software technical reference









(c) Copyright Hewlett-Packard Company, 2002

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

Edition 1, 11/2002

#### 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**

Adobe, Adobe Photoshop, Acrobat, PostScript, and the Acrobat logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries/regions.

Arial is a U.S. registered trademark of the Monotype Corporation.

AutoCAD (TM) is a U.S. trademark of Autodesk, Inc.

CorelDraw (TM) is a trademark of Corel Corporation or Corel Corporation Ltd.

Helvetica and Times are trademarks of Linotype-Hell AG and/ or its subsidiaries in the U.S. and other countries/regions.

Intel (R) is a U.S. trademark of Intel Corporation.

Java (TM) is a U.S. trademark of Sun Microsystems, Inc.

HP-UX Release 10.20 and later and P-UX RElease 11.00 and later (in both 32- and 64-bit configurations) on all HP 9000 computers are Open Group UNIX 95 branded products.

Microsoft (R), MS-DOS (R), Windows (R), and Windows NT (R) are U.S. registered trademarks of Microsoft Corporation.

Netscape and Netscape Navigator are trademarks or registered trademarks of Netscape Communications, Inc.

Pentium (R) is a registered trademark of Intel Corporation.

TrueType (TM) is a U.S. trademark of Apple Computer, Inc.

UNIX (R) is a registered trademark of the Open Group.

# **Table of Contents**

#### **List of tables**

### **List of figures**

1	Pu	rn	nse	and	SCC	ne
	· u	ים וו	550	allu	300	, pc

Introduction	15
HP LaserJet 4200 and HP LaserJet 4300 series printers	16
2 Software description	
2 dortware description	
Introduction	
Supported operating systems	21
Technology background information	21
HP LaserJet user documentation	22
Adobe(R) Acrobat Reader(R)	22
HP LaserJet guides	
HP LaserJet 4200 and 4300 series printing-system installation notes	22
HP LaserJet 4200 and 4300 printing-system release notes	23
Bidirectional communication	23
Bidirectional interface and connectivity	24
Driver Autoconfiguration	25
HP Web Access	26
Information tab	26
Device status	27
Configuration information	28
Links to off-printer solutions	28
Settings tab	28
Remote printer configuration	29
Networking tab	30
Configuration	30
Security	30
Diagnostics	31
Network settings	31
Configurable e-mail alerts	32
Printer Status and Alerts	33
E-mail command and response	37
Euro character	38
Printing-system components	39
Printing system and installer	39

Software Technical Reference

HP LaserJet 4200 and 4300 software CD-ROMs for Windows systems	
Installer features	
Installable components	
Printer drivers	
PCL 5e, PCL 6, and PS drivers	
Windows 95, 98, Me, NT 4.0, 2000, and XP driver versions	
Macintosh and Macintosh-compatible system-driver versions	
Additional driver availability	
Macintosh components	
Additional productivity tools	
HP Web Registration	
Optional software	
HP Web JetAdmin	42
3 Driver features	
ntroduction	
PCL 5e/PCL 6 driver features for Windows 95, Windows 98, Windows Me, and Windows NT 4.0	
Help system	
What's this? Help	
Context-sensitive Help	
Constraint messages	
Bubble Help	46
Finishing tab features	48
Document preview image	48
Quick Sets	49
Defaults	49
User's Manual	50
Custom Quick Sets (Untitled)	51
Document Options	
Print on Both Sides option	
Flip Pages Up	
Booklet Printing	
Activating booklet printing	
Selecting a booklet cover	
Pages per Sheet	
Print Quality	
Default	
Output Settings group box	
Resolution	
Scale Patterns (WYSIWYG)	
Print all Text as Black	
Font Settings group box	
EconoMode	
Effects tab features	
Print Document On setting	
Scale to Fit option	
% of Normal Size option	
Watermarks	
Current watermarks	
Watermark message	ხ∪

Message angle	
Font attributes	60
Name	60
Color	60
Shading	60
Size	61
Default settings	61
Paper tab features	
Printer image	
All Pages	
Other Pages	
Back Cover	
Size is	
Custom	
Name drop-down menu	
Dynamic command button	
Width and height controls	
Custom width and height control limits	
Paper and envelope icons	
Measurement Units button	
Close button	
Source Is	
Type Is	
Printer image	
Destination tab features	
Destination Features	
Hardware configuration and availability of Job Storage options	
Configuring the printer driver for a printer hard disk	
Job Storage modes	
Off	
Quick Copy	
Proof and Hold	
Using a PIN for Private Job and Stored Job	
Private Job	
Stored Job	
Document identifiers used in Job Storage	72
User Name	
Job Name	
Using Job Storage options when printing	
Releasing stored jobs at the printer	73
Deleting a print job	73
Output bin options	73
Options	74
Printer image	74
Basics tab features	75
Copies	
Orientation	
About	
Driver extensions	
Configure tab features	
Printer Model group box	77

Paper-handling options	
Duplexing unit	
Mopier enabled	79
Envelope feeder	79
Optional paper destinations	79
Optional paper sources	79
Other options	79
Storage Storage	80
Printer Memory	
Allow scaling from large paper	
Include types in application source list	
Fonts	
Ignore Application Collation	
Automatic configuration	
Printer image	
NT Forms tab features	
Configuring the trays	
PS driver features for Windows 95, 98, Me, and NT 4.0	
PS Level 3 Emulation support for the HP LaserJet 4200 and 4300 series printers	
Page Setup tab features	
Advanced tab features	
Job Storage tab features	
Off	
Proof and Hold	
Private Job and Stored Job	
PIN	
Private Job	
Stored Job.	
Device Settings tab features	
PCL 5e and PCL 6 driver features for Windows 2000 and Windows XP	
Help system	
What's this? Help	
Context-sensitive Help	
Constraint messages	
Layout tab	
Orientation	
Print on Both Sides	
Page Order	
Advanced features	
Paper Size	
Copy Count and Collated	
REt	
Send TrueType as Bitmaps	
Graphics Mode for PCL 5e	
Paper/Quality tab features	
Paper Options	
First Page and Other Pages	
Back Cover	
Source is:	
Type is:	
Print Quality	96

EconoMode	96
Finishing tab features	97
Pages per Sheet	98
Print Page Borders	99
Page Order	99
Booklet Layout	99
Rotate by 180 degrees	.100
Stapling Options	.100
Stapling a document	.100
Effects tab features	.100
Print Document On setting	.101
Scale to Fit option	
% of Normal Size option	
Watermarks	
Current Watermarks	
Watermark Message	
Message Angle	
Font Attributes	
Name	
Color	
Shading	
Size	
Default settings	
Destination tab features	
Destination features	
About tab	
Device settings	
Input Paper Handling Options	
Accessory Output Bin	
Duplex Unit (for 2-Sided Printing)	
Printer Hard Disk	
Mopier Enabled	
Mopier mode and collation	
Job Storage	
Printer Memory	
Form to Tray Assignment	
HP LaserJet 4200/4300 software CD-ROM	
In-box file layout  HP LaserJet software CD-ROM, Windows partition	
HP LaserJet software CD-ROM, Macintosh Partition	
Availability and fulfillment	
Web deployment	
Software component availability	
Software component localization.	
Driver support tables for the HP LaserJet 4200 and 4300 series printers	
Job stream output	
Stream output modes	
ConnectivityBidirectional communication	
Driver Management and Configuration utility	
Dirvor ivianayonioni ana ooniiyaralon aliiliy	. 120

UI features	_
Help features	
Constraint support	
Document layout	
Job storage	
Custom preference storage/recall	
Print controls	122
Watermarks	
Paper sizes	
Paper types	
Paper sources	
Alternate source/paper type	
Printing destination	
Installable options	
Localization	
PostScript specific	127
4 Installing Windows printing system components	
Introduction	129
Supported operating systems	
System requirements	
Font support	
Basic fonts	
Default fonts	130
Installation instructions	
General installation for Windows 95, 98, Me, NT 4.0, 2000, and XP	
Installing from the printing-system CD-ROM	
Installing from a network or from downloaded files	
Detailed Windows installation	134
Typical Installation dialog box sequence	134
Custom installation	151
Product registration (HP WebReg)	153
Customization Utility for Windows	
Silent installer	
Customized silent installer	160
Driver Management and Configuration Utility (Internal)	160
Command-line silent install	
Method 1: Command line	161
Method 2: SETUP.LST	161
Driver-only installation	161
Point and Print installation for Windows 95, 98, Me, NT 4.0, 2000, and XP	162
Setting a default printer	163
Windows 3.1x	163
Printer support	163
5 Installation for Macintosh, IBM OS/2, and Linux operating systems	
Introduction	165
System Requirements	
Macintosh	

IBM OS/2	165
Linux	165
Macintosh	166
Macintosh component descriptions	166
HP LaserJet PPDs	166
PDEs (Mac OS X)	166
HP LaserJet Utility	166
Installation notes	
ColorSync profiles	
Online Help	
Screen fonts (Mac OS classic)	
Font support	
Installing the Macintosh printing system	
To install the HP LaserJet printer software for Macintosh OS	
To set up a USB direct printer connection with Mac OS 8.6 - 9.1	
To set up an AppleTalk networked printer with Mac OS 8.6 - 9.1	
To set up a printer with Mac OS X	
Uninstalling the Macintosh printing system	
In-box disk layout	
Folders and files added through installation of the HP LaserJet software (Macintosh OS)	
Macintosh (Macintosh OS Classic) installation	
Main Install dialog box sequence	
Printer setup using AppleTalk Chooser	
HP LaserJet Screen Fonts Installer dialog box sequence	
Macintosh (Macintosh OS X) installation	
Main Install dialog box sequence	
IBM OS/2 Warp 3.0 and later	
OS/2 installation instructions	
Installing a printer in OS/2 when printer object is missing	
Installing a printer in OS/2 with pre-existing printer object on desktop	
Font support	
Changing a printer driver in the printer object	
Changing the printer properties	
Changing the job properties	185
6 Engineering Detail	
Introduction	187
Media attributes	187
Paper sources and destinations	187
Paper tray configurations	
Paper-source commands	
Media types and sizes	
PCL 5e and PCL 6 custom paper sizes	
Paper Type commands	

Index

Software Technical Reference

9

# List of tables

Table 1: Features of the HP LaserJet 4200 and the HP LaserJet 4300 series printers	16
Table 2: Bidirectional communication support in various operating systems	23
Table 3: Driver UI controls that are set by bidirectional communication	24
Table 4: Default alerts selection state for connection type	36
Table 5: Bubble help messages	
Table 6: Quick Set default values for the HP LaserJet 4200 and 4300 series printers	49
Table 7: Page orientation	
Table 8: EconoMode Settings	56
Table 9: Name drop-down menu text strings	
Table 10: Custom width and height limits for the HP LaserJet 4200 and 4300 series printers	67
Table 11: Close dialog box text strings	68
Table 12: Printer behavior with Ignore Application Collation settings	
Table 13: EconoMode Settings	
Table 14: Driver Mopier mode and collation settings	
Table 15: CD-ROM versions	
Table 16: Software component availability for HP LaserJet 4200 and 4300 series printers	
Table 17: Software component localization for the HP LaserJet 4200 and 4300 series printers	
Table 18: Driver support for job stream output feature	
Table 19: Driver support for stream output modes feature	
Table 20: Driver support for connectivity features	
Table 21: Driver support for bidirectional communication features	
Table 22: Driver support for DMC utility feature	
Table 23: Driver support for UI features	
Table 24: Driver support for Help features	
Table 25: Driver support for constraints	
Table 26: Driver support for document layout features	
Table 27: Driver support for job storage features	
Table 28: Driver support for custom preference storage/recall features	
Table 29: Driver support for print controls	
Table 30: Driver support for watermarks feature	
Table 31: Driver support for paper sizes	
Table 32: Driver support for paper types	
Table 33: Driver support for paper sources	
Table 34: Driver support for alternate source/paper type feature	
Table 35: Driver support for printing destination feature	
Table 36: Driver support for installable options	
Table 37: Driver support for localization feature	
Table 38: Driver support for PostScript-specific features	
Table 39: Default fonts	
Table 40: Additional PS 3 fonts	131

10 Software Technical Reference

Table 41: Choose Setup Language dialog box text strings	.135
Table 42: Setup dialog box text strings	.135
Table 43: Welcome dialog box text strings	.136
Table 44: HP Software License Agreement dialog box text strings	.137
Table 45: Web Update dialog box text strings	.138
Table 46: Type of Connection dialog box text strings	
Table 47: Select Port dialog box text strings	.140
Table 48: Network Setup dialog box text strings	.141
Table 49: Network Printer Configuration dialog box text strings	.142
Table 50: Identify Printer dialog box text strings	.144
Table 51: Specify Network Path dialog box text strings	.145
Table 52: Set Network Communication Mode dialog box text strings	.145
Table 53: Printer Model dialog box text string	.146
Table 54: Installation Type dialog box text strings	.147
Table 55: Printer Name dialog box text strings	.148
Table 56: Printer Sharing dialog box text strings	.149
Table 57: Finish dialog box text strings	.150
Table 58: Exit Setup dialog box text strings	.151
Table 59: Custom Installation dialog box text strings	
Table 60: Hewlett-Packard's Electronic Registration text strings	.153
Table 61: Welcome to Hewlett-Packard's Registration dialog box text strings	.154
Table 62: Hewlett-Packard's Electronic Registration dialog box text strings (1 of 3)	.155
Table 63: Hewlett-Packard's Electronic Registration dialog box text strings (2 of 3)	.157
Table 64: Hewlett-Packard's Electronic Registration dialog box text strings (3 of 3)	.158
Table 65: Exiting registration text strings	.159
Table 66: Windows servers with Windows clients	.162
Table 67: HP LaserJet for Macintosh installer splash screen dialog box text strings	.172
Table 68: HP LaserJet Installer dialog text strings (easy install)	.173
Table 69: HP LaserJet Installer dialog text strings (custom install)	.174
Table 70: Installing dialog text strings	.175
Table 71: Installation successful dialog text strings	.175
Table 72: Important! dialog box text strings	.176
Table 73: How do I select my printer? dialog text strings	.177
Table 74: HP LaserJet Screen Fonts splash screen dialog text strings	.177
Table 75: HP LaserJet Screen Fonts installer dialog text strings (1 of 2)	.178
Table 76: HP LaserJet Screen Fonts installer dialog text strings (2 of 2)	.178
Table 77: Installation was successful dialog text strings	.179
Table 78: HP LaserJet for Macintosh installer splash screen dialog box text strings	.179
Table 79: HP LaserJet Installer dialog text strings (easy install)	.180
Table 80: HP LaserJet Installer dialog text strings (custom install)	.181
Table 81: Installing dialog text strings	.182
Table 82: Installation successful dialog text strings	.182
Table 83: HP LaserJet 4200 and 4300 series printers paper sources and destinations	.187
Table 84: Paper tray configurations for the HP LaserJet 4200 and 4300 series printers	.188
Table 85: Paper-source commands	
Table 86: Supported features and attributes by driver	
Table 87: Supported input media types	
Table 88: HP LaserJet 4200 and 4300 Stacker and Stapler/Stacker	
Table 89: PCL 5e and PCL 6 custom paper sizes	
Table 90: Paper-type commands	

Software Technical Reference

# List of figures

Figure 1: Device Status page	27
Figure 2: Configuration page	28
Figure 3: Configure Device	29
Figure 4: Networking tab	30
Figure 5: Configurable Alerts page	32
Figure 6: Printer Status and Alerts icons	34
Figure 7: Printer Status and Alerts window	34
Figure 8: Refresh rate option	
Figure 9: Printer Status and Alert options	37
Figure 10: Installation software CD-ROM main screen	39
Figure 11: A property page with Bubble Help icons	46
Figure 12: The default appearance of the Finishing tab	48
Figure 13: Activating booklet printing	
Figure 14: Selecting booklet printing type	53
Figure 15: Selecting booklet printing type	54
Figure 16: Print Quality Details	
Figure 17: Effects tab	
Figure 18: Preview images - Legal on Letter; Scale to Fit off (left) and on (right)	
Figure 19: Watermark details	59
Figure 20: Paper tab	
Figure 21: Other Pages mini-tab	
Figure 22: Back Cover mini-tab	
Figure 23: Custom Paper Size dialog box	
Figure 24: Destination tab	
Figure 25: Basics tab	
Figure 26: About This Driver dialog box	
Figure 27: Configure tab	
Figure 28: Configure Font DIMMs dialog box	
Figure 29: Driver NT Forms tab	
Figure 30: Page Setup tab	
Figure 31: Advanced tab	
Figure 32: Job Storage tab	
Figure 33: Device Settings tab	
Figure 34: A typical constraint message with an OK button	
Figure 35: The default appearance of the Layout tab	
Figure 36: The default appearance of the Advanced subtab	
Figure 37: The default appearance of the Paper/Quality tab	
Figure 38: The default appearance of the Finishing tab	
Figure 39: Finishing tab, with duplexing unit and paper-handling accessory	
Figure 40: Page Order previews	99

Figure 41:	Effects tab	100
Figure 42:	Preview images - Legal on Letter; Scale to Fit off (left) and on (right)	101
Figure 43:	Watermark Details	103
Figure 44:	Destination tab features	105
Figure 45:	Job Storage Settings window	106
-	About tab	
	Device Settings tab	
	Choose Setup Language dialog box	
-	Setup dialog box	
	Welcome dialog box	
-	HP Software License Agreement dialog box	
-	Web Update dialog box	
	Type of Connection dialog box	
-	Select Port dialog box	
-	Network Setup dialog box	
-	Network Printer Configuration dialog box	
-	Identify Printer dialog box (1 of 2)	
	Identify Printer dialog box (2 of 2)	
•	Specify Network Path dialog box	
-	Set Network Communication Mode dialog box	
-	Printer Model dialog box dialog box	
-	Installation Type dialog box	
-	Printer Name dialog box	
-	Printer Sharing dialog box	
-	Finish dialog box	
-	Exit Setup dialog box	
	Components dialog box, Custom Installation	
	Hewlett-Packard's Electronic Registration dialog box	
	Welcome to Hewlett-Packard's Registration dialog box	
	Hewlett-Packard's Electronic Registration dialog box (1 of 3)	
	Hewlett-Packard's Electronic Registration dialog box (2 of 3)	
-	Hewlett-Packard's Electronic Registration dialog box (3 of 3)	
	Exiting registration! dialog box	
	HP LaserJet for Macintosh installer splash screen dialog box	
•	HP LaserJet Installer dialog box (easy install)	
-	HP LaserJet Installer dialog box (custom install)	
•	Installing dialog box	
-	Installation was successful dialog box	
-	Important! dialog box	
	How do I select my printer? dialog box	
	HP LaserJet Screen Fonts splash screen dialog box	
	HP LaserJet Screen Fonts installer dialog box	
	Installation was successful dialog box	
	HP LaserJet for Macintosh installer splash screen dialog box	
-	HP LaserJet Installer dialog box (easy install)	
	HP LaserJet Installer dialog box (custom install)	
	Installing dialog box	
		182

Software Technical Reference

1

# Purpose and scope

#### Introduction

This Software Technical Reference (STR) provides information and troubleshooting tips for the printing system software for the HP LaserJet 4200 and HP LaserJet 4300 series printers.

This document is prepared in an electronic format to serve as a quick-reference tool for Customer Care Center (CCC) agents, support engineers, system administrators, management information systems (MIS) personnel, and HP LaserJet printer end-users, as appropriate.

The following information is included in this technical reference:

- descriptions of drivers and platforms with system modifications
- procedures for installing and uninstalling software components
- descriptions of problems that can arise while using the printer, and known solutions to those problems
- descriptions of known software issues and workarounds

The following table contains descriptions of the printer models described in this STR. The printing system software for each printer model accommodates the differences between models.



Bundle configurations might vary among geographic regions.

# HP LaserJet 4200 and HP LaserJet 4300 series printers

Table 1: Features of the HP LaserJet 4200 and the HP LaserJet 4300 series printers

Models	Memory	Memory Speed		Paper handling	Resolution and	
Base model	48 megabytes (MB) Random	• 35 pages per	Parallel connection	one 100-sheet multipurpose	• 1200 dots per inch (dpi)	
	Access Memory (RAM),	minute (ppm) letter-size		tray (tray 1); maximum paper size, legal (216	ProRes/600 dpi dual-beam scanner	
	expandable to 416 MB (4200 series)	media; 34 ppm A4- size		mm by 356 mm, 8.5 by 14 inches)	• 12,000-page print cartridge (4200 series)	
	• 64 MB RAM, expandable to 416 MB (4300 series)	media (4200 series) 45 ppm letter-size		<ul> <li>one 500-sheet tray (tray 2); maximum paper size, legal (216 mm by 356 mm,</li> </ul>	18,000-page print cartridge (4300 series)	
		media; 44 ppm A4- size		8.5 by 14 inches) optional high-		
		media (4300 series)		capacity input (HCI) 1,500- sheet tray		
n model	64 MB RAM, expandable to 416 MB (4200	35 ppm letter-size media; 34	<ul><li>Parallel connection</li><li>HP Jetdirect</li></ul>	one 100-sheet multipurpose tray (tray 1);	1200 dpi     ProRes/600     dpi dual-beam	
	series)  80 MB RAM, expandable to	ppm A4- size media	10/100Base-TX print server card for network	maximum paper size, legal (216 mm by 356 mm,	scanner 12,000-page print cartridge	
	416 MB (4300 series)	(4200 series) • 45 ppm	connection	8.5 by 14 inches) • one 500-sheet	<ul><li>(4200 series)</li><li>18,000-page print cartridge</li></ul>	
		letter-size media; 44 ppm A4-		tray (tray 2); maximum paper size, legal (216	(4300 series)	
		size media (4300		mm by 356 mm, 8.5 by 14 inches)		
		series)		optional high- capacity input (HCI) 1,500- sheet tray		

Purpose and scope Software Technical Reference

Models	Memory	Speed	Connectivity Paper handling		Resolution and print cartridge	
tn model	<ul> <li>64 MB RAM, expandable to 416 MB (4200 series)</li> <li>80 MB RAM, expandable to 416 MB (4300 series)</li> </ul>	35 ppm letter-size media; 34 ppm A4-size media (4200 series)     45 ppm letter-size media; 44 ppm A4-size media (4300 series)	Parallel connection HP Jetdirect 10/100Base-TX print server card for network connection	one 100-sheet multipurpose tray (tray 1); maximum paper size, legal (216 mm by 356 mm, 8.5 by 14 inches)     two 500-sheet trays (trays 2 and 3); maximum paper size, legal (216 mm by 356 mm, 8.5 by 14 inches)     optional high-capacity input (HCI) 1,500-sheet tray*	1200 dpi     ProRes/600     dpi dual-beam     scanner     12,000-page     print cartridge     (4200 series)     18,000-page     print cartridge     (4300 series)	
dtn model	<ul> <li>64 MB RAM, expandable to 416 MB (4200 series)</li> <li>80 MB RAM, expandable to 416 MB (4300 series)</li> </ul>	35 ppm letter-size media; 34 ppm A4-size media (4200 series)     45 ppm letter-size media; 44 ppm A4-size media (4300 series)	Parallel connection HP Jetdirect 10/100Base-TX print server card for network connection	one 100-sheet multipurpose tray (tray 1); maximum paper	1200 dpi     ProRes/600     dpi dual-beam     scanner     12,000-page     print cartridge     (4200 series)     18,000-page     print cartridge     (4300 series)	

Software Technical Reference Purpose and scope 17

Models	Memory	Speed	Connectivity	Paper handling	Resolution and
dtns model	64 MB RAM, expandable to	35 ppm letter-size	Parallel connection	one 100-sheet multipurpose	print cartridge 1200 dpi ProRes/600
	416 MB (4200 series)  80 MB RAM, expandable to 416 MB (4300 series)	media; 34 ppm A4- size media (4200 series)  45 ppm letter-size media; 44 ppm A4- size media (4300 series)	HP Jetdirect     10/100Base-TX     print server card     for network     connection	tray (tray 1); maximum paper size, legal (216 mm by 356 mm, 8.5 by 14 inches)  two 500-sheet trays (trays 2 and 3); maximum paper size, legal (216 mm by 356 mm, 8.5 by 14 inches)  duplexing unit for automatic two-sided printing  500-sheet stacker output accessory  optional HCI 1,500-sheet tray*	dpi dual-beam scanner  12,000-page print cartridge (4200 series)  18,000-page print cartridge (4300 series)
dtnsl model	<ul> <li>64 MB RAM, expandable to 416 MB (4200 series)</li> <li>80 MB RAM, expandable to 416 MB (4300 series)</li> </ul>	• 35 ppm letter-size media; 34 ppm A4- size media (4200 series) • 45 ppm letter-size media; 44 ppm A4- size media (4300 series)	Parallel connection  HP Jetdirect 10/100Base-TX print server card for network connection	<ul> <li>one 100-sheet multipurpose tray (tray 1); maximum paper size, legal (216 mm by 356 mm, 8.5 by 14 inches)</li> <li>two 500-sheet trays (trays 2 and 3); maximum paper size, legal (216 mm by 356 mm, 8.5 by 14 inches)</li> <li>duplexing unit for automatic two-sided printing</li> <li>500-sheet stapler/stacker output accessory</li> <li>optional HCI 1,500-sheet tray*</li> </ul>	1200 dpi     ProRes/600     dpi dual-beam     scanner     12,000-page     print cartridge     (4200 series)     18,000-page     print cartridge     (4300 series)

18 Purpose and scope Software Technical Reference



2

# Software description

#### Introduction

The HP LaserJet 4200 and 4300 series printers come with software and installers for Microsoft (R) Windows (R) and Apple Computer, Inc., Macintosh systems. UNIX (R) and OS/2 systems are supported, and software is available on the Web. For specific information about a system's installer, drivers, and components, locate the section that corresponds to that system.

### Supported operating systems

The following operating systems (OSs) support the HP LaserJet 4200 and 4300 printing-system software, including standard printer command language (PCL) drivers and PostScript (R) (PS) emulation drivers. Windows OSs support a full-featured configuration of the HP LaserJet 4200 and 4300 series printers; other OSs support varying levels of functionality.

- Windows 95.
- Windows 98.
- Windows Millennium Edition (Me).
- Windows NT (R) 4.0 (Service packs 3 through 6).
- Windows 2000 (Service packs 1 and 2).
- Windows XP Professional and Windows XP Home Edition (Windows XP)
- IBM OS/2 2.0 or later (available on the IBM Web site at http://www.ibm.com).
- Mac OS 8.6 to 9.x and Mac OS X Classic.

Windows Terminal Server, Windows Cluster Server, and Citrix Terminal server technology accommodates as many as 128 devices or terminals to share the resources dynamically on a terminal server. A terminal server eliminates the need for modems, network interface cards, programs, or complete operating systems on the terminals. Terminals can include personal computers, so-called dumb terminals, printers, and other devices. Terminal clients connect to the terminal server through Transmission Control Protocol/Internet Protocol (TCP/IP). Citrix Metaframe supports connection through TCP/IP, NETBIOS Extended User Interface (NetBEUI), Internetwork Packet Exchange/Sequenced Packet Exchange (IPX/SPX), and asynchronous modem connections. In turn, the terminal server connects to a local area network (LAN) through a network interface card. For information about supported printers and driver versions (including a list of supported printers, recommendations for installing printer drivers, a description of terminal server configurations, differences between terminal server versions, and differences between remote client operating systems), go to http://www.hp.com/cposupport/printers/support\_doc/bpl10248.html

## **Technology background information**

This section contains information about the following topics:

- HP LaserJet user documentation
- Bidirectional communication
- Driver Autoconfiguration
- HP Web Access
- Printer Status and Alerts
- Euro character

#### **HP LaserJet user documentation**

#### Adobe(R) Acrobat Reader(R)

The HP LaserJet software compact disk read-only memory (CD-ROM) includes Adobe Acrobat Reader version 5.0 (version 4.05c for Russian) for viewing online documentation. When you click any of the documentation links on the HP LaserJet 4200 and 4300 software CD-ROMs, the installer scans the system for an installed Portable Document Format (PDF) reader. If the installer cannot find a reader, the installer presents the option to install the Adobe Acrobat Reader.



Adobe Acrobat Reader 4.0 or later is required to view the documents on the HP LaserJet 4200 and 4300 software CD-ROMs.

#### **HP LaserJet guides**

On the CD-ROM that came with the printers, the *HP LaserJet 4200 and 4300 User Guide* is supplied in Adobe Acrobat Reader PDF files for viewing on your computer.

You can either view the guides from the HP LaserJet 4200 and 4300 software CD-ROMs or install them on your system. To install the online user guides, select the User Guide check box during a Custom Installation. The guide is installed in the Manuals folder on the target system. You can also choose to install the guides later, or to read the guide on the printing system software CD-ROM by navigating to <language>/Manuals.

In accordance with the Americans with Disabilities Act (ADA), Hewlett-Packard provides readable, onscreen versions of the *HP LaserJet 4200 and 4300 User Guide* at the following HP Web sites:

http://www.hp.com/support/lj4200

http://www.hp.com/support/lj4300

Hyperlinked, screen-readable versions of the *HP LaserJet 4200 and 4300 User Guide* is available on the printer software CD-ROM. To view the user guide, navigate to the **English** folder, and then to the **Manuals** folder. There, open HP4200EN.CHM or HP4300EN.CHM.

#### HP LaserJet 4200 and 4300 series printing-system installation notes

The HP LaserJet 4200 and 4300 Series Printing System Installation Notes are available on the HP LaserJet software CD-ROM. The installation notes (filename READ4200.RTF for the HP LaserJet 4200 printer, and READ4300.rtf for the HP LaserJet 4300 printer) contain important information about printer features, instructions for installing the printing-system software, and technical assistance.

To view this text file from the HP LaserJet 4200 and 4300 software CD-ROMs, click **View Documentation**, and then click **Readme**.

You can also gain access to the file by inserting the CD-ROM, navigating to <LANGUAGE>, and then clicking the filename, (READ4200.RTF for the HP LaserJet 4200 printer and READ4300.RTF for the HP LaserJet 4300 printer). When you have the file open in Notepad, you can click **File**, and then click **Save As** to save a copy of the file to another location.

#### HP LaserJet 4200 and 4300 printing-system release notes

The Hewlett-Packard LaserJet 4200 and 4300 Printing System Release notes, late-breaking information, and other technical assistance, are available at the following Web sites:

http://www.hp.com/support/lj4200

http://www.hp.com/support/lj4300

#### **Bidirectional communication**

Bidirectional communication is the printer's ability to respond to data inquiries from the computer and report back information, such as what type of print media is available or what accessories are connected to the printer. If a printer does not have this capability (that is, if it has no bidirectional mode), it can only accept commands from the host and cannot report information back.

Driver Autoconfiguration and Printer Status and Alerts use bidirectional communications software. The Typical Installation installs Driver Autoconfiguration in supported environments that contain the bidirectional communication software. Use Custom Installation when you do not want these features.

Bidirectional communication depends on the operating system on which your network runs and on the type of connection you have between your computer and your printer.

The following table provides information about the operating systems and network environments that support bidirectional communication.

Table 2: Bidirectional communication support in various operating systems

Connection type			Windows 95	Windows 98	Windows Me	Windows NT 4.0	Windows 2000	Windows XP (32- bit only)	Macintosh
Direct									
connect <sup>1</sup>	1.48	TOD //D							
Network	Jetdirect	TCP/IP	X	X	X	X	X	X	Х
port		IPX/ SPX	Х	Х	Х	Х	X	Х	
	Standard	TCP/IP (HP)	Х	Х	Х	Х	Х	Х	
	·	TCP/IP (MS <sup>2</sup> )					X	Х	Х
		IPX/ SPX (HP)	Х	Х	Х	Х	X	Х	
	LPR					Х	Χ	Х	X
	AppleTalk								Х
Novell4	NetWare 4.x	Bindery queue	Х	Х	Х	Х	X	Х	
		NDS <sup>3</sup> queue	Х	Х	Х	Х	Х	Х	
	NetWare 5.x	Bindery queue	Х	Х	Х	Х	Х	Х	
		NDS queue	Х	Х	Х	Х	X	Х	
Microsoft	Windows	TCP/IP	Х	Х	Х	Х	Χ	Х	Х
Share	95, 98, or Me host	IPX/ SPX	Х	Х	Х	Х	Х	Х	
	Windows	TCP/IP	Х	Х	Х	Х	Χ	Х	Х
	NT 4.0, 2000, or	IPX/ SPX	Х	Х	Х	Х	Х	Х	
	XP <sup>4</sup> host	LPR	Х	Х	Х	Х	Χ	Х	

Software Technical Reference Software description 23

#### Bidirectional interface and connectivity

The following table lists the driver user interface (UI) controls bidirectional communication sets when the user clicks **Update Now** or when Enterprise Auto-configure is initiated. To the right are the corresponding PML counterparts.

The Corresponding Object ID column shows the values that the driver .INF file inserts into the registry, as transformed from the firmware OID number, such as: 2.8.2.1.10.1 A set of Object ID to printer management language (PML) mappings appear in the registry. A component called NRA queries the Object IDs in the registry from the printer, and sets the corresponding PML value to what the printer returns. The driver then parses these PML values to determine the printer's configuration. For example, when NRA asks the printer for the Object ID that corresponds to hrMemorySize, the printer returns a value such as 6553610, and this value is stored in the hrMemorySize registry key. The driver then reads this value, and sets the printer memory configuration to 64 MB.

Note	The printer model name is not tied to a UI control, but the driver uses the printer model name to verify that it is communicating with the correct printer model.
Note	The default UI settings are based on the printer base bundle.
Note	The strings that are returned from firmware for the various paper source and destination options are not included in this table.

Table 3: Driver UI controls that are set by bidirectional communication

UI control	UI default	PML object for control	PML default	Corresponding object ID
	setting		value	
Printer model name	N/A	MODEL_NAME	" "	01,03,06,01,04,01,0B,02,03,09,04,02,01,01,03,02,00
Driver work space	7.74 MB	HOST-APPLICATION- AVAILABLE-MEMORY	6400 (10)	01,03,06,01,04,01,0B,02,03,09,04,02,01,01,02,3B,00
Duplexing unit check box	clear	prtMediaPathType2	6400 (10)	01,03,06,01,02,01,2b,0d,04,01,09,01,02
Total memory control	64 MB	HrMemorySize	6400 (10)	01,03,06,01,02,01,19,02,02,00
Mopier enabled check box	selected	MOPY_MODE	6400 (10)	01,03,06,01,04,01,0b,02,03,09,04,02,01,02,04,01,01,00
Hard disk check box	clear	hrDiskStorageMedia2 hrDiskStorageMedia4	6400 (10)	01,03,06,01,02,01,19,03,06,01,02,02 01,03,06,01,02,01,19,03,06,01,02,04
Option paper destinations drop-down list	None	PHD1-MODEL PHD6-MODEL	" "	01,03,06,01,04,01,0b,02,03,09,04,02,01,04,01,07,03,01,04,00 01,03,06,01,04,01,0b,02,03,09,04,02,01,04,01,07,03,02,04,00

<sup>&</sup>lt;sup>1</sup>Not supported.

<sup>&</sup>lt;sup>2</sup>Bidirectional functionality is supported only with the client software from Novell. It is not supported with Microsoft Client Service for NetWare.

<sup>&</sup>lt;sup>3</sup>Novell Directory Services.

<sup>&</sup>lt;sup>4</sup>Printer Status and Alerts is not installed when the share computer is running Terminal Server.

UI control	UI	PML object for control	PML	Corresponding object ID
	default setting		default value	
Optional paper sources drop-down list	None	PHD1-MODEL PHD6-MODEL	пп	01,03,06,01,04,01,0b,02,03,09,04,02,01,04,01,07,03,01,04,00 01,03,06,01,04,01,0b,02,03,09,04,02,01,04,01,07,03,02,04,00
Type is:	No user- defined types	Media15Name Media19-Name	" "	01,03,06,01,04,01,0b,02,03,09,04,02,01,04,01,08,03,0F,01,00 01,03,06,01,04,01,0b,02,03,09,04,02,01,04,01,08,03,13,01,00

#### **Driver Autoconfiguration**

The HP LaserJet PCL 6 and PCL 5e drivers for Windows feature bidirectional communication technology which, in supported environments, provides automatic discovery and driver configuration for printer accessories at the time of installation or later, if needed. Some accessories that are supported by Driver Autoconfiguration are the duplexing unit, optional paper trays, dual inline memory modules (DIMMs), and the hard drive.

If the environment supports bidirectional communication, the installer presents Driver Autoconfiguration as an installable component by default for a Typical Installation, and as an optional installable component for a Custom Installation. The Driver Autoconfiguration component installs the bidirectional communication software. If the installation environment does not support bidirectional communication, the Driver Autoconfiguration option does not appear during installation. However, installed drivers will be configured automatically in accordance with the HP printer bundle that is selected during installation of the printing-system software.

Driver Autoconfiguration works in four ways:

- In environments that support bidirectional communication, the computer communicates with the printer, determines the physical configuration, and then configures the driver accordingly.
- If the configuration of the HP LaserJet 4200 and 4300 series printers change after installation, the driver can be
  automatically updated with the new configuration in environments that support bidirectional communication. For
  example, if the base printer model is installed and an optional duplexing unit is added later, you can automatically
  configure the duplexing unit in the driver by clicking the Update Now button on the driver's Configuration tab.

The **Update Now** button activates the HP Network Registry Agent (HPNRA) and triggers the driver to recheck the registry for new information. The HPNRA automatically updates the registry and changes the configuration information that appears on the **Configuration** tab in the Printer folder.



The bidirectional communication software necessary for the two methods of Driver Autoconfiguration described above is included in a Typical Installation when installing a network printer in supported environments. The feature is also a selectable option for a Custom Installation.

- In environments that do not support bidirectional communication, the driver automatically configures options based on the HP LaserJet 4200 or 4300 series printer bundle that is selected during the installation of the printingsystem software. Configuration is based solely on the definition of the printer bundle.
- Enterprise AutoConfiguration (EAC) is a version of bidirectional communication that provides autoconfiguration
  functionality for an Add Printer Wizard installation (when you do not use autoselect). An Add Printer Wizard
  installation that includes EAC is identical to other Add Printer installations, except that when installation is
  complete, the driver for the supported printer is configured with the same settings as the physical configuration of
  the device. Configuration occurs without user interaction.

If bidirectional communication software has been installed previously, EAC will not be activated, and the Add Printer Wizard uses the pre-existing bidirectional communication to configure the printer. If bidirectional communication software has not been installed, EAC configures the driver to match the device configuration, which it detects automatically. EAC is active only as needed to use the autoconfiguration utility, and is then shut off. The files required to install EAC remain on your system.

Software Technical Reference Software description 25

#### **HP Web Access**

The HP Web Access feature, also known as the embedded Web server (EWS), contains the following components:

- embedded virtual machine for Java (TM) applications
- Web pages
- storage space

HP Web Access is a standard feature for the HP LaserJet 4200 and HP LaserJet 4300 series printers.

HP Web Access provides a simple, easy-to-use solution for one-to-one printer management. In offices with a limited number of printers, remote management of printing devices can be accomplished without installing any management software, such as HP Web JetAdmin. The only requirement is that the management console have a supported Web browser.

In environments with a larger number of printers, where one-to-one management is impractical, HP Web Access and HP Web JetAdmin work together to provide scalable remote printer management. HP Web JetAdmin is used for consolidated management tasks, where operations are performed on a selected set of printers instead of on individual printers. For such environments, HP has provided hooks between HP Web Access and HP Web JetAdmin so that Web Access features can be configured on multiple printers in one operation. For example, the security password for HP Web Access can be set on a population of printers simultaneously.

For additional information and a copy of the **HP Embedded Web Server for HP LaserJet Printers** guide, go to one of the following Web sites:

#### http://www.hp.com/support/lj4200

#### http://www.hp.com/support/lj4300

To view information about the printer by using HP Web Access, open a supported Web browser and type in the printer TCP/IP address or host name. To find the TCP/IP address, look for "IP Address" on the enhanced input/output (EIO) Jetdirect page, in the "TCP/IP" section under "Protocol Information". To find the host name of the printer, look for "Host Name" in the "TCP/IP" section. To print a copy of the EIO Jetdirect page from the printer control-panel display, see the instructions for printing a configuration page in the "Determining the current level of firmware" section. You also can view information about an installed HP Jetdirect print server by clicking the **Networking** tab in the HP Web Access window.

