending on your version of the Desktop Printer Utility.
10. Enter a name and location for the desktop printer icon and click OK. The default name is the print server's IP address, and the default location is on the desktop.
11. Exit the program.

Using the embedded web server

HP J6035A Jetdirect 175X External Print Server

HP Jetdirect print servers contain an embedded web server that can be accessed from a compatible web browser over an intranet. You can use any computer on the network to access the configuration and management pages for the print server and the attached network device—the printer or multifunction (MFP or All-in-One) device. The print server's embedded web server allows you to monitor server and device status, view and change print server configuration, and use basic scanning over the network if you have a multifunction (MFP or All-in-One) device.

- Compatible versions of web browsers (and HP Web JetAdmin)
- Getting started with the embedded web server
- Directory of pages and features in the embedded web server

Viewing the embedded web server

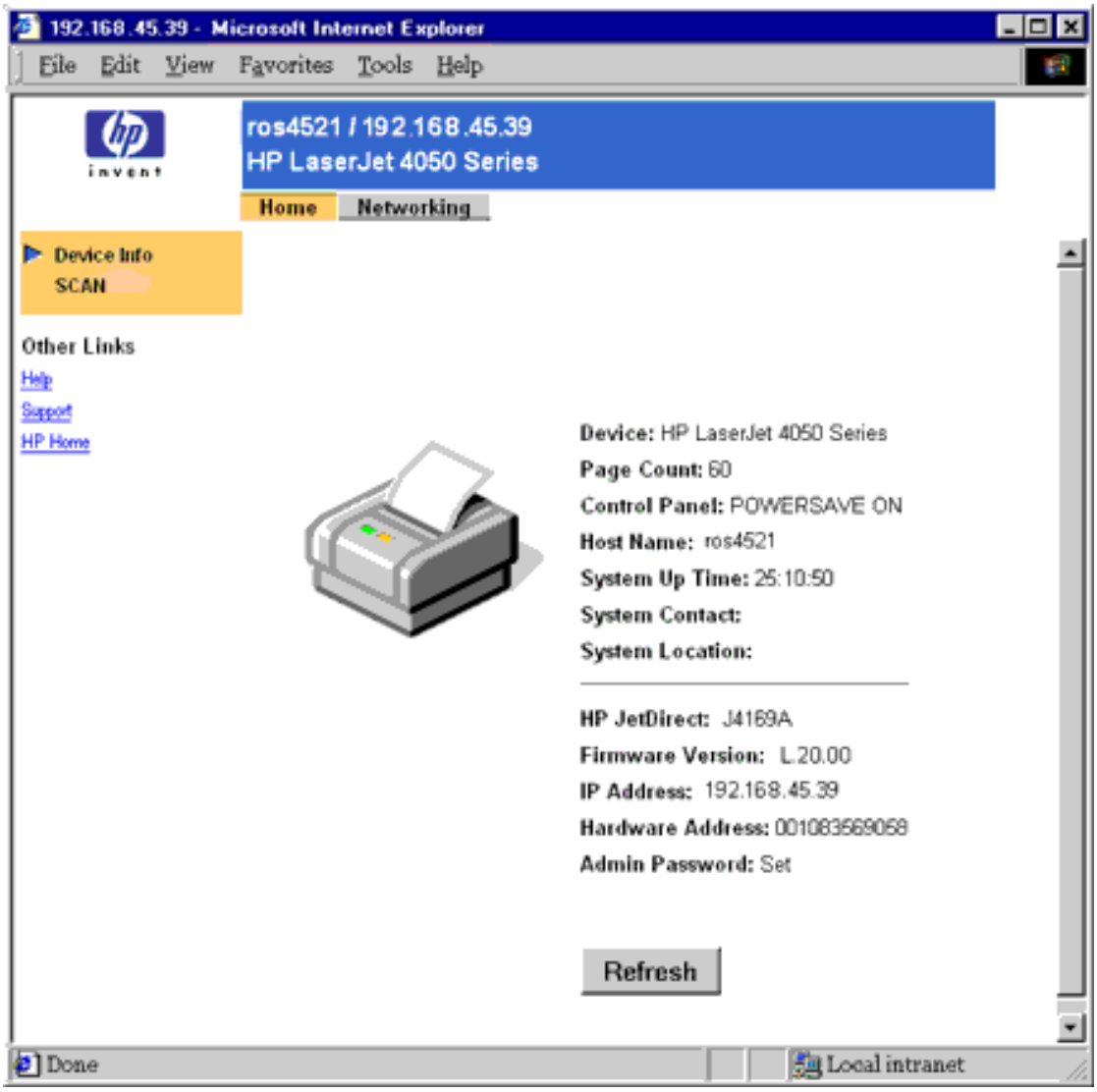
Before you can use the embedded web server, the HP Jetdirect print server must be configured with an IP address.
Ways to configure an IP address

After an IP address is established on the print server, perform the following steps.

1. Run a supported web browser.
2. Enter the IP address of the print server as the URL address.

   For example: http://192.168.45.39

The Home page will be displayed, as illustrated below.



Pages and features

- Home tab
  - Device Info
  - Scan
- Networking tab
  - Configuration:
    - Network Settings
    - Support Info
    - USB Settings
  - Security:
    - Admin Password
    - Access Control

- Diagnostics:
  - Network Statistics
  - Protocol Info
  - Test (Configuration) Page
  - Refresh Rate
- Help link

Home tab (Home page)

The Home page is initially displayed when entering the embedded web server. When it is *not* displayed, click on the Home tab at the top of the web page. The Home page displays a generic printer graphic to represent the attached printing device, and it provides status information for the HP Jetdirect print server (as illustrated above).

Menu items in the left column:

- Device Info
  Clicking Device Info in the left column identifies the printing device connected to the network through the HP Jetdirect print server. Other information that can be retrieved from the device are also displayed (such as page count).
- Scan *(Only for MFP or All-in-One devices)*
  If the attached printer is a supported multifunction (MFP) or All-in-One device, you can click Scan in the left column to access the Scan page to do simple scanning over the network using the web browser. You can display the document, download it to a file, or e-mail it (if an e-mail server is configured).
  Specific scanning capabilities.
- Help link
  Click on the Help link to reach Online help for the current page. If Help doesn't answer your question, return to this documentation.

Specific Jetdirect status items on the Home page:

(Graphic of home page)

Jetdirect Home page parameters	
Host Name	Specifies the IP host name assigned to the device and stored on the print server. See TCP/IP settings.
System Up Time	The length of time since either the print server or the network device was last power cycled.

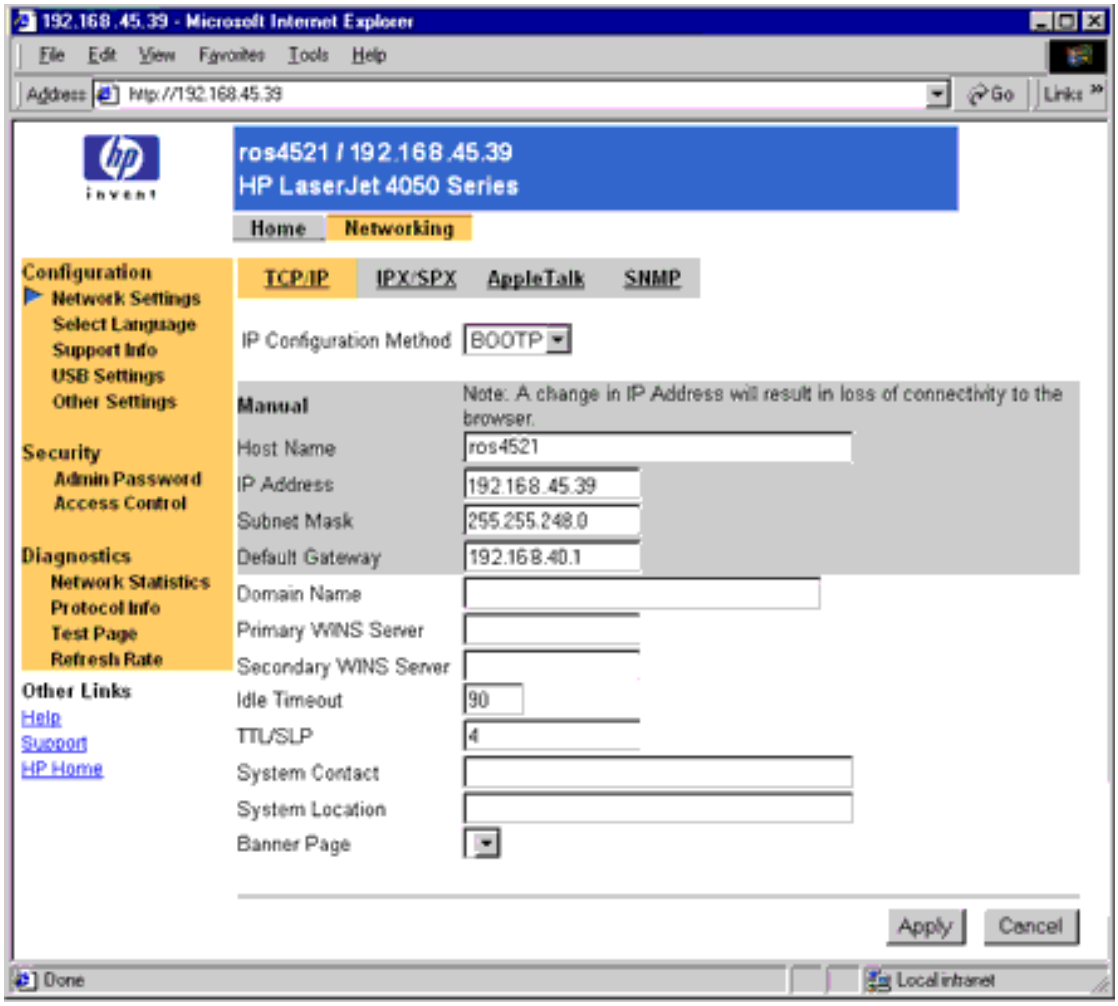
System Contact	A text string (stored on the print server) for the name of a person to contact for this device. See TCP/IP settings.
System Location	A text string (stored on the print server) that identifies the physical location of this device. See TCP/IP settings.
HP Jetdirect	The product number of the HP Jetdirect print server (for example HP J6035A).
Firmware Version	The version of the operating instructions installed on the HP Jetdirect print server.
IP Address	The Internet Protocol address configured on the HP Jetdirect print server.
Hardware Address	The hardware (LAN or MAC) address of the HP Jetdirect print server. This unique address is assigned by Hewlett-Packard.
Admin Password	Specifies whether or not an administrative password has been set. If an administrative password has been set, you will be prompted for a user name and password to access networking parameters, such as on the Networking web pages. You can configure or clear this password on the Admin Password page.

Back to start of Home page
Back to directory of all pages and features in embedded web server
Back to start of embedded web server

Networking tab

Clicking on the Home tab at the top of the embedded web server page accesses network status, configuration parameters, security parameters, and diagnostic facilities for the HP Jetdirect print server.

The initial TCP/IP networking configuration page will be displayed, as illustrated below. Other tabs across the second row at the top and other menu items in the left column access other networking pages.



Menu items in the left column and tabs in the second row at the top are listed below. Use the links in the following lists to find the additional pages they access and all the specific items on each page.

- Configuration:
  - Network Settings:
    - TCP/IP tab
    - IPX/SPX tab
    - AppleTalk tab
    - SNMP tab
    - (For Advanced tab: see Other Settings.)
  - Support Info
  - USB Settings
  - Other Settings
- Security:
  - Admin Password
  - Access Control
- Diagnostics:

Configuration:

Network Settings

Click on the Networking tab at the top of the web page. (Make sure that beneath Configuration in the left column of the page, Network Settings is selected.) The Network Settings pages allow you to set or change configuration parameters for TCP/IP, IPX/SPX, AppleTalk, and SNMP protocols. To assign a parameter setting, enter the desired value and click [Apply].

Notes

- If you enter or change a configuration parameter value, click [Apply] to enable your change, or click [Cancel] to erase your change.
- Changes to the IP address will close the connection to the embedded web server. To re-establish a connection, use the new IP address.

TCP/IP settings

Click on the Networking tab. If the TCP/IP tab is not highlighted, then beneath Configuration in the left column of the page, select Network Settings, and then select the TCP/IP tab in the second row of tabs across the page. To assign a parameter setting, enter the desired value and click [Apply].

TCP/IP Settings

IP Configuration Method	Selects the method for the print server to receive its IP configuration parameters: BOOTP (default), DHCP, or Manual. BOOTP or DHCP: the IP parameters will be automatically configured by a BOOTP or DHCP server each time the print server is powered on. Manual: basic IP parameters can be manually entered using this web page, or using other available tools. A Caution! Configuration tools. More explanation of these configuration methods.
Host Name	Specifies a readable IP name (the SNMP SysName object) for the network device. The name may contain up to 32 characters including numbers, upper- and lower-case letters, and hyphen and underscore.
IP Address	Use this field to manually assign the Internet Protocol address on the print server. The IP address is a four byte (32-bit) address in the form “n.n.n.n”, where “n” is a number from 0 to 255. An IP address uniquely identifies a node on a TCP/IP network. Duplicate IP addresses on a TCP/IP network are not allowed.
Subnet Mask	If subnetting is used, use this field to manually assign a subnet mask. A subnet mask is a 32-bit number that, when applied to an IP address, determines which bits specify the network and subnet, and which bits uniquely specify the node.
Default Gateway	Identifies the IP address of a router or computer that is used to connect to other networks or subnetworks.
Domain Name	Specifies the name of the Domain Name System (DNS) domain that the print server resides in (for example, “support.hp.com”). It does not include the host name; it is not the Fully Qualified Domain Name (such as “printer1.support.hp.com”).
Primary WINS Server	Specifies the IP address of the primary Windows Internet Naming Service (WINS) server. The WINS server provides IP address and name resolution services for network computers and devices.
Secondary WINS Server	Specifies the IP address to be used for WINS if the primary WINS Server is unavailable.
Syslog Server	Specifies the IP address of a host computer that is configured to receive syslog messages from the print server. If a syslog server is not specified, syslog messages are disabled.

