## **hp** LaserJet 3300mfp





use



hp LaserJet 3300mfp

user guide

#### **Copyright Information**

© Copyright 2002, Hewlett-Packard Company

All Rights Reserved. Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

A user of the Hewlett-Packard printer associated with this user guide is granted a license to: a) print hard copies of this user guide for PERSONAL, INTERNAL or COMPANY use subject to the restriction not to sell, re-sell or otherwise distribute the hard copies; and b) place an electronic copy of this user guide on a network server, provided access to the electronic copy is limited to PERSONAL, INTERNAL users of the Hewlett-Packard printer associated with this user guide.

Part number: C9124-90909 Edition 2, February 2002

#### Warranty

The information contained in this document is subject to change without notice.

Hewlett-Packard makes no warranty of any kind with respect to this information.

HEWLETT-PACKARD SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Hewlett-Packard shall not be liable for any direct, indirect, incidental, consequential, or other damage alleged in connection with the furnishing or use of this information.

#### **Trademark Credits**

Microsoft®, Windows®, and Windows NT® are U.S. registered trademarks of Microsoft Corporation.

All other products mentioned herein may be trademarks of their respective companies.

## Contents

#### 1 Getting to know your product 2 Getting started 3 Changing your product's general default settings

To change the ring volume of the fax product	
To change the control panel key press volume	
Changing settings from your computer	
To change default settings across all applications (Windows)	
To change default settings across all applications (Macintosh)	
To temporarily change settings from a software application (Windows)	
To temporarily change settings from a software application (Macintosh) 3	9
4 Printing	
Printing with manual feed	2
To print using manual feed	
Stopping or canceling a print job	
Printer drivers	
Understanding print quality settings	
To temporarily change print quality settings	
To change print quality settings for all future jobs	
To enable EconoMode (save toner)	
Optimizing print quality for media types	
To access the optimizing feature	
Printing envelopes	
To print one envelope	
To print multiple envelopes	
Printing transparencies and labels 4	
To print transparencies or labels	
Printing letterhead or preprinted forms	8
To print letterhead or preprinted forms	8
Printing custom-sized media or card stock	9
	9
To print custom-sized media or card stock	
Printing on both sides of the media (manual duplexing)	
Printing on both sides of the media (manual duplexing)	0
Printing on both sides of the media (manual duplexing)	0
Printing on both sides of the media (manual duplexing)	0 1 2
Printing on both sides of the media (manual duplexing)	0 1 2 2
Printing on both sides of the media (manual duplexing)	0 1 2 2
Printing on both sides of the media (manual duplexing)	0 1 2 2 3
Printing on both sides of the media (manual duplexing)	0 1 2 2 3 3
Printing on both sides of the media (manual duplexing)	0 1 2 2 2 3 3 4
Printing on both sides of the media (manual duplexing)	0 1 2 2 2 3 3 4
Printing on both sides of the media (manual duplexing)	0 1 2 2 2 3 3 4
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5   5 Copying	0 1 2 2 2 3 3 4 4
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  Starting a copy job 5  Starting a copy job 5  To duplex manually on lightweight media 5  Manual duplexing) 6  Manual duplexing	0 1 2 2 2 3 3 4 4
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5   **Starting a copy job 5 Canceling a copy job 5  **Canceling a copy job 6  **Canceling a copy job 7  **Canceling a copy job	0 1 2 2 2 3 3 4 4 6 6
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  Copying  Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5	012223344 6666
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 To print booklets 5 To access the watermark feature 5  Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 To adjust the copy quality for the current job 5	012223344 6666
Printing on both sides of the media (manual duplexing)	012223344 66667
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5   **Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 Adjusting the default copy quality 5 To adjust the copy quality 5 To adjust the copy quality 5	012223344 666677
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  5 Copying Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 Adjusting the default copy quality 5 To adjust the copy quality 5 To adjust the copy quality 5 Adjusting the lighter/darker (contrast) setting for the current job 5	012223344 6666777
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  5 Copying Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality 15 To adjust the copy quality 5 To adjust the copy quality 5 To adjust the copy quality 5 To adjust the lighter/darker (contrast) setting for the current job 5 To adjust the lighter/darker setting for the current job 5 To adjust the lighter/darker setting for the current job 5	012223344 66667777
Printing on both sides of the media (manual duplexing)	012223344 666677777
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  Copying  Starting a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 Adjusting the default copy quality 5 To adjust the copy quality 5 To adjust the lighter/darker (contrast) setting for the current job 5 Adjusting the default lighter/darker (contrast) setting 5 To adjust the default lighter/darker (contrast) setting 5 To adjust the default lighter/darker (contrast) setting 5 To adjust the default lighter/darker setting 5	012223344 6666777777
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  5 Copying Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 Adjusting the default copy quality for the current job 5 Adjusting the lighter/darker (contrast) setting for the current job 5 To adjust the lighter/darker setting for the current job 5 Adjusting the default lighter/darker (contrast) setting for the current job 5 Adjusting the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting 5 To adjust the default lighter/darker setting 5 Reducing or enlarging copies for the current job 5 Reducing or enlarging copies for the current job 5	012223344 6666777778
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  5 Copying Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 Adjusting the default copy quality To adjust the copy quality for the current job 5 To adjust the lighter/darker (contrast) setting for the current job 5 Adjusting the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting for the current job 5 Adjusting the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting 5 Reducing or enlarging copies for the current job 5 To reduce or enlarge copies for the current job 5	0122233344 6666677777888
Printing on both sides of the media (manual duplexing)  To duplex manually on lightweight media  To duplex manually on heavy media or card stock (straight-through output path)  5 Printing multiple pages on a single sheet of media  To print multiple pages on a single sheet (Windows)  To print multiple pages on a single sheet (Macintosh)  5 Printing booklets  To print booklets  To print booklets  Frinting watermarks  To access the watermark feature  5  Copying  Starting a copy job.  Canceling a copy job  Adjusting copy quality for the current job.  To adjust the copy quality for the current job  Adjusting the default copy quality  To adjust the copy quality  To adjust the lighter/darker (contrast) setting for the current job.  To adjust the lighter/darker (setting for the current job.  To adjust the default lighter/darker setting for the current job.  To adjust the default lighter/darker setting  Reducing or enlarging copies for the current job.  5 Adjusting the default copy size  5 Adjusting the default copy size	0122233344 6666777778888
Printing on both sides of the media (manual duplexing) 4 To duplex manually on lightweight media 5 To duplex manually on heavy media or card stock (straight-through output path) 5 Printing multiple pages on a single sheet of media 5 To print multiple pages on a single sheet (Windows) 5 To print multiple pages on a single sheet (Macintosh) 5 Printing booklets 5 To print booklets 5 To print booklets 5 Printing watermarks 5 To access the watermark feature 5  5 Copying Starting a copy job 5 Canceling a copy job 5 Adjusting copy quality for the current job 5 To adjust the copy quality for the current job 5 Adjusting the default copy quality To adjust the copy quality for the current job 5 To adjust the lighter/darker (contrast) setting for the current job 5 Adjusting the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting for the current job 5 Adjusting the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting for the current job 5 To adjust the default lighter/darker setting 5 Reducing or enlarging copies for the current job 5 To reduce or enlarge copies for the current job 5	012223344 666677777788889

To change the default copy collation setting.  Changing the number of copies.  To change the number of copies for the current job.  To change the default number of copies.  Using HP LaserJet Copier software  To access HP LaserJet Copier (Windows or Macintosh)  Using HP LaserJet Copy Plus software.  To access HP LaserJet Copy Plus (Windows)  To access HP LaserJet Copy Plus (Macintosh)  Copying photos, two-sided originals, or books	60 60 60 60 61 61
To copy or scan a photo	62
6 Scanning	
Understanding scanning methods	66 66 67
To reprogram the scan to button destinations	68 68
To scan using HP LaserJet Director (Windows)	69 69 70
Scanning with TWAIN-compliant software	. 70
Archiving scanned text or images	. 71
To use the archive feature (Macintosh)	. 72
To change the OCR word processing application	. 72 . 72
Enhancing images with HP LaserJet Document Manager or HP Photo Center	
Adding annotations to HP documents	. 75
To change the annotation settings	. 75
To scan to e-mail (Windows)	. 75 . 76
Scanner resolution and color	. 76 . 77
7 Faxing	
Setting the information in the fax header	
To set the fax header	
Setting the answer mode	. 80 . 80

Loading originals to fax	
To load fax documents into the ADF input tray	
Sending faxes	
To send a fax to one recipient	
To send a fax to multiple recipients	
To send a fax using a group-dial code	
To send a fax to an ad hoc group	
Canceling a fax job	
To cancel the current fax job	
To cancel a fax job using fax job status	
Using manual dial	
To use manual dial	
Deleting faxes from memory	
To delete faxes from memory	
Redialing manually	. 84
To redial manually	. 84
Sending a fax at a future time	
To send a fax at a future time	. 85
Receiving faxes	. 85
To receive faxes when you hear fax tones	
To reprint a fax	. 85
To block or unblock fax numbers	. 86
Receiving faxes to your computer	. 86
To turn the receive to PC setting off from the control panel	. 87
About speed-dial codes, one-touch keys, and group-dial codes	. 87
To program speed-dial codes and one-touch keys	. 87
To delete speed-dial codes and one-touch keys	. 88
To quickly program speed-dial codes or one-touch keys	. 88
To program a one-touch key for alternate long distance	. 89
Managing group-dial codes	. 89
To program group-dial codes	. 89
To delete group-dial codes	
To delete an individual from a group-dial code	. 90
Deleting all phone book entries	. 91
To delete all phone book entries	. 91
Using dialing characters	
Dialing character table	91
To insert a pause or wait	. 92
Inserting a dial prefix	. 92
To set the dial prefix	
Using fax forwarding	. 93
To use fax forwarding	. 93
Using fax polling	
To poll (request a fax from) another fax machine	
Enabling an extension phone	
To enable an extension phone	. 93
Sending a fax by dialing from a telephone	
To send a fax by dialing from a telephone	
Changing the HP LaserJet 3330 product's volume settings	
To change the fax sounds (line monitor) volume	
To change the ring volume	
Changing the default resolution	
To change the default resolution	
Changing the default contrast	
To change the default contrast	
Changing the detect dial tone setting	
To change detect dial tone	95

Changing how the product answers incoming faxes
To set the answer mode to automatic or manual
Changing rings-to-answer
To set the number of rings-to-answer
Changing answer ring patterns
What is ring pattern service?
How do I get the service?
How will I know if it is working?
To change answer ring patterns
Changing the silence-detect mode
To change the silence detect mode 98
Changing autoreduction settings for incoming faxes
To change autoreduction for incoming faxes
Enabling stamp received faxes
To enable stamp received faxes
Setting the fax error correction
To change the error correction setting
Selecting tone- or pulse-dialing mode
To select tone- or pulse-dialing99
Changing redial settings
To turn the redial on busy option on or off
To turn the redial on no answer on or off
Using billing codes
To turn billing codes on or off
Changing the V.34 setting
To turn the V.34 setting on or off
Managing fax logs and reports
Printing the fax activity log
To print the fax activity log
Setting the fax activity log to print automatically
To set the fax activity log to print automatically
Printing a fax call report
To print a fax call report
Setting fax call report print times
To set fax call report print times
Including the first page of each fax on the fax call report
To include the first page of each fax on the fax call report
Printing a phone book report
To print a phone book report
Printing the billing codes report
To print the billing codes report
Printing a T.30 protocol trace report
To print a T.30 protocol trace report
To set T.30 protocol trace report print times
Printing the block fax list
To print the block fax list
Printing all fax reports
To print all fax reports
8 Networking
Understanding the print server's features and benefits
Using network protocols
Software installation
Network connection requirements
Installing the 310x print server
To connect the product to a network111
Installing the network software

Using the embedded web server
Prerequisites
Compatible web browsers
To start the embedded web server
Using HP Web JetAdmin
Using BOOTP
Setting up the BOOTP server
Bootptab file entries
Using DHCP
<del>-</del>
UNIX servers:
Windows NT 4.0 servers:
Windows 2000 servers:
Configuring the print server for DHCP configuration
Moving to another network
Printing a print server configuration page
To print a Jetdirect configuration page
For more information
9 Cleaning and maintenance
Joleaning and maintenance
Cleaning the outside of the product
To clean the exterior
To clean the glass
To clean the lid backing
Cleaning the print cartridge area
To clean the print cartridge area
Cleaning the printer media path
To clean the printer media path
Cleaning the pickup roller
To clean the pickup roller
Changing the pickup roller
To change the pickup roller
Changing the printer separation pad
To change the printer separation pad
Installing a new ADF
To install a new or replacement ADF
Changing an ADF pickup roller assembly
Removing and replacing the control panel bezel
Removing and replacing the control pariet bezel
40 Modie
10 Media
Product media specifications
Supported media sizes (printer)
Guidelines for using media
Paper
Common media problems table
Labels
Transparencies
Envelopes
Card stock and heavy media
Selecting media for the ADF
· ·
11 HP parts and accessories
parto ana accoccino
Ordering HP parts and accessories
HP parts and accessories chart 144
Power modules (network model only)145
HP LaserJet print cartridges

HP policy on non-HP print cartridges To install a print cartridge Storing print cartridges Print cartridge life expectancy Recycling print cartridges Saving toner DIMMs (memory or font) To test a DIMM installation or removal To install a DIMM To remove a DIMM	147 148 148 148 148 148
12 Troubleshooting printing problems	
Product will not turn on or print	154 155 155 156 156
Product does not pull media from the media input tray	156
Media curls when fed through product	
Printed page is different from what appeared onscreen	
Clearing media jams	
To clear a media jam	
To clear other media jams	
Tips to avoid media jams	
Improving print quality	
Light print or fade	
Toner specks	
Dropouts	
Vertical lines	
Gray background	
Toner smear	
Loose toner	
Vertical repetitive defects	
Misformed characters	
Page skew	
Curl or wave	
Wrinkles or creases 1	
Toner scatter outline	
Control panel error messages	
Critical error messages	
Alert messages	
Warning messages	166
13 Troubleshooting copy problems	
No copy came out	160
Copies are blank, or images are missing or faded	
Improving copy quality	
Preventing problems	
Clearing ADF media jams	
To clear a media jam from the ADF	
Removing a jammed ADF page	
7 0 17	171
Vertical white or faded stripes	i / 1

Blank pages	172
Unwanted lines	
Black dots or streaks	
Unclear text	
Reduced size	173
14 Troubleshooting scanning problems	
Scanned image is of poor quality	
Part of the image did not scan or text is missing	
The text cannot be edited	
The scan takes too long	
Error messages appear on the screen	
The scanner did nothing	
Improving scan quality	
Preventing problems	
Identifying and correcting scan defects	
Too light or dark	
Unwanted lines	
Black dots or streaks.	
Unclear text	
Reduced size	180
15 Troubleshooting faxing problems	
Fax phone problems	182
The document stops feeding during faxing	
Is the document too large or too small for the ADF?	
Are there problems with the fax machine you are sending to?	
Are there problems with the phone line?	
The product is receiving faxes but not sending them	
Is your product on a PBX system?	
Outgoing fax calls keep dialing	
Faxes you send are not arriving	
Is the receiving fax machine off or does it have an error condition?	
Is the fax still waiting in memory?	
All of the numbers in a long fax number cannot be dialed	
Unable to start receiving faxes from an extension phone	
Is the extension phone setting disabled?	
Is the telephone cord securely connected?	185
Voice calls are not being received	
by the phone or answering machine connected to the line	
Is the phone cord connected properly?	
Are the answer mode and rings-to-answer settings set properly?	
Incoming fax calls are not being answered	
Is the answer mode set to manual?	
Is the rings-to-answer setting set correctly?	
Is the answer ring pattern feature turned on?	
Is the phone cord connected properly?	
Is there a voice message being played by an answering machine?	
Are there too many devices connected to the phone line?	
Is the phone line working?	
Is a voice messaging service interfering with the product answering calls?	186 186
IN THE DITURNICE OUT OF DAMAGE.	124

Faxes are transmitting or being received very slowly	
Are you sending or receiving a very complex fax?	
Does the receiving fax machine have a slow modem speed?	
Is the resolution at which the fax was sent or received very high?	187
Is there a poor phone line connection?	187
Faxes are not printing or are printing incorrectly	
Is there media in the media input tray?	187
Is the receive to PC option selected?	187
Faxes are printing on two pages instead of one	187
Is the autoreduction setting set correctly?	187
Received faxes are too light or are printing only on half of the page	187
Did the product run out of toner while printing a fax?	187
Fax activity logs or call reports are not printing correctly	188
Are the activity log and call report settings correct?	188
The volume is too high or low	188
Do the volume settings need to be adjusted?	
,	
16 Troubleshooting network problems	
Troubleshooting overview	190
ON and READY	
Is your printer ON and READY?	
USB OK? (USB light ON solid green?)	
What is the state of the USB light?	
Power/Status OK? (Power/Status light ON solid green?)	
10/100 link OK? (10 light or 100 light ON solid green?)	
Check the print server's I/O status	
Configuration page does not print	
Error messages	
03 LAN Error: EXTERNAL LOOPBACK	
08 LAN Error: INFINITE DEFERRAL	
11 LAN Error: RETRY FAULTS	
12 LAN Error: NO LINKBEAT	
Resetting the 310x print server to factory defaults (cold reset)	
Interpreting the configuration page	
General information	
USB port information	
Network statistics	
TCP/IP protocol information	
IPX/SPX protocol information	
Novell/NetWare protocol information	
AppleTalk protocol information	
DLC/LLC protocol information	
Error messages	
Browse hp.com	
Cleanery	
Glossary	
Appendix A	
Specifications and regulatory information	
HP LaserJet 3300 series product	224
HP LaserJet 3300 series product specifications	224
Laser safety statement	
FCC regulations	
Declaration of Conformity	
Canada DOC regulations	
Laser statement for Finland	220

	Korean EMI statement	230
	Japan VCCI Class B regulations	
ΗP	LaserJet 3330 fax	
	HP LaserJet 3330 product fax specifications	
	FCC Part 68 Requirements (US)	
	Telephone consumer protection act (US)	
	IC CS-03 requirements	
	Regulatory information for EU countries	
ΗР	Jetdirect 310x print server	
• • •	HP Jetdirect 310x print server specifications	
	FCC compliance	
	Declaration of Conformity	
	Australia	
	Canada	
	Japan VCCI Class 1 regulations	
	Korean EMI statement	
	Chinese safety statement	
Εn	rironmental product stewardship program	
	Protecting the environment	
	Ozone production	
	Energy consumption	
	Toner consumption	
	Paper use	
	Plastics	
	HP LaserJet printing supplies	
	HP printing supplies returns and recycling program information	
	US returns	
	Non-US returns	
	Paper	
	Material restrictions	
	Material safety data sheets	
	Extended warranty	
	Spare parts and consumables availability	
	For more information	
ΗР	LaserJet 3300 series product battery	241
Α.	and and the D	
	opendix B	
Wa	arranties and licensing	
ΗР	software license agreement	243
	limited warranty statement.	
	illinited warranty statement.	244
۸.	ppendix C	
<b>Se</b>	rvice and support	
Obt	aining hardware service	247
	To obtain hardware service	
Ext	ended warranty	
	vice information form	

Index

## Getting to know your product

Use these topics to acquaint yourself with your new HP LaserJet 3300 series product:

- Identifying your product
- Identifying your product's hardware components
- Identifying your product's control panel components
- Identifying HP Jetdirect 310x print server components
- Identifying your product's software components

## **Identifying your product**

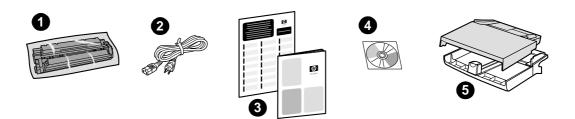
Use these topics to learn about your product's features and to make sure your package contents are complete:

- HP LaserJet 3300mfp
- HP LaserJet 3300se mfp
- HP LaserJet 3310mfp
- HP LaserJet 3320mfp
- HP LaserJet 3320n mfp
- HP LaserJet 3330mfp

#### HP LaserJet 3300mfp



The **HP LaserJet 3300mfp** prints and copies up to 15 pages per minute (ppm) and comes standard with a flatbed copier/scanner, 32 MB of RAM, a dual in-line memory module (DIMM) slot for adding fonts and memory, a USB 1.1 certified port, and an IEEE 1284-B parallel port.

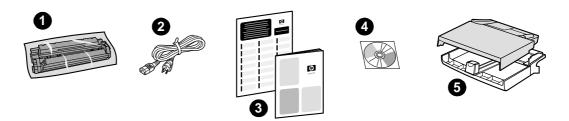


**Package contents:** 1) Print cartridge; 2) power cord; 3) getting started guide and support flyer; 4) CD-ROM containing product software and electronic user guide; 5) 250-sheet media input tray and priority input tray.

#### HP LaserJet 3300se mfp



The **HP LaserJet 3300se mfp** prints and copies up to 15 pages per minute (ppm) and comes standard with a flatbed copier/scanner, 32 MB of RAM, a dual in-line memory module (DIMM) slot for adding fonts and memory, a USB 1.1 certified port, an IEEE 1284-B parallel port, and specialized software. This product is available only in the U.S.

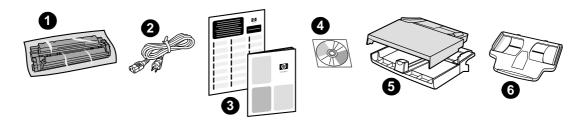


**Package contents:** 1) Print cartridge; 2) power cord; 3) getting started guide and support flyer; 4) CD-ROM containing product software and electronic user guide; 5) 250-sheet media input tray and priority input tray.

#### HP LaserJet 3310mfp



The HP LaserJet 3310mfp is a copier-centric product that prints and copies up to 15 pages per minute (ppm) and comes standard with a flatbed copier/scanner, a 50-page automatic document feeder (ADF), 32 MB of RAM, a dual in-line memory module (DIMM) slot for adding fonts and memory, a USB 1.1 certified port, and an IEEE 1284-B parallel port. The HP LaserJet 3310 product has no control panel scan buttons.



Package contents: 1) Print cartridge; 2) power cord; 3) getting started guide and support flyer; 4) CD-ROM containing product software and electronic user guide; 5) 250-sheet media input tray and priority input tray; 6) ADF input tray.

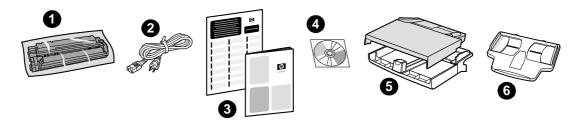
Note

Scanning with the HP LaserJet 3310 product can be done from your computer with the product software.

#### HP LaserJet 3320mfp



The **HP LaserJet 3320mfp** is a copier-centric product that prints and copies up to 15 pages per minute (ppm) and comes standard with a flatbed copier/scanner, a 50-page automatic document feeder (ADF), 32 MB of RAM, a dual in-line memory module (DIMM) slot for adding fonts and memory, a USB 1.1 certified port, and an IEEE 1284-B parallel port.



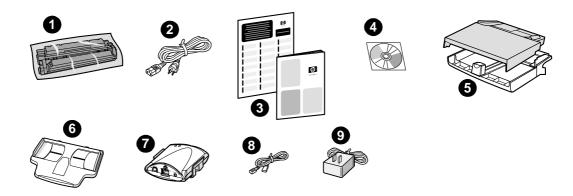
**Package contents:** 1) Print cartridge; 2) power cord; 3) getting started guide and support flyer; 4) CD-ROM containing product software and electronic user guide; 5) 250-sheet media input tray and priority input tray; 6) ADF input tray.

#### HP LaserJet 3320n mfp



The HP LaserJet 3320n mfp is a copier-centric product that prints and copies up to 15 pages per minute (ppm) and comes standard with a flatbed copier/scanner, a 50-page automatic document feeder (ADF), 32 MB of RAM, a dual in-line memory module (DIMM) slot for adding fonts and memory, la USB 1.1 certified port, and an IEEE 1284-B parallel port.

This product also includes networking capabilities and includes an HP Jetdirect 310x print server for connecting to a 10Base-T or 100Base-Tx network (sometimes called Ethernet and Fast Ethernet, respectively). The print server provides network solutions for communicating over TCP/IP, IPX/SPX, Novell Netware, and AppleTalk protocols.



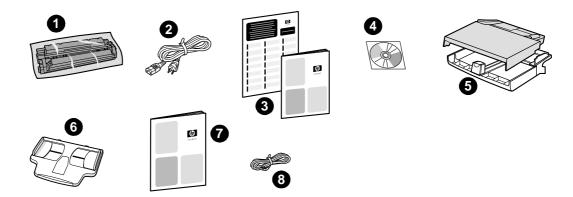
Package contents: 1) Print cartridge; 2) power cord; 3) getting started guide and support flyer; 4) CD-ROM containing product software, print server software, and electronic user guide; 5) 250-sheet media input tray and priority input tray; 6) ADF input tray; 7) HP Jetdirect 310x print server with mounting clip; 8) USB 2.0 certified cable; 9) print server power adapter.

#### HP LaserJet 3330mfp



The **HP LaserJet 3330mfp** is a copier-centric product that prints and copies up to 15 pages per minute (ppm) and comes standard with a flatbed copier/scanner, a 50-page automatic document feeder (ADF), 32 MB of RAM, a dual in-line memory module (DIMM) slot for adding fonts and memory, a USB 1.1 certified port, and an IEEE 1284-B parallel port.

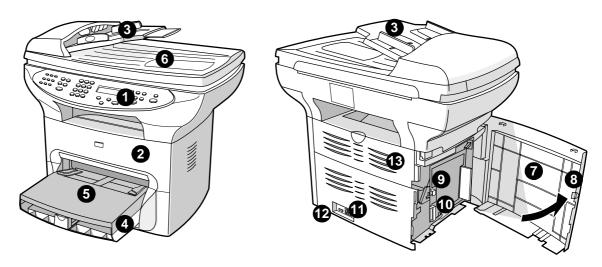
The 3330 also includes full-functionality fax capabilities with V.34 fax, including phone book, fax polling, and delayed fax features.



**Package contents:** 1) Print cartridge; 2) power cord; 3) getting started guide and support flyer; 4) CD-ROM containing product software, fax software, and electronic user guide; 5) 250-sheet media input tray and priority input tray; 6) ADF input tray; 7) fax guide; 8) phone cord.

## **Identifying your product's hardware components**

#### **HP LaserJet 3300 series hardware components**



- 1 Printer control panel
- 2 Print cartridge door
- **3** ADF input tray
- 4 Media input tray
- **5** Priority input tray
- 6 Flatbed scanner lid
- 7 Left side panel
- 8 Left side panel latch
- 9 USB port
- 10 Parallel port
- 11 Power receptacle
- 12 Power switch (220V product)
- **13** Straight-through output door

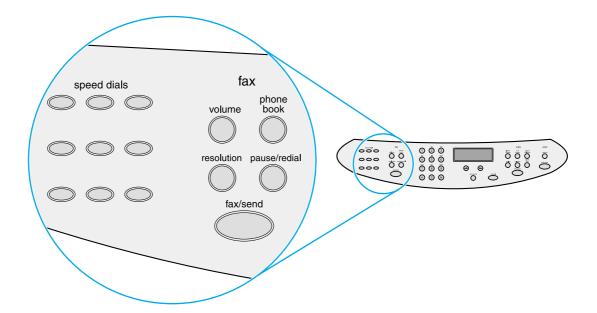
## Identifying your product's control panel components

Choose a section of the HP LaserJet 3300 control panel to display.

- 1 Fax controls
- 2 Alphanumeric buttons
- 3 Menu and cancel controls
- 4 Copy, scan, and start controls

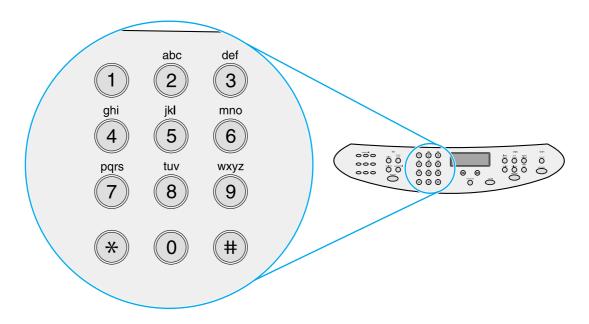
#### **Fax controls**

Use the fax controls to send and receive faxes and to change commonly used fax settings. Fax capability is available on the HP LaserJet 3330 product only. See <a href="Faxing">Faxing</a> for instructions on using the fax controls.



## **Alphanumeric buttons**

If you have a fax model, use the alphanumeric buttons to enter data into the product's display screen and dial phone numbers for faxing. For information on using alphanumeric key characters see Using dialing characters.

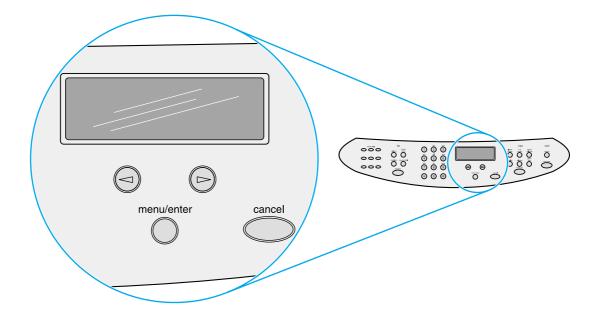


**Note** 

Keypad buttons are numeric on non-fax models.

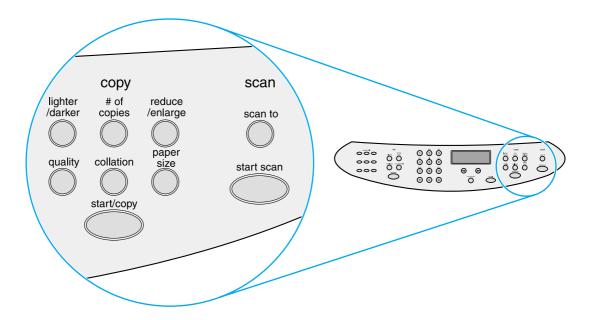
#### Menu and cancel controls

Use these controls to choose menu options, determine the product's status, and cancel the current job.



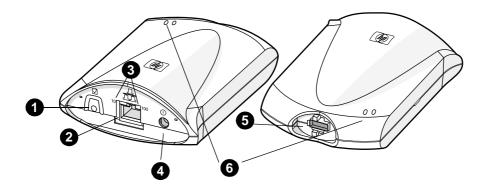
#### Copy, scan, and start controls

Use these controls to change commonly used default settings, to start scanning, and to start copying. For instructions on copying, see <a href="Copying">Copying</a>. For instructions on scanning, see <a href="Scanning">Scanning</a>.



#### **Identifying HP Jetdirect 310x print server components**

If you purchased an HP LaserJet 3320n model, an HP Jetdirect 310x print server was included with it. The graphic below points out the main features of the print server. See <a href="Networking">Networking</a> for information about using the print server to connect the product to a network.



- 1 Test button
- 2 Network port
- **3** 10 and 100 LED lights
- 4 Power outlet
- 5 USB port
- 6 Status indicator lights

## Identifying your product's software components

Note

Software components installed depend on OS, installation type, and the HP LaserJet 3300.

Below are the software items included with your product:

- HP LaserJet Director
- HP LaserJet Scan Control Viewer
- TWAIN Scan Driver
- HP LaserJet Fax
- HP LaserJet Configuration Utility
- HP Photo Center
- Read Iris OCR
- Uninstaller

# 2 Getting started

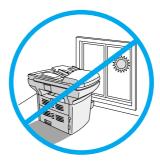
Use this information to perform basic assembly and installation tasks for your HP LaserJet 3300 series product:

- Finding a location for your product
- Connecting a printer cable to your product
- Installing a print cartridge
- Installing and loading the media input trays
- Installing the ADF input tray
- Connecting the power cord
- Loading originals to copy or scan
- Verifying your work

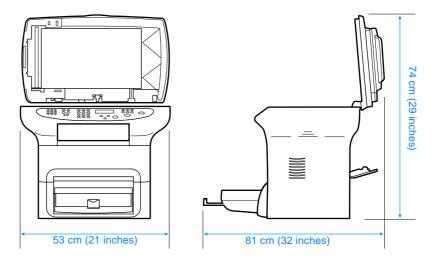
## Finding a location for your product

Install the product in a location that meets the following requirements:

 Situate the product on a sturdy, level surface out of direct sunlight and away from dust, open flames, and ammonia fumes.

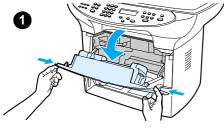


- Make sure the environment is well ventilated, free from abrupt temperature or humidity changes, and within the following limits:
  - Temperature: 15 to 32.5° C (59 to 90.5° F)
  - Relative Humidity: 10 to 80% humidity (no condensation)
- Make sure that there is enough space around the product for media access and proper ventilation; media fed into the straight-through media path will emerge behind the product.

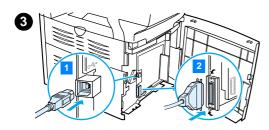


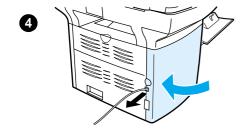
26 2 Getting started EN

## Connecting a printer cable to your product









To connect a printer cable to your product, use the following steps:

#### Note

Windows 95 and Windows NT 4.0 do not support USB cable connections with the printer. Macintosh computers do not support parallel cable connections.

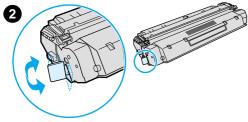
- 1 Open the print cartridge door by pulling the sides of the door forward as shown.
- **2** Open the product's left side panel by pressing the release latch.
- 3 Plug one end of the USB (1) or parallel cable (2) into the correct socket inside the left side panel as shown.
- 4 Thread the cable through the left side panel opening as shown, and close the left side panel.

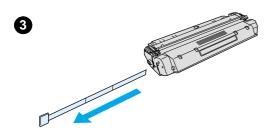
#### Note

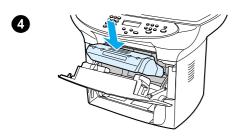
If you are using a USB cable, it should be threaded through the upper notch in the left side panel. If you are using a parallel cable, it should be threaded through the lower notch.

## Installing a print cartridge











To install a print cartridge, use the following steps:

#### **CAUTION**

To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

- 1 Make sure the print cartridge door is open.
- 2 Remove the print cartridge from its packaging, and locate the sealing tape at the end of the cartridge.
- 3 To remove the sealing tape from the cartridge, grasp the tape and pull it straight out from the cartridge. Avoid touching any black toner on the tape.
- 4 Insert the cartridge as shown, with the arrows pointing into the product.
- 5 Close the print cartridge door. The print cartridge engages when the door is closed.

#### **Note**

If toner gets on your clothing or other fabric, wipe off the toner with a dry cloth. Wash the items in cold water and air dry.

#### **CAUTION**

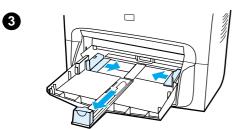
Hot water or heat from a dryer can set toner into fabric.

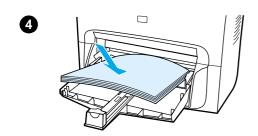
Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new, refilled, or remanufactured. Since they are not HP products, HP cannot influence their design or control their quality.

28 2 Getting started EN

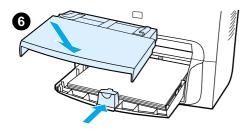
## Installing and loading the media input trays











To install and load the media input tray and the priority input tray, use the following steps:

- 1 Slide the trays in and down at an angle until they fit securely. Remove the tape connecting the two trays.
- 2 Remove the priority input tray.
- 3 Push in the guides past the normal paper size mark.
- 4 Roll the paper and place it in the tray.
- **5** Push down on the paper so it lies flat in the tray.
- 6 Push in the bottom guide so it is snug.
- 7 Install the priority input tray over the media input tray.

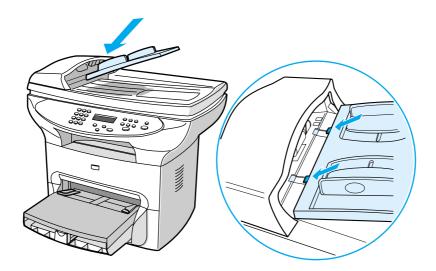
#### **Note**

If the media guides are not sufficiently tight, your media may skew and cause a media jam.

## **Installing the ADF input tray**

If your HP LaserJet 3300 series product comes with an ADF, or if you purchased the HP LaserJet 3300 series ADF accessory, use the following instructions to install the ADF input tray:

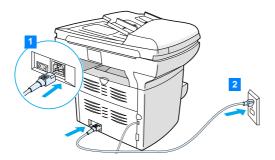
- 1 Align the two tabs on the input tray with the two grooves in the ADF lid.
- 2 Slide the tray into the grooves as shown until the tray snaps into place.



## Connecting the power cord

To connect your product to a power source, use the following steps.

- 1 If you have the 220V product, locate the power switch on the back of the product and make sure the product is switched off.
- **2** Connect the power cord to the product, as shown (1).
- 3 Plug the other end of the power cord directly into a grounded AC outlet (2).



4 If you have the 220V product, switch on the power. If you have the 110V product, there is no power switch. It will automatically power on when it is plugged in.

Note

HP does not recommend the use of uninterrupted power supply (UPS) battery backup devices or surge suppressors with this product. Many surge suppressors and battery backups can cause print defects.

30 2 Getting started EN

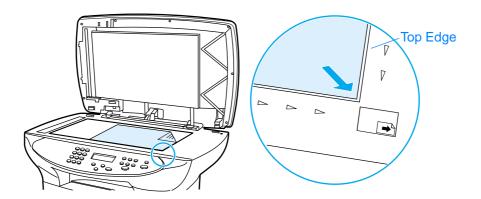
#### Loading originals to copy or scan

Use these instructions to load originals into your HP LaserJet 3300 series product for copying or scanning. For the best quality scans and copies, use the flatbed scanner. See <u>Selecting media for the ADF</u> for guidelines on choosing original documents for scanning and copying.

If you purchased an HP LaserJet 3300 product and want to purchase an ADF, see Ordering HP parts and accessories for more information.

#### To load originals onto the flatbed scanner

- 1 Make sure the ADF is free of media.
- 2 Lift the flatbed scanner cover.
- 3 Place the original document face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.
- 4 Gently close the lid.
- 5 The document is ready to be copied or scanned.



**CAUTION** 

To prevent damaging the product, do not allow the scanner lid to fall onto the flatbed scanner surface. Always close the scanner lid when the product is not in use.

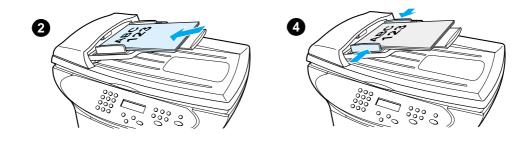
#### To load originals into the ADF input tray

#### Note

ADF capacity is up to 50 sheets of 75 g/m<sup>2</sup> (20-pound) media (depending on the thickness of the media), or until the ADF input tray is full.

The minimum size for media in the ADF is  $127 \times 127 \text{ mm}$  (5 x 5 inches). For smaller sizes use the flatbed scanner. The maximum size for media in the ADF is 215.9 mm wide by 381 mm long ( $8.5 \times 15 \text{ inches}$ ).