#### Information tab

26

HP Web Access offers the following additional features. To view the information, click the items on the menu that is on the left side of the HP Web Access **Information** tab:

- Device Status. This page provides current status information about your printer.
- Configuration Page. This page provides information about the configuration for your printer.
- **Supplies Status**. This page provides information about the print cartridge and the total pages printed, and the serial number of the printer.
- Event Log. This page provides information about reported printer errors.
- Usage Page. This page provides information about printer usage.
- Device Information. This page shows device information, such as the printer TCP/IP address and serial number.
- Control Panel. This page shows the layout of the control panel.

#### **Device status**

If a printer problem exists, status information (such as whether the printer is online or the toner is low) is available through your Web browser on a computer that is linked directly to the printer. You can view this information without physically going to the printer to identify the status. The following illustration shows how this information is presented on the printer's Web page.

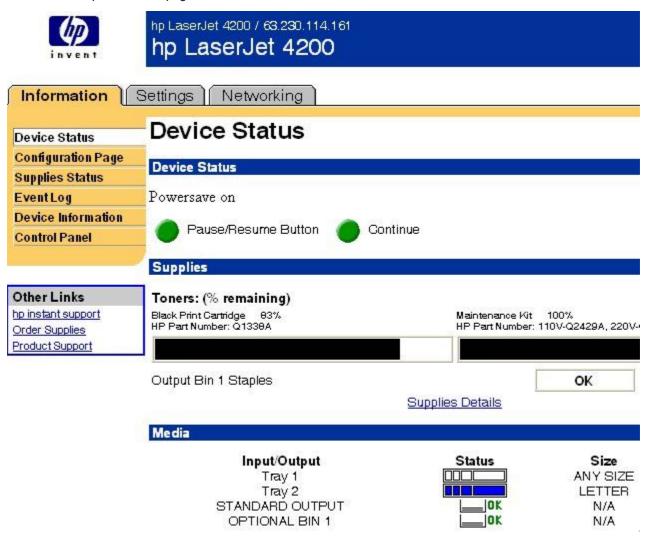


Figure 1: Device Status page

Software Technical Reference Software description 27

#### **Configuration information**

The HP LaserJet printer configuration page is available remotely through HP Web Access. The HP Web Access configuration page provides configuration information about the printer in the same way as the configuration page printed from the printer. The following illustration shows an example of a configuration page viewed remotely through HP Web Access.

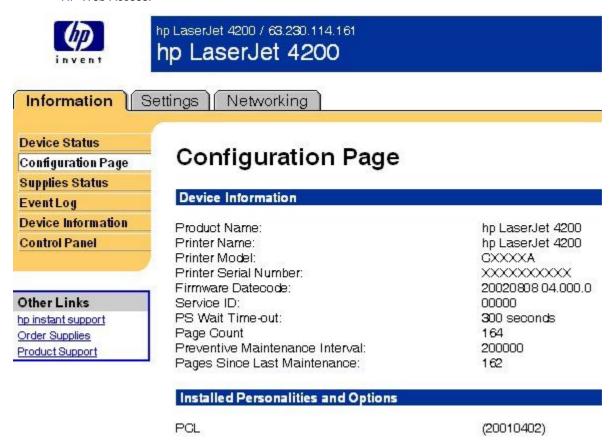


Figure 2: Configuration page

#### Links to off-printer solutions

Links within the home page of HP Web Access provide an easy way to locate information or complete tasks.

- **hp Instant Support**. This link connects you to a set of dynamic Web resources that help you solve specific problems and determine additional services that might be available for your device. Specific status and configuration information about the printer is retained and directed to the "Solve a Problem" Web site. This site offers targeted support content and messages to help resolve problems as quickly as possible.
- Order Supplies. Click this link to connect to an ordering page where you can order genuine HP supplies, such as print cartridges and paper.
- **Product Support**. This link connects you with an HP product support page from which you can search for information, contact the HP customer care home page, or find additional resources for your printer.

#### Settings tab

The options on the left of the **Settings** tab are as follows:

Configure Device

- Alerts
- Email
- Security
- Other Links
- Device Information
- Language
- Time Services

#### Remote printer configuration

Printer configuration information can be obtained through a Web browser by opening the printer HP Web Access page and changing any of the basic configuration information on the **Settings** tab. Security and password controls provide management information system managers with the level of control required within their environments. The following illustration shows an example of printer options that can be configured remotely.

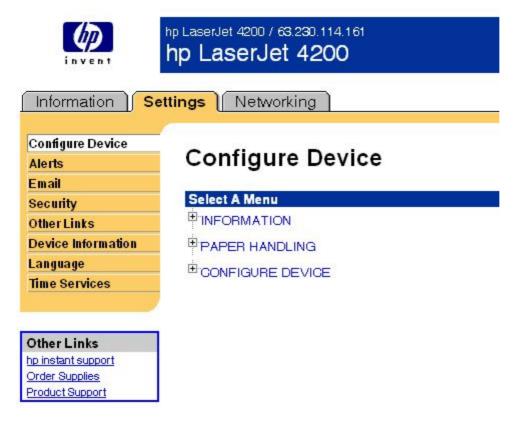


Figure 3: Configure Device

Some configuration tasks cannot be performed remotely because printed pages must be examined.

#### **Networking tab**

The following illustration shows the **Network Settings** option on the HP Web Access **Networking** tab.

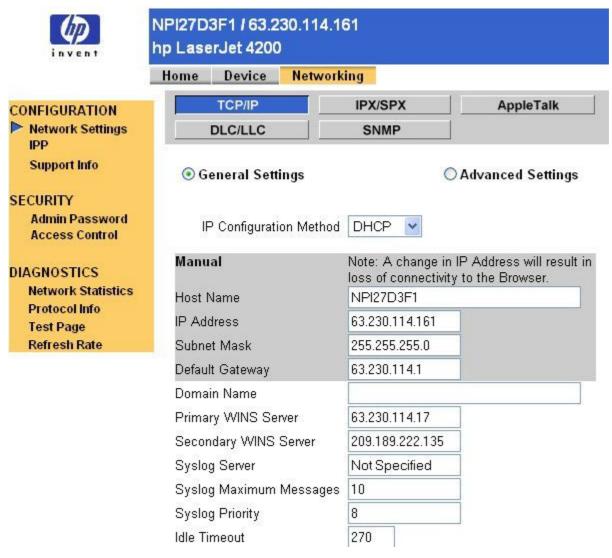


Figure 4: Networking tab

The menu on the left of the screen contains other networking options under three categories: configuration, security, and diagnostics.

#### Configuration

- Network Settings
- IPP (Internet Printing Protocol)
- Support Info

#### Security

- Admin Password
- Access Control

### **Diagnostics**

- Network Statistics
- Protocol Info
- Test Page
- Refresh Rate

### **Network settings**

From the **Networking** tab, you can enable and configure the following network protocols:

- TCP/IP
- IPX/SPX
- AppleTalk
- Data Link Control/Logical Link Control (DLC/LLC)
- Simple Network Management Protocol (SNMP)

Software Technical Reference Software description 31

#### Configurable e-mail alerts

The printer can automatically send e-mail alerts about printer problems or job status to specified e-mail addresses. For example, if toner is low, the printer can notify the person responsible for ordering or changing the cartridge. If there is a printer failure, an e-mail alert can be sent directly to the person responsible for fixing the problem. These e-mail alerts can be configured to be sent to any device that can accept e-mail, such as digital phones, pagers, and personal digital assistants. In large environments, administrators can route e-mail addresses to list-servers or universal resource locator addresses (URLs) for expanded notification.

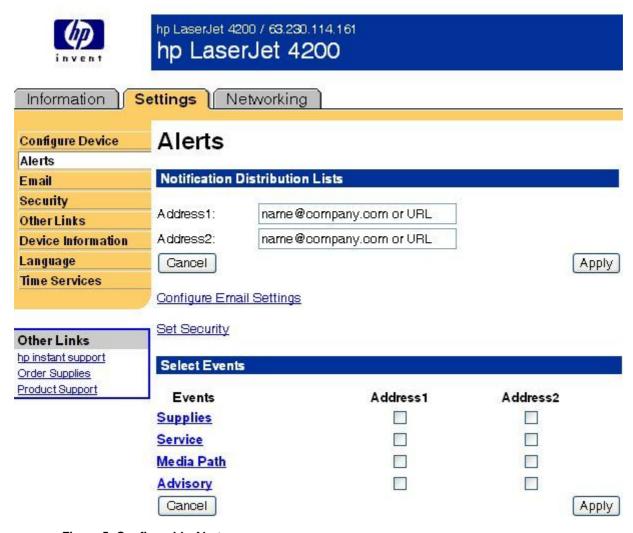


Figure 5: Configurable Alerts page

#### **Printer Status and Alerts**

The HP LaserJet printing-system software includes a utility called Printer Status and Alerts that you can use to monitor print jobs and printer status from the desktop. The Printer Status and Alerts feature provides printer and job status information such as printing history, job progress, toner and paper levels, and consumables and supplies reorder information, and presents a simulated view of the printer control panel. This utility offers several options for configuring pop-up windows to view the status of the printer and of individual print jobs.

Printer Status and Alerts is a selectable component of Custom Installation. To install Printer Status and Alerts, choose **Custom Installation** and select the appropriate check box.

Printer Status and Alerts features are available for printers connected by means of a connection, whether direct or over a network, that supports bidirectional functionality. The Printer Status and Alerts feature cannot be installed over infrared (IR) or serial ports. See "Bidirectional communication."

For Windows 95, the Microsoft Winsock2 patch must first be installed. To download the Microsoft Winsock2 patch, go to http://www.microsoft.com/windows95/downloads/contents/WUAdminTools/S\_WUNetworkingTools/W95Sockets2/Default.asp

For all operating systems, the computer must have Internet Explorer version 4.72 or later installed; version 5.0 or later is recommended.

HP Printer Status and Alerts communicates with the printer only during an active print job to minimize network traffic.

The following restrictions apply to HP products that use Printer Status and Alerts:

- Windows NT 4.0, Windows 2000, and Windows XP do not support Printer Status and Alerts with terminal servers.
- For Device Status (printer icons in the status window), the computer must have Internet Explorer version 4.72.x or later installed. To find the version number, open Internet Explorer, click **Help**, and then click **About Internet Explorer**. Netscape browsers do not support Printer Status and Alerts. No Internet Explorer is necessary for getting status about jobs. Internet Explorer can be installed after installing Printer Status and Alerts.
- Netscape browsers do not support HP Printer Status and Alerts.
- On a few programs, such as Microsoft Excel and Seagate Crystal Reports, multiple copies of the same document show up in the Printer Status and Alerts window as separate jobs. This is because these programs actually send each copy as a separate job.
- For Windows screen reader programs, such as Job Access With Speech from Freedom Scientific, the computer must have Internet Explorer version 5.0 or later installed. To find the version number, open Internet Explorer and click **Help**, and then click **About Internet Explorer**. Version 5.0 is reported as Version 5.00.x or later. No Internet Explorer is necessary for getting status about jobs for network-connected printers. Internet Explorer can be installed after installing Printer Status and Alerts.
- When renaming a driver, job and device status will not be tracked until the computer is restarted.
- Drivers added after Printer Status and Alerts is installed are not recognized until the computer is restarted.
- Clicking the Cancel button in the Printer Status and Alerts window will not always cancel a job. This button sends
  a cancel request to the printer, but if the job has already been processed, it might not be possible to cancel the job
  (this is commonly the case with smaller jobs).
- When using Printer Status and Alerts with Microsoft printer sharing, the following items apply:
- The Microsoft patch "Vredir" is required if you want to use Printer Status and Alerts on a Windows 98 or Windows
  Me computer for a printer that has been shared directly from a computer with Windows NT 4.0, Windows 2000, or
  Windows XP installed. Failure to install the patch could cause an intermittent blue screen to appear on the client
  computer.
- For Microsoft shared printers, the host system must have either **Printer Status and Alerts** or the **HP Driver Autoconfiguration** option from the HP installer on the computer. Load Printer Status and Alerts on the computer sharing the printer before loading Printer Status and Alerts on the client computer.
- For Windows 95, Windows 98, and Windows Me client computers that have Printer Status and Alerts installed, installing a printer by using the Point and Print method will not activate Printer Status and Alerts.

Software Technical Reference Software description 33

When the Printer Status and Alerts feature is installed, a status icon in the form of a printer is included in the Windows system tray in the lower-right corner of the screen. The printer icon remains unchanged until you send a print job to the HP LaserJet 4200 and 4300 series printers. When you send a print job, the icon changes to alert you to the status of the print job. Eight icons exist in this feature. The eight icons in the following illustration show current job status. Neither the **Receiving nor the Waiting** icon ever shows up in the Systray. When the print job is in a receiving or waiting state, the **Printing** icon appears in the Systray.

The icons behave differently, depending on whether the printer is connected through a direct connection (universal serial bus [USB] or parallel) or through a network.



Figure 6: Printer Status and Alerts icons

Double-click the status icon to open the Printer Status and Alerts window, shown in the following illustration.



Figure 7: Printer Status and Alerts window

Note

The appearance on the screen varies according to the HP LaserJet printer and its configuration.

The Printer Status and Alerts window consists of two panes. The left pane shows icons for the available printers, an icon for each current print job in progress, and an **Options** icon. The right pane provides information based on what is selected in the left pane. The buttons at the top can be used to perform the following functions:

- Left arrow: Return to the previous pane.
- Right arrow: Go to the next pane.
- Circular arrows: Refresh the pane.
- Home: Return to the device status.
- Clock face: Show print-job history.

Click a printer icon in the left pane to view information about the printer and supplies or to view a history of recent print jobs. The following printer information is available:

- Device Status indicates the current status of the HP LaserJet 4200 or 4300 series printer.
- Supplies shows information about the percentage of print-cartridge life remaining.
- Media provides information about paper-handling devices and the status of each device. For example, this section
  of the window shows the level of media present in each input device, as well as the status of output devices. This
  section also provides information about the type and size of media loaded in each input device.
- Capabilities provides information about such things as installed trays, paper-handling devices, and disk storage.
   Also listed are DIMM slots, the printer serial number, and the firmware date code. Click a print job icon to see information about the progress and status of the print job. Click the Options icon to select options for configuring pop-up status windows that contain document alerts and to set the refresh rate for showing printer status information.

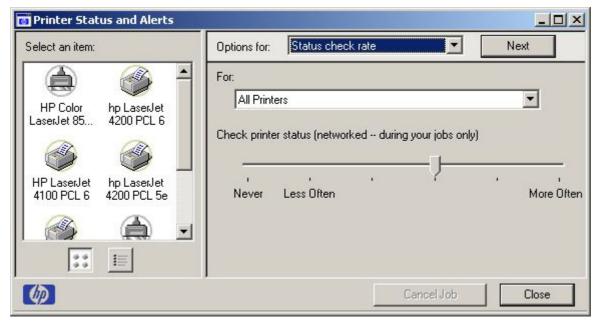


Figure 8: Refresh rate option

Note

The appearance of the screen varies according to the HP LaserJet 4200 or 4300 series printer and its configuration.

Software Technical Reference Software description 35

There are six settings for the refresh rate. The default setting is halfway between Less Often and More Often.

The **Less Often** setting specifies the least frequent update intervals, which have minimal impact on network traffic. The **More Often** setting updates the status more frequently, but also has the most impact on traffic. The **Never** setting disables the job-status monitoring mechanism for the selected printer. If the refresh rate for a given printer is set to **Never**, then subsequent jobs sent to that printer will not appear in the Printer Status and Alerts window. If the **Never** setting is selected when the scope control is set to **All Printers**, then all job-status monitoring will be disabled. However, even when job-status monitoring is disabled, you can still open the status window and view the printer status panels.

Changes to the refresh rate settings affect any subsequent jobs submitted to the affected printer. Existing jobs that are already being processed have a fixed refresh rate which was determined (according to the setting in the Refresh Rate panel) when the job was submitted.

Refresh-rate intervals for direct-connect printers are as follows:

Less Often setting: 5 minutes

One setting to the right of Less Often: 2 minutes

Two settings to the right of Less Often: 1 minute

Three settings to the right of Less Often: 30 seconds

More Often setting: 10 seconds

On network printers, the refresh-rate interval changes, depending on the stage of the print job.

The Alerts options panel has controls to determine when the Printer Status and Alerts window automatically appears for each printer that has an icon in the left pane. The drop-down menu provides a list of available printers for which to make the selection. An option for all printers is included as the default selection. Each of the three, four, or five available selections, depending on the printer connection type, causes the Printer Status and Alerts window to automatically appear when that alert condition arises.

The availability of each alert option and the default selection varies depending on connection type. The following table shows the default state of the alerts panel as it relates to connection type.

Table 4: Default alerts selection state for connection type

Connection type	Alerts (first two options)	Printer warning condition	Toner low	Printer error condition
All printers	Selected and activated <sup>1</sup>	Selected and activated	Selected and activated	Selected and activated
Direct connect	Selected and activated	Selected and activated	Selected and activated	Selected and activated
Network	Selected and activated	Selected and activated	Unselected and grayed out	Selected and activated

<sup>&</sup>lt;sup>1</sup>"Activated" means that the option is available; "selected" means that the option is selected by default.

Printers that are involved with at least one active print job are queried for job status periodically according to the **Status Check Rate** setting. If an error or a warning condition is detected, the Printer Status and Alerts window will automatically appear according to the **Alerts** options.



Depending upon the options you select, information in the status window changes for each job printed, each job completed, and each warning condition detected.

Software description Software Technical Reference

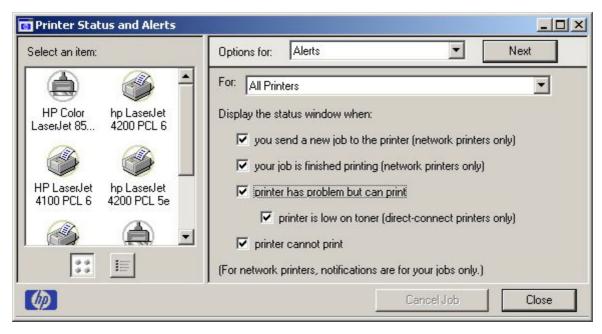


Figure 9: Printer Status and Alert options

Note

The appearance of the screen varies according to the HP LaserJet 4200 or 4300 series printer and its configuration.

#### E-mail command and response

The HP LaserJet 4200 and 4300 series printers can send e-mail messages directly. However, you must configure e-mail information to initiate this capability. One use for this feature is to send diagnostic information to solve a printer problem. An e-mail sent to the printer requests configuration information. The printer automatically sends that information back to the service provider. In many cases, the problem can be identified quickly and solved remotely. For more information about e-mail command and response, see the **HP Embedded Web Server for HP LaserJet Printers** quide.

To configure your printer to send e-mails, follow these steps:

- Take note of your printer's TCP/IP address on the EIO X JetDirect page (this is the second page of the Configuration Page printout. The number indicated by "X" may vary. To print a configuration page, see "Determining the current level of firmware".)
- 2 Launch your Web browser.
- In the **Address:** or **Go to:** field, type the TCP/IP address assigned to the printer (for example, 192.168.0.20) or the host name (for example, http://myprinter). The HP Web Access home page appears.
- 4 From the top of the HP Web Access screen, click **Device**.
- 5 On the navigational bar on the left, click Alerts.
- 6 Under Notification Recipients, type your e-mail address (for example, "name@company.com".)
- 7 Click Apply.
- 8 Under Select Events, click Media Path.
- 9 Select the List1 check box next to CLOSE DRAWERS/DOORS/COVERS.
- 10 Click Apply. A screen stating that your selections have been accepted should appear. Click OK.
- 11 In the **SMTP Server:** field under Outgoing Mail, type the TCP/IP address for the SMTP server (for example, 192.168.0.201).
- 12 In the **Domain Name:** field under **Outgoing Mail**, type the domain name.

- 13 Click Apply.
- 14 Click Security.
- 15 Under Security, select the Outgoing Mail check box.
- 16 Click Apply.
- 17 To test the configuration, open the top cover of the printer, then go to your computer and verify that you have received an e-mail message from the printer.

#### **Euro character**

The euro is the name for the currency of the European Union (EU). Use of this unit was launched on January 1, 1999. The euro has changed the way business is conducted in Europe and has affected every company and industry in the world. It is vital that companies understand and prepare for the changes the euro brings.

This HP LaserJet 4200 and 4300 series printers include euro characters for each of the internal fonts. The printer can print the euro character in the Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP operating systems. Hewlett-Packard is committed to maximizing document portability through supporting and promoting euro-symbol standards.

38 Software description Software Technical Reference

#### **Printing-system components**

#### Printing system and installer

#### HP LaserJet 4200 and 4300 software CD-ROMs for Windows systems

In previous versions of the printing-system software, the installer was started by locating and running the SETUP.EXE file. For the Microsoft Windows environment (Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP), the HP LaserJet software CD-ROM provides an interactive software window that you can use not only to install the printer drivers and related components, but also to gain access to online product registration, user documentation, a customization utility, Adobe Acrobat Reader software, and optional HP software.

The following illustration shows the main screen of the HP LaserJet 4200 and 4300 software CD-ROMs, which appears when you insert the printing software CD-ROM in your CD-ROM drive. If the screen does not appear when you insert the CD-ROM, click **Start**, click **Run**, click **Browse...**, navigate to the root directory of the CD-ROM, and then double-click the SETUP.EXE file to start the CD-ROM.



Figure 10: Installation software CD-ROM main screen

The HP LaserJet 4200 and 4300 software CD-ROMs contain the following options. The text that follows each of the following options is approximately the same text that appears when you put the cursor on the option button.

Note

The options on your printer might vary from the illustration.

**Install Printer** - This wizard guides you through the installation of your HP LaserJet printing system. You are given the choice of performing a Typical Installation or a Custom Installation. If you select Typical Installation, only the necessary software will be installed. If you select Custom Installation, you can select the components you want to install.

Software Technical Reference Software description 39

**Register Product** - This option can be used to register your HP LaserJet 4200 or 4300 series printer now and to receive the following information at no cost:

- notification of driver updates
- technical support updates
- news about emerging technologies

**View Documentation** - This option can be used to view the HP LaserJet 4200 and 4300 series printers documentation. The following document options are available:

- Readme
- User's Guide
- HP Jetdirect Guide
- Release Notes

Note

For systems that do not have Adobe Acrobat Reader 4.0 (or later) installed, you will be given the option to download that software. Clicking any of the links to documentation that is provided in the Adobe Acrobat PDF file format opens a dialog box from which you can install Adobe Acrobat Reader software from the HP LaserJet 4200 and 4300 software CD-ROMs.

**Customization Utility** - This utility can be used to create a custom software installer for the HP LaserJet 4200 and 4300 series printers that can then be copied to other media, such as a local hard drive or a network drive.

**Optional Software** - To increase productivity and get the most out of your HP LaserJet 4200 or 4300 series printer, view a list of optional software available for installation. The **HP Web Jetadmin** option is available for the HP LaserJet 4200 and 4300 series printers.

#### Installer features

The common installer is designed to provide a simple and consistent installation method for the product line. The common installer is available for the Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP operating systems.

The common installer offers the following features:

- The HP LaserJet 4200 and 4300 software CD-ROM features an interactive software interface. See "HP LaserJet 4200 and 4300 software CD-ROMs for Windows systems."
- Acrobat Reader 5.0 is automatically installed (Acrobat Reader 4.05 is installed for languages that read from right to left).
- The installer is Web-enabled, providing access to the HP Web site for the latest software components and drivers.
- Network connection is integrated so that you can install drivers and connect to a network printer in a single process.
- The selection dialog box sets the operating-system language as the default language (for Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP only). You can use the installer to select any of the languages on the HP LaserJet software CD.
- The installer includes the HP LaserJet Uninstaller Utility.
- Product registration is available using the Web and e-mail.
- The Customization Utility is available on the HP LaserJet 4200 and 4300 software CD-ROMs.

All of the Windows system components are installed by using the HP LaserJet printing-system installer. The installer automatically senses your language of choice and your operating system. It offers selections for each printer model. You can select the type of installation you prefer: Typical Installation or Custom Installation.

When performing a Web installation, the installer compares the versions of the software components on the HP LaserJet software CD-ROM to those on the HP Web site. If newer versions are on the HP Web site, the installer downloads them.

40 Software description Software Technical Reference

#### Installable components

This section provides information about the various installable components available either with the HP LaserJet software CD-ROM or from the HP Web site.

#### **Printer drivers**

HP supports the use of older drivers with new printers. Because earlier (legacy) HP LaserJet printers might have different versions of the PCL language, new drivers are not supported with legacy printers. The drivers associated with each printer use the version of PCL language that is installed in the printer.

The printing system for the HP LaserJet 4200 and 4300 series printers include the following printer drivers.

#### PCL 5e, PCL 6, and PS drivers

The PCL 5e, PCL 6, and PS drivers are included with the HP LaserJet software CD-ROM. The PCL 5e and PCL 6 drivers feature a graphical user interface that has a shared look and feel.



PCL 5e is not supported in Asian languages.

If a Typical Installation is chosen during installation of the printing system software, the PCL 6 driver is set as the default driver.

All three drivers provide access to the printer paper-handling and print-quality features.

#### Windows 95, 98, Me, NT 4.0, 2000, and XP driver versions

PCL 5e and PCL 6 support for Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP operating systems is provided by using the HP LaserJet 4200 and 4300 printer drivers for the HP LaserJet 4200 and 4300 series printers. For Windows 2000 and Windows XP, the HP LaserJet 4200 and 4300 generic printer description (GPD) provides information about printer features for the PCL 5e and PCL6 drivers. The HP LaserJet 4200 and 4300 PS printer description (PPD) provides PS feature support for the HP LaserJet 4200 and 4300 series products.]

You can view the printer driver version number by clicking the HP logo in the lower-left corner of the following HP PCL 5e and PCL 6 printer-driver tabs:

- Configure
- NT Forms
- Finishing
- Effects
- Paper
- Destination
- Basics

#### Macintosh and Macintosh-compatible system-driver versions

The HP LaserJet printing solution for Macintosh is composed of the Apple LaserWriter driver, which is provided with the operating system, and HP-created PPD files. The driver uses these files to determine the features and PS commands that the printer supports. Bidirectional support in AppleTalk and USB connections supports autoconfiguration of the software. The installable components are:

- the HP LaserJet Installer for Mac OS 8 and Mac OS 9.
- the HP LaserJet Installer for Mac OS X.
- the HP LaserJet Screen Fonts Installer.
- SYSTEM/EXTENSIONS/PRINTER DESCRIPTIONS (for Mac OS 8 and Mac OS 9).

- LIBRARY/PRINTERS/PPDS/CONTENTS/RESOURCES/LANGUAGE.LPROJ (for Mac OS X).
- the HP LaserJet Utility, an HP printer utility that is installed in the HP LaserJet folder of Mac OS 8 and Mac OS 9. It provides configuration and management support for PS and PCL printers.
- online Help, an HTML-based printer and utility help that can be viewed through a browser or in the Macintosh OS Help Center.
- the HP Auto Setup Utility, installed in the Startup Items folder of Mac OS 8 and later versions. It provides assistance to set up the new printer, then moves itself to Trash.
- installation notes.

#### Additional driver availability

Additional drivers are available from your Hewlett-Packard distributor or from the Web site.

These drivers are:

- OS/2 PCL 5e, OS/2 PS, and OS/2 PCL 6 printer drivers. The OS/2 drivers are available from IBM and are packaged with OS/2.
- UNIX model scripts. Go to http://www.hp.com/support/net\_printing, and then select hp printer installation software for further information about UNIX drivers.
- Linux drivers. Go to http://www.hp.com/go/linux for further information about Linux drivers for HP LaserJet printers, or to http://hp.sourceforge.net (HP Linux support home page).

#### **Macintosh components**

- HP LaserJet PPDs for past projects
- Screen fonts

#### Additional productivity tools

#### **HP Web Registration**

You can use this component to register your HP LaserJet printer on the HP Web site or through e-mail. After you have successfully installed the software, the installer prompts you to register your HP LaserJet printer. Also, you can gain access to HP Web Registration from the HP LaserJet 4200 and 4300 software CD-ROMs by clicking **Register Product**. You can choose to complete the online registration at that time or later. If you want to register your printer later, click **Register Product** from the HP LaserJet program group when you decide to complete your registration.

#### **Optional software**

The HP LaserJet 4200 and 4300 software CD-ROMs provide links to download and install HP Web JetAdmin as optional software.

#### **HP Web JetAdmin**

Use HP Web JetAdmin to manage HP Jetdirect connected printers within your intranet by using a browser. HP Web JetAdmin is a browser-based management tool and should be installed only on the network administrator's computer.

When it is installed on a host server, any client can use HP Web JetAdmin through a supported Web browser (such as Microsoft Internet Explorer 4.x or later, or Netscape Navigator 4.x or later) by browsing to the HP Web JetAdmin host. HP Web JetAdmin 6.2 and later have the following features:

- task-oriented user interface, providing configurable views for network managers
- customizable user profiles that can be customized to let network administrators include only the function that is being viewed or used
- routing of instant e-mail notification of hardware failure, low supplies, and other printer problems to different people
- remote installation and management from anywhere by using only a standard Web browser

42 Software description Software Technical Reference

- advanced automatic discovery of peripherals on the network without manually typing information about each printer into a database
- simple integration into enterprise-management packages
- capacity to find peripherals based on parameters such as the Internet protocol (IP) address, color capability, and model name
- capacity to organize peripherals into logical groups, with an option that provides virtual office maps for easy navigation

HP Web JetAdmin can be used for access to HP Web Access (the embedded Web server), ordering supplies, and remote firmware updates.

The HP LaserJet 4200 and 4300 software CD-ROMs provide a link to the HP Web site (http://www.hp.com/go/webjetadmin) to download the latest version of the HP Web JetAdmin software. Click Optional Software from the CD-ROM browser, and then click HP Web JetAdmin. HP Web JetAdmin is available for the following network operating environments:

- Microsoft Windows 2000
- Microsoft Windows NT 4.0
- Red Hat Linux 7.1
- SuSE Linux 7.1

Software Technical Reference Software description 43

# 3

# Driver features

#### Introduction

This chapter describes the features of the following drivers for supported operating systems for the HP LaserJet 4200 and 4300 series printers:

- PCL 5e and PCL 6 drivers for Windows 95, Windows 99, Windows Me, and Windows NT 4.0
- PCL 5e and PCL 6 drivers for Windows 2000 and Windows XP
- PostScript driver
- Structure and availability of the printing-system software CD-ROM

# PCL 5e/PCL 6 driver features for Windows 95, Windows 98, Windows Me, and Windows NT 4.0

This section describes the options that are available on each tab of the PCL 6 and PCL 5e driver interfaces.

# **Help system**

The HP LaserJet PCL 6 and PCL 5e drivers include a full-featured Help system to provide assistance with printing and configuration options.

#### What's this? Help

In Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP, What's this? Help is supported. You can gain access to What's this? Help messages in any of the following ways:

- Right-click a control and click What's this?, and a pop-up Help window appears.
- Click the ? button at the upper-right corner of the frame, next to the X, to change the cursor to an arrow with a question mark. Use this special cursor to select a control, and the pop-up Help window for that feature appears.
- Press the F1 key, and the Help window for the currently selected control appears.

#### **Context-sensitive Help**

Press the **Help** button on a driver tab or in a dialog box, and context-sensitive Help appears.

#### **Constraint messages**

Constraint messages are unsolicited messages that appear in response to specific actions you take. These messages alert you to selections that are illogical or impossible given the capabilities of the printer or the current settings of other controls. For example, if you click **Print on Both Sides** and then change the paper type to transparencies, a message appears asking you to resolve this conflict.

A typical constraint message with an OK button

Whenever a constraint message appears with the **OK** or **Cancel** button, the interpretation of the button is as follows:

- Clicking OK accepts the change that was just made, and the driver then resets the conflicting control to a setting
  that is compatible with the new value.
- Clicking Cancel rejects the change that was just made, returning the control to its previous value.

#### **Bubble Help**

Bubble Help features a graphical icon resembling a cartoon speech bubble with a small i in it, representing the international symbol for information. The following illustration shows Bubble Help icons on a driver tab.

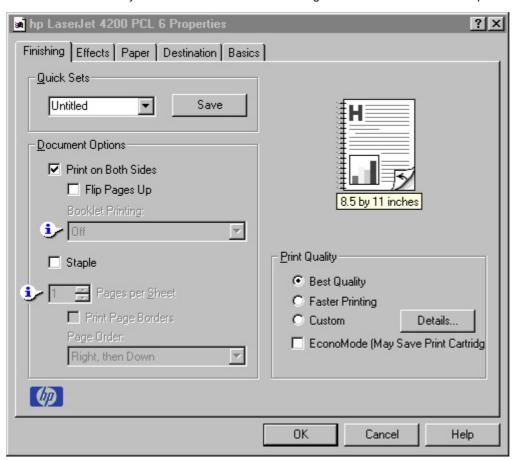


Figure 11: A property page with Bubble Help icons

The bubble typically appears next to a disabled control, although it can also accompany an enabled control if there is an important note concerning its use. Moving the pointer over the bubble changes the arrow to a gloved hand, which indicates that the area underneath the pointer is selectable. When the bubble is selected by using either the mouse or the keyboard, a message box appears that contains a brief explanation about why the control is disabled and what can be done to enable it. If the control is not disabled, the message is a tip or a precaution to be aware of when using that particular feature.

The following table lists Bubble Help messages and the conditions that cause them to appear.

#### Table 5: Bubble help messages

rance or managed		
Condition	Effect	Message
Finishing tab: Pages per Sheet is	Finishing tab: Booklet Printing	To use this feature, set Pages per
greater than 1	is not available if Print on Both	Sheet to 1.
	Sides check box is selected.	

Condition	Effect	Message
Finishing tab: Pages per Sheet is	Effects tab: Print Document On	To use this feature, set Pages per
greater than 1	is not available.	Sheet to 1.
Finishing tab: Pages per Sheet is	Effects tab: % of Normal Size is	To use this feature, set Pages per
greater than 1	not available.	Sheet to 1.
Finishing tab: Booklet Printing	Finishing tab: Pages per Sheet	To use this feature, set the
setting is any setting except Off.	is not available.	Booklet Printing option to Off.
Finishing tab: Booklet Printing	Effects tab: Print Document On	To use this feature, set the
setting is any setting except Off.	is not available.	Booklet Printing option to Off.
Finishing tab: Booklet Printing	Effects tab: % of Normal Size is	To use this feature, set the
setting is any setting except Off.	not available.	Booklet Printing option to Off.
Effects tab: The Print Document	Effects tab: % of Normal Size is	To use this feature, turn off the
On check box is selected.	not available.	Print Document On option.
Effects tab: The Print Document	Paper tab: A Help bubble points	Although your document will be
On check box is selected.	to Size Is.	formatted for the paper size indicated, it will be printed on the
		paper size specified on the
		Effects tab.
Effects tab: The Print Document	Finishing tab: Pages per Sheet	To use this feature, turn off the
On check box is selected.	is not available.	Print Document On option.
Effects tab: The % of Normal	Effects tab: Print Document On	To use this feature, set % of
Size setting is any value except	is not available.	Normal Size to 100.
100%.		
Effects tab: The % of Normal	Finishing tab: Booklet Printing	To use this feature, set % of
Size setting is any value except	is not available.	Normal Size to 100.
100%.		
Effects tab: The % of Normal	Finishing tab: Pages per Sheet	To use this feature, set % of
Size setting is any value except	is not available.	Normal Size to 100.
100%.		
Paper tab: Type Is setting is	Finishing tab: Bubble Help	This feature is not available with
Transparency, Labels, or	points to the Print on Both	the currently selected paper type.
Envelope.	Sides check box.	Ti. ( )
Paper tab: The Size Is setting is	Finishing tab: Bubble Help	This feature is not available with
for any envelope.	points to the <b>Print on Both Sides</b> check box.	the currently selected paper size.
Paper tab: The Size Is setting is	Finishing tab: Bubble Help	To use this feature, set the paper
for anything except Letter, Legal,	points to the <b>Booklet Printing</b>	size to Letter, Legal or A4.
or A4.	drop-down menu, which is not	Size to Letter, Legal of A4.
01711.	available.	
Paper tab: The Source Is tray in	Paper tab: Bubble Help points to	In order to use this feature,
the Other Pages mini-tab is the	Type Is drop-down menu.	choose a source tray that is
same as the one defined in the	<b>7.</b>	different from tray used for the first
First Page mini-tab.		page.
Effects tab: Number of	Effects tab: Bubble Help points	You cannot add a new watermark
watermarks exceeds 30.	to Watermarks.	because the list is full. You can
		edit existing watermarks, or you
		can delete unused ones to make
Didinational communication is	Operformer talks III also No.	more room.
Bidirectional communication is not	Configure tab: Update Now	The configuration settings cannot be updated automatically because
installed.	button is not available.	bidirectional communication is not
		available.
		G. G. IGNIO1

Software Technical Reference Driver features 47

Condition	Effect	Message
Finishing tab: The Print on Both	Basics tab: Bubble Help points	Only one copy is allowed per job
Sides check box is selected, and	to the <b>Copies</b> option.	for manual duplex printing. To
the Allow Manual Duplexing		change this feature, first disable
check box (on the <b>Configure</b> tab)		the Print On Both Sides option.
is also selected.		

# Finishing tab features

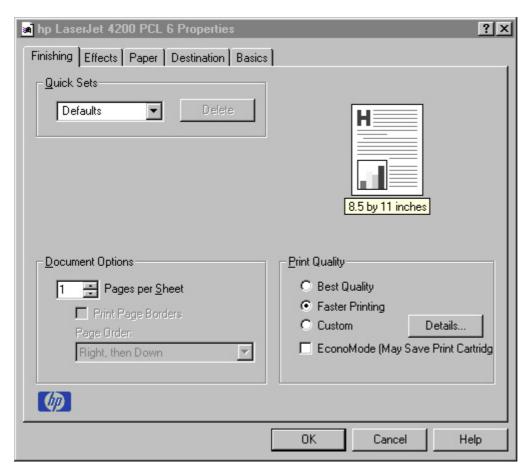


Figure 12: The default appearance of the Finishing tab

The options in the **Print Quality** group box might vary, depending on your HP LaserJet 4200 or 4300 series printer. The **Finishing** tab contains a document preview image and three group boxes:

- Quick Sets
- Document Options
- Print Quality

#### **Document preview image**

The preview image is a line-drawn image of a page that represents graphics and text. For color printers the bitmap contents appear in color, while for monochrome printers the contents appear in tones of gray. The image is always oriented so that the contents of the page are right-side up. The preview image appears in the upper-right corner of all properties tabs except for the **Configure** tab.

Switching between tabs does not change the location or appearance of the preview image. When you move the mouse over the preview image, the mouse cursor changes from an arrow to a gloved hand. You can toggle between portrait and landscape page orientation by clicking on the image. The light-yellow dimensions label that appears below the preview image reflects the selected page size. The horizontal dimension is always first, so the order of the numbers will reverse when the orientation changes. Click on the label to toggle between English and metric units.

#### **Quick Sets**

Quick sets is a feature that is available on all tabs (except NT Forms and Configure) and that is used to store the current combination of driver settings that are found on all other tabs (except NT Forms and Configure). Quick sets are either preset or user-defined printing specifications (such as paper size, pages per sheet, and so on).

#### **Defaults**

The default setting is **Defaults**. Other settings are **User's Manual** and **Untitled**. When **Defaults** is selected, nearly all of the settings are restored to the combination that existed after the driver was installed (the original settings). However, if the attribute combinations that are associated with watermark definitions, custom paper sizes, or the **User's Manual** quick set have been changed or deleted, the original settings are not restored.

The **Defaults** setting appears automatically if no other driver settings have been changed since the driver was installed, or if all driver settings match the original settings. Otherwise, the setting in the Quick Sets menu will be the same label that appeared when you last closed the printing **Properties** dialog box by clicking **OK**.

The following table shows the default settings for Quick Sets. See "Driver Management Configuration" (DMC) for information about preconfigurable DMC settings.