Syslog Maximum Messages	Specifies the maximum number of syslog messages that can be sent by the print server on a per-minute basis. This setting allows administrators to control the log file size. The default is 10 per minute. If set to zero, no maximum number is defined.
Syslog Priority	Controls the filtering of syslog messages that are sent to the syslog server. The filter range is 0 to 8, with 0 being the most specific and 8 being the most general. Only messages that are lower than the filter level specified (that is, higher in priority) are reported. The default value is 8 which reports all syslog messages. A value of zero effectively disables syslog reporting.
Idle Timeout	Specifies the number of seconds that an idle print connection is allowed to remain open. Up to 3600 seconds can be set. 270 is the default value. If set to 0, the timeout is disabled and TCP/IP connections will remain open until closed by the device at the other end of the network (for example, a workstation).
TTL/SLP	Specifies the IP multicast Time To Live (TTL) discovery setting for Service Location Protocol (SLP) packets (used by the HP Jetdirect Install Network Printer Wizard). The default value is 4 hops (the number of routers from the local network). The range is 1-15. If set to -1, multicast capability is disabled.
System Contact	Identifies a person who is assigned to administer or service this device. This field may include a phone number or similar information. When configured, this parameter will be displayed on the HP Jetdirect Home page.
System Location	Specifies the physical location of the device or related information. Only printable ASCII characters are allowed, up to 64 characters. When configured, this parameter will be displayed on the HP Jetdirect Home page.
Banner Page	Specifies whether to enable or disable printing of an LPD banner page for print jobs.

IPX/SPX settings

Click on the Networking tab at the top of the web page. (Make sure that beneath Configuration in the left column of the page, Network Settings is selected.) Select the IPX/SPX tab in the second row of tabs across the page. To assign a parameter setting, enter the desired value and click [Apply].

IPX/SPX Settings

IPX/SPX Enable	Enables or disables the IPX/SPX protocols on the print server. If the checkbox is empty, IPX/SPX is disabled.
Print Server Name	The IPX/SPX name for the print server (alphanumeric characters only). The default name is NPIxxxxxx, where xxxxxx are the last six digits of the print server's LAN hardware (MAC) address.
IPX/SPX Frame Type	The frame type to be used by the print server on your network. After a frame type has been configured, all others will be counted and discarded. ● AUTO (the default) senses all frame types and configures the first one detected. ● EN_8023 limits the frame type to IPX over IEEE 802.3 frames. ● EN_II limits the frame type to IPX over Ethernet frames. ● EN_8022 limits the frame type to IPX over IEEE 802.2 with IEEE 802.3 frames. ● EN_SNAP limits the frame type to IPX over SNAP with IEEE 802.3 frames.
SAP Interval	Specifies the time interval (in seconds) that the print server waits to send Service Advertising Protocol (SAP) messages, which are broadcast to advertise its service capabilities on a network. To disable SAP messages, use the value “0”.

AppleTalk settings

Click on the Networking tab at the top of the web page. (Make sure that beneath Configuration in the left column of the page, Network Settings is selected.) Select the AppleTalk tab in the second row of tabs across the page. To assign a parameter setting, enter the desired value and click [Apply].

Using the checkbox provided, you can enable (check) or disable (clear) the AppleTalk protocol on the print server. If AppleTalk is enabled, AppleTalk parameter settings are displayed. To assign a parameter setting, enter the desired value and click [Apply].

Notes:

- The HP Jetdirect print server supports AppleTalk Phase 2 only.
- Up to two types of printers can be advertised on the network.

SNMP settings

Click on the Networking tab at the top of the web page. (Make sure that

beneath Configuration in the left column of the page, Network Settings is selected.) Select the SNMP tab in the second row of tabs across the page. To assign a parameter setting, enter the desired value and click [Apply].

These are parameters for SNMP (Simple Network Management Protocol) management of the print server.

SNMP Settings	
Set Community Name	An SNMP Set Community Name is a password allowing access to configure (or “write”) SNMP control functions on the print server. An incoming SNMP SetRequest must contain a community name that matches the one stored on the print server before the print server will respond. The community name must be ASCII characters and can be up to 32 characters long. The default community name is “public”.
Get Community Name	An SNMP Get Community Name is a password that allows “read” access to SNMP information on the print server. The community name must be ASCII characters and can be up to 32 characters long. The default community name is “public”.

Support Info

Click on the Networking tab at the top of the web page. (Make sure that beneath Configuration in the left column of the page, Support Info is selected.)

Use this page to configure links for Support assistance. You can designate a Support person and phone number of an administrator for this device, as well as URL addresses for web-based product and technical support. To assign a parameter setting, enter the desired value and click [Apply].

USB Settings

Click on the Networking tab at the top of the web page. (Make sure that beneath Configuration in the left column of the page, USB Settings is selected.)

Use this page to configure parameters used for the USB connection to the printer. To assign a parameter setting, enter the desired value and click [Apply].

USB Settings

Communication Mode	Sets the highest level of USB communication to be used when the print server tries to establish the best level with the printer. ● Automatic is the default setting, allowing the print server to set the highest level it determines to function. The highest level it attempts is **1284.4**, a IEEE standard protocol, a mode for printers and multi-function (All-in One) devices that allows multiple channels of simultaneous print, scan, and status communication. Otherwise it attempts, in turn, one of the other modes, as listed below. This parameter is used to limit the highest setting to one of those below. ● MLC is the next lower level, an HP-proprietary protocol for Multiple Logical Channels, a mode for printers and multi-function (All-in One) devices that allows multiple channels of simultaneous print, scan, and status communication. ● Bidirectional is the next lower level, two-way printer communication, sending print data to the printing device and returning status information from the printing device. ● Unidirectional is the lowest level, one-way printer communication from the computer to printing device. Note that the current USB mode being used is reported on the Jetdirect configuration page. (How to see the configuration page)
Status (Configuration) Page Language	Sets the Page Description Language (PDL), the printer language of the data sent to the printer, for the configuration (test) page. Settings are: PCL, ASCII, PostScript, and HPGL2.

Other Settings

Click on the Networking tab at the top of the web page. In the left column of the page (in the Configuration list, select Other Settings. To assign a parameter setting, enter the desired value and click [Apply].

These settings are used to enable or disable some “advanced” TCP/IP protocols for management and printing, and some scanning settings for multi-function peripheral (MFP) or All-in-One devices.

Other Settings	
SLP Config	Enable or disable SLP (Service Location Protocol), used by selected client application software to automatically discover and identify the print server.
9100 Config	Enable or disable port 9100 services. Port 9100 is an HP-proprietary raw TCP/IP port on the print server and is the default port (the HP Standard Port) for printing. See port numbers.
LPD Printing	Enable or disable the Line Printer Daemon services on the print server. LPD provides line printer spooling services for TCP/IP systems. See LPD.
DNS Server	Specifies a Domain Name Server (DNS) , by IP address. Then, a name input for the parameter Email (SMTP) Server (see below) can be resolved to the IP address.
Enable MFP and AIO software support	Enable or disable the print server's support of the full-function scanning facility installed on the computers (the client software from the MFP's CD) for an HP multifunction (MFP or All-in-One) device. Disabling this causes the print server to disallow all functions other than printing over the network. (Support for basic scanning using the print server's Web Scan facility is separate; see following parameter.)
Enable Web Scan	Enable or disable use of the basic scanning facility provided by the print server's embedded web server Scan page (details). Availability of this facility is separate from support of the client's full-function scanning software (see preceding parameter). The features include displaying and downloading scanned files. Whether scanning to e-mail is also enabled with this facility is determined by the setting of the following parameter.
Enable Scan-to-email	Enable or disable use of the scanning to e-mail facility—sending the file—provided by the print server's embedded web server Scan page (see preceding parameter).When this parameter is enabled, scanning to email is available, in addition to displaying and downloading scanned files. The e-mail facility is accessible for users only when the mail server is set for the Email (SMTP) Server parameter (see following parameter).

Email (SMTP) Server (for outgoing mail)	Specifies the outgoing email server (SMTP) for use of the scanning to email feature in the embedded web server. This mail server will be used when any user scans to email from the MFP (or All-in-One device) attached to the print server. *See also* DNS Server above.
Scan Idle Timeout	Specifies the number of seconds that an idle connection for scanning (either web scanning or the client's full-function scanning software) is allowed to remain open. If set to 0, the timeout is disabled and the connection will remain open until closed by the device at the other end.

Security

- Admin Password
- Access Control (host access list)

Admin Password setting

Click on the Networking tab at the top of the web page. In the left column of the page, beneath Security, select Admin Password. To assign a parameter setting, enter the desired value and click [Apply].

For controlled access to configuration and status information through the embedded web server, use this page to set or clear an administrative password. If a password is set, you will be prompted for a user name and this password to access these print server web pages. Possible user names for the administrative password are: “admin”, “root”, “administrator”, and “supervisor”.

Access Control (host access list)

Click on the Networking tab at the top of the web page. In the left column of the page, beneath Security, select Access Control.

This page allows you to create a host access list on the print server. A host access list specifies individual host systems, or networks of host systems, that will be allowed to access the print server and the attached network printing device. Up to 10 entries can be included on the host access list. If the list is empty (no hosts are listed), any supported system can access the print server.

> **Note:** Use caution with this feature. You may lose your ability to communicate with the print server if your system is improperly specified in the list.

Host systems are specified by their IP addresses or network number. If the

network contains subnets, a “mask” may be used to identify whether the IP address designates an individual host system or a group of host systems.

To clear all entries in the host access list, enable the Clear Allow Table checkbox and click [Apply]. To add an entry into the host access list, use the IP address and Mask fields to specify a host, then click [Apply].

Sample entries		
IP Address	**Mask**	**Description**
192.0.0.0	255.0.0.0	Allow all hosts with network number 192.
192.1.0.0	255.1.0.0	Allow all hosts on network 192, subnet 1.
192.168.1.2		Allow the host with IP address 192.168.1.2. The mask 255.255.255.255 is assumed and is not required.

Diagnostics

- Network Statistics
- Protocol Info
- Test Page (configuration page)
- Refresh Rate

Network Statistics

Click on the Networking tab at the top of the web page. In the left column of the page, beneath Diagnostics, select Network Statistics.

This page is used to display counter values and other status information currently stored on the print server. This information is often useful to diagnose performance and operational problems associated with the network or the network device (the printer).

Protocol Info

Click on the Networking tab at the top of the web page. In the left column of the page, beneath Diagnostics, select Protocol Info.

This page provides a list of various network configuration settings on the print server for each protocol. Use these lists to validate your desired settings.

Test Page (configuration page)

To request to view the Jetdirect configuration (test) page, click on the Networking tab at the top of the web page. In the left column of the page, beneath Diagnostics, select Test Page.

This configuration page provides a summary of print server status and configuration information. The contents of this page are described in interpreting the configuration page.

For another method of requesting the configuration page, see step 5 at the following link.

Refresh Rate

Click on the Networking tab at the top of the web page. In the left column of the page, beneath Diagnostics, select Refresh Rate.

The refresh rate is the time period (in seconds) that the diagnostic pages will be automatically updated. To assign a parameter setting, enter the desired value and click [Apply]. The value "0" disables the refresh rate.

Back to start of Networking tab
Back to directory of all pages and features in embedded web server
Back to start of embedded web server

Web Scan

With HP's Web Scan, you can perform a simple scan from your supported networked multi-function peripheral (MFP) or All-in-One device, using a web browser on your computer! You do this using the embedded web server that is maintained for each HP Jetdirect print server. (Starting the embedded web server.)

Click Scan in the left column to access the Scan page to do simple scanning over the network using the web browser. You can display the document, download it to a file, or e-mail it (if an e-mail server is configured).

- Using Web Scan
  - Features:
    - Preview image
    - Scan image
    - Scan to e-mail
  - Reference topics:
    - Scanner status messages

Using Web Scan

Preview image

If you have a flatbed MFP or All-in-One, you may *preview* an image by clicking the Preview button. The preview will be displayed in a small window on the Web Scan page.

> *For a flatbed with a multi-page document feeder (ADF):*
> You cannot preview an image from the feeder. Put the document on the glass flatbed instead.

Scan (download) the image

Follow these easy steps to scan the document placed in the scanner:
Note: Do **not** press the scan button on the MFP; use buttons on the screen as follows.

1. Select the type of image you are scanning using the Image Type buttons. Available document settings.
2. Select the file format you want using the Image Format buttons. Available formats.
3. Select your paper size in the Document Size list box. Available document sizes.
4. Click the Scan button to scan the document and download it to your computer. Depending on the image format, you may view the scanned image (in an appropriate plug-in or application, inside or outside of your browser) or save it to your hard disk.

   For a multi-page document feeder (ADF):
   Click Scan only once. (The same is true for Email To...; see Email below.) For a PDF image, one file will be created from all the pages in the feeder. For a TIFF or JPEG image, a separate file will be created for

(and a separate window will be used to display) each page in the feeder.

Scan the image to e-mail

Instead of downloading the image to your computer or viewing it on your computer, you can e-mail the file containing the image as an attachment.

1. The network administrator must configure an outgoing e-mail server for the print server that connects the scanner, before any users can succeed at this procedure. You'll find out if this was done as soon as you do step 5 below.
   How to configure the e-mail server.

2. Select the type of image you are scanning using the Image Type buttons. Available document settings.

3. Select the file format you want using the Image Format buttons. Available formats.

4. Select your paper size in the Document Size list box. Available document sizes.

5. Click the Email To... button. The Email page will appear.

   Problems:
   If the Email To... button does not appear...
   If the Email To... button works, but then an error message appears...

   For a multi-page document feeder (ADF):
   Click Email To... only once. For a PDF image, one file will be created from all the pages in the feeder. For a TIFF or JPEG image, separate files will be created for each page in the feeder. Each file will be contained in a separate attachment to the message.

6. Complete the form with the From, To, and Subject information. You also may enter a short message introducing the scanned image.

7. Click the Send button on the Email page.

Back to start of Web Scan information

Scanner status

You may see a status message appear on the Scan or Email window while the embedded web server is executing your operation (usually in a window overlaying the original Scan or Email window). The following table shows the status messages for the scanner and what they mean.

Status Message	Meaning

Scanner Ready	The scanner is ready for use.
Connecting	Connecting to the email server
Scanning page	You are currently scanning.
Scanner in use	Someone else is using the scanner. Try again later.

Image Type document settings

The document settings available depend on the specific peripheral pointed to by the embedded web server. They include:

- Color Picture for low-resolution color: 150 DPI, 24-bit color. [DPI=dots per inch]
- Color Drawing for high-resolution color: 300 DPI, 24-bit color.
- B/W Picture for monochrome graphics: 150 DPI, gray-scale.
- Text: 300 DPI, black and white.

Document Size settings

The following document sizes are available (in inches). The document size you select will contain only a portion of the entire scanned image if the document size is smaller than the image.

- Letter (8.5 by 11)
- Legal (8.5 by 14)
- A4 (8.3 by 11.7)
- Executive (7.25 by 10.5)
- 4X6 (4 by 6)
- 5X7 (5 by 7)
- 3X5 (3 by 5)
- 3X3 (3 by 3)

Image Format settings

The image format settings available depend on the capabilities of the scanner in the specific peripheral pointed to by the embedded web server. They include:

- PDF files for easy interchange with other people. When downloading, the browser typically will start the Adobe Acrobat Reader plug-in to view the file in a browser window.
- JPEG for compact, compressed files suitable for display in web browsers. When downloading, the image typically will be displayed in a

browser window. The availability of JPEG format depends on the capabilities of the scanner.