- 1 Make sure the flatbed scanner is free of media.
- 2 Close the flatbed scanner cover and put the top end of the original media stack into the ADF input tray, with the media stack face up and the first page to be scanned, copied, or faxed on top of the stack.
- 3 Slide the media stack into the ADF until the media does not move any farther.
- 4 Adjust the media guides until they are snug.
- **5** The document is now ready to be copied or scanned.



32 2 Getting started EN

#### Verifying your work

After setting up the product, verify your work by testing your HP LaserJet 3300 product's printing and copying functions.

#### To self-test the printer

To test the printer, use the following steps:

- 1 On the product's control panel, press **menu/enter**.
- 2 Use the < and > buttons to select Reports and press menu/enter.
- 3 Use the < and > buttons to select Config Report and press menu/enter.

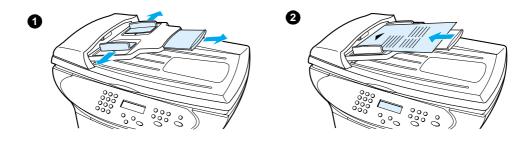
A configuration page prints, showing the product's current configuration and the control panel display returns to Ready. If the page does not print successfully, see <u>Troubleshooting printing problems</u>.

#### To self-test the copier using the ADF input tray

Use the configuration page you just printed to test the copier.

- 1 Adjust the guides on the ADF input tray to the size of the configuration page.
- Place the configuration page into the ADF input tray top first, print side up. Verify that the control panel display reads Document Loaded.
- 3 On the product's control panel, press **start/copy**.

The product makes a copy of the configuration page and the control panel display returns to Ready. If the page does not copy successfully, see <u>Troubleshooting copy problems</u>.



EN Verifying your work 33

#### To self-test the copier using the flatbed scanner

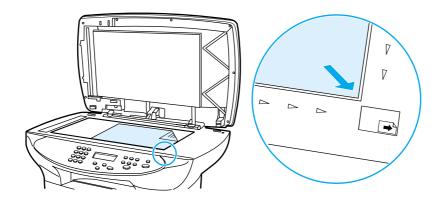
If your product does not have an ADF input tray, you can still test the copier by placing the configuration page on the flatbed scanner.

- 1 Place the configuration page face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.
- 2 Gently close the lid.
- 3 On the product's control panel, press start/copy.

The product makes a copy of the configuration page and the control panel display returns to Ready. If the page does not copy successfully, see <u>Troubleshooting copy problems</u>.

**CAUTION** 

To prevent damaging the product, do not allow the scanner lid to fall onto the flatbed scanner surface. Always close the scanner lid when the product is not in use.



#### To print a control panel menu map

In addition to printing a configuration page, you can also test your product by printing a menu map that shows all of the control panel menu options.

To print a control panel menu map, use the following steps:

- 1 On the product's control panel, press **menu/enter**.
- 2 Use the < and > buttons to select Reports and press menu/enter.
- 3 Use the < and > buttons to select Menu Structure and press menu/enter.

A menu map prints, showing all of the product's control panel menu options. If the menu map does not print successfully, see <u>Troubleshooting printing problems</u>.

34 2 Getting started EN

# Changing your product's general default settings

Use these topics to learn about your HP LaserJet 3300 series product's general default settings, how to check them, how to change them from the control panel, and how to access them using the product software.

- HP LaserJet 3300 series product settings
- Printing a configuration page
- Printing a control panel menu map
- Restoring the factory default settings
- Changing the display panel language
- Changing the default paper size
- Using the product's volume controls
- Changing settings from your computer

EN 35

#### **HP LaserJet 3300 series product settings**

Using the product software is often the easiest method to adjust your product settings. The instructions in this section show how to access the device settings from both the control panel and the product software.

**CAUTION** 

When changing certain settings in a network environment, you are changing settings for all users.

# Printing a configuration page

You can see what product settings are currently selected by printing a configuration page.

#### To print a configuration page

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Reports and press menu/enter.
- Use the < and > buttons to select Config Report and press menu/enter.

The product exits the Menu settings and prints the report.

#### Printing a control panel menu map

You can see all of your product's control panel menu options by printing a control panel menu map.

#### To print a control panel menu map

- 1 On the product's control panel, press **menu/enter**.
- 2 Use the < and > buttons to select Reports and press menu/enter.
- Use the < and > buttons to select Menu Structure and press menu/enter.
- 4 A menu map prints, showing all of the product's control panel menu options.

### Restoring the factory default settings

This procedure returns all settings to the factory defaults and clears the fax header name and phone number. (See Setting the information in the fax header for information on how to add your information to the fax header.) This procedure clears fax numbers and names associated with one-touch keys and speed-dial codes and deletes any pages stored in memory. The procedure then automatically restarts the product.

#### To restore the factory default settings

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Service and press menu/enter.
- 3 Use the < or > button to select Restore Defaults, press menu/enter, and press menu/enter again to confirm your selection.
- The product automatically restarts.

#### Changing the display panel language

Use this procedure to have the control panel display messages and reports in a language other than the default for your country/region.

#### To change the display panel language

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Common Settings and press menu/enter.
- 3 Use the < and > buttons to select Language and press menu/enter.
- 4 Use the < and > buttons to select the language you want.
- 5 Press menu/enter to save your selection.
- 6 The product automatically restarts.

#### Changing the default paper size

The paper size should be set to the size of paper you normally load in the paper input tray. The product uses this setting for copying, printing reports, and determining autoreduction for incoming faxes.

#### To change the default paper size

- 1 Press menu/enter.
- 2 Use the < or > button to select Common Settings and press menu/enter.
- 3 Use the < or > button to select Def. Paper Size and press menu/enter.
- 4 Use the < or > button until the size of paper you have loaded appears. You can choose Letter, Legal, or A4.
- **5** Press **menu/enter** to save your selection.

#### Using the product's volume controls

You can control the volume of the following sounds:

- The alarm sound the product emits when it requires attention, such as when the printer door is open.
- The beeps emitted when you press control panel buttons.
- For the fax product, the phone line sounds for outgoing faxes.
- For the fax product, the ring volume for incoming faxes.

#### To change the alarm volume

The alarm is heard when the device is presenting an alert or critical error message. The alarm duration length is either one or three seconds, based on the type of error.

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Common Settings and press menu/enter.

- 3 Use the < and > buttons to select Volume Settings and press menu/enter.
- 4 Press menu/enter to select Alarm Volume.
- 5 Use the < and > buttons to select Off, Soft, Medium, or Loud.
- 6 Press menu/enter to save your selection.

Note

The default set at the factory for the alarm volume is Soft.

#### To change the volume for the fax product

- 1 Press Volume.
- 2 Press the < or > button to select Off, Soft, Medium, or Loud.
- 3 Press menu/enter to save your selection.

Note

The default set at the factory is Soft.

#### To change the ring volume of the fax product

The ring volume is heard when the device is initially sending or receiving a call. The ring duration length is based on the local telecom ring pattern length.

- 1 Press menu/enter.
- 2 Use the < or > button to select Common Settings and press menu/enter.
- 3 Use the < or > button to select Volume Settings and press menu/enter.
- 4 Press the < or > button once to select Ring Volume and press menu/enter.
- 5 Use the < or > button to select Off, Soft, Medium, or Loud, and press menu/enter to save your selection.

**Note** 

The default set at the factory is Soft.

#### To change the control panel key press volume

The key press volume controls the sound that is made when a control panel button is pressed.

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Common Settings and press menu/enter.
- 3 Use the < and > buttons to select Volume Settings and press menu/enter.
- 4 Use the < and > buttons to select Key Press Volume and press menu/enter.
- 5 Use the < and > buttons to select Off, Soft, Medium, or Loud.
- 6 Press menu/enter to save your selection.

Note

The default set at the factory for the control panel key press volume is Soft.

#### Changing settings from your computer

After installation, you can gain access to printer settings from the product's printer driver or from another software application. These settings do not affect other users on a network.

Use one of the following methods to change your printer settings:

- To change default settings across all applications (Windows)
- To change default settings across all applications (Macintosh)
- To temporarily change settings from a software application (Windows)
- To temporarily change settings from a software application (Macintosh)

You can also change printer settings from the product software. For instructions on using the product software, see the product software Help.

#### To change default settings across all applications (Windows)

**Windows 95, 98, ME, and XP Home:** From the Start menu, select **Settings**, and select **Printers**. Right-click the printer icon and click **Properties**.

**Windows NT 4.0 SP3, 2000, and XP Professional:** From the Start menu, select **Settings**, and select **Printers**. For Windows 2000 right-click the printer icon, and click **Printing Preferences**.

**Note** 

The actual steps may vary; these are the most common methods.

#### To change default settings across all applications (Macintosh)

Macintosh OS 9.1:

- 1 From the Macintosh desktop, choose **File**. Then choose **Print Desktop**.
- 2 In the printer group box, choose the **HP All-in-one**.
- 3 Make the necessary changes to the settings.
- 4 Click the Save Settings option.
- 5 Click Cancel.

Macintosh OS X:

- 1 Open a document in a text editing application.
- 2 Choose File. Then choose Print.
- 3 Make the appropriate changes to the default settings.
- 4 On the settings options, choose to **Save Custom Setting**.
- **5** To invoke the settings when printing a document, choose the **Custom** option in the Saved Settings section.

# To temporarily change settings from a software application (Windows)

From the File menu, click **Print**. From the Print dialog, click **Properties**. Change the settings that you want to apply for the current print job.

# To temporarily change settings from a software application (Macintosh)

From the File menu, choose **Print**. Use the Print dialog to set print options.

Note

The actual steps may vary; these are the most common methods.

# 4 Printing

Use these instructions to perform printing tasks with your HP LaserJet 3300 series product:

- Printing with manual feed
- Stopping or canceling a print job
- Printer drivers
- Understanding print quality settings
- Optimizing print quality for media types
- Printing envelopes
- Printing transparencies and labels
- Printing letterhead or preprinted forms
- Printing custom-sized media or card stock
- Printing on both sides of the media (manual duplexing)
- Printing multiple pages on a single sheet of media
- Printing booklets
- Printing watermarks

EN 41

#### **Printing with manual feed**

You can use manual feed when printing mixed media, for example, an envelope, then a letter, then an envelope, and so on. Load an envelope in the priority input tray and load letterhead in the main input tray.

#### To print using manual feed

- 1 Access the printer setup from your software application, and select Manual Feed from the Source Tray drop-down list. (For instructions on accessing the printer setup from your computer, see Changing settings from your computer.)
- 2 After you have enabled the setting, wait until the display reads Manual Feed, then press menu/enter to print each job.

#### Stopping or canceling a print job

If your print job is currently printing, you can cancel a print job by pressing **cancel** on the control panel.

CAUTION

Pressing **cancel** clears the job currently being processed by the product. If more than one process is running, it clears the process that currently appears on the display panel.

#### **Printer drivers**

When you installed the product software, you selected one of the following printer drivers:

**PCL 6 driver:** Use the PCL 6 driver to take full advantage of the product's features. Unless complete backward compatibility with previous PCL drivers or older printers is necessary, the PCL 6 driver is recommended.

**PCL 5e driver:** Use the PCL 5e driver if you need print results to look consistent with those from older HP LaserJet printers. Certain features (FastRes 1200, ProRes 1200, and 300 dpi) are not available in this driver. (Do not use the PCL 5e driver provided with this printer with older printers.)

**PS driver:** Use the PostScript (PS) driver for compatibility with PS needs. Certain features (manual duplexing, printing booklets, watermarks, and printing more than four pages per sheet) are not available with this driver.

**Note** 

The product automatically switches between PS emulation and PCL printer languages depending on the driver you have selected. PS emulation emulates Adobe® PostScript Level2. PostScript is a registered trademark of Adobe Systems Incorporated. For information about accessing your printer driver see <a href="Changing settings from your computer">Changing settings from your computer</a>.

# **Understanding print quality settings**

Print quality settings affect how light or dark the print is on the page and the style in which the graphics are printed. You can also use the print quality settings to optimize the print quality for a specific media type. See Optimizing print quality for media types for more information.

You can change the settings in the printer properties to accommodate the types of jobs you are printing. The following settings are available depending on the printer driver you are using:

- Best Quality (ProRes 1200): This prints at 1200 dpi (dots per inch) and provides the best print quality.
- Faster Printing (FastRes 1200): The resolution is rendered differently so that the job can print faster. This is the default setting.
- 1200 dpi
- 600 dpi
- 300 dpi
- Custom: This prints the same as the Faster Printing setting, but you can change the scale patterns.
- EconoMode (Save Toner): Text is printed using less toner. This setting is useful when you are printing drafts.

**Note** 

Changing the resolution can change the formatting of your text.

#### To temporarily change print quality settings

To change the print quality settings only for the current software application's use, access the properties through the Print Setup menu in the application you are using to print. See <a href="Changing settings from your computer">Changing settings from your computer</a> for more information.

#### To change print quality settings for all future jobs

You can access print quality settings by selecting Printers from the Windows Start menu, then accessing the properties for the product. The settings are on the **Finishing** tab (Windows) under Print Quality settings in the printer properties. To view the details of each setting, click **Details**. For Macintosh OS 9.1 select the **Imaging Options** screen.

#### To enable EconoMode (save toner)

An excellent way to extend the life of your print cartridge is by using EconoMode. EconoMode uses substantially less toner than normal printing. The printed image is lighter, but it is adequate for printing drafts or proofs.

To enable EconoMode, access the printer properties. On the **Finishing** tab (Windows) or the **Imaging Options** screen (Macintosh OS 9.1) under **Print Quality**, select **EconoMode**. For Macintosh OS X use the Device Configuration Utility:

- Open the HP LaserJet Director.
- 2 Choose Tools.
- 3 Choose Device Configuration.
- 4 Choose the Print tab.
- 5 On the Print Quality menu, choose to turn EconoMode **On**.

Note

See <u>Changing settings from your computer</u> for instructions on enabling EconoMode for all future jobs.

# **Optimizing print quality for media types**

Media type settings control the temperature of your printer's fuser. You can change the settings for the media that you are using to optimize the print quality. The following are the media types that you can optimize for:

- Plain paper
- Bond paper
- Card stock
- Envelope
- Heavy paper
- Labels

**Note** 

- Rough paper
- Thin paper
- Transparency

#### To access the optimizing feature

You can access the optimizing feature from the **Paper** tab in your Windows printer driver. For more information, see <u>Changing settings from your computer</u>.

Note Printing speeds are automatically reduced when printing special-sized media.

You need to reset the default after the job prints.

# **Printing envelopes**

Use one of the following methods to print envelopes:

- To print one envelope
- To print multiple envelopes

#### To print one envelope

Only use envelopes that are recommended for laser printers. See <u>Product media specifications</u> for more information.

#### Note

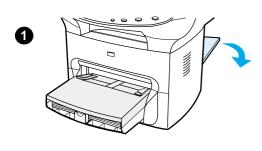
Use the priority input tray for printing one envelope. Use the main input tray for printing multiple envelopes.

- 1 To prevent the envelopes from curling as they print, open the straight-through output door.
- **2** Before loading the envelopes, slide the media guides outward to slightly wider than the envelopes.
- **3** Place the envelope with the stamp end forward and the side to be printed facing up.

#### Note

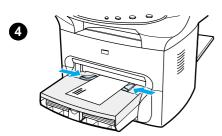
If the envelope has a flap on the short edge, feed that edge into the printer first.

4 Adjust the media guides to the width of the envelope. Set **Optimize for:** on the **Paper** tab in your Windows printer driver to **Envelope**, and print the envelope.









Printing envelopes 45

#### To print multiple envelopes

Only use envelopes that are recommended for laser printers. See <u>Product media specifications</u> for more information.

#### Note

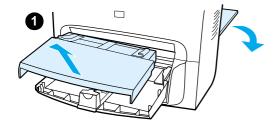
Use the priority input tray for printing one envelope. Use the main input tray for printing multiple envelopes.

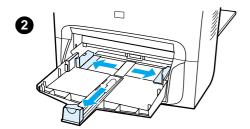
- 1 To prevent the envelopes from curling as they print, open the straight-through output door.
- **2** Before loading the envelopes, slide the media guides outward to slightly wider than the envelopes.
- 3 Place the envelopes with the stamp end forward and the side to be printed facing up.

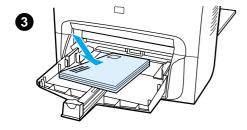
#### Note

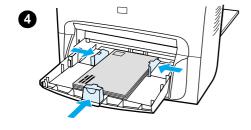
If the envelopes have a flap on the short edge, feed that edge into the printer first.

- 4 Adjust the media guides to the length and width of the envelopes. Set Optimize for: on the Paper tab in your Windows printer driver to Envelope, and print the envelope.
- 5 Replace the priority input tray.









# **Printing transparencies and labels**

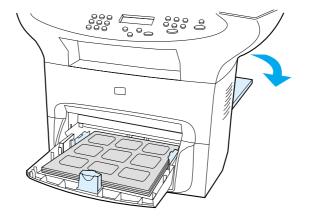
Only use transparencies and labels that are recommended for use in laser printers, such as HP transparency film and laser quality labels. See <u>Product media specifications</u> for more information.

**CAUTION** 

Inspect the media to make sure that it is not wrinkled or curled and that it does not have any torn edges or missing labels. Do not run labels through the product more than once. The adhesive may damage the product.

#### To print transparencies or labels

- 1 Open the straight-through output door on the back of the product.
- 2 Load a single page in the priority input tray or load multiple pages in the main input tray. Make sure that the top of the media is forward and the side to be printed (rough side of transparencies) is facing up.
- 3 Adjust the media guides.
- 4 Access the optimizing feature from the **Paper** tab in your Windows printer driver. Then select **Optimize for:** and choose **Transparency** or **Labels** in the drop-down list.
- **5** Print the document. Remove the media from the back of the printer as it prints to prevent it from sticking together, and place the printed pages on a flat surface.



# **Printing letterhead or preprinted forms**

Only use letterhead or preprinted forms that are recommended for use in laser printers, such as HP laser quality letterhead and preprinted forms. See <u>Product media specifications</u> for more information.

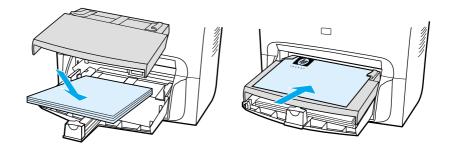
Use these instructions to print documents on letterhead or preprinted forms.

#### To print letterhead or preprinted forms

- 1 Load the paper with the top forward and the side to be printed facing up. Adjust the media guides to fit the width of the paper.
- 2 Print the document.

Note

To print a single-page cover letter on letterhead, followed by a multiple-page document, load the standard paper in the main input tray first, then load the letterhead into the priority input tray. The product automatically prints from the priority input tray first.



#### Printing custom-sized media or card stock

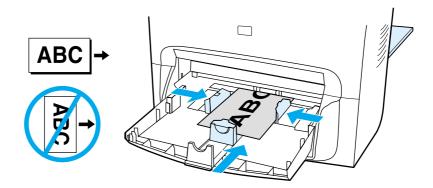
HP LaserJet 3300 series products can print on custom-sized media or card stock between 76 by 127 mm. (3 by 5 inches) and 216 by 356 mm. (8.5 by 14 inches). Depending on the media, you can print up to 10 sheets from the priority input tray. Use the main input tray for more than 10 sheets.

**Note** 

Make sure that the sheets are not stuck together before you load them.

#### To print custom-sized media or card stock

- 1 Open the straight-through output door.
- 2 Load the media with the narrow side forward and the side to be printed facing up. Adjust the side and rear media guides to fit the media.
- 3 Select the correct size in the printer settings. (Software settings can override printer properties.)
- 4 If printing on card stock, access the optimizing feature from the **Paper** tab in your Windows printer driver. Then select **Optimize for:** and choose **Card stock** from the drop-down list.
- 5 Print the document.



#### Printing on both sides of the media (manual duplexing)

To print on both sides of the media (manual duplexing), you must run the media through the printer twice. You can print using the normal output path or the straight-through output path. Hewlett-Packard recommends that you use the normal output path for lightweight paper and use the straight-through output path for any heavy media or media that curls when printed.

See the following topics for more information:

To duplex manually on lightweight media

To duplex manually on heavy media or card stock (straight-through output path)

**Note** 

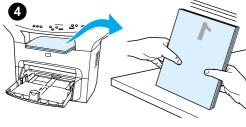
Manual duplexing is supported only in Windows.

Manual duplexing can cause the product to become dirty, reducing print quality. If the product becomes dirty, see <u>Cleaning and maintenance</u> for instructions.

#### To duplex manually on lightweight media









- 1 Make sure that the straight-through output door is closed.
- 2 Access the printer properties (for instructions, see <u>Changing</u> <u>settings from your computer</u>). On the <u>Finishing</u> tab, click <u>Print on</u> <u>Both Sides</u>, select the <u>Flip Pages Up</u> check box, and click <u>OK</u>. Print the document.
- **3** After side one has printed, remove the remaining paper from the input tray, and set it aside until after you finish your manual duplexing job.
- **4** Gather the printed pages, keep the printed side down, and straighten the stack.
- Remove the priority input tray and place the stack of media back in the input tray. Side one should be facing down with the top edge toward the printer. Replace the priority input tray.
- 6 Click Continue (on screen) and wait for side two to print.

# To duplex manually on heavy media or card stock (straight-through output path)

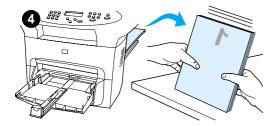
For heavy media, such as card stock, use the straight-through output path.

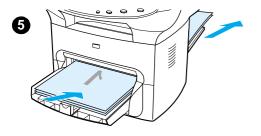
- 1 Load the media, and open the straight-through output door on the back of the product.
- 2 Access the printer properties. See <u>Changing settings from your computer</u> for instructions. On the <u>Finishing</u> tab, click <u>Print on Both Sides</u>, select the <u>Straight Paper Path</u> check box, and click <u>OK</u>. Print the document.
- After side one has printed, remove the remaining paper from the input tray and set it aside until after you finish your manual duplexing job.
- 4 Gather the printed pages, turn the printed side down, and straighten the stack before placing it back in the input tray. Side one should be facing down with the top edge toward the printer.
- 5 Click **Continue** (on screen), and wait for side two to print.





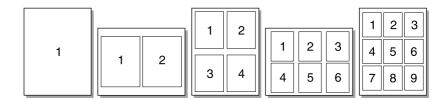






# Printing multiple pages on a single sheet of media

You can select the number of pages that you want to print on a single sheet of media. If you choose to print more than one page per sheet, the pages appear smaller and are arranged on the sheet in the order that they would otherwise be printed. You can specify up to nine pages per sheet of media for Macintosh, or up to 16 for Windows.



#### To print multiple pages on a single sheet (Windows)

- 1 From your software application, access the printer properties. See <u>Changing settings from your computer</u> for instructions.
- 2 On the **Finishing** tab under **Pages Per Sheet**, specify the number of pages per sheet that you want to print. You can print up to 16 pages per sheet with a Windows OS.
- 3 There is also a check box for page borders and a drop-down menu to specify the order of pages printed on the sheet.

#### To print multiple pages on a single sheet (Macintosh)

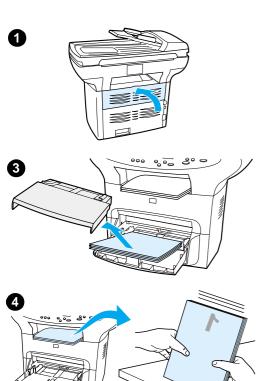
- 1 From the **General** drop-down list, select **Layout**.
- 2 In the **Pages Per Sheet** drop-down list, select the number of pages per sheet to print. You can print up to nine pages per sheet with a Macintosh OS.

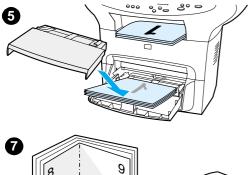
# **Printing booklets**

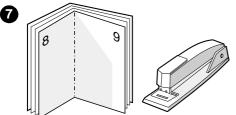
You can print booklets on letter, legal, executive, or A4 paper. This function is available for Windows users only.

#### To print booklets

- 1 Load the paper, and make sure that the straight-through output door is closed.
- 2 Access the printer properties. See <u>Changing settings from your computer</u> for instructions. On the <u>Finishing</u> tab, select <u>Print on Both Sides</u>, and select <u>Letter (Left Binding)</u> or <u>Letter (Right Binding)</u> in the <u>Booklet</u> drop-down menu. Print the booklet.
- **3** After side one has been printed, remove the remaining paper from the input tray, and set it aside until your booklet job is complete.
- **4** Gather the printed pages, keep the printed side down, and straighten the stack of paper.
- 5 Place the printed pages back in the input tray. Side one should be facing down with the top edge toward the printer.
- 6 Click **Continue** (on screen), and wait for side two to print.
- 7 Fold and staple the pages.







EN Printing booklets 53

# **Printing watermarks**

You can use the watermark option to print text "underneath" (in the background) of an existing document. For example, you might want to have large gray letters reading Draft or Confidential printed diagonally across the first page or all of the pages of a document.



#### To access the watermark feature

- 1 From your software application, access the printer properties. See <u>Changing settings from your computer</u> for instructions.
- 2 On the **Effects** tab (Windows) or the **Watermark/Overlay** screen (Macintosh), specify the type of watermark that you want to print on your document.

# 5 Copying

Use these instructions to perform copying tasks with your HP LaserJet 3300 product:

- Starting a copy job
- Canceling a copy job
- Adjusting copy quality for the current job
- Adjusting the default copy quality
- Adjusting the lighter/darker (contrast) setting for the current job
- Adjusting the default lighter/darker (contrast) setting
- Reducing or enlarging copies for the current job
- Adjusting the default copy size
- Changing the copy collation setting
- Changing the number of copies
- Using HP LaserJet Copier software
- Using HP LaserJet Copy Plus software
- Copying photos, two-sided originals, or books

EN 55

#### Starting a copy job

To make copies with your HP LaserJet 3300 series product, use the following instructions:

- 1 Load your original document onto the flatbed scanner face down (one page at a time) with the top left corner of the document located in the lower right corner of the glass.
  OR
  - Load your original document face up into the ADF input tray.
- 2 Press start/copy on the product's control panel to start copying.
- 3 Repeat the process for each copy.

For more detailed instructions on loading originals onto the flatbed scanner or into the ADF input tray, see <u>Loading originals to copy or scan</u>.

Note

If there are originals loaded in the ADF input tray and on the flatbed scanner, the product automatically scans from the ADF regardless of whether there is an original on the flatbed scanner.

## Canceling a copy job

To cancel a copy job, use one of the following methods:

- Press cancel on the control panel. If more than one process is running, it clears the process that currently appears on the display panel.
- For copies started with the HP LaserJet Copier, click Cancel in the onscreen dialog box.

**Note** 

If you cancel a copy job, clear the original document from the flatbed scanner or from the ADF.

# Adjusting copy quality for the current job

The default setting for copy quality is Text. This setting is the best for items that contain mostly text.

When making a copy of a photo or graphic, you can select the Photo setting to increase the quality of your copy, or select the Best Photo setting for the highest photo quality.

If you want to conserve toner, and the copy quality is not that important, select Draft. To change the default copy quality, see Adjusting the default copy quality.

#### To adjust the copy quality for the current job

- 1 From the control panel, press **quality** to display the current quality setting for the copy.
- 2 Use the < and > buttons to scroll through the quality setting options.
- 3 Select a resolution setting and press **start/copy** to save the selection and immediately start the copy job, or **menu/enter** to save the selection without starting the job.

Note

The change in the copy quality setting will remain active for two minutes after the copy job has been completed.

56 5 Copying EN

### Adjusting the default copy quality

The default setting for copy quality is Text. This setting is the best for items that contain mostly text. When making a copy of a photo or graphic, you can select Photo or Best Photo to increase the quality. If you want to conserve toner and the copy quality is not that important, select Draft. To change the copy quality for the current copy job only, see Adjusting copy quality for the current job.

#### To adjust the copy quality

- 1 From the control panel, press menu/enter.
- 2 Use the < and > buttons to select Copy Setup and press menu/enter.
- 3 Press menu/enter to select Default Quality.
- 4 Use the < or > button to scroll through the choices.
- 5 Press menu/enter to save the selection.

# Adjusting the lighter/darker (contrast) setting for the current job

The lighter/darker setting affects the lightness or darkness (contrast) of the copy. Use the following procedure to change the contrast for the current copy job only. After the copy has been made, the contrast setting returns to the default.

Note

To change the default copy contrast, see Adjusting the default lighter/darker (contrast) setting.

#### To adjust the lighter/darker setting for the current job

- 1 Press lighter/darker to display the current contrast setting.
- 2 Use the < or > button to adjust the setting. Move the slider to the left to make the copy lighter than the original, or move the slider to the right to make the copy darker than the original.
- 3 Press press start/copy to save the selection and immediately start the copy job, or menu/enter to save the selection without starting the job.

# Adjusting the default lighter/darker (contrast) setting

The default lighter/darker setting affects all copy jobs. To adjust the lighter/darker setting for the current copy job only, see <u>Adjusting the lighter/darker</u> (contrast) setting for the current job.

#### To adjust the default lighter/darker setting

- 1 Press menu/enter.
- 2 Use the < or > button to select Copy Setup and press menu/enter.
- 3 Use the < or > button to select Def. Light/Dark and press menu/enter.
- 4 Use the < or > button to adjust the setting. Move the slider to the left to make all copies lighter than the original, or move the slider to the right to make all copies darker than the original.
- 5 Press menu/enter to save the selection.

#### Reducing or enlarging copies for the current job

The HP LaserJet 3300 series product can reduce copies to as small as 25% of the original or enlarge copies to as much as 400% of the original. It can also make the following reductions or enlargements automatically:

• Original: (100%)

Legal to Letter: (78%)

Legal to A4: (83%)

A4 to Letter: Full page (94%)

• Letter to A4: Fit to page when copying (97%)

• Full Page: (91%)

Fit To Page

2 pages per sheet

4 pages per sheet

Custom: (25-400%)

**Note** 

When using the Fit To Page setting, copy from the flatbed scanner only.

Note

When using the **2 pages per sheet** or **4 pages per sheet** setting, copy from the ADF only. These options will not display unless the ADF is installed.

#### To reduce or enlarge copies for the current job

To reduce or enlarge copies for the current job only, use the following instructions:

- 1 From the control panel, press reduce/enlarge.
- 2 Enter the size to which you would like to reduce or enlarge the copies in this job. You can choose Original=100%, Ltr To A4, A4 To Ltr, Lgl To Ltr, Lgl To A4, Full Page, Fit to Page, Or Custom: 25-400%.
- 3 If you choose Custom 25-400%, enter a percentage using the numeric keypad.
- 4 Press press **start/copy** to save the selection and immediately start the copy job, or **menu/enter** to save the selection without starting the job.

**Note** 

You must change the default paper size in the paper input tray to match the output size or part of your copy may be cut off. For instructions, see <a href="Changing the default paper size">Changing the default paper size</a>.

#### Adjusting the default copy size

The default copy size is the size to which copies are normally reduced or enlarged. If you keep the factory default size set to Original (100%), all copies will be the same size as the original document.

Note

If you only want to adjust the copy size for the job you are currently copying, see Reducing or enlarging copies for the current job.

58 5 Copying EN

#### To change the default copy size

- 1 Press menu/enter.
- 2 Use the < or > button to select Copy Setup and press menu/enter.
- 3 Use the < or > button to select Def. Redu/Enlrg and press menu/enter.
- 4 Use the < or > button to select the option for how you normally want to reduce or enlarge copies. You can choose Original=100%, Ltr To A4, A4 To Ltr, Lgl To Ltr, Lgl To A4, Full Page, Fit to Page, or Custom: 25-400%. If you choose Custom, type in the percentage of the original size that you normally want for copies.
- 5 Press menu/enter to save your selection.

# Changing the copy collation setting

You can set the product to automatically collate multiple copies into sets. For example, if you are making two copies of three pages and automatic collation is on, the pages print in this order: 1,2,3,1,2,3. If automatic collation is off, the pages print in this order: 1,1,2,2,3,3.

To use automatic collation, the original document must fit into memory. If it does not, the product makes only one copy and displays a message notifying you of the change. If that happens, use one of the following methods to finish the job:

- Split the job into smaller jobs containing fewer pages.
- Make only one copy of the document at a time.
- Turn off automatic collation.
- If using the Best Photo quality setting, try using the Photo setting instead.

The collation setting you choose is in effect for all copies until you change the setting.

The collation setting can also be changed from the product software. For instructions on accessing settings from the product software, see <a href="Changing settings from your computer">Changing settings from your computer</a>.

#### To change the copy collation setting for the current job

To change the copy collation setting for the current job, press **collation** on the control panel.

If the copy collation setting is On, press **collation** to turn it Off for the current job. If the copy collation setting is Off, press **collation** to turn it On for the current job.

#### To change the default copy collation setting

To change the copy collation default, use the following instructions:

- 1 From the control panel, press **menu/enter**.
- 2 Use the < and > buttons to select Copy Setup and press menu/enter.
- 3 Press menu/enter to select Def. Collation.
- 4 Use the < and > buttons to select On or Off.
- 5 Press menu/enter to save your selection.

**Note** 

The default set at the factory for automatic copy collation is on.

#### Changing the number of copies

You can choose to have the default number of copies be any value from 1 to 99.

#### To change the number of copies for the current job

From the product's control panel, press # of copies and use the < and > buttons to inicrement or decrement the quantity that appears in the control panel display;
OR

Use the numeric keypad to enter the number of copies (between 1 and 99) that you want to make for your current job.

2 Press **start/copy** to begin copying your job.

# To change the default number of copies

- 1 From the control panel, press menu/enter.
- 2 Use the < and > buttons to select Copy Setup and press menu/enter.
- 3 Use the < and > buttons to select Def. # of Copies and press menu/enter.
- 4 Use the numeric keypad to enter the number of copies (between 1 and 99) that you want as the default.
- **5** Press **menu/enter** to save your selection.

**Note** 

The default set at the factory for number of copies is 1.

# **Using HP LaserJet Copier software**

You can use HP LaserJet Copier to perform any of the following tasks when you copy your original:

- Print up to 99 copies of the same document
- Enable or disable collation
- Reduce or enlarge the image
- Adjust the contrast
- Specify the copy quality
- Make color copies by sending to a color printer using HP LaserJet Copy Plus

**Note** 

This functionality is not available in Windows 95.

#### To access HP LaserJet Copier (Windows or Macintosh)

To access HP LaserJet Copier, use one of the following methods:

- From HP LaserJet Director, click Copy or Copy Plus.
- From the Windows task bar, click Start, Programs, HP LaserJet 3300, and HP LaserJet Copier.
- From HP LaserJet Document Manager (Windows), click the Copier icon.

From HP Workplace (Macintosh), click the Copy or Copy Plus icon.

60 5 Copying EN

Note	If you click the Copy Plus icon in addition to the standard copier settings, you can also adjust the brightness of your copies and send the copy to another printer, including a color printer. For more information, see <a href="Using HP LaserJet Copy Plus software">Using HP LaserJet Copy Plus software</a> .
Note	For more information on using these features, see the product software Help.

#### **Using HP LaserJet Copy Plus software**

You can use HP LaserJet Copy Plus to send a scanned image to any installed Windows printer, including color printers, enabling you to make color copies. You can also access other advanced features, such as multiple pages per sheet copying and watermarks.

#### To access HP LaserJet Copy Plus (Windows)

To access HP LaserJet Copy Plus, use one of the following methods:

- From HP LaserJet Director, click Copy Plus.
   OR
   Click Copy and select, I want to copy to another printer.
- From the Windows task bar, click Start, Programs, HP LaserJet 3300, and HP LaserJet Copier. Select I want to copy to another printer.

Note

This functionality is not available in Windows 95.

#### To access HP LaserJet Copy Plus (Macintosh)

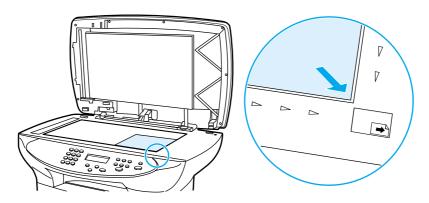
- 1 From the HP LaserJet Director, click Customize.
- 2 Click the Customization tab.
- 3 Enable Copy Plus by checking the Copy Plus check box.
- 4 Click OK.

The HP LaserJet Director will now display a Copy Plus option. This can be used in the same manner as the HP LaserJet Copier, see <u>To access HP LaserJet Copier</u> (Windows or Macintosh).

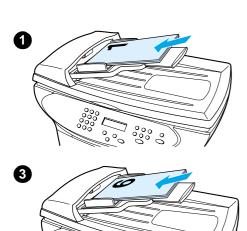
# Copying photos, two-sided originals, or books

#### To copy or scan a photo

1 Place the photo on the flatbed scanner with the picture side down and the top left corner of the photo in the lower right corner of the glass.

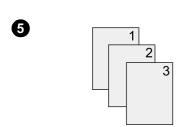


- 2 Gently close the lid.
- You are now ready to scan or copy the photo using one of the methods described. See <u>Understanding scanning methods</u> for more information.

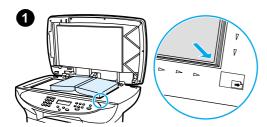


# To copy a multiple page stack of 2-sided originals

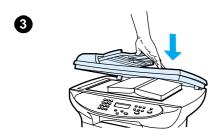
- 1 Load the stack of originals to be copied into the ADF with the first page up.
- 2 Press **start/copy**. The odd-numbered pages will be copied and printed.
- 3 Remove the stack from the ADF output tray and load the stack with the last page up and facing forward.
- 4 Press **start/copy**. The even-numbered pages will be printed.
- 5 Collate the odd and even-numbered printed copies.

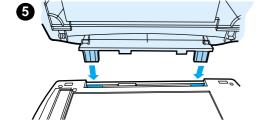


62 5 Copying EN









#### To copy a book

- 1 Lift the lid and place the book on the flatbed scanner with the desired book page located in the lower right corner of the glass.
- 2 Gently close the lid.
- **3** Gently press down on the lid to press the book to the flatbed scanner surface.
- 4 Press **start/copy**, or use one of the other described methods to copy or scan the book.
- If your product does not have an ADF, the rear hinge may lift up to accommodate the book. Gently press down on the center of the lid to press the book to the flatbed scanner. If the lid comes out, align the hinge posts to the recesses and reinstall.

64 5 Copying EN

# 6 Scanning

Use the following instructions to perform scanning tasks with your HP LaserJet 3300 series product:

- Understanding scanning methods
- Scanning from the product's control panel
- Canceling a scan job
- Scanning with the product software
- Scanning with TWAIN-compliant software
- Archiving scanned text or images
- Scanning with OCR
- Enhancing images with HP LaserJet Document Manager or HP Photo Center
- Adding annotations to HP documents
- Adding annotations to scanned image files
- Sending scanned items as e-mail attachments
- Scanner resolution and color

EN 65

#### **Understanding scanning methods**

The HP LaserJet 3300 series product offers four ways to scan an item:

- Scan from the product: Start scanning directly from the product using the control panel's scan buttons. The start scan and scan to buttons can be programmed to scan to a destination. For more information, see <u>Scanning from the product's control panel</u>.
- Scan from the HP LaserJet Director: Use the HP LaserJet Director for one-touch scanning to specific programmed destinations, such as saving to a file, sending it to e-mail, or converting it to document files.
- Scan from the HP LaserJet Scan Control Viewer: Use the HP LaserJet Scan Control Viewer to customize your scan and send it to a selected destination. For more information, see Scanning with the product software. The three ways to access the HP LaserJet Scan Control Viewer are:
  - Click Scan from the Document Manager.
  - Click Scan from the HP LaserJet Director.
  - Select **Scanner** from the program group in the Start menu.
- Scan from TWAIN-compliant software: If you are using Microsoft Windows 95 and want to scan documents, you must use a TWAIN-compliant application. For all other operating systems, using TWAIN-compliant software is optional. For more information, see <u>Scanning</u> with <u>TWAIN-compliant software</u>.