Table 6: Quick Set default values for the HP LaserJet 4200 and 4300 series printers

Driver feature	US English Quick Sets default values	Other language default setting (if different)	DMC Preconfigurable
Print on both sides	Off	,	Υ
Flip pages up	Off		Υ
Booklet printing	Off		Υ
Staple	Off		Υ
Pages per sheet	1		Υ
Print page border	Off		Υ
Page order	Right, then down		Υ
Print quality	Best quality		Υ
EconoMode	Off		Υ
Current setting	PCL6: This is the "Faster Printing" setting	PCL5e: This is the "Best Quality" setting	N
Rendering mode <sup>1</sup>	Automatic		N
Resolution	PCL6: FastRes 1200	PCL5e: 600 dpi	N
REt	On	PCL5e = On	N
Scale patterns (WYSIWYG)	On	PCL5e = On	N
Print text as black	Off		Υ
TrueType as bitmaps	Off send TrueType fonts as outlines	On <sup>2</sup>	Y <sup>3</sup>
Print document on	Off - print on size specified in Paper tab		Y
Size to print on	Letter	A4	Υ
Scale to fit	On		Υ
% of normal size	100		Υ
Watermarks	(none)		γ4
Watermarks first page only	Off		γ4
Current watermarks	(none), Confidential, Draft, SAMPLE		Υ <sup>4</sup>

Driver feature	US English Quick Sets default values	Other language default setting (if different)	DMC Preconfigurable
Watermark message	(none)		γ4
Watermark message angle	Diagonal		Υ <sup>4</sup>
Watermark message	52		N
custom angle			
Watermark font name	Arial		Y 4
Watermark font color	Gray		Y 4
Watermark font shading	Very Light		γ4
Watermark font size	150		N
Watermark font style	Regular		γ4
Mini pages tab	All pages		N
Use different paper for first	Off all pages use the		N
page	same paper		
All pages and first page size is	Letter	A4	Y
All pages and first page source is	Auto Select		Y
All pages and first page type is	Unspecified		Υ
Other pages source is	Auto Select		N
Other pages type is	Unspecified		N
Back cover	No back cover		N
Back cover source is	Auto Select		N
Back cover type is	Unspecified		N
Custom width	8.50 inches	216 mm	N
Custom paper size height	11.0 inches	279 mm	N
Paper size units	Inches	Millimeters	N
Destination features	Job Storage		N
Job storage mode	Off		N
Job storage require PIN to print	Off		N
Job storage user name	User logon name <sup>5</sup> , UNTITLED		N
Job storage job name	UNTITLED		N
Job storage PIN to print	0000		N
Output bin	Top bin (face-down)		Υ
Output bin option	(none)		Υ
Copies	1		Υ
Orientation	Portrait		Υ
Rotate by 180 degrees	Off		Υ

<sup>&</sup>lt;sup>1</sup> PCL 5e only

#### **User's Manual**

The User's Manual setting provides a Quick Set for optimal printing of the HP LaserJet 4200 and 4300 User's Guide.

<sup>&</sup>lt;sup>2</sup> Thai only

<sup>&</sup>lt;sup>3</sup> N (Thai)

<sup>&</sup>lt;sup>4</sup> N (Windows 95, Windows 98, and Windows Me)

<sup>&</sup>lt;sup>5</sup> Windows NT 4.0 only

#### **Custom Quick Sets (Untitled)**

When you change any of the default settings on the **Finishing** tab or any of the other tabs, the name in the **Quick Set** drop-down menu dynamically changes to **Untitled**. If you want to save this configuration as a Quick Set, highlight the word **Untitled**, type the name you want for your new Quick Set, and click **Save**. Quick sets are saved in the system registry. To delete a Quick Set, select it from the drop-down menu and click **Delete**.

You can store a maximum of 25 user-defined Quick Sets on a particular system. If you attempt to save too many, a message box appears that reads, "There are too many Quick Sets defined. Please delete some before adding new ones."

#### **Document Options**

#### **Print on Both Sides option**

The default setting for the **Print on Both Sides** option is OFF (not selected). **Print on Both Sides** is not available when:

- Type is on the Paper tabis set to Transparency, Cardstock, or Labels.
- **Size is** is anything except Letter, Legal, A3, A4, A5, B4, B5 (Japanese Industry Standard, or JIS), Executive, 11 x 17, or custom sizes greater than or equal to 148 mm by 210 mm (5.8 inches by 8.3 inches) and less than or equal to 312 mm by 470 mm (12.3 inches by 18.5 inches).

When **Paper Size** is set to Letter, Legal, or A4, clicking **Print on Both Sides** makes the **Flip Pages Up** and **Booklet Printing** options available. The default for both of these options is OFF.

#### Flip Pages Up

The **Flip Pages Up** check box, enabled only when **Print on Both Sides** is selected, is used to specify the duplex-binding option. The following table demonstrates the results of selecting this box, depending on the paper orientation selected on the **Basics** tab.

**Table 7: Page orientation** 

Orientation (Basics tab)	Flip Pages Up selected	Flip Pages Up not selected	
Portrait	Short-edge binding	Long-edge binding	
Landscape	Long-edge binding	Short-edge binding	

When **Print on Both Sides** is selected, the document preview image changes to show a spiral binding along either the left or the top edge of the page. In addition, a folded-over corner appears in the lower-right portion of the preview image, indicating that printing will occur on the back side. An arrow on the folded-over corner points in the direction that the pages would be flipped if they were bound together.

#### **Booklet Printing**

The **Booklet Printing** drop-down menu, visible when **Print on Both Sides** is selected, offers eight choices, two of which are based on the current paper size. The list contains the items such as the following examples:

- Of
- [paper size] (Left Binding)
- [paper size] (Right Binding)

where [paper size] depends on the paper size set on the **Paper** tab. The following table shows the appropriate entries in the **Booklet Printing** drop-down menu for each selected paper size.

Booklet printing is disabled when the following paper sizes are selected: Executive, A3, A5, B4, B5, and 11 by 17, and envelopes and postcards of any size.

The Booklet Printing drop-down menu appears only when:

- Print on Both Sides is selected.
- % of Normal Size (on the Effects tab) is 100.
- Pages per Sheet is 1.
- Print Document On (on the Effects tab) is not selected.

If any except the first of these conditions is not met, a Bubble Help appears next to **Booklet Printing** to tell you why it is disabled.

#### **Activating booklet printing**



The following instructions apply only to PCL drivers. The PostScript (PS) driver supports booklet printing through Windows programs that provide booklet-printing configuration settings.

1 Click File, click Print, and then click Properties.

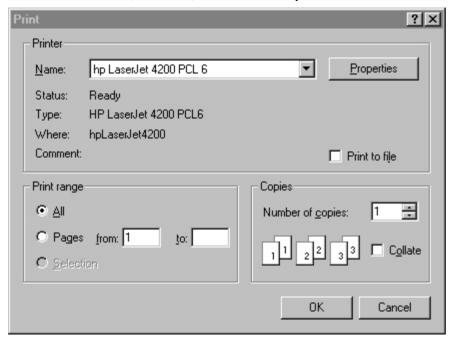


Figure 13: Activating booklet printing

- 2 Click the **Finishing** tab. On the drop-down menu, select **Print on Both Sides**.
- 3 In the **Booklet Printing** drop-down menu, select the type of booklet printing that you want. The booklet printing type consists of the media size and the location of the binding (for example, Letter [Left binding]).

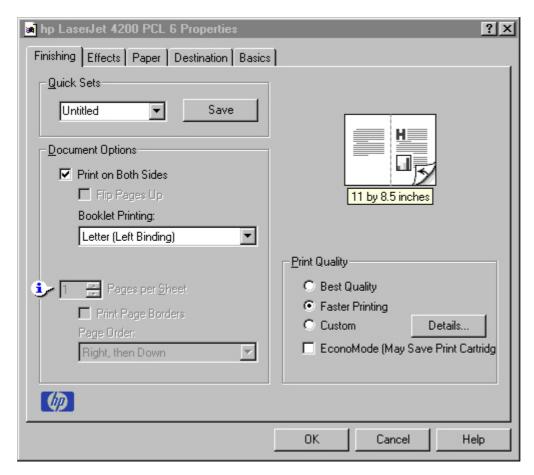


Figure 14: Selecting booklet printing type

Note

The appearance of the screen might vary from product to product. Print Quality settings, for example, can be "600 dpi", or "Faster Printing", or "Default".

#### Selecting a booklet cover

The booklet cover must be the same size as the inside sheets.

- 1 Click File, click Print, and then click Properties.
- 2 Click the Paper tab, and then select the Use different paper for first page check box.
- 3 Click the First Page tab. On the Size is, Source is, and Type is menus, select the size, source, and type settings for your cover.
- 4 Click the **Other Pages** tab. On the **Size is** and **Source is** menus, select the size and source settings for the inside sheets of your print job.
- Click the **Back Cover** tab. The back cover, if there is one, must be the same size as the booklet cover and the inside sheets. The **No back cover** is the default setting. If your print job has a back cover that uses the same source and type settings you selected in the **First Page** tab, select **Use the first page source**. If not, select **Use an alternate source**, and then select the back-cover settings in the **Source is** and **Type is** menus.

#### **Pages per Sheet**

The **Pages per Sheet** drop-down menu provides six settings: 1 (default), 2, 4, 6, 9, and 16. If you type another value into the box (for example, 3), the control will round the value entered to the nearest valid value (in this example, 4).

Related controls indented beneath the **Pages per Sheet** edit box are **Print Page Borders** and **Page Order**, which become active when **Pages Per Sheet** is greater than 1.

**Print Page Borders** sets a line around each page image on a printed sheet to help visually define the borders of each logical page.

The Page Order drop-down menu contains four selections:

- Right, then Down
- Down, then Right
- Left, then Down
- Down, then Left

The preview document image changes to reflect alterations in these settings, as shown by the examples in the following illustration.

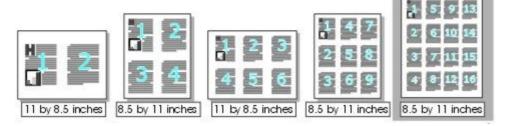


Figure 15: Selecting booklet printing type

#### Page-order preview images

- 1 2 pages per sheet
- 2 4 pages per sheet
- 3 6 pages per sheet
- 4 9 pages per sheet, with Print Page Borders selected
- 5 9 pages per sheet, with **Down, then Right** page-order selected
- 6 16 pages per sheet

#### **Print Quality**

The HP LaserJet printer driver **Print Quality** group box provides options that control resolution, graphics settings, and font settings.

The **Print Quality** group box also includes a **Details** button. Clicking this button opens the dialog box. The **Print Quality Details** dialog box provides options for various print-quality settings, as shown in the following illustration.

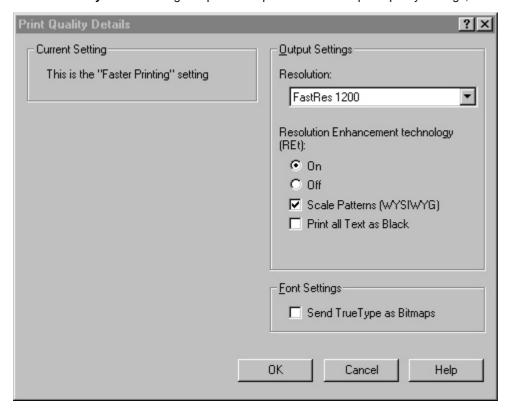


Figure 16: Print Quality Details

#### Default

For the HP LaserJet PCL 6 and PCL 5e drivers, the Default mode contains the following options:

- Resolution is FastRes 1200
- Rendering mode is automatic (PCL 5e only)
- Scale Patterns (WYSIWYG) is selected
- Print all Text as Black is not selected
- Send TrueType as Bitmaps is not selected
- Resolution Enhancement technology (REt) is on

#### **Output Settings group box**

The **Output Settings** group box contains controls for selecting resolution and other print-job settings, including pattern scaling and printing all text as black.

#### Resolution

The resolution setting for the HP LaserJet 4200 and 4300 series printers is 600 dpi.

#### Scale Patterns (WYSIWYG)

The Scale Patterns (WYSIWYG) feature is implemented to address the moiré effect created when certain programs encounter certain patterns. Use this feature to turn off the pattern scaling. What you lose is WYSIWYG with patterns, but the printed result might look better. The feature works only with programs that use vector hatch patterns. This option is on by default.

#### **Print all Text as Black**

The **Print all Text as Black** feature is off by default. When selected, this option causes the driver to print all text as black regardless of the original document text color. By design, however, white text remains white, as a fail-safe method of printing reverse typeface against a dark background. This setting does not affect graphic images on the page. **Print all Text as Black** remains selected only for the current print job. When the current print job is completed, **Print all Text as Black** is automatically turned off.

#### Font Settings group box

In the **Font Settings** group box, the only available option is **Send TrueType as Bitmaps**, which provides a safety net for programs that cannot easily use TrueType (TM) fonts for special graphic purposes, such as shading, rotation, or slanting.

#### **EconoMode**

Use the **EconoMode** check box to turn this toner-saving feature on and off independently of the other **Print Quality** tab settings. When this check box is selected, the preview image lightens to show the expected appearance of the printed page when this feature is applied. The option is off by default.

The **EconoMode** option can also be activated from the printer control panel. The **EconoMode** setting on the **Print Quality** tab (on or off) overrides the setting on the printer control-panel display, as shown on the following table. If an HP cartridge is not used, EconoMode is not available, regardless of the driver or control-panel setting.

**Table 8: EconoMode Settings** 

Default	Driver setting for print job	HP cartridge	Front panel reports	Actual result for print job
ON	ON	Yes	ON	ON
ON	ON	No	OFF	OFF
ON	OFF	Yes	ON	ON
ON	OFF	No	OFF	OFF
OFF	ON	Yes	OFF	ON
OFF	ON	No	OFF	OFF
OFF	OFF	Yes	OFF	OFF
OFF	OFF	No	OFF	OFF

#### Effects tab features

Use the Effects tab to create unique paper effects such as scaling and watermarks.

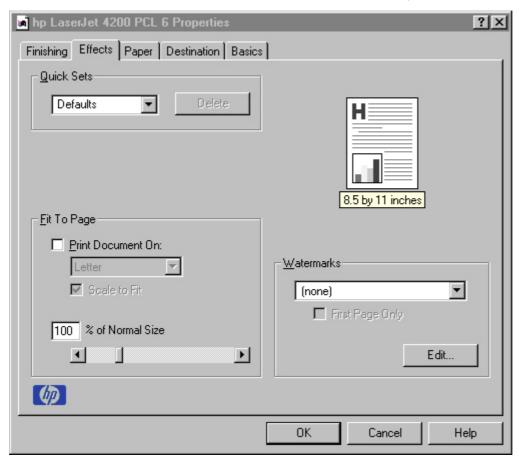


Figure 17: Effects tab

#### **Print Document On setting**

Use **Print Document On** to format the document for one paper size and then print the document on a different paper size, with or without scaling the image to fit the new paper size.

The **Print Document On** control is disabled by either of the following conditions:

- Percent of Normal Size is not 100
- Pages per Sheet (on the Finishing tab) is not 1

When **Print Document On** is selected, the drop-down menu shows the media sizes on which you can print. The list contains all the standard media sizes that are supported by the selected media source and any custom sizes that you have created (if the currently selected media source is manual, auto, or any tray). When **Print Document On** is selected, **Scale to Fit** is automatically selected.

#### Scale to Fit option

The **Scale to Fit** option specifies whether each formatted document page image is scaled to fit the target paper size. By default, **Scale to Fit** is selected when **Print Document On** is selected. If the setting is turned off, then the document page images will not be scaled, and are instead centered at full size on the target paper. If the document size is larger than the target paper size, then the document image is clipped. If it is smaller, then it is centered within the target paper. The following illustration shows preview images for a document formatted for legal-size paper with the **Print Document On** option selected, and the target size specified as **Letter.** 





Figure 18: Preview images - Legal on Letter; Scale to Fit off (left) and on (right)

When the size for which the document is formatted (that is, the logical size) differs from the target size, the preview image uses a dashed gray line to show the boundaries of the logical page in relation to the target page size.

#### % of Normal Size option

The **% of Normal Size** option provides a slider bar to use for scaling the percentage setting. The default setting in the entry box is 100 percent of normal size. Normal size is defined as the paper size that is selected within the driver or what the driver receives from the program (if the program does not negotiate the paper size with the driver). The driver scales the page by the appropriate factor and sends it to the printer.

The limits of the range are from 25 percent to 400 percent, and any values outside the range are clipped to those limits as soon as the focus is removed from the control (that is, when the TAB key is pressed or another control is selected).

Any change to the scale also changes the page preview, which increases or decreases from the top-left corner of the preview.

The slider bar controls the scale directly. The value in the edit box changes as the scroll bar indicator is dragged, and the preview image is updated to the new image scale. Each click on the scroll bar arrows increases or decreases the scale by one percent. Each click on the slider bar affects the scale by 10 percent.

You cannot achieve an exact value by dragging the scroll bar indicator at the default Windows resolution; use the scroll bar indicator to approximate the desired value, and then use the scroll bar arrows to refine the value.

The following settings disable % of Normal Size:

- Print Document On is selected
- Pages per Sheet is not 1

#### **Watermarks**

Use the **Watermarks** feature to choose a watermark, create your own custom watermarks (text only), or edit an existing watermark. The following watermarks are preset in the driver:

- (none)
- Confidential
- Draft
- SAMPLE

The drop-down menu shows alphabetically sorted watermarks that are currently available on the system, plus the string "(none)", which indicates that no watermark is selected. This is the default setting. Any watermark selected from this list appears in the preview image.

When **First Page Only** is selected, the watermark is printed only on the first page of the document. The **First Page Only** check box is disabled when the current watermark selection is "(none)".

Watermarks are applied to logical pages. For example, when **Pages per Sheet** is set to "4" and **First Page Only** is turned off, four watermarks appear on the physical page (one on each logical page).

Click Edit, and the Watermark Details dialog box appears.

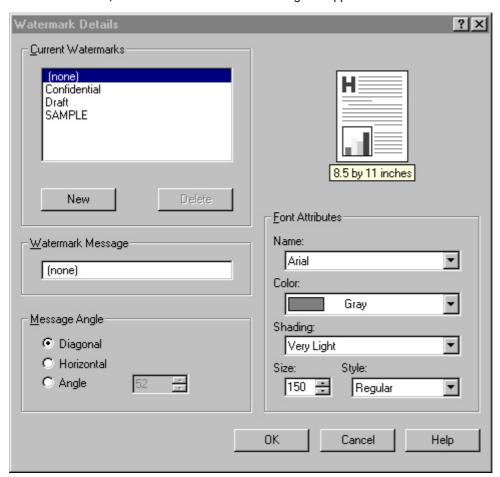


Figure 19: Watermark details

The dialog box shows a preview image and provides options for creating a new watermark and controlling the message angle and font attributes.

Click **OK** to accept all changes that are made in the **Watermark Details** dialog box. However, clicking **Cancel** does not cancel all changes. If you make changes to a watermark, and then select a different watermark or click **New**, all changes made to the previous watermark are saved, and only the current, unsaved changes can be canceled.

#### **Current watermarks**

The **Current Watermarks** group box contains a list of available watermarks, both predefined watermarks made available in the driver and any new watermarks you have created. To create a new watermark, click **New**. The new watermark appears in the **Current Watermarks** list and in the **Watermark Message** edit box as "Untitled" until you name it. To name the new watermark, type the selected watermark text in the **Watermark Message** edit box. To delete a watermark, select the watermark in the **Current Watermarks** list and click **Delete**.

Note

You can have no more that 30 watermarks in the Current Watermarks list at one time. When the limit of 30 watermarks is reached, the New button is disabled, and a Bubble Help appears that explains why the button is disabled and how to enable it.

To edit an existing watermark, select the watermark in the **Current Watermarks** list. If you change the Watermark Message for that watermark, you are, in effect, creating a new watermark.

#### Watermark message

The Watermark Message is also the name that identifies the watermark in the Current Watermarks list, except when more than one watermark has the same message. For example, you might want several different watermarks with the message DRAFT, each with a different font or size. When this occurs, the string is appended with a space, a pound sign, and a number (for example, **Draft #2**). When a number is added, the number two is used first, but if the resulting name is also in the list, then the number increases until the name is unique.

#### Message angle

Use the controls in the **Message Angle** group box to print the watermark in a diagonal, horizontal, or angle (custom) orientation to the page's text. The default is **Diagonal**. All three settings automatically center the watermark string within the page; the selection of a particular setting affects only the angle of the string placement. **Diagonal** places the text along a line that spans the lower-left to upper-right corners of the page.

#### Font attributes

Use controls in the Font Attributes group box to change the font and the color, shading, size, and style of the font.

#### Name

The Name drop-down menu lists TrueType fonts that are currently installed on the system.

#### Color

The **Color** drop-down menu lists the fixed, unalterable color choices for the watermark. **Gray** is the only color option for the HP LaserJet 4200 and 4300 series printers.

#### **Shading**

The following range of shades is available from the **Shading** drop-down menu:

- Lightest
- Very Light
- Light
- Medium Light
- Medium
- Medium Dark
- Dark
- Very Dark
- Darkest

These values represent the intensity of the gray that is used for the Color attribute.

#### Size

Font sizes from 1 to 999 points are available from the **Size** menu. The default point size is language-dependent. The choice of regular, bold, italic, and bold italic is available from the **Style** drop-down menu.

#### **Default settings**

The default settings for new watermarks are **Arial** (R) font, **Gray** color, **Very Light** shading, **150points**, and **Regular** style. The default settings for preset watermarks are **Arial** font, **Gray** color, **Very Light** shading, **and Bold** style. The default point size for preset watermarks is language-dependent, and varies.

# Paper tab features

Use the **Paper** tab to specify the size, type, and source of the media, as well as to define a custom paper size. If you want to, you can indicate different paper-selection choices for the first page and back cover of the document.

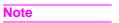
The first group box in the upper-left portion of the **Paper tab** view is **Quick Sets**. This feature is described in the "Finishing tab features" section. Any change to the **Quick Sets** group box that is made on the **Paper** tab affects the group box on the **Finishing** tab and on the **Destination** tab, and vice versa - they are all one and the same control.

## **Printer image**

The bitmap image in the lower-right portion of the **Paper** tab represents the current physical configuration of the printer and corresponds to its configuration data, either obtained automatically through bidirectional communication or configured manually. It should look the same as the image that appears in the same location on the **Destination** tab and the **Configure** tab.

On the **Paper** tab, the printer image contains hot spots where you can select a paper source. When the pointer moves over a hot spot, the arrow reverts to the gloved hand used in the Bubble Help, the preview image, and other areas. The current paper source, whether selected from the drop-down menu or from a printer-image hot spot, is highlighted in bright green on the printer bitmap. The following points are worth noting:

- Auto Select does not have a corresponding area to highlight in the printer image.
- Selecting in the drop-down menu highlights the corresponding part in the printer image.
- Selecting the area that represents tray in the bitmap always selects the corresponding tray in the Source Is option.
   Manual Feed, which is available from the Source is option, cannot be selected by selecting the bitmap.
- On the Paper tab, only input trays have printer-image hot spots and can be highlighted. Output bins must be selected from the Destination tab.



The printer image shown in the following illustration might differ from your HP LaserJet 4200 or 4300 series printer, depending on the model number and accessory devices.

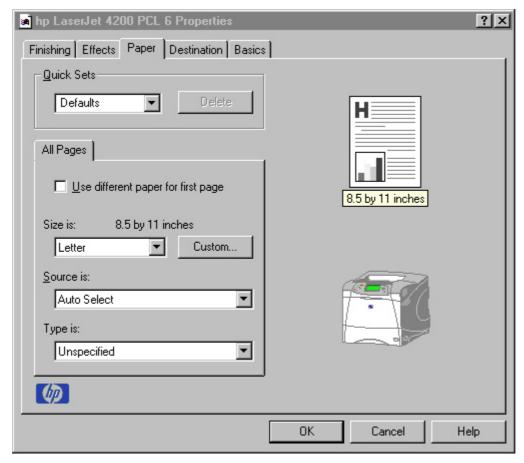


Figure 20: Paper tab

# **All Pages**

The controls on this mini-tab are contained in an **All Pages** mini-tab. As the name implies, this means that the settings specified on that mini-tab apply to all pages of the document. However, when you select the **Use different paper for first page** check box, the **All Pages** mini-tab is replaced by three mini-tabs. These three mini-tabs are:

- First Page, which contains the same controls as All Pages.
- Other Pages, which contains different controls, as noted in the following sections.
- Back Cover, which also contains different controls, as noted in the following sections.

# **Other Pages**

Use the **Other Pages** mini-tab to select an alternative media type or source for the pages that follow the first page of a document. The choices and defaults for **Source is** and **Type is** are the same as for **First Page**.

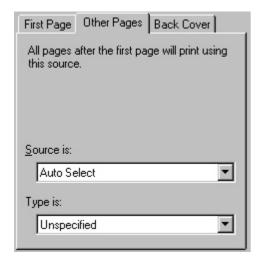


Figure 21: Other Pages mini-tab

#### **Back Cover**

Use this feature to include a blank back cover on a document, or include a back cover from a paper source different from that used for the remainder of the document. Use the **Back Cover** mini-tab to select an alternative media source (or the same source as **First Page**) from which a blank page is drawn and placed after the final page of the body of the document. The mini-tab contains three option buttons and two drop-down menus. Three option buttons are available:

- No back cover (default)
- Use the first page source
- Use an alternate source

The two drop-down menus become available when **Use an alternate source** is selected:

- Source is (default)
- Type is

**No back cover** is selected as the default, with the drop-down **Source is** and **Type is** selection boxes disabled. Clicking **Use an alternate source** activates the drop-down menus. The drop-down menu value defaults to the same source as that chosen for the **First Page** mini-tab. Clicking **Use the first page source** changes the drop-down value to match the first page, if necessary, but the drop-down menus remain inactive.

When the **Back Cover mini-**tab is active, clicking **No back cover** deactivates the drop-down menus, but does not change their value. No Bubble Help is available for the inactive drop-down menus. The settings revert to defaults when **Use different paper for first page** is selected again.

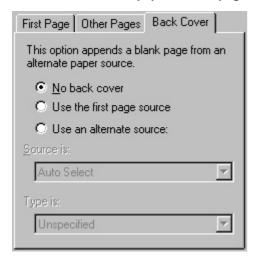


Figure 22: Back Cover mini-tab

#### Size is

This feature actually functions as two controls: a drop-down menu that contains all the supported media sizes (including any user-defined custom sizes) and a text label that indicates the dimensions of the selected size.

Moving the pointer over the text label causes the arrow to change to a gloved hand, which indicates that the area beneath the pointer is selectable. Clicking here toggles the units of measure between inches and millimeters, offering the same options on the dimensions label in the preview image. Selecting a new size from the drop-down menu updates the media-dimensions text label as well as the preview image. Changing the orientation (on the **Basics** tab) also updates the dimensions text label.

Size can be specified only for the first page or for all pages. On the **Other Pages** and **Back Cover** mini-tabs, the **Size is**drop-down menu does not appear because the media size must be consistent for all pages of the job. Certain software programs can override this command and specify different media sizes within a single document. Any change in the media size selection causes the Booklet Printing feature to be turned off.

#### Custom

The **Custom Paper Size** dialog box appears when you click the **Custom** button on the **Paper** tab. The following illustration shows the initial appearance of the **Custom Paper Size** dialog box.

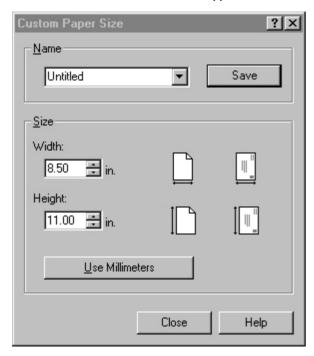


Figure 23: Custom Paper Size dialog box

When the **Custom Paper Size** dialog box appears, the drop-down menu in the **Name** group contains one of two things, depending on the current paper size selection in the **Paper** tab:

- If the paper size selection is a previously defined custom size, then the drop-down menu contains the name of that custom size.
- If the paper size selection is a standard paper size, then the drop-down menu shows the default name Untitled for a custom paper size.

Note

In Windows 95, Windows 98 and Windows Me, two names for the same size media can coexist (for example, "big" and "BIG" can both be used as names for custom-size paper measuring 8.4 inches by 11 inches). In Windows NT 4.0, Windows 2000, and Windows XP, both upper and lower-case names can be used, but they cannot be used to name the same paper size.

The new name is compared only against the list of user-defined custom paper-size names, and not against the standard paper-size names.

The complete set of titles for this button and the specific characteristics that determine its title and capabilities are discussed in the dynamic command button section.

# Name drop-down menu

The **Name** drop-down menu shows the name of the last selected custom paper size. Use the **Name** drop-down menu to type new names for custom paper sizes and to select from the list of currently defined custom paper sizes.

The name displayed in the Name drop-down menu is one of three things, depending on the following conditions:

 If a saved custom paper size has been selected from the drop-down menu and the other controls in the dialog box have not been changed since then, the Name drop-down menu shows the name of the last selected custom paper size.

- If the width or height controls have been changed since a custom size was selected or saved, or if a saved paper size has just been deleted, then the Name drop-down menu shows the default name of Untitled.
- If a new name has been typed into the **Name** drop-down menu for the purpose of saving a new size or renaming an existing size, then that new name will remain in the drop-down menu until a saved custom paper size has been selected from the drop-down menu.

If you type a new name into the **Name** drop-down menu, but then do not click the **Save** button, you should be able to change the width and height values without losing the name. However, if a saved paper-size name is selected from the drop-down menu, any unsaved name or size values are lost without warning, and replaced by the values of the selected custom paper size.

# **Dynamic command button**

The button located to the right of the Name drop-down menu has three possible labels: Save, Delete, and Rename.

- Save is the button title whenever the height and width values have been changed since the last save or since the selection of an existing custom paper size. Clicking the button causes the name in the Name drop-down menu to be compared against each of the saved names. If a duplicate is found, a dialog box appears, asking if it is okay to replace the existing item. If you click Yes, the old item is updated with the new values. If you click No, the driver returns to the Custom Paper Size dialog box, where you can type a different name. The new name is compared only against the list of user-defined custom paper names, and not against the standard paper-size names. Whenever the command button has the Save title, it is the default button.
- Delete is the button title whenever the name of an existing (previously saved) custom paper size appears in the
   Name drop-down menu, such as immediately after selecting an item from the drop-down menu or clicking the
   Save button. Clicking the Delete button causes the saved custom paper size to be deleted, after which the Name
   drop-down menu changes to Untitled, the height and width controls are unchanged, and the button title changes
   to Save.
- Rename is the button title when you type something into the Name drop-down menu after selecting an existing custom paper size from the drop-down menu. If no duplicate is found, the name of the stored custom paper size changes to match the contents of the Name drop-down menu. Whenever the command button has the Rename title, it is also the default button.

The following table illustrates the relationships between the **Name** drop-down menu, the command button, and the actions that take users from one state to another.

Table 9: Name drop-down menu text strings

State	Drop-down menu contents	Button label	Action	Next state
1	Untitled	Save	Click Save	3
			Type something into the Name drop-down menu	2
			Change the width or height values	1
			Select a saved item from the drop-down menu	3
2	<user-typed text=""></user-typed>	Save	Click Save	3
			Type something into the <b>Name</b> drop-down menu	2
			Change the width or height values	2
			Select a saved item from the drop-down menu	3
3	<name item="" of="" saved=""></name>	Delete	Click <b>Delete</b>	1
			Type something into the <b>Name</b> drop-down menu	4
			Change the width or height values	1
			Select a saved item from the drop-down menu	3
4	<user-typed text=""></user-typed>	Rename	Click <b>Rename</b> (when the name is unique)	3
			Click <b>Rename</b> (when the name is a duplicate)	4
			Type something into the Name drop-down menu	4
			Change the width or height values	2
			Select a saved item from the drop-down menu	3

## Width and height controls

The width and height values can be changed either by typing numeric strings into the edit boxes, or by using the up and down arrows.

Any entry that is greater than the maximum limits of the width and height control is rounded down to the maximum valid entry, while any entry that is smaller than the minimum limits of the width and height control is rounded up to the minimum valid entry. See "Custom width and height control limits."

If units are in millimeters, the custom paper-size range minimum is the limit rounded up to the nearest whole millimeter. The custom paper-size range maximum is the limit rounded down to the nearest whole millimeter. Any non-numerical entry reverts to the last valid entry. Width and height entries are validated when the focus has changed.

The resolution of each control is one millimeter or one-tenth of an inch, depending on the current measurement units. Clicking the up and down arrows increases or decreases the current value by the increment amount (within the allowed range of values). The computer determines the rate at which the values change.

Unit indicator labels change dynamically to indicate inches or millimeters, depending on the measurement units the driver is currently using. To change measurement units, click the **Measurement Units** button.

# **Custom width and height control limits**

The minimum paper size for the HP LaserJet 4200 and 4300 series printers is 98 mm by 191 mm (3.87 inches by 7.5 inches) and the maximum is 216 mm by 356 mm (8.5 inches by 14.0 inches). The following table summarizes paper size limits for each paper-handling device.

Table 10: Custom width and height limits for the HP LaserJet 4200 and 4300 series printers

Media source or paper-handling	Minimum size - width by height Maximum size - width by heigh		
accessory			
Tray 1 (multipurpose)	98 mm by 191 mm	312 mm by 470 mm	
	(3.9 inches by 7.5 inches)	(12.28 inches by 18.46 inches)	
Tray 2	148 mm by 210 mm	297 mm by 432 mm	
	(3.9 inches by 7.5 inches)	(11.7 inches by 17.0 inches)	
Tray 3	148 mm by 210 mm	297 mm by 432 mm	
	(3.9 inches by 7.5 inches)	(11.7 inches by 17.0 inches)	
Duplex printing accessory	98 mm by 191 mm	312 mm by 470 mm	
	(3.9 inches by 7.5 inches)	(12.28 inches by 18.46 inches)	
500-sheet stapler/stacker face-up bin	98 mm by 191 mm	312 mm by 470 mm	
	(3.9 inches by 7.5 inches)	(12.28 inches by 18.46 inches)	
1,500-sheet stapler/stacker face-down bin	148 mm by 210 mm	312 mm by 470 mm	
	(3.9 inches by 7.5 inches)	(12.28 inches by 18.46 inches)	
Tray 4	148 mm by 210 mm	297 mm by 432 mm	
	(3.9 inches by 7.5 inches)	(11.7 inches by 17.0 inches)	

#### Paper and envelope icons

The paper and envelope icons visually define width and height.

#### **Measurement Units button**

Like the dynamic command button previously described, the **Measurement Units** button is also multititled, although its function is always to toggle the unit of measurement between standard (inches) and metric (millimeters) units of measurement.

#### **Close button**

The **Close** button closes the **Custom Paper Size** dialog box according to the logic in the following table. In all cases, any custom paper sizes that are successfully saved (and not renamed or deleted) while the dialog box is open will remain in the paper size list in the **Paper** tab. The following table lists options that appear when you click the **Close** button.

Table 11: Close dialog box text strings

If the drop-down menu contains	And the button says	Then this happens when the Close button is clicked
Untitled	Save	The dialog box closes, but you lose the changes that were not saved.
		The current paper size remains the same as it was when the <b>Custom</b> button was selected.
<user-typed text=""></user-typed>	Save	The dialog box closes, but you lose the changes that were not saved.
		The current paper size remains the same as it was when the <b>Custom</b> button was selected.
<name item="" of="" saved=""></name>	Delete	The dialog box closes, and the current paper size is set to that which was last shown in the drop-down menu.
<user-typed text=""></user-typed>	Rename	The dialog box closes, but you lose the changes that were not saved.
		The current paper size remains the same as it was when the <b>Custom</b> button was selected.

#### Source Is

The **Source Is** drop-down menu shows the input trays available according to **Configure** tab settings. The list contains the following options:

- Auto Select
- Manual Feed
- Envelope Feeder (if installed)
- Tray 1
- Tray 2
- Tray 3 (if installed)
- Tray 4 (if installed)

The default setting is **Auto Select**, which allows the printer firmware to select the media source. Any optional paper trays that are installed through the **Configure** tab are also shown here.

If a conflict exists among paper source, size, and type, and you choose to keep the conflicting settings, the settings are processed in the following order: paper size, paper type, and then paper source.

For information about media types and sizes, see "Media attributes".

# Type Is

The **Type Is** drop-down menu shows all the paper types that the HP LaserJet 4200 and 4300 series printers support, as well as any user-defined types that have been created by a network administrator. The default setting is **Unspecified**, which allows the program to select the paper type.

No mechanism exists for manually adding custom paper types through the driver. Custom sizes can be added only by using the bidirectional communication mechanism, so they must already exist in the printer when the bidirectional

query occurs. If bidirectional communication is enabled, then the information returned is an updated list of paper types. If bidirectional communication is not enabled, then the driver looks for custom paper types saved from a previous bidirectional communication query, and uses those. Otherwise, no custom paper types are available through the driver.

The following standard types appear in the lists:

- Bond
- Cardstock
- Color
- Labels
- Letterhead
- Plain
- Preprinted
- Prepunched
- Recycled
- Rough
- Transparency
- Unspecified
- Envelope

For more information about media types and sizes, see "Media attributes".

# **Printer image**

The bitmap image in the lower-right portion of the **Paper** tab screen represents the current physical configuration of the printer according to the driver configuration data (obtained automatically through bidirectional communication, or configured manually through the driver). It should have the same appearance as the image in the same location on the **Destination** tab and the **Configure** tab.

On the **Paper** tab, the printer image contains hot spots for selecting a media source. When the pointer moves over a hot spot, the arrow reverts to the gloved hand used in the Bubble Help, the preview image, and other areas. The current media source is highlighted in a bright green color on the printer bitmap.

#### **Destination tab features**

The **Destination** tab provides options for job storage and output bins.

Note

The Destination tab appears only if the Printer Hard Disk and Job Storage Enabled check boxes are selected. To select these options, click More... on the Configure tab.

The printer image in the lower-right portion of the **Destination** tab represents the current physical configuration of the printer and corresponds to its configuration data, either obtained automatically through bidirectional communication or configured manually. It should look the same as the image that appears in the same location on the **Paper** tab and the **Configure** tab.

**Note** 

The printer image shown in the illustration might differ from your HP LaserJet 4200 or 4300 series printer, depending on the model number and the installed accessory devices.

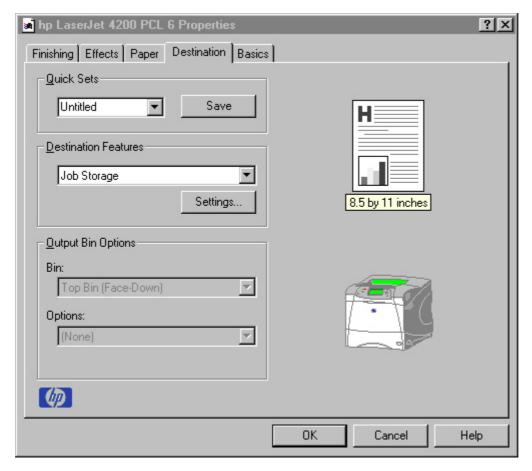


Figure 24: Destination tab

#### **Destination Features**

The **Destination Features** group box provides controls for Job Storage. This group box is only visible if the **Printer Hard Disk** and **Job Storage Enabled** check boxes are selected in the **More...Configuration Options** dialog box that is available on the **Configure** tab.

# Hardware configuration and availability of Job Storage options

The **Job Storage** options available to you depends on whether your printer has an optional hard disk installed. Some **Job Storage** options require a printer hard disk (an optional HP EIO disk drive).

The **Quick Copy** and **Stored Job** options require the installation of a printer hard disk. To use all four of the **Job Storage** options, the printer must have the optional hard disk installed, the **Printer Hard Disk** selected in the **More** dialog box of the **Configure** tab, and the print driver configured to use hard-disk storage.

# Configuring the printer driver for a printer hard disk

If the print driver on your computer is not yet configured to use the hard disk, follow these steps:

Note These steps must be completed for each driver.

- 1 Double-click the **My Computer** icon. This opens the My Computer window.
- 2 Open the Printers window.

- Right-click the printer icon. This opens a drop-down menu.
- 4 Click **Properties**. The **Properties** dialog box appears.
- 5 Click the Configure tab.
- 6 Under Other Options, click More.
- 7 Under Storage, click the Printer Hard Disk check box. (This also selects Job Storage Enabled).
- 8 Close all of the dialog boxes by clicking **OK**.
- 9 Your PCL printer driver is now configured to use the hard-disk and Job Storage features of your HP LaserJet 4200 or 4300 series printer.

# Job Storage modes

Using the **Job Storage** feature on the HP LaserJet 4200 and 4300 series printers, you can store documents at the printer and then control the printing of these documents at the printer control panel. This feature is intended to provide greater flexibility, convenience, security, and cost savings.

After the Job Storage feature has been enabled, you can use its features by clicking **Settings** on the **Destination** tab of the printer driver.

The HP LaserJet 4200 and 4300 series printers offer the following Job Storage options.

#### Off

This option turns the Job Storage feature off (it is disabled), which means that the print job will not be stored in the printer.

## **Quick Copy**

Quick Copy stores a copy of a printed job on the hard disk, after which you can print additional copies of a print job at the control panel. The number of quick-copy print jobs that can be stored in the printer is set from the printer control panel.