- TIFF for files to be printed or to be manipulated as high-resolution images. When downloading, the browser will use a plug-in or external application for TIFF files, if one is loaded, or will prompt the user to view or save the image.

Back to start of Web Scan information

Troubleshooting web scanning

Problems using scan

- Unable to scan using PDF image format

  Problem: After I click the Scan button, I get an error message that the scan is aborted. I am using Internet Explorer.

  Resolution: This is a known issue with plug-ins (not external applications) and version 5.0 of Microsoft Internet Explorer. Configure your Internet Explorer browser to not use that specific plug-in for TIFF files.

- Unable to scan using TIFF image format

  Problem: After I click the Scan button, the scanner begins to scan but never completes. I am using Internet Explorer.

  Resolution: This is a known issue with various versions of Microsoft Internet Explorer and Windows 95, 98, and NT 4.0. A recommended work-around is to download the latest version of Internet Explorer, 5.0 or higher, and the latest version of Adobe Acrobat Reader, 4.0 or higher.

- Unable to use “Save” or “Save As” command in Adobe Acrobat Reader

  Problem: After I click the Scan button, Adobe Acrobat Reader is launched. I am unable to select “Save” or “Save As”.

  Resolution: This is a known issue with various versions of Microsoft Internet Explorer and Windows 95, 98, and NT 4.0. A recommended work-around is to download the latest version of Adobe Acrobat Reader, 4.0 or higher.

- Not prompted to “Save File As” or “Open File”

  Problem: After I click the Scan button, I am not prompted to “Save File As” or “Open File”. Instead, an application or plug-in is loaded and the scanned image is displayed.

  Resolution: There are many different plug-in applications available for

each of the image format choices. If you do not want the plug-in to automatically load your scanned image, you can uninstall the plug-in associated with the image format you are using. Or, you can use the "Save" or "Save As" command located within the plug-in application.

- Scanned image does not display on the screen

  Problem: After I click the Scan button, a plug-in is launched and tries to open either my TIFF or PDF image. Instead of the image displaying on the screen, I get a graphical icon (for example, a page with the left corner folded or a small image with a question mark in the center) or even a message stating that the browser could not load the image.

  Resolution: Since a variety of plug-in applications exist, each plug-in exhibits a different behavior. You can uninstall the plug-in associated with the image format you are using. Or, you can change the association of the TIFF or PDF file type to a different application.

Problems using scan preview

- Preview option is missing with a sheet feed scanner or with a multi-page document feeder (ADF)

  Problem: I want to preview the image before saving it, but the Preview button is missing.

  Resolution: Sheet-feed MFPs (and All-in-Ones) do not support scan previews. Flatbed scanners do not support scan previews when using a multi-page document feeder (ADF) instead of the glass flatbed. In these cases, to preview the image before saving it, use the "Open it" option or allow the plug-in to open the scanned image. Once the scanned image is displayed, use the "Save" or "Save As" option in the application.

- Unable to "rubber band" or scan a small area from the preview

  Problem: I clicked the Preview button and the image appeared in the preview window. I tried to select a small region, but this did not work.

  Resolution: Rubber banding or selecting a portion of a document are not supported. However, it is possible to select a predefined document size that is smaller than the image size; the result will be a portion of the image.

Problems with availability of scan and e-mail

- Scan menu item is missing from the Home page.

  Problem: On the Home page of my embedded web server the Scan item is missing from the left column.

  Resolution 1: Only HP multifunction (MFP or All-in-One) devices can

be used for scanning; check the type of printer attached to the print server.

Resolution 2: Web Scan has been disabled on the print server that networks the multifunction printer. Someone with configuration access to the print server should check the configuration of the Enable Web Scan parameter.

- Email To... button is missing from the Scan page.

  Problem: I can reach the Scan page but no Email To... button appears next to Scan.

  Resolution: Scanning to email has been disabled on the print server that networks the multifunction printer. Someone with configuration access to the print server should check the configuration of settings of the Enable Web Scan-to-email parameter. Both Enable Web Scan and Scan-to-email must be set for the Email To... button to appear.

- The Email To... button is available but I get an error message.

  Problem 1: The Email To... button is available but the operation fails and an error message says "To use this feature, Email (SMTP Server) must be specified". This means that no outgoing SMTP mail server was detected as configured for the print server.

  Resolution 1: Someone with configuration access to the print server should configure the e-mail server, as follows: Click on the Networking tab at the top of the embedded web server page. In the left column of the page (in the Configuration list), select Other Settings. For the parameter Email (SMTP) Server (for outgoing mail), specify the e-mail server to be used when any user scans to email through this networked scanner. Click [Apply].

Back to start of troubleshooting web scanning
Back to start of Web Scan information

Disabling Web Scan and its alternative

You can disable and enable the availability of the web scanning facility in the embedded web server. You can also disable and enable the alternative to this basic scanning functionality.

The alternative: The print server may support (depending on installation methods) the full-function scanning facility residing on individual computers—acquired by installing the client software from the CD for the HP multifunction (MFP or All-in-One) device. The client user can use that software normally on printers networked through an HP JetDirect print server, and it probably has more features than the simple scanning available available on the embedded web server through the client user's browser.

Enabling/disabling: Both alternatives—the print server's support of the full-function client scanning software and the print server's embedded web server Web Scan facility—are enabled by default and therefore available to the network clients. Either or both can be disabled (and then enabled again) in the print server's configuration. Methods for making these configuration changes:

- The embedded web server's Networking configuration facility:

  Click on the Networking tab at the top of the web page. In the left column of the page (in the Configuration list, select Other Settings. To assign a parameter setting, enter the desired value and click [Apply]. Networking configuration reference. The parameters are the following:

  - Enable Web Scan
    Enable Scan-to-email
    are the parameters used to disable and enable Web Scan, with or without the e-mail capability, in the print server's embedded web server. Both are enabled by default. Enable Web Scan must be enabled if Enable Scan-to-email is enabled.

  - Enable MFP and AIO software support
    is the parameter used to disable and enable the print server's support of the full-function client scanning software. It is enabled by default.

Back to start of disabling web scanning
Back to start of web scanning
Back to directory of all pages and features in the embedded web server
Back to start of the embedded web server

Compatible Web Browsers

The embedded web server has been tested with the following web browsers:

- Windows 95/98 and NT 4.0:
  - Microsoft Internet Explorer 4.01 with SP2, 5.0 and later
  - Netscape Navigator 4.08 and later
- Windows 2000:
  - Microsoft Internet Explorer 5.0 and later
  - Netscape Navigator 4.6 and later
- Windows Millennium (ME):
  - Microsoft Internet Explorer 5.0, 5.5 and later
  - Netscape Navigator 4.6 and later
- MacOS 8.6 and later:

    - Microsoft Internet Explorer 5.01 and later
    - Netscape Navigator 4.08 and later
- HP-UX 10.10 and 10.20:
    - Microsoft Internet Explorer 5.0 and later
    - Netscape Navigator 4.08 and later
- HP-UX 11.0:
    - Microsoft Internet Explorer 5.0 and later
    - Netscape Navigator 4.72 and later
- Solaris 2.5x, 2.6, 7, 8:
    - Microsoft Internet Explorer 5.0 and later
    - Netscape Navigator 4.70 and later
- AIX 4.x:
    - Netscape Navigator 4.08 and later
- Red Hat Linux 6.0, 6.1, 7.0:
    - Netscape Navigator 4.08 and later

For the latest list of compatible web browsers, visit HP's Customer Care Online at www.hp.com/support/net_printing.

If you use HP Web JetAdmin, a printer installation and management application for intranets, with the HP JetDirect embedded web server, version 6.1 or greater is recommended. (HP Web JetAdmin is available from HP Customer Care Online at www.hp.com/support/net_printing.

Back to directory of all pages and features in embedded web server
Back to start of embedded web server

Troubleshooting Overview for HP Jetdirect 175X

Back to start of troubleshooting for:
HP Jetdirect 175X

The questions below will help you troubleshoot your print server quickly. Just answer each question in turn. For each question:

- If your answer is Yes, go on to the next question.
- If your answer is No, there is a problem. Click on the No button for a procedure to solve the problem. After you've solved the problem, the troubleshooting procedure may bring you back to this page.
- If you're not sure of the answer, or if you don't understand the question, click on the ??? button for more detailed information about the question.

At the bottom of this page are links to some additional topics related to troubleshooting the print server.

Please answer the questions below in the order listed.

1 Is your printer ON and ONLINE?

If **Yes**, continue with the next question.

No ???

2 Is your print server's USB light ON (solid green)?

If **Yes**, continue with the next question.

No ???

3 Is your print server's Power/Status light ON (solid green)?

If **Yes**, continue with the next question.

No ???

4 Is one of the print server's 10/100 link lights ON (solid green)?

If **Yes**, continue with the next question.

No ???

5 **Can you print a Jetdirect configuration page?**

Yes | No | ???

Related topics:

Interpreting the HP Jetdirect 175X configuration page

Interpreting the lights on the HP Jetdirect 175X print server

Resetting the HP Jetdirect 175X print server to factory defaults (cold reset)

ON and ONLINE?

Back to start of troubleshooting for:
HP Jetdirect 175X

The first step in troubleshooting your print server is to make sure that the attached printer is ready to receive a print job from the print server. To do this, you check the printer's lights or control panel to see whether it is ON and ONLINE.

If your printer's power is switched on and the printer is ready to print, click on the Yes button below to return to the Troubleshooting Overview page and continue with the next step in the troubleshooting procedure.

If the printer is not ready to print, or if you are not sure what to look for, click on the No button below to start evaluating the printer.

Yes No

Is your printer ON and ONLINE?

Back to start of troubleshooting for:
HP Jetdirect 175X

Check the following items to make sure that your printer is online and ready to print.

- **Is the printer plugged in and switched on?** Make sure that the printer is plugged in and switched on. If your printer has a front panel display, it should not be blank. If you have checked these items and the printer still shows no sign of being on, you may have a defective power cable, power source, or printer.
- **Is the printer online?** The ONLINE light should be lit. If it is not, press the appropriate key (such as ON LINE or GO) to place the printer online. If your printer has a front panel display, check that is says "Online" or "Ready".
- **Is the FORM FEED light on?** If your printer has a FORM FEED light and it is on, it may indicate that a print job is waiting to be printed. Take the printer offline (if necessary), press the FORM FEED key, and then put the printer back online. If a print job starts (or continues) to print, wait for it to complete.

After looking through the list above and making any necessary changes, is your printer online now?

Yes | No

Does your printer have a control panel display?

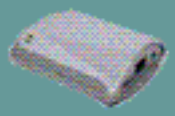
Is there a display panel on the front of your printer that provides messages about the printer's status?

Yes

No

Back to start of troubleshooting for:

HP Jetdirect 175X



175X

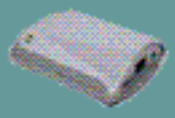
Does the control panel display on your printer show an error message?

Yes

No

Back to start of troubleshooting for:

HP Jetdirect 175X



175X

Check your printer manual.

There appears to be a printer error. Please refer to your printer manual for further information on how to correct the error, or for information on how to contact Hewlett-Packard technical support if you can't correct the error. (Note that your printer manual may be either printed on paper or stored electronically on a CD-ROM.)

Back to start of troubleshooting for:
HP Jetdirect 175X

After you have resolved the printer error, if you still have problems connecting the printer to the network you can restart this troubleshooting utility. Click on the button below to return to the beginning of troubleshooting for the HP Jetdirect 175X print server.

Continue

Check your printer manual.

There appears to be a printer error. If the printer is still not online and does not show an error message on the control panel display, please refer to your printer manual for further information on how to correct the error, or for information on how to contact Hewlett-Packard technical support if you can't correct the error. (Note that your printer manual may be either printed on paper or stored electronically on a CD-ROM.)

After you have resolved the printer error, if you still have problems connecting the printer to the network you can restart this troubleshooting utility. Click on the button below to return to the beginning of troubleshooting for the HP Jetdirect 175X print server.

Back to start of troubleshooting for:
HP Jetdirect 175X

Continue

Check your printer manual.

Please refer to your printer manual for further information on what the error means and how to correct it. (Note that your printer manual may be either printed on paper or stored electronically on a CD-ROM.)

After you have resolved the printer error, if you still have problems connecting the printer to the network you can restart this troubleshooting utility. Click on the button below to return to the beginning of troubleshooting for the HP Jetdirect 175X print server.

Back to start of troubleshooting for:
HP Jetdirect 175X

Continue

Troubleshooting Overview for HP Jetdirect 175X

Back to start of troubleshooting for:
HP Jetdirect 175X

The questions below will help you troubleshoot your print server quickly. Just answer each question in turn. For each question:

- If your answer is Yes, go on to the next question.
- If your answer is No, there is a problem. Click on the No button for a procedure to solve the problem. After you've solved the problem, the troubleshooting procedure may bring you back to this page.
- If you're not sure of the answer, or if you don't understand the question, click on the ??? button for more detailed information about the question.

At the bottom of this page are links to some additional topics related to troubleshooting the print server.

Please answer the questions below in the order listed.

1 **Is your printer ON and ONLINE?**

If **Yes**, continue with the next question.

No ???

2 **Is your print server's USB light ON (solid green)?**

If **Yes**, continue with the next question.

No ???

3 **Is your print server's Power/Status light ON (solid green)?**

If **Yes**, continue with the next question.

No ???

4 **Is one of the print server's 10/100 link lights ON (solid green)?**

If **Yes**, continue with the next question.

No ???

5 **Can you print a Jetdirect configuration page?**

Yes | No | ???

Related topics:

Interpreting the HP Jetdirect 175X configuration page

Interpreting the lights on the HP Jetdirect 175X print server

Resetting the HP Jetdirect 175X print server to factory defaults (cold reset)

USB OK? (USB light ON solid green?)

The HP Jetdirect 175X print server connects to its printer via a USB cable. If the USB connection is working correctly, the USB light on the print server will be ON solid green (bright green in color and glowing continuously, not blinking). If the USB connection is not working correctly, the USB light may be off, blinking green, or blinking amber.

Back to start of troubleshooting for:
HP Jetdirect 175X

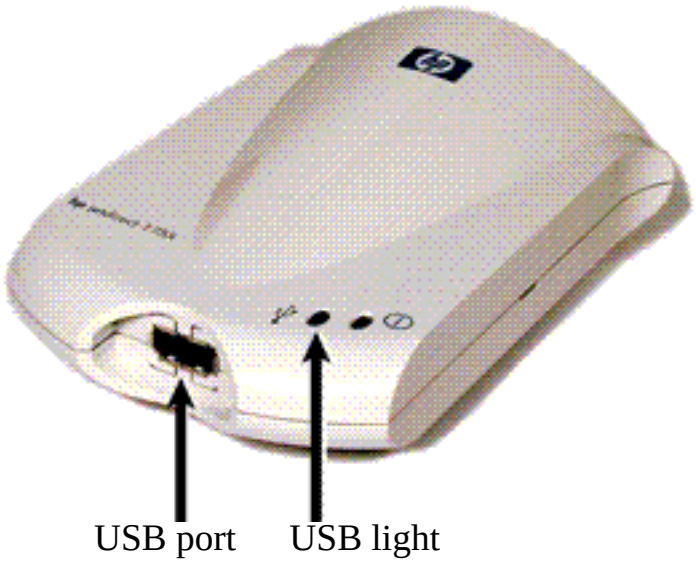
If your print server's USB light is ON solid green, click on the Yes button below to return to the Troubleshooting Overview page and continue with the next step in the troubleshooting procedure.