Note

To learn about optical character recognition (OCR) software, see <a href="Scanning with OCR">Scanning with OCR</a>.

**Note** 

Scan buttons are not available on the 3310 model.

### Scanning from the product's control panel

**Note** 

If you purchased the HP LaserJet 3310 product, scanning from the control panel is not available. To scan with the 3310, see <u>Scanning with the product software</u>.

Use the following instructions to scan directly from your HP LaserJet 3300 series product:

- To scan from the product's control panel using the start scan button
- To use the scan to button via USB or parallel connection
- To use the scan to button via network connection
- To reprogram the scan to button destinations
- To reprogram the start scan button

**Note** 

For the best scan quality, load your originals onto the flatbed scanner.

# To scan from the product's control panel using the start scan button

To scan from the product's control panel, use the following instructions. For more detailed information on loading original documents onto the flatbed scanner or into the ADF input tray, see <u>Loading originals to copy or scan</u>.

66 6 Scanning EN

- 1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 To start scanning, press **start scan** on the product's control panel.

Note

To scan to a particular destination, you can program the **start scan** button or use the **scan to** button on the product's control panel. For more information, see <u>To reprogram the start scan button</u> and <u>To reprogram the scan to button destinations</u>.

#### To use the scan to button via USB or parallel connection

To scan to a destination using the **scan to** button on the product's control panel, use the following instructions:

- 1 Press scan to on the control panel.
- 2 Use the < and > buttons to select a destination.
- 3 Press start scan or menu/enter.

#### To use the scan to button via network connection

To use **scan to** through a network connection, the Display Name must be configured. The Display Name is configured as follows:

- 1 From the HP LaserJet Director, click the **Customize** button to open the Customize property sheet.
- 2 Select the Monitor Device tab.
- 3 Enter the text that you wish to use to identify your PC in the Display Name edit box (9 characters maximum).
- 4 Click **Apply** to make the changes and keep the Customize dialog box open, or **OK** to keep the changes and return to the HP LaserJet Series Director. New destinations that include this Display Name will now appear in the device **scan to** destinations list.
- 5 Follow the instructions in <u>To use the scan to button via USB or parallel connection</u> to scan to this destination.

### To reprogram the scan to button destinations

- 1 From the HP LaserJet Director, click the Customize button to open the Customize property sheet.
- Select the Monitor Device tab.
- **3** From the Device Scan To Button Settings group box, select the desired destinations, one at a time, and click the **Add** button to add to the **scan to** list.
- 4 To edit the device display string or update the e-mail address for a recipient, select the destination in the **scan to** list and click the **Edit** button.
- 5 To remove a destination from the **scan to** list, select the destination and click the **Remove** button.
- 6 Click **Apply** to make the changes and keep the Customize dialog box open, or **OK** to keep the changes and return to the HP LaserJet Director.

#### To reprogram the start scan button

To program the **start scan** button to use a **scan to** destination, use the following instructions:

- 1 From the HP LaserJet Director, click the Customize button to open the Customize property sheet.
- 2 Select the Monitor Device tab.
- 3 Choose an action from the drop-down list. The default setting is Open the HP LaserJet Director.

#### Canceling a scan job

To cancel a scan job, use one of the following methods:

- Press cancel on the control panel.
- Click the cancel button in the onscreen dialog box.

Note

If you cancel a scan job, clear the original document from the flatbed scanner or from the ADF.

Note

These functions vary with Macintosh computers.

### Scanning with the product software

You can perform most scanning functions from HP LaserJet Director.

HP LaserJet Director is not supported for Microsoft Windows 95. If you are using Windows 95, see <u>Scanning with TWAIN-compliant software</u>.

For more detailed instructions on loading original documents onto the flatbed scanner or into the ADF input tray, see <u>Loading originals to copy or scan</u>.

#### To scan using HP LaserJet Director (Windows)

1 Load the originals to be scanned face up in the ADF input tray, with the top of the document forward, and adjust the media guides.

#### OR

Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.

- 2 Press start scan on the product's control panel. If you are using the ADF, the HP LaserJet Director launches automatically. If you are on a network, scanning from the flatbed scanner, or the HP LaserJet Director does not automatically open, click the Start button on the Windows task bar, point to Programs, and click HP LaserJet Director or click on it in the System Tray.
- 3 To open the HP LaserJet Scan Control Viewer dialog box, click the Scan button on HP LaserJet Director.
- 4 Specify a scan destination.
- 5 If you want to scan in color, select the **Color** radio button.
  - If there are originals loaded in the ADF input tray and on the flatbed scanner, the product automatically scans from the ADF regardless of whether there is an original on the flatbed scanner.
- 6 Choose the option to scan all pages at once.

68 6 Scanning EN

- If you choose to scan page-by-page, see <u>To use page-by-page scanning (Windows)</u>.
- 7 Click Scan.
- **8** If there are originals loaded in the ADF, all of the pages are scanned automatically. If the ADF is empty, one page is scanned from the glass. The entire document is then sent to the specified destination.
  - If you send a scanned document to a file, a printer, or an e-mail application, a secondary dialog box opens and prompts you for additional information.

#### To scan using HP LaserJet Director (Macintosh)

- 1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 If the product is connected directly to your computer, the HP LaserJet Director opens after you insert an item into the ADF input tray.

#### OR

- If you are on a network, scanning from the flatbed scanner, or HP LaserJet Director does not automatically open, double-click the desktop alias for the HP LaserJet Director.
- 3 To open the HP LaserJet Scan Control Viewer dialog box, click the **Scan** button in HP LaserJet Director.
- 4 Specify an image type.
- 5 Choose the option to Scan All.
  - If you choose to scan page-by-page, see <u>To use page-by-page scanning (Macintosh)</u>.
- 6 After all the pages have completed the scanning process, choose **Send To Destination**, then choose **Send Now!**

#### OR

Use the Save As icon to save the pages to a disk file.

#### To use page-by-page scanning (Windows)

- 1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 Press start scan on the product's control panel. If you are using the ADF, the HP LaserJet Director launches automatically. If you are on a network, scanning from the flatbed scanner, or the HP LaserJet Director does not automatically open, click the Start button on the Windows task bar, point to Programs, and click HP LaserJet Director or click on it in the System Tray.
- 3 From the HP LaserJet Director, click **Scan** to launch the HP LaserJet Scan Control Viewer.
- 4 From the HP LaserJet Scan Control Viewer, select the option to scan one page at a time and then click **Scan**. The first page is scanned and appears in the Preview window.
  - If you send a scanned document to a file, a printer, or an e-mail application, a secondary dialog box appears and prompts you for additional information.
- 5 Specify a destination to send the scan to, and change the settings accordingly.
- **6** Use the Viewer modes as necessary by clicking the corresponding button on the toolbar located in the upper right corner of the Preview window.

- Selection mode allows you to specify the area in which to save.
- Edit Region mode allows you to edit the region areas and types.
- 7 Click Accept to save the current image.
- If you wish to scan another page, click **Yes** in the message box that displays. Repeat steps 4 through 7 to scan more pages. Click **No** in the message box to send the current scan to its destination.

#### To use page-by-page scanning (Macintosh)

1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
OR

Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.

If the product is connected directly to your computer, the HP LaserJet Director opens after you insert an item into the ADF input tray.

OR

If you are on a network, scanning from the flatbed scanner, or HP LaserJet Director does not automatically open, double-click the desktop alias for the HP LaserJet Director.

- 3 To open the HP LaserJet Scan Control Viewer dialog box, click the Scan button on HP LaserJet Director.
- 4 Specify an image type.
- 5 Choose To Scan.
- **6** After the scan process has finished, choose **Scan another page**.
- 7 Repeat step 6 for each page of the document.
- 8 After all the pages have completed the scanning process, choose **Send To Destination**, then choose **Send Now!**

OR

Use the Save As icon to save the pages to a disk file.

#### **Scanning with TWAIN-compliant software**

**Note** 

If you are using Windows 95 and want to scan documents, you will have to use a TWAIN-compliant application. For all other operating systems, you may use a TWAIN-compliant application or the product software.

The HP LaserJet 3300 series product is TWAIN-compliant and works with Windows- and Macintosh-based programs that support TWAIN-compliant scanning devices. While in a TWAIN-enabled program, you can access the scanning feature and scan an image directly into the open application. To do so, follow the program's instructions for acquiring an image using TWAIN. For more specific information, see the product software Help.

**Note** 

The Macintosh product software is TWAIN version 1.9 compliant.

#### To use flatbed scanner preview scan

Use this procedure to preview the scanned image when you are using the TWAIN interface in Windows.

70 6 Scanning EN

- 1 In the scan (or TWAIN) software, click the preview button. The scanner will scan the image and then display it in the preview screen.
- 2 If you want to save only part of the image, select the area that you want to save. The selected area will be saved to the preset scan destination.

#### **Archiving scanned text or images**

HP software provides direct access to your file management system, which means you can quickly store scanned images in any directory you choose. You can use HP LaserJet Director or HP LaserJet Document Manager to store scanned images.

#### To archive a scanned image

1 Load the originals to be scanned face up in the ADF input tray, with the top of the document forward, and adjust the media guides.

#### OR

- Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 Press start scan on the product's control panel. If you are using the ADF, the HP LaserJet Director launches automatically. If you are on a network, scanning from the flatbed scanner, or the HP LaserJet Director does not automatically open, click the Start button on the Windows task bar, point to Programs, and click HP LaserJet Director or click on it in the System Tray.
- 3 In the HP LaserJet Director, click Archive. If the HP LaserJet Director does not display an Archive option, use the Customize option in the HP LaserJet Director to activate the Archive feature.
- **4** The document is scanned and stored in the destination specified by the user in the Save As dialog.

## To use the archive feature (Macintosh)

- 1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 If the product is connected directly to your computer, the HP LaserJet Director opens after you insert an item into the ADF input tray.

#### OR

- If you are on a network, scanning from the flatbed scanner, or HP LaserJet Director does not automatically open, double-click the desktop alias for the HP LaserJet Director.
- 3 In the HP LaserJet Director, click **Archive**. If the HP LaserJet Director does not display an Archive option, use the Customize option in the HP LaserJet Director to activate the Archive feature.
- 4 The paper document is scanned, and the created document is opened in the HP Workplace.
- 5 If necessary, you can crop the image or add annotations.
- 6 Select File. Then select Save to save the document to disk.

## Scanning with OCR

#### To edit scanned text (Windows and Macintosh)

You can use the OCR software to import scanned text into your preferred word processing application for editing. This allows you to edit faxes, letters, newspaper clippings, and many other documents. The HP LaserJet Director allows you to specify the word processing application you want to use for editing.

**Note** 

OCR cannot recognize handwritten text.

#### To change the OCR word processing application

You can change the default word processing program that is used for OCR.

- 1 Open the HP LaserJet Director.
- 2 Click the Customize button.
- 3 Select the **Button Customization** tab.
- 4 Select **OCR**, then click the **Options** button.
- 5 Select the desired word processing application from the Select Application drop-down list.
- 6 Click **Next** and select the application's icon if it is not already selected.
- 7 Click Finish.
- 8 Click **Apply** or **OK** to save your selection.

**Note** 

Due to the complexity of some word processing applications and their interaction with the product, it is sometimes preferable to scan to Wordpad (a Windows accessory) and then cut and paste the text into your preferred word processing application.

#### To use HP LaserJet Director's OCR feature

- Load the originals to be scanned face up in the ADF input tray, with the top of the document forward, and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid. See <u>Loading originals to copy or scan</u> for more information.
- 2 Press start scan on the product's control panel. If you are using the ADF, the HP LaserJet Director launches automatically. If you are on a network, scanning from the flatbed scanner, or the HP LaserJet Director does not automatically open, click the Start button on the Windows task bar, point to Programs, and click HP LaserJet Director or click on it in the System Tray.
- 3 In HP LaserJet Director, click OCR.
- **4** The original is scanned, and your word processing software application launches automatically.
- 5 The scanned text has been optically recognized and is now ready to edit using your word processing application.

72 6 Scanning EN

Note	If the word processing icon is not present or active, either you do not have a word processing software application installed on your computer or the scanner software did not recognize the application during the installation. For instructions on how to create a link to your word processing application, see <a href="To change the OCR word processing application">To change the OCR word processing application</a> .
Note	The OCR software does not support scanning colored text. Colored text will always be converted to black and white text before being sent to OCR; thus, all text in the final document will be black and white regardless of the original color.

Scanning with OCR 73

## **Enhancing images with HP LaserJet Document Manager or HP Photo Center**

You can use HP LaserJet Document Manager or HP Photo Center to make the following enhancements to scanned images:

- Contrast
- Brightness
- Color adjustment
- Crop
- Effects
- Invert
- Red-eye removal
- Rotate and flip
- Sharpen
- Straighten

Note

If you are using the Macintosh product software, these features are found in the HP Workplace. However, not all of the features listed above are supported by the Macintosh software.

#### To access image enhancement features (Windows)

- From HP LaserJet Document Manager, open a document and select an image enhancement feature from the Image menu.
- For the Photo Center, first open a document then turn on Advanced menus from the View menu in order to display the Image menu.

Note

For instructions on using HP LaserJet Document Manager's image enhancement features, see the product software Help.

## Adding annotations to HP documents

You can use HP software to modify and annotate scanned documents that are saved as HP documents (.hpd extension). You can add any of the following elements to an HP document:

- Text
- Electronic sticky notes
- Highlights (to text or graphics)
- Rubber stamp (for example, Confidential)
- Lines and arrows
- Hyperlinks

To use annotations with other types of scanned documents, see <u>Adding annotations to scanned image files</u>.

Note

For complete instructions on using HP LaserJet Document Manager's annotation features, see the product software Help.

74 6 Scanning EN

#### To access HP LaserJet Document Manager's annotation features

**Note** 

These instructions apply to Windows users only.

- 1 If it is not open, open the document to be annotated in the HP LaserJet Document Manager.
- **2** Select an annotation tool from the Annotation menu.

#### To change the annotation settings

To change the annotations settings, open the Annotations menu and select **Annotation Properties**.

## Adding annotations to scanned image files

You can add annotations to .bmp, .tif, .jpg, and .gif files using the HP LaserJet Photo Center.

You can add the following annotation elements:

- Freehand drawing items
- Lines, rectangles, ovals, and polygons (filled or outlined)
- Text

To add annotations to an image file, select the Tools menu in the HP LaserJet Photo Center.

#### Sending scanned items as e-mail attachments

You can use either HP LaserJet Director or HP LaserJet Document Manager to scan to e-mail. Not all e-mail applications are supported.

Note

Scan to e-mail features are not supported in Windows 95.

#### To scan to e-mail (Windows)

Note

If there are originals loaded in the ADF input tray and on the flatbed scanner, the product automatically scans from the ADF regardless of whether there is an original on the flatbed scanner.

- Open the HP LaserJet Director.
- 2 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 3 Press start scan on the control panel. If you are using the ADF, the HP LaserJet Director launches automatically. If you are on a network, scanning from the flatbed scanner, or the HP LaserJet Director does not automatically open, click the Start button on the Windows task bar, point to Programs, and click HP LaserJet Director or click on it in the System Tray.
- 4 In HP LaserJet Director, click **E-mail**.
- 5 The original is scanned, and your computer e-mail software application launches and automatically attaches the scanned image file to a new message. Enter an e-mail address and click **Send**.

#### To scan to e-mail (Macintosh)

- 1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 Open the HP LaserJet Director by double-clicking the HP LaserJet Director alias that appears on the desktop.
- 3 Click the E-mail button.
- 4 When an e-mail appears with the scanned item attached, enter an e-mail address and click Send.

#### To e-mail scanned files in an alternative mode

You can use an alternative mode to send a document in e-mail in any of the following situations:

- You do not have a compatible e-mail program.
- The **E-mail** button does not appear on the HP LaserJet Director.
- You do not have access to the HP LaserJet Director.
- 1 Load the originals to be scanned face up in the ADF input tray and adjust the media guides.
  OR
  - Lift the flatbed cover and load the original to be scanned face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass. Gently close the lid.
- 2 Use the HP LaserJet Director or other software to scan the document to the desktop or HP LaserJet Scan Control Viewer.
- **3** Save the file in the format you want.
- 4 Open your e-mail program, attach the file as you normally would, enter an address, and click **Send**.

#### Scanner resolution and color

If you are printing a scanned image or copying an image and the quality is not as you expected, you might have selected a resolution or color setting in the copier/scanner software that does not match your needs. Resolution and color affect scanned and copied images in the following ways:

- Image clarity
- Texture of gradations (smooth or rough)
- Scan and copy time
- File size

Resolution is measured in dots per inch (dpi) while color, grayscale, and black and white define the number of colors possible. You can adjust the scanner hardware resolution up to 600 dpi. The software has the ability to perform an interpolated resolution up to 9600 dpi. You can set color and grayscale at 1 bit (black and white) or 8 bit (256 levels of gray) to 24 bit (true color).

The resolution and color guidelines table lists simple tips that you can follow to meet your scanning and copying needs.

76 6 Scanning EN

Note

Setting the resolution and color to a high value can create large files that take up disk space and slow the scanning or copying process. It is important that you first determine how you are going to use the scanned image.

**Note** 

Color and grayscale images achieve the best resolution when scanned from the flatbed scanner rather than the ADF.

#### **Resolution and color guidelines**

Intended use	Recommended resolution	Recommended color settings
Fax	150 dpi	Black and White
E-mail	150 dpi	<ul> <li>Black and White if the image does not require smooth gradation</li> <li>Grayscale if the image requires smooth gradation</li> <li>Color if the image is in color</li> </ul>
Edit text	300 dpi	Black and White
Print (graphics or text)	600 dpi for text and complex graphics 150 to 300 dpi for simple graphics and photos	<ul> <li>Black and White for text and line art</li> <li>Grayscale for shaded or colored graphics and photos</li> <li>Color if the image is in color</li> </ul>
Display on screen	75 dpi	<ul> <li>Black and White for text</li> <li>Grayscale for graphics and photos</li> <li>Color if the image is in color</li> </ul>

## Color

You can set the color values to the following settings when copying or scanning.

Setting	Recommended use	Where to set the color value
Color	High quality color photos or documents in which the color is important.	Windows scanner software
Black and White	Use for text documents.	Windows scanner software
Grayscale	Use this setting when file size is an issue or when you want a document or photograph scanned quickly.	Windows scanner software
Photo Only	Documents that contain mostly color and black and white photos.	Windows or Macintosh TWAIN driver
Text Only	Documents that contain mostly text.	Windows or Macintosh TWAIN driver
Mixed Color	Documents that contain mostly color graphics.	Windows or Macintosh TWAIN driver
Mixed Grayscale	Documents that contain mostly black and white graphics.	Windows or Macintosh TWAIN driver
Photo	Typical photo quality.	Copier software
Text	Documents that contain mostly text.	Copier software
Best Photo	Documents that contain mostly color and black and white photos.	Copier software
	Best photo quality.	
Draft	To save toner when copying documents.	Copier software

78 6 Scanning EN

# 7 Faxing

Use the instructions below to perform basic faxing tasks with your HP LaserJet 3300mfp product:

- Setting the information in the fax header
- Setting the answer mode
- Loading originals to fax
- Sending faxes
- Canceling a fax job
- Using manual dial
- Deleting faxes from memory
- Redialing manually
- Sending a fax at a future time
- Receiving faxes
- Receiving faxes to your computer
- About speed-dial codes, one-touch keys, and group-dial codes
- Managing group-dial codes
- Deleting all phone book entries
- Using dialing characters
- Inserting a dial prefix
- Using fax forwarding
- Using fax polling
- Enabling an extension phone
- Sending a fax by dialing from a telephone
- Changing the HP LaserJet 3330 product's volume settings
- Changing the default resolution
- Changing the default contrast
- Changing the detect dial tone setting
- Changing how the product answers incoming faxes
- Changing rings-to-answer
- Changing answer ring patterns
- Changing the silence-detect mode
- Changing autoreduction settings for incoming faxes
- Enabling stamp received faxes
- Setting the fax error correction
- Selecting tone- or pulse-dialing mode
- Changing redial settings
- Using billing codes

EN 79

- Changing the V.34 setting
- Managing fax logs and reports
- Printing the fax activity log
- Setting the fax activity log to print automatically
- Printing a fax call report
- Setting fax call report print times
- Including the first page of each fax on the fax call report
- Printing a phone book report
- Printing the billing codes report
- Printing a T.30 protocol trace report
- Printing the block fax list
- Printing all fax reports

## Setting the information in the fax header

#### To set the fax header

To set or change the fax header information, use the following steps. If you need help entering any information, see Using dialing characters.

- 1 On the control panel, press **menu/enter**.
- 2 Using the < and > buttons, select Time/Date, Header and press menu/enter.
- 3 Using the < and > buttons, select Fax Header, and press menu/enter.
- 4 Using the alphanumeric keypad, enter your fax number and press **menu/enter**.
- 5 Using the alphanumeric keypad, add the name of your company and press menu/enter.

#### Setting the answer mode

Depending on your situation, you can set the HP LaserJet 3330's answer mode to automatic or manual.

- Automatic: In automatic answer mode, the product answers incoming calls after a specified number of rings or upon recognition of special fax tones. To specify the number of rings, see Changing rings-to-answer.
- Manual: In manual answer mode, the product never answers calls. You must start the
  fax-receiving process yourself, either by pressing start fax on the control panel or by picking
  up a phone connected to that line and dialing 1-2-3.

The default answer mode is automatic.

**Note** 

Although most users leave the answer mode set to automatic, voice callers who dial the fax phone number will hear fax tones if the phone is not answered, or if they do not hang up by the specified number of rings-to-answer. If you do not want voice callers to hear fax tones, use the manual setting, but remember that fax calls are not received automatically.

#### To set the answer mode

To set or change the answer mode, use the following steps:

1 On the control panel, press menu/enter.

- 2 Using the < and > buttons, select Fax Setup and press menu/enter.
- 3 Using the < and > buttons, select Fax Recv. Setup and press menu/enter.
- 4 Press menu/enter to select Answer Mode.
- 5 Using the < and > buttons, select Automatic or Manual and press menu/enter.
- 6 The control panel display shows the answer mode setting that you specified.

## Loading originals to fax

Use the instructions below to load original documents for faxing.

#### To load fax documents into the ADF input tray

- Before loading the fax documents into the ADF input tray, check to make sure there is nothing on the flatbed scanner.
- 2 Put the top ends of the document to be faxed print side up in the ADF input tray with the first page to be scanned at the top of the stack.
- 3 Push the document up against the side of the ADF input tray.
- 4 Slide the document into the ADF input tray until it does not move any farther.

The document is now ready to be faxed.

## **Sending faxes**

#### To send a fax to one recipient

**Note** 

If you want to improve the quality of a paper document before faxing it, scan the document, straighten or clean the image, and send it as a fax from the software. For more information, see the product software Help.

- 1 Dial the fax number using one of the following methods:
  - Use the alphanumeric buttons on the product's control panel.
  - If the fax number you are calling has been assigned to a one-touch key, press that key.
  - If the fax number you are calling has a speed-dial code, press **speed dial**, enter the speed-dial code using the alphanumeric buttons, and press **menu/enter**.

**Note** 

When dialing with the alphanumeric buttons, include any pauses or other needed numbers, such as an area code, an access code for numbers outside a PBX system (usually a 9 or 0), or a long-distance prefix. For more information, see <u>Using dialing characters</u>.

- 2 Load the document into the ADF input tray.
- 3 Press fax/send.

When the last page of the fax has exited the product, you can start sending another fax, copying, or scanning.

To fax to numbers you use regularly, you can assign a one-touch key or speed-dial code. See <u>To program speed-dial codes and one-touch keys</u> and <u>To program group-dial codes</u>. If you have electronic phone books available, you may be able to use them for selecting recipients. Electronic phone books are generated with third-party applications.

#### To send a fax to multiple recipients

You can send a fax to several fax numbers at once. If you want to send a fax to a group of fax numbers that you have assigned to a group-dial code, see <a href="Managing group-dial code">Managing group-dial code</a>. If you want to send a fax to a group of numbers (maximum of 20) without a group-dial code, see <a href="To send a fax">To send a fax</a> to an ad hoc group.

In the rare instance that your document does not fit into memory, you will need to send the document to each fax number one at a time or use HP LaserJet Director.

**Note** 

HP LaserJet Director is not supported for Microsoft Windows 95.

#### To send a fax using a group-dial code

- 1 Load the document into the ADF input tray.
- 2 Adjust any fax settings, such as contrast or resolution.
- 3 Press the one-touch key for the group.
  OR

Press phone book, press the group-dial code assigned to the group, and press menu/enter.

4 Press fax/send.

The product scans the document into memory and sends the fax to each number specified. If a number in the group is busy or does not answer, the product will redial the number based on its redial setting. After multiple redial attempts fail, the product updates the Fax Activity Log with the error and proceeds to the next number in the group.

**Note** 

The Fax Activity Log feature is not supported in the software for Microsoft Windows 95, but you can print the Fax Activity Log using the control panel. For instructions, see <a href="Printing the fax activity log">Printing the fax activity log</a>.

#### To send a fax to an ad hoc group

Use the following instructions to send a fax to a group of recipients that does not have an assigned group-dial code:

- 1 Load the document into the ADF input tray or the flatbed scanner.
- **2** Dial the first fax number using one of the following methods:
  - · Use the alphanumeric buttons.
  - If the fax number you are calling has a one-touch key, press that key.
  - If the fax number you are calling has a speed-dial code, press **phone book**, enter the speed-dial code using the alphanumeric buttons, and press **menu/enter**.

**Note** 

When dialing using the alphanumeric buttons, include any pauses or other needed numbers, such as an area code, an access code for numbers outside a PBX system (usually a 9), or a long distance prefix. See <u>Using dialing characters</u> for more information.

- 3 Press menu/enter.
- 4 To continue entering numbers, repeat steps 2 and 3. OR

If you are finished entering numbers, go to the next step.

5 Press fax/send.

6 The product sends the fax to each fax number. If a number in the group is busy or does not answer, the product will redial that number based on its redial setting. If multiple redial attempts fail, the product updates the Fax Activity Log with the error and then proceeds to the next number in the group.

**Note** 

The Fax Activity Log feature is not supported in the software for Microsoft Windows 95, but you can print the Fax Activity Log using the control panel. For instructions, see <a href="Printing the fax activity log">Printing the fax activity log</a>.

#### Canceling a fax job

Use these instructions to cancel a single fax currently dialing or a fax that is being transmitted or received.

#### To cancel the current fax job

Press cancel on the control panel. Any pages that have not been transmitted are canceled.

#### To cancel a fax job using fax job status

Use this procedure to cancel a fax job in the following situations:

- The product is waiting to redial after a busy signal or no answer.
- The fax is going to a group of numbers.
- The fax is scheduled to be sent at a future time.

Use the following steps to cancel a fax job using fax job status:

- 1 Press menu/enter.
- 2 Press menu/enter to select Fax Job Status.
- 3 Use the < or > button to scroll through pending jobs until you reach the job you want to clear.
- 4 Press menu/enter to select the job you want to cancel.
- **5** Press **menu/enter** to confirm that you want the job to be canceled.

## **Using manual dial**

Normally, the product dials after you press **fax/send**. At times, however, you might want the product to dial each number as you press it. For example, if you are charging your fax call to a calling card, you may need to dial the fax number, wait for the acceptance tone of your telephone company, and then dial the calling card number. When dialing internationally, you might need to dial part of the number and then listen for dial tones before continuing to dial.

#### To use manual dial

- 1 Load the document into the ADF input tray.
- 2 Press fax/send.
- 3 Begin dialing. The fax number dials as you press each digit. This allows you to wait for pauses, dial tones, international access tones, or calling card acceptance tones before continuing to dial.

## **Deleting faxes from memory**

Use this procedure only if you are concerned someone else has access to your product and will try to reprint faxes from memory.

#### **CAUTION**

In addition to clearing the reprint memory, this procedure clears any fax currently being sent, unsent faxes pending redial, faxes scheduled to be sent at a future time, and faxes not printed or forwarded.

#### To delete faxes from memory

- 1 Press menu/enter.
- 2 Press > once to display Fax Functions and press menu/enter.
- 3 Use the < or > button to select Clear Saved Faxs and press menu/enter.
- 4 Press menu/enter to confirm the deletion.

## **Redialing manually**

If you want to send another document to the last fax number dialed, use the following procedure to manually redial. If you are trying to resend the same document you sent the first time, you will want to wait until the automatic redials have stopped or you have stopped them yourself. Otherwise, the recipient might get the fax twice: once from the manual redial attempt and once from one of the automatic redial attempts.

Note

To stop the current redial attempt for a fax, or to cancel all pending, automatic redial attempts for a fax, see <u>Canceling a fax job</u>. To change redial settings, see <u>Changing redial settings</u>.

#### To redial manually

- 1 Load the document into the ADF input tray.
- 2 Press redial/pause.
- 3 Press fax/send. The product redials the last number dialed and attempts to send the fax.

## Sending a fax at a future time

You can schedule a fax to be sent automatically at a future time to one or more people. When you complete this procedure, the product scans the document into memory and returns to the Ready state so you can do other tasks.

Note

This feature is not supported for Microsoft Windows 95.

**Note** 

If the product cannot transmit the fax at the scheduled time, it is indicated on the fax call report (if that option is turned on), or logged in the fax activity log. This can happen in the case of no answer, or if a busy signal results in the failure of redial attempts. (See <u>Setting fax call report print times</u> and <u>Printing the fax activity log</u> for more information.)

If you have set a fax to send at a future time but need to add something to it, you can send the additional information as another job. All faxes scheduled to go to the same fax number on the same date and time are delivered as individual faxes.

#### To send a fax at a future time

- Load the document into the ADF input tray.
- 2 Press menu/enter.
- 3 Use the < or > button to display Fax Functions and press menu/enter.
- 4 Use the < or > button to display Send Fax Later and press menu/enter.
- 5 Use the alphanumeric buttons to enter the start time. If you are set to a 12-hour clock, use the > button to move the cursor past the fourth character to set A.M. or P.M. Select 1 for A.M. or select 2 for P.M., and press menu/enter.

OR

If you are set to a 24-hour clock, press menu/enter.

6 Use the alphanumeric buttons to enter the date and press menu/enter.

OR

Accept the default date by pressing **menu/enter**.

7 Type the fax number, enter the speed-dial code, or press the one-touch key. (This feature does not support ad hoc groups.) Press menu/enter or fax/send. The product scans the document into memory and sends it at the designated time.

## **Receiving faxes**

You can receive faxes to the product or to your computer. In general, incoming faxes to the product are automatically answered; however, if you change which devices are connected to the same phone line that the product is connected to, you will need to change how the product answers incoming faxes. See <a href="Changing how the product answers incoming faxes">Changing how the product answers incoming faxes</a> for instructions. Follow the procedures in this section to manage faxes routed to the product.

- To receive faxes when you hear fax tones
- To reprint a fax
- To block or unblock fax numbers

#### To receive faxes when you hear fax tones

If you have a phone line that receives both fax and phone calls, and you hear fax tones when you answer the phone, you can start the receiving process in one of two ways:

- If you are close to the product, press fax/send on the control panel.
- When you answer any phone connected to the line (an extension phone) and hear fax tones, the product should begin answering the call automatically. If not, press 1-2-3 in sequence on the telephone keypad, listen for fax transmission sounds, and then hang up.

Note

For the second method to work, the extension phone setting must be set to Yes. See <u>Enabling an extension phone</u> to check or change the setting.

#### To reprint a fax

If you want to reprint a fax because the print cartridge was empty or if the fax printed on the wrong type of media, you can try to reprint it. The actual number of faxes stored for possible reprinting is determined by the available memory. The most recent fax prints first; the oldest fax prints last.

These faxes are continuously stored, and reprinting them does not clear them from memory. To clear these faxes from memory, see <u>Deleting faxes from memory</u>.

EN Receiving faxes 85

#### **Note**

You do not need to use this procedure if the fax does not print because of a jam or because the media runs out. During these situations, faxes are received to memory. As soon as you clear the jam or refill the media, faxes automatically resume printing.

Use the following steps to reprint a fax:

- 1 Press menu/enter.
- 2 Press > once to display Fax Functions and press menu/enter.
- 3 Use the < or > button to display Reprint Last and press menu/enter. The product begins reprinting the most recently printed fax.

Note

To stop the printing at any time, press cancel.

#### To block or unblock fax numbers

If there are people or businesses from whom you do not want to receive faxes, you can block up to 30 fax numbers using the control panel. When you block a fax number and someone from that number sends you a fax, the display panel indicates the number is blocked, the fax does not print, and the fax is not saved in memory. Faxes from blocked fax numbers appear in the fax activity log with a "discarded" designation. You can unblock blocked fax numbers individually or all at one time.

Note

The fax activity log feature is not supported for Microsoft Windows 95, but you can print the fax activity log using the control panel. See <a href="Printing the fax activity log">Printing the fax activity log</a>.

**Note** 

To print a list of numbers you have blocked, see Printing the block fax list.

Use the following steps to block or unblock fax numbers using the control panel:

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Settings and press menu/enter.
- 3 Use the < or > button to select Fax Recv. Setup and press menu/enter.
- 4 Use the < or > button to select Block Faxes and press menu/enter.
- **5** Do one of the following:
  - To block a fax number, use the < or > button to select Add Entry and press menu/enter. Enter the fax number exactly as it appears in the header (including spaces) and press menu/enter. Enter a name for the blocked number and press menu/enter.
  - To unblock a single fax number, use the < or > button to select Delete Entry and press
    menu/enter. Use the < or > button to select the fax number you want and press
    menu/enter to confirm the deletions.
  - To unblock all blocked fax numbers, use the < or > button to select Clear All and press menu/enter. Press menu/enter again to confirm the deletions.

## Receiving faxes to your computer

To receive faxes to your computer, you must enable the receive to PC setting in the software (see the product software Help). If you have a phone line receiving both fax and voice calls (a shared line) and an answering machine or computer voicemail on the line, you must turn off the answering machine or voicemail to receive faxes to the computer. If you do not, either the answering system answers all calls, or the PC fax program does. Because of this limitation, most users choose to receive faxes to the product.

The receive to PC setting can only be activated from the computer. If for any reason that computer is no longer available or accessible, you can use the procedure below to turn the receive to PC setting off from the product control panel.

#### To turn the receive to PC setting off from the control panel

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Functions and press menu/enter.
- 3 Use the < or > button to select Stop Recv To PC and press menu/enter to confirm your selection.
- Once the Stop Recv to PC setting has been selected, any faxes still in the product's memory are printed.

**Note** 

You cannot use the receive to PC feature if the product is networked, or if you are using the Macintosh software.

## About speed-dial codes, one-touch keys, and group-dial codes

You can store frequently dialed fax numbers or groups of fax numbers as one-touch keys, speed-dial codes, or group-dial codes.

In the product's phone book, there are a total of 275 codes available that can be used for speed-dial codes and group-dial codes. For example, if you program 225 of the codes as speed-dials, the remaining 50 can be used for group-dials.

See the following procedures for more information about how to use speed-dial codes, one-touch keys, and group-dial codes:

#### To program speed-dial codes and one-touch keys

Speed-dial codes 1 through 9 are also associated with their corresponding one-touch keys on the control panel. The one-touch keys can be used for speed-dial or group-dial codes. A maximum of 50 characters can be entered for a single fax number.

Note

Speed-dial codes, one-touch keys, and group-dial codes are more easily programmed from the software. For instructions on programming speed-dial codes, one-touch keys, and group-dial codes using the product software, see the product software Help.

Use the following steps to program speed-dial codes and one-touch keys from the product's control panel:

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press menu/enter to select Phone Book.
- 4 Press menu/enter to select Individual Setup.
- 5 Press menu/enter to select Add.
- 6 Using the alphanumeric buttons, enter the speed-dial code number you want to associate with this fax number, and press **menu/enter**. Choosing a number from 1 to 9 also associates the fax number with the corresponding one-touch key.

#### **Note**

When entering a fax number, you can use a comma (,) for a pause, or the letter R if you want the product to wait for a dial tone.

- 7 Using the alphanumeric buttons, enter the fax number. Include any pauses or other needed numbers, such as an area code, an access code for numbers outside a PBX system (usually a 9 or 0), or a long distance prefix.
- 8 Press menu/enter.
- 9 Using the alphanumeric buttons, enter a name for the fax number. To do so, repeatedly press the alphanumeric button for the letter you need until the letter appears. (For a list of characters, see Using dialing characters.)

#### Note

To insert punctuation, press the asterisk (\*) repeatedly until the character you want appears and press > to go to the next space.

- 10 Press menu/enter to save the information.
- 11 If you have more speed-dial codes or one-touch keys to program, repeat steps 1 through 10.

#### To delete speed-dial codes and one-touch keys

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press menu/enter to select Phone Book.
- 4 Press menu/enter to select Individual Setup.
- 5 Use the < or > button to select Delete and press menu/enter.
- **6** Using the alphanumeric buttons, enter the number of the speed-dial code you want to delete and press **menu/enter**.
- 7 Press menu/enter to confirm the deletion.

#### To quickly program speed-dial codes or one-touch keys

#### Note

The following procedure cannot be used to program a group-dial code. For group-dial code instructions, see <u>To program group-dial codes</u>.

Use the following method to program speed-dial codes and one-touch keys easily from the product control panel:

1 On the product control panel, press **phone book**, enter an unprogrammed speed-dial code and press **menu/enter**.

#### OR

Press an unprogrammed one-touch key. The control panel display will notify you that the speed-dial code or one-touch key has not been programmed.

- 2 Press menu/enter to program the speed-dial code or one-touch key.
- 3 Enter the fax number and press **menu/enter**. Include pauses, or other needed numbers, such as an area code, an access code for numbers outside a PBX system (usually a 9 or 0), or a long distance prefix. (See <u>Using dialing characters</u> for more information.)

#### Note

When entering a fax number you can use a comma (,) for a pause, or the letter R if you want the product to wait for a dial tone.

- **4** Enter a name for the fax number. To do so, repeatedly press the numeric button for the letter you need until the letter appears. (See <u>Using dialing characters</u> for a list of characters.)
- **5** Press **menu/enter** to save the information.

#### To program a one-touch key for alternate long distance

If you use an alternate long distance carrier, you can program a one-touch key to dial the service's access number before a fax number. When you need to use this one-touch key, press it, enter the fax number, and press **fax/send**. Both the access number and the fax number are then dialed together. If the access number is used almost every time you dial a fax, it might be easier to program the access number as a dialing prefix (see <u>Inserting a dial prefix</u> for more information).

Note

Speed-dial codes, one-touch keys, and group-dial codes are more easily programmed from the software (not available in Windows 95). For instructions on programming speed-dial codes, one-touch keys, and group-dial codes using the product software, see the product software Help.

Use this procedure if the access number has more than 10 characters or if you only occasionally use the access number.