The printer configuration can be set to hold a maximum of 50 quick-copy or proof-and-hold jobs. The number is set at the printer control panel in the Configuration menu, and the default is 32. When this preset limit is reached, a newer document will overwrite the oldest. Also, a document that has the same user and job name as one that is already stored on the hard disk will overwrite the existing document. Quick Copy jobs are deleted if the printer's power is removed.

#### **Proof and Hold**

This option stores the print job on the printer hard disk, and prints only the first copy of the job, allowing you to check the first copy. If the document prints correctly, you can print the remaining copies of the print job at the printer control panel. The number of proof-and-hold print jobs that can be stored in the printer is set at the printer control panel.

## Using a PIN for Private Job and Stored Job

The Private Job and Stored Job options can be secured by a four-digit personal identification number (PIN). This number must be typed in the printer control panel before the printer prints the job.

The box labeled **PIN** is usually inactive. Selecting **Private Job** or **Stored Job** along with **Require PIN to Print** activates the **PIN** box. The Stored Job/PIN coupling has a PIN restriction of four ASCII numeric characters (ASCII 0-30 through 0-39). If you type non-numeric characters, they are removed immediately. If you type more than four characters, the characters past the fourth are truncated. The field temporarily accepts fewer than four digits in the string, but when the edit field loses focus, the zeroes pad the left end until there are exactly four digits. The default initialized value for the PIN is 0000 for **Private Job** and **Stored Job** when **Require PIN to Print** is selected.

#### **Private Job**

Use this option to send a print job directly to the printer memory. Selecting **Private Job** activates the **PIN** field. The print job can be printed only after you type a PIN at the printer control panel. After the job is printed, the printer

removes the job from the printer memory. This feature is useful when you are printing sensitive or confidential documents that you do not want to leave in an output bin after printing. **Private Job** stores the print job on the hard disk.

After it is released for printing, the private job is immediately deleted from the printer. If more copies are needed, you must reprint the job from the program. If you send a second private job to the printer with the same user name and job name as an existing private job (and you have not released the original job for printing), the job will overwrite the existing job, regardless of the PIN. Private jobs are deleted if power to the printer is removed.

#### Stored Job

Use the **Stored Job** option to send a print job directly to the printer hard disk. The print job is stored in the printer as if it is an electronic file cabinet. After the print job is stored in the printer's hard disk, you can print the job at the printer control panel.

The job remains stored on the printer until it is deleted or overwritten by a document with the same user and job names. Stored jobs remain on the printer hard disk when power is interrupted. Use this feature for forms and other common or shared documents.

A stored job can be handled in two ways: as either a private or a public job. Use a private stored job to send a print job directly to the printer memory, which can then be printed only after you type in a PIN at the printer control panel. (You can set the PIN in the **Print** dialog box.) After the job is printed, the job remains in the printer memory and can be printed again at the printer control panel. This feature is useful when you are printing sensitive or confidential documents that you do not want to leave in an output bin after printing. Private mode is initiated by clicking the **Require PIN to Print** check box. In this mode, a PIN typed at the control panel is required to release the job.

The box labeled PIN is usually inactive. The **Require PIN to Print** option is activated if you click **Stored Job**. If selected, you must enter a PIN to make the stored job private.



A private stored job is not the same as a private job (see above). Private jobs are deleted from the printer memory after they are printed. Private stored jobs are retained in the printer memory after printing, but require that a PIN be typed each time they are printed.

# **Document identifiers used in Job Storage**

When you use a job storage feature, your document is identified at the printer control panel by user name and job name.

#### **User Name**

Use the **User Name** edit box to identify the job at the printer control panel. When the driver is first installed (or when **Factory Defaults Quick Set** is selected), this string initializes to the empty string (""), but the dialog box detects this condition and replaces the string with your login name in Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP. It replaces it with "Untitled" in Windows 3.1x. The following describes the restrictions for the **User Name** field.

#### **Job Name**

Use the **Job Name** edit box to specify a name to identify the job at the printer control panel. When the driver is installed, or when the **Factory Defaults Quick Set** is selected, this string is initialized to the empty string (" "), but the dialog box detects this condition and replaces the string with "Untitled".

The **Job Name** and the **User Name** fields can contain no more than 16 characters each, and are limited to A through Z and 0 through 9, because the name appears on the printer control-panel display. If you try to type a lowercase character, it automatically shifts to uppercase. If you try to type a character with an ASCII code of fewer than 32 or more than 126 characters, the character is removed from the edit field, along with all characters that follow it. If you try to type more than 16 characters, any character beyond 16 is truncated.

When the dialog box is closed, or the edit box loses focus, an empty string is replaced with "Untitled". In those languages for which "Untitled" cannot be translated without the use of invalid characters, the driver uses a string of

three dashes. The acceptable characters for job name and user name vary for each operating system. The string must be of a length and type that can appear on the printer control-panel display.

# Using Job Storage options when printing

You can use Job Storage options in the Destination tab of the printer driver.

Note

The printer driver that is installed on your computer must be configured to use the Job Storage features. See "Configuring the printer driver for a printer hard disk".

- 1 Click **Print** from the software program. The **Print** dialog box appears.
- 2 Click Properties. The Properties dialog box appears.
- 3 Click the **Destination** tab to show the destination options.
- 4 Click **Job Storage** on the drop-down menu under **Destination Features**.
- 5 Click Settings. The Job Storage Settings dialog box appears.

You can then select one of the Job Storage options described above by clicking the appropriate option button.



These instructions are specific to the Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP environments when using the latest available PCL 5 and PCL 6 drivers. While the basic concepts of Job Storage are the same for PS print jobs, there are significant differences in the driver user interface. Also, there are some limitations in naming and PIN selection.

# Releasing stored jobs at the printer

Once you send a print job using Job Storage, you can release the job to print at the printer control panel.

- 1 Press the select button (the one with the check mark) to open the menus.
- 2 Press the up and down buttons to scroll to **RETRIEVE JOB**, and then press the select button.
- 3 Press the up and down buttons to scroll to your job, and then press the select button.
- 4 Press the up and down buttons to scroll to **PRINT**. (The **PRINT** selection might have an icon next to it indicating that the job is locked. If so, type the PIN number, and then press the select button.) Press the select button.

# Deleting a print job

Sometimes it is necessary to delete a print job from the printer memory or hard disk. This can be done at the printer control panel.

- 1 Press the **Menu** button to open the menus.
- 2 Press the up and down buttons to scroll to **RETRIEVE JOB**.
- 3 Press the up and down buttons to scroll to your job name, and then press the select button.
- 4 Press the up and down buttons to scroll to **DELETE** (The **DELETE** selection might have an icon next to it indicating that the job is locked. If so, type the PIN number, and then press the select button.).

# **Output bin options**

The **Output Bin Options** group box contains a drop-down menu that you can use to select from a list of configured output bins. Only output bins that are configured on the **Configure** tab appear in this drop-down menu.



When using the face-down output bin, you must manually switch the bin between face-down and face-up output.

Depending on the bundle and the driver configurations, the HP LaserJet 4200 and 4300 series printers offer the following optional output devices:

- Stacker Bin (Stapler). It provides single-position stapling for up to 15 sheets of paper per document and stacking for up to 500 sheets of unstapled paper.
- Stacker Bin. It provides stacking for up to 500 sheets of paper.

# **Options**

The **Options** drop-down menu is inactive. This setting can be used to enable non-HP paper-handling devices.

# **Printer image**

The bitmap image in the lower-right portion of the **Destination** tab represents the current physical configuration of the printer according to the driver configuration data (obtained automatically through bidirectional communication, or configured manually through the driver). It should have the same appearance as the image in the same location on the **Paper** tab and the **Configure** tab.

On the **Destination** tab, the printer image contains hot spots for selecting an output bin. When the pointer moves over a hot spot, the arrow reverts to the gloved hand used in the Bubble Help, the preview image, and other areas. The current output bin is highlighted in a bright green color on the printer bitmap.



On the Destination tab, only output bins have hot spots and can be highlighted; source trays must be selected from the Paper tab.

## **Basics tab features**

The **Basics** tab provides options for setting the number of copies to be printed and for the orientation of the print job. You can also use it to retrieve information about the driver.

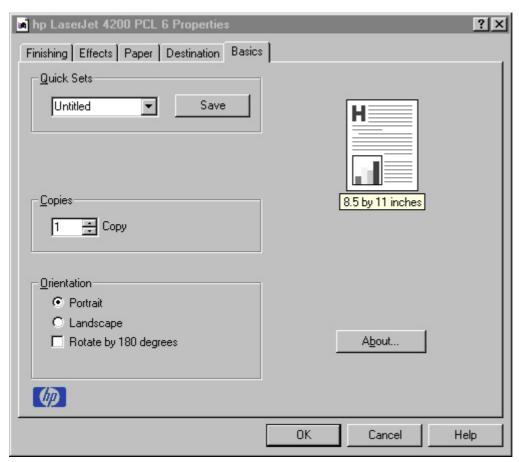


Figure 25: Basics tab

# **Copies**

Use the Copies feature to specify the number of copies to print.

The number of copies you request appears in the **Copies** box. You can select the number by typing in the box or by using the up and down arrows to the right of the edit box. Valid entries are numbers from 1 to 9999 for the HP LaserJet 4200 and 4300 series printers. The copies value will not advance from the maximum number (9999) to 1 when the up arrow is used, or change from 1 to the maximum number (9999) when the down arrow is used. When you click another group box or leave the **Basics** tab, invalid entries into the edit box (such as non-numerical input, numbers less than 1, or numbers greater than the maximum allowed) are changed to the last valid value that appeared in the box. The default number of copies is 1.

Because you can set the number of copies you want from some programs, conflicts between the program you are using and the driver can arise. In most cases, the program and the driver communicate, so that the number of copies set in one location (such as the program) will appear in the other (such as the driver). For some programs, this communication does not take place, and the copies values are treated independently. For these programs, setting 10 copies in the program and then setting 10 copies in the driver will result in 100 copies (10 x 10) being printed. It is recommended that you set the number of copies in the program, wherever possible.

## **Orientation**

Orientation refers to the layout of the image on the page, and does not affect the manner in which media is fed into the printer. You can specify the orientation of the print job. The three available orientations are portrait, landscape, and rotated. The default orientation is Portrait.

The three orientation options have these configurations:

- Portrait. The top edge of the document is the shorter edge of the paper.
- Landscape. The top edge of the document is the longer edge of the paper.
- Rotate by 180 degrees. This creates a landscape or portrait orientation in which the image is rotated 180 degrees.
   This setting is useful for printing envelopes and when using some third-party paper-handling devices.

You can can toggle orientation between portrait and landscape by left-clicking the preview image. If you select the **Rotate by 180 degrees** check box, there is no change in the preview image.

## **About**

By clicking the **About** button on the **Basics** tab or clicking the HP logo on any of the driver property pages, the **About** box appears. To close the **About** box, click **OK**, press ESC, press ALT + F4, or press ENTER. The following figure shows the **About** box. The information it contains varies according to HP LaserJet model number, driver, date, and versions.



Figure 26: About This Driver dialog box

## **Driver extensions**

The **Driver Extensions** text box provides you with some information about any extended driver functionality. It can contain a brief description of the driver extension and a version number.

# Configure tab features

Use the **Configure** tab to tell the driver about the hardware configuration of the printer. If bidirectional communication is enabled in a supported environment, set up this tab by clicking the **Update Now** button. If your environment does not support bidirectional communication, the **Update Now** button is unavailable, so you must manually configure the options on this tab.

The **Configure** tab is available when the driver is opened from the Printers folder by clicking **Properties**. When you open the driver from within a program, the **Configure** tab is not visible (with a few exceptions, such as when using Excel 5.0 or Corel (R) Chart 4.0). When opened from the Printers folder, the **Configure** tab looks like the following illustration.

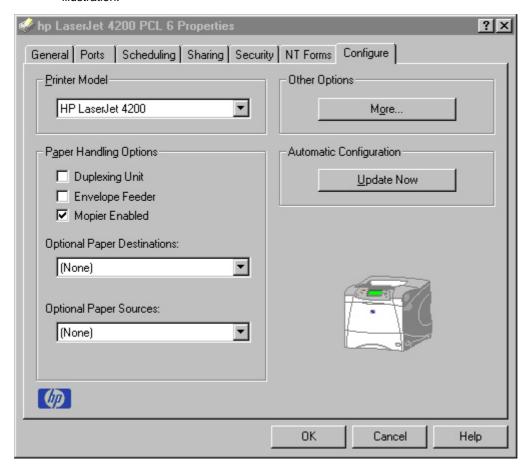


Figure 27: Configure tab

The printer image in the lower-right portion of the **Configure** tab represents the current physical configuration of the printer and corresponds to its configuration data, either obtained automatically through bidirectional communication or configured manually. It should look the same as the image that appears in the same location on the **Paper** tab and the **Destination** tab. For more information, see "Paper tab features."



The printer image shown in the illustration might differ from your HP LaserJet 4200 or 4300 series printer, depending on the model number and accessory devices that are installed.

77

# **Printer Model group box**

In the **Printer Model** group box, the driver title remains HP LaserJet 4200 or HP LaserJet 4300 for all models. Selection of another printer bundle makes the appropriate changes to other configuration options on the tab.

When the HP LaserJet 4200 or the HP LaserJet 4300 is selected, the following settings apply:

The Driver Work Space (DWS) value shown in the Other Options dialog box is 6.0 MB.

- The Total Printer Memory value is 48 MB.
- No optional paper destinations, paper sources, duplexing unit, or hard disk are selected.

When the HP LaserJet 4200n or the HP LaserJet 4300n is selected, the following settings apply:

- The Total Printer Memory value is 64 MB.
- Duplexing Unit is selected.
- No optional paper destinations, paper sources, or hard disk are selected.

When the HP LaserJet 4200tn or the HP LaserJet 4300tn is selected, the following settings apply:

- The Total Printer Memory value is 64 MB.
- Duplexing Unit is selected.
- HP 500-Sheet Input Tray is selected in Optional Paper Sources.
- No optional paper destinations are selected.

When the HP LaserJet 4200dtn or the HP LaserJet 4300dtn is selected, the following settings apply:

- The Total Printer Memory value is 64 MB.
- Duplexing Unit is selected.
- Mopier Enabled is selected.
- Printer Hard Disk is selected.
- 2 x 500-Sheet Input Tray is selected.

When the HP LaserJet 4200dtns or the HP LaserJet 4300dtns is selected, the following settings apply:

- The Total Printer Memory value is 64 MB.
- Duplexing Unit is selected.
- Mopier Enabled is selected.
- Printer Hard Disk is selected.
- 2 x 500-Sheet Input Tray is selected.

When the HP LaserJet 4200dtnsl or the HP LaserJet 4300dtnsl is selected, the following settings apply:

- The Total Printer Memory value is 64 MB.
- Duplexing Unit is selected.
- Mopier Enabled is selected.
- Printer Hard Disk is selected.
- 2 x 500-Sheet Input Tray is selected.

# Paper-handling options

The Paper Handling Options group box provides options for configuring most of the paper-handling device features.

# **Duplexing unit**

Select this option if a duplexing unit is installed in the printer. When it is selected, additional controls appear in the **Document Options** group box on the **Finishing** tab. Unlike most options in this group box, the **Duplexing Unit** option

does not affect the printer image because the duplexing unit is contained within the printer. To print on both sides, click **Print** from the program, click the **Properties** button, click the **Finishing** tab, and then click **Print on Both Sides**.

# Mopier enabled

A mopier is an HP-designed printer that produces multiple, collated copies from a single print job. Multiple-original printing (mopying) increases printer performance and reduces network traffic by sending the job to the printer once, then storing it on the hard disk. The remainder of the copies are printed at the printer's fastest speed. All documents can be created, controlled, managed, and finished from the desktop, which eliminates the extra step of using a photocopier.

The HP LaserJet 4200 and 4300 series printers support the Transmit Once mopying feature. The **Mopier Enabled** option is selected by default, if a hard disk is installed and Printer Hard Disk is selected in the driver software.

# **Envelope feeder**

This check box should be selected if an envelope feeder unit is installed on the printer. Selecting the **Envelope Feeder** option causes the envelope feeder bitmap to be superimposed on the printer's bitmap image.

When the **Envelope Feeder** check box is selected, the choice of **Envelope Feeder** is added to the **Paper** tab **Source** is dropdown menu. Its order in the list should directly follow **Manual Feed**.

# **Optional paper destinations**

The Optional Paper Destinations drop-down menu contains the following options:

- (None)
- HP 500-Sheet Stacker
- HP 500-Sheet Stapler/Stacker

If the 500-Sheet Stapler/Stacker is configured on the **Configure** tab, the **Staple** option is included on the **Finishing** tab.

# **Optional paper sources**

The **Optional Paper Sources** drop-down menu lists optional paper sources for the HP LaserJet 4200 and 4300 series printers. The list of available paper sources varies, depending on your printer, its input accessories, and the printer configuration settings on the **Configure** tab.

For the HP LaserJet 4200 and 4300 series printers, five optional paper sources are available. The settings in the **Optional Paper Sources** drop-down menu are as followings:

- (None) (the default setting for the HP LaserJet 4200 and 4300 and 4200n and 4300n models)
- HP 500-Sheet & 1,500-sheet Input Tray
- 2 HP 500-Sheet Stackable Trays (the default setting for the HP LaserJet 4200tn and 4300tn, 4200dtn and 4300dtn, 4200dtns, and 4300dtns, and 4300dtns and 4300dtns models)
- HP 1,500-sheet Input Tray
- HP 500-Sheet Stackable Tray

# Other options

The **Other Options** group box contains a single **More** command button. Clicking the **More** button opens the **More Configuration Options** dialog box.

# **Storage**

If your printer has a hard disk installed, you can use the **Storage** section to specify whether **Job Storage** is enabled. **Job Storage** is automatically enabled if **Printer Hard Disk** is selected. The printer hard disk control can be set manually or updated by using a successful bidirectional communication query that is initiated through the **Update Now** button in environments that support bidirectional communication. **Job Storage Enabled** determines whether **Job Storage** appears as a feature on the **Destination** tab. Because this is the only possible Destination Feature for the HP LaserJet 4200 and 4300 series printers, this also determines whether the **Destination** tab appears.

# **Printer Memory**

**Total Memory**. This shows the total amount of memory physically installed in the printer. The default values for total printer memory are specified in the Printer Model section of the **Configuration** tab and are based on the printer model.

If you select **Printer Hard Disk**, the **Job Storage** check box is selected as the default setting. Selecting **Printer Hard Disk** also selects the **Mopier Enabled** check box as the default setting for all HP LaserJet 4200 and 4300 series printers. Total printer memory is updated through a successful bidirectional query, or can be set manually.

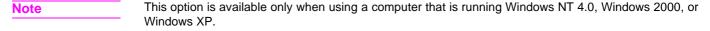
**Driver Work Space**. Use the **Driver Work Space** (**DWS**) option to specify the amount of work-space memory available to the printer. In environments that support bidirectional communication, this option is configured automatically. To manually set **DWS**, print a configuration page and find the **DWS** value in the Memory section of the configuration page. The **DWS** value might change if you switch printer-model settings. Then, type that value in the **DWS** box in the **More Configuration Options** dialog box. An accurate **DWS** value optimizes driver performance.

# Allow scaling from large paper

Select **Allow Scaling from Large Paper** to allow additional larger-than-supported paper sizes to appear in the **Paper** tab **Size Is** drop-down list. This check box is clear (not selected) by default.

# Include types in application source list

When the **Include types in application source list** check box is selected, all paper types (such as envelopes and transparencies) are available from the **Source is:** list on the **Paper** tab. When you are in an application (also called a program), you can open the **Paper** tab by clicking **Print** from the **File** menu, and then clicking **Properties**.



#### **Fonts**

The **Fonts** group box contains a **Font DIMM** check box and a corresponding **Configure** button. Selecting the **Font DIMM** check box tells the driver that a Font DIMM is installed, and that stored data about the fonts on the DIMM is available. When the check box is selected, the **Configure** button is enabled. Click the **Configure** button to open the **Configure Font DIMMs** dialog box. If the **Font DIMM** check box was not selected when you opened the **More Configuration Options** dialog box, selecting that check box automatically opens the **Configure Font DIMMs** dialog box.

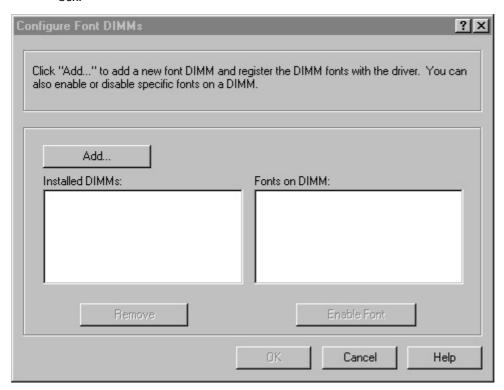


Figure 28: Configure Font DIMMs dialog box

Use the Configure Font DIMMs dialog box to perform the following tasks:

- Add up to two font DIMMs by clicking the Add button.
- Specify a unique font DIMM name.
- Select specific font DIMM data files that contain lists of fonts on specified DIMMs.
- Select one or more installed DIMMs in the Installed DIMM list, and based on the selected DIMM(s). The list to the right (Fonts on DIMM) shows all of the fonts available on the selected DIMM(s).
- Enable or disable one or more of the selected font(s).

Use the following procedure to configure a font DIMM.

- 1 Make sure that the font DIMM is properly installed.
- 2 Click Add. The Add Font DIMM dialog box appears.
- 3 Click Browse. The Font DIMM Files dialog box appears.
- 4 Find and select the appropriate Printer Cartridge Metrics (PCM) file that came with the font DIMM.
- 5 Click Open.
- 6 If you want to, specify a Font DIMM Name in the **Add Font DIMM** dialog box.
- 7 Click OK. The selected printer cartridge metrics (.PCM) file appears in the Installed DIMMs list. Select the .PCM file to see a list of available fonts in the Fonts on DIMM list.

8 Click **OK** to close the **Add Font DIMM** dialog box. The fonts on the DIMM should now be available on the system.

Note

When using font DIMMs with the PCL 5e and PCL 6 drivers: To install screen fonts that match the font DIMM, use the .HPB file specifically designed to work with that DIMM. If there are no screen fonts for the DIMM, use the .PCM file specifically designed to work with that DIMM.

# **Ignore Application Collation**

The following table shows the expected behavior for a two-page print job when the number of copies is three.

Table 12: Printer behavior with Ignore Application Collation settings

Hard disk on printer	Mopier Enabled check box	Ignore Application Collation check box	Application Collation check box in Print dialog box	Commands sent by printer	Pages sent to printer	Pages output from printer
Yes	On	On	On Off None	QTY=3	1,2	1,2,1,2,1,2
Yes	On	On	On	QTY=3	1,2	1,2,1,2,1,2
Yes	On	Off	Off	Copies=3	1,2	1,1,1,2,2,2
Yes/No	Off	Off	On	Copies=1	1,2,1,2,1,2	1,2,1,2,1,2
Yes/No	Off	Off	Off	Copies=3	1,2	1,1,1,2,2,2
Yes/No	Off	Off	None	Copies=1	1,2,1,2,1,2	1,2,1,2,1,2
Yes/No	Off	Off	None	Copies=3	1,2	1,1,1,2,2,2
No	On	On	On Off None	QTY=3	1,2	1, 2
No	On	Off	On Off None	QTY=3	1,2	1, 2

Placing the **Ignore Application Collation** setting in the printer properties means that, on a Windows NT network, clients connecting to the printer through a network share cannot change its value; only the network administrator can decide how the printer driver is set up.

You cannot use the **Ignore Application Collation** setting to print non-collated copies. If you want to print non-collated copies, disable mopying.

# **Automatic configuration**

If you have modified the configuration of the HP LaserJet 4200 or 4300 series printer since installation, click the **Update Now** button to automatically reflect the new configuration in the driver. For more information about the Driver Automatic Configuration feature, see "Driver Autoconfiguration."

# Printer image

The bitmap image in the lower-right portion of the **Configure** tab represents the current physical configuration of the printer according to the driver configuration data (which can be obtained automatically through bidirectional communication, or configured manually in the **Paper-Handling Options** group box). It should have the same appearance as the image in the same location on the **Paper** tab and the **Destination** tab.

#### NT Forms tab features

The **NT Forms** tab appears only in the Microsoft Windows NT 4.0, Windows 2000, and Windows XP operating environments. The **NT Forms** tab (like the **Configure** tab) can be viewed only from the Properties window.

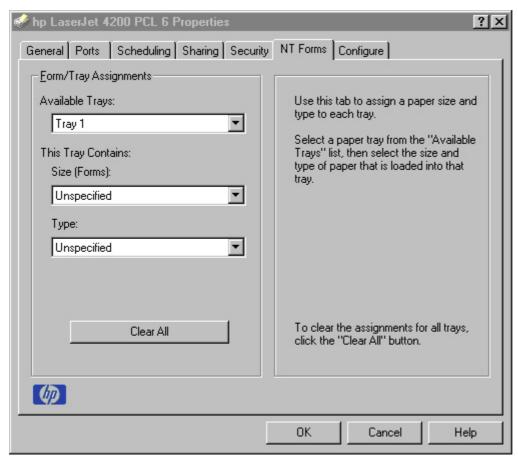


Figure 29: Driver NT Forms tab

Use the **NT Forms** tab to specify which media sizes and types are loaded in each of the available paper trays. This constrains the choices available in the **Size** and **Type** lists on the **Paper** tab. This constraint prevents information overload if you request unavailable sizes or types.

Available Trays is a drop-down menu that contains all the printer trays that are specified on the **Configure** tab. The **This Tray Contains/Size (Forms)** drop-down menu contains a list of standard paper sizes the HP LaserJet 4200 and 4300 series printers support, as well as any custom forms that are defined in the **Forms** tab. The **This Tray Contains/Type** drop-down menu lists all of the media types supported by the HP LaserJet 4200 and 4300 series printers. The **Clear All** button removes all the size and type constraints on the **Paper** tab.

# Configuring the trays

- 1 Select the appropriate tray from the **Available Trays** list.
- 2 Use the This Tray Contains/Size (Forms) drop-down menu to select the paper size (or form) that is loaded in that tray.
- 3 Use the **This Tray Contains/Type** drop-down menu to select the paper type that is configured for the tray.
- 4 Repeat steps 1 through 3 for the remaining trays.

5 If necessary, click the **Clear All** button to reconfigure all the trays, and remove the size and type constraints that have been imposed on the **Paper** tab.

## PS driver features for Windows 95, 98, Me, and NT 4.0

This section provides information about the features of the Windows PS printer driver.

# PS Level 3 Emulation support for the HP LaserJet 4200 and 4300 series printers

The PS Level 3 Emulation maintains full compatibility with Adobe PS Level 3 when PS Level 3 soft fonts are purchased from Adobe.

A set of 92 PS Level 3 soft fonts is included with the printing-system software. If you want to permanently install the fonts in the printer, PS Level 3 emulation fonts are also available from HP in an optional font DIMM.

Users of Adobe-licensed programs might also have the right to use the Adobe PS level 3 printer drivers from Adobe with the HP LaserJet printer PS Level 3 emulation PPD, available on the HP LaserJet printer software CD-ROM or from the HP Web site. When using the Adobe PS Level 3 printer driver, users must comply with all Adobe licensing agreements, as stated on the Adobe Web site at <a href="http://www.adobe.com/support/downloads/license.html">http://www.adobe.com/support/downloads/license.html</a>. See "Font support" for a list of the additional fonts.



The driver interface shown in this section is for Windows NT 4.0. The order and appearance of tabs can vary among operating systems.

## Page Setup tab features

The **Page Setup** tab contains controls for the following options:

- Paper Size
- Paper Source
- Copy Count
- Orientation

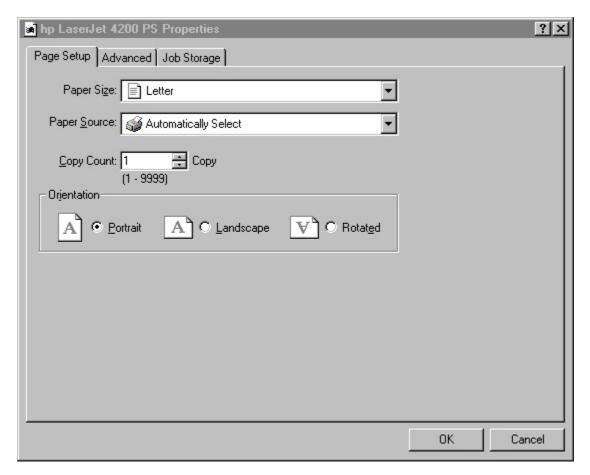


Figure 30: Page Setup tab

#### Advanced tab features

The **Advanced** tab contains controls for the following types of options:

- Paper/Output (advanced control over the options available on the Page Setup tab)
- Graphic (including resolution, scaling, and TrueType font controls)
- Document Options (including printer features and PostScript options)

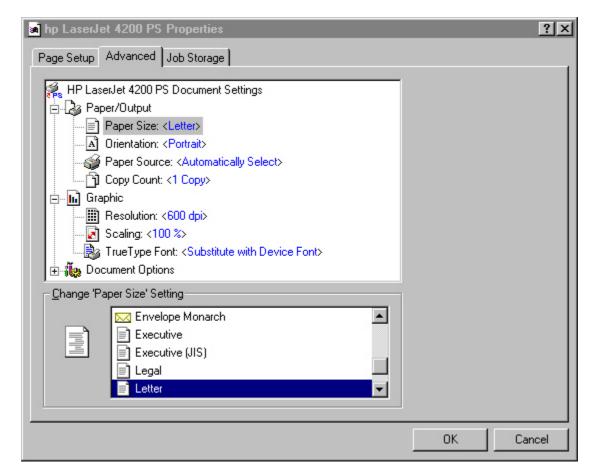


Figure 31: Advanced tab

#### Job Storage tab features

The **Job Storage** tab for the PCL 6 driver (for Windows NT 4.0, Windows 2000, or Windows XP operating systems) is shown in the following figure.



Limited Job Storage functions for Windows 95, Windows 98, and Windows Me operating systems are available under Printer Features on the PS driver Advanced tab.

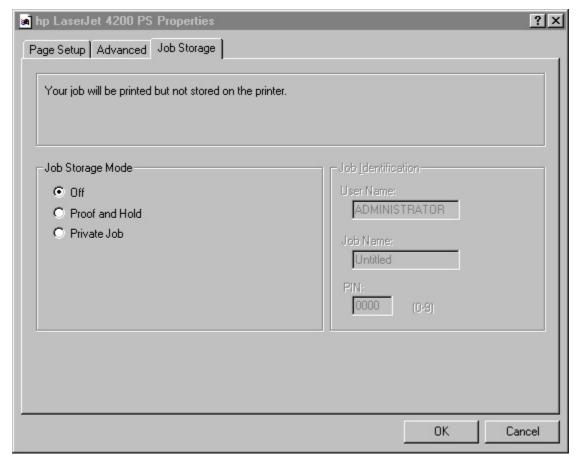


Figure 32: Job Storage tab

When a hard disk is installed and **Job Storage** is enabled, the HP LaserJet 4200 and 4300 series printers offer the following PS 3 emulation **Job Storage** options:

- Off
- Proof and Hold
- Private Job

The **Job Storage** tab appears when **Job Storage** is enabled on the **Device Settings** tab. All of the options appear if a hard disk is installed on the printer and enabled on the **Device Settings** tab.

#### Off

This option turns the Job Storage feature off (it is disabled), which means that the print job will not be stored in the printer.

#### **Proof and Hold**

Use this option to store the print job on the printer hard disk and print only the first copy of the job. You can check the first copy and, if the document is correct, you can print the remaining copies of the print job at the printer control panel. The number of proof-and-hold print jobs that can be stored in the printer is set at the printer control panel.

#### Private Job and Stored Job

The Private Job and Stored Job options can be secured by using a four-digit personal identification number (PIN).

#### PIN

You can assign a four-digit PIN to a print job when you are using the Private Job or Stored Job feature. This number must be typed at the printer control panel before the job can be printed.

The box labeled **PIN** is usually inactive. Selecting **Private Job** or **Stored Job** along with **Require PIN to Print** activates the **PIN** box. The Stored Job/PIN coupling has a PIN restriction of four ASCII numeric characters (ASCII 0-30 through 0-39). If you type non-numeric characters, they are removed immediately. If you type more than four characters, the characters after the fourth are truncated. The field temporarily accepts fewer than four digits in the string, but when the edit field loses focus, the zeroes pad the left end of the PIN until it contains exactly four digits. The default initialized value for the PIN is 0000 for **Private Job** and **Stored Job** with **Require PIN to Print** selected.

#### **Private Job**

Use this option to send a print job directly to the printer memory. Selecting **Private Job** activates the **PIN** field. The print job can be printed only after you type a PIN at the printer control panel. After the job is printed, the printer removes the job from the printer memory. This feature is useful when you are printing sensitive or confidential documents that you do not want to leave in an output bin after printing. **Private Job** stores the print job on the hard disk.

After it is released for printing, the private job is immediately deleted from the printer. If more copies are needed, you will have to reprint the job from the software program. If you send a second private job to the printer that has the same user name and job name as an existing private job (and if you have not released the original job for printing), the second job will overwrite the older job, regardless of the PIN. Private jobs are deleted if power to the printer is interrupted.

#### Stored Job

Use Stored Job to send a print job directly to the printer hard disk. The print job is stored in the printer as if it is an electronic file cabinet. After the print job is stored in the printer's hard disk, you can print the job at the printer control panel. Nothing will be printed until the job is requested at the printer control panel.

The job remains stored on the printer until it is deleted or overwritten by a document with the same user and job names. Stored jobs remain on the printer hard disk when power is interrupted. Use this feature for forms and other common or shared documents.

A stored job can be handled in two ways: as either a private or a public job. If you create a private stored job, a print job is sent directly to the printer memory and can be printed only after you type a PIN at the printer control panel. (You can set the PIN in the **Print** dialog box.) After the job is printed, the job remains in the printer memory and can be printed again from the printer control panel. This feature is useful when you are printing sensitive or confidential documents that you do not want to leave in an output bin after printing. Private mode is initiated by selecting the **Require PIN to Print** check box. In this mode, you have to type a PIN at the control panel to release the job.

The box labeled PIN is usually inactive. The **Require PIN to Print** option is activated if you click **Stored Job**. If the **Require PIN to Print** option is selected, you must type a PIN to make the stored job private.



A private stored job is not the same as a private job (see above). Private jobs are deleted from the printer memory after they are printed. Private stored jobs are retained in the printer memory after printing, but require a PIN to be used each time the private stored jobs are printed.

# **Device Settings tab features**

The **Device Settings** tab contains controls for paper-handling devices and controls for managing the HP LaserJet 4200 and 4300 series printers. To gain access to the **Device Settings** tab, click **Start**, click **Settings**, and then click **Printers**. Right-click the printer name, click **Properties**, and then click the **Device Settings** tab.

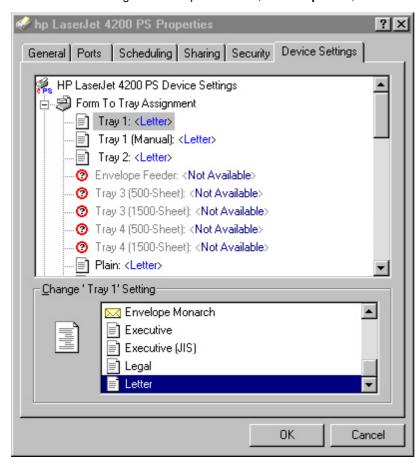


Figure 33: Device Settings tab

## PCL 5e and PCL 6 driver features for Windows 2000 and Windows XP

This section describes the options available on each tab of the PCL 6 and PCL 5e driver interfaces.

# **Help system**

The HP LaserJet PCL 6 and PCL 5e drivers include a full-featured Help system to provide assistance with printing and configuration options.

#### What's this? Help

In Windows 2000 and Windows XP, "What's this?" Help is supported. You can gain access to "What's this?" Help messages in any of the following ways:

- Right-click a control and click What's this?, and a pop-up Help window appears.
- Click the ? button at the upper-right corner of the frame, next to the X, to change the cursor to an arrow with a
  question mark. Use this special cursor to select a control, and the pop-up Help window for that feature appears.

Press the F1 key, and the Help window for the currently selected control appears.

#### **Context-sensitive Help**

Press the Help button on a driver tab or in a dialog box, and context-sensitive Help appears.

#### **Constraint messages**

Constraint messages are unsolicited messages that appear in response to specific actions you take. These messages alert you to selections that are illogical or impossible given the capabilities of the printer or the current settings of other controls. For example, if you click **Print on Both Sides** and then change the paper type to transparencies, a message appears asking you to resolve this conflict.

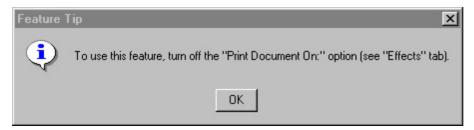


Figure 34: A typical constraint message with an OK button

Whenever a constraint message appears with **OK** or **Cancel** buttons, the interpretation of the buttons is as follows:

- Clicking OK accepts the change that was just made, and the driver then resets the conflicting control to a setting
  that is compatible with the new value.
- Clicking Cancel rejects the change that was just made, setting the control back to its previous value.

# Layout tab

The **Layout** tab is a Microsoft-owned tab page that you can use to change the layout of printed pages. The **Layout** tab is the default tab that appears when you click **Document Defaults...** (or **Printing Preferences**, depending on your operating system) for the driver or for a software program.

The following group boxes are available on the **Layout** tab:

- Orientation
- Print on Both Sides (when a duplexing unit is installed)
- Page Order

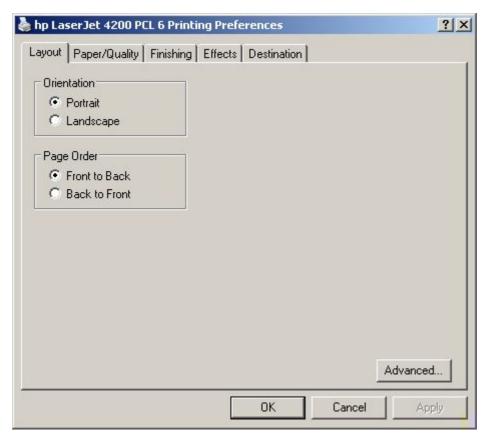


Figure 35: The default appearance of the Layout tab

#### Orientation

Orientation refers to the layout of the image on the page. It does not affect in any way the manner in which the media is fed into the printer. The default orientation is Portrait.



Nearly all programs establish the orientation for the printed page, so the page orientation in the driver is useful only for the few programs that do not set an orientation.

#### **Print on Both Sides**

The Print on Both Sides control represents duplex printing and is visible only when the Device Settings tab indicates that a duplexing unit is installed. The control allows the user to select between printing one or both sides of the paper. Click None to print on one side of the paper only. Click Flip on Short Edge or Flip on Long Edge to print on both sides of the paper. Short Edge prints portrait pages that are read by turning pages over like a notepad. Long Side prints portrait pages that are read by turning pages as in a book. The default setting is None (that is, not duplexing).

When the Print on Both Sides setting on the Layout tab is activated (by selecting either Flip on Long Edge or Flip on Short Edge), the document preview image in the Finishing tab changes to show a spiral binding along either the left or the top edge of the page. In addition, a folded-over corner appears in the lower-right portion of the preview image, indicating that printing will occur on the back side. An arrow on the folded-over corner points in the direction that the pages would be flipped if they were bound together.



The duplexing unit generally has constraints on the paper size (small or oversize) and media (heavy stock, labels) that may be duplexed. Check the printer control panel for specific restrictions.

## **Page Order**

Page Order specifies the order in which the pages of your document are printed. Front to Back prints the document so that page 1 is the front of the document. Back to Front prints the document so that page 1 is at the back of the document. The Back to Front setting is useful if the user is printing to a face-up output bin to achieve output in the correct order.



The page-ordering operation works on whole sheets of paper rather than on individual logical pages. Accordingly, if you set N-up to be greater than one, the ordering of logical pages on a physical sheet of paper does not change.

#### **Advanced features**

The Advanced button allows you to select items such as paper size and copies in the driver (even though today, most programs support these features in their print dialog box or through the program page settings) or special controls that are not commonly used. This is a Microsoft pop-up dialog. The main features of interest are described.