If your print server's USB light is not ON solid green, or if you are not sure what to look for, click on the No button below to start evaluating the USB connection. Clicking the No button will also give you information on where to find the USB light, what it looks like, and what the correct USB cable looks like.

Yes No

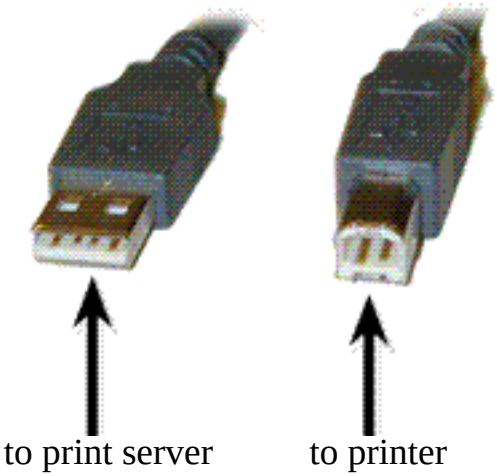
Is the USB light ON solid green?

Back to start of troubleshooting for:
HP Jetdirect 175X



Check the USB light on your print server. It should be ON solid green (bright green in color and glowing continuously, not blinking). If it is not ON solid green, please follow the troubleshooting steps below.

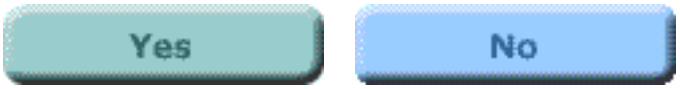
1. Make sure that you have a USB cable connected between your printer and the USB port on the print server. It should be a standard USB A-to-B cable, like this:



   Note that the Jetdirect 175X print server does not support parallel-to-USB converters (for connecting a parallel printer to a USB host) -- it works with USB printers only. Make sure that the cable is connected firmly to both the printer and the print server.

2. Check that both the printer and the print server are powered on.

After checking the items above and making any necessary changes, is the USB light now ON solid green?


Yes
No

What is the state of the USB light?

The behavior of the USB light indicates the status of the USB connection. If the USB light on your print server is not ON solid green, find its state in the list below and click on it to continue troubleshooting.

OFF

Blinking green

Blinking amber

Back to start of troubleshooting for:

HP Jetdirect 175X

USB light OFF

Back to start of troubleshooting for:
HP Jetdirect 175X

If the USB light is OFF, it means that the print server's USB connection is not operational. This is OK before the print server finishes starting up (whether or not a USB cable is attached). If the light remains OFF after startup, then the print server may be faulty.

Please restart the print server by detaching the power cable and re-attaching it. Wait for the Power/Status light to stop blinking (when the self-test finishes).

Is the USB light now ON solid green?

If yes, click on the Yes button to return to the Troubleshooting Overview page and continue with the next step of the troubleshooting procedure.

If no, your print server has a problem that requires assistance from HP Jetdirect technical support; click on the No button for information on contacting HP.

Yes | No

USB light blinking green

Back to start of troubleshooting for:
HP Jetdirect 175X

If the USB light is blinking green, it indicates that the print server has detected a good connection to a valid USB device, but the print server does not support the device. For example, this would happen if you connected a USB digital camera to the print server.

This is not a fault, but rather an incompatibility between the print server and the connected device. The HP Jetdirect 175X print server supports only USB printers (including USB multifunction printers and All-in-One devices). It does not support non-printer USB devices, nor does it support USB cable extenders, USB-to-parallel converters, or USB hubs.

Please check that your print server is connected to a USB printer. If your printer is not a USB printer, you will need to substitute a USB printer or use a different model of HP Jetdirect print server (for instance, one suitable for use with parallel printers).

Is the USB light now ON solid green?

If yes, click on the Yes button to return to the Troubleshooting Overview page and continue with the next step of the troubleshooting procedure.

If no, but you *are* connected to a USB printer, your print server has a problem that requires assistance from HP Jetdirect technical support; click on the No button for information on contacting HP.

Yes No

USB light blinking amber

Back to start of troubleshooting for:
HP Jetdirect 175X

If the USB light is blinking amber, there might be a hardware fault (for example, a short-circuit, faulty cable, or a printer drawing too much power).

To verify, disconnect the USB cable at the print server. Switch on the printer if it is off. Power cycle the print server (unplug it and plug it back in). Then reconnect the USB cable. If the USB light is now green and steady, then no problem remains.

Otherwise, if the USB light is still blinking amber, then there may be a faulty component. Try these steps to determine which component might be causing the problem:

- Detach the USB cable and power cycle the print server (unplug it and plug it back in). If the USB LED is green and steady, then the print server is OK. If it is blinking amber, then the print server is faulty.
- Try reconnecting the USB cable to the print server only, and power cycle the print server (unplug it and plug it back in). If the USB LED is green and steady, then the cable is also OK. If it is blinking amber, then the cable may be faulty.
- Power cycle the printer and reconnect the USB cable to the printer. If the USB LED is green and steady, then the printer is also OK. If it is blinking amber, then the printer may be faulty.

Is the USB light now ON solid green?

If yes, click on the Yes button to return to the Troubleshooting Overview page and continue with the next step of the troubleshooting procedure.

If no, you may need to replace the component indicated at fault. If the fault is with the print server or the USB cable (provided with the print server), get assistance from HP Jetdirect technical support; click on the No button for information on contacting HP.

Yes No

Troubleshooting Overview for HP Jetdirect 175X

Back to start of troubleshooting for:
HP Jetdirect 175X

The questions below will help you troubleshoot your print server quickly. Just answer each question in turn. For each question:

- If your answer is Yes, go on to the next question.
- If your answer is No, there is a problem. Click on the No button for a procedure to solve the problem. After you've solved the problem, the troubleshooting procedure may bring you back to this page.
- If you're not sure of the answer, or if you don't understand the question, click on the ??? button for more detailed information about the question.

At the bottom of this page are links to some additional topics related to troubleshooting the print server.

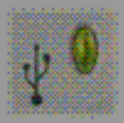
Please answer the questions below in the order listed.

1 **Is your printer ON and ONLINE?**

If **Yes**, continue with the next question.

No ???

2 **Is your print server's USB light ON (solid green)?**



If **Yes**, continue with the next question.

No ???

3 **Is your print server's Power/Status light ON (solid green)?**

If **Yes**, continue with the next question.

No ???

4 **Is one of the print server's 10/100 link lights ON (solid green)?**

If **Yes**, continue with the next question.

No ???

5 **Can you print a Jetdirect configuration page?**

Yes | No | ???

Related topics:

Interpreting the HP Jetdirect 175X configuration page

Interpreting the lights on the HP Jetdirect 175X print server

Resetting the HP Jetdirect 175X print server to factory defaults (cold reset)

Power/Status OK? (Power/Status light ON solid green?)

Back to start of troubleshooting for:
HP Jetdirect 175X

The Power/Status light provides information on the state of the print server's power connection and on its physical connection to the network. If connections are working correctly, the Power/Status light should be ON solid green (bright green in color and glowing continuously, not blinking). If the connections are not working correctly, the Power/Status light may be off, blinking green, or blinking amber.

If your print server's Power/Status light is ON solid green, click on the Yes button below to return to the Troubleshooting Overview page and continue with the next step in the troubleshooting procedure.

If your print server's Power/Status light is not ON solid green, or if you are not sure what to look for, click on the No button below to start evaluating the status of the print server. Clicking the No button will also give you information on where to find the Power/Status light, what it looks like, and what the correct power connection looks like.

Yes | No

Is the Power/Status light ON solid green?

Back to start of troubleshooting for:
HP Jetdirect 175X

Power/Status light

power receptacle

Check the Power/Status light on your print server. It should be ON solid green (bright green in color and glowing continuously, not blinking). If it is not ON solid green, please follow the troubleshooting steps below.

For all of the steps below, note that when you first apply power to a normally operating print server, the Power/Status light will slowly blink green for several seconds during self-test, and then go ON solid green when the unit is ready for operation.

1. Check that the Jetdirect power module is plugged into a suitable power source (typically a wall outlet), and that the power connector is plugged into the print server.

   Note: The power module shown below is the North American version. The plug pattern may be different in other regions of the world.

typical power module (to power source)

power connector (to print server)

2. If necessary, try plugging the power module into a different power source.
3. Try a different power module/cable if one is available.

After checking the items above and making any necessary changes, is the Power/Status light now ON solid green?

Yes No

What is the state of the Power/Status light?

The behavior of the Power/Status light indicates the status of the print server's power connection and its physical connection to the network. If the Power/Status light on your print server is not ON solid green, find its state in the list below and click on it to continue troubleshooting.

Back to start of troubleshooting for:
HP Jetdirect 175X

OFF

Blinking green

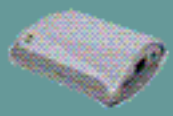
Blinking amber

Power/Status light OFF

If the Power/Status light is OFF, your power module may be faulty. Fixing this fault requires assistance from HP Jetdirect technical support; click on the button below for information on contacting HP.

Contact HP

Back to start of troubleshooting for:
HP Jetdirect 175X



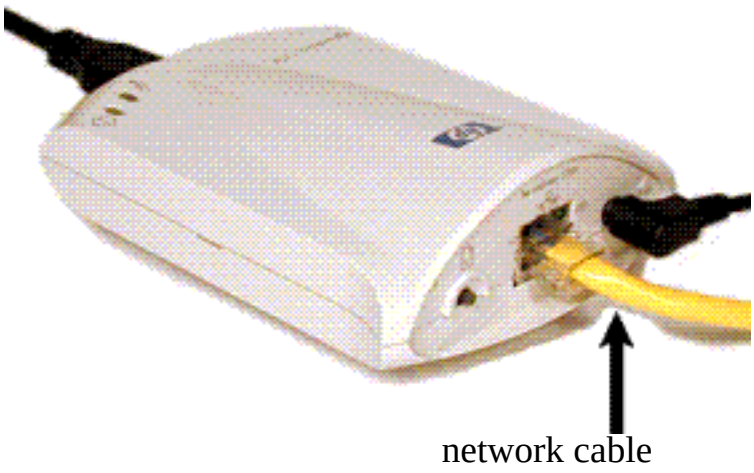
175X

Power/Status light blinking green

Back to start of troubleshooting for:
HP Jetdirect 175X

The Power/Status light should be ON solid green to indicate that print server power is OK and that the network cable is connected properly to the print server. If the Power/Status light is blinking green, please try the steps below and make changes as necessary.

1. Make sure that the network cable is connected securely to the print server.



2. Check that the network cable is plugged securely into the hub/switch/router, and that the connection is set to the correct network speed.
3. Check that the LINK light is ON for the port on the hub/switch/router to which the print server is connected.
4. Your network cable may be faulty. Try a different cable.
5. If the light still does not come on, try a different port on the hub/switch/router.

Is the Power/Status light now ON solid green?

If yes, click the Yes button to return to the Troubleshooting Overview page and continue with the next step of the troubleshooting procedure. If no, your print server has a problem that requires assistance from HP Jetdirect technical support; click on the No button for information on contacting HP.

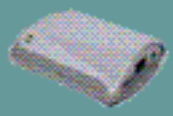
Yes | No

Power/Status light blinking amber

Your print server has developed a fault. Fixing this fault requires assistance from HP Jetdirect technical support; click the Contact HP button for information on contacting HP.

Contact HP

Back to start of troubleshooting for:
HP Jetdirect 175X



175X

10/100 link OK? (10 light or 100 light ON solid green?)

Back to start of troubleshooting for:
HP Jetdirect 175X

The link lights -- the 10 light and the 100 light -- indicate whether the print server can initiate a network link at the right speed with your hub, switch, or router. One of the link lights -- either the 10 light or the 100 light -- should be ON solid green (bright green in color and glowing continuously, not blinking) to indicate a valid link with the hub/switch/router. If there is not a valid link, then both the 10 and 100 lights will be off.

If one of the print server's link lights is ON solid green, click on the Yes button below to return to the Troubleshooting Overview page and continue with the next step in the troubleshooting procedure.

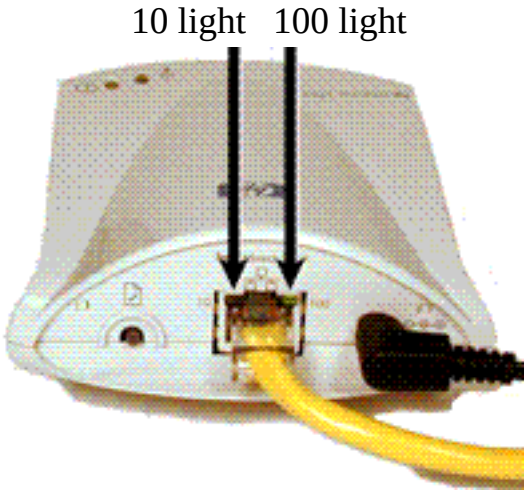
If neither of the print server's link lights is ON solid green, or if you are not sure what to look for, click on the No button below to start evaluating the link status of the print server. Clicking the No button will also give you information on where to find the link lights, what they look like, and what the correct network connection looks like.

Yes | No

Is one of the link lights ON (solid green)?

Back to start of troubleshooting for:

HP Jetdirect 175X



Check the link lights on your print server; these lights are built into the network connector. One of the link lights -- either the 10 light or the 100 light, but not both -- should be ON solid green, to indicate a valid network connection.

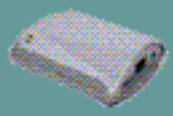
Is either the 10 light or the 100 light ON solid green?

Yes

No

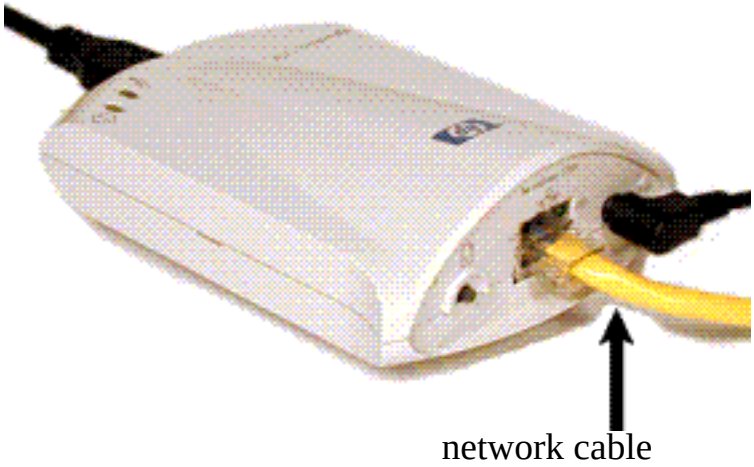
Link lights OFF

Back to start of troubleshooting for:
HP Jetdirect 175X



Try the steps below and make any necessary corrections.