- 1 Follow steps 1 through 6 of <u>To program speed-dial codes and one-touch keys</u>. When entering the fax number, you might also have to do one or both of the following tasks:
  - If you have to wait for an access tone at some point in the number, enter one or more three-second pauses by pressing **pause/redial**.
  - Enter a personal identification number (PIN), if applicable.
- When you are finished entering the access number, press **pause/redial**. A pause at the end of the string tells the product not to dial this number until you dial the fax number.
- 3 Continue with steps 7 through 10 of <u>To program speed-dial codes and one-touch keys</u>.

#### Managing group-dial codes

If you send information to the same group of people on a regular basis, you can program a group-dial code to simplify the task. Any available speed-dial codes can be programmed with group-dial codes. Group-dial codes using numbers 1 through 9 are also associated with the corresponding one-touch key on the control panel. Any individual can be added to a group. All group members must have programmed speed-dial codes or one-touch keys assigned to them before being added to the group-dial code.

Use these instructions to manage your group-dial codes:

To program group-dial codes

To delete group-dial codes

To delete an individual from a group-dial code

Note

Speed-dial codes, one-touch keys, and group-dial codes are more easily programmed from the software (not available in Windows 95). For instructions on programming speed-dial codes, one-touch keys, and group-dial codes using the product software see the product software Help.

## To program group-dial codes

- 1 Assign a speed-dial code to each fax number you want in the group. (For instructions, see <u>To program speed-dial codes and one-touch keys.</u>)
- 2 Press menu/enter.

- 3 Use the < or > button to select Fax Setup and press menu/enter.
- 4 Press menu/enter to select Phone Book.
- 5 Use the < or > button to select Group Setup and press menu/enter.
- 6 Use the < or > button to select Add Group and press menu/enter.
- 7 Using the alphanumeric buttons, enter the number you want to associate with this group and press menu/enter. Choosing 1 through 9 also associates the group with the corresponding one-touch key.
- 8 Using the alphanumeric buttons, enter a name for the group. See <u>Using dialing characters</u> for instructions on using the buttons. After the name of the group has been entered, press menu/enter.
- 9 Press the one-touch key or choose the speed-dial code for the group member you want to add and press menu/enter. Press menu/enter again to confirm the addition. Repeat this step for each group member you want to add.
- 10 When you are finished, press cancel.
- 11 If you have more group-dial codes to enter, press menu/enter and repeat steps 1 through 10.

#### To delete group-dial codes

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press menu/enter to select Phone Book.
- 4 Use the < or > button to select Group Setup and press menu/enter.
- 5 Use the < or > button to select Delete Group and press menu/enter.
- 6 Using the alphanumeric buttons, enter the number of the group-dial code you want to delete and press **menu/enter**.
- 7 Press menu/enter to confirm the deletion.

## To delete an individual from a group-dial code

- Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press menu/enter to select Phone Book.
- 4 Use the < or > button to select Group Setup and press menu/enter.
- 5 Use the < or > button to select Del. # in Group and press menu/enter.
- **6** Use the < or > button to select the individual you want to delete from the group.
- 7 Press menu/enter to confirm the deletion.
- **8** Repeat steps 6 and 7 to delete other individuals from the group.

OR

Press cancel if you are finished.

#### **Deleting all phone book entries**

You can delete all speed-dial codes, one-touch keys, and group-dial codes that are programmed in the product.

#### **CAUTION**

Once speed-dial codes, one-touch keys, and group-dial codes are deleted, they cannot be recovered.

#### To delete all phone book entries

Use the following instructions to delete all speed-dial codes, one-touch keys, and group-dial codes that are programmed in your product:

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press menu/enter to select Phone Book.
- 4 Use the < or > button to select Delete All and press menu/enter.
- 5 Press menu/enter to confirm the deletion.

#### **Using dialing characters**

When using the control panel to enter your name in the header or type a name for a one-touch key, speed-dial code, or group-dial code, press the appropriate numeric button repeatedly until the letter you need appears. Then, press > to select that letter and move to the next space.

#### Dialing character table

This table shows which letters and numbers appear on each numeric button when the default language is set to English.

Button number	Characters
1	1
2	ABCabc
3	DEFdef
4	GHlghi
5	JKLjkl
6	MNOmno
7	PQRSpqrs

8	TUVtuv
9	WXYZwxyz
0	0
*	()+/,"*&@
#	space #

#### To insert a pause or wait

You can insert pauses into a fax number you are dialing or programming to a one-touch key, speed-dial code, or group-dial code. Pauses are often needed when dialing internationally or connecting to an outside line.

Press **pause/redial** to insert a three-second pause in your dialing sequence (models sold in France insert a two-second pause). A comma appears on the control panel display, indicating the pause will occur at that point in the dialing sequence.

## **Inserting a dial prefix**

A dial prefix is a number or group of numbers automatically added to the beginning of every fax number you enter at the control panel or from the software.

By default, this setting is off. You may want to turn this setting on and enter a prefix if, for example, you have to dial a number such as 9 to get a phone line outside your company's phone system. While this setting is on, you can still dial a fax number without the dial prefix by using manual dial. For instructions, see <u>Using manual dial</u>.

#### To set the dial prefix

Use the following instructions to set the dial prefix:

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press > once to select Fax Send Setup and press menu/enter.
- 4 Use the < or > button to select Dial Prefix and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter.
- 6 If you choose on, use the numeric buttons to enter the prefix and press **menu/enter**. You can use numbers, pauses, and dialing symbols.

#### **Using fax forwarding**

You can set your product to forward incoming faxes to another fax number. When the fax arrives at your product, it is stored in memory. Then your product dials the fax number you have specified and sends the fax. If it cannot forward a fax because of an error (for example, the number is busy) and repeated attempts to redial are unsuccessful, your product will print the fax.

If the product runs out of memory while receiving a fax, it will terminate the incoming fax and only forward the pages and partial pages already stored in memory.

When using this feature, the product must be the one receiving faxes (not the computer) and the answer mode must be set to Automatic (see Changing how the product answers incoming faxes).

#### To use fax forwarding

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Use the < or > button to select Fax Recv. Setup and press menu/enter.
- 4 Use the < or > button to select Forward Fax and press menu/enter.
- 5 Press > to select On or Off and press menu/enter.
- If you choose to turn fax forwarding on, use the alphanumeric buttons to enter the fax number where you want the fax to go, and press **menu/enter** to save your selection.

## **Using fax polling**

If someone else has set up a fax to be polled, you can request that the fax be sent to your product (this is known as polling another machine).

#### To poll (request a fax from) another fax machine

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Functions and press menu/enter.
- 3 Use the < or > button to select Polling Receive and press menu/enter.
- 4 Use the alphanumeric buttons to enter the number of the fax machine that you want to request the fax from and press **menu/enter**.
- 5 Your product dials the other fax machine and requests the fax.

#### **Enabling an extension phone**

With this setting turned on, you can alert the product to pick up the incoming fax call by pressing 1-2-3 sequentially on the telephone keypad. The default is Yes. Turn this setting off only if you have a service from your telephone company that also uses the 1-2-3 sequence. The service will not work if it conflicts with the product.

#### To enable an extension phone

Use the following instructions to enable an extension phone:

1 Press menu/enter.

- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Use the < or > button to select Fax Recv. Setup and press menu/enter.
- 4 Use the < or > button to select Extension Phone and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter to save your selection.

#### Sending a fax by dialing from a telephone

At times, you might want to dial a fax number from a telephone connected to the same line as the product. For example, if you are sending a fax to a person whose product is in manual receive mode, you can call first to let that person know the fax is coming.

#### To send a fax by dialing from a telephone

- 1 Load the document into the ADF input tray.
- 2 Pick up the handset of a phone connected to the same line as the product and dial the fax number using either the phone's or the product's numeric buttons.
- **3** When the recipient answers, instruct the recipient to start the fax machine.
- When you hear the fax tones, press **fax/send** to begin transmitting the fax, wait until the display reads Connecting, and hang up the phone.

## Changing the HP LaserJet 3330 product's volume settings

You can control the volume of the following fax sounds from the product's control panel:

- The fax sounds associated with incoming and outgoing faxes
- The ring for incoming faxes

For information on controlling general volume settings, see <u>Using the product's volume controls</u>.

#### To change the fax sounds (line monitor) volume

- 1 Press **volume** on the control panel.
- 2 Use the < and > buttons to select Off, Soft, Medium, or Loud.
- 3 Press menu/enter to save your selection.

**Note** 

The default set at the factory is Soft.

#### To change the ring volume

The ring is heard when the device is initially sending or receiving a call. The ring duration length is based on the local telecom ring pattern length.

- 1 Press menu/enter.
- 2 Use the < or > button to select Common Settings and press menu/enter.
- 3 Use the < or > button to select Volume Settings and press menu/enter.
- 4 Press the > button once to select Ring Volume and press menu/enter.
- 5 Use the < or > button to select Off, Soft, Medium, or Loud.

6 Press menu/enter to save your selection.

Note

The default set at the factory for ring volume is Soft.

## **Changing the default resolution**

Resolution affects the quality, in dots per inch, of documents to be faxed. It also affects the transmission speed.

Use this procedure to change the default resolution for all fax jobs.

#### To change the default resolution

- 1 Press **resolution** to display the current resolution setting.
- 2 Use the < and > buttons to display the desired resolution setting.
- 3 Press menu/enter to save the selection.

#### **Changing the default contrast**

#### To change the default contrast

The default contrast is the contrast normally applied to items being faxed. The slider is set to the middle as the default contrast setting.

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Use the < or > button to select Fax Send Setup and press menu/enter.
- 4 Use the < or > button to select Def. Light/Dark.
- 5 Use the < button to move the slider to the left to make the fax lighter than the original, or use the > button to move the slider to the right to make the fax darker than the original.
- 6 Press menu/enter to save your selection.

#### Changing the detect dial tone setting

Normally the product waits for a dial tone before attempting to a dial a fax number. If you are using the product on the same line as your phone, turn on the detect dial tone setting. This will prevent the product from sending a fax while someone is on the phone.

#### To change detect dial tone

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Press > once to select Fax Send Setup and press menu/enter.
- 4 Use the < and > buttons to select Detect Dial Tone and press menu/enter.
- 5 Use the < and > buttons to select On or Off and press menu/enter.

**Note** 

The default set at the factory for detect dial tone is On for France and Hungary, and Off for all other countries/regions.

## Changing how the product answers incoming faxes

The product's answer mode is set when you set up the product. You only need to change these settings if you change the devices connected to this phone line.

#### To set the answer mode to automatic or manual

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select Fax Recv. Setup and press menu/enter.
- 4 Press menu/enter to select Answer Mode.
- 5 Use the < and > buttons to select Automatic or Manual and press menu/enter to save your selection.

#### **Changing rings-to-answer**

When the answer mode is set to automatic, the product's rings-to-answer setting determines the number of times the phone rings before an incoming call is answered.

If the product is connected to a line receiving both fax and voice calls (a shared line) with an answering machine, you may need to adjust the rings-to-answer. The number of rings-to-answer for the product must be greater than the rings-to-answer on the answering machine. This allows the answering machine to answer the incoming call and record a message if it is a voice call. When the answering machine answers the call, the product listens to the call and automatically answers it if it detects fax tones.

Refer to the fax guide that came with your product to determine the default and recommended rings-to-answer settings for your country or region.

#### To set the number of rings-to-answer

To set or change the number of rings-to-answer, use the following steps:

- 1 On the control panel, press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select Fax Recv. Setup and press menu/enter.
- 4 Use the < and > buttons to select Rings To Answer and press menu/enter.
- **5** Use the alphanumeric keypad to enter the number of rings-to-answer and press **menu/enter**.

**Note** 

If you have an answering machine or computer voicemail connected to this line for the other phone number (on the single ring pattern), make sure the product's rings-to-answer is set to a lower number than the rings-to-answer on the answering machine or voicemail. If it is not, the product will be unable to receive fax calls.

## **Changing answer ring patterns**

If you subscribe to ring pattern service with your telephone company, you can enable the product to detect ring patterns. If you do not have ring pattern service, and you change this setting, the product will not be able to receive faxes.

#### What is ring pattern service?

Ring pattern service, such as distinctive ring, is available from some local telephone companies. It allows you to have two or three phone numbers on one line. This costs less than paying for two or three separate lines. Each of the phone numbers has a different ring pattern. Ring patterns allow you to answer voice calls and allow the product to answer fax calls.

#### How do I get the service?

Call your local telephone company to check the availability and to subscribe. The service might not be available in all areas. Also, your telephone company might use a different name for this service. If ring pattern service is available and you choose to subscribe to it, remember the following:

- Determine which ring pattern is used for phone calls and which is used for fax calls.
- Make sure the telephone company assigns the correct ring pattern to the fax number. The product ignores other ring patterns.

#### How will I know if it is working?

After product installation is complete, ask someone you know to send you a fax. Make sure you provide the correct fax number.

#### To change answer ring patterns

Note

Do not change the all rings default setting if you do not have ring pattern service from your telephone company. If you do not have ring pattern service and you change this setting, the product might not be able to receive faxes.

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select Fax Recv. Setup and press menu/enter.
- 4 Use the < and > buttons to select Answer Ring Type and press menu/enter.
- 5 Use the < and > buttons to select the ring pattern you want the product to use when answering incoming fax calls and press **menu/enter** to save your selection.

## Changing the silence-detect mode

This setting controls whether or not you can receive faxes from older-model fax machines that do not emit a fax signal during fax transmissions. At the time of this publication, these silent-model fax machines represented very few of the fax machines in use. The default setting is Off. It should be changed only if you regularly receive faxes from someone with an older-model fax machine.

#### To change the silence detect mode

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select Fax Recv. Setup and press menu/enter.
- 4 Use the < and > buttons to select Silence Detect and press menu/enter.
- 5 Use the < and > buttons to select on or off.

#### Changing autoreduction settings for incoming faxes

If the fit to page option is on, the product automatically reduces long faxes to fit on the product's default paper size (up to a 75% reduction), for example from legal to letter size.

If the fit to page option is turned off, long faxes print at full size on multiple pages.

If you have the stamp received faxes option on, you may want to turn autoreduction on also. This reduces the size of incoming faxes just slightly and prevents the page stamp from forcing a received fax page onto two pages.

**Note** 

Make sure the paper size setting matches the size of paper loaded in the paper input tray. To change the default paper size, see <u>Changing the default paper size</u>.

#### To change autoreduction for incoming faxes

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select Fax Recv. Setup and press menu/enter.
- 4 Use the < and > buttons to select Fit to Page and press menu/enter.
- 5 Use the < and > buttons to select on or off and press menu/enter to save your selection.

**Note** 

The default set at the factory for incoming fax autoreduction is On.

## **Enabling stamp received faxes**

The HP LaserJet 3330 product is set up to print the sender's identification at the top of each received fax. You can also choose to have your header information included on each received fax to confirm the date and time the fax was received.

**Note** 

This option only applies to received faxes that are printed by the product.

#### To enable stamp received faxes

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select Fax Recv. Setup and press menu/enter.
- 4 Use the < and > buttons to select Stamp Faxes and press menu/enter.
- 5 Use the < and > buttons to select On or Off and press menu/enter to save your selection.

Note

The default set at the factory for stamp received faxes is Off.

#### Setting the fax error correction

Normally, the product monitors the signals on the telephone line while it is sending or receiving a fax. If the product detects an error signal during the transmission and the error correction setting is on, the product can request that a portion of the fax be resent.

You should only turn error correction off if you are having trouble sending or receiving a fax, and you want to accept the errors in the transmission. Turning the setting off might be useful when you are trying to send or receive a fax overseas, or if you are using a satellite telephone connection.

#### To change the error correction setting

- 1 Press menu/enter.
- 2 Use the < and > buttons to select Fax Setup and press menu/enter.
- 3 Use the < and > buttons to select All Faxes and press menu/enter.
- 4 Use the < and > buttons to select Error Correction and press menu/enter.
- 5 Use the < and > buttons to select on or off and press menu/enter to save your selection.

Note

The default set at the factory for error correction is on.

## Selecting tone- or pulse-dialing mode

Use this procedure to set the product to tone- or pulse-dialing mode. The default is set to tone. Leave this as tone unless you know your phone line is incapable of tone dialing.

#### To select tone- or pulse-dialing

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Press > once to select Fax Send Setup and press menu/enter.
- 4 Use the < or > button to select Dialing Mode and press menu/enter.
- 5 Use the < or > button to select Tone or Pulse and press menu/enter to save your selection.

#### **Changing redial settings**

If the product was unable to send a fax because the receiving fax machine did not answer or was busy, the product will attempt to redial based on the redial on busy and redial on no answer options. Use the procedures in this section to turn these options on or off.

**Note** 

The product will, by default, redial if the receiving fax machine is busy but will not, by default, redial if the receiving fax machine does not answer.

#### To turn the redial on busy option on or off

The product is set to redial busy numbers five times automatically.

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Use the < or > button to select Fax Send Setup and press menu/enter.
- 4 Use the < or > button to select Redial On Busy and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter.

#### To turn the redial on no answer on or off

If this option is turned on, the product is set to redial on no answer one time automatically in the U.S. and Canada, and two times automatically for all other countries/regions.

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Use the < or > button to select Fax Send Setup and press menu/enter.
- 4 Use the < or > button to select Redial-No Answer and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter.

#### **Using billing codes**

If the billing codes feature has been turned on, the user will be asked to input a billing code for each fax. The billing number will be credited for each fax page that is sent. This includes all types of faxes except for poll receive, fax forwarding, or PC downloaded faxes. For an ad hoc group or a group dial fax, the billing number will be credited for each successful fax sent to each destination. The default setting is off. To print a report showing the total for each billing code, see <a href="Printing the billing codes report">Printing the billing codes report</a>.

#### To turn billing codes on or off

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.
- 3 Use the < or > button to select Fax Send Setup and press menu/enter.
- 4 Use the < or > button to select Billing Codes and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter.

## **Changing the V.34 setting**

V.34 is the modem protocol used by the product to send faxes. It is the worldwide standard for full-duplex modems sending and receiving data across telephone lines at 1,200 or 2,400 bps. The default setting for V.34 is on.

#### To turn the V.34 setting on or off

- 1 Press menu/enter.
- 2 Use the < or > button to select Fax Setup and press menu/enter.

- 3 Use the < or > button to select All Faxes and press menu/enter.
- 4 Use the < or > button to select V.34 and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter.

#### Managing fax logs and reports

If you purchased an HP LaserJet 3330 product, use the following instructions to manage your fax logs and reports:

- To print the fax activity log
- To set the fax activity log to print automatically
- To print a fax call report
- To set fax call report print times
- To include the first page of each fax on the fax call report
- To print a phone book report
- To print the billing codes report
- To print a T.30 protocol trace report
- To print the block fax list
- To print all fax reports

## Printing the fax activity log

On demand, you can print a log of the last 40 faxes. A fax activity log includes the following information:

- All faxes received to the product
- All faxes sent from the control panel
- All faxes sent from the HP LaserJet Document Manager (for Windows-compatible computers directly connected to the product)
- All faxes sent from the HP Workplace (for Macintosh-compatible computers directly connected to the product)

**Note** 

The HP LaserJet Document Manager is not supported for Microsoft Windows 95 or for any Macintosh OS prior to 9.1.

#### To print the fax activity log

Use the following steps to print a fax activity log:

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Fax Activity Log and press menu/enter.
- 4 Press menu/enter to select Print Fax Log Now. The product exits the Menu settings and prints the log.

#### Setting the fax activity log to print automatically

The fax activity log provides a chronological history of the last 40 faxes that were received, sent, or deleted, as well as any errors that occurred. You can decide whether or not you want the fax log to print automatically after every 40 entries.

#### To set the fax activity log to print automatically

Use the following steps to set the fax activity log to print automatically:

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Fax Activity Log.
- 4 Press > once to select Auto Log Printing and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter to confirm your selection.

**Note** 

The factory default is on.

## **Printing a fax call report**

A fax call report is a brief report indicating the status of the last sent or received fax.

#### To print a fax call report

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Fax Call Report and press menu/enter.
- 4 Press menu/enter to select Print Fax Call Now. The product exits the Menu settings and prints the report.

**Note** 

To set the fax call report to print automatically, see Setting fax call report print times.

## Setting fax call report print times

A fax call report is a brief report indicating the status of the last sent or received fax. You can set your product to print a fax call report after the following events:

- Every Fax Error (the default)
- Send Fax Error
- Receive Fax Error
- Every Fax
- Send Fax Only
- Never

Note

If you choose Never, you will have no indication that a fax failed to transmit unless you print a fax activity log.

#### To set fax call report print times

Use the following steps to set when the fax call report prints:

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Fax Call Report and press menu/enter.
- 4 Press the > button once to select Print Report and press menu/enter.
- 5 Use the < or > button to select the option for when you want the fax call reports to print.
- 6 Press menu/enter to save your selection.

#### Including the first page of each fax on the fax call report

If this option is turned on, the fax call report will display a thumbnail (50% reduction) of the first page of the last fax that was sent or received.

#### To include the first page of each fax on the fax call report

Use the following steps to include the first page of each fax on the fax call report:

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Fax Call Report and press menu/enter.
- 4 Use the < or > button to select Include First Page and press menu/enter.
- 5 Use the < or > button to select On or Off and press menu/enter to confirm your selection.

Note

The default setting for this option is On.

## Printing a phone book report

A phone book report lists the fax numbers that are assigned to the one-touch buttons and speed-dial and group-dial codes.

#### To print a phone book report

Use the following steps to print a one-touch, speed-dial, and group-dial report:

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Phone Book Report and press menu/enter. The product exits the Menu settings and prints the report.

#### Printing the billing codes report

The billing codes report prints out a list of all fax billing codes with their total number of faxes.

Note

After this report is printed, all billing data is reset to zero.

#### To print the billing codes report

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Billing Report and press menu/enter. The product exits the Menu settings and prints the report.

## Printing a T.30 protocol trace report

This report is used by service technicians to troubleshoot fax transmission issues.

## To print a T.30 protocol trace report

- 1 Press enter/menu.
- 2 Use the < or > button to select Service and press enter/menu.
- 3 Use the < or > button to select Print T.30 Trace and press enter/menu.
- 4 Use the < or > button to select Now and press **enter/menu**. The product exits the Menu settings and prints the report.

#### To set T.30 protocol trace report print times

You can set the T.30 protocol trace report to print at the following times:

- Never (the default)
- When an error occurs
- At the end of every sent and received fax

Use the following steps to set the T.30 protocol trace report print times:

- 1 Press enter/menu.
- 2 Use the < or > button to select Service and press enter/menu.
- 3 Use the < or > button to select Print T.30 Trace and press enter/menu.
- 4 Use the < or > button to select when T.30 protocol trace reports will print.
- 5 Press enter/menu to save the selection.

#### Printing the block fax list

Use this procedure to print a list of the blocked fax numbers. See To block or unblock fax numbers.

#### To print the block fax list

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select Block Fax List and press menu/enter. The product exits the Menu settings and prints the list.

## **Printing all fax reports**

Use this procedure to print the following reports at one time:

- Fax activity log
- One-touch, speed-dial, and group-dial report
- Configuration report
- Block fax list
- Billing report (if on)

#### To print all fax reports

Use the following steps to print all fax reports:

- 1 Press menu/enter.
- 2 Use the < or > button to select Reports and press menu/enter.
- 3 Use the < or > button to select All Fax Reports and press menu/enter. The product exits the Menu settings and prints the reports.

# 8 Networking

Use this information to learn about using your HP LaserJet 3300 series product with a network:

- Understanding the print server's features and benefits
- Using network protocols
- Software installation
- Network connection requirements
- Installing the 310x print server
- Installing the network software
- <u>Using HP Web JetAdmin</u>
- Using BOOTP
- Using DHCP
- Moving to another network
- Printing a print server configuration page
- For more information

EN 107

# Understanding the print server's features and benefits

If you use an HP Jetdirect 310x (or other compatible HP Jetdirect print server) with your HP LaserJet 3300 printer, you can perform the following tasks:

- Enhance workgroup productivity by placing your printer at a convenient location on the network while improving network printer performance.
- Connect your printer directly to the network.
- Share scan and print functions with others on the network.

**Note** 

You can only attach one printer to the print server. Do not use a USB hub to attach more than one printer.

# **Using network protocols**

## **Printing protocols**

The HP Jetdirect 310x supports the following printing protocols:

- TCP/IP (Transmission Control Protocol/Internet Protocol)
  - Port 9100
  - IPP (Internet Printing Protocol)\*
  - LPD (Line Printer Daemon)\*
  - FTP (File Transfer Protocol)\*
- IPX/SPX (Internetwork Packet Exchange)
  - Novell NetWare\*
  - IPX peer-to-peer printing (called IPX direct mode)
- DLC/LLC\*
- AppleTalk\*

#### Scanning protocols

The HP Jetdirect 310x supports the following scanning protocols:

- TCP/IP (Transmission Control Protocol/Internet Protocol)
  - Port 9100
  - · Embedded web server's scan service
- IPX/SPX (Internetwork Packet Exchange)
  - IPX peer-to-peer printing (called IPX direct mode)

## **Software installation**

If you are setting up client-server printing on a Microsoft Windows 95, 98, NT, ME, XP, or 2000 network, you should use the installation software that came with your HP LaserJet 3300 product to configure your Windows 95, 98, NT, ME, XP, or 2000 print server and then share the printer with client computers.

<sup>\*</sup> Only print is available over these protocols. The other protocols support printing, scanning and faxing over the network.

If you are setting up peer-to-peer printing on a Microsoft Windows 95, 98, NT, or 2000 network, you should use the installation software that came with your HP LaserJet 3300 product to configure each client to print directly to the printer.

# **Network connection requirements**

If you purchased an HP LaserJet 3300 series model other than the HP LaserJet 3320n and are connecting to a network, you will need a supported HP Jetdirect print server available from HP.

Your choice of print server depends on the type of network connection you have, the number of devices you want to connect to the print server, and your network protocol.

The following print servers are supported with the HP LaserJet 3300 series and are available from your local HP dealer or at http://www.buy.hp.com:

Model	Product No.	Connectors	Firmware version	Supported protocol
HP Jetdirect 75x	J6035A	Home phoneline 10-Mbits/s network—with a USB printer connection.	All	TCP/IP (LPD and 9100) IPX/SPX Peer-to-Peer AppleTalk
HP Jetdirect 170x	J3258B (not supported) J4102B	10Base-T parallel printer connection.	All	TCP/IP (9100 only) IPX/SPX Peer-to-Peer Novell NetWare DLC/LLC
HP Jetdirect 175x	J6035A	10/100Base-Tx USB printer connection.	All	TCP/IP (LPD and 9100) IPX/SPX Peer-to-Peer AppleTalk
HP Jetdirect 300x	J3263A J4101B	10/100Base-Tx (sometimes called Ethernet and Fast Ethernet) parallel printer connection.	H.08.00 or higher	TCP/IP (LPD and 9100) IPX/SPX Peer-to-Peer Novell NetWare DLC/LLC AppleTalk
HP Jetdirect 310x	J6038A	10/100Base-Tx USB printer connection.	All	TCP/IP (LPD and 9100) IPX/SPX Peer-to-Peer Novell NetWare DLC/LLC AppleTalk
HP Jetdirect 500x	J3265A	BNC, 10/100Base-Tx parallel printer network connections—can connect the product and up to two other devices to the print server.	J.08.00 or higher	TCP/IP (LPD and 9100) IPX/SPX Peer-to-Peer Novell NetWare DLC/LLC AppleTalk
		<b>Note:</b> The product is supported only on Port 1 of this print server.		

Model	Product No.	Connectors	Firmware version	Supported protocol
HP Jetdirect 500x	J3264A	Token Ring 3 twisted pair, (RJ-45) parallel printer connections — can connect the product and up to two other devices to the print server.	•	or higher TCP/IP (LPD and 9100) IPX/SPX Peer-to-Peer Novell NetWare DLC/LLC
		<b>Note:</b> The product is fully supported only on Port 1 of this print server.		

### Note

HP recommends against using print servers other than those listed above.

You can check the print server's firmware revision number by printing a configuration report for the print server. For instructions, see <u>To print a Jetdirect configuration page</u>.

# Installing the 310x print server

The HP Jetdirect 310x has a single USB port and an RJ-45 network port (10/100Base-Tx) for connecting to a network. The following items are included with your HP Jetdirect 310x:

- Power module
- Clip (attached to server)
- USB cable

## To connect the product to a network

Use the procedure in this section to connect your HP LaserJet 3300 series product to the network using an HP Jetdirect 310x print server.

#### Note

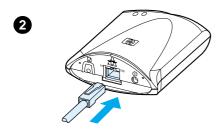
The instructions below apply to the HP Jetdirect 310x that is included with the HP LaserJet 3320n. If you are using a different Jetdirect print server, you must refer to the installation instructions that came with that print server.

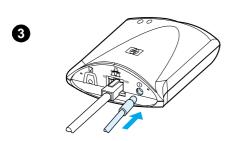
#### Note

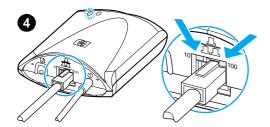
The USB cable should already be connected to the product. (For more information, see <u>Connecting a printer cable to your product</u>.)

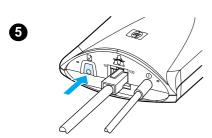
- Plug the rectangular end of the USB cable, with the USB symbol facing up, into the USB socket on the front of the print server. Make sure the cable is fully inserted.
- 2 Attach the print server to a 10/100Base-Tx local network by plugging the network cable into the network port on the rear of the print server.
- 3 Plug the power module (supplied with the print server) into a power outlet. Plug the other end of the power module cable into the power socket on the rear of the print server.

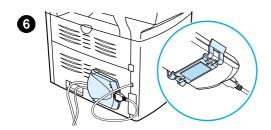












- 4 The 10 or 100 LED lights, indicating a network connection, and the power/status LED should begin blinking. After 15 seconds, the power/status LED should be solid green.
- 5 Press the test button on the rear of the print server to print a configuration page. A configuration page should be printed by the attached printer. If a page does not print or is unreadable, see Configuration page does not print.
- 6 If you want to mount the print server to the product (or table or wall), secure the attached mounting clip using the supplied sticky tape or the mounting screw holes. You can use the location illustrated in image 6 at left.

# Installing the network software

After you have successfully connected the HP LaserJet 3300 series product to your network, you should install or reinstall the software that came with the product. The software must be installed to take full advantage of the product features and to enable networked printing from each PC.

**Note** 

If you are using a previously purchased HP Jetdirect print server, do **not** install the software that came with it. Use the software that came with your HP LaserJet 3300 series product.

See the getting started guide that came with the product for complete instructions on installing the software.

# Using the embedded web server

Each HP Jetdirect 310x print server contains an embedded web server that you can access through a compatible web browser on an intranet. The embedded web server provides access to configuration and management pages for the print server and the attached printer. The networking pages provide access to status and configuration information on the HP Jetdirect 310x print server.

You can use the embedded web server to perform the following tasks:

- Monitor the status of the printer and the print server
- Make configuration changes to the print server to customize it for your network
- Link to HP's web site
- Scan images over the network without installing the HP LaserJet 3300 series product software

## **Prerequisites**

Computers with the TCP/IP protocol installed can use the embedded web server to monitor and configure the printers networked with an HP Jetdirect print server. Use the installation program on the product CD-ROM to set this up.

Before you can use the embedded web server, you must configure an IP address for the HP Jetdirect print server. Use the installation program on the product CD-ROM to configure the IP address.

Optionally, you can use BOOTP (Bootstrap Protocol) or DHCP (Dynamic Host Configuration Protocol) to automatically configure the IP address over the network each time the print server is turned on.

## Compatible web browsers

If you use Windows 9x, or NT 4.0, the embedded web server works with the following browsers:

- Microsoft Internet Explorer 5.0, 5.01, or 5.5
- Netscape Navigator 4.6x, 4.7x, 6.0, or 6.1

If you use Windows 2000, ME, or XP, the following browsers are supported:

- Microsoft Internet Explorer 5.0 or 5.5
- Netscape Navigator 4.6x, 4.7x, 6.0, or 6.1

If you use Mac OS 8.6 and later, or 9.0, the following browsers are supported:

Microsoft Internet Explorer 5.01

Netscape Navigator 4.6x, 4.7x, 6.0, or 6.1

For the latest list of compatible web browsers, check HP's Customer Care online at http://www.hp.com/support/net\_printing.

#### To start the embedded web server

After you establish an IP address 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. The print server's home page displays.
- 3 Click the **Help** link on the web page for more information.

Note

If you change the IP address and other parameters, the connection to the embedded web server closes. To re-establish a connection, use the new IP address as the URL. Also, some computer setups may no longer work.

# **Using HP Web JetAdmin**

HP Web JetAdmin is a printer installation and management application for intranets. You can obtain this software from HP Customer Care online at http://www.hp.com/support/net\_printing.

Hewlett-Packard recommends that you use HP Web JetAdmin version 6.5 or later for operation with the print server's embedded web server.

# **Using BOOTP**

This section describes how to configure the print server using Bootstrap Protocol (BOOTP) services on servers in some operating systems. BOOTP is used to download network configuration data from a server to the HP Jetdirect print server over the network.

For BOOTP, the downloaded configuration data may also identify a file containing extended configuration data. The HP Jetdirect print server downloads this file using TFTP. This TFTP configuration file may be located on the BOOTP server or on a separate TFTP server.

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 contain 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, TFTP, 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).

## Setting up the BOOTP server

**Note** 

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 BOOTP requests as well as to DHCP requests from the print server. See <u>Windows NT Procedure</u>.
- 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. See <u>Windows 2000</u> <u>Procedure</u>.

These systems may require third-party software for TFTP support.

#### **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. See <u>Bootptab file entries</u>.

TFTP is used to obtain additional configuration data from a configuration file on a TFTP server. This file is specified in the bootptab file; see the T144 tag. See <u>Bootptab file entries</u>.

#### **NetWare BOOTP servers:**

For setup of NetWare BOOTP servers, refer to your NetWare documentation.