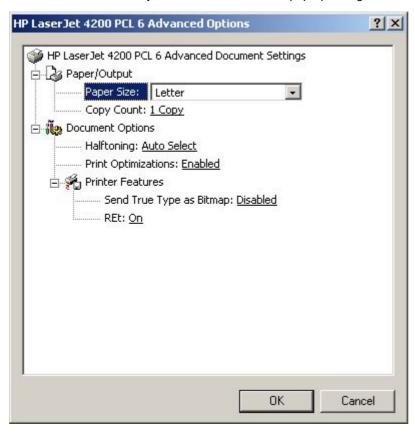


Figure 36: The default appearance of the Advanced subtab

## **Paper Size**

Paper Size sets the default paper size used by the driver if the program does not specify a size. This list contains all standard printer-supported forms and any user defined forms that can be supported by the printer, as defined through the server properties. This setting is used by the driver to highlight the constraints that features have on paper size. For example, Letter-size media cannot be pulled from an envelope feeder.

## **Copy Count and Collated**

This driver setting is useful for programs that do not provide a copy count. The Collated check box appears when the Copy Count setting is greater than 1. The default collate setting is selected.

_	

This setting is not synchronized with the program's print dialog.

#### **REt**

Resolution Enhancement technology is a simple on/off setting rather than light/medium/dark/off. The On setting corresponds to the "medium" setting found in older HP printers.

## Send TrueType as Bitmaps

Send TrueType as Bitmaps is the only setting available and provides the user a safety net for those programs that have trouble dealing with TrueType fonts for special graphic purposes such as shading, rotation, or slanting. The feature is not available when the Send Page as Raster option is selected. The check box is clear (off) by default. Using this feature, TrueType fonts are first converted to bitmap softfonts prior to downloading. The On setting causes the driver to send TrueType fonts to the printer as outlines, which retains the standard format (Outline) of the fonts.

## **Graphics Mode for PCL 5e**

There are two settings under Graphics Mode (on the PCL 5e driver only) that control the way in which the driver expresses vector graphics on a page:

- Select Send Graphics as Vector to send graphics to the printer as a combination of HP-GL2 and raster images.
   This setting may produce higher quality graphics output.
- Select Send Graphics as Raster to send all graphics to the printer as images composed of individual dots. This
  setting may improve printing speed in some cases.

## Paper/Quality tab features

The Paper/Quality tab allows you to specify the size, type, and source of your print media, together with Print Quality settings. You may also indicate paper selection choices for the first page of the document that are different from the choices for the other pages. The Paper/Quality tab is shown in the following illustration.

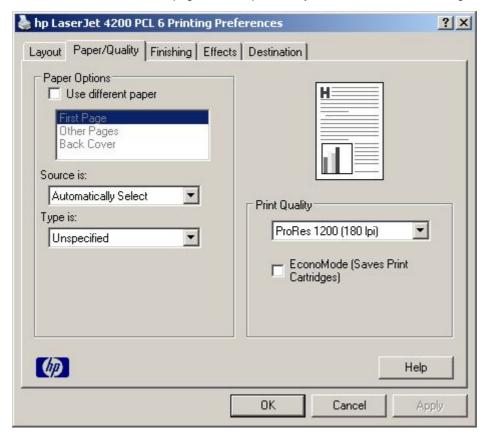


Figure 37: The default appearance of the Paper/Quality tab

## **Paper Options**

The following settings are available in the Paper Options group box:

- Use different paper
- Source is:
- Type is:

## First Page and Other Pages

A cover can have two forms, depending on the type of booklet a user is printing:

- For full size (e.g., LETTER size, Letter type) booklets, select a different media for the first page and add an extra blank back page. The front cover may contain print data or be a blank page and can either be pulled from a different paper source or be another media type. The back cover may be printed on a different media from the front cover.
- 2. For two-page-per-sheet (2-up) booklet printing, a cover is obtained by selecting a different media for the first page only. The back cover setting is hidden, since this page would otherwise be printed in the middle of a booklet.

Whenever you make changes to all pages (that is, when Use different paper is cleared), these changes are reflected in both the First Page and Other Pages settings whenever the user sets "Use different paper".

#### **Back Cover**

The Back Cover allows the user to select an alternate paper source or media type from which a blank page will be drawn and placed after the last page of the document. The default selection is that no back cover is printed.

The settings for Back Cover are not retained when the Use different paper check box is cleared. If you select Use different paper, and then select Back cover, the Add a blank back cover check box appears. When you clear the Use different paper check box, the source and media type for the first tab overwrites the other paper settings and the Add a blank back cover check box is cleared, and disappears. The setting for Source is: is set to Automatically Select, and the setting for Type is: is set to Unspecified.

#### Source is:

The Source Is: setting specifies the desired paper source to use for printing a document. Different printer models support different paper sources, such as upper tray, envelope feed, cassette, and manual feed.

If you click Automatically Select, the printer uses the paper tray that supports the paper size you have selected. If you choose a paper source other than Automatically Select, make sure that the correct paper size is loaded in the paper source.

All other options are printer-dependent. Consult the operating manual for your printer to determine what these settings do and which settings are appropriate for the task you want to perform.

## Type is:

This dropdown menu contains the media types supported by the printer, as well as any user-defined types that may have been created by a printer administrator using Web JetAdmin. When the default setting, Unspecified; is used, the printer uses its default media type, usually Plain.

No mechanism exists for manually adding custom paper types from the driver — these can only be added with the bidirectional-communication mechanism, and they must already exist in the printer when the bidirectional-communication query occurs. If bidirectional communication is working, the information returned will be used to update the list of paper types. If bidirectional communication is not working, the driver will look for any custom paper types that it might have saved from a previous bidirectional communication query and use those. Otherwise, no custom paper types will be accessible through the driver.

The standard types that appear in the lists are:

- Bond
- Cardstock >164 g/m2
- Envelope
- Labels
- Letterhead
- Plain
- Preprinted
- Prepunched
- Recycled
- Rough
- Transparency
- Unspecified

## **Print Quality**

For the HP LaserJet PCL 6 driver, the Print Quality group box contains the following resolution options:

- ProRes 1200 (180 lpi)
- ProRes 1200 (212 lpi)
- FastRes 1200 (Faster)
- 600 dpi

FastRes 1200 (Faster) is the default setting.

For the HP LaserJet PCL 5e driver, the Print Quality group box contains the following resolution options:

- 600 dpi
- 300 dpi

300 dpi is the default setting.

For the HP LaserJet PS driver, the Print Quality group box contains the following resolution options:

- ProRes 1200 (Best)
- FastRes 1200 (Faster)
- 600 dpi

FastRes 1200 (Faster) is the default setting.

#### **EconoMode**

Use the **EconoMode** check box to turn this toner-saving feature on and off independently of the other **Print Quality** tab settings. When this check box is selected, the preview image lightens to show the expected appearance of the printed page when this feature is applied. The option is off by default.

The **EconoMode** option can also be activated from the printer control panel. The setting on the **EconoMode** option on the **Print Quality** tab (on or off) overrides the setting on the printer control-panel display, as shown on the following table. If an HP cartridge is not used, EconoMode is not available, regardless of the driver or control-panel setting.

**Table 13: EconoMode Settings** 

Default	Driver setting for print job	HP cartridge	Front panel reports	Actual result for print job
ON	ON	Yes	ON	ON
ON	ON	No	OFF	OFF
ON	OFF	Yes	ON	ON
ON	OFF	No	OFF	OFF
OFF	ON	Yes	OFF	ON
OFF	ON	No	OFF	OFF
OFF	OFF	Yes	OFF	OFF
OFF	OFF	No	OFF	OFF

# Finishing tab features

The appearance of the Finishing tab differs, depending on the printer model and paper-handling accessories installed. The following illustration shows the default appearance of the Finishing tab:

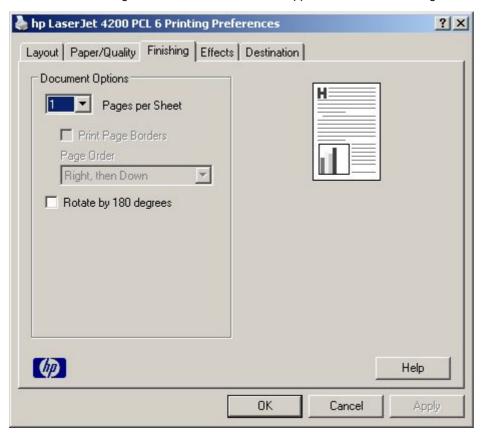


Figure 38: The default appearance of the Finishing tab

The full range of settings for the Finishing tab is shown in the following illustration.



Figure 39: Finishing tab, with duplexing unit and paper-handling accessory

The Finishing tab can contain the following controls:

- Pages per Sheet
- Print Page Borders(activated when Pages per Sheet setting is greater than 1)
- Page Order (activated when the Pages per Sheetsetting is greater than 1)
- Booklet Layout (visible when the Duplex Unit (for 2-Sided Printing):setting on the Device Settings tab is Installed
- Rotate by 180 degrees
- Stapling Options (visible when the Accessory Output Bin:setting on the Device Settings tab is HP 500-Sheet Stacker/Stapler
- Booklet Layout

# Pages per Sheet

The Pages per Sheet option (also called n-Up) is a drop-down list with six settings: 1 (default), 2, 4, 6, 9 and 16.

Related controls indented beneath the Pages per Sheet edit box are Print Page Borders and Page Order, which become active when the Pages Per Sheet setting is greater than 1. If you type another value into the box (for example, 3), the control will round the value entered to the nearest valid value (in this example, 4).

When the Print Page Borders check box is selected, a line is set around each page image to help visually define the borders of each logical page.

## **Print Page Borders**

When you select the Print Page Borders check box, a line is set around each page image on a printed sheet to help visually define the borders of each logical page.

## **Page Order**

There are four options for page order:

- Right, then Down
- Down, then Right
- Left, then Down
- Down, then Left

The preview document image changes to reflect alterations in these settings, as shown by the examples in the following illustration.

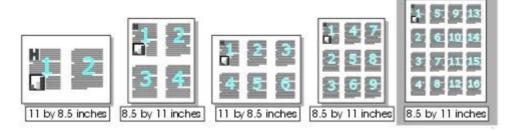


Figure 40: Page Order previews

- 2 pages per sheet
- 4 pages per sheet
- 6 pages per sheet
- 9 pages per sheet, with Print Page Borders selected
- 9 pages per sheet, with Down, then Right page order selected
- 16 pages per sheet

## **Booklet Layout**

The Booklet Layout drop-down menu, visible when the Duplex Unit (for 2-Sided Printing): setting on the Device Settings tab is Installed, offers three choices, two of which are based on the current paper size. The choices are:

- Off
- Left Edge Binding
- Right Edge Binding

where [paper size] depends on the paper size set on the Paper tab. The following table shows the appropriate entries in the Booklet Printing drop-down menu for each selected paper size.

The Print Document On setting determines the physical media size used in the print job.

## Rotate by 180 degrees

This feature causes the driver to rotate all page images 180 degrees. The purpose of this feature is to provide more control over the binding edge and for controlling the image on special media. For example, a printer may have difficulty-fusing toner near the trailing edge of an envelope. To correct this problem, rotate the media 180 degrees in the paper tray and select the Rotate by 180 degrees check box.

## **Stapling Options**

The Stapling Options group box is visible when the Accessory Output Bin: setting on the Device Settings tab is HP 500-Sheet Stacker/Stapler. Use the Paper Size option in the Advanced window of the Layout tab to select the media size.

## Stapling a document

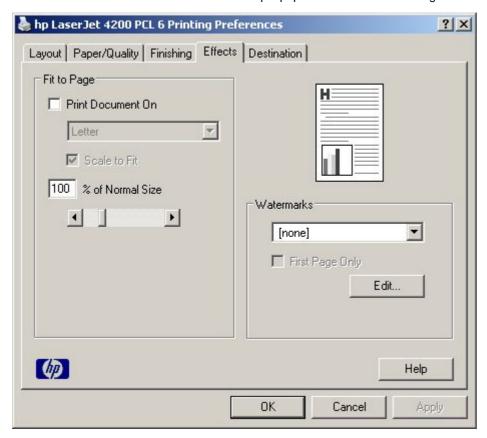
- 1 Click File, click Print, and then click Properties.
- 2 Click the Finishing tab.
- 3 Select the One Staple Angled in the Stapling Options drop-down menu.

Stapling options may be disabled by any of the following conflicts:

- The staple unit does not support the paper size.
- The stapling unit does not handle certain media types. For example, Transparency, Cardstock, or Labels.

## Effects tab features

The **Effects** tab is used to create unique paper effects such as scaling and watermarks.



#### Figure 41: Effects tab

## **Print Document On setting**

Use **Print Document On** to format the document for one paper size and then print the document on a different paper size, with or without scaling the page image to fit the new paper size.

The **Print Document On** control is disabled by any of the following conditions:

- Percent of Normal Size is not 100.
- Pages per Sheet (on the Finishing tab) is not 1.

When **Print Document On** is selected, the drop-down menu shows the media sizes on which you can print. The list contains all standard media sizes supported by the selected media source and any custom sizes that you have created (if the currently selected media source is manual, auto, or any tray). When **Print Document On** is selected, **Scale to Fit** is automatically selected.

## Scale to Fit option

The **Scale to Fit** option specifies whether each formatted document page image is scaled to fit the target paper size. By default, **Scale to Fit** is selected when **Print Document On** is selected. If the setting is turned off, then the document page images will not be scaled, and are instead centered at full size on the target paper. If the document size is larger than the target paper size, then the document image is clipped. If it is smaller, then it is centered within the target paper. The following illustration shows preview images for a document formatted for Legal paper with the **Print Document On** option selected, and the target size specified as **Letter.** 





Figure 42: Preview images - Legal on Letter; Scale to Fit off (left) and on (right)

When the size for which the document is formatted (that is, the logical size) differs from the target size, the preview image uses a dashed gray line to show the boundaries of the logical page in relation to the target page size.

## % of Normal Size option

The **% of Normal Size** option provides a slider bar for scaling the percentage setting. The default setting in the entry box is 100 percent of normal size. Normal size is defined as the paper size selected within the driver or what the driver receives from the program (if the program does not negotiate paper size with the driver). The driver will scale the page by the appropriate factor and send it to the printer.

The limits of the range are from 25 percent to 400 percent, and any values outside the range are clipped to those limits as soon as the focus is removed from the control (that is, when the TAB key is pressed or another control is selected).

Any change to the scale also changes the page preview, which increases or decreases from the top-left corner of the preview.

The slider bar controls the scale directly. The value in the edit box changes as the scroll bar indicator is dragged, and the preview image is updated to the new image scale. Each click on the scroll bar arrows increases or decreases the scale by one percent. Each click on the slider bar affects the scale by 10 percent.

You cannot achieve an exact value by dragging the scroll bar indicator at the default Windows resolution; use the scroll bar indicator to approximate the desired value, and then use the scroll bar arrows to refine the value.

101

The following settings disable % of Normal Size:

- Print Document On is selected.
- Pages per Sheet is not 1.

## **Watermarks**

Use the Watermarks feature to choose a watermark, create your own custom watermarks (text only), or edit an existing watermark. The following watermarks are preset in the driver:

- (none)
- Confidential
- Draft
- SAMPLE

The drop-down menu shows alphabetically sorted watermarks that are currently available on the system, plus the string "(none)", which indicates that no watermark is selected. This is the default setting. Any watermark selected from this list appears in the preview image.

When **First Page Only** is selected, the watermark is printed only on the first page of the document. The **First Page Only** check box is disabled when the current watermark selection is "(none)".

Watermarks are applied to logical pages. For example, when **Pages per Sheet** is set to "4" and **First Page Only** is turned off, four watermarks appear on the physical page (one on each logical page).

Click Edit, and the Watermark Details dialog box appears.

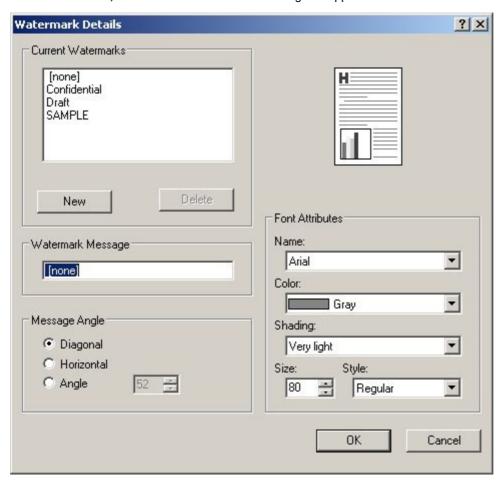


Figure 43: Watermark Details

The dialog box shows a preview image and provides options for creating a new watermark and controlling the message angle and font attributes.

Click **OK** to accept all changes made in the **Watermark Details** dialog box. However, clicking **Cancel** does not cancel all changes. If you make changes to a watermark, and then select a different watermark or click **New**, all changes made to the previous watermark are saved, and only the current, unsaved changes can be canceled.

#### **Current Watermarks**

The **Current Watermarks** group box contains a list of available watermarks, both predefined watermarks made available in the driver and any new watermarks you have created. To create a new watermark, click **New**. The new watermark appears in the **Current Watermarks** list and in the **Watermark Message** edit box as "Untitled" until you

name it. To name the new watermark, type the selected watermark text in the **Watermark Message** edit box. To delete a watermark, select the watermark in the **Current Watermarks** list and click **Delete**.



You can have no more that 30 watermarks in the Current Watermarks list at one time. When the limit of 30 watermarks is reached, the New button is disabled, and a Bubble Help appears that explains why the button is disabled and how to enable it.

To edit an existing watermark, select the watermark in the **Current Watermarks** list. If you change the Watermark Message for that watermark, you are, in effect, creating a new watermark.

## **Watermark Message**

The Watermark Message is also the name that identifies the watermark in the Current Watermarks list, except when more than one watermark has the same message. For example, you might want several different watermarks with the message DRAFT, each with a different font or size. When this occurs, the string is appended with a space, a pound sign, and a number (for example, **Draft #2**). When a number is added, the number two is used first, but if the resulting name is also in the list, then the number increases until the name is unique.

## Message Angle

Use the controls in the **Message Angle** group box to print the watermark in a diagonal, horizontal, or angle (custom) orientation to the page's text. The default is **Diagonal**. All three settings automatically center the watermark string within the page; the selection of a particular setting affects only the angle of the string placement. **Diagonal** places the text along a line that spans the lower-left to upper-right corners of the page.

#### **Font Attributes**

Use controls in the Font Attributes group box to change the font and the color, shading, size, and style of the font.

#### Name

The Name drop-down menu lists TrueType (TM) fonts that are currently installed on the system.

#### Color

The **Color** drop-down menu lists the fixed, unalterable color choices for the watermark. **Gray** is the only color option for the HP LaserJet 4200 and 4300 series printers.

## **Shading**

The following range of shades is available from the **Shading** drop-down menu:

- Lightest
- Very Light
- Light
- Medium Light
- Medium
- Medium Dark
- Dark
- Very Dark
- Darkest

These values represent the intensity of the color selected in the Color attribute.

#### Size

Font sizes from 1 to 999 points are available from the **Size** menu. The default point size is language-dependent. The choice of regular, bold, italic, and bold italic is available from the **Style** drop-down menu.

## **Default settings**

The default settings for new watermarks are **Arial** (R) font, **Gray** color, **Very Light** shading, **150points**, and **Regular** style. The default settings for preset watermarks are **Arial** font, **Gray** color, **Very Light** shading, **and Bold** style. The default point size for preset watermarks is language-dependent, and varies.

#### **Destination tab features**

The Destination tab provides options for job storage and output bins. The Destination tab is shown in the following illustration.

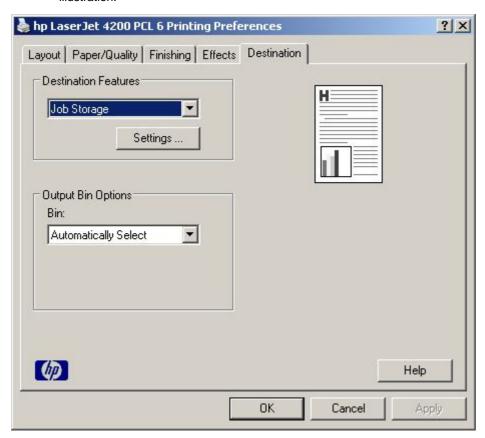


Figure 44: Destination tab features

#### **Destination features**

# Hardware configuration and availability of Job Storage options

The HP LaserJet 4200 and 4300 series printers can be equipped with a hard disk to accommodate the following Job Storage options:

- Proof and Hold
- Private Job
- Quick Copy

#### Stored Job

The following illustration shows the Job Storage Settings window.

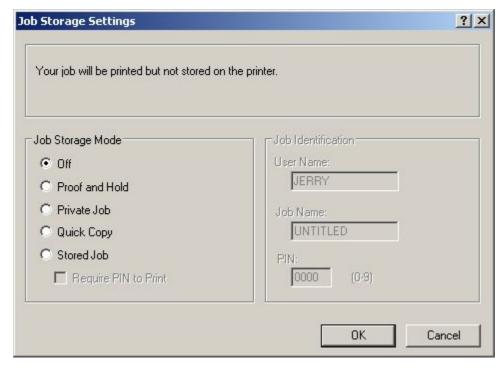


Figure 45: Job Storage Settings window

The Job Storage options available to you depends on whether your printer has an optional hard disk installed. Job Storage options require a printer hard disk (an optional HP EIO disk drive).

The Quick Copy and Stored Job options require the installation of a printer hard disk. To use all four of the Job Storage options, the printer must have the optional hard disk installed, the Printer Hard Disk setting under Installable Options in the Device Settings tab must be Installed, and the print driver must be configured to use hard-disk storage.

# Configuring the printer driver for a printer hard disk

If the print driver on your computer is not yet configured to use the hard disk, follow these steps:

Note

These steps must be completed for each driver.

- 1 Click Start, and then click Settings.
- 2 Navigate to the Printers (or Printers and Faxes) folder.
- 3 Right-click the printer icon, and click Properties.
- 4 Click the Device Settings tab.
- 5 Under Installable Options, click Printer Hard Disk. A drop-down menu appears.
- 6 Click Installed. (This also selects Job Storage Enabled).
- 7 Close all of the dialog boxes by clicking OK.

Your printer driver is now configured to use the hard-disk and Job Storage features of your HP LaserJet 4200 or 4300 series printer.

## Job storage modes

Using the Job Storage feature on your HP LaserJet 4200 or 4300 series printer, you can store documents at the printer and then control the printing of these documents using the printer control panel. This feature is intended to provide greater flexibility, convenience, security, and cost savings.

The HP LaserJet 4200 and 4300 series printers offer the following Job Storage options.

#### Off

This option turns the Job Storage feature off (it is disabled), which means the print job will not be stored in the printer.

#### **Quick Copy**

Quick Copy stores a copy of a printed job on the hard disk, and allows you to print additional copies of a print job using the control panel. The number of quick-copy print jobs that can be stored in the printer is set from the printer control panel.



The printer configuration can be set to hold a maximum of 50 quick-copy or proof-and-hold jobs. The number is set on the printer control panel in the Configuration menu, and the default is 32. When this preset limit is reached, a newer document will overwrite the oldest. Also, a document that has the same user and job name as one already stored on the hard disk will overwrite the existing document. Quick-copy jobs are deleted if the printer's power is removed.

#### **Proof and Hold**

This option stores the print job on the printer hard disk or in printer RAM memory, and prints only the first copy of the job, allowing you to check the first copy. If the document prints correctly, you can print the remaining copies of the print job from the printer control panel. The number of proof-and-hold print jobs that can be stored in the printer is set from the printer control panel.

## Using a PIN for Private Job and Stored Job

The Private Job and Stored Job options can be secured by a four-digit personal identification number (PIN). This number must be typed in the printer control panel before the printer prints the job. You can choose a predefined PIN, or you can also create a custom PIN.

The box labeled PIN is usually inactive. Selecting Private Job or Stored Job along with Require PIN to Print activates the PIN box. The Stored Job/PIN coupling has a PIN restriction of four ASCII numeric characters (ASCII 0-30 through 0-39). If you enter non-numeric characters, they are removed immediately. If you enter more than four characters, the characters past the fourth are truncated. The field temporarily allows fewer than four digits in the string, but when the edit field loses focus, the zeroes pad the left end until there are exactly four digits. The default initialized value for the PIN is 0000 for Private Job and Stored Job with Require PIN to Print selected.

#### **Private Job**

This option allows you to send a print job directly to the printer memory. Selection of Private Job activates the PIN field. The print job can be printed only after you type a PIN in the printer control panel. After the job is printed, the printer removes the job from the printer memory. This feature is useful when you are printing sensitive or confidential documents that you do not want to leave in an output bin after printing. Private Job stores the print job on the hard disk or in printer RAM memory.

After it is released for printing, the private job is immediately deleted from the printer. If more copies are needed, you have to reprint the job from the program. If you send a second private job to the printer with the same user name and job name as an existing private job (and you have not released the original job for printing), the job will overwrite the existing job, regardless of the PIN. Private jobs are deleted if power to the printer is removed.

#### **Stored Job**

The **Stored Job** option allows you to send a print job directly to the printer hard disk. The print job will be stored in the printer as if it is an electronic file cabinet. After the print job is stored in the printer's hard disk, you can print the job from the printer control panel.

The job remains stored on the printer until it is deleted or overwritten by a document with the same user and job names. Stored jobs remain on the printer hard disk when power is interrupted. Use this feature for forms and other common or shared documents.

A stored job can be handled in two ways, as either a private or a public job. A private stored job allows you to send a print job directly to the printer memory and can be printed only after you type a PIN in the printer control panel. (You can set the PIN in the Print dialog box.) After the job is printed, the job remains in the printer memory and can be printed again from the printer control panel. This feature is useful when you are printing sensitive or confidential documents you do not want to leave in an output bin after printing. Private mode is initiated by clicking the Require PIN to Print check box. In this mode, a PIN entry at the control panel is required to release the job.

The box labeled PIN is usually inactive. The Require PIN to Print option is activated if you click Stored Job. If selected, you must enter a PIN to make the stored job private.



A private stored job is not the same as a private job (see above). Private jobs are deleted from the printer memory after they are printed. Private stored jobs are retained in the printer memory after printing, but require that a PIN be typed each time they are printed.

## **Document Identifiers used in Job Storage**

When you use a Job Storage feature, your document is identified in the printer control panel by user name and job name.

#### **User Name**

The User Name edit box allows you to identify the job at the printer control panel. When the driver is first, this string initializes to the empty string (""), but the dialog box detects this condition and replaces the string with your login name in Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP. The following describes the restrictions for the User Name field.

#### **Job Name**

The Job Name is used for specifying a name to identify the job on the printer control panel. When the driver is installed, this string is initialized to the empty string (" "), but the dialog box will detect this condition and replace the string with "Untitled". The following describes the restrictions for the Job Name field.

The Job Name and the User Name fields can contain no more than 16 characters each, and are limited to A through Z and 0 through 9, because the name is displayed on the printer control panel. If you try to enter a lowercase character, it automatically shifts to uppercase. If you try to enter a character with an ASCII code of less than 32 or greater than 126 characters, the character is removed from the edit field, along with all characters that follow it. If you try to enter more than 16 characters, any character beyond 16 is truncated. When the dialog box is closed, or the edit box loses focus, an empty string is replaced with "Untitled". In those languages for which "Untitled" cannot be translated without the use of invalid characters, the driver uses a string of three dashes. The acceptable characters for job name and user name vary for each operating system. The string must be displayable on the printer control panel.

## **Using Job Storage options when printing**

You can use Job Storage options in the Destination tab of the printer driver.

Note

The printer driver installed on your computer must be configured to use the Job Storage features. See the "Configuring the printer driver for a printer hard disk" section.

- 1 Click Print from the software program. The Print dialog box appears.
- 2 Click Properties. The Properties dialog box appears.

108 Driver features Software Technical Reference

- 3 Click the Destination tab to display the destination options.
- 4 Click Job Storage on the drop-down menu under Destination Features.
- 5 Click Settings.... The Job Storage Settings dialog box appears.
- 6 You can then select one of the Job Storage options described above by clicking the appropriate option button. These instructions are specific to the Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP environments using the latest available PCL 5e, PCL 6, and PS drivers.

## Releasing stored jobs at the printer

Once you send a print job using Job Storage, you can release the job to print using the printer control panel.

- 1 Press the select button (the one with the check mark) to enter the menus.
- 2 Press the up and down buttons to scroll to RETRIEVE JOB, and then press the select button.
- 3 Press the up and down buttons to scroll to your job and press the select button.
- 4 Press the up and down buttons to scroll to PRINT. (The PRINT selection might have an icon next to it indicating that the job is locked. If so, type the PIN number, and then press the select button.) Press the select button.

## Deleting a print job

Sometimes it is necessary to delete a print job from the printer memory or hard disk. This can be done from the printer control panel.

- Press the select button (the one with the check mark) to enter the menus.
- 2 Press the up and down buttons to scroll to RETRIEVE JOB.
- 3 Press the up and down buttons to scroll to your job name and press the select button.
- 4 Press the up and down buttons to scroll to DELETE. (The DELETE selection might have an icon next to it indicating that the job is locked. If so, type the PIN number, and then press the select button.)

## **Output Bin Options**

The Output Bin Options group box contains a drop-down menu that lets you select from a list of configured output bins. Only output bins configured on the Device Settings tab appear in this drop-down menu.

- Automatically Select. This is the default setting.
- Stacker Bin. The optional 500-Sheet Stacker is a single 500-sheet stacking device that accommodates up to 500 sheets of standard and custom-sized paper.
- Stacker Bin (Stapled). The optional 500-Sheet Stapler/Stacker is a single 500-sheet stapling and stacking device
  that accommodates up to 500 sheets of standard and custom-sized paper. The print job is directed to the output
  paper-handling device and receives a single staple. It provides stapling for up to 15 sheets of Letter, Legal, or A4
  paper per document.
- Top Bin. The HP LaserJet 4200 and 4300 series printers have an output bin that can be selected in the driver. Output is delivered face-down.

The rear face-up bin also can be manually set for a straight paper path. Use the rear output door (straight-through paper path) when printing envelopes, labels, heavy- or light-weight paper, and other thick or special print media. Remove each sheet as it exits the printer.

#### About tab

The About tab provides detailed information about the driver. It contains an overall build number (in parenthesis after the model name) along with specific information about each of the components. The information varies according to HP LaserJet model number, driver, date, and versions. The About tab is shown in the following illustration.

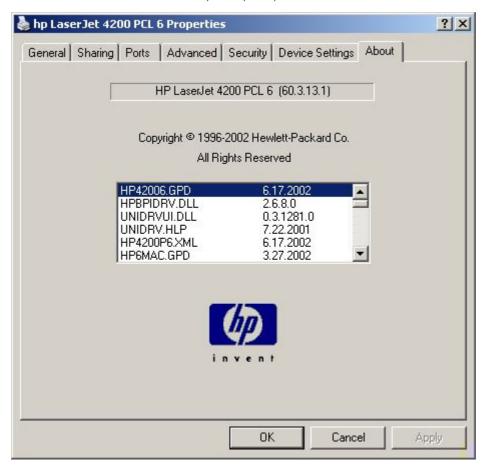


Figure 46: About tab

## **Device settings**

The Device Settings tab communicates the hardware configuration of the printer to the driver. The Device Settings tab sheet appears whenever the driver is opened from the Printers folder by selecting and right-clicking the printer, and then clicking Properties... for the driver. When the driver is opened from within a program, the Device Settings tab is not visible. When opened from the Printers folder, the Device Settings tab appears, as shown in the following illustration.

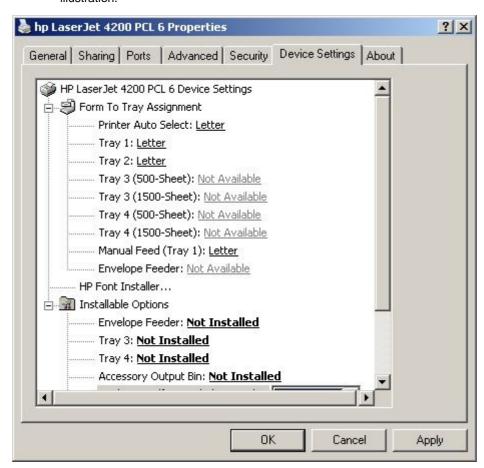


Figure 47: Device Settings tab

Each model of the HP LaserJet 4200 and 4300 printer device has its own list of configurable items; refer to the *HP LaserJet 4200 and 4300 User Guide* for detailed information. The description that follows includes installable options that may be supported by one or more printer models.

## Input Paper Handling Options

The Input Paper Handling Options include standard trays, high-capacity input trays, configurable sized paper trays (XY Trays), and envelope feeders. Generally, items that are installed separately have a separate Installable Options entry. For example, for the HP LaserJet 4200 and 4300 series printers, trays 3 and 4 can be high-capacity (1,500-sheet) trays. The additional input trays are included as paper sources in the driver's Paper/Quality tab. Another installable option is Envelope Feeder. To install an envelope feeder, select Installed in the Envelope Feeder drop-down menu. When installed, the Envelope Feeder option will be enabled as a Paper Source setting on the Paper/Quality tab.

#### **Accessory Output Bin**

The Accessory Output Bin setting includes various output devices that may be added to one of the printer's standard output tray (generally the face up tray). Generally, a printer supports only one output accessory. For example, the HP

LaserJet 4200 and 4300 series printers can support either the HP 500-Sheet Stacker or the HP 500-Sheet Stacker/ Stapler.

## **Duplex Unit (for 2-Sided Printing)**

If a duplexing unit is installed in the printer, select Duplex Unit (for 2-Sided Printing):, and then click Installed. When installed, the Print on Both Sides control will appear in the Layout tab. You can turn duplexing off or enable either long or short edge duplexing.

#### **Printer Hard Disk**

If a hard disk is installed in the printer, select Printer Hard Disk, and then click Installed. The printer hard disk enables additional features, such as additional Job Storage options, mopying, and downloading fonts and forms to the printer's hard disk. The utility to download and manage fonts and forms is separate from the driver. The driver does not explicitly support fonts and forms on the printer's hard disk.

## **Mopier Enabled**

A mopier is an HP-designed printer that produces multiple, collated copies from a single print job. Multiple-original printing (mopying) increases printer performance and reduces network traffic by sending the job to the printer once, then storing it on the hard disk. The remainder of the copies are printed at the printer's fastest speed. All documents can be created, controlled, managed, and finished from the desktop, which eliminates the extra step of using a photocopier.

The HP LaserJet 4200 and 4300 series printers support the Transmit Once mopying feature, and the Mopier Enabled option is enabled by default, if a hard disk is installed and the Printer Hard Disk setting is **Installed** in the Device Settings tab.

The driver determines whether the printer is capable of mopying by the presence of the Collate feature in a PPD/GPD along with any constraints that may apply (for example, requiring that a hard disk be installed in the printer). The driver automatically performs collation by checking the Collate check box in the program print dialog box. If the printer is properly configured, the printer performs the collation; otherwise, the spooler collates the print job. Likewise, if you clear the "Collate" check box in the program, the copies will not be collated. The following table shows the results of various driver Mopier Mode and collation settings.

#### Mopier mode and collation

Table 14: Driver Mopier mode and collation settings

Mopier mode	Application collation	Driver collation	Expected result
Disabled	Clear (not selected)	Clear	3 copies uncollated
Disabled	Clear	Selected	3 copies uncollated
Disabled	Selected	Clear	3 copies collated by OS
Disabled	Selected	Selected	3 copies collated by OS
Enabled	Clear	Clear	3 copies uncollated
Enabled	Clear	Selected	3 copies uncollated
Enabled	Selected	Clear	3 copies collated by Printer
Enabled	Selected	Selected	3 copies collated by Printer

## **Job Storage**

When the Job Storage setting in the Device Settings tab is enabled, Job Storage appears as a feature on the Destination tab.

#### **Printer Memory**

The amount of memory installed in the printer is established with this installable option. The driver generates ranges of memory that may be installed up to the maximum that may be installed in the printer. For the PS driver, this setting established the value shown in the Available PostScript Memory installable option. The driver can use this information to manage how the driver uses the printer memory.

112 Driver features Software Technical Reference

## **Form to Tray Assignment**

Form to Tray Assignment allows a network administrator to specify the paper size contained in each physical paper tray on the printer.

Many printers support more than one source of paper, such as upper and lower trays. You can assign a form (which defines the paper size and margins) to each of your printer's paper sources. Once a form is matched to a source, you can select the form when you print from your programs. The printer prints from the tray to which that form is assigned.

The purpose of the form to tray section allow network administrators to specify, for the driver, the media sizes that are loaded into each of the available paper trays. The use of forms constrains the choices available in the media-size lists on the Paper tab. This constraint prevents (or reduces the likelihood of) tying up the printer with paper-mount messages caused by users who request sizes or types that are not available.



Changes made to the Device Settings tab are not reflected in the Printing Preferences until the modified device settings have been applied. For example, the duplexing unit will not appear until you have modified the Device Settings tab, applied the settings, and then re-entered Printing Preferences.

#### HP LaserJet 4200/4300 software CD-ROM

## In-box file layout

The HP LaserJet printer system consists of two partitions: one for installation using Windows operating systems, the other for Macintosh operating systems. The files include both documentation files and files required to install and uninstall the systems.

## HP LaserJet software CD-ROM, Windows partition

## **Directory structure**

The files contained in the Windows partition of the HP LaserJet software CD-ROM, grouped by language, reside in the following directories:

- Root directory
- Drivers directory
- Fonts directory
- Manuals directory
- Reader directory
- Setup

File layouts differ according to language for the European and Asian versions of the software CD-ROM.

To view the files, insert the HP LaserJet printing system software CD-ROM, right-click **Start**, click **Explore**, and then select the CD-ROM drive.

#### **HP LaserJet software CD-ROM, Macintosh Partition**

The files contained in the Macintosh partition of the HP LaserJet software CD-ROM, grouped by language, reside in the following directories:

- Root directory
- HP LASERJET INSTALLERS (for Macintosh operating systems)
- PDF (for guides and manuals)

File layouts differ according to language for the European and Asian versions of the software CD-ROM.

## Availability and fulfillment

This section provides information about the availability of the HP LaserJet printing system software and related software and firmware. Software is available on CD-ROM from HP fulfillment centers or can be downloaded from the Web at the following URL:

http://www.hp.com/go/lj4200\_software

http://www.hp.com/go/lj4300\_software

#### In-box CD-ROMs

The HP LaserJet software CD-ROM is available in three regional versions. The following table lists the three versions of the software CD-ROM, along with the languages each version supports.

**Table 15: CD-ROM versions** 

CD-ROM version	Languages supported
Americas	Dutch (Nederland)
	English
	French (Français)
	German (Deutsch)
	Hebrew
	Italian (Italiano)
	Portuguese (Português) - Brazilian
	Spanish (Español)
Asian	English
	Chinese (Simplified)
	Chinese (Traditional)
	Korean
	Japanese
	Thai
Rest of world	Arabic
	Czech (Cesky)
	Danish (Dansk)
	English
	Finnish (Suomi)
	French (Français)
	Hungarian (Magyar)
	Norwegian (Norsk)
	Polish (Polski)
	Russian (Russ)
	Swedish (Svenska)
	Turkish (Turkçe)

## Web ordering

The HP LaserJet software CD-ROM and related software CD-ROMs can be ordered from the http://www.hp.com/go/lj4200\_software and http://www.hp.com/go/lj4300\_software Web sites. The links for ordering the CD-ROMs appear on these pages.

## Web deployment

Software and firmware to support HP LaserJet 4200 and 4300 series printers are available for download from the following Web sites:

http://www.hp.com/go/lj4200\_software

http://www.hp.com/go/lj4300\_software

http://www.hp.com/go/lj4200\_firmware

http://www.hp.com/go/lj4300\_firmware

This is the preferred method for obtaining the latest software and firmware. The Web sites offers a notification option for automatic e-mail notification about new software and firmware releases.

## **Printing-system software**

The HP LaserJet printing system software is available for download from the HP Web site at the following URL:

http://www.hp.com/go/lj4200\_software

http://www.hp.com/go/lj4300\_software

The software supports the following operating systems:

- Windows 95, Windows 98, and Windows Me
- Windows NT 4.0, Windows 2000, and Windows XP

#### **Printer firmware**

Firmware to support the HP LaserJet 4200 and 4300 series printers is available for download from the HP Web site at the following URLs:

http://www.hp.com/support/lj4200\_firmware

http://www.hp.com/support/lj4300\_firmware

Use the notification option to be notified of new firmware releases.

#### Standalone drivers

The HP LaserJet PCL 5e, PCL 6, and PS drivers are available individually to support the following operating systems:

- Windows 95, Windows 98, and Windows Me
- Windows NT 4.0
- Windows 2000
- Windows XP

Note

PCL 5e is not supported in Asian languages.