1. Make sure that the network cable is connected securely to the print server.



2. Check that the network cable is plugged securely into the hub/switch/router, and that the connection is set to the correct network speed. (If your hub/switch/router is set to configure its link speed automatically, try to configure it manually for 10 Mbps or 100 Mbps only. After changing this setting, you may need to cycle power to the print server -- unplug the print server's power cable and then plug it in again.)
3. Check that the LINK light is ON for the port on the hub/switch/router to which the print server is connected.
4. Your network cable may be faulty. Try a different cable.
5. If the light still does not come on, try a different port on the hub/switch/router.

Did these steps turn ON one of the link lights?

If yes, click on the Yes button to continue the troubleshooting procedure.

If no, your print server has a problem that requires assistance from HP Jetdirect technical support; click on the No button for a list of technical support telephone numbers.

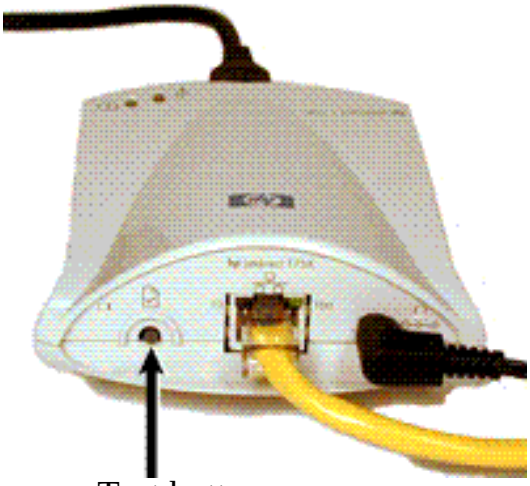
Yes | No

Check the print server's I/O status.

Back to start of troubleshooting for:
HP Jetdirect 175X

Check the I/O status of the print server by following these steps:

1. Print a Jetdirect configuration page. To print the page, press the Test button on the print server.

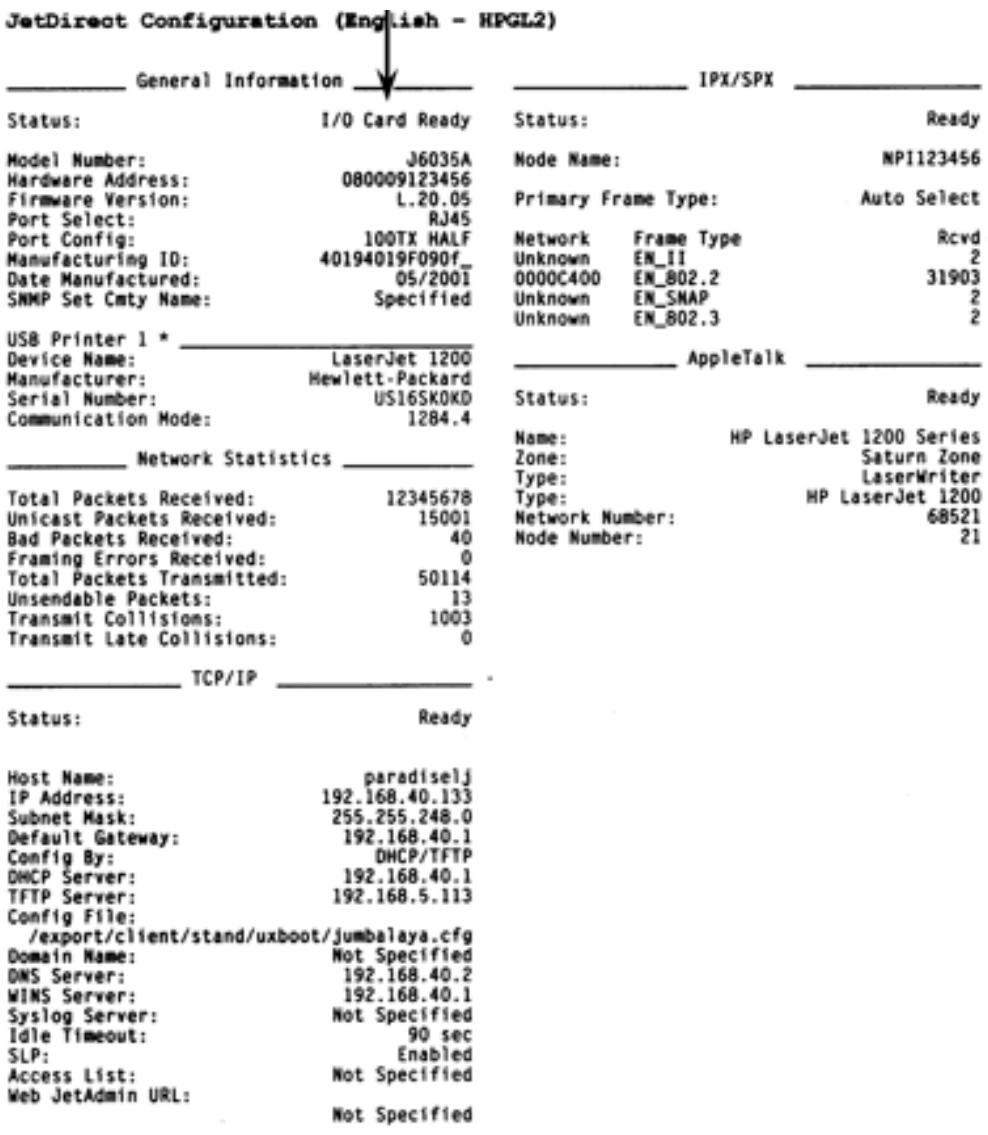


Test button

If the configuration page does not print, click here for help in getting it to print.

2. On the configuration page, check that the print server reports its status as "I/O Card Ready". The Status entry is the first entry in the General Information section, in the upper left portion of the page.

Status entry



JetDirect Configuration (English - HPGL2)

General Information

Status:	I/O Card Ready
Model Number:	J6035A
Hardware Address:	080009123456
Firmware Version:	L.20.05
Port Select:	RJ45
Port Config:	100TX HALF
Manufacturing ID:	40194019F090f_
Date Manufactured:	05/2001
SNMP Set Cmty Name:	Specified

USB Printer 1 *

Device Name:	LaserJet 1200
Manufacturer:	Hewlett-Packard
Serial Number:	US16SK0KD
Communication Mode:	1284.4

Network Statistics

Total Packets Received:	12345678
Unicast Packets Received:	15001
Bad Packets Received:	40
Framing Errors Received:	0
Total Packets Transmitted:	50114
Unsendable Packets:	13
Transmit Collisions:	1003
Transmit Late Collisions:	0

TCP/IP

Status:	Ready
Host Name:	paradiselj
IP Address:	192.168.40.133
Subnet Mask:	255.255.248.0
Default Gateway:	192.168.40.1
Config By:	DHCP/TFTP
DHCP Server:	192.168.40.1
TFTP Server:	192.168.5.113
Config File: /export/client/stand/uxboot/jumbalaya.cfg	
Domain Name:	Not Specified
DNS Server:	192.168.40.2
WINS Server:	192.168.40.1
Syslog Server:	Not Specified
Idle Timeout:	90 sec
SLP:	Enabled
Access List:	Not Specified
Web JetAdmin URL:	Not Specified

IPX/SPX

Status:	Ready
Node Name:	NPI123456
Primary Frame Type:	Auto Select

Network	Frame Type	Rcvd
Unknown	EN_II	2
0000C400	EN_802.2	31903
Unknown	EN_SNAP	2
Unknown	EN_802.3	2

AppleTalk

Status:	Ready
Name:	HP LaserJet 1200 Series
Zone:	Saturn Zone
Type:	LaserWriter
Type:	HP LaserJet 1200
Network Number:	68521
Node Number:	21

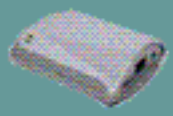
Does the page indicate "I/O Card Ready"?

Yes

No

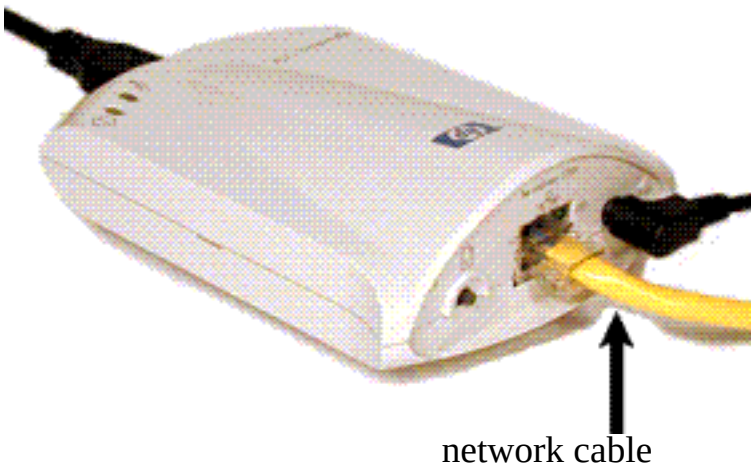
I/O card not ready

Back to start of troubleshooting for:
HP Jetdirect 175X



Check the following items to see whether you can correct the “I/O Card Not Ready” situation. (If you have already performed these steps earlier in the troubleshooting process, you can skip them and go directly to answering the question at the end of the steps.)

1. Make sure that the network cable is connected securely to the print server.



2. Check that the network cable is plugged securely into the hub/switch/router, and that the connection is set to the correct network speed.
3. Check that the LINK light is ON for the port on the hub/switch/router to which the print server is connected.
4. Your network cable may be faulty. Try a different cable.
5. If the light still does not come on, try a different port on the hub/switch/router.

If you made any changes, please print another configuration page. Does the page show I/O Card Ready now?

Yes No

Error messages

If your configuration page shows a status of "I/O Card Not Ready", you will see a specific error message just below the status line. This error message indicates what is preventing the print server from functioning correctly.

From the list below, please click on the error message that you see on the configuration page. This will take you to a fuller explanation of the error.

Back to start of troubleshooting for:
HP Jetdirect 175X

- 03 LAN Error: EXTERNAL LOOPBACK
- 08 LAN Error: INFINITE DEFERRAL
- 11 LAN Error: RETRY FAULTS
- 12 LAN Error: NO LINKBEAT
- Other Error: If the error that you see on the configuration page is not listed above, your problem requires assistance from HP Jetdirect technical support. Click on this entry for information on contacting HP.

03 LAN Error: EXTERNAL LOOPBACK

The print server is incorrectly connected to the network or is defective.

Make sure that your print server is correctly attached to your network. In addition, check all other cabling and connectors.

For help in correcting this error, please check your print server documentation (the Jetdirect 175X welcome mat or the User's Guide on the Jetdirect CD-ROM), or contact HP Jetdirect technical support. Click on the button below for information on contacting HP.

Contact HP

Back to start of troubleshooting for:
HP Jetdirect 175X

08 LAN Error: INFINITE DEFERRAL

There is a network congestion problem.

For help in correcting this error, please check your print server documentation or contact HP Jetdirect technical support. Click on the button below for information on contacting HP.

Contact HP

Back to start of troubleshooting for:
HP Jetdirect 175X

11 LAN Error: RETRY FAULTS

There is a problem with your network cabling or with your external network configuration.

Verify that your hub/switch/router port is operating correctly.

For help in correcting this error, please check your print server documentation or contact HP Jetdirect technical support. Click on the button below information on contacting HP.

Back to start of troubleshooting for:
HP Jetdirect 175X

Contact HP

12 LAN Error: NO LINKBEAT

When the print server is connected to a 10/100 Base-TX port, this message is displayed if the Link Beat signal is not sensed.

Check the network cable, and verify that the hub/switch/router is providing Link Beat.

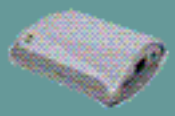
For help in correcting this error, please check your print server documentation or contact HP Jetdirect technical support. Click on the button below for information on contacting HP.

Contact HP

Back to start of troubleshooting for:
HP Jetdirect 175X

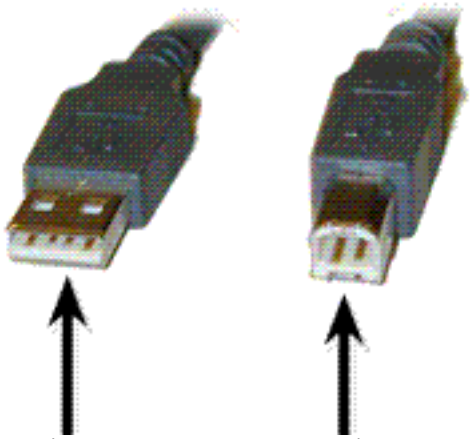
Configuration page does not print.

Back to start of troubleshooting for:
HP Jetdirect 175X



If the configuration page does not print, try these steps:

1. Make sure your printer is connected to your print server by a USB A-to-B cable. (This is the standard USB cable.)



   Note that the Jetdirect 175X print server does not support parallel-to-USB converters (for connecting a parallel printer to a USB host) -- it works with USB printers only. Make sure that the cable is connected firmly to both the printer and the print server.

2. Make sure that the printer and the print server are powered on.
3. Make sure that the printer is Online or Ready.
4. Make sure that the printer supports one of these printer languages:
   - ASCII
   - PCL
   - PostScript
   - HP/GL-2

   The HP Jetdirect 175X print server can print a configuration page in any of these languages. By default, the print server is configured to determine the appropriate printer language automatically. It is possible that the print server is not able to determine automatically which language it should use for your printer. Please refer to your printer documentation to find out which printer languages are supported by your printer. Then check the electronic documentation on the Jetdirect CD-ROM for information on setting a specific printer language for the configuration page, to match one of the languages supported by

your printer.

5. It may be necessary to re-initialize the connection between the printer and the print server by cycling power on the print server. (Unplug the power cable from the print server; then plug it back in.) Do this with the printer switched ON.

Can you now print a Jetdirect configuration page?

If yes, click on the Yes button. This returns you to the page in the troubleshooting procedure where you check the I/O status of the print server. Continue with step 2 on that page.

If no, your print server has a problem that requires assistance from HP Jetdirect technical support; click on the No button for information on contacting HP.

Yes No

Configuration page prints?

Back to start of troubleshooting for:
HP Jetdirect 175X

The Jetdirect configuration page is a page that the print server sends to the attached printer, both as a test of the connection between the print server and the printer, and as an display of the status of the print server's functions.