# Bootptab file entries

The following is an example of an /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:\
   :lg=192.168.40.3:\
   :T144="hpnp/picasso.cfg":
```

A colon (:) indicates the end of a field, and a backslash (\) indicates that the entire entry is continued on the next line—more fields. 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.

The configuration data contains tags that identify the various HP Jetdirect parameters and their settings. The following table describes these tags:

EN Using BOOTP 115

Tag	RFC 2132 Option	Description
nodename	-	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, the nodename is picasso.)
hn	12	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	-	Hardware type tag. For this HP Jetdirect print server, set this to ether (for Ethernet). Must precede the ha tag.
vm	-	The BOOTP report format tag (required). Set this tag to rfc1048.
ha	-	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. The ht tag must precede this tag.
ip	-	IP address tag (required). This will be the print server's IP address.
sm	1	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.
gw	3	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.
ds	6	DNS (Domain Name System) server's IP address tag. Only a single name server can be specified.
dn	15	Domain name tag. Specifies the domain name for the print server (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).
ef	18	Extensions file tag that specifies the relative path name of the TFTP configuration file. This tag is similar to the vendor-specific tag T144.
na	44	Tag for IP addresses of the NetBIOS-over-TCP/IP Name Server (NBNS). A primary and secondary server may be specified in order of preference.
lease-time	51	DHCP IP address lease duration time (seconds).
tr	58	DHCP T1 timeout, specifying the DHCP lease renewal time (seconds).
tv	59	DHCP T2 timeout, specifying the DHCP lease rebind time (seconds).

Tag	RFC 2132 Option	Description
lg	7	syslog server's IP address tag. It specifies the server to which the print server sends syslog messages.
T144	-	An HP-proprietary tag that specifies the relative path name of the TFTP configuration file. Long path names may be truncated. The path name must be in double quotes ("pathname"). For file format information, refer to the TFTP file entries below. Note that standard BOOTP RFC-2132 option 18 (extensions file path) also allows the standard tag of to specify the relative path name of the TFTP configuration file.
T145	-	Idle Timeout option. An HP-proprietary tag to set the idle timeout (seconds), which is the amount of time that a print data connection may remain idle before being closed. The range is 1–3600 seconds.
T146	-	Buffer Packing option. An HP-proprietary tag to set buffer packing for TCP/IP packets:  0: (default) Normal, data buffers are packed before sending to the printer.  1: Disable buffer packing, data is sent to the printer when received.
T147	_	Write Mode option. An HP-proprietary tag that controls the TCP PSH flag setting for device-to-client data transfers: 0: (default) Disables this option, flag not set. 1: All-push option. Push bit is set in all data packets. 2: EOI-push option. Push bit is set only for data packets that have an End-of-Information flag set.
T148	-	IP Gateway Disable option. An HP-proprietary tag to prevent configuration of a gateway IP address: 0: (default) Allows a gateway IP address. 1: Prevents a Gateway IP address from being configured.
T149	-	Interlock Mode option. An HP-proprietary tag that specifies whether an acknowledgement (ACK) on all TCP packets is required before the printer is allowed to close a Port 9100 print connection.
Т150	_	TFTP server's IP address option. An HP-proprietary tag to specify the IP address of the server where the TFTP configuration file is located.
Т151	-	Network configuration option. An HP-proprietary tag to ensure other dynamic configuration methods are not used: BOOTP-ONLY: Send BOOTP requests only, not DHCP. DHCP-ONLY: Send DHCP requests only, not BOOTP.

Use the following conventions for the bootptab file entries:

- A colon (:) indicates the end of a field.
- 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), or hyphens.
- The underscore character (\_) is not allowed.

EN Using BOOTP 117

See your system documentation or product software help for more information.

# **Using DHCP**

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** 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 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.

#### **Windows NT Procedure**

**Note** 

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

- 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.
- Select Server and select Server Add.
- Type the server IP address, then click **OK** to return to the DHCP Manager window.
- In the list of DHCP servers, click on the server you have just added, then select **Scope** and select Create.
- 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.

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.

118 8 Networking ΕN

If you have set Lease Duration to Unlimited in the previous step, skip to the next step. If you have set Lease Duration to a finite time, 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:

- a 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), skip to the next step. If you plan to use WINS (Windows Internet Naming Service), continue with this step:
  - a 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.
  - 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.

- 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:

**Note** 

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

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.

EN Using DHCP 119

#### Windows 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.
- 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, click **Next**.
- **6** Enter the range of IP addresses for this scope (beginning IP address and ending IP address). Enter the subnet mask and 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 and click Next.
- 8 Set the IP address lease duration for your DHCP clients and click Next.
  - HP recommends that all print servers be assigned reserved IP addresses. You can do this after you set up the scope, as in step 11 below.
- 9 HP recommends that you select [No] to configure DHCP options for this scope later, and click Next.

If you want to configure DHCP options now:

- a Select Yes and click Next.
- b If desired, specify the IP address of the router (or default gateway) to be used by clients and click Next.
- **c** If desired, specify the Domain Name and DNS (Domain Name System) servers for clients and click **Next**.
- **d** If desired, specify WINS server names and IP addresses and 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:
  - a 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** and 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.

## Changing the BOOTP/DHCP configuration method

Other configuration tools that include IP configuration, such as the embedded web server or Telnet, 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. See Resetting the 310x print server to factory defaults (cold reset).

EN Using DHCP 121

# Moving to another network

When you move an HP Jetdirect print server that is configured with an IP address to a new network, make sure that the IP address does not conflict with the IP addresses on the new network. You can change the print server's IP address to one that can be used on the new network, or you can erase the current IP address and configure another IP address after you install the print server on the new network. Cold reset the print server (see Resetting the 310x print server to factory defaults (cold reset) for instructions).

If the current BOOTP server cannot be reached, you might need to find a different BOOTP server and configure the printer to that server.

If you used BOOTP or DHCP to configure the print server, edit the appropriate system files with updated settings. If you manually set the IP address, reconfigure the IP parameters.

Follow the instructions on the appropriate home page to configure or modify your printer. These instructions show you how to configure your printer and set up the printer for printing.

**Note** 

You can substitute the server domain with the TCP/IP address.

# Printing a print server configuration page

If you connect your HP LaserJet 3300 series product to a network, use the following instructions to print out a configuration page with information about your print server.

## To print a Jetdirect configuration page

Briefly press the test button on the rear panel of the print server. If you are not sure if the configuration page is in the process of printing, check the power/status LED. If the page never appears on the printer (or if it is unreadable), see <u>Configuration page does not print</u>.

For more information on the configuration page, see Interpreting the configuration page.

## For more information

For more information on the print server, see the HP support web site for the HP LaserJet 3300 series: http://www.hp.com/support/lj3300 (site is in English).

# 9 Cleaning and maintenance

Use the topics below to learn about basic cleaning and maintenance tasks:

- Cleaning the outside of the product
- Cleaning the print cartridge area
- Cleaning the printer media path
- Cleaning the pickup roller
- Changing the pickup roller
- Changing the printer separation pad
- Changing an ADF pickup roller assembly
- Removing and replacing the control panel bezel

EN 123

# Cleaning the outside of the product

#### To clean the exterior

Use a soft, damp, lint-free cloth to wipe dust, smudges, and stains off the exterior of the product.

## To clean the glass

Dirty glass, from fingerprints, smudges, hair, and so on, slows down performance and affects the accuracy of special features such as fit to page and copy.

1 Turn off the product, unplug the power cord from the electrical socket, and raise the lid.

**Note** 

If you have a 220V product, turn off the power switch.

2 Clean the glass with a soft cloth or sponge slightly moistened with nonabrasive glass cleaner.

**CAUTION** 

Do not use abrasives, acetone, benzene, ethyl alcohol, or carbon tetrachloride on the glass; these can damage it. Do not place liquids directly on the glass. They may seep under it and damage the product.

B Dry the glass with a chamois or cellulose sponge to prevent spotting.

**Note** 

Dust might appear on the underside of the glass, but this cannot be cleaned and it has no effect on the copy or scan quality.

## To clean the lid backing

Minor debris can accumulate on the white document lid backing located underneath the product's lid.

1 Turn off the product, unplug the power cord from the electrical socket, and raise the lid.

**Note** 

If you have a 220V product, turn off the power switch.

2 Clean the white document lid backing with a soft cloth or sponge slightly moistened with a mild soap and warm water.



- **3** Wash the backing gently to loosen debris; do not scrub the backing.
- 4 Dry the backing with a chamois or soft cloth.

**CAUTION** 

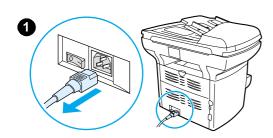
Do not use paper-based wipes as these may scratch the backing.

5 If this does not clean the backing well enough, repeat the previous steps using isopropyl alcohol, and then wipe the backing thoroughly with a damp cloth to remove any residual alcohol.

# Cleaning the print cartridge area

You do not need to clean the print cartridge area often. However, cleaning this area can improve the quality of your printed sheets. During the printing process, paper, toner, and dust particles can accumulate inside the printer. Over time, this buildup can cause print quality problems, such as toner specks or smearing. To correct and prevent these types of problems, you can clean the print cartridge area and the printer media path.

## To clean the print cartridge area



#### **WARNING!**

Wait for the printer to cool before beginning this procedure.

1 Before cleaning the printer, turn the printer off by unplugging the power cord.

#### Note

If you have a 220V product, turn off the power switch.

**2** Open the print cartridge door, and remove the print cartridge.



#### **CAUTION**

To prevent damage, do not expose the print cartridge to light. Cover the print cartridge if necessary. Also, do not touch the black sponge transfer roller inside the printer. By doing so, you can damage the printer.



- **3** With a dry, lint-free cloth, or an HP toner cloth (part number 5090-3379), wipe any residue from the media path area and the print cartridge cavity.
- 4 Replace the print cartridge, and close the print cartridge door.
- 5 Plug the printer in to turn it back on. If you have a 220V product, turn on the power switch.

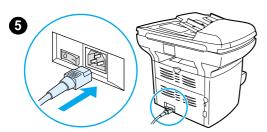


#### **Note**

Do not spray or use water inside the printer.

#### Note

If toner gets on your clothing or other fabric, wipe off the toner with a dry cloth. Wash the items in cold water and air dry.



#### **CAUTION**

Hot water or heat from a dryer can set toner into fabric.

# Cleaning the printer media path

If you are experiencing toner specks or dots on the printouts, clean the printer media path.

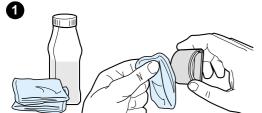
## To clean the printer media path

- 1 Press menu/enter.
- 2 Use the < and > buttons to find the service menu.
- 3 Press menu/enter.
- 4 Use the < and > buttons to find the Cleaning Mode.
- 5 Press menu/enter.

# Cleaning the pickup roller

If the printer regularly mispicks, you might need to change or clean the pickup roller. Before replacing the pickup roller you may want to try to clean it. To clean the pickup roller, follow the instructions below:

## To clean the pickup roller

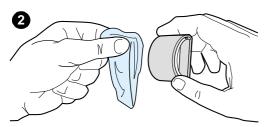


Remove the pickup roller as described in steps 1 through 5 of <u>Changing</u> the pickup roller.

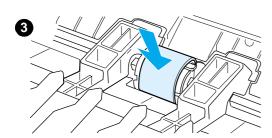
1 Dab a lint-free cloth in isopropyl alcohol, and clean the roller with it.

#### **WARNING!**

Alcohol is flammable. Keep the alcohol and cloth away from an open flame. Before you close the printer and plug in the power cord, allow the alcohol to dry completely.



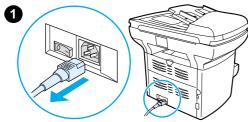
- 2 Using a dry, lint-free cloth, wipe the pickup roller to remove loosened dirt.
- Allow the pickup roller to dry completely before you reinstall it in the printer (see steps 6 through 9 of Changing the pickup roller).



# **Changing the pickup roller**

See Ordering HP parts and accessories to order a new pickup roller.

## To change the pickup roller





Failure to complete this procedure might damage the printer.

1 Unplug the power cord from the printer, and allow the printer to cool.

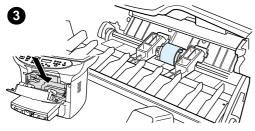


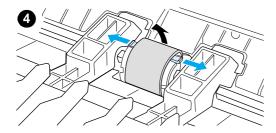


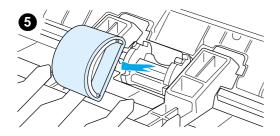
If you have a 220V product, turn off the power switch.

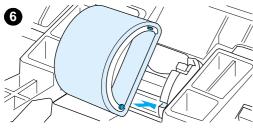
- 2 Open the print cartridge door, and remove the print cartridge.
- **3** Find the pickup roller.
- 4 Release the small, white tabs on either side of the pickup roller, and rotate the pickup roller toward the front.
- **5** Gently pull the pickup roller up and out.

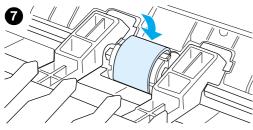


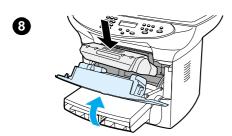


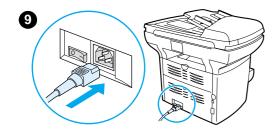












Position the new or cleaned part in the slot of the previous pickup roller. See Cleaning the pickup roller for instructions.

#### **Note**

Circular and rectangular pegs on each side prevent you from incorrectly positioning the pickup roller.

Rotate the top of the new pickup roller away from you until both sides snap into place.

#### **Note**

Touching the black sponge roller may damage the product.

- 8 Reinstall the print cartridge, and close the print cartridge door.
- 9 Plug the printer in to turn it back on. If you have a 220V product, turn on the power switch.

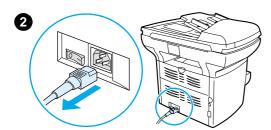
# **Changing the printer separation pad**

If your input tray feeds more than one page at a time, you might need to change the printer separation pad. Recurring feed problems indicate that the printer separation pad is worn. If your product is under warranty, call support. If your product is not under warranty, see <a href="Ordering-HP">Ordering-HP</a> parts and accessories to order a new printer separation pad.

**Note** 

Before you change the separation pad, clean the pickup roller. See <u>Cleaning the pickup roller</u> for instructions.

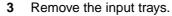
## To change the printer separation pad



- 1 Unplug the power cord from the printer, and allow the printer to cool.
- 2 Verify the power is off.

#### **Note**

If you have a 220V product, turn off the power switch.

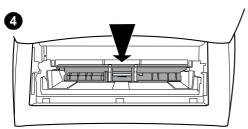


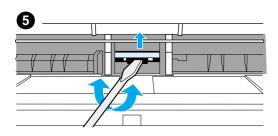
- 4 Find the blue separation pad.
- 5 To pry the separation pad up from the spring-loaded base, insert a flat-edged screwdriver in the slot under the separation pad and twist until the tabs are free.

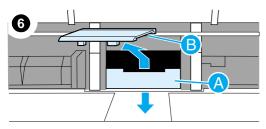


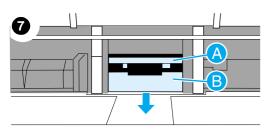
#### **Note**

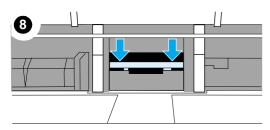
Touching the black sponge roller may damage the product.

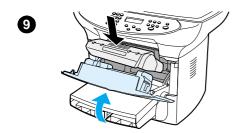


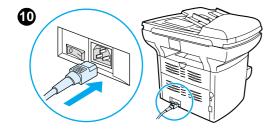












- Reach in through the opening, push the spring-loaded base down (A) with one hand, and pull the separation pad up (B) with the other hand.
- 7 With one hand, position the new separation pad in the slot of the previous separation pad (A). With the other hand, reach through the input tray opening, and push the spring-loaded base down (B).

#### **Note**

The tab on the right is larger to help you position it correctly.

8 Snap both sides of the separation pad firmly into place.

#### **CAUTION**

Make sure that the separation pad is straight and that there is no space between the separation pad and the spring-loaded base. If the separation pad is not straight or you see space on one side, remove the separation pad, make sure that the larger tab is on the right, reinsert the separation pad, and snap both sides into place.

- 9 Reinsert the input trays.
- **10** Plug the printer in to turn it back on. If you have a 220V product, turn on the power switch.

#### Note

If the pad is not properly positioned, the printer may be noisy or the paper will not feed at all.

# **Installing a new ADF**

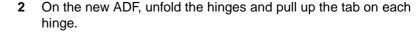
If your HP LaserJet 3300 came without an ADF, you can upgrade it by adding one. The ADF replaces your current lid, includes a 50-page input tray, and installation takes only a few seconds. Adding the ADF will save you time and effort when making copies of multiple page documents. If you are experiencing abnormal media jams in your current ADF, you may need to replace it. See HP parts and accessories for information on ordering a replacement ADF.



Remove the flatbed scanner lid by opening it and gently lifting straight up.

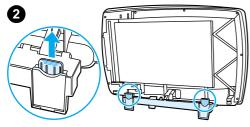


If you are replacing an existing ADF, you must first pull up both hinge tabs before lifting the ADF up out of the product.

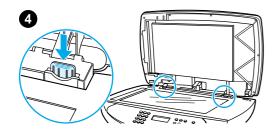


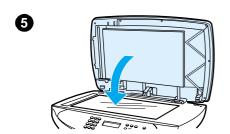
- Install the new ADF by inserting the hinges straight down into the product.
- Push down both tabs until they click.

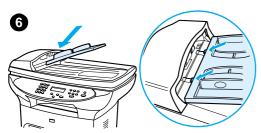












**5** Gently close the ADF lid.

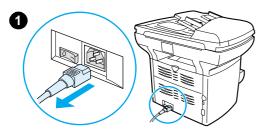
### **CAUTION**

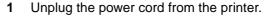
To avoid damaging the product, do not allow the ADF lid to fall onto the flatbed scanner. Always close the ADF lid when the product is not in use.

Install the ADF input tray by aligning the two tabs on the input tray with the two grooves in the ADF lid and sliding the tray into the grooves until it snaps into place.

# **Changing an ADF pickup roller assembly**

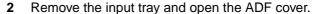
If your ADF has trouble picking paper, you may want to replace the ADF pickup roller assembly. See <u>Ordering HP parts and accessories</u> to order an ADF pickup roller assembly. To remove the existing assembly, follow the directions below.



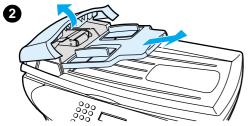


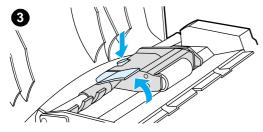
#### **Note**

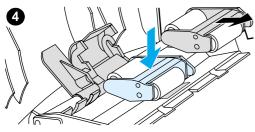
If you have a 220V product, turn off the power switch.

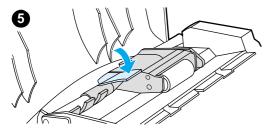


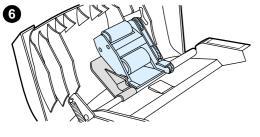
- 3 Press the round green button while lifting the green lever. Rotate the green lever until it stops in the open position. The old pickup roller assembly should remain on the black surface.
- 4 Remove the old assembly and put the new one in exactly the same place. The largest roller goes in back, and the gear side will be away from you.
- **5** Lower the green lever with the flat green part fitting in between the rollers. Press down on the green lever until a snap is heard.

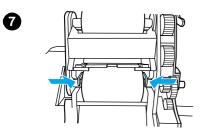


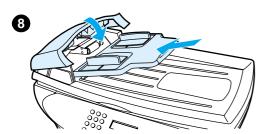












- 6 To check for proper installation, lift the green lever until it remains open. The new pickup roller assembly should be secured to the lever assembly and should not fall out.
- **7** Make sure that both sides of the assembly are secured by the green hooks.
- **8** Lower the green lever assembly and close the ADF lid. Reinstall the input tray.

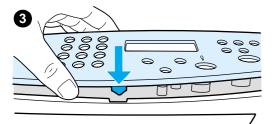
#### Note

If you are experiencing abnormal jams in the ADF, you may want to order a new ADF, or upgrade the ADF copy lid. See <a href="Installing a new ADF">Installing a new ADF</a>.

# Removing and replacing the control panel bezel









1 Unplug the power cord from the printer.

#### Note

If you have a 220V product, turn off the power switch.

2 Remove the existing control panel bezel by lifting up on both sides of the bezel edges until all the snaps are disengaged. Set the old bezel aside.

#### **CAUTION**

Be careful not to touch any components or buttons inside the exposed control panel area.

- 3 Align the new bezel at the lower notch. The bezel notch should align to the inside of the printer.
- **4** Press down until all the snaps are engaged, and then press outward until the bezel is secured.
- 5 Plug the printer in to turn it back on. If you have a 220V product, turn on the power switch.

# 10 Media

## See the following sections for more information:

- Product media specifications
- Guidelines for using media
- Selecting media for the ADF

EN 137

# **Product media specifications**

HP LaserJet printers produce excellent print quality. The printer accepts a variety of media, such as cut-sheet paper (including recycled paper), envelopes, labels, transparencies, vellum, and custom-sized paper. Properties such as weight, grain, and moisture content are important factors affecting printer performance and output quality.

The printer can use a variety of paper and other print media in accordance with the guidelines in this user guide. Media that does not meet these guidelines might cause the following problems:

- Poor print quality
- Increased media jams
- Premature wear on the printer, requiring repair

For best results, use only HP brand paper and print media. Hewlett-Packard Company cannot recommend the use of other brands. Because they are not HP products, HP cannot influence or control their quality.

It is possible for media to meet all of the guidelines in this user guide and still not produce satisfactory results. This might be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Hewlett-Packard has no control.

Before you purchase a large quantity of media, make sure that it meets the requirements specified in this user guide and in Guidelines for Paper and Other Print Media. (See <u>Ordering HP parts and accessories</u> for more information about ordering the guidelines.) Always test media before you purchase a large quantity.

#### **CAUTION**

Using media that does not meet Hewlett-Packard's specifications might cause problems for the printer, requiring repair. This repair is not covered by the Hewlett-Packard warranty or service agreements.

## Supported media sizes (printer)

The following are the supported media sizes:

• Minimum: 76 x 127 mm (3 x 5 inches)

• Maximum: 216 x 356 mm (8.5 x 14 inches)

# **Guidelines for using media**

## **Paper**

For best results, use conventional paper. Make sure that the paper is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

If you are unsure about what type of paper you are loading (such as bond or recycled), check the label on the package of paper.

Some paper causes print quality problems, jamming, or damage to the printer.

Note Do not use letterhead that is printed with low-temperature inks, such as those used in some types of thermography.

Note Do not use raised letterhead.

138 10 Media EN

Note

The printer uses heat and pressure to fuse toner to the paper. Make sure that any colored paper or preprinted forms use inks that are compatible with the printer temperature (200° C or 392° F for 0.1 second).

## Common media problems table

Symptom	Problem with paper	Solution	
Poor print quality or toner adhesion, or problems with	Too moist, too rough, too smooth, or embossed.	Try another kind of paper between 100 and 250 Sheffield and 4 to 6% moisture content.	
feeding.	Faulty paper lot.		
Dropouts, jamming, or curl.	Stored improperly.	Store paper flat in its moisture-proof wrapping.	
Increased gray background shading.	Might be too heavy.	Use lighter paper.	
Excessive curl, or problems with feeding.	Too moist, wrong grain direction, or short-grain construction.	Use long-grain paper.	
g.		Print using the straight-through output path.	
Jamming, or damage to printer.	Cutouts or perforations.	Do not use paper with cutouts or perforations.	
Problems with feeding.	Ragged edges.	Use good quality paper.	

#### Labels

When selecting labels, consider the quality of the following factors:

- Adhesives: The adhesive material should be stable at 200° C (392° F), the printer's maximum temperature.
- Arrangement: Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams.
- **Curl:** Prior to printing, labels must lie flat with no more than 13 mm (0.5 inch) of curl in any direction.
- **Condition:** Do not use labels with wrinkles, bubbles, or other indications of separation. Never use a sheet of labels that has already been run through the printer.

# **Transparencies**

Transparencies must be able to withstand 200° C (392° F), the printer's maximum temperature.

## **Envelopes**

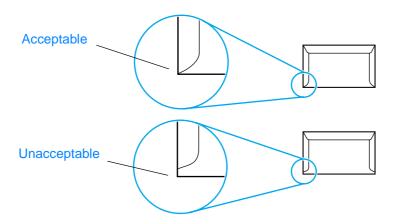
## **Envelope construction**

Envelope construction is critical. Envelope fold lines can vary considerably, not only between manufacturers, but also within a box from the same manufacturer. Successful printing on envelopes depends on the quality of the envelopes. When selecting envelopes, consider the following factors:

- **Weight:** The weight of the envelope paper should not exceed 105 g/m<sup>2</sup> (28-pound), or jamming might result.
- **Construction:** Prior to printing, envelopes should lie flat with less than 6 mm (0.25 inch) curl and should not contain air. Envelopes that trap air may cause problems.
- Condition: Make sure that the envelopes are not wrinkled, nicked, or otherwise damaged.
- Sizes: From 90 x 160 mm (3.5 x 6.3 inches) to 178 x 254 mm (7 x 10 inches).

#### **Envelopes with double-side seams**

An envelope with double-side-seam construction has vertical seams at both ends of the envelope rather than diagonal seams. This style might be more likely to wrinkle. Make sure that the seam extends all the way to the corner of the envelope as shown in the following illustration:



#### **Envelopes with adhesive strips or flaps**

Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the heat and pressure in the printer: 200° C (392° F). The extra flaps and strips might cause wrinkling, creasing, or jams.

#### **Envelope storage**

Proper storage of envelopes contributes to good print quality. You should store envelopes flat. If air is trapped in an envelope, creating an air bubble, the envelope might wrinkle during printing.

# Card stock and heavy media

You can print many types of card stock from the paper input tray, including index cards and postcards. Some card stock performs better than others because its construction is better suited for feeding through a laser printer.

For optimum printer performance, do not use paper heavier than 157 g/m² (42-pound). Paper that is too heavy might cause misfeeds, stacking problems, paper jams, poor toner fusing, poor print quality, or excessive mechanical wear.

140 10 Media EN

Note

You might be able to print on heavier paper if you do not fill the input tray to capacity and if you use paper with a smoothness rating of 100 to 180 Sheffield.

#### **Card stock construction**

- **Smoothness:** 135-157 g/m<sup>2</sup> (36-to 42-pound) card stock should have a smoothness rating of 100 to 180 Sheffield. 60-135 g/m<sup>2</sup> (16- to 36-pound) card stock should have a smoothness rating of 100 to 250 Sheffield.
- Construction: Card stock should lie flat with less than 5 mm (0.2 inch) of curl.
- Condition: Make sure that the card stock is not wrinkled, nicked, or otherwise damaged.
- Sizes: Only use card stock within the following size ranges:
  - Minimum: 76 x 127 mm (3 x 5 inches)
  - Maximum: 216 x 356 mm (8.5 x 14 inches)

## Card stock guidelines

- If the card stock curls or jams, print using the straight-through output path.
- Set margins at least 2 mm (0.08 inch) away from the edges.

# **Selecting media for the ADF**

### **ADF** specifications

- Input capacity: The ADF holds up to 50 sheets of flat 60 to 90 g/m (16- to 24-pound) plain paper.
- Media size: Only use plain paper within the following size ranges:
  - Minimum: 127 mm x 127 mm (5 x 5 inches)
  - Maximum: 215.9 mm x 381 mm (8.5 x 15 inches)

**Note** 

Use the flatbed scanner for copying and scanning if the media is fragile, thin, or thick. The flatbed scanner provides the best copy and scan quality. The ADF is recommended for plain paper copying, scanning, and faxing (faxing can be done only from the ADF).

142 10 Media EN

# 1 1 HP parts and accessories

Use the following topics to find out about ordering parts and accessories for your product:

- Ordering HP parts and accessories
- HP LaserJet print cartridges
- DIMMs (memory or font)

EN 143

# **Ordering HP parts and accessories**

# HP parts and accessories chart

You can increase the product's capabilities with optional accessories and supplies. Use accessories and supplies designed specifically for your HP LaserJet 3300 product to ensure optimum performance.

	Item	Description or use	Part number
Product memory	Dual in-line memory module (DIMM)  Boosts the product's ability to handle complex print jobs or increases available fonts.  Maximum add on: 64 MB  Available DIMMs:  8 MB		C7842A
		16 MB 32 MB 64 MB	C7843A C7845A C7846A
Cables and	Parallel cables	Method of connectivity from product to computer.	
interface accessories		<ul><li>2-meter IEEE 1284-B cable</li><li>3-meter IEEE 1284-B cable</li></ul>	C2950A C2951A
	USB cable	Method of connectivity from product to computer.  2-meter cable	8121-0539
	ADF	If your printer did not come with an ADF, use this part number to order one.	C9143A
Printer server	HP Jetdirect 310x	Connects the HP LaserJet 3300n mfp printer to a network.	J6038A
Printing supplies	HP Multipurpose paper	HP brand paper for a variety of uses (1 box of 10 reams, 500 sheets each).	HPM1120
	HP LaserJet paper	Premium HP brand paper for use with HP LaserJet printers (1 box of 10 reams, 500 sheets each).	HPJ1124
	HP LaserJet transparency film	HP brand transparency film for use with HP LaserJet monochrome printers.	92296T (letter) 92296U (A4)
Print cartridges	print cartridges	Replacement print cartridges for the HP LaserJet 3300.  2,500 page cartridge  3,500 page cartridge	C7115A C7115X
	Guidelines for Paper and Other Print Media		

	Item	Description or use	Part number
Replacement parts	Paper pickup roller	Used to pick the paper from the paper input tray and advance it through the printer.	RF0-1008-000CN
	Main input tray	Used to hold media for the printer.	RG0-1121-000CN
	Priority input tray	Used to feed special media or for printing a first page.	RG0-1122-000CN
	ADF input tray	Used to feed documents into the scanner.	C9143-60102
	Separation pad for the printer	Used to keep multiple sheets from feeding through the printer path.	RF0-1014-000CN
	ADF pickup roller assembly	Used to pick the paper from the ADF paper input tray and advance it through the ADF.	C7309-60016
	ADF	If your ADF breaks, use this part number to order one (includes flatbed scanner lid).	C9143-60101
	Copy lid	If you do not have an ADF and your copy lid breaks, use this part number to order one.	C9124-60117

# Power modules (network model only)

Countries/Regions	Part number	Input rating	Output rating
Australia, New Zealand,	0950-3172	240 Vac 50 Hz	13 Vdc @ 300 mA
Argentina	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,	0950-3171	220-240 Vac 50 Hz	13 Vdc @ 300 mA
Ireland, Hong Kong SAR	0950-3350	220–240 Vac 50 Hz	13 Vdc @ 800 mA

Country/Regions	Part number	Input rating	Output rating
US, Canada, Latin America, Taiwan	0950-3169	110-127 Vac 60 Hz	13 Vdc @ 300 mA
laiwaii	0950-3348	110-127 Vac 60 Hz	13 Vdc @ 800 mA

Note

If two parts are listed for one country/region, either part can be used regardless of output rating.

# **HP LaserJet print cartridges**

This section contains the following information on HP LaserJet print cartridges:

- HP policy on non-HP print cartridges
- To install a print cartridge
- Storing print cartridges
- Print cartridge life expectancy
- Recycling print cartridges
- Saving toner

# HP policy on non-HP print cartridges

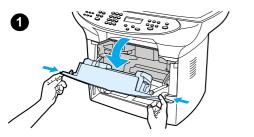
Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new, refilled, or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. Service or repair required as a result of using a non-HP print cartridge will not be covered under the printer warranty.

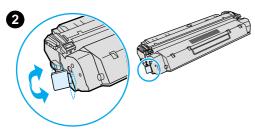
If you use a non-HP print cartridge, the printer is unable to report on the number of pages that can still be printed with the amount of toner left in the cartridge. The toner level estimate will only be an approximate percentage.

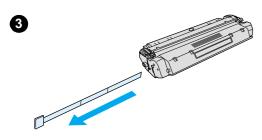
Note

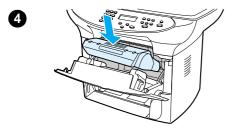
The warranty does not apply to defects resulting from software, interfacing, or parts not supplied by HP.

## To install a print cartridge











To install a print cartridge, use the following steps:

#### **CAUTION**

To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

- 1 Open the print cartridge door.
- **2** Remove the print cartridge from its packaging, and locate the sealing tape at the end of the cartridge.
- 3 To remove the sealing tape from the cartridge, grasp the tape and pull it straight out from the cartridge. Avoid touching any black print on the tape.
- 4 Insert the cartridge as shown, with the arrows pointing into the product.
- 5 Close the print cartridge door. The print cartridge engages when the door is closed.

#### **Note**

If toner gets on your clothing or other fabric, wipe off the toner with a dry cloth. Wash the items in cold water and air dry.

#### **CAUTION**

Hot water or heat from a dryer can set toner into fabric.

# Storing print cartridges

Do not remove the print cartridge from its package until you are ready to use it. The shelf life of a print cartridge in an unopened package is approximately 2.5 years. The shelf life of a print cartridge in an opened package is approximately 6 months.

**CAUTION** 

To prevent damage to the print cartridge, do not expose it to light.

## Print cartridge life expectancy

The life of the print cartridge depends on the amount of toner that your print jobs require. When printing text at 5% coverage, the standard print cartridge (C7115A) lasts an average of 2,500 pages. The extended life print cartridge (C7115X) lasts an average of 3,500 pages. This assumes that you set the print density to 3 and turn EconoMode off (these are the default settings).

## Recycling print cartridges

To reduce landfill waste, Hewlett-Packard has adopted a recycling program for empty print cartridges. A postage-paid shipping label is inside the new HP LaserJet print cartridge box. Since 1990, the HP LaserJet Print Cartridge Recycling Program has collected more than 25 million used HP LaserJet print cartridges that otherwise might have been discarded in the world's landfills. To join this recycling effort, follow the instructions provided in the new print cartridge box.

To install a new HP print cartridge, see To install a print cartridge or follow the instructions included in the print cartridge box. See the recycling information on the print cartridge box and the HP Printing Supplies Environmental Program Information included in the print cartridge box.

## Saving toner

To save toner, select the EconoMode option in your printer properties settings. While in EconoMode (Save Toner), the printer uses less toner on each page. Selecting this option will extend the life of the print cartridge and reduce your cost per page, but it will reduce print quality. See Print cartridge life expectancy for more information.

# **DIMMs (memory or font)**

If you add a dual in-line memory module (DIMM) to the HP LaserJet 3300 product, you can perform more complex product tasks or add additional fonts.

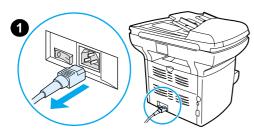
Use this information to manage DIMMs with your HP LaserJet 3300 product:

- To test a DIMM installation or removal
- To install a DIMM
- To remove a DIMM

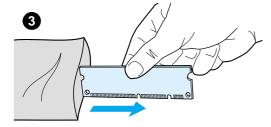
#### To test a DIMM installation or removal

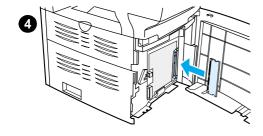
After installing or removing a memory DIMM, you can test your work by printing a configuration page and checking the Memory Available shown on the page. For more information, see Printing a configuration page. This does not apply if you have installed a font DIMM.

## To install a DIMM





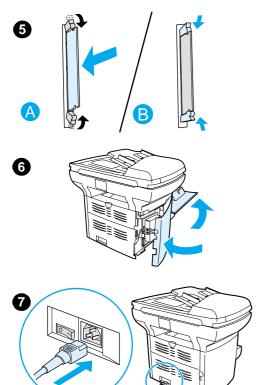




#### **CAUTION**

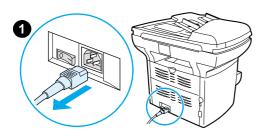
Handling a DIMM without wearing a grounded, antistatic device might damage the DIMM. Do not touch the contacts on the side of the DIMM.

- 1 Turn off the power switch (220V product only), and unplug the printer.
- 2 Open the print cartridge door and the left side panel.
- **3** Remove the DIMM from the antistatic bag it came in, grasping the DIMM on the top edge.
- 4 Position the DIMM in front of the slot located inside the left side panel. The gold contacts should be pointing toward the printer and the cutouts should be at the top and bottom.

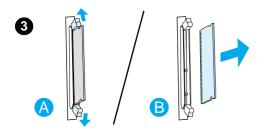


- 5 Carefully press the DIMM into the slot, making sure that it is straight and pushed in all the way (A). The cam latches, located at the top and bottom, should rotate inward. To snap the cam latches into place, press the handles toward each other (B).
- 6 Close the left side panel and the print cartridge door.
- 7 Plug the product back in. If you have a 220V product, turn on the power switch.

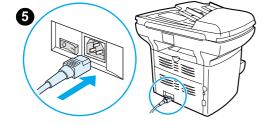
## To remove a DIMM











#### **CAUTION**

Handling a DIMM without wearing a grounded, antistatic device might damage the DIMM. Do not touch the contacts on the side of the DIMM.

- 1 Switch off the power (220V product only), and unplug the product.
- 2 Open the print cartridge door and the left side panel.
- 3 To unlock the cam latches, press them outward (A). Grasp the DIMM on the edge, gently pull straight out, and remove the DIMM from the printer (B).

#### **Note**

Store the DIMM in an antistatic bag.

- 4 Close the left side panel and the print cartridge door.
- **5** Plug the product back in. If you have a 220V product, switch on the power.

# 12 Troubleshooting printing problems

Use this section to find tips for solving problems specifically associated with printing.

- Product will not turn on or print
- Pages print but are totally blank
- Pages did not print
- Pages printed, but there was a problem
- Onscreen error messages
- Paper handling problems
- Printed page is different from what appeared onscreen
- Clearing media jams
- Improving print quality
- Control panel error messages

EN 153

# Product will not turn on or print

#### Is the parallel or USB cable working and connected correctly?

The parallel or USB cable might be defective. Try the following:

- Disconnect the parallel or USB cable at both ends and reconnect it.
- Try printing a job that has printed in the past.
- Try using a different IEEE 1284-B-compliant parallel cable or USB cable. See Ordering HP parts and accessories.
- Contact the manufacturer of your computer about changing parallel port settings to an ECP (extended capabilities port).

## Are other devices running on your computer?

- The HP LaserJet 3300 series product may not share a parallel port. If you have an external hard drive or network switchbox connected to the same port as the HP LaserJet 3300, the other device might be interfering. To connect and use the HP LaserJet 3300, you must disconnect the other device or you must use two ports on the computer.
- You might need to add another interface card. Hewlett-Packard strongly recommends an ECP parallel interface card.

## Is the product getting power?

- If you are using a power strip, make sure the power strip is on. Or, try plugging the product directly into the power outlet.
- Test the power outlet to make sure it is working.
- If you have plugged the product into a switched outlet, make sure the switch is on.
- If you have a 220V product, make sure the power is switched on.

**WARNING!** 

If the product still does not turn on after you try the above tips, it may have a mechanical failure. Unplug the product from the power outlet and contact HP. Refer to the support flyer that came with the product for information on contacting HP.

# Pages print but are totally blank

#### Is the sealing tape still in the print cartridge?

The sealing tape may still be in the print cartridge. Remove the print cartridge and pull out the sealing tape. Reinstall the print cartridge. Try printing the file again.

#### Does the file have blank pages?

The file may have blank pages. Check the file you are printing to determine whether there is content on all of its pages.

## Is the original loaded correctly?

If you are making a copy, the original might be loaded incorrectly. The original must be loaded into the ADF face up. If loaded print side down, the copy will print out blank.

# Pages did not print

#### Is there a message on your computer screen?

See Onscreen error messages for more information.

#### Is media being pulled into the printer correctly?

See <u>Paper handling problems</u> for more information.

## Are there media jams?

See <u>Paper handling problems</u> for more information.

# Pages printed, but there was a problem

## Is the print quality poor?

See Improving print quality for more information.

#### Is the printed page different than what appeared onscreen?

See Printed page is different from what appeared onscreen for more information.

#### Are the printer settings appropriate for the media?

See <u>Paper handling problems</u> for more information.

# Onscreen error messages

#### Printer not responding/error writing to LPT1

Check the following:

- Is the product in its Ready state?
- Are the power cord and parallel or USB cable correctly connected?

Try the following:

- Disconnect the power cord and parallel or USB cable at both ends and reconnect them.
- Use another IEEE 1284-B-compliant parallel or USB cable.

### Cannot access port (in use by another application)

There is a device conflict. This might occur if another device is installed on your computer and running status software. The status software dominates the parallel port on the computer and will not allow the HP LaserJet 3300 to access the port.

Try the following:

- Disable all of the status windows for other printers.
- Make sure that the printer's port setting is correct. Access the port settings on the Printer Properties Details tab.

# Paper handling problems

## Print is skewed (crooked)

## Are the media guides adjusted properly?

Adjust the media guides to the width and length of the media that you are using and try reprinting. See Product media specifications or Installing and loading the media input trays for more information.

See Page skew for more information.

#### More than one sheet feeds at one time

#### Is the media input tray too full?

See <u>Installing and loading the media input trays</u> for more information.

#### Is the media wrinkled, folded, or damaged?

Make sure the media is not wrinkled, folded, or damaged. Try media from a new or different package.

#### Is the printer separation pad worn?

See Changing the printer separation pad for more information.

## Product does not pull media from the media input tray

#### Is the product in manual feed mode?

Try one of the following:

- If Manual Feed appears in the control panel display, press menu/enter to print the job.
- Make sure that the printer is not in manual feed mode and print your job again.

#### Is the pickup roller dirty or damaged?

Clean or replace the pickup roller and print your job again. See Cleaning the pickup roller or Changing the pickup roller for instructions.

# Media curls when fed through product

- Open the straight-through output door to print straight through.
- See Curl or wave for more information.

# Printed page is different from what appeared onscreen

#### Is the text garbled, incorrect, or incomplete?

First, print a configuration page to verify the product is functioning. See Printing a configuration page for instructions. If it prints successfully, try the following:

Disconnect the cable and reconnect it at both ends.

- Try printing a job that you has printed correctly.
- If possible, attach the cable and printer to another computer, and try printing a job that you know has printed correctly.
- Try using a new IEEE 1284-B-compliant parallel or USB cable. See <u>Ordering HP parts and accessories</u> for information.
- The wrong printer driver might have been selected when the software was installed. Make sure that the HP LaserJet 3300 is selected in the printer properties.
- There might be a problem with your software application. Try printing from another software application.

## Are graphics or text missing? Are there blank pages?

- Make sure that your file does not contain blank pages.
- The sealing tape might still be in the print cartridge. Remove the print cartridge, and pull out the sealing tape.
- Reinstall the print cartridge. See <u>Installing a print cartridge</u> for instructions.
- To check the product, print a configuration page. See <u>Printing a configuration page</u> for instructions.
- The graphic settings in the printer properties might not be correct for the type of job that you
  are printing. Try a different graphic setting in the printer properties. See <u>Changing settings</u>
  <u>from your computer</u> for more information.
- The printer driver might not work for the type of job that you are printing. Try using a different printer driver.

**Note** 

If you use a different printer driver, some product features may not be accessible.

## Is the page format different than on another printer?

If you used an older or different printer driver (printer software) to create the document or the printer properties settings in the software are different, the page format might change when you try to print using your new printer driver or settings. To help eliminate this problem, try the following:

- Create documents and print them using the same printer driver (printer software) and printer properties settings regardless of which HP LaserJet printer you use to print them.
- Change the resolution, paper size, font settings, and other settings. See <u>Changing settings</u> from your computer for more information.

#### Is graphics quality poor?

The graphics settings might be unsuitable for your print job. Try the following:

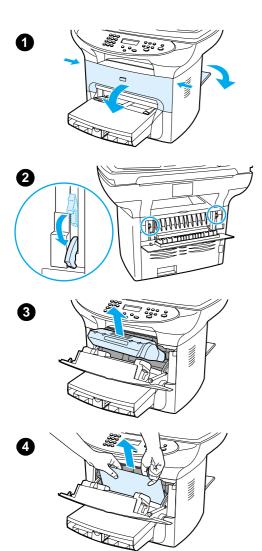
- Check the graphic settings, such as resolution, in the printer properties and adjust them as necessary. See <u>Changing settings from your computer</u> for more information.
- Try using a different printer driver (software).

**Note** 

If you use a different printer driver, some product features may not be accessible.

# Clearing media jams

- Make sure you are printing with media that meets specifications. See Product media specifications for more information.
- Make sure that you are printing with media that is not wrinkled, folded, or damaged.
- Make sure that the printer is clean. See <u>Cleaning the printer media path</u> for more information.
- If you are printing to the straight-through output path, close and open the door again to make sure the green release levers are closed.