## Operating system driver bundles

The HP LaserJet 4200 and 4300 PCL 5e, PCL 6, and PS drivers are available in bundled configurations to support the following operating systems:

- Windows 95, Windows 98, and Windows Me
- Windows NT 4.0
- Windows 2000 and Windows XP

## Point-and-print bundles

The HP LaserJet PCL 6 driver is available in a point-and-print bundle to support the Windows operating environments.

## Other operating systems

Drivers and related software are available for these additional operating environments:

- Macintosh OS (PPDs and Universal Installer)
- OS/2 (PCL 5e,and PS)

## Software component availability

The following table lists the availability of HP LaserJet software components by operating system.

Note			
------	--	--	--

In the following table, "9x/Me" refers to Windows 95, Windows 98, and Windows Me. "2K" refers to Windows 2000; "4.0" refers to Windows NT 4.0; and "XP" refers to Windows XP.

Table 16: Software component availability for HP LaserJet 4200 and 4300 series printers

Component	9x/Me	4.0	2K/XP	OS/2	Mac	UNIX	Linux
Drivers							
PCL 6	Х	X	Χ				
PCL 5e	Х	Х	Х				
PCL 6 Unidriver			Х				
PCL 5 Unidriver			X				
PScript Driver & Postscript Printer Description (PPD)	X	Х	X				
Mac QuickDraw PPD					Х		
OS/2 IBM Drivers				Х			
	Х	Х					
Unix Model Script						Χ	
Linux Printing Architecture							Χ
Installers	•						
Common Windows Installer	Х	Х	Χ				
CD-ROM Browser	X	Х	Χ				
Customization Utility	X	Х	Х				
Fonts	X	Х	Х				
INF File (Add Printer)	X	Х	Χ				
Font Installer1							
Macintosh Installer for OSs 8 and 9					Х		
Macintosh Installer for OS X					Х		
Web Registration	X	Х	Χ				
Bidirectional communication							
Network Bidirectional Communications	X	Х	Χ				
Direct Connect Bidirectional Communications	X	Х	Χ				
Enterprise Autoconfiguration	X	Х	Х				
Proxy server	X	Х	Х				
Remote management and status	-						
Web JetAdmin		Х					Х
Applet for Web JetAdmin		Х	Х			Χ	
Macintosh LJ Utility					Х		
Printer Status and Alerts	Х	Χ	Х				
Autoconfiguration	Х	Х	Х				
Online Documentation							
Adobe Acrobat Reader	X	Х	Χ		Х		
HP LaserJet 4200 and 4300 User Guide	Х	Х	Х		Х		

116 Driver features Software Technical Reference

Component	9x/Me	4.0	2K/XP	OS/2	Мас	UNIX	Linux
HP LaserJet 4200 and 4300 series printer Installation	Х	Х	Х		Х		
HP LaserJet 4200 and 4300 series printer Release Notes	Х	X	Х		Х		
HP Jetdirect Guide	Х	X	Х		Х		
HP Fast InfraRed Receiver Guide	Х	X	Х				
Mac PS Help					Х		
Help	Х	X	Х		Х		
Other							
PS Fonts	X	X	X				
PS Fonts DIMM	Х	Х	Х		Х		

<sup>&</sup>lt;sup>1</sup>Supported as a standalone utility.

## **Software component localization**

The following table provides localization information about the HP LaserJet Series Printing system software. The information in this table does not necessarily reflect in-box solutions.

Components that are not available in any given language are supported in English.

Table 17: Software component localization for the HP LaserJet 4200 and 4300 series printers

Component	Operating System	AR	EN	FR	IT	GE	SP	JN	KO	TC	SC	TH	sw	DU	PG	NW	FN	DN	CZ	РО	RU	ΗU	TU
PS PPD	9 <b>x</b> , 4.0, 2000, XP	х	х	Х	х	х	Х	Х	х	Х	х	x <sup>1</sup>	х	х	х	Х	Х	х	Х	х	х	х	х
Printer Status and Alerts	9 <b>x</b> , 4.0, 2000, XP	Х	х	Х	Х	Х	х	Х	х	Х	х		Х	х	х	Х	Х	Х	Х	Х	Х	Х	х
Macintosh PS PPD	Mac	x <sup>2</sup>	X	Х	Х	Х			х	Х	Х		х	х	Х	Х	Х	х	Х		х		х
Macintosh LJ Utility	Mac		х	Х	Х	Х	Х						х	х	Х	Х	Х	х					
Macintosh Installation Notes	Mac		х	Х	Х	Х	х	Х	х	х	Х		х	х	Х	х	Х	х	х		х		Х
PCL 6	9 <b>x</b> , 4.0, 2000, XP	Х	Х	Х	Х	х	Х	Х	х	Х	х	x <sup>2</sup>	X	х	Х	Х	Х	Х	Х	х	х	Х	х
PCL 5c	9 <b>x</b> , 4.0, 2000, XP	Х	Х	Х	Х	Х	Х					x <sup>2</sup>	X	х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Printing System Installation Notes ReadMe	9 <b>x</b> , 4.0, 2000, XP	х	х	x	Х	х	х	x	x	х	х		х	x	Х	х	x	x	х	х	х	Х	x
Printing System Release Notes (Late-breaking ReadMe)	9 <b>x</b> , 4.0, 2000, XP		X																				
Common Windows Installer	9 <b>x</b> , 4.0, 2000	х	×	х	Х	x	Х	Х	x	Х	x		х	×	Х	Х	Х	x	Х	х	х	Х	x
Web JetAdmin	4.0, 2000, UNIX		х	х	Х	х	Х	х	х	х	х		х	х	Х	Х	Х	х	Х	Х	Х	х	х
Web JetAdmin Help	4.0, 2000, UNIX		х	х	Х	х	х	х	х	х	х		х	х	х	Х	х	х	Х	Х	Х	Х	х

Component	Operating System	AR	EN	FR	IT	GE	SP	JN	KO	TC	sc	TH	SW	DU	PG	NW	FN	DN	CZ	РО	RU	HU	TU
HP Web Access	System		х	X	х	х	X	х					х	Х	х	Х	X	х	Х	х	х	х	х
Online manuals (PDF)	9 <b>x</b> , 4.0, 2000, XP		х	х	Х	Х	Х	х	х	Х	х		х	Х	Х	х	Х	х	Х	Х	х	Х	X
IBM OS/2 Driver - PCL 5c	OS/2		х	х	Х	Х	х						х	Х	Х	х	Х	х					
IBM OS/2 Driver - PS	OS/2		х	х	х	Х	Х						х	Х	х	Х	Х	х					
Standard Fonts	9 <b>x</b> , 4.0, 2000, XP	Х	х	Х	Х	Х	Х	х					Х	Х	х	Х	Х	Х	Х	Х	Х	Х	Х
PS 3 Fonts	9 <b>x</b> , 4.0, 2000, XP	Х	х	X	Х	х	X	х		·		·	х	х	х	Х	Х	х	Х	х	Х	х	Х

<sup>&</sup>lt;sup>1</sup>For the Windows NT 4.0 operating system, the English driver is used.

Language Key:

AR = Arabic

CZ = Czech

DN = Danish

DU = Dutch

EN = English

FN = Finnish

FR = French

GE = German

HE = Hebrew

HU = Hungarian

IT = Italian

JN = Japanese

KO = Korean

NW = Norwegian

PG = Portuguese

PO = Polish

RU = Russian

SC = Simplified Chinese

SW = Swedish

SP = Spanish

TC = Traditional Chinese

TH = Thai

TU = Turkish

<sup>&</sup>lt;sup>2</sup>The English driver is used.

## Driver support tables for the HP LaserJet 4200 and 4300 series printers

The following tables detail the software features available for each driver type and for each supported operating system supported by the HP LaserJet 4200 and 4300 series printers.

## Job stream output

Table 18: Driver support for job stream output feature

	Windows X	(P (64 & 32) \ 2000	Windows	Windo	ows NT	4.0	Windov	vs 95, 98	3, Me	Mac	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
PCL 6 support	Х			Х			Х				
PCL5 support		Х			Χ			Χ			
PCL6 passthrough support	X			X			X				
XL 3.0	Х			Х			Х				
XL color											
PostScript level 3			X			Х				Х	Х
PostScript level 1.2			X			Х			Χ	Х	Х
PRN file driver identification	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Х	Х
Job accounting information	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Х	Х
UTF-8 encoding for PJL	Х	Х	Х	Х			Х				

## Stream output modes

Table 19: Driver support for stream output modes feature

					-						
	Windows XP	(64 & 32) Win	dows 2000	Windo	ows NT	4.0	Windov	/s 95, 98	3, Me	Mac	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
RAW output	X	Χ	X	Χ	Χ		Х	Х			
MS EMF output	X	Х	Х								
EPS			X			Χ			Χ	Х	Х

## Connectivity

Table 20: Driver support for connectivity features

			,								
	Windows XP	(64 & 32) Wind	dows 2000	Windo	ows NT	4.0	Windov	vs 95, 98	, Me	Mac	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Parallel	X	X	Х	Х	Χ	Х	Х	Х	Χ	Х	Х
Network	Х	X	Х	Х	Х	Х	Χ	Х	Х	Х	Х
USB					·						

#### **Bidirectional communication**

Table 21: Driver support for bidirectional communication features

	Windows XP	(64 & 32) Wind	dows 2000	Wind	ows NT	4.0	Windov	vs 95, 98	3, Me	Mac	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Parallel				Х	Χ		Χ	Χ		Х	
Network	Х	Х	Х	Х	Х		Х	Х		Х	
USB											

# **Driver Management and Configuration utility**

Table 22: Driver support for DMC utility feature

Table 221 Piller cap	P 0 : 0 : 0 : 2 :										
		ws XP (64 & ndows 2000		Windo	ows NT	4.0	Window	rs 95, 98	B, Me	Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Preconfiguration	X	X	Х	Х	Χ		Х	X			
Feature lockout	X	X	Х	X	Χ		Х	Х			
Enterprise Autoconfiguration (EAC)	X	X	Х	Х	Х		Х	Х			
Continuous export	X	X	Х	Х	Χ		Х	Х			

## **UI** features

Table 23: Driver support for UI features

	Windows	XP (64 & 32) 2000	Windows	Windo	ws NT					Мас	
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
UI tabs	X	X	Χ	Χ	Χ	Χ	Χ	Х	Χ	Х	Х
UI extensions	Х	X	X			Х				Х	Х
Page preview images	X	X	X	Х	Х		Х	Х			
Printer image bitmaps with hot spots				Х	Х		Х	X			
Paper size dimensions	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Page layout graphical representation	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х
About	X	X	X	Χ	Х	Х	Χ	X	Х	Х	Х
Update now				Χ	X		Х	X		Х	
Printer bundle setting				Х	Х		Х	Х			
Accessability/ disability	Х	X	Х	Х	Х		Х	Х			
Accessible architecture	Х	X	X	Х	Х		Х	Х			

## **Help features**

Table 24: Driver support for Help features

	Windows XP	Windows XP (64 & 32) Windows 2000		Windo	ows NT	4.0	Windov	vs 95, 98	8, Me Mac		OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
What's this Help (F1)	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Help button	X	Х	Х	Х	X		Х	Х			
Bubble Help				Х	X		Х	Х			
MS Windows "?" Help	X	X	Х	Х	Х	X	Х	Х	Χ	X	Х

# **Constraint support**

**Table 25: Driver support for constraints** 

	Windows	Windows XP (64 & 32) Windows 2000								Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Constraint messages	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х
Gray-out options				Х	Х		Х	Х			
Constraint warnings by symbol	X	X	X			Х			Х	Х	Х

# **Document layout**

Table 26: Driver support for document layout features

14510 20. 511101	Windows XP (64 & 32) Windows 2000 PCL6 PCL5 PS				ows NT	4.0				Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Print on both	Х	X	X	Х	Χ	Χ	Х	Х	Х	Х	Х
sides											
Manual duplex											
Flip pages up	Х	X	X	Х	Χ	Χ	Х	Х		Χ	Х
Booklet printing	Χ	X	Х	X	Χ		Х	Х			
Fold saddle stitch											
Pagers per sheet (N-up)	Х	X	X	X	Х	Х	Х	Х	Χ	Х	Х
Page borders on/off	Χ	X	Х	X	Х		Х	Х			
Page order	Х	X	X	Х	Х		Х	Х			
Print document on (alternative size)	Х	Х	X	Х	Х		Х	Х			
Scale to fit	Χ	X	X	X	Х	Х	Х	Х	Х	Х	Х
Allow scaling from large paper	X	X	Х	Х	Х		Х	Х			
% of normal size	X	X	Х	X	Χ	Х	Х	Х	Χ	Х	Х
Portrait	X	X	X	Х	Χ	Χ	Х	Х	Χ	Χ	Х
Landscape	Х	X	Х	Х	Х	Х	Х	Х	Χ	Х	Х
Rotated by 180 degrees	Х	X	Х	Х	Х	Х	Х	Х	Χ	Х	Х
Number of copies	Х	X	Х	Х	Х	Х	Х	Х	Χ	Х	Х
Ignore application collation				Х	Х		Х	Х			
Мору	Χ	X	X	Х	X	Χ	Х	Х	Χ	Х	Х

# Job storage

Table 27: Driver support for job storage features

	Windows XP (64 & 32) Windows 2000			Windows NT 4.0		4.0			B, Me	Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Proof and hold	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х
Private job	X	Х	X	Х	Х	Х	Х	Х	Х	Х	Х
Quick copy	Χ	X	X	Х	Χ	Χ	Х	Х	Χ	Х	Х
Stored job	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Job name	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х
User name	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
PIN	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х
Unicode for job	Х	Х	Х	Х	Х	Χ	Х	Х		Х	Х
and user name											
Automatic job											
and user name											

## Custom preference storage/recall

Table 28: Driver support for custom preference storage/recall features

	Windows XP	(64 & 32) Win	dows 2000	Windo	ows NT	4.0	Windov	vs 95, 98	3, Me	Mac	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Quick sets				Х	Χ		Х	Х			
Print quality	Х	Х	Х	Х	Χ		Х	Х			
Color options	Х	X	X	Х	Χ						

## **Print controls**

Table 29: Driver support for print controls

	Windows 2	Windows XP (64 & 32) Windows 2000  PCL6 PCL5 PS			ows NT	4.0	, i		, Me	Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Raster											
compression											
EconoMode	Χ	X	X	Х	Χ	Х	X	Χ	Χ	Х	Χ
DWS	Χ	X	X	X	Χ		Х	Χ			
Mopier enable	Х	X	X	Х	Χ	Х	Х	Х	Х	Х	Х
Print optimizations	Х	Х	X								
Halftone: print images lighter											
Halftoning auto select	Х	Х	Х								
Halftoning dither 6x6	Х	Х	Х								
Halftoning dither 8x8	Х	X	Х								
Rendering mode (automatic)	Х	Х	X		Х			Х			
Send graphics as vector	Х	Х			Х			Х			
Send graphics as raster	Х	Х			Х			Х			
Send page as raster					Х			Х			

	Windows XP (64 & 32) Window 2000			Wind	dows N	Γ 4.0	0 Windows 95, 98, M		8, Me	Мас	OS2
Use HP MEt/use											
more memory											
PCL6 (standard/						1					
enhanced)											
Resolution		X	X	Х		+	X				
(ProRes 1200		^	^	^			^				
180 lpi)											
Resolution		X		Х		+	X	+			
(ProRes 1200		^		^			^				
212 lpi)											
Resolution	X	X	X	Х		X	X		X	Х	Х
(FastRes 1200)	^	^	^	^		^	^		^	^	^
Resolution (600	X	X	X	Х	X	+	X	X	X	Х	Х
	^	^	^	^	^	^	^	^	^	^	^
dpi)	X				X	X	1	X	X	X	Х
Resolution (300	Χ				^	^		^	^	^	Λ
dpi)							-	_			
Manually print on	Х	Х	X								
2nd side						+	1				
Photo paper											
printing						ļ.,	L				
RET	Χ	X	X	Х	Х	X	X	X	X	Х	Х
Scale patterns	Х	Х	X	Х	Х		X				
(WYSIWYG)											
General device											
font support											
Hebrew, Greek,											
Arabic, Cyrillic											
device fonts											
Font DIMM (on/	X	X		Х	Х		X	Х			
off)											
Send TrueType	X	X	X	Х	Х		X	Х			
as bitmaps											
TrueType fonts	Χ	X	X			X			Х	Х	Χ
Levels of gray											
Edge to edge	X	Х	X								
Print text as black	Χ	X	X	Х	Х		X	Х			
CYMK inks						1					
Print in grayscale											
Text neutral grays							1				
Text halftone		+			1	+	+	+			
Graphics neutral						+	+	+			
grays											
Graphics halftone			+		+	+	+	+			
Photographs					+	+	-	+			
neutral grays											
					1	+	1	+			
Photographs											
halftones					+	+	-	+			
Color edge control			-		1	-	<u> </u>				
Color rendering											
(RGB/device)						+	<del>                                     </del>	1			
Alienation							—				
Better mobile											
printing											

## **Watermarks**

Table 30: Driver support for watermarks feature

	Windows 2	XP (64 & 32) \ 2000	Windows	Windo	ows NT					Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
First page only	Χ	X	Х	X	Х	Χ	X	Х	Χ	Х	Х
Custom watermark definition	X	X	X	X	Х	Х	X	Х	Х	X	Х
Watermark angle	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Watermark font name	X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х
Watermark font color	X	X	X	X	Х	Х	Х	Х	Χ	Х	Х
Watermark font shading	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Watermark font size	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Watermark font style	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

# Paper sizes

Table 31: Driver support for paper sizes

	Windows XP	(64 & 32) Wir	ndows 2000	Windo	ows NT	4.0	Windov	vs 95, 98	, Me	Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Letter	X	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Legal	Х	X	X	Χ	Х	Х	Х	Х	Х	Х	Х
Executive	X	X	X	Χ	Χ	Х	Х	Х	Χ	Х	Х
A4	Х	X	X	Χ	Χ	Х	Х	Х	Χ	Х	Х
A5	X	X	X	Χ	Χ	Х	Χ	Х	Χ	Х	Х
B5 (ISO)	X	X	X	Χ	Χ	Х	Х	Х	Χ	Х	Х
B5 (JIS)	X	X	X	Χ	Χ	Χ	Х	Х	Χ	Х	Х
A3											
11x17											
8K											
16K	X	X	X	Χ	Χ	Х	Χ	Х	Χ	Х	Х
B4 (JIS)											
Executive (JIS)	X	X	X	Х	Χ	Х	Х	Х	Х	Х	Х
Double	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Postcard (JIS)											
Envelope #10	X	X	X	Χ	Χ	Χ	Х	Х	Χ	Х	Х
Envelope	Х	X	X	Х	Χ	Х	Х	Х	Х	Х	Х
Monarch											
Envelope C5	X	X	X	Χ	Χ	Х	Х	Х	Χ	Х	Χ
Envelope DL	X	X	X	Χ	Χ	Χ	Х	Х	Χ	Х	Х
Envelope B5	X	X	X	Χ	Χ	Χ	Х	Х	Χ	Х	Х
Custom	Х	X	X	Χ	Χ	Х	Х	Х	Х	Х	Х
Custom paper size definition	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х

# Paper types

Table 32: Driver support for paper types

	Windows	XP (64 & 32) 2000	Windows	Windo	ows NT	4.0	Window	/s 95, 98	8, Me Mad		OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Unspecified	X	X	X	Х	X	X	Х	Х	Х	X	Х
Plain	X	X	X	X	X	X	X	X	X	X	X
Preprinted	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Letterhead	X	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Transparency	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Prepunched	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х
Labels	X	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Bond	Х	X	X	Х	Х	Χ	Х	Х	Χ	Х	Χ
Recycled	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Color	Х	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Light < 75 g/m2											
Heavy (106 - 163											
g/m2)											
Cardstock > 164	X	X	X	Х	Х	Х	Х	Х	Χ	Х	Х
g/m2											
Glossy (75 - 105											
g/m2)											
Heavy glossy											
Tough paper											
Rough	X	X	X	Х	Χ	Χ	Х	Х	Χ	Х	Χ
Envelope	X	X	Х	Х	Х	Χ	Х	Х	Χ	Χ	Χ
User type 1				Х	X		Х	Х			
User type 2				Х	Χ		Х	Х			
User type 3				Х	Х		Х	Х			
User type 4				Χ	Х		Х	Х			
User type 5				Х	Х		Х	Х			
Display media	Х	X	Х	Х	Х		Х	Х			
types as sources											

## **Paper sources**

Table 33: Driver support for paper sources

	Windows >	(P (64 & 32) V	Vindows	Windo	ows NT	4.0	Windows 95, 98, N			Мас	OS2
		2000									
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Autoselect	X	Х	X	Х	Х	Х	Х	Х	Χ	Х	Х
Manual feed	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Envelope feeder	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
HCI input	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Tray 1	X	X	Х	Х	Х	Χ	Х	Х	Χ	Х	Х
Tray 2	X	Х	Х	Х	Х	Χ	Х	Х	Χ	Х	Х
Tray 3	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Tray 4	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Assign paper	Х	Х	Х	Х	Х	Х			Х	Х	Х
size to tray											
Assign paper	X	Х	Х	Х	Х	Χ			Χ	Х	Х
type to tray											

## Alternate source/paper type

Table 34: Driver support for alternate source/paper type feature

	Windows XP	(64 & 32) Win	dows 2000	Windo	ows NT	4.0	Windov	vs 95, 98	3, Me	Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
All pages the	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
same											
Other pages	X	X	X	Χ	Χ		X	Х			
Back cover	X	Χ	X	Χ	Χ		Х	Χ			

## **Printing destination**

Table 35: Driver support for printing destination feature

-	Windows XP	(64 & 32) Win	dows 2000	Windo	ows NT	4.0	Windov	/s 95, 98	, Me	Mac	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Top bin (face down)	X	Х	Х	Х	Х	Х	Х	Х	Χ	Х	Х
Top bin (face up)											
Stacker	X	Х	X	Х	Х	Х	Х	Х	Х	Х	Х
Stapler	X	Х	Х	Χ	Х	Χ	Х	Х	Χ	Х	Х
Booklet bin											
Straight paper path											

## Installable options

Table 36: Driver support for installable options

	Windows XP (64 & 32) Windows 2000			Windows NT 4.0			Windows 95, 98, Me			Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Duplexing unit	X	Х	X	Х	Х	Х	Х	Χ	Х	Х	Х
Printer hard disk	X	Х	Х	Х	Х	Χ	Х	Χ	Χ	Х	Х
Total memory	X	Х	Х	Х	Х	Χ	Х	Χ	Х	Х	Х
Additional source trays	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Additional destination bins	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Envelope feeder	X	Х	X	Х	Х	Х	Х	X	Х	Х	Х
Font DIMM	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
MFP module											

## Localization

Table 37: Driver support for localization feature

	Windows	Windows XP (64 & 32) Windows 2000			Windows NT 4.0		Windows 95, 98		, Me	Мас	OS2
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Arabic	X	X	X	Х	Х	Х	Х	Х	Х	Х	Х
Chinese (Traditional)	X	X	Х	Х		Х	Х		Х	Х	Х
Chinese (Simplified)	X	X	X	Х		Х	X		Χ	Х	Х
Czech	X	X	X	Х	Х	X	Х	Х	Х	Х	Х
Danish	X	X	X	Х	Χ	Х	Х	Х	Х	Х	Х

	Windo	ws XP (64 & 3 2000	32) Windows	Wine	dows N	Γ 4.0	Windo	ws 95, 9	8, Me	Мас	OS2
Dutch	X	X	X	X	X	X	X	X	X	Х	Х
English	X	X	X	X	X	X	X	Х	X	Х	Х
Finnish	X	X	X	X	Х	X	X	Х	X	Х	Х
French	Х	X	X	X	Х	X	X	Х	X	Х	Х
German	X	X	X	X	Х	X	X	Х	X	Х	Х
Hebrew	X	X	X	X	Х	X	X	Х	X	Х	Х
Hungarian	X	X	X	Х	Х	X	X	Х	X	Х	Х
Italian	X	X	X	X	Х	X	X	Х	X	Х	Х
Korean	Х	X	X	X		X	X		X	Х	Х
Norwegian	X	X	X	X	Х	X	X	Х	X	Х	Х
Polish	X	X	X	X	X	X	X	X	X	Х	Х
Portuguese	X	X	X	X	Х	X	X	Х	X	Х	Х
Russian	X	X	X	X	Х	X	X	Х	X	Х	Х
Spanish	Х	X	X	X	Х	X	X	Х	X	Х	Х
Thai	Х	X	X	Х	Х	X	Х	Х	Х	Х	Х
Turkish	X	X	X	Х		X	Х		X	Х	Х
Japanese	Х	X	X	Х		Х	Х		Х	Х	Х

# PostScript specific

Table 38: Driver support for PostScript-specific features

	Windows X	(P (64 & 32)	Windows	Windo	ows NT 4	4.0	Windov	vs 95, 98	, Me	Mac	OS2
		2000									
	PCL6	PCL5	PS	PCL6	PCL5	PS	PCL6	PCL5	PS	PS	PS
Font substitution			Х			Х			Х		
PostScript			Х			Χ			Χ		
memory											
Output protocol			Х			Χ			Χ		
Send CTRL-D			Х			Χ			Χ		
before each job											
Send CTRL-D			Х			Χ			Χ		
after each job											
Convert gray text			X								
to PostScript gray											
Convert gray			Х								
graphics to											
PostScript gray											
Add Euro			X								
currency symbol											
Job timeout			Х			Χ			Χ		
Wait timeout			Х			Χ			Х		
Minimum font size			Х			Х					
to download as											
outline											
Minimum font size			Х			Χ					
to download as											
bitmap											
PostScript			Х			Χ			Χ		
language level											
Send PostScript			Х			Χ			Χ		
error handler											
Mirrored output			X			Χ			Χ		
Negative output			Х			Х			Χ		

	Windows XP (64 & 32) W 2000	indows	Windo	ows NT 4.0	Window	vs 95, 98,	Ме	Mac	OS2
PostScript output	option								
Optimize for speed		Х		X			Х		
Optimize for portability		Х		Х			Χ		
Encapsulated PostScript (EPS)		Χ		X			Х		
Archive format		Χ		X			X		
TrueType font do	wnload option								
Outline		Χ		X			X		
Bitmap		Χ		X			X		
Native TrueType		Х		X			Х		

128 Driver features Software Technical Reference

# Installing Windows printing system components

#### Introduction

The information that follows addresses the following topics:

- Supported operating systems
- System requirements
- Font support
- General Windows installation instructions
- Detailed Windows installation instructions
- Setting a default printer

## Supported operating systems

The HP LaserJet 4200 and 4300 series printing system software supports the following operating systems:

- Windows 95
- Windows 98
- Windows Me
- Windows NT 4.0
- Windows 2000
- Windows XP

Note

Windows operating systemsprinter support for Windows 3.1xprinterssupport for Windows 3.1xThe HP LaserJet 4200 and 4300 series printers have not been tested with and do not support Windows 3.1x.

# System requirements

Following are the system requirements for installing and using the HP LaserJet printing system software on each of the supported operating systems.

- Pentium (R) processor
- Minimum 16-color/grayscale display with 640-by-480 pixel resolution (video graphics array [VGA])
- Same amount of RAM as the minimum requirements for the operating system
- 93 MB of available disk space for full installation (on the same partition as the operating system)

# **Font support**

## **Basic fonts**

Microsoft Windows software includes these basic fonts, which can be used with any HP printer:

- Arial
- Courier New Italic
- Times New Roman Italic
- Arial Italic
- Courier New Bold
- Times New Roman Bold
- Arial Bold
- Courier New Bold Italic
- Times New Roman Bold Italic
- Arial Bold Italic
- Symbol
- Wingdings
- Courier New
- Times New Roman

## **Default fonts**

The following default fonts are installed through a Typical Installation of the HP LaserJet printing system software.

**Table 39: Default fonts** 

File name	Font name
albr85w.TTF	Albertus Extra Bold
albr55w.TTF	Albertus Medium
olvr55w.TTF	Antique Olive
olvr75w.TTF	Antique Olive Bold
olvr56w.TTF	Antique Olive Italic
cgor45w.TTF	CG Omega
cgor65w.TTF	CG Omega Bold
cgor66w.TTF	CG Omega Bold Italic
cgor46w.TTF	CG Omega Italic
cgtr45w.TTF	CG Times
cgtr65w.TTF	CG Times Bold
cgtr66w.TTF	CG Times Bold Italic
cgtr46w.TTF	CG Times Italic
clar67w.TTF	Clarendon Condensed Bold
coronet.TTF	Coronet
cpsr45w.TTF	CourierPS
cpsr65w.TTF	CourierPS Bold
cpsr66w.TTF	CourierPS Bold Oblique
cpsr46w.TTF	CourierPS Oblique
garr45w.TTF	Garamond
garr65w.TTF	Garamond Bold
garr46w.TTF	Garamond Italic

File name	Font name
garr66w.TTF	Garamond Kursiv Halbfett
helr45w.TTF	Helvetica
helr65w.TTF	Helvetica Bold
helr66w.TTF	Helvetica Bold Oblique
helr47w.TTF	Helvetica Narrow
helr67w.TTF	Helvetica Narrow Bold
helr68w.TTF	Helvetica Narrow Bold Oblique
helr48w.TTF	Helvetica Narrow Oblique
helr46w.TTF	Helvetica Oblique
avgr45w.TTF	ITC Avant Garde Gothic Book
avgr46w.ttg	ITC Avant Garde Gothic Book Oblique
avgr65w.TTF	ITC Avant Garde Gothic Demi
avgr66w.TTF	ITC Avant Garde Gothic Demi Oblique
bokr75w.TTF	ITC Bookman Demi
bokr76w.TTF	ITC Bookman Demi Italic
bokr35wq.TTF	ITC Bookman Light
bokr36w.TTF	ITC Bookman Light Italic
chancTTF	ITC Zapf Chancery Medium Italic
dingsTTF	ITC Zapf Dingbats
letr65w.TTF	Letter Gothic
letr65w.TTF	Letter Gothic Bold
letr46w.TTF	Letter Gothic Italic
marigold.TTF	Marigold
ncsr75w.TTF	New Century Schoolbook Bold
ncsr76w.TTF	New Century Schoolbook Bold Italic
ncsr56w.TTF	New Century Schoolbook Italic
ncsr55w.TTF	New Century Schoolbook Roman
palr65w.TTF	Palatino Bold
palr66w.TTF	Palatino Bold Italic
palr46w.TTF	Palatino Italic
palr45w.TTF	Palatino Roman
sympsTTF	SymbolPS
timr65w.TTF	Times Bold
timr66w.TTF	Times Bold Italic
timr46w.TTF	Times Italic
timr45w.TTF	Times Roman
unvr65w.TTF	Univers Bold
unvr66w.TTF	Univers Bold Italic
unvr67w.TTF	Univers Condensed Bold
unvr68w.TTF	Univers Condensed Bold Italic
unvr57w.TTF	Univers Condensed Medium
unvr58w.TTF	Univers Condensed Medium Italic
unvr55w.TTF	Univers Medium
unvr56w.TTF	Univers Medium Italic

Ninety-two additional PS 3 fonts are also available on the CD-ROM.

#### Table 40: Additional PS 3 fonts

Tubio ioi /tualificilari o o i	J.110
File name	Font name
PS_12639.TTF	Albertus MT
PS_12640.TTF	Albertus MT Italic
PS_14530.TTF	Albertus MT Light
PS-11120.TTF	Antique Olive CompactPS
PS_11119.TTF	Antique Olive Roman

File name	Font name
PS_11118.TTF	Antique Olive Roman Bold
PS_11846.TTF	Antique Olive Roman Italic
PS_24516.TTF	Apple Chancery Italic
PS_12704.TTF	Bodoni Poster
PS_14508.TTF	Bodoni PosterCompressed
PS_12581.TTF	BodoniPS
PS_12585.TTF	BodoniPS Bold
PS_12586.TTF	BodoniPS Bold Italic
PS_12582.TTF	BodoniPS Italic
PS_24517.TTF	Candid
PS_24518.TTF	Chicago
PS_14513.TTF	Clarendon Light
PS_10269.TTF	ClarendonPS
PS_12968.TTF	ClarendonPS Bold
PS_10369.TTF	Cooper Black
PS_10370.TTF	Cooper Black Italic
PS_14514.TTF	Copperplate32bc
PS_14515.TTF	Copperplate33bc
PS_10249.TTF	Coronet
PS_10267.TTF	Eurostile
PS_10268.TTF	Eurostile Bold
PS_14512.TTF	Eurostile Bold ExtendedTwo
PS_14511.TTF	Eurostile ExtendedTwo
PS_10267.TTF	Eurostile Medium
PS_24509.TTF	Geneva
PS_13872.TTF	GillSans
PS_13874.TTF	GillSans Bold
PS_13875.TTF	GillSans Bold Italic
PS_14053.TTF	GillSans Condensed
PS_14054.TTF	GillSans Condensed Bold
PS_14051.TTF	GillSans ExtraBold
PS_13873.TTF	GillSans Italic
PS_13870.TTF	GillSans Light
PS_13871.TTF	GillSans Light Italic
PS_12542.TTF	Goudy
PS_12544.TTF	Goudy Bold
PS_10695.TTF	Goudy Bold Italic
PS_12545.TTF	Goudy ExtraBold
PS_12543.TTF	Goudy Italic
PS_14526.TTF	Helvetica Condensed
PS_14528.TTF	Helvetica Condensed Bold
PS_14529.TTF	Helvetica Condensed Bold Italic
PS_14527.TTF	Helvetica Condensed Italic
PS_24519.TTF	Hoefler Text
PS_24521.TTF	Hoefler Text Black
PS_24522.TTF	Hoefler Text Black Italic
PS_24520.TTF	Hoefler Text Italic
PS_24523.TTF	Hoefler Text Ornaments
PS_14503.TTF	Joanna MT
PS_14505.TTF	Joanna MT Bold
PS_14506.TTF	Joanna MT Bold Italic
PS_14504.TTF	Joanna MT Italic
PS_13778.TTF	Letter Gothic Italic

File name	Font name
PS_13777.TTF	Letter GothicPS
PS_13779.TTF	Letter GothicPS Bold
PS_13780.TTF	Letter GothicPS Bold Italic
PS_12675.TTF	Lubalin Graph
PS_12677.TTF	Lubalin Graph Bold
PS_12625.TTF	Lubalin Graph Bold Italic
PS_12623.TTF	Lubalin Graph Italic
PS_94073.TTF	Marigold
PS_14525.TTF	Mona Lisa Recut
PS_24524.TTF	Monaco
PS_24510.TTF	New York
PS_12506.TTF	Optima
PS_12510.TTF	Optima Bold
PS_12511.TTF	Optima Bold Italic
PS_12507.TTF	Optima Italic
PS_14072.TTF	Oxford Italic
PS_11546.TTF	Stempel Garamond Roman Italic
PS_11545.TTF	StempelGaramond Roman
PS_11547.TTF	StempelGaramond Roman Bold
PS_11548.TTF	StempelGaramond Roman Bold Italic
PS_14507.TTF	Taffy
PS_13501.TTF	Univers 45 Light
PS_14023.TTF	Univers 45 Light Bold
PS_14024.TTF	Univers 45 Light Bold Italic
PS_13502.TTF	Univers 45 Light Italic
PS_14030.TTF	Univers 47 Condensed Light Bold
PS_14040.TTF	Univers 47 CondensedLIght Bold Italic
PS_14021.TTF	Univers 55
PS_14022.TTF	Univers 55 Italic
PS_14029.TTF	Univers 57 Condensed
PS_14039.TTF	Univers 57 Condensed Italic
PS_13548.TTF	Univers Extended Italic
PS_13547.TTF	Univers ExtendedPS
PS_14481.TTF	Univers ExtendedPS Bold Italic
PS_14480.TTF	Univers ExtendedPS Italic

#### Installation instructions

## General installation for Windows 95, 98, Me, NT 4.0, 2000, and XP

General installation instructions for the Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP operating systems are similar.

If the HP LaserJet 4200 and 4300 series printers are connected through a file or print server, the HP LaserJet printing system software must first be installed on the server before being installed on any client systems. If the HP LaserJet printing system software is not first installed on the server, bidirectional communication, some Driver Autoconfiguration methods, and Printer Status and Alerts will not be available to the client systems.

For Windows NT 4.0, Windows 2000, and Windows XP, administrator rights on the system are necessary to install the software.

When the HP LaserJet printing system installer runs, the HP LaserJet uninstaller is always added to the system.

## Installing from the printing-system CD-ROM

To install the HP LaserJet printing system from the CD-ROM that came with your printer, follow these instructions:

- Close all programs.
- Insert the CD-ROM in the CD-ROM drive.

Note

If your CD-ROM does not start automatically, click Start, click Run, and then browse to and click the SETUP.EXE file in the root location of the CD-ROM.

3 Click **Install Printer** and follow the onscreen prompts.

#### Installing from a network or from downloaded files

Follow these instructions if you downloaded the files from the Web, or if you are installing the printing system files from a network. You might need to see your network administrator for the location of the printing system software file.

- 1 Browse to the location of the SETUP.EXE file.
- 2 Double-click the SETUP.EXE file.
- 3 Click Install Printer and continue to follow the instructions until the printer is installed. For detailed installation instructions, see "Detailed Windows installation."

#### **Detailed Windows installation**

This section provides information about the installation dialog box sequence for installing the HP LaserJet printingsystem software in Microsoft Windows environments. You can choose to install the software by using either a Typical Installation or a Custom Installation.

## Typical Installation dialog box sequence

**Note** 

The dialog boxes shown here appear in the Windows NT 4.0 installation sequence. The order and appearance of dialog boxes can vary among operating systems.

The Typical Installation includes the following components:

- HP LaserJet PCL 6 driver.
- Screen fonts.
- Driver Autoconfiguration (in environments that support bidirectional communication). This option will not appear in unsupported bidirectional communications environments.

Note

The components of a typical installation might vary from printer to printer.

When you select the **Install Printer** option from the HP LaserJet software CD-ROM browser, the **Choose Setup Language** dialog box appears. This dialog box does not appear when the setup language is Hebrew or Arabic.



Figure 48: Choose Setup Language dialog box

Note

The Choose Setup Language dialog box lists only the languages available on the particular HP LaserJet software CD-ROM you are using.

Table 41: Choose Setup Language dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Choose Setup Language	Select the language for this installation from following the choices:  OK [button]  Cancel [button]	The installer automatically detects your computer system language and presents this choice as the default.  You can select another language available on the CD-ROM by clicking the down arrow of the drop-down menu.
		Click <b>OK</b> to initiate the printing system setup.
		Click <b>Cancel</b> to go to the <b>Exit Setup</b> dialog box.

Next, the Setup dialog box appears.

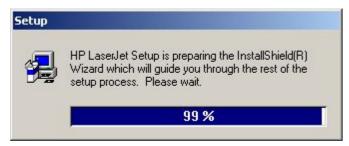


Figure 49: Setup dialog box

Note

While the Setup dialog box appears, the installer is decompressing files into the system Temp directory. The elapsed time to complete this action depends upon the performance of the system.

Table 42: Setup dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Setup	HP LaserJet 4200 or HP LaserJet 4300 Series Printing System Setup is preparing the InstallShield (R) Wizard that will guide you through the rest of the setup process. Please wait.	No user options. This is an information-only dialog box.



Figure 50: Welcome dialog box

Table 43: Welcome dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Welcome	Welcome to the HP LaserJet 4200 (or HP LaserJet 4300) Series Printing System Setup Wizard.  It is strongly recommend that you close all other programs before running this Setup wizard.  Before continuing, refer to the Setup poster and make any required connections.	Next takes you to the HP Software License Agreement dialog box. Click Installation Notes to open the file READXXXX.RTF. Cancel takes you to the Exit Setup dialog box.
	Click <b>Next</b> to continue.	
	Copyright Hewlett-Packard XXXX	

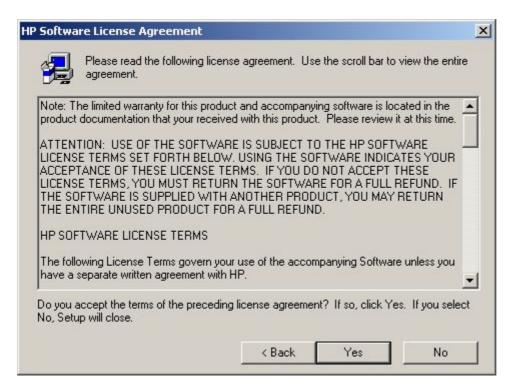


Figure 51: HP Software License Agreement dialog box

Table 44: HP Software License Agreement dialog box text strings

able 44. In Contrare Liberies Agreement dialog box text en inge		
Title of dialog box	Text in dialog box	User options and descriptions
HP Software License Agreement	agreement. Use the scroll bar to	Yes takes you to the Web Update dialog box.
	view the entire agreement.  Do you accept the terms of the	Back returns you to the Welcome dialog box.
	preceding license agreement? If so, click <b>Yes</b> . If you click <b>No</b> , Setup will close.	No takes you to the Exit Setup dialog box.