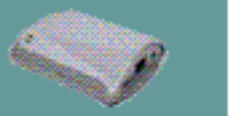
If you are able to print a Jetdirect configuration page on your printer, click on the Yes button below to continue with the troubleshooting procedure. This takes you to information about interpreting the results contained on the configuration page.

If you are not able to print a Jetdirect configuration page on your printer, or if you don't know how to print one, click on the No button below to start evaluating the print server's ability to print a configuration page. Clicking on the No button will also give you information on how to print a test page.

Yes | No

Back to start of troubleshooting for:

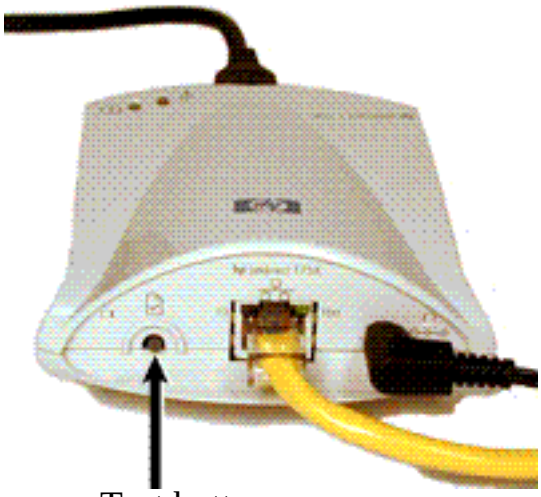
HP Jetdirect 175X



175X

Can you print a Jetdirect configuration page?

To print a configuration page, press the Test button on the print server.



Test button

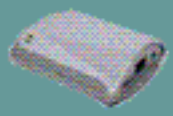
A configuration page should print on the connected printer. This page displays information about the print server hardware, the firmware version, the hardware (MAC) address, the connected printer, network connectivity, network traffic, and network protocols.

Did the configuration page print successfully? (If the configuration page printed but is unreadable, click on the No button.)

Yes | No

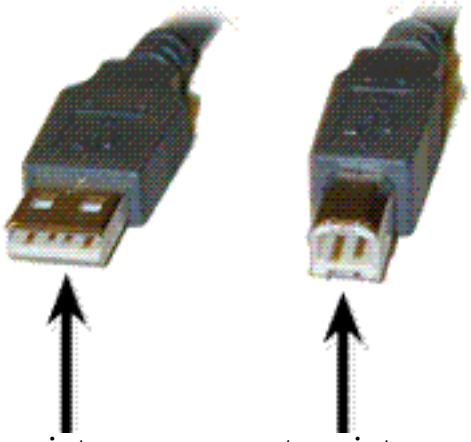
Configuration page does not print, or is unreadable.

Back to start of troubleshooting for:
HP Jetdirect 175X



If the configuration page does not print successfully, try the steps below. If the page prints but is unreadable, note step 4 particularly.

1. Make sure your printer is connected to your print server by a USB A-to-B cable. (This is the standard USB cable.)



   Note that the Jetdirect 175X print server does not support parallel-to-USB converters (for connecting a parallel printer to a USB host) -- it works with USB printers only. Make sure that the cable is connected firmly to both the printer and the print server.
2. Make sure that the printer and the print server are powered on.
3. Make sure that the printer is Online or Ready.
4. Make sure that the printer supports one of these printer languages:
   - ASCII
   - PCL
   - PostScript
   - HP/GL-2

   The HP Jetdirect 175X print server can print a configuration page in any of these languages. By default, the print server is configured to determine the appropriate printer language automatically. It is possible that the print server is not able to determine automatically which language it should use for your printer. Please refer to your printer documentation to find out

which printer languages are supported by your printer. Then check the electronic documentation on the Jetdirect CD-ROM for information on setting a specific printer language for the configuration page, to match one of the languages supported by your printer.

5. It may be necessary to re-initialize the connection between the printer and the print server by cycling power on the print server. (Unplug the power cable from the print server; then plug it back in.) Do this with the printer switched ON.

Can you now print a Jetdirect configuration page?

If yes, click on the Yes button for information on interpreting the configuration page.

If no, your print server has a problem that requires assistance from HP Jetdirect technical support; click on the No button for information on contacting HP.

Yes No

Interpreting the configuration page

Back to start of troubleshooting for:
HP Jetdirect 175X

The configuration page (also called a self-test page or configuration plot) for a print server displays messages, network statistics, and status for the print server. To print a configuration page, press the Test button on the print server.

An HP JetDirect configuration page can also be viewed over the network from a management utility (such as HP Web Jetadmin), or by accessing the embedded web server on the HP JetDirect print server.

Just click on any section of the configuration page below for detailed description of that section.

JetDirect Configuration (English - HPGL2)

General Information

Status:	I/O Card Ready
Model Number:	J6035A
Hardware Address:	080009123456
Firmware Version:	L.20.05
Port Select:	RJ45
Port Config:	100TX HALF
Manufacturing ID:	40194019F090f_
Date Manufactured:	05/2001
SNMP Set Cmty Name:	Specified

USB Printer 1 *

Device Name:	LaserJet 1200
Manufacturer:	Hewlett-Packard
Serial Number:	US16SK0KD
Communication Mode:	1284.4

Network Statistics

Total Packets Received:	12345678
Unicast Packets Received:	15001
Bad Packets Received:	40
Framing Errors Received:	0
Total Packets Transmitted:	50114
Unsendable Packets:	13
Transmit Collisions:	1003
Transmit Late Collisions:	0

TCP/IP

Status:	Ready
Host Name:	paradiselj
IP Address:	192.168.40.133
Subnet Mask:	255.255.248.0
Default Gateway:	192.168.40.1
Config By:	DHCP/TFTP
DHCP Server:	192.168.40.1
TFTP Server:	192.168.5.113
Config File: /export/client/stand/uxboot/jumbalaya.cfg	
Domain Name:	Not Specified
DNS Server:	192.168.40.2
WINS Server:	192.168.40.1
Syslog Server:	Not Specified
Idle Timeout:	90 sec
SLP:	Enabled
Access List:	Not Specified
Web JetAdmin URL:	Not Specified

IPX/SPX

Status:	Ready
Node Name:	NPI123456
Primary Frame Type:	Auto Select

Network	Frame Type	Rcvd
Unknown	EN_II	2
0000C400	EN_802.2	31903
Unknown	EN_SNAP	2
Unknown	EN_802.3	2

AppleTalk

Status:	Ready
Name:	HP LaserJet 1200 Series
Zone:	Saturn Zone
Type:	LaserWriter
Type:	HP LaserJet 1200
Network Number:	68521
Node Number:	21

General JetDirect Information

Provides general print server status and identification information.

Message	Description
Status	Current state of the print server. • I/O Card Ready: the print server has successfully connected to the network and is awaiting data. • I/O Card Initializing: the print server is initializing the network protocols. For more information, see the status line for each protocol on the configuration page. • I/O Card Not Ready: there is a problem with the print server or its configuration. An error code and message are displayed if the print server is not ready.
Model Number	The model number of the HP print server (for example, J6035A).
Hardware Address	The 12-digit hexadecimal LAN hardware (MAC) address of the print server installed in or attached to the printing device. This address is assigned by the manufacturer.
Firmware Version	The firmware revision number of the print server currently installed in the printer. The format is X.NN.NN, where X is a letter that depends on the HP print server model.
Port Select	Specifies the LAN port on the print server that has been detected for use: • None: the print server is not connected to the network. • RJ-45: the RJ-45 network port is connected.
Port Config	Identifies the link configuration of the RJ-45 LAN port on the print server: • 10BASE-T HALF: 10 Mbps, half-duplex • 10BASE-T FULL: 10 Mbps, full-duplex • 100TX HALF: 100 Mbps, half-duplex • 100TX FULL: 100 Mbps, full-duplex • Unknown: the print server is in an initialization state. • Disconnected: a network connection has not been detected. Check network cables.
Auto Negotiation	Identifies whether IEEE 802.3u Autonegotiation on the 10/100TX port is enabled (on) or disabled (off). On: the print server will attempt to automatically configure itself onto the network at the proper speed (10 or 100 Mbps) and mode (half or full duplex).
Manufacturing ID	The manufacturing identification code for use by HP Customer Care personnel.
Date Manufactured	Identifies the date of manufacture of the HP Jetdirect print server.
SNMP Set Cmty Name	Specifies whether an SNMP set community name has been configured on the print server. An SNMP set community name is a password for "write" access to SNMP control functions (SNMP SetRequests) on the print server. • Not Specified: an SNMP set community name has not been set. • Specified: a specific SNMP set community name has been set.
USB Printer 1 *	Heads the section for the USB printer class descriptor information supplied by the manufacturer of the printing device. The number and asterisk "1 *" indicates that the configuration and diagnostic pages will be printed on the printing device attached to print server port 1. See USB Port Information.

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USB Port Information

Provides the USB printer class descriptors for the device connected to the port.

Message	Description
Device Name	Name of the attached USB printing device, supplied by the manufacturer.
Manufacturer	Manufacturer of the attached printing device.
Serial Number	Serial number of the attached printing device.
Communication Mode	Current USB communication mode: ● 1284.4: IEEE standard protocol, a mode for printers and multi-function (All-in-One) devices that allows multiple channels of simultaneous print, scan, and status communication. ● MLC: HP-proprietary protocol for Multiple Logical Channels, a mode for printers and multi-function (All-in-One) devices that allows multiple channels of simultaneous print, scan, and status communication. ● Bidirectional: two-way printer communication, sending print data to the printing device and returning status information from the printing device. ● Unidirectional: one-way printer communication from computer to printing device. ● Device not found: connection of a printing device has not been detected. Check device and cable. ● Device not supported: the device connected is not a printer (for example, a camera).

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Network Statistics

Provides the current values for various network parameters monitored by the print server.

Message	Description
Total Packets Received	Total number of frames (packets) received by the print server without error. This includes broadcast, multicast packets, and packets specifically addressed to the print server. This number does not include packets specifically addressed to other nodes.
Unicast Packets Received	Number of frames specifically addressed to this print server. This does not include broadcasts or multicasts.
Bad Packets Received	Total number of frames (packets) received with errors by the print server.
Framing Errors Received	Maximum of CRC (Cyclic Redundancy Check) errors and framing errors. CRC errors are frames received with CRC errors. Framing errors are frames received with alignment errors. A large number of framing errors could indicate a cabling problem with your network.
Total Packets Transmitted	Total number of frames (packets) transmitted without error.

Unsendable Packets	Total number of frames (packets) not successfully transmitted because of errors.
Transmit Collisions	Number of frames not transmitted because of repeated collisions.
Transmit Late Collisions	Total number of frames not transmitted because a late collision occurred. A large number may indicate a cabling problem on the network.

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TCP/IP Protocol Information

Provides the current status and parameter values for the TCP/IP network protocols.

Message	Description
Status	Current TCP status: ● Ready: the print server is awaiting data over TCP/IP. ● Disabled: TCP/IP was manually disabled. ● Initializing: the print server is searching for the BOOTP server, or trying to get the configuration file through TFTP. An additional status message may also be displayed. An error code and message are displayed if the print server is not ready.
Host Name	The host name configured on the print server. It may be truncated. ● Not Specified: no host name was specified in a BOOTP response or TFTP configuration file. ● NPIxxxxxx: the default name is NPIxxxxxx, where xxxxxx represents the last six digits of the LAN hardware (MAC) address.
IP Address	The Internet Protocol (IP) address assigned to the print server. This is a required entry for its operation on a TCP/IP network. During initialization, a temporary value 0.0.0.0 is displayed. After two minutes, a default IP address 192.0.0.192 is assigned, which may not be a valid IP address for your network. ● Not Specified: an IP address is not assigned or the value is zero.
Subnet Mask	The IP subnet mask configured on the print server. During initialization, a temporary value 0.0.0.0 is displayed. Depending on configuration parameters, the print server may automatically assign a usable default value. ● Not Specified: a subnet mask is not configured.
Default Gateway	The IP address of the gateway used when sending packets off the local network. Only one default gateway may be configured. During initialization, a temporary value 0.0.0.0 is displayed. If not provided, the IP address of the print server is used. ● Not Specified: a default gateway is not configured.

Config By	Identifies how the print server obtained its IP configuration. ● BOOTP: automatic configuration via a BOOTP server. ● BOOTP/TFTP: automatic configuration via a BOOTP server and TFTP configuration file. ● DHCP: automatic configuration via a DHCP server. ● DHCP/TFTP: automatic configuration via a DHCP server and TFTP configuration file. ● RARP: automatic configuration via the Reverse Address Resolution Protocol. ● User Specified: manual configuration via Telnet, the printer's control panel, HP Web JetAdmin, embedded web server, or other method. ● Default IP: the default IP address was assigned. This address may not be a valid address for your network. ● Not Configured: the print server was not configured with IP parameters. Verify that TCP/IP is enabled, or check for error status.
BOOTP Server or DHCP Server or RARP Server	Displayed if BOOTP, DHCP, or RARP is used for TCP/IP configuration. It specifies the IP address of the system that responds to the print server's request for automatic TCP/IP configuration over the network. ● Not Specified: the configuration server's IP address could not be determined or was set to zero in the response packet.
BOOTP/DHCP Server	Displayed during initialization while the print server attempts to obtain its TCP/IP configuration from a BOOTP or DHCP server. The temporary address displayed is 0.0.0.0. ● Not Specified: the configuration server's IP address could not be determined or was set to zero in the response packet.
TFTP Server	The IP address of the system where the TFTP configuration file is located. During initialization, the temporary address 0.0.0.0 is displayed. ● Not Specified: a TFTP server has not been not been set.
Config File	The name of the print server's configuration file. The file pathname may be truncated to fit on two lines. ● Not Specified: a file was not specified in the BOOTP reply from the host.
Domain Name	The Domain Name System (DNS) name of the domain in which the print server resides (for example, support.company.com). It is not the fully qualified DNS name because the host printer name is not included (for example: printer1.support.company.com). ● Not Specified: a domain name has not been configured on the print server.
DNS Server	The IP address of the Domain Name System (DNS) server. ● Not Specified: a DNS server's IP address has not been configured on the print server.
WINS Server	The IP address of the Windows Internet Name Service (WINS) server. ● Not Specified: a WINS server's IP address has not been configured on the print server.
Syslog Server	The IP address of the syslog server configured on the print server. ● Not Specified: a syslog server has not been configured.
Idle Timeout	The timeout value expressed in seconds after which the print server closes an idle TCP print data connection. Acceptable values are integers between 0 and 3600 seconds. A value of zero turns off the timeout mechanism. The default value is 270 seconds.