## To clear a media jam

#### **CAUTION**

Media jams might result in loose toner on the page. If you get any toner on your clothes, wash them in cold water. Hot water will permanently set the toner into the fabric.

- Open the print cartridge door and the straight-through output door.
- 2 Rotate the green pressure release levers at the back of the product downward. If you can remove the media from the front of the machine without removing the print cartridge, do so, and continue with step 4.

#### **CAUTION**

To prevent damage to the print cartridge, do not expose it to light.

- 3 Remove the print cartridge, and place it aside.
- With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.
- When you have removed the jammed media, replace the print cartridge, and close the print cartridge door and the straight-through output door.

#### Note

The pressure release levers automatically close when you close the straight-through output door.

After clearing a media jam, you might need to turn the printer off and turn it back on.

#### **Note**

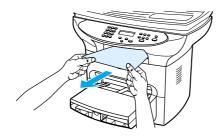
When you add new media, remove all of the media from the input tray and straighten the stack of new media.

# To clear other media jams

If the paper has crumpled and jammed in the back of the product, open the straight-through output door. Gently pull the paper out of the rollers. Close the straight-through output door.



If the paper has jammed where it exits the product, grasp the leading edge of the paper and pull the paper out through the output tray.



**Note** 

If you turned the product off before clearing the paper jam, turn it back on, and then restart your printing or copying job.

If the paper has jammed in the ADF, see Clearing ADF media jams.

# Tips to avoid media jams

- Make sure the input tray is not overfilled. The input tray capacity varies depending on the type
  of paper you are using.
- Check that the input tray is in place.
- Do not add paper to the input tray while the product is printing.
- Use recommend paper types. See <u>Product media specifications</u> for more information on paper types.
- Do not let paper stack up in the output tray. The paper type and the amount of ink used affect the output tray's capacity.
- Check the power connection. Make sure the power cord is firmly connected to both the product and the power supply box. Plug the power cord into a grounded AC power outlet.

**Note** 

HP does not recommend the use of uninterrupted power supply (UPS) battery backup devices or surge suppressors with this product. Many surge suppressors and battery backups can cause print defects.

# Improving print quality

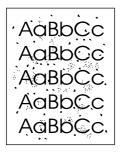
This section provides information about identifying and correcting print defects.

# Light print or fade



- The toner supply is low. See <u>HP LaserJet print cartridges</u> for more information.
- The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough). See Product media specifications for more information. If the whole page is light, the print density adjustment is too light or EconoMode might be turned on. Adjust the print density and disable EconoMode in the printer properties. See Saving toner for more information.

## **Toner specks**



- The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough). See <u>Product media specifications</u> for more information.
- The printer might need to be cleaned. See Cleaning the printer media path for instructions.

# **Dropouts**

**AaRPCC AaBbCc AakbCc** ACBUCC AaBbCc

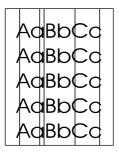
- A single sheet of media might be defective. Try reprinting the job.
- The media's moisture content is uneven or the media has moist spots on its surface. Try printing with new media. See Product media specifications for more information.

- The media lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different type or brand of media.
- The print cartridge might be defective. See <u>HP LaserJet print cartridges</u> for more information.
- Check **Optimize for**: in the **Paper** tab of your printer driver, and make sure it is set to the appropriate media. See Optimizing print quality for media types for instructions.

Note

If these steps do not correct the problem, contact an HP-authorized dealer or service representative. See the support flyer that came with your product for more information on contacting HP.

#### **Vertical lines**



- Make sure that the priority input tray is in place.
- The photosensitive drum inside the print cartridge has probably been scratched. Install a new HP print cartridge. See <a href="Installing a print cartridge">Installing a print cartridge</a> for instructions.

## **Gray background**



- Make sure that the priority input tray is in place.
- Decrease the print density setting through HP LaserJet Device Configuration. This decreases the amount of background shading. See the product software Help.
- Change the media to a lighter basis weight. See <u>Product media specifications</u> for more information.
- Check the printer's environment. Very dry (low humidity) conditions can increase the amount of background shading.
- Install a new HP print cartridge. See <u>Installing a print cartridge</u> for instructions.

#### Toner smear



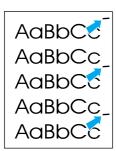
- The fuser temperature might be too low. Check Optimize for: in the Paper tab of your printer driver, and make sure it is set to the appropriate media. See Optimizing print quality for media types for instructions.
- If toner smears appear on the leading edge of the media, the media guides might be dirty. Wipe the media guides with a dry, lint-free cloth. See Cleaning the printer media path for more information.
- Check the media type and quality.
- Try installing a new HP print cartridge. See <u>Installing a print cartridge</u> for instructions.

#### Loose toner



- Select **Optimize for:** in the **Paper** tab of your printer driver, and choose the media that you are using. See Optimizing print quality for media types for instructions. This feature is also available in HP LaserJet Device Configuration. See the product software Help for details.
- Clean the inside of the printer. See <u>Cleaning and maintenance</u> for instructions.
- Check the media type and quality. See Product media specifications for more information.
- Try installing a new HP print cartridge. See HP LaserJet print cartridges for instructions.
- Plug the printer directly into an AC outlet instead of into a power strip.

# Vertical repetitive defects



The print cartridge might be damaged. If a repetitive mark occurs at the same spot on the page, install a new HP print cartridge. See Installing a print cartridge for instructions.

- The internal parts might have toner on them. See <u>Cleaning and maintenance</u> for more information. If the defects occur on the back of the page, the problem will probably correct itself after a few more printed pages.
- Select Optimize for: in the Paper tab of your printer driver, and choose the media that you are
  using. See Optimizing print quality for media types for instructions. This feature is also
  available in HP LaserJet Device Configuration. See the product software Help for details.

#### Misformed characters

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

• If characters are improperly formed, producing hollow images, the media stock might be too slick. Try a different media. See <a href="Product media specifications">Product media specifications</a> for more information.

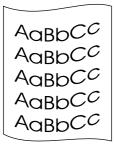
If characters are improperly formed, producing a wavy effect, the printer might need service. Print a configuration page. See <u>Printing a configuration page</u> for more information. If the characters are improperly formed, contact an HP-authorized dealer or service representative. See the support flyer that came with your product for more information on contacting HP.

## Page skew

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

- Make sure that the media is loaded correctly and the media guides are not too tight or too loose against the media stack. See <u>Installing and loading the media input trays</u> for more information.
- The ADF input tray might be too full. See <u>Loading originals to copy or scan</u> for more information.
- Check the media type and quality. See <u>Product media specifications</u> for more information.

#### Curl or wave

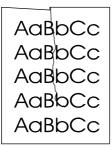


- Check the media type and quality. Both high temperature and humidity cause media to curl. See Product media specifications for more information.
- The media might have been in the input tray too long. Turn over the stack of media in the tray. Also, try rotating the media 180° in the input tray.
- Open the straight-through output door and try printing straight through.
- The fuser temperature might be too high. See Optimizing print quality for media types for instructions. This feature is also available in HP LaserJet Device Configuration. See the product software Help for details.

You can also adjust the fuser temperature from the product control panel. The Less Paper Curl setting in the Service menu sets the fuser temperature to the lowest setting. Its default setting is off. Use the instructions below to turn this setting on.

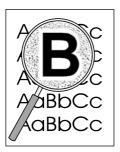
- On the control panel, press menu/enter.
- 2 Using the < and > buttons, select Service and press menu/enter.
- Using the < and > buttons, select Less Paper Curl and press menu/enter.

#### Wrinkles or creases



- Make sure that media is loaded properly. See Installing and loading the media input trays for more information.
- Check the media type and quality. See Product media specifications for more information.
- Open the straight-through output door and try printing straight through.
- Turn over the stack of media in the tray. Also, try rotating the media 180° in the input tray.

#### Toner scatter outline



- If large amounts of toner have scattered around the characters, the media might be resisting
  the toner. (A small amount of toner scatter is normal for laser printing.) Try a different media
  type. See <u>Product media specifications</u> for more information.
- Turn over the stack of media in the tray.
- Use media designed for laser printers. See <u>Product media specifications</u> for more information.

# **Control panel error messages**

## **Door Open or No Print Cartridge**

The print cartridge door is open or there is no print cartridge in the product's print cartridge cavity. Make sure you have correctly installed a print cartridge into your product. For instructions on installing the print cartridge, see <a href="Installing a print cartridge">Installing a print cartridge</a>. After checking the print cartridge, close the print cartridge door securely. When the problem is solved, the product either completes the current job or returns to its Ready state.

## **Printer Tray is Empty, Add Paper**

The product is out of paper. Load paper into the media input tray or the priority input tray. For instructions on loading the media input trays, see <u>Installing and loading the media input trays</u>. If media is already loaded, remove it, check for and remove any jams, and reload the input tray. When the problem is solved, the product either completes the current job or returns to its Ready state.

# **Critical error messages**

The current copying or scanning job stops and one of the following messages is displayed on the product's control panel:

- 50 Fuser Error
- 51 Laser Error
- 52 Scanner Error
- 57 Fan Error
- 79 Service Error
- CCD Scanner Error
- Scanner Bulb Failure

If your product displays one of these message, the product is experiencing a critical device error. Unplug the printer for five minutes, and then plug it back in. If the error persists, contact HP customer service at the number provided on the support flyer included with the product, or visit http://www.hp.com.

## Alert messages

The following messages are generic alert messages that may appear in the control panel display.

- Printer Mispick (Enter) To Resume
- Printer Jam. Clear Paper Path
- Door Open Or No Print Cartridge
- Printer Tray Is Empty. Add Paper
- Document Feeder Mispick. Reload
- Doc Feeder Jam. Clear, Reload
- Memory Low. Press [Cancel]

Alert messages communicate to the user that some action must be performed, such as adding paper or clearing a jam. When an alert message appears, the product will automatically stop the current task, display the error message, and wait for the user to attend to the situation. Once the user has corrected the error, the device will either complete the task or go back to the Ready state. The exception to this rule is when the user wants to enter the main menu system. In this instance the device will change the display and allow the user to enter the menu system.

**Note** 

If the alert message pertains to clearing a jam, see Clearing media jams for more information.

## Warning messages

The following messages are generic warning messages that may appear in the control panel display.

- Not Enough Memory. Try Later
- Device Busy. Try Again Later
- Settings Cleared
- Device Error. [Enter] To Cont.
- Page Too Complex [Enter] To Cont.

Warnings are messages that are important enough that the user must be notified. They are transient in nature, but may affect the completion of the task or the quality of the output. When a warning message appears, the active job might cancel. The message will display for five seconds.

If the warning messages are related to print, and the auto continue setting is on, the message will display for 10 seconds. If there is no response from the user by either pressing enter/menu or cancel, the device will continue processing the print job. If auto continue is off, the print related warning messages will display until the user has either pressed enter/menu to proceed or cancel to cancel the job.

Note

Auto continue is set in the printer driver. To find out whether auto continue is enabled, print a configuration page. See Printing a configuration page for more information.

# 13 Troubleshooting copy problems

Use these topics to find tips for solving common copy problems.

- No copy came out
- Copies are blank, or images are missing or faded
- Improving copy quality
- Clearing ADF media jams
- Identifying and correcting copy defects

EN 167

# No copy came out

#### Is media loaded in the input tray?

Load media in the printer. See Installing and loading the media input trays for more information.

#### Is the original loaded correctly?

Make sure that the original is loaded correctly:

- ADF input tray: The original should be loaded top down in the ADF input tray, with the side to be copied facing up. See Loading originals to copy or scan for more information.
- Flatbed scanner: Place original document face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.

## Is the wrong device selected?

In HP LaserJet Copy Plus, make sure that the printer you are intending to use is selected in the **Printer** field as the current device when you press **start/copy**.

# Copies are blank, or images are missing or faded

#### Is the sealing tape still in the printer print cartridge?

The sealing tape might still be in the print cartridge. Remove the print cartridge, pull out the sealing tape, and reinstall the print cartridge. See Installing a print cartridge for more information.

#### Is the print cartridge low on toner?

Copies are made using the printer. If the print cartridge is low on toner, the copies will be faded.

#### Is the original of poor quality?

The accuracy of the copy depends on the quality and size of the original. Try adjusting the contrast with HP LaserJet Copier. See Using HP LaserJet Copier software for instructions. If your original is too light, the copy might not be able to compensate, even if you adjust the contrast.

#### Does the original have a colored background?

Colored backgrounds might cause images in the foreground to blend too much or the background to appear in a different shade. Try using HP LaserJet Copier to adjust the settings before copying or to enhance the image after it has been copied. See Using HP LaserJet Copier software for instructions.

# Improving copy quality

This section provides information on the following topics:

- Preventing problems
- Identifying and correcting copy/scan defects

# **Preventing problems**

The following are a few simple steps you can take to improve copy quality:

- Copy from the flatbed scanner. This will produce a higher quality copy than copying from the ADF.
- Use quality originals.
- Load the media correctly. If the media is loaded incorrectly, it might skew, causing unclear images and problems with the OCR application. See <u>Installing and loading the media input</u> <u>trays</u> for instructions.
- Open or close the straight-through output door on the product to accommodate the copy job. If you are copying to standard weight media, use the output bin (door closed). If you are copying to heavy media, use the straight-through output path (door open).
- If your product frequently feeds more than one page at a time, replace the separation pad. For more information, see <u>Changing the printer separation pad</u>.
- Use or make a carrier sheet to protect your originals.

**Note** 

Recurring feed problems indicate the copier/separation pad is worn. See <u>Ordering HP parts and accessories</u> to order a new separation pad. See <u>Changing the printer separation pad</u> for more information about replacing the separation pad.

# **Clearing ADF media jams**

# To clear a media jam from the ADF

Occasionally, media becomes jammed during a copy, scan, or fax job. Some of the causes include the following:

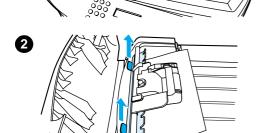
- The ADF input tray is loaded improperly or is too full. See <u>Loading originals to copy or scan</u> for more information.
- The media does not meet HP specifications. See <u>Selecting media for the ADF</u> for more information.

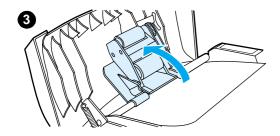
You are notified of a media jam by an error in the software and a <code>Document Feeder Jam</code> message in the control panel display.

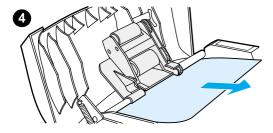
## Typical ADF jam locations

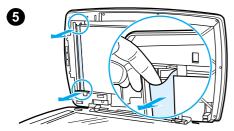
- Input tray areas: If the page is still sticking out of the input tray, gently try to remove it from the
  input tray without tearing the page. If you feel resistance, see <a href="Removing a jammed ADF">Removing a jammed ADF</a> page
  for instructions.
- Output paths: If the page is sticking out of the output bin, gently try to remove it without tearing the page. If you feel resistance, see <u>Removing a jammed ADF page</u> for instructions.
- Intermediate location: If the page is sticking out of both the input tray and into the output area, see Removing a jammed ADF page for instructions.

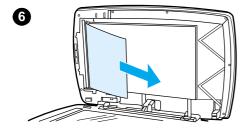










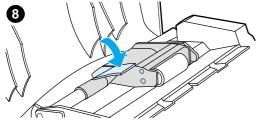


# Removing a jammed ADF page

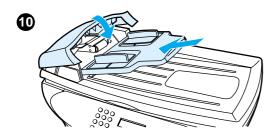
- Remove the ADF input tray and open the ADF cover.
- Remove the jam cleanout part. Using both hands, lift up on the two handles until the part unsnaps. Rotate and lift out the cleanout and set aside.
- 3 Lifting the green lever, rotate the pick mechanism until it stays open.
- Gently try to remove the page without tearing it. If you feel resistance, go to the next step.
- Open the ADF lid and gently loosen the media using both hands. 5
- When the media is free, gently pull it out in the direction shown.







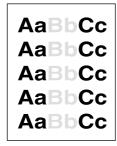




- Close the lid to the flatbed scanner.
- Lower the green lever.
- Reinstall the cleanout by inserting it as shown. Push down on the two tabs until the part snaps into place. It is important to install the cleanout correctly, as future jamming might occur if the cleanout is not properly placed.
- 10 Close the ADF lid and replace the ADF input tray.

# Identifying and correcting copy defects

# Vertical white or faded stripes



- The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough). See Product media specifications for more information.
- The toner might be low. See <u>HP LaserJet print cartridges</u> for instructions.

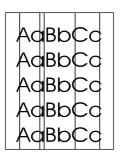
# **Blank pages**

- The original might have been loaded upside down. In the ADF, load the original with the narrow side forward and the side to be scanned facing up. See Loading originals to copy or scan for instructions.
- If you are getting blank pages when scanning from the flatbed scanner, make sure the original document is loaded correctly. Place the original document face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.
- The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough). See Product media specifications for more information.
- The toner might be out. See HP LaserJet print cartridges for instructions.
- The tape might not have been removed from the print cartridge. See HP LaserJet print cartridges for instructions.

## Too light or dark

- Try adjusting the settings.
  - HP LaserJet Copier: see Using HP LaserJet Copier software for more information.
  - Make sure you have the correct copy quality settings. See Adjusting copy quality for the current job for more information.
- You might need to change the properties settings for the associated function in HP LaserJet Director or HP LaserJet Document Manager. See the product software Help for details.

#### **Unwanted lines**



- Make sure the priority input tray is in place.
- Try cleaning the flatbed scanner. See Cleaning the outside of the product for instructions.
- The photosensitive drum inside the print cartridge may have been scratched. Install a new HP print cartridge. See HP LaserJet print cartridges for instructions.

#### Black dots or streaks

Ink, glue, correction fluid, or an unwanted substance might be on the ADF or flatbed scanner. Try cleaning the product. See Cleaning the outside of the product for instructions.

#### **Unclear text**

- Try adjusting the settings.
  - HP LaserJet Copier: see Using HP LaserJet Copier software for more information.
  - Make sure you have the correct quality settings. See Adjusting copy quality for the current job for more information.
- You might need to change the properties settings for the associated function in HP LaserJet Director or HP LaserJet Document Manager. See the product software Help for details.

## Reduced size

- The HP software settings might be set to reduce the scanned image.
- See the product software Help for more information about changing the settings in HP LaserJet Director and HP LaserJet Document Manager.
- See <u>Using HP LaserJet Copier software</u> for more information about changing the settings for HP LaserJet Copier.

# 14 Troubleshooting scanning problems

Use these topics to find tips for solving common scanning problems.

- Scanned image is of poor quality
- Part of the image did not scan or text is missing
- The text cannot be edited
- The scan takes too long
- Error messages appear on the screen
- The scanner did nothing
- Improving scan quality
- Identifying and correcting scan defects

EN 175

# Scanned image is of poor quality

#### Is the original a second generation photo or picture?

Reprinted photographs, such as those in newspapers or magazines, are printed using tiny dots of ink that make an interpretation of the original photograph, which dramatically decreases the quality. Often, the ink dots form unwanted patterns that, when scanned and reprinted or displayed, can be detected. If the following suggestions do not solve your problem, you might need to use a better quality version of the original.

- To eliminate the patterns, try reducing the size of the image after scanning. See Enhancing images with HP LaserJet Document Manager or HP Photo Center for more information.
- Print the scanned image to see if the quality is better.
- Make sure that your resolution and color settings are correct for the type of scan job that you are performing. See <u>Scanner resolution and color</u> for more information.
- For best results, use the flatbed scanner, not the ADF, for scanning.

#### Is the image quality better when printed?

The image displayed on the screen is not always an accurate representation of the quality of the scan.

- Try adjusting the settings on your computer monitor to display more colors (or levels of gray). Typically, you make this adjustment by selecting Display, found on the Windows Control Panel.
- Try adjusting the resolution and color settings in the scanner software. See Scanner resolution and color for more information.

## Is the image skewed (crooked)?

The original might have been loaded incorrectly. It is important to use the media guides when you load the originals into the ADF. See Loading originals to copy or scan for more information.

## Does the scanned image have blots, lines, vertical white stripes, or any other defect?

See Improving scan quality for more information.

## Is the scanner dirty?

If the scanner is dirty, the image produced will not have optimum clarity. See Cleaning the outside of the product for instructions.

## Do graphics appear different from the original?

The graphics settings might not be suitable for the type of scan job that you are performing. Try changing the graphics settings, see Changing settings from your computer for more information.

# Part of the image did not scan or text is missing

#### Was the original loaded correctly?

Make sure that you loaded the original correctly. See Loading originals to copy or scan for instructions.

## Does the original have a colored background?

Colored backgrounds can cause images in the foreground to blend too much. Try adjusting the settings before you scan the original or enhancing the image after you scan the original. See <a href="Scanner resolution and color">Scanner resolution and color</a> for more information.

#### Is the original longer than 381 mm (15 inches)?

The maximum scannable length is 381 mm (15 inches) using the ADF. If the page exceeds the maximum length, the scanner stops. Copies can be longer.

#### **CAUTION**

Do not try to pull the original from the ADF; you might damage the scanner or your original. See <u>Clearing ADF media jams</u> for instructions.

#### Is the original too small?

The minimum size supported in the ADF for the HP LaserJet 3300 is 127 by 127 mm (5 by 5 inches). The original might be jammed. See <u>Clearing ADF media jams</u> for instructions.

#### Are you using HP LaserJet Director?

Your default property settings for HP LaserJet Director might be set to automatically perform a specific task other than the one you are attempting. For example, you can set HP LaserJet Director to automatically perform a scan to e-mail. This means that your image does not show up on the screen but is attached to an e-mail message as a file. See the product software Help for instructions on changing the properties in HP LaserJet Director.

#### Is the paper size correct?

In Scan settings (in the HP LaserJet Scan Control Viewer), make sure that the input paper size is large enough for the document that you are scanning.

## Did you check for missing text in selected regions?

Scan your document in page-by-page mode and make sure that missing text is in a selected region. If you are performing an OCR operation on a document, colored text does not scan well, if at all.

## The text cannot be edited

## Is the product software set to edit text (OCR)?

Text remains as a single image until the Optical Character Recognition (OCR) application converts the single image into text that you can edit. See <a href="Scanning with OCR">Scanning with OCR</a> for more information.

## Was the original loaded correctly?

For OCR, the original must be loaded top forward and face up into the ADF. If using the flatbed scanner, make sure to load originals correctly. Place the original document face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.

## Are you using the correct word processing application?

Your OCR application might be linked to a word processing application that does not perform OCR tasks. See the product software Help for more information about linking applications.

## Does the original have tightly spaced text?

- The OCR application might not recognize text that is tightly spaced. For example, if the text that the OCR application converts has missing or combined characters, rn might appear as m.
- Text may be classified as a graphic and therefore not converted to text.

## Is the original of poor quality?

The accuracy of the OCR application depends on the image quality, text size, and structure of the original and the quality of the scan itself. Make sure that your original has good image quality.

#### Does the original have a colored background?

Colored backgrounds can cause images in the foreground to blend too much. Try adjusting the settings before you scan the original or enhancing the image after you scan the original. See Scanner resolution and color for more information. If you are performing an OCR operation on a document, colored text does not scan well, if at all.

# The scan takes too long

## Is your resolution or color level set too high?

If you set the resolution and color level too high, the scan job takes longer and results in larger files. To obtain good results when scanning or copying, it is important that you use the correct resolution and color level settings for your job. See Scanner resolution and color for more information.

#### Is your software set to scan in color?

Your system defaults to color, which takes longer to scan even if you are scanning a monochrome original. If you acquire an image through TWAIN, you can change the settings to scan in grayscale. See the product software Help for details.

### Did you send a print or copy job before you tried to scan?

If you sent a print or copy job before you tried to scan, the scan will start if the scanner is not busy. However, the printer and scanner share memory, which means that the scan might be slower.

#### Is your computer set for bi-directional communication?

See the documentation that came with your computer to change the BIOS settings. The recommended bi-directional setting for the parallel port is ECP. USB is always bi-directional.

# Error messages appear on the screen

#### Unable to activate TWAIN source

If you are acquiring an image from another device, such as a digital camera or another scanner, make sure that the other device is TWAIN compliant. Non-TWAIN-compliant devices do not work with the HP LaserJet 3300 product software.

Make sure that you have connected the USB or parallel cable to the correct port on the back of your computer. If you have another port, try attaching the cable to the other port. Make sure that you have an SPP-(bidirectional) or ECP-compliant parallel port on your computer. An SPP parallel port is the minimum; an ECP parallel port is strongly recommended. See the documentation that came with your computer for more information about your port.

Some devices might not share the parallel port with the printer. If you have an external hard drive, or network switchbox connected to the same USB or parallel port as the HP LaserJet 3300, the other device might be interfering. To connect and use the HP LaserJet 3300, you must disconnect the other device or you must use two ports on the computer. You might need to add another parallel interface card. Hewlett-Packard strongly recommends an ECP parallel interface card. See the documentation that came with your computer for more information about installing an additional parallel interface card or resolving device conflicts.

Verify that the correct TWAIN source is selected. In the software, check the TWAIN source by selecting **Select Scanner** from the File menu.

# The scanner did nothing

### Is the original loaded correctly?

Make sure that the original is loaded correctly:

- ADF input tray: Top down in the ADF input tray, and the side to be scanned facing up. See To load originals into the ADF input tray for more information.
- **Flatbed scanner:** Place the original document face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.

# Improving scan quality

This section provides information on the following topics:

- Preventing problems
- Identifying and correcting scan defects

# **Preventing problems**

The following are a few simple steps you can take to improve copy and scan quality:

- Use the flatbed scanner, rather than the ADF, to scan.
- Use quality originals.
- Load the media correctly. If the media is loaded incorrectly, it might skew, causing unclear images and problems with the OCR application. See <u>Installing and loading the media input</u> <u>trays</u> for instructions.
- Open or close the straight-through output door on the product to accommodate the copy job. If you are copying to standard weight media, use the output bin (door closed). If you are copying to heavy media, use the straight-through output path (door open).
- Adjust the software settings according to how you plan to use the scanned page. See
   <u>Enhancing images with HP LaserJet Document Manager or HP Photo Center</u> and <u>Scanner</u>
   <u>resolution and color</u> for more information.
- If your product frequently feeds more than one page at a time, replace the separation pad. For more information, see <u>Changing the printer separation pad</u>.
- Recurring feed problems indicate that the copier/separation pad is worn. See <a href="Ordering HP">Ordering HP</a> parts and accessories to order a new separation pad. See <a href="Changing the printer separation">Changing the printer separation</a> pad for more information about replacing the separation pad.
- Use or make a carrier sheet to protect your originals.

# Identifying and correcting scan defects

# **Blank pages**

- The original might have been loaded upside down. In the ADF, put the top end of the original media stack into the ADF input tray, with the media stack face up and the first page to be scanned on top of the stack. See Loading originals to copy or scan for instructions.
- If you are getting blank pages when scanning from the flatbed, make sure the original document is loaded correctly. Place the original document face down on the flatbed scanner with the top left corner of the document located in the lower right corner of the glass.

### Too light or dark

- Try adjusting the settings.
  - Make sure you have the correct resolution and color settings. See Scanner resolution and color for more information.
- You might need to change the properties settings for the associated function in HP LaserJet Director or HP LaserJet Document Manager. See the product software Help for details.

### **Unwanted lines**

Ink, glue, correction fluid, or an unwanted substance might be on the scanner. Try cleaning the flatbed scanner surface. See Cleaning the outside of the product for instructions.

### Black dots or streaks

Ink, glue, correction fluid, or an unwanted substance might be on the scanner surface. Try cleaning the flatbed scanner surface. See Cleaning the outside of the product for instructions.

### **Unclear text**

- Try adjusting the settings.
  - Make sure you have the correct resolution and color settings. See <u>Scanner resolution and</u> color for more information.
- You might need to change the properties settings for the associated function in HP LaserJet Director or HP LaserJet Document Manager. See the product software Help for details.

### Reduced size

The HP software settings might be set to reduce the scanned image. See the product software Help for more information about changing the settings in HP LaserJet Director and HP LaserJet Document Manager.

# 15 Troubleshooting faxing problems

Use the topics in this chapter to troubleshoot common fax problems. These apply only to the LaserJet 3330 product.

- Fax phone problems
- The document stops feeding during faxing
- The product is receiving faxes but not sending them
- Outgoing fax calls keep dialing
- Faxes you send are not arriving
- All of the numbers in a long fax number cannot be dialed
- Unable to start receiving faxes from an extension phone
- Voice calls are not being received by the phone or answering machine connected to the line
- Incoming fax calls are not being answered
- Faxes are transmitting or being received very slowly
- Faxes are not printing or are printing incorrectly
- Faxes are printing on two pages instead of one
- Received faxes are too light or are printing only on half of the page
- Fax activity logs or call reports are not printing correctly
- The volume is too high or low

EN 181

# Fax phone problems

Use the following checklist to help you define what is causing any faxing problems you might be encountering.

### Are you using the phone cord supplied with the product?

This product has been tested with the supplied phone cord to meet RJ11 specifications.

### Is the fax/phone line connector installed in the correct socket on the product?

It should be plugged into the product's line socket (the socket on top with an "L" next to it). You must open the left side panel to access the socket. See "Connecting the product to a phone line" in the fax guide that came with your product for details.

### Is the fax/phone line connector seated into the socket on the product?

Gently pull on the Fax/Phone line connector to make sure it is well seated into the socket.

### Is the phone wall jack working properly?

Verify that a dial tone exists by attaching a phone to the wall jack.

### Can you hear a dial tone and can you make a phone call?

Attach a phone to the wall jack and verify that there is a dial tone and that you can make a phone call.

### What type of phone line are you using?

Dedicated line: A unique fax/phone number assigned to receive or send faxes. The phone cord should be connected to the top port inside the left side panel of the product (the one that is not labeled with a telephone icon).

Shared phone line: A system where both phone calls and faxes are received or sent using the same phone number and phone line. A single standard phone line can only perform one function at a time. You cannot send a fax while talking on the phone or while connecting to the Internet using the same phone line.

PBX system: A business environment phone system. Standard home phones and the HP LaserJet 3330 use an analog phone signal. PBX systems are digital and are incompatible with standard phones and with devices such as the HP LaserJet 3330. You need to have access to a standard analog phone line in order to send and receive faxes.

Roll-over lines: A phone system feature where, when one incoming line is busy, the next call "rolls over" to the next available line. Try attaching the product to the first incoming phone line. The product will answer the phone after it rings the number of times set in the product's rings-to-answer setting. (See Changing rings-to-answer.)

Distinctive ring service: The phone company can assign two phone numbers to one physical line and assign each number a distinctive ring pattern. Make sure the product is set to respond to the correct distinctive ring pattern assigned to the fax phone number by your phone service provider. (See Changing answer ring patterns.)

### Are you using a phone line splitter?

A phone line splitter is a device used to split out two or more phone line jacks to connect phones or devices to the same phone line wall jack. Confusion can result from the existence of two different kinds of splitters.

Parallel splitters (also called "T" splitters) split a single line into two jacks, allowing two devices to be plugged into the same line.

Line1/Line2 splitters provide two phone line outlets from a single jack with two unique phone numbers (two phone lines are connected to a single wall jack). A Line1/Line2 splitter must be used if you have a fax line and a voice line coming into the same wall jack.

See "Connecting the product to a phone line" in the fax guide that came with your product for instructions.

**Note** 

Parallel or "T" splitters should not be used with the product, as they can degrade the quality of the phone signal. If you need to attach a second device to the phone line along with the product, plug the second device into the product's "phone" socket (the socket on the bottom) inside the product's left side panel. See "Connecting the product to a phone line" in the fax guide that came with your product for instructions.

### Are you using a surge protection device?

This is a device used between the wall jack and the product to protect the product against electrical power passed through the phone lines. These can cause some fax communication problems by degrading the quality of the phone signal. If you are having problems sending or receiving faxes and are using one of these devices, connect the product directly to the phone jack on the wall to determine whether the problem is with the surge protection device.

### Are you using a phone company's voice messaging service?

This is a voice messaging service used to replace telephone answering devices. If the messaging service's rings-to-answer setting is lower than the product's rings-to-answer setting, the messaging service answers the call and the product is not able to receive faxes. If the product's rings-to-answer setting is lower than that of the messaging service, the product will answer all calls and no call will ever be routed to the messaging service. The only voice messaging solution that can be successfully used with the product is a stand-alone telephone answering machine.

### Are you using an answering machine?

An answering machine should be connected directly to the port located inside the left side panel of the product that is labeled with the telephone icon or should be shared on the same phone line extension. Set the product's rings-to-answer for one ring more than the number of rings for which the answering machine is set. See <a href="Changing rings-to-answer">Changing rings-to-answer</a> for more information.

Note

If an answering machine is connected on the same phone line but on a different jack, it may interfere with the product's ability to receive faxes.

# The document stops feeding during faxing

# Is the document too large or too small for the ADF?

The maximum length of a page you can load is 381 mm (15 inches). Faxing of a longer page stops at 381 mm (15 inches). The minimum page size for the ADF is 127 by 127 mm (5 by 5 inches). If the item is too small, it can jam inside the ADF.

If there is no jam and it has been less than one minute, wait a moment before pressing cancel. If there is a jam, see <u>Clearing media jams</u>, and resend the job.

### Are there problems with the fax machine you are sending to?

Try sending to a different fax machine.

### Are there problems with the phone line?

Do one of the following:

- Turn up the volume on the product and press fax/send on the control panel. If you hear a dial tone, the phone line is working.
- Disconnect the product from the phone jack and connect a phone. Try to make a phone call to make sure the phone line is working.

# The product is receiving faxes but not sending them

# Is your product on a PBX system?

If your product is on a PBX system, the PBX system might be generating a dial tone the product cannot detect.

Disable the detect dial tone setting. See Changing the detect dial tone setting.

## Is there a poor phone connection?

If you think there might be a poor connection on this phone line, try sending the fax later and see if it sends successfully.

# Outgoing fax calls keep dialing

The product will automatically redial a fax number if the redial on busy option is set to on. To stop the redials while the product is dialing, press cancel. See the Changing redial settings if you need to change the setting.

# Faxes you send are not arriving

# Is the receiving fax machine off or does it have an error condition?

Call the recipient to make sure the fax machine is on and ready to receive faxes.

# Is the fax still waiting in memory?

A fax might be in memory because it is waiting to redial a busy number, there are other jobs ahead of it waiting to be sent, or the fax is set up for a delayed send. If a fax job is in memory for any of these reasons, an entry for the job appears in the fax log. Print the fax activity log (see Printing the fax activity log) and check the Status column for jobs with a Pending designation.

# All of the numbers in a long fax number cannot be dialed

The maximum number of digits or characters that can be entered into a fax number is 50. Try dialing the fax number in manual mode. See <u>Using manual dial</u>.

# Unable to start receiving faxes from an extension phone

# Is the extension phone setting disabled?

See Enabling an extension phone for instructions about changing this setting.

## Is the telephone cord securely connected?

Check that the telephone cord is securely connected between the phone and the product (or other device connected to the product).

Press 1-2-3 in sequence, wait for three seconds, then hang up.

# Voice calls are not being received by the phone or answering machine connected to the line

### Is the phone cord connected properly?

See "Connecting the product to a phone line" in the fax guide that came with the product to check the installation. The product must be the first device connected to the phone line.

# Are the answer mode and rings-to-answer settings set properly?

See <u>Setting the answer mode</u> or <u>Changing rings-to-answer</u> to determine which settings you need. The rings-to-answer must be set higher than for the answering machine.

# Is the answering machine or phone functioning?

Connect the phone or answering machine directly to the phone line and determine whether it works by itself.

# Incoming fax calls are not being answered

### Is the answer mode set to manual?

If the answer mode is set to manual, the product never answers calls. You have to answer the phone and start receiving the fax yourself. See <u>Setting the answer mode</u> for more information.

# Is the rings-to-answer setting set correctly?

Check the rings-to-answer setting for your configuration. See <u>Changing rings-to-answer</u> or refer to the fax guide that came with the product to determine which setting you need.

### Is the answer ring pattern feature turned on?

If the answer ring pattern is turned on but you do not have the service, or you do have the service and the feature is not set correctly, this will interfere with receiving faxes. Check the answer ring pattern feature to make sure it is set properly. See Changing answer ring patterns.

## Is the phone cord connected properly?

See "Connecting the product to a phone line" in the fax guide that came with the product to check the installation. Make sure you are using the phone cord that came with the product.

## Is there a voice message being played by an answering machine?

An answering machine voice message can interfere with the product's ability to receive faxes. Re-record your answering machine message, leaving at least two seconds of silence at the beginning of the message.

## Are there too many devices connected to the phone line?

Try removing the last device connected and determine whether the product works. If not, continue removing devices one at a time and retry after removing each one.

## Is the phone line working?

Do one of the following:

- Turn up the volume on the product and press fax/send on the control panel. If you hear a dial tone, the phone line is working.
- Disconnect the product from the phone jack and connect a phone. Try to make a phone call to make sure the phone line is working.

# Is a voice messaging service interfering with the product answering calls?

Do one of the following:

- Discontinue the messaging service.
- Get a phone line dedicated to fax calls.
- Set the product to answer in manual mode. In manual mode, you must start the fax receive process yourself.
- Leave the product set to automatic mode and lower the rings-to-answer for the product to a number less than the rings-to-answer for the voice mail (see Changing rings-to-answer). The product will answer all incoming calls.

# Is the product out of paper?

If the product is out of paper and its memory is full it will not be able to receive faxes. Refill the media input tray. The product will print all of the faxes it has saved in memory and will then resume answering fax calls.

# Faxes are transmitting or being received very slowly

### Are you sending or receiving a very complex fax?

A complex fax, such as one with many graphics, takes longer to be sent or received.

## Does the receiving fax machine have a slow modem speed?

The product only sends the fax at the fastest modem speed the receiving fax machine can use.

## Is the resolution at which the fax was sent or received very high?

A higher resolution typically results in better quality, but also requires a longer transmission time. If you are receiving the fax, call and ask the sender to lower the resolution and resend the fax.