Figure 52: Web Update dialog box

Table 45: Web Update dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Web Update (Conditional)	Setup can look for updated software at the Hewlett-Packard Web site.	This is a conditional dialog box; that is, it appears only if the Setup program
(3.2.2.2.2.7)	Would you like Setup to check the Web for updated software?	determines that an Internet connection might be available.
	Yes (requires an active Internet connection) [option button]	If <b>No</b> is selected, <b>Next</b> takes you to the <b>Type of Connection</b> dialog box. This is the default option.
	No [option button]	If <b>Yes</b> is selected, clicking <b>Next</b> starts the Web Update. Details of the Internet installation are not covered in this document. Web Update requires Internet Explorer 4.0 or later.
		Back returns you to the HP Software License Agreement dialog box.
		Cancel takes you to the Exit Setup dialog box.

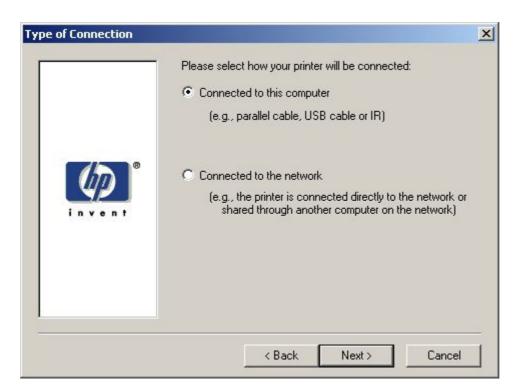


Figure 53: Type of Connection dialog box

Table 46: Type of Connection dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Type of Connection	Please select the way your printer will be connected:	If Connected to this computer (a "direct connection" using a parallel cable, universal serial bus cable, or infrared connection) is selected, <b>Next</b> takes you to
	Connected to this computer (by parallel cable, USB cable or IR) [option button]	
	Connected to the network (e.g., the printer is connected directly to the	the <b>Select Port</b> dialog box. This is the default option.
	network or shared through another computer on the network) [option button]	If Connected to the network is selected, Next takes you to the Network Setup dialog box.
		Back returns you to the HP Software License Agreement dialog box.
		Cancel takes you to the Exit Setup dialog box.

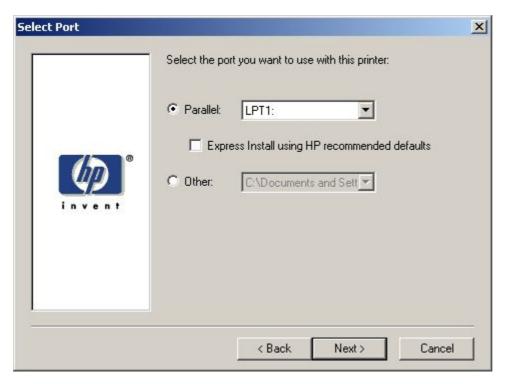


Figure 54: Select Port dialog box

Table 47: Select Port dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Select Port (If Connected to this computer was selected in the <b>Type of Connection</b> dialog box)	Select the port you want to use with this printer: Parallel [option button] Express Install using HP recommended defaults [check box] Other [option button]	Regardless of the port chosen (Parallel or Other), clicking <b>Next</b> takes you to the printer <b>Model</b> dialog box. <b>Back</b> returns you to the <b>Type of Connection</b> dialog box.
		Selecting the Express Install check box, selected by default, installs the PCL 6 driver.  Cancel takes you to the Exit Setup dialog box.

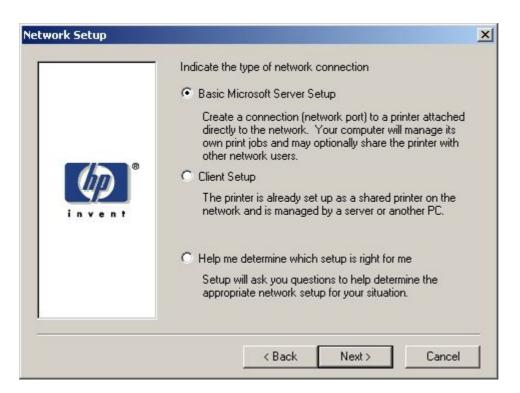


Figure 55: Network Setup dialog box

Table 48: Network Setup dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Network Setup	Indicate the type of network connection  Basic Microsoft Server Setup  Create a connection (network port) to a printer attached directly to the network.  Your computer will manage its own print	If the Client Setup option is selected, Next takes you to the Specify Network Path dialog box, and then to the Installation Type dialog box.  If the Help me option is selected, Next
	jobs and may optionally share the printer with other network users. Client Setup The printer is already set up as a shared printer on the network and is managed by a server or another PC.	initiates a series of question dialog boxes that help you determine the best connection type option to follow. This series begins with the Cable Type Selection dialog box.  Back returns you to the Type of Connection dialog box.
	Help me determine which setup is right for me Setup will ask you questions to help you determine the appropriate network setup for your situation.	Cancel takes you to the Exit Setup dialog box.

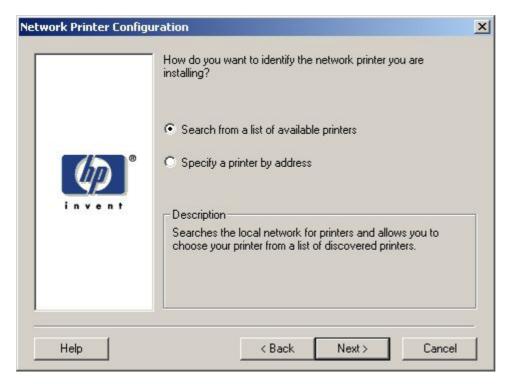


Figure 56: Network Printer Configuration dialog box

Table 49: Network Printer Configuration dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Network Printer Configuration	How do you want to identify the network printer you are installing?  Search from a list of available	If you click Search from a list of available printers, Next takes you to the Identify Printer dialog box.
	printers [option button] Specify a printer by address Description	If you click Specify a printer by address, Next takes you to the Identify Printer dialog box.
	2000 iipiioii	Always choose Specify a printer by address when the printer address is available. On large networks, selecting Search from a list of available printers might not reveal the location of a specific printer.
		Back returns you to the Network Setup dialog box.
		Cancel takes you to the Exit Setup dialog box.

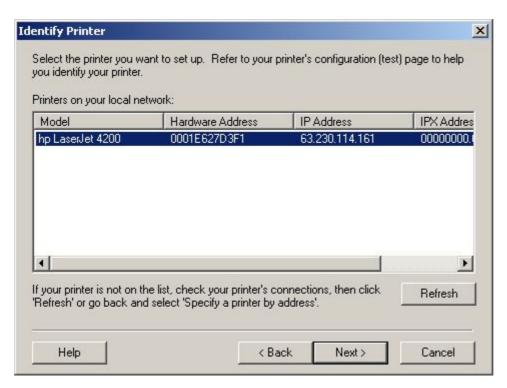


Figure 57: Identify Printer dialog box (1 of 2)

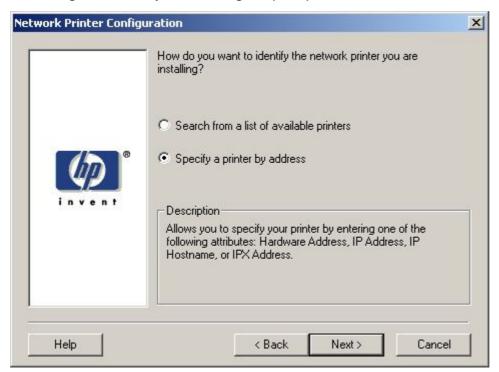


Figure 58: Identify Printer dialog box (2 of 2)

Table 50: Identify Printer dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Identify Printer	Select the network printer you want to install.  Printers on your local network:  If your printer is not found on the list, click 'Refresh', or go back and click 'Specify a printer by address'.  OR  Specify the network printer you want to install.	If you identify the printer by selecting from the list, and your HP LaserJet printer appears in the list and is selected, <b>Next</b> takes you to the <b>Set Network Communication Mode</b> dialog box.  If your HP LaserJet 4200 or 4300 series printer is not found on the network, click <b>Refresh</b> or go back to the <b>Network Printer Configuration</b> dialog box to specify the device by address.
	Specify by: Hardware Address. [option button] IP Address [option button} IP Hostname [option button] IPX Address [option button]	Refresh updates the list of network printers.  If you identify the printer by specifying a specific network address, Next takes you to the Set Network Communication Mode dialog box.
	Description	Back returns you to the Network Printer Configuration dialog box.
		Cancel takes you to the Exit Setup dialog box.

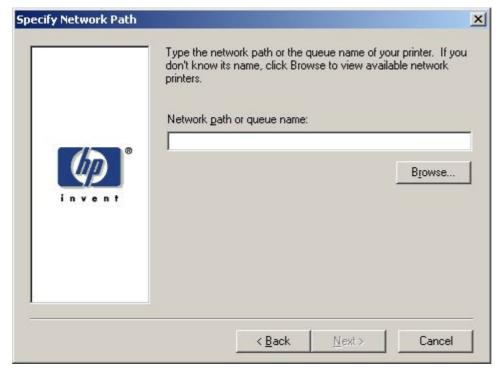


Figure 59: Specify Network Path dialog box

Table 51: Specify Network Path dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Specify Network Path	Type the network path or the queue	If you type a network path or queue
	name of your printer. If you do not know	name, <b>Next</b> takes you to the <b>Cable Type</b>
	its name, click <b>Browse</b> to view the	Selection dialog box.
	available network printers.	NOTE: If you reached this dialog box
	Network path or queue name:	from the Connected to Selection dialog
	Browse[button]	box, <b>Next</b> takes you to the <b>Installation</b>
	, , , , , ,	Type dialog box.
		Click <b>Browse</b> to bring up a list of devices available on the network.
		Back returns you to the Network Setup dialog box.
		Cancel takes you to the Exit Setup dialog box.

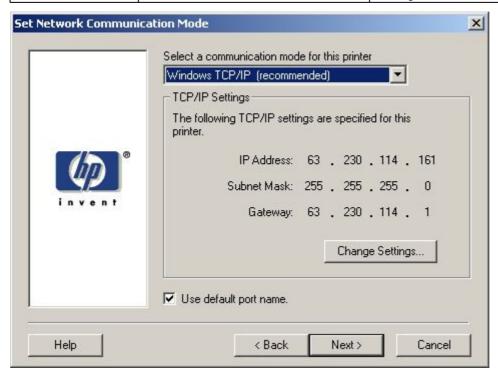


Figure 60: Set Network Communication Mode dialog box

Table 52: Set Network Communication Mode dialog box text strings

Text in dialog box	User options and descriptions
Select a communication mode for this printer Windows TCP/IP (recommended)	Select a communication mode and type the appropriate address information.
other modes listed] TCP/IP Settings Use default port name [check box]	After you have specified a communications mode, <b>Next</b> takes you to the printer <b>Model</b> dialog box.
•	Select a communication mode for this printer Windows TCP/IP (recommended) other modes listed] TCP/IP Settings

Title of dialog box	Text in dialog box	User options and descriptions
		Back returns you to the Identify
		Printer dialog box.
		Cancel takes you to the Exit
		Setup dialog box.

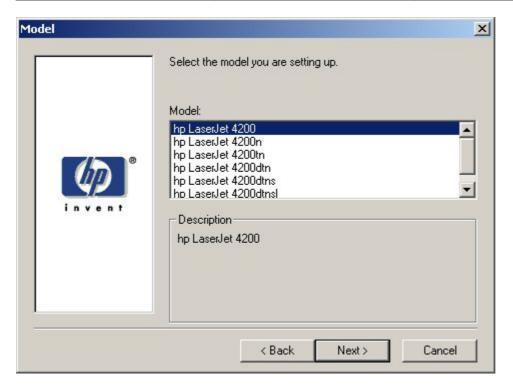


Figure 61: Printer Model dialog box dialog box

Table 53: Printer Model dialog box text string

Title of dialog box	Text in dialog box	User options and descriptions
Model	Select the model you are setting up.	<b>Next</b> takes you to the <b>Installation Type</b> dialog box.
	Model: Description	Back returns you to the Select Port dialog box when you are performing a direct connection installation, or to the Set Network  CommunicationMode dialog box when you are performing a network installation.  Cancel takes you to the Exit Setup dialog box.

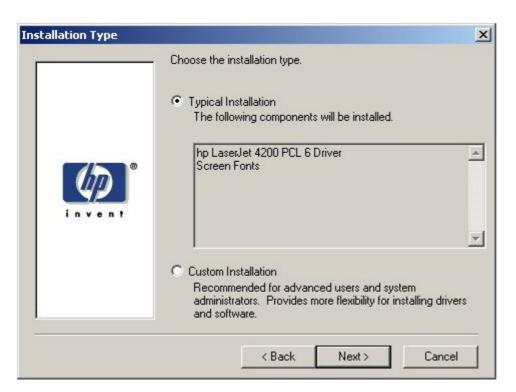


Figure 62: Installation Type dialog box

Note

The components of a Typical Installation might vary from printer to printer.

Table 54: Installation Type dialog box text strings

Tuble 04. Installation Type dialog box text strings		
Title of dialog box	Text in dialog box	User options and descriptions
Installation Type	Choose the installation type.	If Typical Installation is selected, Next
	Typical Installation	takes you to the <b>Printer Name</b> dialog box.
	Custom Installation	If Custom Installation is selected, Next
	Recommended for advanced users and	takes you to the <b>Components</b> dialog box.
	system administrators. Provides more flexibility for installing drivers and software.	Back returns you to the printer Model dialog box.
		Cancel takes you to the Exit Setup dialog
		box.

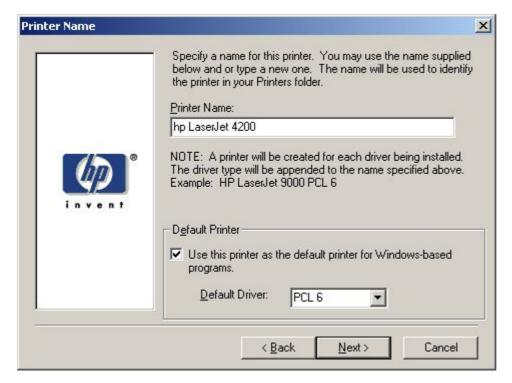


Figure 63: Printer Name dialog box

Table 55: Printer Name dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Printer Name	Specify a name for this printer. You may use the name supplied below or type a	<b>Next</b> takes you to the <b>Printer Sharing</b> dialog box.
	new one. The name will be used to identify the printer in your Printers folder.	The default printer name in the text field is HP LaserJet 4200 or HP LaserJet 4300
	Printer Name:	PCL 6.
	NOTE: A printer will be created for each driver being installed. The driver type will be appended to the name specified above. Example: HP LaserJet 9000 PCL 6	Back returns you to the Installation Type dialog box.  Cancel takes you to the Exit Setup dialog box.
	Do you want your Windows-based programs to use this as the default printer?	
	Yes [option button]	
	No [option button]	

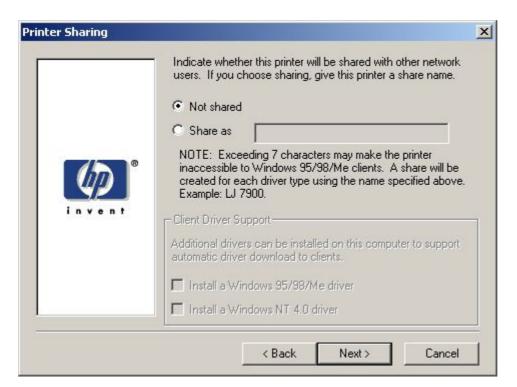


Figure 64: Printer Sharing dialog box

Note

When you do not share the printer, additional driver support is not available. If you share the printer on Windows NT 4.0, Windows 2000, or Windows XP operating systems by selecting Share as, you must type a name. You can also provide additional printer driver support for other operating systems.

Table 56: Printer Sharing dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Printer Sharing	Indicate whether this printer will be shared	<b>Next</b> starts the file copy process.
	with other network users. If you choose sharing, give the printer a share name.	Back returns you to the Printer Name dialog box.
	Not shared [option button]	Cancel takes you to the Exit Setup dialog
	Share as [text entry field]	box.
	NOTE: Exceeding 7 characters may make the printer inaccessible to Windows 95/98/ Me clients. A share will be created for each driver type using the name specified above. Example: LJ 7900. Client Driver Support	
	Additional drivers can be installed on this computer to support automated driver download to clients.	
	Install a Windows 95/98/Me driver. [check box]	

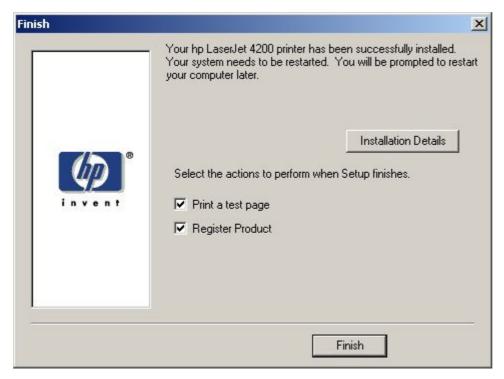


Figure 65: Finish dialog box

Table 57: Finish dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Finish	Your HP LaserJet printer has been successfully installed. Installation Details	Finish completes the installation process and initiates test-page printing and Webpage registration if those options are selected.  Click Installation Details to open a dialog box that shows installation details.
	Select the actions to perform when Setup finishes.  Print a test page [check box]	
	Web Registration [check box]	NOTE: If the computer must be restarted, the Print a test page and Web Registration functions will occur after the computer is restarted.



Figure 66: Exit Setup dialog box

Table 58: Exit Setup dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Exit Setup	Setup is not complete. If you quit the Setup	Exit Setup closes the Installer program.
	program now, the program will not be installed.	Resume takes you to the dialog box you that most recently canceled.
	You can run the Setup program at a later time to complete the installation.	•
	To continue installing the program, click <b>Resume</b> . To quit the Setup program, click	
	Exit Setup.	

#### **Custom installation**

The custom installation gives you the option of installing the following components:

- HP LaserJet 4200 or HP LaserJet 4300 PCL 6 driver (for direct-connect and network installations)
- HP LaserJet 4200 or HP LaserJet 4300 5e driver (for direct-connect and network installations)
- HP LaserJet 4200 or HP LaserJet 4300 PS driver (for direct-connect and network installations)
- Automatic Driver Configuration (for direct-connect [for Job Status only] and for network installations)
- Printer Status and Alerts (for direct-connect [for Job Status only] and for network installations)
- Screen fonts (for direct-connect and network installations)
- HP LaserJet 4200 and 4300 User Guide (for direct-connect and network installations)

Note	The components of a Custom Installation might vary from printer to printer.	
Note	Windows NT 4.0, Windows 2000, and Windows XP computers running a terminal server do not support the Printer Status and Alerts option.	

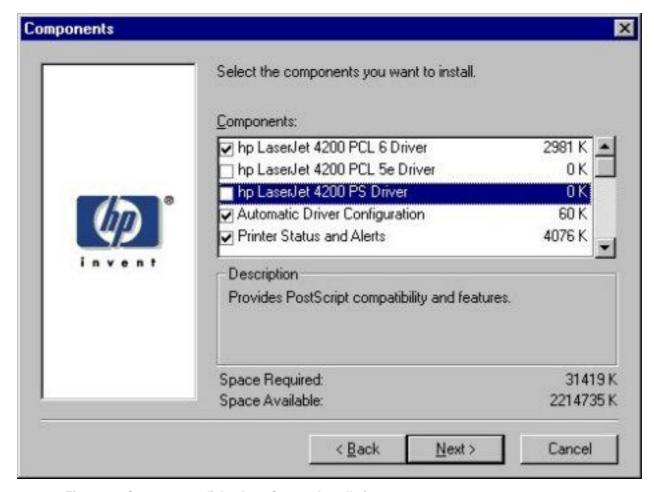


Figure 67: Components dialog box, Custom Installation

Note The appearance of this screen might vary, depending on printer and connection type.

Table 59: Custom Installation dialog box text strings

Title of dialog box	Text in dialog box	User options and descriptions
Components	Select the components you want to install.	Next takes you to the Printer Name dialog
	Components:	box.
	Description	Back returns you to the Installation Type
	Space Required	dialog box.
	Space Available	Cancel takes you to the Exit Setup dialog box.
		<b>NOTE:</b> Custom Installation automatically selects the options that are available in the Typical Installation. You can also select from among the following components:
		PCL 6 driver
		PCL 5e driver
		PostScript driver
		Automatic driver configuration
		Printer Status and Alerts

# **Product registration (HP WebReg)**

The HP LaserJet software CD-ROM browser provides two options for registering the HP LaserJet 4200 and 4300 series printers:

- registration through the Internet to the http://register.hp.com Web site
- registration by e-mail

Note

Web registration for Hebrew and Arabic is in English.

To gain access to the product-registration options, go to the main menu of the HP LaserJet software CD-ROM browser and click **Register Product**. This starts the HP WebReg utility and opens the following window.

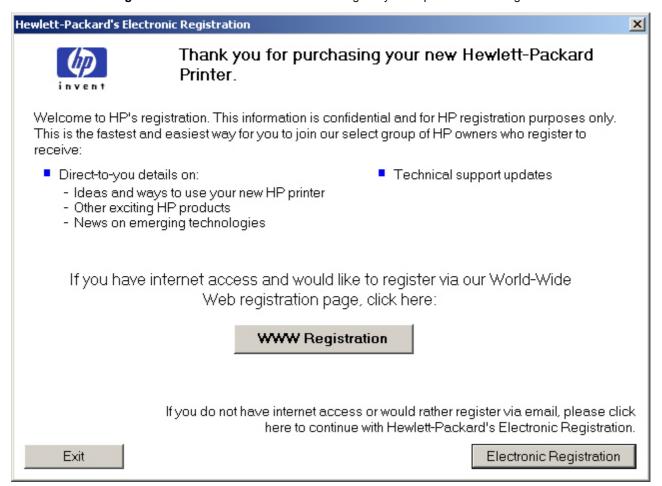


Figure 68: Hewlett-Packard's Electronic Registration dialog box

#### Table 60: Hewlett-Packard's Electronic Registration text strings

Title of dialog box	Text in dialog box	User options and descriptions
Hewlett-Packard's Electronic Registration	Welcome to HP's registration. This information is confidential and for HP registration purposes only. This is the fastest and easiest way for you to join our select group of HP owners who register to receive:	Click the <b>WWW Registration</b> button to open the default Web browser and connect to the product registration page at the http://register.hp.com Web site.
	Direct-to-you details about:	

Title of dialog box	Text in dialog box	User options and descriptions
	<ul> <li>ideas and ways to use your new HP printer.</li> <li>other exciting HP products.</li> <li>news about emerging technologies.</li> <li>Technical support updates.</li> </ul>	Click the Electronic Registration button to open the Welcome to Hewlett-Packard's Registration dialog box. Click the Exit button to open the Exiting Registration! dialog box.
	If you have internet access and would like to register using our World Wide Web registration page, click here:  WWW Registration[button] [default option]	
	If you do not have internet access or would rather register using email, please click here to continue with Hewlett-Packard's Electronic Registration.	
	Electronic Registration [button] Exit[button]	

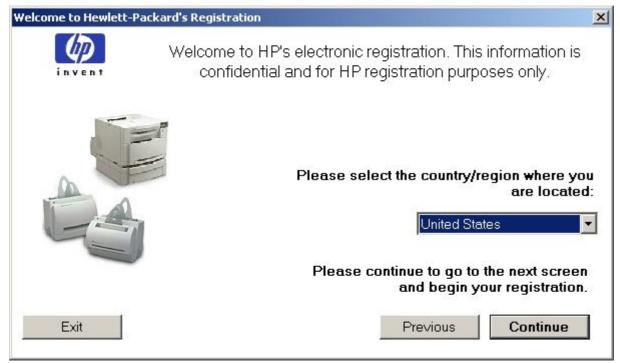


Figure 69: Welcome to Hewlett-Packard's Registration dialog box

Table 61: Welcome to Hewlett-Packard's Registration dialog box text strings

rabio or: Wolcomo to Howett rabitara o Rogionation alarog box toxt ournigo		
Title of dialog box	Text in dialog box	User options and descriptions
Welcome to Hewlett-Packard's Registration	Welcome to HP's electronic registration. This information is confidential and for HP registration purposes only.	Click the <b>Previous</b> button to return to the <b>Hewlett-Packard's Electronic Registration</b> dialog box.

Title of dialog box	Text in dialog box	User options and descriptions
	Please select the country/region where you are located. [dropdown menu] Please continue to go to the next screen and begin your registration Previous [button] Continue [button] Exit [button]	Click the <b>Continue</b> button to start a sequence of three screens. The first screen provides fields for typing your registration information.

Hewlett-Packard's Electronic Registration	x
★ Please complete the following (required fields are denoted by a blue asterisk):	
★ First Name Middle Initial ★ Last Name	
Company/Organization Name Building/Mail Stop/Dept.	
★ Mailing Address	
★ City/Town ★ State   ★ Zip Code	
E-mail Address Telephone Number Extension	
Occasionally HP communicates information on products and/or programs that may be relevant to you. Please select the method(s) of communication HP may use to contact you. (check all that apply)	
□ E-mail □ Mail □ Telephone	
☐ Please don't contact me unless I specifically request it	
Exit Previous Continue	

Figure 70: Hewlett-Packard's Electronic Registration dialog box (1 of 3)

Table 62: Hewlett-Packard's Electronic Registration dialog box text strings (1 of 3)

g		
Title of dialog box	Text in dialog box	User options and descriptions
Hewlett-Packard's Electronic	Please complete the following	Click the <b>Previous</b> button to go
Registration	(required fields are denoted by a	back to the Welcome to Hewlett-
	blue asterisk):	Packard's Registration dialog
	First name*	box.
	Middle Initial	

Title of dialog box	Text in dialog box	User options and descriptions
Title of dialog box	Text in dialog box  Last Name* Company/Organization Name* Building/Mail Stop/Dept. Mailing Address* City/Town* State* [drop-down menu] Zip Code* E-mail Address Telephone Number Extension Occasionally HP communicates information about products and/or programs that might be relevant to you. Please select the method(s) HP can use to contact you. (check all that apply) E-mail [check box] Mail [check box] Telephone [check box] Please don't contact me unless I specifically request it [check box]	User options and descriptions Click the Continue button to go to the second screen in this sequence. Click the Exit button to open the Exiting Registration! dialog box.
	Previous [button] Continue [button]	
	Exit [button]	



Figure 71: Hewlett-Packard's Electronic Registration dialog box (2 of 3)

#### Table 63: Hewlett-Packard's Electronic Registration dialog box text strings (2 of 3)

Title of dialog box	Text in dialog box	User options and descriptions
Hewlett-Packard's Electronic Registration	Please tell us about the Hewlett- Packard product you purchased:	Click the <b>Previous</b> button to go back to the first screen in this
	Where will your new Hewlett- Packard product primarily be used?* [drop-down menu]	sequence.  Click the <b>Continue</b> button to go to the third screen in this sequence.
	Which Hewlett-Packard product did you purchase?* [drop-down menu]	Click the <b>Exit</b> button to open the <b>Exiting Registration!</b> dialog box.
	When did you purchase your Hewlett-Packard product?* [field]	Type the date you purchased your Hewlett-Packard printer.  Type the printer's serial number.
	Serial Number* [field]	Type the printer of demar number.
	Approximately how many employees work at yoursite? Worldwide?	
	What is your job responsibility as it relates to HP products?	

Text in dialog box	User options and descriptions
Text III dialog box	The questions about the number of employees and your job responsibility appear only if you answered that you will use your Hewlett-Packard 4200 or 4300 series printer primarily for business or telecommuting. Drop-down boxes with possible answers are
	provided for your convenience.  (Answering these questions is optional in the registration process.)



Figure 72: Hewlett-Packard's Electronic Registration dialog box (3 of 3)

Table 64: Hewlett-Packard's Electronic Registration dialog box text strings (3 of 3)

Title of dialog box	Text in dialog box	User options and descriptions
Hewlett-Packard's Electronic Registration	Please send your registration to Hewlett-Packard via e-mail. E-mail [button] [default option] Previous [button] Exit [button]	Click the <b>E-mail</b> button to send an e-mail to HP that contains the registration information you specified. A thank-you screen appears when the e-mail is sent.

Title of dialog box	Text in dialog box	User options and descriptions
		Click the <b>Previous</b> button to go
		back to the second screen in this
		sequence.
		Click the <b>Exit</b> button to open the
		Exiting Registration! dialog box.



Figure 73: Exiting registration! dialog box

Table 65: Exiting registration text strings

Title of dialog box	Text in dialog box	User options and descriptions
Exiting Registration!	You have selected to exit Hewlett-Packard's registration.	Click the <b>Continue</b> button to go back to the screen where you were when you
	If you would like to continue with	clicked the <b>Exit</b> button.
	registration, please press the continue button to return to the place where you exited.	Click the <b>Exit</b> button to close the WebReg utility.
	Continue [button] [default option]	
	Otherwise, you can go to the universal resource locator (URL) below to register your product at any time.	
	http://register.hp.com/go/register	
	Thank you for your valuable time!	
	Exit [button]	

# **Customization Utility for Windows**

Use the **Customization Utility** button to create your own customized installation of printing-system components. To start the utility, click **Customization Utility** on the main menu of the HP LaserJet software CD-ROM browser. The following are available options for creating a customized installation.

- Copy printer drivers only. Using this option, you can copy the HP LaserJet Windows printer drivers to a selected form of media (disk, CD-ROM, network drive, and so on). You can use the resulting disk set with the Windows Add Printer Wizard. The Customization Utility prompts these choices:
  - operating system
  - printer model
  - printing system components (drivers to copy)
  - destination path
- Create customized installer. Using this option, you can create either an interactive or silent (unattended) installer customized by any of the following selections:
  - operating system
  - printer model
  - printing system components
  - interactive or silent (unattended) installer
- Copy entire printing system installer. Using this option, you can copy the HP LaserJet printing system installer
  to a selected form of high-capacity media such as a network drive. The customization utility prompts these choices:
  - language
  - operating system

#### Silent installer

You can use the HP LaserJet printing system software to create a silent installer that runs the SETUP.EXE program without user interaction. This installation method is useful when you want to use the default selections that the installer provides or when you want to run the installation without being prompted. You also have the option of creating a custom disk image that contains specific drivers and utilities, allowing users to run the installer without further interaction.

Silent installation can be performed in two ways:

- customized silent installer
- command-line silent installer

# **Customized silent installer**

Use this option to select the printing-system components to include in the silent installation. You can select the operating system, language, printer models, drivers, utilities, and documentation to install.

# **Driver Management and Configuration Utility (Internal)**

Driver Management and Configuration (DMC) is a software architecture and set of tools that permits HP and third-party software to be customized and distributed within managed corporate printing environments. It provides network administrators with the capability to preconfigure printer drivers and other printing software and manage that software on client workstations remotely. With DMC, customized printer settings can be retained during driver updates, rather than be replaced with the default settings of the new driver.

#### Command-line silent install

This method cannot be customized. It installs only the printing-system components that are included in the Typical Installation.

Note

Values that follow equal signs ( = ) in a command line must not contain intervening spaces.

#### Method 1: Command line

Type the following at the command line (do not type the beginning and ending quotation marks):

"<CD-ROM-ROOT>/SETUP/SETUP.EXE /U /PORT=XXXX /PRINTER=N /PD=N"

#### Method 2: SETUP.LST

Use the SETUP.LST file to specify command-line arguments to the installer for an unattended installation. You can send command-line arguments in one of the following ways:

- Send the command directly to the installer.
- Send the command using the SETUP.LST file located in the setup directory.
- Use a combination of the two methods.

For example, this file contains two options: /port and /printer. The installer operates as normal because the /u option has not been specified. If you use setup /u for the installer, it operates in unattended mode and uses the two values specified in the defaults section of the SETUP.LST file. If you use setup /u /printer=4 for the installer, it operates in unattended mode and chooses the HP LaserJet 4200 or HP LaserJet 4300. The options specified on the command line override the options specified in the SETUP.LST file.

The options available can also include the **/u** option. Using this option key makes the installer always operate as unattended. The following descriptions explain the available options:

- /u signals the installer to use the specified port and printer given on the command line (or in this file), and to use all default selections. Installation then proceeds without prompting the user.
- /port=xxxx is used to specify the default port when performing an unattended installation. The value specified by xxxx should be a valid port and should contain no spaces; for example, LPT1
- /printer=n is used to specify the default printer when doing an unattended installation. The value specified by "n" is an integer that references the list of available printers. For example, the following printers are available for the HP LaserJet 4200 or HP LaserJet 4300 series printer installation:
- 0 = HP LaserJet 4200 or HP LaserJet 4300 printer
- 1 = HP LaserJet 4200 or HP LaserJet 4300n printer
- 2 = HP LaserJet 4200 or HP LaserJet 4300tn printer
- 3 = HP LaserJet 4200 or HP LaserJet 4300dtn printer
- 4 = HP LaserJet 4200 or HP LaserJet 4300dtns printer
- 5 = HP LaserJet 4200 or HP LaserJet 4300dtnsl printer
- /pd=n is used to specify whether the selected printer is the default printer, when you have multiple printers connected to your network. The value specified by n is an integer (that is, 0 or 1). For this argument, entering 1 (one) sets the selected printer as the default printer. Entering zero (0) or not specifying a value at all sets the printer as a non-default printer.

You can preset these options in the SETUP.LST file located in the root directory of the HP LaserJet software CD-ROM. In the defaults section, add the following syntax:

[Defaults]

Options=/port=<value>/printer=<number>/pd=<number>

For example, <value> = LPT1,

#### **Driver-only installation**

- Close all software programs.
- 2 Click Start, click Settings, and then click Printers.

- 3 Double-click Add Printer.
- 4 Answer the questions in the Add Printer Wizard dialog box until you reach the screen with the printer manufacturer list.
- 5 Click Have Disk.
- 6 Browse to the driver location using one of these options: Inbox CD-ROM. Browse to the appropriate directory for your operating system and language. Internet download. Browse to the folder where the Web files were downloaded and decompressed.
- 7 Select the appropriate information (.INF) file.
- 8 Click Open, and then click OK.
- 9 Select the appropriate printer.
- 10 Follow the remaining instructions to complete the printer installation. At this point, the driver has been copied to your hard disk and is included with the list of installed printers.

#### Point and Print installation for Windows 95, 98, Me, NT 4.0, 2000, and XP

The following information will assist you as you install a printer driver using the Microsoft Point and Print function when you cannot see the printer on the network.

Point and Print is a Microsoft term that describes a two-step driver installation process. The first step is to install a shared driver on a network print server. The second step is to "point" to the print server from a network client so that the client can use the print driver.

Note

This section outlines the procedures for installing print drivers with Point and Print. If these procedures are not successful, contact Microsoft. Hewlett-Packard provides drivers that are compatible with the Point and Print feature, but this is a function of the Microsoft operating systems, not of HP print drivers. Windows NT, Windows 2000, and Windows XP drivers from HP are supported only on Intel X86 (R) processor types. Any other processor types must use Windows NT drivers from Microsoft. To install the printer driver on a Windows NT 4.0, Windows 2000, or Windows XP server, you must have administrator privileges. To completely install the Windows NT 4.0 printer driver on the Windows NT 4.0 server (or the Windows 2000 printer driver on the Windows 2000 server), you must have administrator privileges on the server. The Windows NT 4.0 Printer .INF file (or the Windows 2000 Printer .INF file) must contain the same printer name as the Windows 95, Windows 98, or Windows Me PS driver version 4.0 or later.

For all operating systems, use the Add Printer Wizard to install the appropriate operating system driver on the server and client machines, as shown in the following table.

**Table 66: Windows servers with Windows clients** 

Computer function	Steps
Server and clients	Click Start, click Settings, and then click Printers.
Server and clients	2. In the Printers folder, double-click the <b>Add Printer</b> icon to start the Add Printer Wizard.
Server only	3. Click <b>Next</b> , and then click <b>Local Printer</b> . Click <b>Next</b> . If your operating system is
	Windows 95, Windows 98, or Windows Me, go to step 6.
Server and clients	4. Select the appropriate port in the list of ports, or click <b>Add Port</b> to connect to a
	network port that is not in the list of available ports.
Server and clients	5. Select the printer model in the list of available printers, or click <b>Have Disk</b> if installing
	the driver from an alternative source, such as disk, CD-ROM, or software download. If
	installing from a software download, you must know the path where the software has been downloaded.
Server only	6. After the installation is complete, highlight the <b>Printer</b> icon and click <b>File</b> , and then
-	click <b>Properties</b> . In the Printer Properties window, click the <b>Sharing</b> tab.
Server only	7. You must enable the File and Print Sharing service for either Microsoft networks or
	Novell networks on the server.
Server only	8. To exit Properties, click <b>OK</b> . A hand appears beneath the <b>Printer</b> icon in the Printers
	folder, indicating that the printer is shared.

Computer function	Steps	
Client only	9. You can install the driver using Point and Print in one of the following four ways:	
	In Network Neighborhood, locate the server and double-click the printer share name.	
	<ul> <li>In Network Neighborhood, locate the server, and then drag and drop the icon for the shared printer into your Printers folder.</li> </ul>	
	<ul> <li>In the Printers folder, open the Add Printer Wizard. The next action depends on the operating system:</li> </ul>	
	<ul> <li>For Windows 95, Windows 98, and Windows Me, click Network Printer.</li> </ul>	
	<ul> <li>For Windows NT 4.0, Windows 2000, and Windows XP, click Network printer server.</li> </ul>	
Client only	10. Click <b>Next.</b> Type the network path or queue name, or select <b>Browse</b> to search the network to locate the appropriate path.	
Client only	11. In Network Neighborhood, locate the server and double-click. Then locate the printer share name and right-click.	
Client only	12. Click <b>Install</b> to complete the installation through the Add Printer Wizard.	

# Setting a default printer

This section applies to the Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP operating systems.

- 1 From the **Start** menu, click **Settings**, and then click **Printers**.
- 2 Select the printer you want to set as the default printer.
- 3 From the File menu, click Set As Default. A check mark appears next to the menu option.
- 4 Click Close.

# Windows 3.1x

# **Printer support**

• The HP LaserJet 4200 series and HP LaserJet 4300 series printers have not been tested with and are not supported with Windows 3.1x.

# Installation for Macintosh, IBM OS/2, and Linux operating systems

# Introduction

This section provides system requirements and procedures for installing and removing the HP LaserJet printing system software for supported operating system other than Windows. It also provides information about font support and system modifications. Supported operating systems include:

- Macintosh
- IBM OS/2
- Linux

# **System Requirements**

The following system requirements are for installing and using the HP LaserJet printing system software on each of these supported operating systems.

#### **Macintosh**

- 68-kilobyte processor
- Macintosh OS 8.6 or later
- 16 MB RAM
- 20 MB available disk space

#### IBM OS/2

- Pentium processor
- 32 MB RAM (required for OS/2)
- 5 MB available disk space (required for driver)

#### Linux

For information about Linux support for the printer, see the following Web sites:

- http://hp.sourceforge.net (HP Linux support home page)
- http://www.hp.com/go/linux (Hewlett-Packard's Linux Web site)

#### **Macintosh**

# **Macintosh component descriptions**

The printer includes the following software for Macintosh computers.

PPDs (Mac OS 8.6 to 9.x, Mac OS X classic, and Mac OS X)

#### **HP LaserJet PPDs**

In Mac OS 8.6 to 9.x, these PS printer-definition files for HP LaserJet 4200 and 4300 series printers are installed to the Printer Descriptions folder, which is in the Extensions folder within the System folder. In Mac OS X, the PPDs are installed in

#### Library:Printers:PPDs:Contents:Resources:<lang>.lproj

where <lang> is the desired localized folder.

PPDs, in combination with the LaserWriter driver, provide access to the printer features and allow the computer to communicate with the printer. An installation program for the PPDs is provided on the printing software CD-ROM.

For Mac OS 8.6 to 9.x, the Apple LaserWriter 8 driver must be installed to use the PPD file. Use the Apple LaserWriter 8 driver that came with your Macintosh. For Mac OS X, use Print Center to print.