SLP	Specifies whether the print server sends Service Location Protocol (SLP) packets used by system applications for automated installation. • Enabled: the print server sends SLP packets. • Disabled: the print server does not send SLP packets.
Access List	Identifies whether a host access control list is configured on the print server. A host access control list specifies the IPaddress of individual systems, or IP network of systems, that are allowed access to the print server and device. • Specified: a host access list is configured on the print server. • Not Specified: a host access list is not configured on the print server. All systems are allowed access.
Web JetAdmin URL	If the print server is found on the network by HP WebJetAdmin, the URL of the host system used for HP WebJetAdmin services is displayed. The URL is limited to two lines and may be truncated. • Not Specified: the URL of the HP WebJetAdmin host system could not be identified or is not configured.

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IPX/SPX Protocol Information

Provides the current status and parameter values for the IPX/SPX network protocols.

Message	Description
Status	Indicates the current IPX/SPX protocol status. • Ready: the print server is awaiting data over IPX/SPX. • Disabled: IPX/SPX was manually disabled. • Initializing: the print server is registering the node address or name. An additional status message may also be displayed. An error code and message are displayed if the print server is not ready.
Node Name	The IPX/SPX name of the print server. The default name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address. [Verify parameter location.]
Primary Frame Type	Specifies the frame type selection on the print server. • Auto Select: the print server automatically senses and limits the frame type to the first one detected. • EN_II: limits the frame type to IPX over Ethernet frames. All others will be counted and discarded. • EN_802.2: limits the frame type to IPX over IEEE 802.2 with IEEE 802.3 frames. All others will be counted and discarded. • EN_SNAP: limits the frame type to IPX over SNAP with IEEE 802.3 frames. All others will be counted and discarded. • EN_802.3: limits the frame type to IPX over IEEE 802.3 frames. All others will be counted and discarded.
Network	The first column *Network* indicates the network number associated with each protocol frame type used for communication between a server and the print server. • Unknown: the print server is still trying to determine which network number to use.

Frame Type *EN_II* *EN_802.2* *EN_SNAP* *EN_802.3*	The second column *Frame Type* identifies the frame type associated with each network number. Unless a specific frame type has been manually configured, the print server automatically determines the protocol frame type by listening to the network data being transferred over the network. • Disabled: a specific frame type for that network has been manually configured.
Rcvd	The third column *Rcvd* indicates how many packets have been received for each frame type.

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AppleTalk Protocol Information

Provides the current status and parameter values for the AppleTalk network protocols.

Message	Description
Status	Indicates the current AppleTalk configuration status. • Ready: the print server is awaiting data. • Disabled: AppleTalk was manually disabled. • Initializing: the print server is registering the node address or name. An additional status message may also be displayed. An error code and message are displayed if the print server is not ready.
Name	The name of the printer on the AppleTalk network. A number after the name indicates that there are multiple devices with this name, and this is the Nth instance of the name.
Zone	The name of the AppleTalk network zone on which the printer is located.
Type	The type of the printer being advertised on the network. Two types can be displayed.
Network Number	The AppleTalk Network Number on which the print server is currently operating.
Node Number	The AppleTalk Node Number that the print server chose for itself as part of its initialization sequence. Note: The AppleTalk phase 2 (P2) parameter is preconfigured on the print server.

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Error Messages

Error Code and Message	Description
02 LAN ERROR-INTERNAL LOOPBACK	During self-test, the print server detected an internal loopback test error. The print server may be faulty. If the error persists, replace the print server.
03 LAN ERROR-EXTERNAL LOOPBACK	The print server is incorrectly connected to your network or is defective. Make sure your print server is correctly attached to your network. In addition, check the cabling and connectors.

07 LAN ERROR- CONTROLLER CHIP	Check the network connections. If the connections are intact, run the power-on self-test: turn the printer off, then on again. If the error persists, replace the print server.
08 LAN ERROR- INFINITE DEFERRAL	There is a network congestion problem. Note: If the print server is not connected to the network, this error cannot occur.
09 LAN ERROR- BABBLE	Check the network connections. If the connections are intact, run the power-on self-test: turn the printer off, then on again. If the error persists, replace the print server.
0A LAN ERROR- NOSQE	Check the network connections. If the connections are intact, run the power-on self-test: turn the printer off, then on again. If the error persists, replace the print server.
0C LAN ERROR- RECEIVER OFF	There may be a problem with your network cabling or the print server. Check the cabling and connectors on your Ethernet network. If you cannot find a problem with your network cabling, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, there is a problem with the print server.
0D LAN ERROR- TRANSMITTER OFF	There may be a problem with your network cabling or the print server. Check the cabling and connectors on your Ethernet network. If you cannot find a problem with your network cabling, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, there is a problem with the print server.
0E LAN ERROR- LOSS OF CARRIER	Check the network connections. If the connections are intact, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, replace the print server.
10 LAN ERROR- UNDERFLOW	There may be a problem with your network cabling or the print server. Check the cabling and connectors on your network. If you cannot find a problem with your network cabling, run the power-on self-test: remove and re-attach the power module connector on the print server. If the error persists, there is a problem with the print server.
11 LAN ERROR- RETRY FAULTS	There is a problem with your network cabling or external network configuration. Verify operation of the hub or switch port.
12 LAN ERROR- NO LINKBEAT	With a 10Base-T or 100Base-TX port connected, Link Beat is not sensed. Check the network cable, and verify that the concentrator or hub is providing Link Beat.
13 NETWORK RECONFIG - MUST REBOOT	Reset or power cycle the print server to enable the new configuration values.
40 ARP DUPLICATE IP ADDRESS	The ARP layer has detected another node on the network using the same IP address as the print server. Extended error information below this message shows the hardware address of the other node.
41 NOVRAM ERROR	The print server cannot read the contents of its NOVRAM.

42 INVALID IP ADDRESS	The IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
43 INVALID SUBNET MASK	The IP subnet mask specified for the print server (through BOOTP) is an invalid subnet mask. Check your Bootptab file for proper entries.
44 INVALID GATEWAY ADDRESS	The default gateway IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
45 INVALID SYSLOG ADDRESS	The syslog server IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
46 INVALID SERVER ADDRESS	The TFTP server IP address specified for the print server (through BOOTP) is an invalid IP address for specifying a single node. Check your Bootptab file for proper entries.
47 INVALID TRAP DEST ADDRESS	One of the SNMP trap (Trap PDU) destination IP addresses specified for the print server (through TFTP) is an invalid IP address for specifying a single node. Check your TFTP configuration file.
48 CF ERR - FILE INCOMPLETE	The TFTP configuration file contained an incomplete last line that did not end in a new line character.
49 CF ERR - LINE TOO LONG	A line being processed in the TFTP configuration file was longer than the print server could accept.
4A CF ERR - UNKNOWN KEYWORD	A TFTP configuration file line contained an unknown keyword.
4B CF ERR - MISSING PARAMETER	A line in the TFTP configuration file was missing a required parameter.
4C CF ERR - INVALID PARAMETER	A line in the TFTP configuration file contained an invalid value for one of the parameters on that line.
4D CF ERR - ACCESS LIST EXCEEDED	The TFTP configuration file specified too many access list entries using the "allow:" keyword.
4E CF ERR - TRAP LIST EXCEEDED	The TFTP configuration file specified too many trap destination list entries using the "trap-destination:" keyword.
4F TFTP REMOTE ERROR	The TFTP transfer of the configuration file from the host to the print server failed with the remote host sending a TFTP ERROR packet to the print server.

50 TFTP LOCAL ERROR	The TFTP transfer of the configuration file from the host to the print server failed with the local print server encountering some form of inactivity timeout or excessive retransmissions situation.
51 TFTP RETRIES EXCEEDED	The overall retrying of the TFTP transfer of the configuration file from the host to the print server has exceeded a retry limit.
52 BAD BOOTP/DHCP REPLY	An error was detected in the BOOTP or DHCP reply that the print server received. The reply either had insufficient data in the UDP datagram to contain the minimum BOOTP/DHCP header of 236 bytes, had an operation field that was not BOOTPREPLY(0X02), had a header field that did not match the print servers hardware address, or had a UDP source port that was not the BOOTP/DHCP server port (67/udp).
53 BAD BOOTP TAG SIZE	The tagsize in a vendor specific field in the BOOTP reply is either 0, or greater than the remaining number of unprocessed bytes in the vendor specified area.
54 BOOTP/RARP IN PROGRESS	The print server is currently in the process of obtaining its basic IP configuration information through BOOTP/RARP.
55 BOOTP/DHCP IN PROGRESS	The print server is currently in the process of obtaining its basic IP configuration information through BOOTP/DHCP, and has not detected any errors.
56 DHCP NAK	The print server received a negative acknowledgment message from the DHCP server in response to a configuration request.
57 UNABLE TO CONNECT DHCP SVR	The print server had received IP parameters from a DHCP server, but communication with the DHCP server has been lost. Check status of the DHCP server. If an infinite lease was assigned, the print server will use the IP address of the most recent DHCP server used, but operation may be degraded until a DHCP server responds.
58 POSTSCRIPT MODE NOT SELECTED	The printer does not support AppleTalk or AppleTalk extensions.
59 INCOMPLETE F/W - MUST DOWNLOAD	Firmware download message. Currently downloading firmware to the print server, or the download did not complete properly.
5A TURN PRINTER OFF/ON	Firmware download message. Download of firmware is complete. Power cycle the print server.
83 DISCONNECTING FROM SERVER	The server has been shut down because of a configuration change or reset request. This message automatically clears after a few seconds, unless the printer is off line, is in an error state, or is servicing another I/O port or another network protocol.

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End of troubleshooting

If you have not been able to correct your print server problem using this troubleshooting procedure, you will need to contact HP technical support for further assistance. Click on the button below for details.

Contact HP

Print server OK

At this point in the troubleshooting procedure, it appears that:

- your print server hardware is functioning correctly
- your physical network connection is functioning correctly
- the print server and the printer are connected correctly

Click on the Continue button below to return to the Troubleshooting Overview page and continue with the next step of the troubleshooting procedure.

Continue

Back to start of troubleshooting for:
HP Jetdirect 175X

Troubleshooting Overview for HP Jetdirect 175X

Back to start of troubleshooting for:
HP Jetdirect 175X

The questions below will help you troubleshoot your print server quickly. Just answer each question in turn. For each question:

- If your answer is Yes, go on to the next question.
- If your answer is No, there is a problem. Click on the No button for a procedure to solve the problem. After you've solved the problem, the troubleshooting procedure may bring you back to this page.
- If you're not sure of the answer, or if you don't understand the question, click on the ??? button for more detailed information about the question.

At the bottom of this page are links to some additional topics related to troubleshooting the print server.

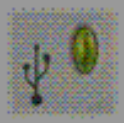
Please answer the questions below in the order listed.

1 **Is your printer ON and ONLINE?**

If **Yes**, continue with the next question.

No ???

2 **Is your print server's USB light ON (solid green)?**



If **Yes**, continue with the next question.

No ???

3 **Is your print server's Power/Status light ON (solid green)?**

If **Yes**, continue with the next question.

No ???

4 **Is one of the print server's 10/100 link lights ON (solid green)?**

If **Yes**, continue with the next question.

No ???

5 **Can you print a Jetdirect configuration page?**

Yes | No | ???

Related topics:

Interpreting the HP Jetdirect 175X configuration page

Interpreting the lights on the HP Jetdirect 175X print server

Resetting the HP Jetdirect 175X print server to factory defaults (cold reset)

Troubleshooting Overview for HP Jetdirect 175X

Back to start of troubleshooting for:
HP Jetdirect 175X

The questions below will help you troubleshoot your print server quickly. Just answer each question in turn. For each question:

- If your answer is Yes, go on to the next question.
- If your answer is No, there is a problem. Click on the No button for a procedure to solve the problem. After you've solved the problem, the troubleshooting procedure may bring you back to this page.
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At the bottom of this page are links to some additional topics related to troubleshooting the print server.

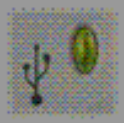
Please answer the questions below in the order listed.

1 **Is your printer ON and ONLINE?**

If **Yes**, continue with the next question.

No ???

2 **Is your print server's USB light ON (solid green)?**



If **Yes**, continue with the next question.

No ???

3 **Is your print server's Power/Status light ON (solid green)?**

If **Yes**, continue with the next question.

No ???

4 **Is one of the print server's 10/100 link lights ON (solid green)?**

If **Yes**, continue with the next question.

No ???

5 **Can you print a Jetdirect configuration page?**

Yes | No | ???

Related topics:

Interpreting the HP Jetdirect 175X configuration page

Interpreting the lights on the HP Jetdirect 175X print server

Resetting the HP Jetdirect 175X print server to factory defaults (cold reset)

Resetting the HP Jetdirect 175x print server to factory defaults (cold reset)

Back to start of troubleshooting for:
HP Jetdirect 175X

Once you configure the HP print server, the configuration settings are retained in memory unless you manually reset them to factory defaults.

To reset the print server configuration to factory defaults, follow these steps:

1. Unplug the power module from the back of the print server.
2. While holding down the **Test** button on the back of the print server, plug the power module back into the print server and continue to hold down the Test button for about five seconds. Any user-configured settings will be erased.

Browse HP.

General Information (http://www.hp.com/support/net printing)
(The central location on HP's web site for the HP Jetdirect print servers and similar products)

Online Customer Forum (http://www.hp.com/go/forums)
(The central location on HP's web site for the HP Jetdirect print servers and similar products)

Customer Support (http://www.hp.com/support/support_assistance)
(Lists all of the support options offered by HP and contact information such as phone numbers and e-mail addresses)

Back to start of troubleshooting for:
HP Jetdirect 175X

Call HP.