If you are sending, lower the resolution and resend the fax. See <u>Changing the default resolution</u> to change the default setting.

## Is there a poor phone line connection?

If there is a poor phone line connection, the product and the receiving fax machine slow down the transmission to adjust for errors. Hang up and resend the fax. If this does not work, have the phone company check the phone line.

# Faxes are not printing or are printing incorrectly

# Is there media in the media input tray?

If there is no media, load the media input tray. Any faxes received while the input tray is empty are stored in memory and will print once the tray has been refilled.

# Is the receive to PC option selected?

If the receive to PC option is selected, faxes are being received by the computer. See <u>Receiving</u> faxes to your computer for information on this setting.

# Faxes are printing on two pages instead of one

# Is the autoreduction setting set correctly?

If you want faxes to be reduced to fit on one page, the autoreduction setting should be on. If the setting is off, faxes may print on multiple pages. See <u>Changing autoreduction settings for incoming faxes</u> to adjust the setting.

# Received faxes are too light or are printing only on half of the page

# Did the product run out of toner while printing a fax?

The product stores up to 10 of the most recently printed faxes. As soon as possible, replace the print cartridge and see To reprint a fax.

# Fax activity logs or call reports are not printing correctly

# Are the activity log and call report settings correct?

Print a configuration page (see Printing a configuration page) and check when the reports print. See Setting fax call report print times and Setting the fax activity log to print automatically to change the settings.

# The volume is too high or low

# Do the volume settings need to be adjusted?

See <u>Using the product's volume controls</u> for instructions about changing volume settings.

# 16 Troubleshooting network problems

You can use the information in this chapter to troubleshoot general network problems. See the following sections for more information:

- Troubleshooting overview
- Configuration page does not print
- Error messages
- Resetting the 310x print server to factory defaults (cold reset)
- Interpreting the configuration page
- Browse hp.com

EN 189

# **Troubleshooting overview**

The questions below will help you troubleshoot your print server quickly. Just answer each question in turn. Please answer the questions below in the order listed.

- Is your printer **ON and READY**?
  - If **Yes**, continue with the next question.
- 2 Is your print server's <u>USB OK? (USB light ON solid green?)</u>
  - If **Yes**, continue with the next question.
- 3 Is your print server's Power/Status OK? (Power/Status light ON solid green?)
  - If **Yes**, continue with the next question.
- 4 Is the 10/100 link OK? (10 light or 100 light ON solid green?)
  - If **Yes**, continue with the next question.
- 5 Can you print a Jetdirect configuration page?

### ON and READY

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, check the printer's lights or control panel to see whether it is ON and READY.

If your printer's power is switched on and the printer is ready to print, continue with USB OK? (USB light ON solid green?).

If the printer is not ready to print, or if you are not sure what to look for, see the next topic.

# Is your printer ON and READY?

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. The control panel display 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 ready? The display should say Ready. If it does not, check to see that there are no paper jams in the print or scan paper paths. See Clearing media jams for instructions.
- Make sure all the doors are securely closed.
- If the printer display still does not say Ready, try pressing the menu/enter button.
- Try printing a configuration page. See Printing a configuration page. If you are not able to print a configuration page, you will not be able to print from your print server.

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

# **USB OK? (USB light ON solid green?)**

The HP Jetdirect 310x print server connects to its printer using a USB cable. If the USB connection is working correctly, the USB light on the print server will be ON solid green (bright areen 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.

If your print server's USB light is ON solid green, continue with Power/Status OK? (Power/Status light ON solid green?).

If your print server's USB light is not ON solid green, or if you are not sure what to look for, continue with the following troubleshooting topics.

Note that the Jetdirect 310x 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.

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?

### 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 the appropriate topic below to continue troubleshooting.

### Is the USB light ON solid green?

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, follow the troubleshooting steps below.

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, as shown below:



### **USB light OFF**

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.

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, continue with Power/Status OK? (Power/Status light ON solid green?).

If no, your print server has a problem that requires assistance from HP Jetdirect technical support; see the support flyer that came with your product for information on contacting HP.

### **USB** light blinking green

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 310x 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.

### Is the USB light now ON solid green?

If yes, continue with Power/Status OK? (Power/Status light ON solid green?).

If no, but you are connected to a USB printer, your print server has a problem that requires assistance from HP Jetdirect technical support; see the support flyer that came with your product for information on contacting HP.

### USB light blinking amber

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, 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, the print server is OK. If it is blinking amber, 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, the cable is also OK. If it is blinking amber, 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, the printer is also OK. If it is blinking amber, the printer may be faulty.

### Is the USB light now ON solid green?

If yes, continue with Power/Status OK? (Power/Status light ON solid green?).

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; see the support flyer that came with your product for information on contacting HP.

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

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, continue with 10/100 link OK? (10 light or 100 light ON solid green?).

If your print server's Power/Status light is not ON solid green, or if you are not sure what to look for, read the topics below to start evaluating the status of the print server.

### Is the Power/Status light ON solid green?

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.

Note

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.

If necessary, try plugging the power module into a different power source.

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?

### 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 continue troubleshooting.

### 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; see the support flyer that came with the product for information on contacting HP.

### Power/Status light blinking green

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.

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

Check that the network cable is plugged securely into the hub/switch/router, and that the connection is set to the correct network speed.

- Check that the LINK light is ON for the port on the hub/switch/router to which the print server is connected.
- Your network cable may be faulty. Try a different cable.
- 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, continue with 10/100 link OK? (10 light or 100 light ON solid green?). If no, your print server has a problem that requires assistance from HP Jetdirect technical support; see the support flyer that came with your product for information on contacting HP.

### Power/Status light blinking amber

Your print server has developed a fault. Fixing this fault requires assistance from HP Jetdirect technical support; see the support flyer that came with your product for information on contacting HP.

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

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, both the 10 and 100 lights will be off.

If one of the print server's link lights is ON solid green, continue with <u>Check the print server's I/O status</u>.

If neither of the print server's link lights is ON solid green, or if you are not sure what to look for, follow the instructions below to start evaluating the link status of the print server.

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

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.

### **Link lights OFF**

Try the steps below and make any necessary corrections.

- Make sure that the network cable is connected securely to the print server.
- 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.)
- Check that the LINK light is ON for the port on the hub/switch/router to which the print server is connected.
- Your network cable may be faulty. Try a different cable.
- 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, continue with Check the print server's I/O status.

If no, your print server has a problem that requires assistance from HP Jetdirect technical support; see the support flyer that came with your product for a list of technical support telephone numbers.

## Check the print server's I/O status

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

- Print a Jetdirect configuration page. To print the page, press the test button on the print server.
- If the configuration page does not print, see Configuration page does not print for help in getting it to print.
- 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. See <u>Interpreting the configuration page</u> for more details on the configuration page.

If your configuration page shows a status of "I/O Card Not Ready," continue with Error messages.

### Can you print a Jetdirect configuration page?

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

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. See Interpreting the configuration page for details on the configuration page contents.

If the configuration page does not print, see Configuration page does not print.

### Configuration page prints?

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 a display of the status of the print server's functions. See Interpreting the configuration page for details on the configuration page contents.

If you are able to print a Jetdirect configuration page on your printer, continue with the instructions in Check the print server's I/O status.

# Configuration page does not print

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

Note that the HP Jetdirect 310x 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 Ready.
- 4 You can check whether the print server is sending the page in a printer language (PDL) that the printer supports. If the language is not supported by the printer, the page will not print or will be unreadable if it does print.

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.

You can cycle through the four printer languages using the following procedure:

- **a** Press and hold the print server's Test button. After about three 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.
- **b** Briefly press and release the test button once again to request the configuration page in the next language.
- **c** Verify that a readable page is printed. Repeat these steps up to four times if necessary to receive a configuration page you can read.
- 5 If you cannot read the page, refer to your printer documentation to find out which of the following four printer languages are supported by your printer:
  - ASCII
  - PCL
  - PostScript
  - HP/GL-2
- 6 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.

# **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, find the error message that you see on the configuration page. The instructions in the next few topics give a fuller explanation of each error.

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. See the support flyer that came with your product 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, contact HP Jetdirect technical support. See the support flyer that came with your product for information on contacting HP.

### 08 LAN Error: INFINITE DEFERRAL

There is a network congestion problem.

For help in correcting this error, contact HP Jetdirect technical support. See the support flyer that came with your product for information on contacting HP.

### 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, contact HP Jetdirect technical support. See the support flyer that came with your product for information on contacting 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, contact HP Jetdirect technical support. See the support flyer that came with your product for information on contacting HP.

# Resetting the 310x print server to factory defaults (cold reset)

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

To reset the HP Jetdirect 310x print server configuration to factory defaults, follow these steps:

- Unplug the power cable from the back of the print server.
- While holding down the test button on the rear end of the print server, plug the power cable back into the print server and continue to hold down the test button for about five seconds. Any user-configured settings will be erased.

# Interpreting the configuration page

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, briefly 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 print server.

### HP JetDirect Configuration Page (English - HPGL2)

General Informati	on ======	IPX/SPX	
Status:	I/O Card Ready	Status:	Ready
Model Number:	J6038A	Primary Frame Type:	Auto Select
Hardware Address:	0001E6123456		
Firmware Version:	L.21.05	Network Frame Type	Revd
Port Select:	RJ45	Unknown EN II	2
Port Config:	100TX HALF	0000C400 EN 802.2	31903
Manufacturing ID:	40194019F090f	Unknown EN SNAP	2
Date Manufactured:	02/2002	Unknown EN 802.3	2
SNMP Set Cmty Name:	Specified		
		======== Novell/NetWare	9
ODD LIGHTOOK I			
Device Name:	LaserJet 3320	Status:	Ready
Manufacturer:	Hewlett-Packard	6	
Serial Number:	US16SK0KD	Node Name:	NPI12345
Communication Mode:	1284.4		
		NetWare Mode:	Queue Server
======== Network Statisti	.C8 ======	NDS Tree Name:	YES-TREE
Total Packets Received:	12345678	NDS Context:	0=HP
Unicast Packets Received:	15001		
Bad Packets Received:	40	Attached Server:	
Framing Errors Received:	0		
Total Packets Transmitted:	50114	Queue Poll Interval:	2 sec
Unsendable Packets:	13	SAP Interval:	60 sec
Transmit Collisions:	1003		
Transmit Late Collisions:	0	Server 1 [nds]	NW4 X
TCP/IP			
Status:	Ready	DLC/LLC	
		Status:	Ready
Host Name:	NPI39BEB2	********	21211117
IP Address:	192.168.0.6		
Subnet Mask:	255.255.255.0	========== AppleTalk	
Default Gateway:	192.168.0.1	**	
Config By:	DHCP/TFTP	Status:	Ready
DHCP Server:	192.168.0.1		-
TFTP Server:	Not Specified	Name: HP Lase	erJet 3300 Series
Config File:		Zone:	Saturn Zone
/export/client/stand	/uxboot/jumb.cfg	Type:	LaserWriter
Domain Name:	Not Specified	Type:	HP LaserJet 3320
DNS Server:	192.168.0.2	Network Number:	65281
WINS Server:	192.168.0.1	Node Number:	4
Syslog Server:	Not Specified		
Idle Timeout:	270 sec		
SLP:	Enabled		
Access List:	Not Specified		
Web JetAdmin URL:			
	Not Specified		

# **General information**

Provides general print server status and identification information.

Message	Description
Status	Current state of the print server.
	<ul> <li>I/O Card Ready the print server has successfully connected to the network and is awaiting data.</li> </ul>
	<ul> <li>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.</li> </ul>
	<ul> <li>I/O Card Not Ready there is a problem with the print server or its configuration.</li> </ul>
	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, J6038A).
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 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.
	<ul> <li>RJ-45 the RJ-45 network port is connected.</li> </ul>
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 <b>10 Mbps, full-duplex</b> .
	• 100TX HALF 100 Mbps, half-duplex.
	• 100TX FULL 100 Mbps, full-duplex.
	<ul><li>Unknown the print server is in an initialization state.</li></ul>
	<ul> <li>Disconnected a network connection has not been detected. Check network cables.</li> </ul>
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.

Message	Description
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 configuration and diagnostic pages will be printed on the printing device attached to the print server.

# **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	<ul> <li>Current USB communication mode:</li> <li>1284.4 IEEE standard protocol, a mode for printers and multifunction (All-in-One) devices that allows multiple channels of simultaneous print, scan, and status communication.</li> <li>MLC HP-proprietary protocol for Multiple Logical Channels, a mode for printers and multifunction (All-in-One) devices that allows multiple channels of simultaneous print, scan, and status communication.</li> <li>Bidirectional two-way printer communication, sending print data to the printing device and returning status information from the printing device.</li> <li>Unidirectional one-way printer communication from computer to printing device.</li> <li>Device not found connection of a printing device has not been detected. Check device and cable.</li> <li>Device not supported the device connected is not a printer (for example, a camera).</li> </ul>

# **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.

Message	Description
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.

# 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.
	<ul> <li>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.</li> </ul>
	An error code and message are displayed if the print server is not ready.
Host Name	<ul> <li>The host name configured on the print server. It may be truncated.</li> <li>Not Specified no host name was specified in a BOOTP response or TFTP configuration file.</li> </ul>
	<ul> <li>NPIxxxxxx the default name is NPIxxxxxx, where xxxxxx represents the last six digits of the LAN hardware (MAC) address.</li> </ul>
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.

Message	Description
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.
	<ul> <li>Not Specified a subnet mask is not configured.</li> </ul>
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.
	Not specified a doladit gateway is not configured.
Config By	Identifies how the print server obtained its IP configuration.  BOOTP automatic configuration via a BOOTP server.
	<ul> <li>BOOTP/TFTP automatic configuration via a BOOTP server and TFTP configuration file.</li> </ul>
	<ul> <li>DHCP automatic configuration via a DHCP server.</li> <li>DHCP/TFTP automatic configuration via a DHCP server and TFTP configuration file.</li> </ul>
	<ul> <li>RARP automatic configuration via the Reverse Address Resolution Protocol.</li> </ul>
	<ul> <li>User Specified manual configuration via Telnet, the printer's control panel, HP Web JetAdmin, embedded web server, or other method.</li> </ul>
	<ul> <li>Default IP the default IP address was assigned. This address may not be a valid address for your network.</li> </ul>
	<ul> <li>Not Configured the print server was not configured with IP parameters. Verify that TCP/IP is enabled, or check for error status.</li> </ul>
BOOTP 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
DHCP Server	request for automatic TCP/IP configuration over the network.
or RARP Server	<ul> <li>Not Specified the configuration server's IP address could not be determined or was set to zero in the response packet.</li> </ul>
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.
	<ul> <li>Not Specified the configuration server's IP address could not be determined or was set to zero in the response packet.</li> </ul>
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 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.

Message	Description
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 IP address 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 Web JetAdmin, the URL of the host system used for HP Web JetAdmin services is displayed. The URL is limited to two lines and may be truncated.  Not Specified the URL of the HP Web JetAdmin host system could not be identified or is not configured.

# **IPX/SPX** protocol information

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

Message	Description
Status	<ul> <li>Indicates the current IPX/SPX protocol status.</li> <li>Ready the print server is awaiting data over IPX/SPX.</li> <li>Disabled IPX/SPX was manually disabled.</li> <li>Initializing the print server is registering the node address or name. An additional status message may also be displayed.</li> <li>An error code and message are displayed if the print server is not ready.</li> </ul>
Primary Frame Type	<ul> <li>Specifies the frame type selection on the print server.</li> <li>Auto Select the print server automatically senses and limits the frame type to the first one detected.</li> <li>EN_II limits the frame type to IPX over Ethernet frames. All others will be counted and discarded.</li> <li>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.</li> <li>EN_SNAP limits the frame type to IPX over SNAP with IEEE 802.3 frames. All others will be counted and discarded.</li> <li>EN_802.3 limits the frame type to IPX over IEEE 802.3 frames. All others will be counted and discarded.</li> </ul>
Network	The first column headed 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 headed 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 headed Rcvd indicates how many packets have been received for each frame type.

# **Novell/NetWare protocol information**

Provides the current status and parameter values for the Novell NetWare network protocol.

Message	Description
Status	<ul> <li>Indicates the current NetWare configuration status.</li> <li>Ready the print server is awaiting data.</li> <li>Disabled IPX/SPX was manually disabled.</li> <li>Initializing the print server is registering the node address or name. An additional status message may also be displayed.</li> <li>An error code and message are displayed if the print server is not ready.</li> </ul>
Node Name	In Queue Server Mode (see below), this is the IPX/SPX name of the print server. It must match a valid print server on the appropriate NetWare file server. The default name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.  In Remote Printer Mode (see below), this is the name specified when you configured the networked printer. The default name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.
NetWare Mode	<ul> <li>The NetWare mode used by the print server:</li> <li>Queue Server indicates that the print server receives data directly from the queue. It is also used when the printer is not configured.</li> <li>Remote Printer with the printer number following it, indicates that the print server emulates a Novell NetWare remote printer.</li> </ul>
NDS Tree Name	Displays the name of the Novell Directory Services (NDS) tree for this printer. NDS is a database of objects on a NetWare network, organized in a heierarchical tree structure.  Not Specified or missing: NDS is disabled.
NDS Context:	Displays the fully qualified NDS name where the print server object resides in the NDS tree. For example:  CN=Ij_pserver.OU=support.OU=mycity.OU=mycompany  Not Specified or missing: NDS is disabled.
Attached Server	Identifies the Jetdirect discovery method NSG (Nearest Service Query) or GSQ (General Service Query) and the name of the proxy file server used to locate the configured bindery servers.  Not Specified or missing: A NetWare server has not been configured.
Queue Poll Interval	This job poll interval specifies the time interval (in seconds) that the print server waits to check for print jobs in a print queue. The default is two seconds.
SAP Interval	Specifies the time interval (in seconds) that the print server waits between Service Advertising Protocol (SAP) broadcasts on the network. The default is 60 seconds.
Server x	x identifies a NetWare file server to which the print server is attached.

# AppleTalk protocol information

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

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.
Туре	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.
	<b>Note:</b> The AppleTalk phase 2 (P2) parameter is preconfigured on the print server.

# **DLC/LLC** protocol information

Provides the current status and parameter values for the DLC/LLC network protocol.

Message	Description
Status	<ul> <li>Indicates the current DLC/LLC configuration status.</li> <li>Ready the print server is awaiting data.</li> <li>Disabled DLC/LLC was manually disabled.</li> <li>Initializing the print server is registering the node address or name. An additional status message may also be displayed.</li> <li>An error code and message are displayed if the print server is not ready.</li> </ul>

# **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	There is a network congestion problem.
LAN ERROR- INFINITE DEFERRAL	<b>Note:</b> 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.
OC 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.

Error Code and Message	Description
12 LAN ERROR- NO LINKBEAT	With a 10/100Base-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.
15 CONFIGURATION ERROR	The configuration information for the NetWare functions is not stored correctly on the print server. Use the installation software, embedded web server, or other tools to reconfigure the print server. If this error persists, there may be a problem with the print server.
16 NOT CONFIGURED	The print server has not been configured for NetWare. Use the installation software, embedded web server, or other tools to configure the print server for NetWare networks.
17 UNABLE TO FIND SERVER	The print server was unable to find the NetWare print server (in Remote Printer mode) or file server (in Queue Server mode). There was no response to service queries for advertising print servers or file servers that matched the configured print server or file server name.
	Make sure that the print server or file server is running and that the print server or file server name configured on the print server matches the actual name used by the print server or file server. Also make sure that all cables and routers are functioning correctly.
18 PASSWORD ERROR	The print server detected that the password for the NetWare print server object is wrong. Use a NetWare utility (such as PCONSOLE) to erase the password for the print server object. When the print server logs on again, it sets a new password.
	<b>Note:</b> When multiple file servers are configured, the error is only displayed on the configuration page if none of the file servers are connected.
19 NO QUEUE ASSIGNED	The HP Jetdirect print server detected that the print server object has not been assigned any queues to service. Assign queues to the print server object using printer installation or NetWare utilities.
	<b>Note:</b> When multiple file servers are configured, the error is only displayed on the configuration page if none of the file servers was successfully connected.
1A PRINTER NUMBER NOT DEFINED	A NetWare printer number for this printer has not been configured. Assign a valid printer number to the print server. Use a NetWare utility (such as PCONSOLE), the Jetdirect embedded web server, or another tool to assign a printer number.
1B PRINTER NUMBER IN USE	The NetWare printer number assigned to the printer is already in use by another printer. Assign an unused printer number. This may also occur when a printer is power cycled, in which case the error goes away after the print server times out and detects the lost connection.

### **Error Code and Message Description**

1C		
PRINT	SERVER	NO
DEFINE	ED	

The file server does not have a print server object that corresponds to the specified NetWare node name. Use printer installation software, a NetWare utility (such as PCONSOLE), or another tool to create the print server object.

Note: When the print server is configured for multiple file servers, the error is only displayed on the configuration page if none of the file servers was successfully connected.

### 1D UNABLE TO CONNECT TO

SERVER

Remote Printer mode error. The print server was unable to establish an SPX connection with the NetWare print server. Make sure that the NetWare print server is running and that all cables and routers are functioning correctly.

### 1E FAIL RESERVING PRINTER NUM

The SPX connection to the print server was lost when the print server attempted to reserve the printer number. This indicates a possible network problem, or a problem with the print server. Make sure all cables and routers are functioning correctly. Try restarting the print server.

### 1 F ERR NEGOTIATING BUFFER SIZE

A failure was detected when selecting the buffer size to be used when reading print data from the file server. This may indicate a network problem.

Note: When the print server is configured for multiple file servers, the error is only displayed on the configuration page if none of the file servers was successfully connected.

### 20 UNABLE TO LOGIN

A failure was detected when the print server tried to log onto the file server. This could be caused by the print server object not existing on the file server, or by a security check that prevents the print server from logging in. Make sure the file server name and print server object name are correct. Use PCONSOLE to erase the password for the print server object. Create a new print server object.

Note: When the print server is configured for multiple file servers, the error is only displayed on the configuration page if none of the file servers was successfully connected.

### 21 UNABLE TO SET PASSWORD

A failure was detected when the print server tried to set the password for the print server object. (Whenever the print server is able to log in without a password, it sets the password automatically.) This indicates a networking or security problem. Create a new print server object.

Note: When the print server is configured for multiple file servers, the error is only displayed on the configuration page if none of the file servers was successfully connected.

### 22 UNABLE TO CONNECT TO SERVER

Queue Server mode error. The print server could not establish an NCP connection to the file server. Make sure that the correct file servers are connected.

Note: When the print server is configured for multiple file servers, the error is only displayed on the configuration page if none of the file servers was successfully connected.

Error Code and Message	Description
23 UNABLE TO ATTACH TO QUEUE	A failure was detected when the print server tried to attach to one of the queues assigned to the print server object. This may be because no servers are allowed to attach to this queue. There may also be a networking or security problem. Use PCONSOLE to make sure that servers are allowed to attach to the queue, to delete the print server object from the list of queue servers if you want the print server to service other queues, or to delete the queue and create a new one (the print server object must be added to the list of queue servers).
	<b>Note:</b> When the print server is configured for multiple file servers, the error is only displayed on the configuration page if none of the file servers was successfully connected.
24 PSERVER CLOSED CONNECTION	The NetWare print server requested a termination of the connection with the print server. No error exists or is indicated. Make sure the NetWare print server is running, and restart it if necessary.
25 DISCONNECTING - SPX TIMEOUT	The SPX connection to the print server was lost after the connection had been made. This indicates a possible network problem, or a problem with the print server. Make sure all cables and routers are functioning correctly. Try restarting the print server.
26 UNKNOWN NCP RETURN CODE	The print server encountered an unexpected fatal error after it had successfully connected to the file server. A wide variety of failures could produce this error message, including a downed file server or a network router failure.
27 UNEXPECTED PSERVER DATA RCVD	The print server sent some data when the print server had not given its permission to do so. This indicates a possible print server problem, possibly a software problem.
28 OUT OF BUFFERS	The print server was unable to allocate a buffer from its internal memory. This indicates all buffers are busy due possibly to heavy broadcast traffic or large amounts of network traffic directed to the print server.
29 UNABLE TO SENSE NET NUMBER	The print server has been trying for more than three minutes to determine the NetWare protocol used on the network. Make sure that any file servers and routers are operating correctly. Make sure that the settings for NetWare frame type and source routing are correct.
2A NDS ERR: EXCEEDS MAX SERVERS	More queues were assigned than the print server can handle. Remove one or more print queues from the list to be serviced by Queue Server Mode.
2B NDS ERR: UNABLE TO LOGIN	Unable to log onto the NetWare directory tree. Make sure that the print server object is defined in the directory at the correct context. Clear the print server password using NWADMIN or similar NetWare tool.

Unable to log onto the NetWare directory tree. Make sure that the print server object is defined in the directory at the correct context.

AUTHENTICATION ERROR

Error Code and Message	Description
2D NDS ERR: CHANGE PSSWRD FAILED	Cannot modify the print server password to the value expected by the print server.
2E NDS SERVER PUBLIC KEY ERROR	Print Server Object Name mismatch. Unable to read the file server's public key. Verify object names, or contact the NDS administrator.
2F NDS ERR: SRVR NAME UNRESOLVD	The file server on the network cannot be located. The server may not be running at this time or a communications problem may exist.
30 NDS PRINT SERVER NAME ERROR	The print server object cannot be located in the specified NDS context.
31 NDS PS PRINTER LIST ERROR	Cannot locate a list of printer objects that should be assigned to the print server object.
32 NDS PRINTER OBJ NOTIFY ERR	The list of notification objects assigned to the printer object cannot be located.
33 NDS PRINT OBJ QUEUE LIST ERR	The list of print queues assigned to the printer objects cannot be located.
34 NDS ERR: UNRESOLVD PRNTR OBJ	The printer object cannot be located in the NDS directory.
35 NDS ERR: INVALID SRVR VERS	The current version of the NetWare file server is not supported.
36 NDS ERR: NO PRINTER OBJECTS	No printer objects are assigned to the print server object configured to this print server.
37 NDS ERR: MAX PRINT OBJECTS	Too many printer objects are assigned to the print server object. Using NetWare utilities (such as NWADMIN), reduce the number of printer objects assigned to the print server.
38 NDS ERR: NO QUEUE OBJECTS	No print queue objects are assigned to the printer objects located in the NDS directory.
39 NDS ERR: MAX QUEUE OBJECTS	Too many print queue objects are assigned to the printer. Reduce the number of queues assigned.

Error Code and Message	Description
3A UND ERR: UNABLE TO FIND TREE	The NDS tree cannot be located. The message may occur when the file server is not running or when a network communications problem exists.
3B NDS CONNECTION STATE ERROR	The print server cannot change the NDS connection state. Check licenses on the spooling server.
3C NDS ERR: UNRESOLVED QUEUE	The print queue object cannot be located in the specified NDS context.
3D NDS ERR: CANNOT READ Q HOST	Cannot locate the file server on the network. The server may not be running at this time or a communications problem may exist.
3E NDS PRNT SRVR PUBLIC KEY ERR	Print Server Object Name mismatch. Unable to read the print server's public key. Verify object names. Verify that the object key assigned to the print server is a print server object and not a printer or other object.
3F UNABLE TO GET NDS SRVR ADDR	The NDS server address cannot be located or accessed.
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. Cycle power on the print server by unplugging is power cable and plugging it back in. If the problem persists, perform a cold reset on the print server (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.) If the problem still persists, call HP technical support for help. See the support flyer that came with the product for information on contacting HP.
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.

Error Code and Message	Description
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.

Error Code and Message	Description
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 server's 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.
F1 TRYING TO CONNECT TO SERVER	The print server is trying to connect to the NetWare server(s). This is a normal message. Wait until either the connection is established or another status message appears.

# **Browse hp.com**

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)

For more information specific to the 310x print server, see the HP support web site for the HP LaserJet 3300 series:

http://www.hp.com/support/lj3300 (site is in English)

# Glossary

Term	Definition	
10-BaseT	A type of Ethernet network that uses twisted pair cabling to attach nodes to the network.	
100-BaseTx	A type of Ethernet network, also known as Fast Ethernet, that uses twisted pair cabling to attach nodes to the network.	
10/100-BaseTx	This term indicates that a product is compatible with both 10-BaseT and 100-BaseTx. Many network products are compatible with both of these, including some HP Jetdirect print server models.	
1284-B	1284 is a parallel port standard developed by IEEE (the Institute of Electrical and Electronics Engineers). 1284-B refers to a specific connector type on the end of the parallel cable which attaches to the peripheral (for example, a printer). A 1284-B connector is bigger than a 1284-C connector, for example.	
actual size	The size of the page when it was scanned (not enlarged using zoom in or reduced using zoom out).	
ADF	Automatic document feeder. The ADF is used to automatically feed originals into the product for copying, scanning, or faxing.	
annotation	A word, note, mark, or highlighting added to an item.	
appletalk	An inexpensive local area network architecture built into all Apple Macintosh computers.	
bit depth	The number of bits used to process scanned images. The greater the number of bits, the more levels of gray that can be used to display the image.	
.bmp file	A Microsoft Windows bitmap file that has the extension .bmp. A bitmap file defines an image (such as the image of a scanned page) as a pattern of dots (pixels).	

EN 215

BNC	A type of network connector generally used with coaxial network cabling. A BNC connector has two slots that lock onto two matching knobs on a network interface card when the connector can be twisted.	
ВООТР	Short for Bootstrap Protocol, an Internet protocol that enables a diskless workstation to discover its own IP address, the IP address of a BOOTP server on the network, and a file to be loaded into memory to boot the machine. This enables the workstation to boot without requiring a hard or floppy disk drive. The protocol is defined by RFC 951.	
brightness	A measure of the overall intensity of the image. The lower the brightness value, the darker the image; the higher the value, the lighter the image will be.	
browser	Short for Web browser, a software application used to locate and display Web pages.	
Chooser	The Chooser is part of the Mac OS that allows configuration of the computer system to print on any printer with the appropriate software. Users that are part of an AppleTalk network system can use the Chooser to activate and select among devices (such as printers, file servers, or other computers) connected to the network.	
client-server	A network architecture in which each computer or process on the network is either a client or a server. Servers are powerful computers or processes dedicated to managing disk drives, network traffic, and printers. Clients are PCs or workstations on which users run applications. Clients rely on servers for resources such as files and devices.	
collapse	The process of reducing a sticky note to an icon.	
collate	The process of printing a multiple-copy job in sets. When collate is selected, the HP LaserJet 3300 series product prints an entire set before printing additional copies. Otherwise, the device prints the desired number of copies of a page together before printing the following pages.	
comma (,)	A comma in a dial sequence indicates that the fax machine will pause at that point in the dialing sequence.	
contrast	The difference between the dark and light areas of an image. The lower the number value, the more closely the shades will resemble each other. The higher the number, the more the shades will stand out from each other.	
container program	A program into which an OLE object is inserted. That program contains the object.	
crop	To remove part of an image. The portion of the image that is selected remains, while the portion that is not selected is removed.	
.dcx	A multi-page .PCX format where each page is a .PCX file. Since this is a multi-page format, it is widely used for receiving and sending faxes to and from the computer. A single DCX document can store up to 1,023 pages.	
dedicated line	A single telephone line that is used exclusively for either voice calls or fax calls.	

216 Glossary EN

DHCP	Short for Dynamic Host Configuration Protocol, a protocol for assigning dynamic IP addresses to devices on a network. With dynamic addressing, a device can have a different IP address every time it connects to the network. In some systems, the device's IP address can even change while it is still connected. DHCP also supports a mix of static and dynamic IP addresses.  Dynamic addressing simplifies network administration because the software keeps track of IP addresses rather than requiring an administrator to manage the task. This means that a new computer can be added to a network without the hassle of manually assigning it a unique IP address.	
DIMMs	Dual In-line Memory Module, a small circuit board that holds memory. A single in-line memory module (SIMM) has a 32-bit path to the memory, whereas a DIMM has a 64-bit path.	
distinctive ring	A feature offered by some telephone companies in Australia, Canada, New Zealand, the United States, and the United Kingdom that allows two or three phone numbers to be set up on the same telephone line. Each phone number has a different ring pattern, and the fax machine can be configured to recognize the distinctive ring of the fax number.	
DLC	Short for Data Link Control. Every network interface card has a DLC address or DLC identifier that uniquely identifies the node on the network	
dots per inch (dpi)	A measurement of resolution used for scanning and printing. Generally, more dots per inch mean a higher resolution, a greater amount of visible detail in the image, and a larger file size.	
EconoMode	EconoMode is a toner-saving feature on the HP LaserJet product.  EconoMode reduces the amount of toner on a printed page, so that the print cartridge lasts longer. The printed result is similar to printing a document in draft mode.	
ECP	Extended capabilities port, a parallel-port standard for PCs that supports bi-directional communication between the PC and attached devices (such as a printer).	
e-mail (electronic mail)	An abbreviation for electronic mail. Software that can be used to electronically transmit items over a communications network.	
embedded	An object created with one application and embedded into a document created by another application. Embedding the object, rather than simply inserting it by pasting it, ensures that the object retains its original format. The embedded object can be modified with the original program. In Windows environments, embedding objects is made possible by a technology called OLE.	
Ethernet	A common type of local area network recognized as the industry standard. Ethernet is also known as IEEE 802.3. Information is broken into "packets" that are transmitted in order until they arrive at the destination without colliding with any other "packet." A network node is either transmitting or receiving a packet at any instant.	
expand	A process to restore a collapsed sticky note from an icon to its original size.	
fax	An abbreviation for facsimile. The electronic encoding of a printed page and the transmission of the electronic page over a telephone line. The product software can send items to electronic fax programs, which require a modem and fax software.	

EN 217

fax functions	Fax-related tasks done from the control panel that only affect the current job, or are only done once before returning to the Ready state, such as clearing memory. These functions are in their own section in the control panel menu.	
fax settings	Fax-related items that, when set or changed, continue to use the choice made until changed again. An example would be the number of times set for the product to redial a busy number. These settings are in their own section of the control panel menu.	
file format	The way the contents of a file are structured by a program or group of programs.	
.ftp	File Transfer Protocol, the protocol used on the Internet for sending files.	
.gif	Graphics Interchange Format, an image used by CompuServe and other online formats.	
grayscale	Shades of gray that represent light and dark portions of an image. Color images can also be converted to grayscale where colors are represented by various shades of gray.	
halftone	An image type that simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.	
.hpd	.HPD files are scanned documents that are saved using the HP LaserJet Document Manager.	
HP Jetdirect print server	An external, standalone print server. To use the HP LaserJet 3300 series product on the network, the product (or a printer) can be connected to the print server, instead of a computer, using a parallel cable. The print server then connects to the network using a standard network connector. For the HP LaserJet 3300 series product and its supported HP Jetdirect external print servers, the connector can be 10-BaseT, 10/100BaseTx, BNC, or token ring.	
HP LaserJet Director toolbar	An HP LaserJet 3300 series product software screen used when working with documents. When the document is loaded into the document feeder tray and the computer is connected directly to the product, the HP LaserJet Director appears on the computer screen, allowing faxing, copying, or scanning of the document to begin.	
HP Web JetAdmin software	Network peripheral management software allows configuration and management from a computer of any peripheral connected to an HP Jetdirect print server. For the HP LaserJet 3300 series product, the HP JetAdmin or Web JetAdmin software (or BOOTP, DHCP, or telnet) may or may not need to be used to configure the product on the network.	
hub	A common connection point for devices in a network. Hubs are commonly used to connect segments of a LAN. A hub contains multiple ports. When a packet arrives at one port, it is copied to the other ports so that all segments of the LAN can see all packets.	
hypertext links	A link from one part of a document to another. When a linked word or phrase or graphic is clicked, the user will jump to the linked word, phrase, or graphic.	
intranet	A network based on TCP/IP protocols (an internet) belonging to an organization, accessible only by the organization's members, employees, or others with authorization. An intranet's Web sites look and act just like any other Web sites, but the firewall surrounding an intranet fends off unauthorized access. Intranets are used to share information internally within an organization.	

218 Glossary EN

IP address	An identifier for a computer or device on a TCP/IP network. Networks using the TCP/IP protocol route messages based on the IP address of the destination.	
IPP	The Internet Printing Protocol defines the protocol for end users' most common printing situations over the Internet. The IPP allows users to: find out about a printer's capabilities, submit print jobs to a printer, find out the status of the printer, and cancel a previously submitted job.	
IPX/SPX	A network protocol made popular by Novell, Inc. as the basic protocol in its Novell NetWare network operating system. In order for the HP LaserJet 3300 series product to work on the network, the TCP/IP or IPX/SPX network protocol must be running.	