Asia Pacific

North America

Latin America

Europe, Middle East, and Africa

HP Customer Care Centers			
Argentina (inside Argentina)	Denmark	Japan	Singapore
Argentina (outside Argentina)	English International	Korea, Republic of	South Africa
Australia	Finland	Malaysia	Spain
Austria	France	Mexico	Sweden
Belgium	Germany	Netherlands	Switzerland
Brazil (Great Sao Paulo)	Greece	New Zealand	Taiwan
Brazil (outside Great Sao Paulo)	Hungary	Norway	Thailand
Canada	India	Peru	Turkey
Chile	Indonesia	Philippines	Ukraine
China	Ireland	Poland	United Arab Emirates (UAE)

Colombia	Israel	Portugal	United Kingdom
Czech Republic	Italy	Russian Federation	US
			Viet Nam

Asia Pacific

Australia	(03) 8877 8000 Hours of operation: 9:00 a.m. to 5:00 p.m. Monday through Friday For all spare parts including technical reference manuals, call: 1800 670 054 Hours of operation: 9:00 a.m. to 5:00 p.m. Monday through Friday
China	+ 86 (0)10 6564 5959 Hours of operation: 8:30 a.m. to 5:30 p.m. Monday through Friday
India	+ 91 11 682 6035 Hours of operation: 9:30 a.m. to 5:30 p.m. Monday through Friday
Indonesia	+62 (21) 350 3408 Hours of operation: 8:00 a.m. to 5:00 p.m. Monday through Friday
Japan	+ 81 3 3335 8333 Hours of operation: 9:00 a.m. to 12:00 p.m. and 13:00 a.m. to 17:00 p.m. Monday through Friday
Korea, Republic of	+82 (2) 3270 0700 Hours of operation: 9:00 a.m. to 6:00 p.m. Monday through Friday; 9:00 a.m. to 1:00 p.m. on Saturdays Outside Seoul only: 080 999 0700 Hours of operation: 9:00 a.m. to 6:00 p.m. Monday through Friday 9:00 a.m. to 1:00 p.m. on Saturdays
Malaysia	+60 (3) 295 2566 Hours of operation: 8:30 a.m. to 5:30 p.m. Monday through Friday Penang 1 300 88 00 28 Hours of operation: 8:30 a.m. to 5:30 p.m. Monday through Friday
New Zealand	+64 (9) 356 6640 Hours of operation: 9:00 a.m. to 5:00 p.m. Monday through Friday
Philippines	+ 63 (2) 867 3551 Hours of operation: 8:30 a.m. to 5:30 p.m. Monday through Friday
Singapore	+65 272 5300 Hours of operation: 8:30 a.m. to 5:30 p.m. Monday through Friday

Taiwan	+ 886 (2) 2717 0055 Hours of operation: 8:30 a.m. to 6:00 p.m. Monday through Friday
Thailand	+66 (2) 661 4000 Hours of operation: 8:30 a.m. to 5:30 p.m. Monday through Friday
Viet Nam	+84 (0) 8 823 4530 Hours of operation: 8:00 a.m. to 5:00 p.m. Monday through Friday and from 8:00 a.m. to 12.00 p.m on Saturday

North America

Canada	905-206-4663 or (800) 387-3867 Hours of operation: 8:00 a.m. to 8:00 p.m. Monday through Friday
US	208-323-2551 Hours of Operation: 6:00 a.m. to 6:00 p.m. PST Monday though Friday

Latin America

Argentina	(from inside Argentina) 0810-555-5520 Hours of operation: 8:30 a.m. to 7:30 p.m. Monday through Friday
Argentina	(from outside Argentina) (5411)4778 8380 Hours of operation: 8:30 a.m. to 7:30 p.m. Monday through Friday
Brazil	Great Sao Paulo (support-HelpPhone) Phone: (11) 3747-7799 Fax : (11) 3747-7765 Hours of operation: 8:00 a.m. to 7:00 p.m. Monday through Friday Call Centralization (Hardware Support) (11) 7297-4998 Hours of operation: 8:00 a.m. to 7:00 p.m Monday through Friday Other Information Phone Phone: (11) 3747-7799 Fax : (11) 3747-7765 Hours of operation: 8:00 a.m. to 10:00 p.m. Monday through Friday; 9:00 a.m. to 6:00 p.m. on Saturday

Brazil	Outside Great Sao Paulo Call Centralization - Hardware Support 0800-130999 Hours of operation: 8:00 a.m. to 7:00 p.m Monday through Friday Call Centralization 0800-130999 Hours of operation: 8:00 a.m. to 7:00 p.m Monday through Friday Other information: Phone : 0800-157751 Fax : (11) 3747-7765 Hours of operation: 8:00 a.m. to 10:00 p.m. Monday through Friday 9:00 a.m. to 6:00 p.m. on Saturday Support - HelpPhone : Phone: 0800-157751 Fax: (11) 3747-7765 Hours of operation: 8:00 a.m. to 7:00 p.m. Monday through Friday
Chile	Post-sales Business Computing 800-22-5547 Post-sales Home Office Computing Phone : 800-360-999 Pre-sales 123-800-360-999 Hours of operation: 9:00 a.m. to 6:00 p.m. Monday through Friday
Colombia	9-800-91477 Hours of operation: 8:00 a.m. to 6:00 p.m. Monday through Friday
Mexico	Mexico City 52-58-9922 Hours of operation: 8:30 a.m. to 22:00 p.m. Monday through Friday; 9:00 a.m. to 14:00 p.m. on Saturday Outside Mexico City 01-800-472 6684 Hours of operation: 8:30 a.m. to 22:00 p.m. Monday through Friday; 9:00 a.m. to 14:00 p.m. on Saturday.
Peru	0-800-10111 Hours of operation: 9:00 a.m. to 6:00 p.m. Monday through Friday
Venezuela	Post-sales 800 47 777 (Caracas 207 8488) Hours of operation: 8:00 a.m. to 8:00 p.m. Monday through Friday

Europe, Middle East, and Africa

Hours of operation for HP Jetdirect products are: Monday to Friday from 8:30 until 18:00

(CET). Please note that support in your language or your country might not be available for all products.

Austria	+ 43 (0)7114 201080
Belgium	Dutch Phone: + 32 (0)2 626 8806 French Phone : + 32 (0)2 626 8807
Czech Republic	+ 42 (0)2 6130 7310 Hours of operation: 08:00 to 18:00 Monday through Thursday; 08:00 to 16.30 on Friday
Denmark	+ 45 39 29 4099
English International	+ 44 (0)207 512 52 02
Finland	+ 358 (0)203 47 288
France	+ 33 (0)1 43 62 34 34
Germany	+ 49 (0)180 52 58 143 (24PF/min)
Greece	+ 30 (0)1 619 64 11 Hours of operation: 09:00 to 17:00 Monday through Friday
Hungary	+36 (0)1 382 1111 Hours of operation: 08:30 to 18:00 Monday through Friday
Ireland	+ 353 (0)1 662 5525
Israel	Phone: + 972 (0)9 9524848 Fax : + 972 (0)9 9524849 Hours of operation: 09:00 to 18:00 Sunday through Thursday
Italy	+ 39 02 264 10350
Netherlands	+ 31 (0)20 606 8751
Norway	+ 47 22 11 6299
Poland	Phone: + 48 22 519 06 00 Fax : + 48 22 519 06 01 Hours of operation: 08:00 to 17:00 Monday through Friday
Portugal	+ 351 21 3176333
Russian Federation	Moscow + 7 095 797 3520 Hours of operation: 09:00 to 18:00 Monday through Friday St Petersburg +7 812 346 7997 Hours of operation: 09:00 to 18:00 Monday through Friday

South Africa	086 000 1030 inside RSA +27-11 258 9301 outside RSA Hours of operation: 08:00 to 17:00 Monday through Friday
Spain	+ 34 902 321 123
Sweden	+ 46 (0)8 619 2170
Switzerland	+ 41 (0)848 80 11 11
Turkey	+ 90 212 221 69 69 Hours of operation: 08:30 to 18:00 Monday through Friday
Ukraine	+7 (380-44) 490-3520 Hours of operation: 09:00 to 18:00 Monday through Friday
United Arab Emirates	Customer Care Reception & Technical Support Phone : 971 4 883 8454 Fax : 971 4 883 9495 This Call Center will answer customer queries from UAE, but also Bahrain, Qatar, Saudi Arabia, Jordan, Palestine, Egypt, Yemen, Lebanon, Kuwait & Oman. The languages supported are English & Arabic.
United Kingdom	+ 44 (0)207 512 52 02

Getting Support and Service

HP Jetdirect Print Servers

Help-yourself Troubleshooting

Information to solve problems and get your print server working

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HP Customer Care by Phone

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

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

For the most recent HP Customer Care telephone numbers worldwide, see phone numbers or visit http://www.hp.com/support/support_assistance and select "call hp". In the USA, the HP Customer Care telephone number for HP Jetdirect products is: **208-323-2551**.

WWW: HP Customer Care Online

Our support pages on the HP Web site www.hp.com/support/net_printing are a collection of information to help solve your issues and answer your questions about your HP Jetdirect print server, 24 hours a day, 7 days a week.

Also: Software, driver, and firmware image upgrades

WWW: 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 "hp network printing user support forum".

Getting Warranty Service

Getting warranty service

Limited Global Warranty Statement and Service

HP J6035A Jetdirect 175X External Print Server

HEWLETT-PACKARD LIMITED GLOBAL WARRANTY STATEMENT

HP Product	Duration of Warranty
HP J6035A Jetdirect 175X External Print Server	One (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. HP's limited warranty is valid in any country or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country for which it was never intended to function for legal or regulatory reasons.

7. 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.

8. 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.

9. 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.

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: see the warranties booklet accompanying your product packaging.

México

Póliza de Garantía: see the warranties booklet accompanying your product packaging.

Getting warranty service

For your records, please retain your original proof of purchase. Record the product number and serial number. Your product number is on a label on the bottom of the print server, for example, “J6035A”. The serial number is on the same label.

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.

HP Customer Care for warranty service

For warranty service on HP Jetdirect products, call the HP Customer Care Center. See phone numbers or visit http://www.hp.com/support/support_assistance and select "call hp". The HP Customer Care representative will help you with troubleshooting, and advise you on warranty service. When calling, please have the following information ready:

- HP Jetdirect product you are calling about, for example, "J6035A".
- Model number of the product, for example, "Jetdirect 175X".
- Serial number of the product.
- Complete description of the problem.
- Proof of purchase of your product.
- Your shipping address.

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); prepare to supply shipping and billing addresses and payment information.

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.

Specifications

HP J6035A Jetdirect 175X External Print Server

Supported networking

Physical

- Supports unshielded or shielded twisted-pair cabling, using an RJ-45 connector, for:
  - IEEE 802.3i 10Base-T (Ethernet)
  - IEEE 802.3u 100Base-TX (Fast Ethernet)
- Requires a 10Base-T or 100Base-T network hub or concentrator that supports link beat (link test pulse) signals.

Supported network systems

- *Microsoft:* Windows 95, 98, 2000, ME, NT 4.0
- *Macintosh:* Mac OS 8.6 and later

Supported network protocols

- TCP/IP
- IPX/SPX (Direct mode {peer-to-peer} only)
- *Macintosh:* EtherTalk

Physical specifications

Interfaces

Port	Specification
Network	See network specifications above.
USB	Female “A” connector, complies with USB version 1.1 specifications

Physical dimensions

	With clip attached	Excluding any protrusions for connectors, clips, and so on
Width	97 mm (3.8 in)	92 mm (3.6 in)
Length	129 mm (5.1 in)	129 mm (5.1 in)
Height	45 mm (1.8 in)	36 mm (1.4 in)

Weight

Weight	108 g (3.9 oz)

Environmental specifications

	Operating environment	Storage environment
Temperature	0° C to 55° C (32° F to 131° F)	–40° C to 70° C (–6° F to 158° F)
Relative humidity	15% to 95% at 40° C (104° F)	90% at 65° C (149° F)
Altitude	4.6 km	4.6 km

Acoustic Noise: Not applicable

Electrical specifications

Power requirements

	Print server	Power module	
Input voltage	13 Vdc	See “input rating” for power modules below	
Nominal output voltage	n/a	13 Vdc	
Input current	140 mA @ 13 V	1.2 A	Depends on particular power module
Max. output current	n/a	300 mA	
Frequency range	dc	50/60 Hz	Depends on particular power module
Power consumption	1.2 W	1.2 W	

Power modules

Regions	Part num.	Input rating	Output rating
Australia, New Zealand, Argentina	0950-3172	240 Vac 50 Hz	13 Vdc @ 300 mA
	0950-3358	240 Vac 50 Hz	13 Vdc @ 800 mA
China	0950-2806	220 Vac 50 Hz	13 Vdc @ 300 mA
	0950-3347	220 Vac 50 Hz	13 Vdc @ 800 mA
Continental Europe	0950-3170	230 Vac 50 Hz	13 Vdc @ 300 mA
	0950-3349	230 Vac 50 Hz	13 Vdc @ 800 mA
Japan	0950-3173	100 Vac 50 Hz	13 Vdc @ 300 mA
	0950-3352	100 Vac 50 Hz	13 Vdc @ 800 mA
South Korea	9100-5168	220–240 Vac 50 Hz	13 Vdc @ 625 mA
	0950-3351	220 Vac 50 Hz	13 Vdc @ 800 mA
South Africa, India	9100-5171	220–250 Vac 50 Hz	13 Vdc @ 625 mA

	0950-3354	220–250 Vac 50 Hz	13 Vdc @ 800 mA
United Kingdom, Singapore, Ireland, Hong Kong	0950-3171	220–240 Vac 50 Hz	13 Vdc @ 300 mA
	0950-3350	220–240 Vac 50 Hz	13 Vdc @ 800 mA
USA, Canada, Latin American, Taiwan	0950-3169	110–127 Vac 60 Hz	13 Vdc @ 300 mA
	0950-3348	110–127 Vac 60 Hz	13 Vdc @ 800 mA
Note: If two parts are listed for one region, either part can be used regardless of output rating.			

USB: Downstream power supplied

Complies with USB 1.1 specifications

Electromagnetic specifications

Electromagnetic immunity

See the Declaration of Conformity.

Electromagnetic emissions

- *USA:* FCC part 15 Class B
- *Canada:* ICES-003 (B)
- *Japan:* VCCI Class 1, 2
- *Europe:* CISPR-22/EN55022 Class B
- *Taiwan:* CNS 13438
- *Australia/New Zealand:* AS/NZA 3548
- *Russia:* GOST 292116

Safety statements

Product complies with:

- IEC 950: (1991)+A1, A2, A3, A4 / EN60950 (1992)+A1, A2, A3, A4, A11
- UL 1950
- CSA 950
- NOM-019-SCIFI-1994, NOM-001-SCFI-1993

Regulatory statements

USA: FCC Class B Statement (U.S.A)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference when the equipment is operated in a residential installation. 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

Declaration of Conformity

This Declaration of Conformity complies with ISO/IEC Guide 22 and EN45014. It identifies the product, manufacturer's name and address, and applicable specifications recognized in the European community.

Australia


This equipment complies with Australian EMC requirements.

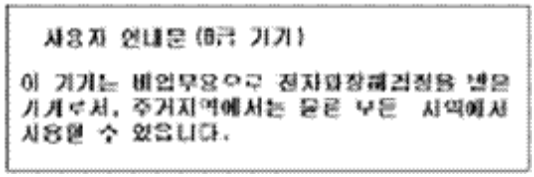
Canada

This equipment complies with Canadian EMC Class B requirements.

Japan: VCCI Class 2

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Ｂ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると受信障害を引き起こすことがあります。
取り扱い説明書に従って正しい取り扱いをして下さい。

Korea: EMI



China: Chinese Safety Statement

See Chinese Safety Statement.

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: JetDirect 175X External Print Server

Model Number: J6035A

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 B
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 B

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.

This product was tested in a typical configurations with Hewlett-Packard Co. products.

Roseville, May 8, 2001

Mark Vigeant

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).

HP网络产品使用安全手册

使用须知

欢迎使用惠普网络产品，为了您及仪器的安全，请您务必注意如下事项:

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

警告

为防止火灾或触电事故，请不要将该机放置于淋雨或潮湿处。

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络。

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