.jpg	(also JPEG) Joint Photographic Experts Group, an international standard for compressing digital photographic images.	
LED	Light emitting diode, an electronic device that lights up when electricity is passed through it. LEDs are usually red. They are good for displaying images because they can be relatively small, and they do not burn out. However, they require more power than LCDs.	
link	A connection to a program or device that can be used to send information from the product software to other programs, such as e-mail, electronic fax, and OCR links.	
Link Bar	The icons on the bottom of the desktop or viewer that represent programs installed on a computer, such as e-mail software.	
linked program	A program installed on a computer that can be used with the product software. For example, OCR software can be used to translate a scanned item into text.	
NetWare	Novell, Inc.'s proprietary networking operating system for the PC environment. NetWare uses the IPX/SPX or TCP/IP network protocols. It supports MS-DOS, Microsoft Windows, OS/2, Macintosh, and Unix clients.	
node	A computer (server or user) or peripheral, such as the HP LaserJet 3300 series product, that is connected to a network.	
Optical Character Recognition (OCR) software	OCR software converts an electronic image of text, such as a scanned document, into a form that word processor, spreadsheet, and database programs can use.	
parallel cable	See 1284-B.	
.рсх	A common graphic file format that many graphic programs accept. This is a popular format in which to store scanned images.	
peer-to-peer	A type of network architecture in which each workstation has equivalent capabilities and responsibilities. Peer-to-peer networks are generally simple, but they usually do not offer the same performance as client-server architectures.	
portable document viewer	A mini-program that can be attached to an electronic document and e-mailed. The recipient will be able to view, annotate, and print the document, no matter what program was used to create the document.	
PostScript fonts	Fonts defined in terms of the PostScript language, intended to be printed on a PS printer. PostScript fonts come as a screen font that appears on the monitor and a matching printer font used by the product to create documents.  PostScript is a registered trademark of Adobe Systems Incorporated.	

EN 219

PPD	PPD stands for PostScript Printer Description file. PPDs are used by the printer driver and applications to determine the features and PostScript commands supported in the product.  PostScript is a registered trademark of Adobe Systems Incorporated.
print server	See HP Jetdirect print server.
printer driver	A printer driver is a program that enables applications to access a product's features. A printer driver translates an application's formatting commands (such as page breaks and font selection) into a printer language (such as PostScript, PS, or PCL), and then sends the print file to the product.  (The PD printer driver emulates Adobe PostScript® Level2. PostScript is a registered trademark of Adobe Systems Incorporated.)
Private Branch Exchange (PBX)	A small telephone switching system that typically is used by large businesses or universities to connect all telephone extensions within the organization. A PBX also connects to the public switched telephone network (PSTN) and may be either manual or dial, depending on the method used by extensions to place incoming or outgoing calls. Normally, the equipment is owned by the customer rather than leased from the telephone company.
public switched telephone network (PSTN)	The worldwide dial-up telephone network or a portion of that network. Users are assigned unique phone numbers, which allow them to connect to the PSTN through local telephone exchange companies. Often, this phrase is used when referring to data or other non-telephone services carried over a path initially established using normal telephone signaling and ordinary switched long distance telephone circuits.
resolution	The sharpness of an image, measured in dots per inch (dpi). The higher the dpi, the greater the resolution.
RJ45	A network connector that looks much like a standard telephone connector, except it is wider (it houses 8 wires instead of 4). Both Ethernet (10/100Base-Tx) and Token Ring networks use this type of network connector.
shared line	A single telephone line that is used for both voice and fax calls.
sticky note	An annotation that is a multiline, resizable note. Similar to a paper sticky note, it covers the item information beneath it. A sticky note can be moved or collapsed to an icon. Words can be searched for in a sticky note by using the Find command.
surge protector	A device that protects a power supply and communications lines from electrical surges. All computers come with some surge protection built into the power supply, but it is a good idea to purchase a separate device.
summary information	Information about the item, such as creator or keywords, can be added to an item in the Summary Information dialog box to help find the item quickly.
TCP/IP	The de facto standard Ethernet protocol. TCP/IP stands for Transmission Control Protocol over Internet Protocol. In order for the HP LaserJet 3300 series product to work on the network, the TCP/IP or IPX/SPX network protocol must be running.
.tif	Tagged Image File Format, a .tif (or TIFF) is a graphic file format that was developed to capture scanned images. It is a format used on IBM-compatible computers, Macintosh computers, and UNIX computers. Many graphic programs accept the .tif file format.

220 Glossary EN

token ring	A local area network in which transmission conflicts are avoided by the	
	granting of "tokens" that give permission to send. A network node keeps the token while transmitting a message, if it has a message to transmit, and then passes the token on to the next node. IEEE 802.5 is the most common type of token ring network.	
TrueType fonts	TrueType fonts use what-you-see-is-what-you-get (WYSIWYG) technology, which means that the printed output of TrueType fonts is identical to what appears on the screen.	
TWAIN	An industry standard for scanners and software. Using a TWAIN-compliant scanner with a TWAIN-compliant program, a scan can be initiated from within the program.	
twisted pair	A type of network cable commonly used in Ethernet networks.	
URL	Uniform resource locator, the global address of documents and resources on the Internet. The first part of the address indicates what protocol to use, the second part specifies the IP address or the domain name where the resource is located.	
USB cable	Universal Serial Bus (USB) is a standard developed by the USB Implementers Forum, Inc. to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.	
watermarks	A watermark adds background text to a document being printed. For example, "Confidential" can be printed in the background text of a document stating that the document is "Confidential." A selection can be made from a set of predefined watermarks, and the font, size, angle, and style can be changed, as well as a determination made whether the printer will place the watermark on the first page only or all pages.	
Windows sharing	A method of peer-to-peer networking that uses Windows products with a network installed, resources can be shared with co-workers, most commonly the HP LaserJet 3300 series product, printers, and hard disks, by simply using Windows tools such as Explorer and Print Manager. When the HP LaserJet 3300 series product (or any printer) is shared using Windows sharing, network users need to install the printer drivers using the Add Printers utility in the Windows Printers folder.	
workgroup	A collection of individuals working together on a task. Workgroup computing occurs when all the individuals have computers connected to a network that allows them to share data files, send e-mail to one another, and schedule meetings.	
zoom in	To make a page larger on the screen so more details can be seen.	
zoom out	To make a page smaller on the screen so a broader view of the page can be seen.	

EN 221

222 Glossary EN

# Appendix A Specifications and regulatory information

See these sections for specifications and regulatory information on the following products:

- HP LaserJet 3300 series product
- HP LaserJet 3330 fax
- HP Jetdirect 310x print server
- Environmental product stewardship program
- HP LaserJet 3300 series product battery

EN 223

# **HP LaserJet 3300 series product**

- HP LaserJet 3300 series product specifications
- Laser safety statement

# **HP LaserJet 3300 series product specifications**

Environmental specifica	ations
Operating environment	Printer plugged into an AC outlet:
	<ul> <li>Temperature: 15 to 32.5° C (59 to 90.5° F)</li> </ul>
	<ul> <li>Relative Humidity: 10 to 80% (no condensation)</li> </ul>
Storage environment	Printer unplugged from an AC outlet:
	<ul><li>Temperature: -20° C to 40° C (-4° F to 104° F)</li></ul>
	<ul> <li>Relative Humidity: Less than 95% (no condensation)</li> </ul>
Acoustics	
Noise level	During copying*: 6.6 Bels sound power level (per ISO 9296)
	<ul> <li>Sound pressure level (bystander position): 50 dB</li> </ul>
	<ul> <li>Sound pressure level (operator position): 59 dB</li> </ul>
	During standby and sleep mode: silent
	* During other operations, acoustic results may vary.
Electrical specifications	3
Power requirements	<ul> <li>110 to 127 volts +/-10%, 50 to 60 Hz +/-2 Hz (for 110 volt units</li> </ul>
	• 220 to 240V +/-10%, 50 to 60 Hz +/-2 Hz (for 220 volt units)
Power consumption	During copying: 330 Watts (maximum)
•	<ul> <li>During printing: 300 Watts (maximum)</li> </ul>
	<ul> <li>During standby and power save: 14 Watts (maximum)</li> </ul>
	Off: 0 Watts

Physical specifications		
Dimensions	<ul> <li>Width: 546.1 mm (21.5 inches)</li> <li>Depth: 520.7 mm (20.5 inches)</li> <li>Height: 495.3 mm (19.5 inches)</li> </ul>	
Weight	<ul><li>Models with ADF: 15.8 kg (34.6 lbs)</li><li>Models without ADF: 14.1 kg (31.01 lbs)</li></ul>	
Printer capacities and rat	ings	
Print speed	<ul> <li>15 pages per minute for letter size paper and 14 pages per minute for A4 size paper</li> <li>First page out in less than 10 seconds</li> </ul>	
Main input tray capacity	250 sheets of regular weight 20 lb (75 g/m²) paper or up to 30 envelopes	
Priority input tray capacity	10 sheets of regular weight 20 lb (75 g/m <sup>2</sup> ) paper or 1 envelope	
Output bin capacity	Up to 125 sheets of regular weight 20 lb (75 g/m <sup>2</sup> ) paper	
Minimum paper size	76 x 127 mm (3 x 5 inches)	
Maximum paper size	216 x 356 mm (8.5 x 14 inches)	
Media weight	<ul> <li>Output bin – 60 to 105 g/m² (16 to 28 lbs)</li> <li>Straight through media path – 60 to 163 g/m² (16 to 43 lbs)</li> </ul>	
Base memory	8 MB of ROM/Flash and 32 MB of RAM	
Upgrade memory expansion	One DIMM slot available for an 8, 16, 32, or 64 MB RAM DIMM	
Print resolution	1,200 dots per inch (dpi)	
Duty cycle	<ul><li>10,000 single-sided pages per month (maximum)</li><li>1,000 single-sided pages per month (average)</li></ul>	
PCL	Level 5e and 6	
PostScript	Emulates Adobe PostScript® Level2 PostScript is a registered trademark of Adobe Systems Incorporated	
Copier capacities and rat	ings	
Copy speed	Up to 15 pages per minute	

Multiple copies	Up to 99 per job	
Copy reduction or enlargement	25 to 400%	
Acoustic emissions (per ISO 9296) while copying	6.6 Bel sound power level	
Scanner capacities and rate	tings	
Margins for scanned items	3.05 mm (0.12 inch) left, 6.2 mm (0.248 inch) right 4.06 mm (0.16 inch) top and bottom	
Scanner Duty Cycle	2,000 single-sided items per month	
Scan resolution	600 PPI color	
ADF specifications		
Input capacity	Up to 50 sheets of flat 16 lb or 20 lb (60-75 g/m²) media	
Media weight	16 lb (60 g/m²) to 24 lb (90 g/m²)	
Media size	127 by 127 mm (5 by 5 inches) to 215.9 mm by 381 mm (8.5 by 15 inches)	
Speed	Up to 11 pages per minute for Letter/A4 size	
Duty cycle	1,000 pages per month	
Memory specifications		
DIMMs	100 pin, 66 MHz minimum speed	
Port availability		
USB	1.1	
Parallel	<ul> <li>IEEE 1284-B level 2 device with an IEEE 1284-B receptacle</li> <li>Set host computer to ECP</li> </ul>	

# Laser safety statement

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. This printer is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation

Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside this printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

#### **WARNING!**

Using controls, making adjustments, or performing procedures other than those specified in this manual can result in exposure to hazardous radiation.

# **FCC** regulations

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 harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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 separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

Note

Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

**Note** 

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

# **Declaration of Conformity**

The following 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.

# **Declaration of Conformity**

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Hewlett-Packard Company

Manufacturer's Address: 11311 Chinden Boulevard

Boise, Idaho 83714-1021 USA

declares that the product

 Product Name:
 LaserJet 3300/3310/3320/3330 Series

 Model Number:
 C9124A, C9125A, C9126A, C9151A, C9709A

 (including Model C0442A ARE Accessed)

(including Model C9143A ADF Accessory)

Product Options: ALL

#### conforms to the following Product Specifications:

Safety: IEC 60950:1991+A1:1992+A2:1993+A3:1995+A4:1996 /

EN 60950:1992+A1:1993 + A2:1993 + A3:1995 + A4:1997 + A11:1997

IEC 60825-1:1993 + A1:1997/

EN 60825-1:1994 + A11:1996 Class 1 Laser/LED Product

EMC: CISPR 22:1993 + A1:1995 + A2:1996 /

EN 55022:1994 + A1:1995 + A2:1997 Class B<sup>1)</sup>

EN 61000-3-2:1995+A14:2000

EN 61000-3-3:1995 EN55024:1998

FCC Title 47 CFR, Part 15 Class B2) / ICES-002, Issue 2

AS / NZS 3548:1995 + A1 + A2:1997

TELECOM<sup>3)</sup> TBR-21:1998; EG 201 121:1998

#### **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.<sup>3)</sup>

- 1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
- 2) 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 may cause undesired operation.
- 3) LaserJet 3330 (Model C9126A) contains fax functionality and is therefore compliant with the referenced telecom standards and the R&TTE Directive 1999/5/EC (Annex II) and carries the CE-marking accordingly.

Boise, Idaho USA August 14, 2001

Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia.

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Strasse 130, D-71034 Böblingen (FAX: +49-7031-14-3143)
USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (Phone: 208-396-6000)

# Canada DOC regulations

This equipment complies with Canadian EMC Class B requirements.

Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques. << CEM>>.

#### Laser statement for Finland

#### **LASERTURVALLISUUS**

#### **LUOKAN 1 LASERLAITE**

#### **KLASS 1 LASER APPARAT**

HP LaserJet 3300-laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle.

Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1993) mukaisesti.

#### **VAROITUS!**

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

#### **VARNING!**

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

#### **HUOLTO**

HP LaserJet 3300-kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

#### VARO!

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömälle lasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

#### **VARNING!**

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista:

Aallonpituus 770-795 nm

Teho 5 mW

Luokan 3B laser

#### Korean EMI statement

사용자 안내문 (B급 기기)

이 기기는 비업무용으로 전자파장해 검정을 받은 기 기로서, 주거지역에서는 물론 모든지역에서 사용할 수 있읍나다.

# **Japan VCCI Class B regulations**

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。

# **HP LaserJet 3330 fax**

HP LaserJet 3330 product fax specifications

FCC Part 68 Requirements (US)

Telephone consumer protection act (US)

IC CS-03 requirements

Regulatory information for EU countries

# **HP LaserJet 3330 product fax specifications**

Fax transmission speed	3 seconds/page (ITU-T Test Image #1)
Right/left margins for printed pages	6.3 mm (0.25 inch)
Top/bottom margins for printed pages	5.08 mm (0.2 inch)
Fax compatibility	ITU Group 3; ECM
Fax coding schemes	MH, MR, and MMR
Modem speed	Up to 33,600 bits per second (bps)
Speed dialing	Yes
Distinctive ring detect	Yes

Fax resolution (standard)	203 by 98 dots per inch (dpi)
Fax resolution (fine)	203 by 196 dpi
Fax resolution (superfine)	300 by 300 dpi (no halftone)
Fax resolution (photo)	300 by 300 dpi (halftone enabled)

# FCC Part 68 Requirements (US)

This equipment complies with FCC rules, Part 68. On the back of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company. The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all, areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

This equipment uses the following USOC jacks: RJ11C.

An FCC-compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs. If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service. If trouble is experienced with this equipment, please see the numbers in the front of this manual for repair and (or) warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved. The following repairs can be done by the customer: Replace any original equipment that came with the product. This includes the print cartridge, the supports for trays and bins, the power cord, and the telephone cord. It is recommended that the customer install an AC surge arrestor in the AC outlet to which this device is connected. This is to avoid damage to the equipment caused by local lightning strikes and other electrical surges.

# Telephone consumer protection act (US)

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided cannot be a 900 number or any other number for which charges exceed local or long-distance transmission charges.) In order to program this information into your facsimile, please see <a href="Setting the information">Setting the information in the fax header</a>.

EN HP LaserJet 3330 fax 231

# IC CS-03 requirements

NOTICE: The Industry Canada label identifies certified equipment. This certification means the equipment meets certain telecommunications network protective, operational, and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirement document(s). The Department does not guarantee the equipment will operate to the user's satisfaction. Before installing this equipment, users should ensure that it is permissible for the equipment to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution can be particularly important in rural areas.

**Caution:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate. The Ringer Equivalence Number (REN) of this device is 0.7.

**Notice:** The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Number of all the devices does not exceed five (5.0). The standard connecting arrangement code (telephone jack type) for equipment with direct connections to the telephone network is CA11A.

# Regulatory information for EU countries

This equipment has been designed to work in all of the countries of the European Economic Area (Public Switched Telephone Networks) only. Network compatibility is dependent on internal software settings. Contact your equipment supplier if it is necessary to use the equipment on a different telephone network. For further product support, contact Hewlett-Packard at the phone numbers provided in the support flyer that came with the product.

# **HP Jetdirect 310x print server**

HP Jetdirect 310x print server specifications

FCC compliance

**Declaration of Conformity** 

**Australia** 

**Canada** 

Japan VCCI Class B regulations

Korean EMI statement

Chinese safety statement

# **HP Jetdirect 310x print server specifications**

Supported networks			
Physical	<ul> <li>Supports unshielded or shielded twisted pair cabling, using an RJ-45 connector for:</li> </ul>		
	IEEE 802.3i 10Base-T (Ethernet)		
	IEEE 802.3u 100Base-Tx (Fast Ethernet)		
	<ul> <li>Requires a 10/100Base-Tx network hub or concentrator that supports link beat (link test pulse) signals.</li> </ul>		
Supported network operating	<ul> <li>Microsoft Windows 95, 98, 2000, ME, and XP (TCP/IP, IPX/SPX)</li> </ul>		
systems and protocols	Microsoft Windows NT 4.0 and later (TCP/IP, IPX/SPX, DLC/LLC)		
	<ul> <li>Apple Macintosh OS 8.6 and later (EtherTalk)</li> </ul>		
	<ul> <li>Novell NetWare v 3.11, 3.12, 4.x, 5.0 (IPX/SPX); NDS (IPX/SPX);</li> <li>NDPS (IPX/SPX)</li> </ul>		
	<ul> <li>IBM OS/2 Warp v 3.0, 4.0 (TCP/IP), DLC/LLC)</li> </ul>		
	<ul> <li>HP-UX 10.x, 11.x; Solaris v2.5x, 2.6; SCO UNIX v86, 3.2, 4.2, 5.0; IBN AIX v3.2.5 and later; MPE-ix v5.5 (TCP/IP)</li> </ul>		
	<ul> <li>Artisoft LANtastic 7.0 (DLC/LLC)</li> </ul>		
	Line Printer Daemon (LPD)		
Physical specifications			
Interfaces	<ul><li>Network</li><li>See network specifications above</li><li>USB</li></ul>		
	Female "A" connector, complies with USB version 1.1 specifications		
Dimensions	• Width: 97 mm (3.8 inches) with clip attached, 92 mm (3.6 inches)		
	excluding clip and connectors		
	<ul> <li>Length: 129 mm (5.1 inches)</li> <li>Height: 45 mm (1.8 inches) with clip attached, 36 mm (1.4 inches)</li> </ul>		
	excluding clip and connectors		
Weight	• 108 g (3.9 oz.)		
Environmental specification	ons		
Operating environment	Temperature: 0° C to 55° C (32° F to 131° F)		
	<ul> <li>Relative humidity: 15% to 95% at 40° C (104° F)</li> <li>Altitude: 4.6 km</li> </ul>		
Storage environment	• Temperature: -40° C to 70° C (-6° F to 158° F)		
	<ul> <li>Relative humidity: 90% at 65° C (149° F)</li> </ul>		
	Altitude: 4.6 km		

#### **Electrical specifications**

#### Power requirements

- Input voltage
  - 310x 13 VDC
  - Power module (see Power modules (network model only))
- Nominal output voltage
  - 310x N/A
  - Power module 13 VDC
- Input current
  - 310x 140 mA @ 13 V
  - Power module 100 mA (depending on your particular power module)
- Maximum output current
  - 310x N/A
  - Power module 300 mA
- Frequency range
  - 310x DC
  - Power module 50/60 Hz (depending on your particular power module)

#### Power consumption

- 310x 1.8 W
- Power module 1.2 W

#### **Electromagnetic immunity**

Statement

See Declaration of Conformity.

#### **Electromagnetic emissions**

#### Regulations

- US: FCC Part 15, Class B
- Canada: ICES-003 (B)
- Japan: VCCI Class 1
- Europe: CISPR-22/EN55022 Class B
- Taiwan: CNS 13438
- Australia/New Zealand: AS/NZS 3548
- Russia: GOST 292116

#### Safety

#### Compliance

The HP Jetdirect 310x print server complies with the following safety regulations:

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

# **FCC** compliance

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 harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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 separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

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.

# **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 USA

declares that the product

EMC:

**Product Name:** HP Jetdirect 310x External Print Server

Model Number: J6038A **Product Operations:** ΑII

#### 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 (Laser/LED)

GB 4943 (1998) 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 / EN61000-3-2 (1995)+A14 EN61000-3-3:1994 / 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, July 18, 2001

Mark Vigeant, Product Regulations Manager

Mark Vigeent

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).

#### **Australia**

This equipment complies with Australian EMC requirements.

#### Canada

This equipment complies with Canadian EMC Class B requirements.

Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques. << CEM>>.

# **Japan VCCI Class 1 regulations**

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

#### Korean EMI statement

사용자 안내분(A급 기기)

이 기가는 업무용으로 진자파장해김정를 받은 기기이오니,만약 잘못 구입하셨을 때에는 구입 한 곳에서 비입무용으로 교환하시기 비립니다.

# **Chinese safety statement**

# HP网络产品使用安全手册

#### 使用須知

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。

# 書告

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

# **Environmental product stewardship program**

# Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

# **Ozone production**

This product generates no appreciable ozone gas (O3).

# **Energy consumption**

Energy usage drops significantly while in PowerSave mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR<sup>®</sup>, which is a voluntary program to encourage the development of energy-efficient office products.



ENERGY STAR<sup>®</sup> is a U.S. registered service mark of the U.S. Environmental Protection Agency. As an ENERGY STAR<sup>®</sup> Partner, Hewlett-Packard Company has determined this product meets ENERGY STAR<sup>®</sup> Guidelines for energy efficiency. For more information, see http://www.energystar.gov/

# **Toner consumption**

EconoMode/Toner Miser uses significantly less toner, which might extend the life of the print cartridge.

# Paper use

This product's manual duplex feature (two-sided printing, see <u>Printing on both sides of the media (manual duplexing)</u>), and printing multiple pages on one page can reduce paper usage and the resulting demands on natural resources.

#### **Plastics**

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

# **HP LaserJet printing supplies**

In many countries/regions, this product's printing supplies (e.g., print cartridge, drum, fuser) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy to use and free takeback program is available in over 48 countries. Multi-lingual program information and instructions are included in every new HP LaserJet print cartridge and consumables package.

# HP printing supplies returns and recycling program information

Since 1990, the HP Printing Supplies Returns and Recycling Program has collected more than 47 million used LaserJet print cartridges that otherwise may have been discarded in the world's landfills. The HP LaserJet print cartridges and consumables are collected and bulk shipped to our resource and recovery partners who disassemble the cartridge. After a thorough quality inspection, selected parts are reclaimed for use in new cartridges. Remaining materials are separated and converted into raw materials for use by other industries to make a variety of useful products.

#### **US returns**

For a more environmentally responsible return of used cartridges and consumables, HP encourages the use of bulk returns. Simply bundle two or more cartridges together and use the single, pre-paid, pre-addressed UPS label that is supplied in the package. For more information, visit the HP LaserJet Supplies web site at http://www.hp.com/go/recycle

#### Non-US returns

Non-US customers should call the local HP Sales and Service Office or visit the http://www.hp.com/go/recycle web site for further information regarding availability of the HP Supplies Returns and Recycling Program.

# **Paper**

This product is capable of using recycled papers when the paper meets the guidelines outlined in the Print Media Guide. See <u>Product media specifications</u> for more information. This product is suitable for the use of recycled paper according to DIN 19309.

#### **Material restrictions**

This HP product contains mercury in the fluorescent lamp, scanner, or liquid crystal display that may require special handling at end-of-life.

This HP product contains lead in solder.

The batteries contained in or supplied by Hewlett-Packard for this product have the following specifications:

Type: Lithium Carbon Monofluoride (solid button cell)

Weight: approx. 1 gram

Location: on formatter PC board (one battery per product)

User Removable: No

For recycling information, you can contact www.hp.com/go/recycle or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

# Material safety data sheets

Material Safety Data Sheets (MSDS) can be obtained by contacting the HP LaserJet Supplies web site at http://www.hp.com/go/msds.

# **Extended warranty**

HP SupportPack provides coverage for the HP hardware product and all HP-supplied internal components. The hardware maintenance covers a three-year period from date of the HP product purchase. The customer must purchase HP SupportPack within 90 days of the HP product purchase. For more information, contact the HP Customer Care Service and Support group. See the support flyer that came with your product for information about contacting HP.

# Spare parts and consumables availability

Spare parts and consumable supplies for this product will be available for at least five years after production has stopped.

#### For more information

On HP's environmental programs, including:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment
- HP's environmental management system
- HP's end-of-life product return and recycling program
- Material Safety Data Sheets

See: http://www.hp.com/go/environment or http://www.hp.com/hpinfo/community/environment/

# **HP LaserJet 3300 series product battery**

Battery material	Poly-carbon Monoflouride Lithium		
Battery type	Button/coin cell battery		
Quantity per product	1		
Weight	Approximately 1 gram		
Lithium type	Solid		
Battery manufacturers	Rayovac, Madison, WI, USA; and Panasonic, Secaucus, NJ, USA.		

# Appendix B Warranties and licensing

Use thse topics to find out about product warantee and license information.

- HP software license agreement
- HP limited warranty statement

# **HP software license agreement**

ATTENTION: USE OF THE SOFTWARE IS SUBJECT TO THE HP SOFTWARE LICENSE TERMS SET FORTH BELOW. USING THE SOFTWARE INDICATES YOUR ACCEPTANCE OF THESE LICENSE TERMS. IF YOU DO NOT ACCEPT THESE LICENSE TERMS, YOU CAN RETURN THE SOFTWARE FOR A FULL REFUND. IF THE SOFTWARE IS BUNDLED WITH ANOTHER PRODUCT, YOU CAN RETURN THE ENTIRE UNUSED PRODUCT FOR A FULL REFUND.

#### HP SOFTWARE LICENSE TERMS

The following License Terms govern your use of the accompanying software unless you have a separate signed agreement with HP.

License Grant. HP grants you a license to use one copy of the software. "Use" means storing, loading, installing, executing, or displaying the software. You may not modify the software or disable any licensing or control features of the software. If the software is licensed for "concurrent use," you may not allow more than the maximum number of authorized users to use the software concurrently.

Ownership. The software is owned and copyrighted by HP or its third party suppliers. Your license confers no title to, or ownership in, the software and is not a sale of any rights in the software. HP's third party suppliers can protect their rights in the event of any violation of these License Terms.

Copies and Adaptations. You may only make copies or adaptations of the software for archival purposes or when copying or adaptation is an essential step in the authorized Use of the software. You must reproduce all copyright notices in the original software on all copies or adaptations. You may not copy the software onto any public network.

No Disassembly or Decryption. You may not disassemble or decompile the software unless HP's prior written consent is obtained.

In some jurisdictions, HP's consent may not be required for limited disassembly or decompilation. Upon request, you will provide HP with reasonably detailed information regarding any disassembly or decompilation. You may not decrypt the software unless decryption is a necessary part of the operation of the software.

Transfer. Your license will automatically terminate upon any transfer of the software. Upon transfer, you must deliver the software, including any copies and related documentation, to the transferee. The transferee must accept these License Terms as a condition to the transfer.

Termination. HP may terminate your license upon notice for failure to comply with any of these License Terms. Upon termination, you must immediately destroy the software, together with all copies, adaptations, and merged portions in any form.

Export Requirements. You may not export or reexport the software or any copy or adaptation in violation of any applicable laws or regulations.

U.S. Government Restricted Rights. The software and any accompanying documentation have been developed entirely at private expense. They are delivered and licensed as "commercial computer software" as defined in DFARS 252.227-7013 (Oct 1988), DFARS 252.211-7015 (May 1991), or DFARS 252.227-7014 (Jun 1995), as a "commercial item" as defined in FAR 2.101 (a), or as "Restricted computer software" as defined in FAR 52.227-19 (Jun 1987) (or any equivalent agency regulation or contract clause), whichever is applicable. You have only those rights provided for such software and any accompanying documentation by the applicable FAR or DFARS clause or the HP standard software agreement for the product involved.

# **HP limited warranty statement**

HP LaserJet 3300 product ONE-YEAR LIMITED WARRANTY

- 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 which 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 the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which 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.
- 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.
- TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries, states, or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.
- 7 HP'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.

8 TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, states, or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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

# Appendix C Service and support

Use these topics to learn about obtaining product service and support.

- Obtaining hardware service
- Extended warranty
- Service information form

# **Obtaining hardware service**

#### To obtain hardware service

If your hardware should fail during the warranty period, HP offers the following support options:

- HP repair services. You can return the product to an HP repair center, depending on your location.
- **Express Exchange.** In some places, HP provides a reconditioned permanent replacement product to you on the next working day.
- HP authorized service provider. You can return the unit to a local authorized service dealer.
- Express pick-up and delivery. HP will arrange to pick up the product, repair it, and return it to you within 5 to 10 days, depending on your location.

#### Returning the unit

When shipping equipment, HP recommends insuring it. Also, include a copy of your proof of purchase. Please also fill out the "Service information form" to ensure the most accurate repairs.

#### **CAUTION**

Shipping damage resulting from inadequate packaging is the customer's responsibility. See Repackaging guidelines below.

# Repackaging guidelines

- If possible, print a self-test page (see <a href="Printing a configuration page">Printing a configuration page</a>) before you turn off the unit, and send the self-test report with the unit.
- Remove and retain the print cartridge.

#### **CAUTION**

Toner left in the printer during shipping can damage the product.

- Include the completed copy of the service information form below. Note on the form which items were returned.
- Use the original shipping container and packaging materials, if possible.
- Include samples that illustrate the problems you are having, if applicable.

Include five sheets of the paper or other media that are causing trouble in printing, scanning, faxing, or copying.

# **Extended warranty**

HP SupportPack provides coverage for the HP product and all HP-supplied internal components. The hardware maintenance covers a one- to-five year period from date of the HP product purchase. The HP SupportPack can provide Express Exchange or onsite service. The customer must purchase HP SupportPack within 180 days of the HP product purchase. Get more support information from the following HP web site: <a href="http://www.hp.com/peripherals2/care\_netlj/index.html">http://www.hp.com/peripherals2/care\_netlj/index.html</a>

or contact the Customer Care Service and Support group; see the support flyer that came with your product for the appropriate phone numbers and information.

# **Service information form**

#### Service information form

Who is returning the equipm	nent?	Date:	
Person to contact:		Phone:	
Alternate contact:		Phone:	
Return shipping address:		Special shipping instructions:	
What is being sent?	Model number:	Serial number:	
Please attach any relevant printouts when returning equipment. <b>Do not</b> ship accessories that are not required to complete the repair (for example, media trays, manuals, and cleaning supplies).			
What needs to be done?  1. Describe the conditions of the failure (What was the failure? What were you doing when the failure occurred? What software were you running? Can you make the failure reoccur?).			
2. If the failure is intermittent, how much time elapses between failures?			
3. Is the unit connected to any of the following? (Please provide manufacturer and model numbers.)			
Personal Computer:	Modem:	Network:	
4. Additional comments:			

# Index

A	printer media path 126
accessories and parts 144	codes
acoustics specifications 224	billing 100
activity logs, printing 101, 188	group-dial 89
ad hoc groups, faxing to 82	one-touch key 87
ADF	speed-dial 87
pickup roller assembly, changing 133	collating copies
specifications 141	changing defaults 59
adjusting	changing settings 59
copy quality 56	configuration report, printing 33
languages, display panel 37	connecting, power cord 30
settings 36–39	control panel
volume 37	error messages 165
alarm volume, adjusting 37	key press volume, adjusting 38
alcohol, cleaning with 124	languages, changing 37
alphanumeric buttons 22	menu structure 34
alternate long distance service, one-touch key 89	programming one-touch keys 88
annotations	programming speed-dial codes 88
adding 74	scan 66
changing settings 75	control panel bezel, replacing 135
answer mode, changing 80, 96	control panel components
answering machines, troubleshooting 183	alphanumeric buttons 22
archiving, scanned images 71	copy, scan, and start controls 23
autoreduction, faxes 98	fax controls 21
	menu, status, and cancel controls 22
В	copier capacities and ratings 225
	copy quality
billing codes 100	see also image quality, troubleshooting
blocked fax list, printing 104	adjusting 56
blocking fax numbers 86	defaults, adjusting 57
booklets, printing 53	copying
BOOTP	acoustic emissions 226
configuring 115	book 63
Bootptab file entries 115	canceling 56
buttons	enlarging 58
alphanumeric 22	multipage stack of 2-sided originals 62
control panel 21–23	quality, improving 168
	reducing 58
C	speed 225
cancel control 22	start 56
canceling	troubleshooting 168
copy jobs 56	curling, troubleshooting 164
fax job 83	customer support
print jobs 42	form, service 248
scan jobs 68	hardware service 247
card stock	
printing 49	D
specifications 140	Declaration of Conformity 228
changing	default settings
contrast, fax 95	adjusting 38
fax headers 80	restoring 36
print quality 43	defaults, restoring factory 36
ring patterns 97	deleting
settings, default 38	faxes from memory 84
volume 37	group-dial codes 90
characters	one-touch keys 88
dropouts 160	phone book entries 91
misformed 163	speed-dial codes 88
cleaning	DHCP
glass 124	using 118
lid backing 124	dial prefix, inserting 92
pickup roller 126	diai pielix, iliseitilly 32

EN Index 251

dial tone detection, changing 95	forwarding 93
dialing	group-dial code 82
character table 91	loading media 81
manually 83	manual dialing 84
pulse, selecting 99	margins 230
redialing manually 84	multiple recipients 82
speed-dial codes and one-touch keys 87	one recipient 81
tone detection 95	resolution 231
tone, selecting 99	sending 81-83
dimensions, product 225	speed 230
DIMM	troubleshooting 182-188
installing 149	volume adjustments for 94
removing 151	FCC regulations 227
specifications 226	features 14–19
testing installation or removal 148	forms
drivers, printer, requirements for 42	printing 48
dropouts, character 160	service information 248
duplexing, manual 49	
duty cycle	G
product 225	glossary of terms 215
scanner 226	gray backgrounds, troubleshooting 161
	group-dial codes
E	deleting 90
EconoMode 43	programming 89
electrical specifications 224	groups, faxing to 89
electromagnetic emissions 234	groups, taking to oo
embedded web server 113–114	
enlarging, copies 58	H
envelopes	hardware components 20
printing 45	hardware service 247
specifications for 140	HP Jetdirect 310x
Environmental Product Stewardship Program 239	embedded web server 113
environmental specifications 26, 224	features 108
error messages 178	installing 111
error messages, control panel 165	operating environments 233
European Union regulatory information 232	power requirements 234
Express Exchange repair service 247	print server components 23
extended warranty 248	specifications 233
extension phone 93	supported networks and protocols 233
extension phone of	HP LaserJet 3300
-	features 14
F	package contents 14
fax headers, changing 80	HP LaserJet 3300se
fax polling 93	features 15
fax reports	package contents 15
call reports, printing 102	HP LaserJet 3310
fax logs, printing 101	features 16
first page thumbnail, including 103	package contents 16
fax sounds, adjusting volume 38, 94	HP LaserJet 3320
faxes	features 17
canceling 83	package contents 17
contrast defaults, adjusting 95	HP LaserJet 3320n
delayed sending 84	features 18
deleting from memory 84	package contents 18
error correction settings 99	HP LaserJet 3330
extension phone, receiving from 93	features 19
forwarding 93	package contents 19
printing incorrectly 187	HP LaserJet Director, scanning with 68
receiving 85	HP LaserJet Document Manager, using 74
receiving to computer 86	HP limited warranty statement 244
reprinting 85	HP Photo Center 74
resolution default, adjusting 95	HP repair services 247
stamping enabling 98	HP software license agreement 243
faxing	HP Web JetAdmin, using 114
ad hoc groups 82	humidity, operating environment 26
blocking or unblocking fax numbers 86	
controls 21	T .
error correction settings 99 extension phone, receiving from 93	image enhancement, accessing 74
CALCIDION PHONE, LECEIVING HOUR 33	

252 Index EN

image quality, troubleshooting	troubleshooting 158
black dots 172, 180	weight 225
blank copies 168	memory
blank pages 180	base 225
characters, misformed 163	DIMM 226
curl or wave 164	specifications 226
dropouts 160	upgrade expansion 225
faded images 168	menu control 22
faded print 160	menu structure, control panel 34
faded stripes 171	•
•	messages
graphics 176	alert 166
gray backgrounds 161	critical error 165
light print 160	warning 166
lines 161, 180	modem speed 230
loose toner 162	multiple pages, printing on single sheet 52
missing images 168	
repeating defects 162	N
skewed pages 163, 176	
smears 162	network
specks 160	connecting to 111
streaks 172, 180	connection requirements 109
incoming faxes, troubleshooting 185	moving to another 122
	protocols, using 108
input tray, paper	software, installing 113
ADF input tray, installing 30	noise level, copying 224
capacity, main 225	number of copies, changing 60
capacity, priority 225	,
installing and loading 29	0
J	OCR (optical character recognition)
iams	HP LaserJet Director 72
·	using 72
ADF, clearing 169	one-touch keys
ADF, typical locations 169	deleting 88
clearing 158	programming 87
preventing 159	ordering
	accessories 144
K	parts 144
key press volume, adjusting 38	output bin, capacity 225
	output biri, capacity 225
keys, numeric	
see dialing	P
	package contents 14–19
L	page-by-page scanning 69
labels	paper
printing 47	see also media
specifications for 139	see also special media
laser safety statement 226	common problems 139
letterhead, printing 48	guidelines 138
	<u> </u>
license, software 243	size, maximum 225
lines, troubleshooting 185	size, minimum 225
loading	sizes, default adjustments 37
fax originals 81	specifications 138
originals 31–32	Part 2
loose toner, troubleshooting 162	part numbers 144
	parts and accessories 144
M	phone book entries, deleting 91
	phone lines
manual dialing 83	fax tone volume, adjusting 38
manual duplexing	splitters 183
heavy media 51	troubleshooting 182
lightweight media 50	types of 182
manual feed 42	**
margins	physical specifications 225
faxing 230	pickup roller
scanning 226	changing 127
media	cleaning 126
common problems 139	port availability 226
guidelines 138	power
sizes 138	consumption 224
specifications 138	requirements 224
specifications 150	power cord, connecting 30

EN Index 253

power module chart 146	programming 68
power modules 145	programming destinations 67
print cartridge	USB or parallel connection 67
cleaning 125	scanner capacities and ratings 226
installing 28, 147	scanning
life expectancy 148	book 63
recycling 148 storing 147	cancel scan job 68 color 76
print jobs, stopping 42	control panel key 66
print quality	e-mail 75
changing 43	enhancing images 74
settings 42	error messages 178
print server	flatbed scanner preview 70
configuration page, printing 122	HP LaserJet Director 68
printer	loading originals 31
cable, connecting 27	margins 226
capacities and ratings 225 drivers, requirements for 42	methods 66 OCR, using 72
media path cleaning 126	page-by-page 69
separation pad, changing 129	photos 62
printing	quality, improving 179
all fax reports 105	resolution 76
blocked fax list 104	store scanned images 71
canceling 42	troubleshooting 176-180
configuration page 195	TWAIN, using 70
configuration report 33	sending faxes
control panel menu map 34, 36	ad hoc groups 82
envelopes 45 fax activity logs 101, 188	delaying 84 dialing from a telephone 94
letterhead 48	group-dial code 82
print server configuration page 122	multiple recipients 82
special media 45–49	one recipient 81
speed 225	troubleshooting 183
transparencies and labels 47	V.34 setting, changing 100
troubleshooting 154-166	service
watermarks 54	hardware 247
pulse dialing 99	information form 248
	settings 36–39
R	silence-detect mode, changing 97 software
receiving faxes	HP LaserJet Copier 60
fax tones 85	HP LaserJet Copy Plus 61
to computer 86	special media
troubleshooting 184 redial settings, changing 99	common problems 139
reducing, copies 58	printing 45–49
repackaging guidelines 247	specifications 139–141
repeating defects, troubleshooting 162	specifications
reports	acoustics 224
billing codes 103	ADF 226 battery 241
fax call 102	copier capacities and ratings 225
phone book 103	electrical 224
T.30 protocol trace 104	environmental 26, 224
reports, fax, printing all 105 reprinting faxes 85	fax 230
resolution	media 138
fax default, changing 95	memory 226
faxing 231	network connection 109
scanning 76, 226	physical 225
resolution, print 225	print server 233
returning the unit 247	printer capacities and ratings 225 scanner capacities and ratings 226
ring pattern, changing 97	speed-dial codes
ring volume, adjusting 94	deleting 88
rings-to-answer, changing 96	programming 87
6	stamp received faxes, enabling 98
S	start scan button 68
safety, compliance 234	statements
scan buttons 66– 68 network connection 67	Declaration of Conformity 228
HELWOLK COUNECTION OF	FCC Part 68 requirements 231

254 Index EN

FCC regulations 227	smears 162
IC CS-03 requirements 232	specks 160, 165
laser safety 226	streaks 172, 180
software license agreement 243	text problems 156, 172, 176, 177, 180
telephone consumer protection act 231	too dark 172, 180
warranty 244	too light 172, 180
status control 22	volume 188
storage, environment 224	white lines 171
storing, scanned images 71	wrinkles 164
support, customer	TWAIN
see customer support	scanning with 70
surge protectors 183	
cally protection 100	U
-	_
T	unblocking fax numbers 86
temperature, operating environment 26	
testing	V
copier with the ADF input tray 33	V.34 setting, changing 100
copier with the flatbed scanner 34	voice message services 183
printer 33	volume, adjusting 37
text, prints poorly 176	volume, troubleshooting 188
tone dialing 99	volume, troublesmouting 100
toner	***
loose 162	W
smear 162	warranty 244
specks 160	warranty, extended 248
transparencies	watermarks, printing 54
printing 47	weight
specifications for 139	ADF media 226
trays	media 225
see input tray, paper	product 225
troubleshooting	wrinkling, troubleshooting 164
•	g, a capiconic can ig
see also image quality, troubleshooting	
answering machines 183	
black dots 172, 180	
blank pages 154, 168, 172, 180	
characters, misformed 163	
configuration page 195	
copy output 168	
copying 168– 173	
curled media 156	
curling paper 164	
dropouts 160	
error messages 155, 178	
faded print 160	
fax phone problems 182	
faxing 182-188	
feeding problems 155, 183	
graphics 157, 176	
gray backgrounds 161	
incoming faxes 185	
light print 160	
lines 161, 172, 180	
loose toner 162	
media guides 156	
media jams 158	
not responding 154, 155	
paper 177	
parallel ports 155	
pickup roller 156	
printer 154-166	
printer separation pad 156	
quality, image 176	
repeating defects 162	
scanning 176-180	
size, reduced 173, 180	
sizes, wrong 177	
skewed pages 163, 176	
skewed print 156	
slow faxes 187	

EN Index 255



copyright © 2002 Hewlett-Packard Company

www.hp.com/support/lj3300