# PDEs (Mac OS X)

Printer Dialog Extensions (PDEs) are code plug-ins that provide access to printer features, such as number of copies, duplexing, and quality settings. An installation program for the PDEs and other software is provided on the printing software CD-ROM.

# **HP LaserJet Utility**

This Hewlett-Packard printer utility is installed to the HP LaserJet folder in Macintosh OS 8.6 to 9.1 operating systems. It provides configuration and management support for PS and PCL printers.

Use the HP LaserJet Utility to control features that are not available in the driver. The illustrated screens make selecting printer features from the Macintosh computer easier than ever. Use the HP LaserJet Utility to do the following:

- customize the printer's control panel messages.
- name the printer, assign it to a zone on the network, download files and fonts, and change most of the printer settings.
- set a password for the printer.
- from the computer, lock out functions on the printer's control panel to prevent unauthorized access. (See the printer software help.)

#### Installation notes

This text file contains important information about printer features, instructions for installing the printing-system software, and technical assistance.

#### ColorSync profiles

These text files contain color-matching information for the Macintosh system and HP LaserJet color printers.

#### Online Help

This HTML-based help system replaces the Apple Guide help system that was provided with earlier HP printers. The help system can be viewed through a browser or in the Macintosh OS Help Center.

# Screen fonts (Mac OS classic)

These screen fonts are available only for Macintosh computers and Macintosh-compatible computers. Because the screen fonts match your printer fonts, you can see on screen how your printed page will look.

# **Font support**

To ensure that you can use all installed fonts with the HP LaserJet 4200 and 4300 series printers, the Macintosh printing system includes the standard 35 screen fonts in 11 families:

- Avant Garde
- Helvetica Narrow
- Times
- Bookman
- New Century Schoolbook
- Zapf Chancery
- Courier
- Palatino
- Zapf Dingbats
- Helvetica
- Symbol

The Macintosh printing system also includes the HP 45 XPS font families:

- Clarendon Condensed Bold
- Symbol
- Albertus Medium
- Coronet
- Times New Roman
- Antique Olive
- Courier
- Univers
- Arial
- Garamond
- Univers Condensed
- CG Omega
- Letter Gothic
- Wingdings
- CG Times
- Marigold

The following bitmap screen fonts reside on the HP LaserJet 4200 and 4300 series printers:

- ITC Avant Garde Gothic Book
- Helvetica
- Palatino

- ITC Avant Garde Gothic Book Oblique
- Helvetica Bold
- Palatino Bold
- ITC Avant Garde Gothic Demi
- Helvetica Bold Oblique
- Palatino Bold Italic
- ITC Avant Garde Gothic Demi Oblique
- Helvetica Oblique
- Palatino Italic
- ITC Bookman Demi
- Helvetica Narrow
- Symbol
- ITC Bookman Demi Italic
- Helvetica Narrow Bold
- Times Bold
- ITC Bookman Light
- Helvetica Narrow Bold Oblique
- Times Bold Italic
- ITC Bookman Light Italic
- Helvetica Narrow Oblique
- Times Italic
- Courier
- New Century Schoolbook Bold
- Times Roman
- Courier Bold
- New Century Schoolbook Bold Italic
- ITC Zapf Chancery Medium Italic
- Courier Bold Oblique
- New Century Schoolbook Italic
- ITC Zapf Dingbats
- Courier Oblique
- New Century Schoolbook Roman

The following fonts are resident on all HP LaserJet 4200 and 4300 series printers, but can be used by Macintosh platforms only if you install additional screen fonts. You can either use these screen fonts directly from the HP LaserJet 4200 and 4300 software CD-ROMs, or obtain them from the HP Web site at one of the following URLs: http://www.hp.com/support/lj4200 or http://www.hp.com/support/lj4300

- Albertus Extra Bold
- CG Times Italic
- Marigold
- Albertus Medium

- Clarendon Condensed Bold
- Symbol
- Antique Olive
- Coronet
- Times New Roman
- Antique Olive Bold
- Courier
- Times New Roman Bold
- Antique Olive Italic
- Courier Bold
- Times New Roman Bold Italic
- Arial Courier Bold Oblique
- Times New Roman Italic
- Arial Bold
- Courier Italic
- Univers Bold
- Arial Bold Italic
- Garamond Antiqua
- Univers Bold Italic
- Arial Italic
- Garamond Halbfett
- Univers Condensed Bold Italic
- CG Omega
- Garamond Kursiv
- Univers Condensed Medium
- CG Omega Bold
- Garamond Kursiv Halbfett
- Univers Condensed Medium Italic
- CG Omega Bold Italic
- Letter Gothic
- Univers Medium
- CG Omega Italic
- Letter Gothic Bold
- Univers Medium Italic
- CG Times
- Letter Gothic Italic
- Univers Italic
- CG Times Bold
- CG Times Bold Italic

- Wingdings
- CG Times Bold Italic

# **Installing the Macintosh printing system**

On a Macintosh-compatible computer, the installation procedures are the same for a network administrator, a network client, and a single user. Install the software on any computer that has access rights to the printer.



If the computer is connected to the printer by a LocalTalk (Printer Port) or EtherTalk connection, the AppleTalk (or Network) control panel must be configured for the correct connection to communicate with the printer. The HP LaserJet 4200 and 4300 series printers must be set up, connected to the computer, and turned on before the software is installed. Macintosh OS systems do not support parallel connections. You must use a USB connection for a direct connection to a computer running Macintosh OS. In the following instructions, "XXXXX" represents the HP LaserJet printer model number.

The Macintosh partition contains an installer program for each language. Find the language appropriate for the operating system being used, and use the installer program for that language.

# To install the HP LaserJet printer software for Macintosh OS

Insert the CD-ROM that came with the Macintosh printer software into the CD-ROM drive.

Note

If the CD screen does not open automatically, double-click the CD-ROM icon on the desktop to open the CD-ROM window.

- 2 Open the HP LaserJet Installers folder. Find the **Installer** icon for the appropriate language. Double-click the **Installer** icon to launch the Installer. In the opening dialog, click **Continue**.
- 3 The main Installer dialog box appears. Click Install and then follow the instructions on the screen to complete the software installation.

Note

If you are installing the printer software on a Macintosh OS X system, please be patient. The installer must perform an initial search of the computer for up to one full minute. During this time the installer may appear to be making no progress.

Note

If you want to use the HP LaserJet utility (Mac OS 8.6 - 9.1 only) using a USB connection to configure Apple Talk Zone or to name your printer, you must select Custom Install and then select HP USB and all other applicable components. Installing the HP USB components will require you to restart your computer. If you do not want to use the HP LaserJet utility, continue with the following Easy Install instructions.

- 4 When software installation is complete, click **Quit**. Choose one of the following options to finish setting up your printer:
  - -To set up a USB direct printer connection with Mac OS 8.6-9.1
  - -To set up an AppleTalk networked printer with Mac OS 8.6-9.1
  - -To set up a printer with Mac OS X

# To set up a USB direct printer connection with Mac OS 8.6 - 9.1

- Run the Apple Desktop Printer Utility.
- Select **HP Printer (USB)** if you installed this component during a Custom Install and intend to use the HP LaserJet utility for configuration,
  - OR -

select Printer (USB), and then click OK.

3 Click Change in the USB Printer Selection area.

- 4 Select the USB printer in the printer selection window, and then click **OK**.
- 5 Click **Auto Setup** to attempt to match a PPD file and USB driver to your printer. If **Auto Setup** fails, click **Change**. Scroll through the list of printers, select **HP LaserJet 4200** or **HP LaserJet 4300**, and then click **Select**.
- 6 Click Create.

# To set up an AppleTalk networked printer with Mac OS 8.6 - 9.1

- 1 Run the Apple Desktop Printer Utility.
- Select Printer (AppleTalk), and then click OK.
- 3 Click Change in the AppleTalk Printer Selection area.
- Select the appropriate zone and printer, and then click OK.
- Click **Auto Setup** to attempt to match a PPD file and USB driver to your printer. If **Auto Setup** fails, click **Change**. Scroll through the list of printers, select **HP LaserJet 4200** or **HP LaserJet 4300**, and then click **Select**.
- 6 Click Create.

# To set up a printer with Mac OS X

- 1 In the **Applications** folder, open the **Utilities** folder, and then run the **Print Center**.
- 2 Click Add (in Mac OS X 10.2) or Add Printer (in Mac OS X 10.1).
- 3 From the top pop-up menu, select the appropriate connection type for your printer.
- Select or type in any other information as indicated for the type of connection for your printer. For example, if you are using an AppleTalk connection, select your printer zone; or if you are using IP Printing, type in an IP address.



If the automatic selection fails, or if you want to manually select a PPD file, click the Printer Model popup menu, select HP, and then click LaserJet 4200 or LaserJet 4300.

- 5 Click Add.
- To configure installable options in Mac OS X 10.2, such as a duplexing unit or optional paper trays, click the appropriate printer icon in the **Print Center Printer List**.window. Select **Show Info** from the **Printers** menu, and then select the appropriate options from the **Installable Options** popup menu.
- 7 Configure the options, and then click **Apply Changes**.

# **Uninstalling the Macintosh printing system**

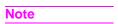
To uninstall the Macintosh Printing System, drag the PPDs and the unwanted component(s) to **Trash**.

#### In-box disk layout

The Macintosh Printing System consists of one file: the HP LaserJet Installer - Integrated installer program.

# Folders and files added through installation of the HP LaserJet software (Macintosh OS)

The tables in the following sections detail the changes to your system as new folders and files are added when the HP LaserJet 4200 and 4300 series printer software is installed on Macintosh OS systems.



This listing does not include temporary directories and files that are created, and then deleted, during the installation process.

In the following listing, "MACINTOSH HD" indicates the drive on which the software was installed.

# Macintosh (Macintosh OS Classic) installation

This section provides information about the various installation dialog box sequences for the Macintosh operating system.

# Main Install dialog box sequence

This subsection provides information about the Macintosh installation dialog box sequence for the Easy Install (the typical installation option).



Figure 74: HP LaserJet for Macintosh installer splash screen dialog box

Table 67: HP LaserJet for Macintosh installer splash screen dialog box text strings

- auto or rem = accretion materials of accretion and of accretion and accretion accretion and accretion accretion and accretion accretion accretion accretion and accretion ac		
Title of dialog box	Text in dialog box	User Options and Descriptions
Splash screen	hp LaserJet for Macintosh	Click Continue to open the HP LaserJet Installer dialog box.
	Continue [button]	



Figure 75: HP LaserJet Installer dialog box (easy install)

Table 68: HP LaserJet Installer dialog text strings (easy install)

Title of dialog box	Text in dialog box	User Options and Descriptions
HP LaserJet Installer	Easy Install [drop-down menu]	If you want to install the files in a location
	Click the <b>Install</b> button to install:	other than the default "Macintosh HD,"
	· Printer Descriptions (Classic)	click <b>Select Folder</b> to specify a location.
	· hp LaserJet Utility (Classic)	You can also choose a <b>Custom</b> installation option from the drop-down
	· Installation Notes (Classic)	menu at upper left.
	· hp LaserJet Help (Classic)	Click the <b>Read Me</b> button to open the
	Disk space available: [conditional]	Installer readme file.
	Approximate disk space needed: [conditional]	Click the <b>Install</b> button to start the installation on the selected disk
	The folder "HP LaserJet Folder" will be created on the disk "Macintosh HD" [name may vary]	Click the <b>Quit</b> button to quit the Installer without making changes to the system.
	Select Folder [button]	
	Quit [button]	
	Install [button] (default option)	

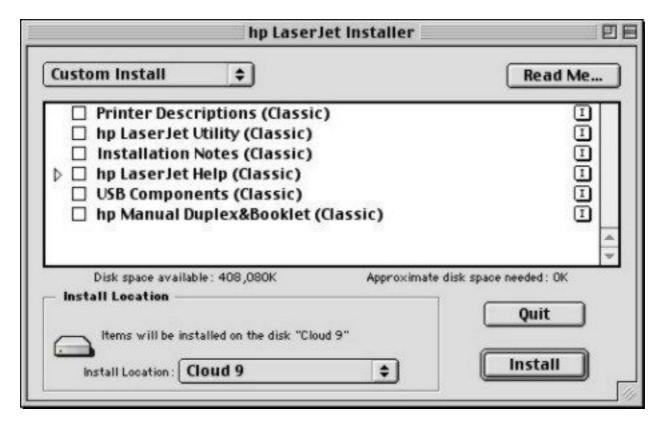


Figure 76: HP LaserJet Installer dialog box (custom install)

Table 69: HP LaserJet Installer dialog text strings (custom install)

Title of dialog box	Text in dialog box	User Options and Descriptions
HP LaserJet Installer	Custom Install [drop-down menu]	Select the install location using the
	Printer Descriptions (Classic)	Select Folder option (if the desired
	hp LaserJet Utility (Classic)	location is different from "Macintosh HD").
	Installation Notes (Classic)	Select available components to install
	hp LaserJet Help (Classic)	by using the check boxes in the list.
	USB Components (Classic)	Click the <b>Read Me</b> button to open the
	hp Manual Duplex&Booklet (Classic)	Installer readme file.
	Disk space available: [conditional]	Clicking Install starts the installation on
	Approximate disk space needed:	the selected disk.
	[conditional]	Click the <b>Quit</b> button to quit the
	The HP LaserJet Folder will be created on the disk "Macintosh HD."	Installer without making any changes to the system.
	Select Folder [button]	
	Quit [button]	
	Install [button] [default option]	

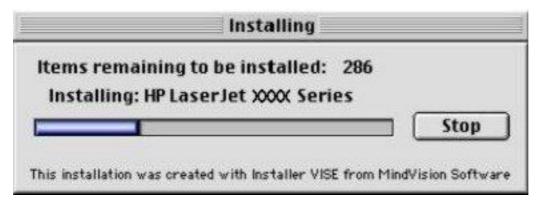


Figure 77: Installing dialog box

#### Table 70: Installing dialog text strings

	and the first transfer of the second		
Title of dialog box	Text in dialog box	User Options and Descriptions	
Installing	Items remaining to be installed: [conditional	This dialog box shows installation	
	number]	progress. No action is required unless you	
	Installing: HP LaserJet XXXX Series	wish to stop the installation. Click the <b>Stop</b>	
	Stop [button]	button to interrupt the install file copy	
	Otop [button]	process.	



Figure 78: Installation was successful dialog box

Table 71: Installation successful dialog text strings

Title of dialog box	Text in dialog box	User Options and Descriptions
	Installation was successful. If you are finished, click <b>Quit</b> to leave the Installer. If	Click the <b>Quit</b> button to exit the Installer. The Printer Setup Assistant opens.
	you wish to perform additional installations, click Continue.	Click the <b>Continue</b> button to return to the HP LaserJet Installer.

# Printer setup using AppleTalk Chooser

This section provides information about installing the printer using the AppleTalk Chooser.

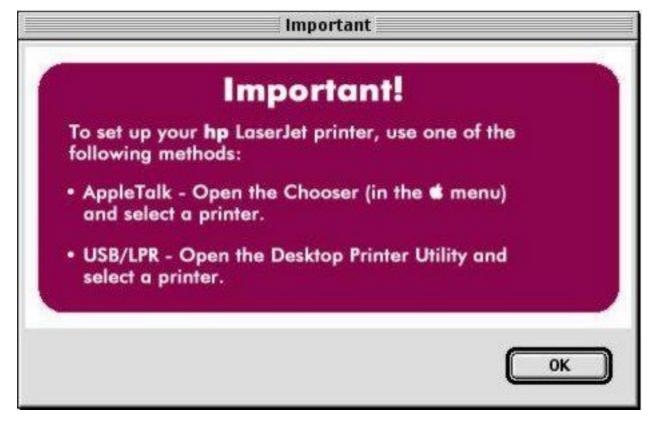


Figure 79: Important! dialog box

Table 72: Important! dialog box text strings

Title of dialog box	Text in dialog box	User Options and Descriptions
Important!	To set up your HP LaserJet printer, use one of the following methods:	Click <b>OK</b> , and then continue installing the printer using either the AppleTalk Chooser,
	AppleTalk - Open the Chooser (in the [Apple icon] menu) and select a printer.	or USB/LPR.
	USB/LPR - Open the Desktop Printer Utility and select a printer.	



Figure 80: How do I select my printer? dialog box

Table 73: How do I select my printer? dialog text strings

Title of dialog box	Text in dialog box	User Options and Descriptions
How do I select my printer?	For instructions, click the right arrow.	This is a standard Macintosh OS help
	Topics [button]	sequence.

# **HP LaserJet Screen Fonts Installer dialog box sequence**

This section provides information about the installation dialog box sequence for the HP Screen Font Installer.



Figure 81: HP LaserJet Screen Fonts splash screen dialog box

Table 74: HP LaserJet Screen Fonts splash screen dialog text strings

Title of dialog box	Text in dialog box	User Options and Descriptions
HP LaserJet Screen Fonts	HP LaserJet Screen Fonts	Click the <b>Continue</b> button to open the <b>HP</b>
	Continue [button]	LaserJet Screen Fonts dialog box.



Figure 82: HP LaserJet Screen Fonts installer dialog box

Table 75: HP LaserJet Screen Fonts installer dialog text strings (1 of 2)

Tubio 70. Til Eucordot ot	abio 10.111 Lacordot Corcon 1 citto motanor dialog toxt offingo (1 cit 2)			
Title of dialog box	Text in dialog box	User Options and Descriptions		
HP LaserJet Screen Fonts	Click the <b>Install</b> button to install:	Click the <b>Install</b> button to start the		
	Screen Fonts	installation.		
	Items will be installed on the disk "Apple External HD"	Click the <b>Quit</b> button to quit the Installer without making changes to the system.		
	Quit [button]			
	Install [button] (default option)			

When you click **Install**, an installation progress bar dialog box briefly appears. The following table details the contents of that dialog box.

Table 76: HP LaserJet Screen Fonts installer dialog text strings (2 of 2)

Title of dialog box	Text in dialog box	User Options and Descriptions
Installing	Items remaining to be installed: [conditional	Click the <b>Stop</b> button to interrupt the install
	number]	file copy process.
	Stop [button]	



Figure 83: Installation was successful dialog box

Table 77: Installation was successful dialog text strings

Title of dialog box	Text in dialog box	User Options and Descriptions
	Installation was successful. If you are	Click the <b>Quit</b> button to exit the Installer.
	finished, click <b>Quit</b> to leave the Installer.	Click the <b>Continue</b> button to return to the
	If you want to perform additional installations, click Continue.	HP LaserJet Screen Fonts installer.

# Macintosh (Macintosh OS X) installation

This section provides information about the various installation dialog box sequences for the Macintosh operating system.

### Main Install dialog box sequence

This section provides information about the Macintosh installation dialog box sequence for the Easy Install (the typical installation option).



Figure 84: HP LaserJet for Macintosh installer splash screen dialog box

Table 78: HP LaserJet for Macintosh installer splash screen dialog box text strings

Title of dialog box	Text in dialog box	User Options and Descriptions
Splash screen	hp LaserJet for Macintosh	Click Continue to open the HP LaserJet Installer dialog box.
	Continue [button}	



Figure 85: HP LaserJet Installer dialog box (easy install)

Table 79: HP LaserJet Installer dialog text strings (easy install)

Title of dialog box	Text in dialog box	User Options and Descriptions
HP LaserJet Installer	Easy Install [drop-down menu]	If you want to install the files in a location
	Click the <b>Install</b> button to install:	other than the default "Macintosh HD,"
	· Printer Descriptions	click <b>Select Folder</b> to specify a location.
	· HP LaserJet Utility	You can also choose a <b>Custom</b> installation option from the drop-down
	· Installation Notes	menu at upper left.
	· ColorSync Profiles	Click the <b>Read Me</b> button to open the
	Disk space available: [conditional]	Installer readme file.
	Approximate disk space needed: [conditional]	Click the <b>Install</b> button to start the installation on the selected disk
	The folder "HP LaserJet Folder" will be created on the disk "Macintosh HD"	Click the <b>Quit</b> button to quit the Installer without making changes to the system.
	Select Folder [button]	
	Quit [button]	
	Install [button] (default option)	



Figure 86: HP LaserJet Installer dialog box (custom install)

Table 80: HP LaserJet Installer dialog text strings (custom install)

Title of dialog box	Text in dialog box	User Options and Descriptions
HP LaserJet Installer	Custom Install [drop-down menu]	Select the install location using the
	Printer Descriptions	Select Folder option (if the desired
	HP LaserJet Utility	location is different from "Macintosh HD").
	Installation Notes	Select available components to install by using the check boxes in the list.
	ColorSync Profiles	Click the <b>Read Me</b> button to open the
	HP LaserJet Help	Installer readme file.
	LaserJet Printer Help	Clicking <b>Install</b> starts the installation on
	USB Components	the selected disk.
	Disk space available: [conditional]	Click the <b>Quit</b> button to quit the Installer
	Approximate disk space needed: [conditional]	without making any changes to the system.
	The HP LaserJet Folder will be created on the disk "Macintosh HD."	
	Select Folder [button]	
	Quit [button]	
	Install [button] [default option]	

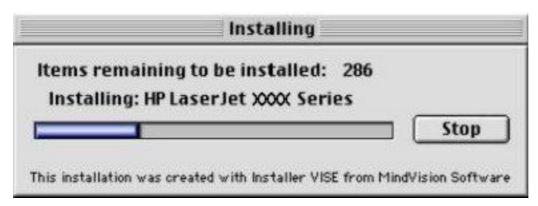


Figure 87: Installing dialog box

### Table 81: Installing dialog text strings

Table 01. Illotalli	able of this tailing dialog text of higo									
Title of dialog box	Text in dialog box	User Options and Descriptions								
Installing	Items remaining to be installed: [conditional	9								
	number]	progress. No action is required unless you								
	Installing: HP LaserJet XXXX Series	wish to stop the installation. Click the <b>Stop</b>								
	Stop [button]	button to interrupt the install file copy								
	Grob [Button]	process.								



Figure 88: Installation was successful dialog box

### Table 82: Installation successful dialog text strings

Title of dialog box	Text in dialog box	User Options and Descriptions		
	Installation was successful. If you are finished, click <b>Quit</b> to leave the Installer. If	Click the <b>Quit</b> button to exit the Installer. The Printer Setup Assistant opens.		
	you want to perform additional installations, click Continue.	Click the <b>Continue</b> button to return to the HP LaserJet Installer.		

# IBM OS/2 Warp 3.0 and later

### **OS/2** installation instructions

Installation procedures differ depending upon whether or not a printer object exists on the OS/2 desktop. Use the instructions that match the desktop.

### Installing a printer in OS/2 when printer object is missing

Use this procedure when a printer object does not appear on the computer desktop. To create a printer object and install a printer driver, follow these steps:

### Note

Use this procedure if the OS/2 desktop does not have a printer object. A system can have this configuration if no printer was selected during OS/2 installation, or if all the print objects have been deleted from the desktop.

- 1 Open the templates folder that is located in OS/2 system folder after OS/2 installation.
- 2 Click the Printer template. Press and hold the right mouse button.
- 3 Drag the template to Desktop.
- 4 Release the right mouse button.
- 5 Type a name for the printer in the Name field.
- 6 Select a port to which the printer is connected.
- 7 Click Install new printer driver. A window appears with a list of the printer drivers that are shipped with OS/2.
- 8 Click Other printer driver.
- 9 Point to the downloaded printer drivers.
- 10 Click **Refresh**. Wait until the window fills with printer drivers.
- 11 Select a driver by clicking the left mouse button over the driver that you want.
- 12 Click Install.

### Installing a printer in OS/2 with pre-existing printer object on desktop

To install a new printer driver using an existing printer object, use the following procedure:

**Note** 

If the 16-bit HP LaserJet driver is installed on a system, delete it before installing this driver.

Use these directions if a printer object exists on the OS/2 desktop, but you do not have the correct printer driver installed on the system. This could happen if a different printer has been added to the system.

- 1 Right-click the **Printer** object.
- 2 Click Settings.
- 3 Click the Printer Driver tab.
- 4 Right-click one of the **Printer Driver** objects.
- 5 Click Install.
- 6 Click Other OS/2 printer driver.
- 7 Point to the downloaded printer drivers.
- 8 Click the Refresh button. Wait until the window fills with printer drivers.
- 9 Click the driver that you want to use.
- 10 Click Install.

Additional information about the OS/2 drivers is included in the readme files that come with each driver.

# Font support

#### **Note**

Fonts can be downloaded to the printer by using the Font Installer feature of the printer driver.

- Albertus
- CG Times Italic
- Symbol
- Albertus Extra Bold
- Clarendon Condensed

- Times New Roman
- Antique Olive · Coronet
- Times New Roman Bold
- Antique Olive Bold
- Courier
- Times New Roman Bold Italic
- Antique Olive Italic
- Courier Bold
- Times New Roman Italic
- Arial
- Courier Bold Italic
- Univers
- Arial Bold
- Courier Italic
- Univers Bold
- Arial Bold Italic
- Garamond Antiqua
- Univers Bold Italic
- Arial Italic
- Garamond Halbfett
- Univers Italic
- CG Omega
- Garamond Kursiv
- Univers Condensed
- CG Omega Bold
- Garamond Kursiv Halbfett
- Univers Condensed Bold
- CG Omega Bold Italic
- Letter
- Univers Condensed Bold Italic
- CG Omega Italic
- Letter Bold
- Univers Condensed Medium Italic
- CG Times
- Letter Italic
- Wingdings
- CG Times Bold
- Line Printer
- CG Times Bold Italic

Marigold

# Changing a printer driver in the printer object

Once both the printer object and the printer driver have been installed, the correct printer driver should be selected in the print object. This might also be necessary if you are using different printer drivers with a single print object. To change to a different printer driver:

- 1 Right-click the **Printer** object.
- 2 Click Settings.
- 3 Click the Printer Driver tab.
- 4 Double-click the Titlebar icon.

The printer object is now set up to use a different printer driver. To customize the settings for this printer driver, see "Changing the printer properties" or "Changing the job properties."

# Changing the printer properties

Printer properties describe how a particular printer is physically set up. Examples of printer properties include the amount of memory in a printer, forms defined by the printer, forms associated with the printer paper trays, and installed printer patterns.

To set or change printer properties:

- 1 Point to the Printer object. Right-click the **Printer** object.
- 2 Click Settings.
- 3 Click the Printer Driver tab.
- 4 Right-click the correct printer driver.
- 5 Click Settings.
- 6 Change the properties to match the printer setup.
- 7 Double-click the **Titlebar** icon.

The printer object is now set up to print a job. For information about how to print a job, see the OS/2 tutorial or the information folder for information about printing.

# Changing the job properties

Job properties describe how a particular print job is printed. Examples of job properties include number of copies, print resolution, print quality, and orientation (portrait or landscape). Programs generally allow the selection of a printer object, and they allow you to change the job properties associated with a particular job by selecting setup or options buttons. Under certain conditions, it is appropriate to change job properties outside of a software program, such as when performing drag-and-drop printing.

To change the default job properties associated with a printer object outside of an program:

- 1 Right-click the **Printer** object.
- 2 Click Settings.
- 3 Click the Job Properties tab.
- 4 Change the properties.
- 5 Click Save.

The default job properties associated with a printer object are now set up. For more information about how to print a job, see the OS/2 tutorial or the information folder.

# 6

# **Engineering Detail**

### Introduction

This section presents engineering detail for the following topic:

"Media attributes"

### Media attributes

This section includes the following information about media attributes:

- · paper sources and destinations
- paper tray configurations
- paper-source commands
- media types and sizes
- PCL 5e and PCL 6 custom paper sizes

# Paper sources and destinations

The following table indicates the standard and optional paper sources and destinations for the HP LaserJet 4200 and 4300 series printers.

### Table 83: HP LaserJet 4200 and 4300 series printers paper sources and destinations

Paper sources	multipurpose tray (tray 1)	standard
	500-sheet paper tray (tray 2)	standard
	500-sheet paper tray (tray 3)	optional
	1,500-sheet paper tray (tray 4)	optional
	Envelope feeder	optional
Paper destinations	Stacker unit	optional
	Stacker/stapler unit	optional

# Paper tray configurations

The HP LaserJet 4200 and 4300 series printers come with an integral standard 500-sheet input cassette, which is always designated as Tray 2. Up to two optional 500-sheet cassettes can be stacked beneath the printer, providing a Tray 3 and a Tray 4. Likewise, a 1,500-sheet HCl tray can be added to the standard printer, which would then be designated as Tray 3. Another option is to install a 500-sheet cassette, with a 1,500-sheet HCl unit beneath, in which case the 500-sheet unit would be Tray 3 and the HCl unit would be Tray 4. The cassette hardware provides mechanical system for automatically assigning these tray numbers.

The following table indicates the paper tray configurations that are possible for the HP LaserJet 4200 and 4300 series printers.

Table 84: Paper tray configurations for the HP LaserJet 4200 and 4300 series printers

Configurations	Tray number	Tray type	Standard/optional
A	Tray 1	multipurpose tray	standard
	Tray 2	500-sheet tray	standard
В	Tray 1	multipurpose tray	standard
	Tray 2	500-sheet tray	standard
	Tray 3	500-sheet tray	optional
С	Tray 1	multipurpose tray	standard
	Tray 2	500-sheet tray	standard
	Tray 3	500-sheet tray	optional
	Tray 4	500-sheet tray	optional
D	Tray 1	multipurpose tray	standard
	Tray 2	500-sheet tray	standard
	Tray 3	1,500-sheet tray	optional
E	Tray 1	multipurpose tray	standard
	Tray 2	500-sheet tray	standard
	Tray 3	500-sheet tray	optional
	Tray 4	1,500-sheet tray	optional

Note: Envelope feeder and/or duplexing unit possible in any configuration.

# **Paper-source commands**

The PCL 5e escape sequence for paper source is "Esc&l#H" (the "I" is a lowercase "L" rather than the numeral "1"). See the following table for values of #. For example, "Esc& I1H" is the command for tray 2.

The PCL 6 escape sequence for paper source is "ubyte # MediaSource". See the following table for values of #. For example, "ubyte 4 MediaSource" is the command for tray 2.

**Table 85: Paper-source commands** 

Paper source	PCL 5e	PCL 6	PS
Tray 1	4	3	3 ManualFeed false
Tray 2	1	4	0
Tray 3 (500-sheet)	5	5	1
Tray 3 (1,500-sheet)	5	5	5
Tray 4 (500-sheet)	8	7	4
Tray 4 (1,500-sheet)	8	7	5
Envelope feeder	6	6	2
Auto Select	7	1	-
Manual feed	2	2	3 ManualFeed true

# Media types and sizes

The tables in this section provide information about media features, media attributes, and paper-handling constraints for the HP LaserJet 4200 and 4300 series printers.

Note

The following table lists the features and attributes of various media listed under the Size Is: drop-down menu on the Paper tab. The list order can vary, depending on the printer and operating system. The list contains all the following sizes, and might contain sizes from other drivers.

188 Engineering Detail Software Technical Reference

Table 86: Supported features and attributes by driver

Paper sizes	Width	Height	PCL 5	tes by driver PCL 6 <sup>2</sup>	PCL 5	PCL 5	PCL 6	DO 15
rapei sizes	Widti	neight	escape value <sup>1</sup>	PCL 6 <sup>2</sup>	margin x,		margins	PS commands <sup>5</sup>
Letter	216 mm (8.5	279 mm (11.0	2	"LETTER"	150,100	120,100	100, 100	"Letter"
Legal	inches) 216 mm	inches) 356 mm	3	"LEGAL"	150,100	120,100	100,	"Legal"
	(8.5 inches)	(14.0 inches)			·	·	100	-
Executive	184 mm (7.25 inches)	267 mm (10.5 inches)	1	"EXEC"	150,100	120,100	100, 100	"Executive"
Executive (JIS)			18	"JISEXEC"				"W612h936"
A5	148 mm (5.83 inches)	210 mm (8.27 inches)	25	"A5"	150,100	120,100	100, 100	"A5"
A4	210.0 mm (8.27 inches)	297 mm (11.69 inches)	26	"A4"	142, 100	118, 100	100, 100	"A4"
Envelope Commercial #10	105 mm (4.12 inches)	241 mm (9.5 inches)	81	"COM10"	150, 100	120, 100	100, 100	"Env10"
Envelope DL (ISO)	110 mm (4.3 inches)	220 mm (8.66 inches)	90	"DL"	142, 100	118, 100	100, 100	"EnvDL"
Envelope C5 (ISO)	162 mm (6.38 inches)	229 mm (9.01 inches)	91	"C5"	142, 100	118, 100	100, 100	"EnvC5"
Envelope B5 (ISO)	176 mm (6.93 inches)	250 mm (9.84 inches)	100	"B5 ENV"	142, 100	118, 100	100, 100	"EnvISOB <sup>5</sup> "
Envelope Monarch	98 mm (3.87 inches)	190 mm (7.5 inches)	80	"MONARCH"	150, 100	120,100	100, 100	"EnvMonarch"
B5 (ISO)3	176 mm (6.93 inches)	250 mm (9.84 inches	65	"ISOB5"	142, 100	118, 100	100, 100	"ISOB5"
B5 (JIS)	182 mm (7.16 inches)	257 mm (10.12 inches)	45	"JIS B5"	142,100	·	100, 100	"B5"
Double Post card	100 mm (3.94 inches)	148 mm (5.83 inches)	???	???	???	???	100, 100	"DoublePostcard"
16K <sup>3</sup>	197 mm (7.75 inches)	273 mm (10.75 inches)	17	"ROC16K"	150, 100	120, 100	100, 100	"W558h774"

Software Technical Reference Engineering Detail 189

Paper sizes	Width	Height	PCL 5 escape	PCL 6 <sup>2</sup>	PCL 5 margin x,	PCL 5 margin	PCL 6 margins	PS commands <sup>5</sup>
			value <sup>1</sup>		y portrait	x,y landscape	_	
Custom	Minimum:	Minimum:	101	4	4	4	4	true
(leading	76 mm	127 mm						
edge) (other	(3.0 inches)	(5.0 inches)						
edge)	Maximum:	Maximum:						
	148 mm	216 mm						
	(8.5 inches)	(14.0 inches)						

<sup>&</sup>lt;sup>1</sup>The PCL escape sequence for paper size is Esc&1#A. The values in this column are for #.

Table 87: Supported input media types

Input media types (PS string)	Tray 1	Tray 2	Tray 3	Tray 4	Envelope feeder	1,500-sheet tray
Plain	Υ	Υ	Υ	Υ	Υ	Υ
Preprinted	Y	Υ	Υ	Υ	Υ	Υ
Letterhead	Y	Υ	Υ	Υ	Υ	Υ
Transparency	Υ	Υ	Υ	Υ	N	Υ
Prepunched	Y	Υ	Υ	Υ	Υ	Υ
Labels	Y	N	N	Υ	Υ	Υ
Bond	Y	Υ	Υ	Υ	Υ	Υ
Recycled	Υ	Υ	Υ	Υ	Υ	Υ
Color	Y	Υ	Υ	Υ	Υ	Υ
Cardstock <sup>1</sup>	Υ	Y	Υ	Υ	Υ	Υ
Rough	Υ	Υ	Υ	Υ	Υ	Υ

<sup>&</sup>lt;sup>1</sup>Tray 1 accepts cardstock at a maximum weight of 164 g/m<sup>2</sup> (45-lb).

The following table identifies the media types that are supported by the HP LaserJet 4200 and 4300 series printers stapler/stacker.

Table 88: HP LaserJet 4200 and 4300 Stacker and Stapler/Stacker

Output media types	Stapler/Stacker			
	Stacker bin	Stacker bin		Stapling
	Face down	Face up	7	
Plain	Υ	Υ	Υ	Υ
Preprinted	Υ	Y	Υ	Υ
Letterhead	Υ	Y	Υ	Υ
Transparency	Y	Y	N	N
Prepunched	Υ	Y	Y1	Y2
Labels	Υ	N	N	N
Bond	Υ	Υ	Υ	Υ
Recycled	Υ	Y	Υ	Υ

190 Engineering Detail Software Technical Reference

<sup>&</sup>lt;sup>2</sup>The PCL 6 command for paper size is ubyte array(String)MediaSize. The values in this column are the values for "String".

<sup>&</sup>lt;sup>3</sup>In Windows NT 4.0, this paper size is treated as a custom size.

 $<sup>^4\</sup>mbox{For custom sizes},$  the PCL 6 Wizard specifies actual dimensions - for example, for 8-inch by 9-inch custom size, "real32\_8.000000 9.000000 CustomMediaSize".

<sup>&</sup>lt;sup>5</sup>The PS command for paper size is "PageSize".

Color	Υ	Υ	Υ	Υ
Card stock	Υ	Y3	Y3,4	Y3,5
Rough	Υ	Υ	Υ	Υ

<sup>&</sup>lt;sup>1</sup>Mechanically feasible, but impractical.

# PCL 5e and PCL 6 custom paper sizes

Note

The PS driver does not support user-defined media sizes.

The following table shows custom paper sizes available for the HP LaserJet 4200 and 4300 series printers.

### Table 89: PCL 5e and PCL 6 custom paper sizes

Tray	Dimensions	Minimum	Maximum
Tray 1	Width	76 mm (3.0 inches)	215 mm (8.5 inches)
	Height	127 mm (5.0 inches)	356 (14.0 inches)
Tray 2	Width	148 mm (5.83 inches)	215 mm (8.5 inches)
	Height	210 mm (8.27 inches)	356 mm (14.0 inches)
Trays 3 & 4 (500-sheet)	Width	148 mm (5.83 inches)	215 mm (8.5 inches)
	Height	210 mm (8.27 inches)	356 (14.0 inches)
Trays 3 & 4 (1,500-sheet)	Width	210 mm (8.27 inches)	215 mm (8.5 inches)
	Height	279 mm (11.0 inches)	356 (14.0 inches)
Envelope feeder	Width	98 mm (3.87 inches)	176 mm (6.93 inches)
	Height	190 mm (7.5 inches)	249 mm (9.84 inches)
Duplexing unit	Width	182 mm (7.17 inches)	215 (8.5 inches)
	Height	257 mm (10.12 inches)	356 (14.0 inches)

### **Paper Type commands**

The PCL 5e escape sequence for paper type is "Esc&n#Wdpapertype", where "n#" is the number of characters in the paper type plus 1. For example, in the sequence "Esc&n6WdPlain", "Plain" has 5 letters plus 1, for a total of 6.

For the command to work properly, at least one of the paper trays in the printer must be configured at the control panel for the paper type used in the command.

Note

Some paper type options listed in the following table might not be defined in the printer driver.

### **Table 90: Paper-type commands**

Esc&	n#	Wd	Paper type
Esc&	5	Wd	Bond
Esc&	10	Wd	Cardstock <sup>1</sup>
Esc&	6	Wd	Color
Esc&	7	Wd	Labels
Esc&	11	Wd	Letterhead
Esc&	6	Wd	Plain
Esc&	11	Wd	Preprinted
Esc&	11	Wd	Prepunched

Software Technical Reference Engineering Detail 191

<sup>&</sup>lt;sup>2</sup>Media must be properly oriented when loaded in selected input trays.

<sup>&</sup>lt;sup>3</sup>Up to a weight of 199 grams per square meter. Between 199 grams per square meter, and 216 grams per square meter, only face-up delivery is supported.

<sup>&</sup>lt;sup>4</sup>Only covers are supported.

<sup>&</sup>lt;sup>5</sup>Stapling is allowed to a maximum weight of 199 grams per square meter.

Esc&	n#	Wd	Paper type
Esc&	9	Wd	Recycled
Esc&	6	Wd	Rough
Esc&	13	Wd	Transparency <sup>2</sup>
Esc&	9	Wd	Envelope

<sup>&</sup>lt;sup>1</sup>The correct command for cardstock is "Esc&n11WdCard Stock", with a space between the "d" and the "S", and with an uppercase "S".

192 Engineering Detail Software Technical Reference

<sup>&</sup>lt;sup>2</sup> You must spell out the word "Transparency" in the string, although it is abbreviated on the printer control panel.

cartridges. See print cartridges

	command-line silent install for Windows 160
	paper source 188
	paper type 191
	Configuration Page, HP Web Access 28
% of Normal Size option in drivers 101	Configure tab in drivers 77
1,500-sheet tray. See trays	e-mail alerts 32
500-sheet tray. See trays	network settings 30
About tab in drivers 110	network settings 31
access control security 30	printer options remotely 29
accessibility support in drivers 120	·
enabling 78	protocols 31
supported by Driver Autoconfiguration 25	security 30
Accessory Output Bin option in drivers 111	bidirectional communication support 23
accounting information support 119	driver support 119
Acobat Reader. See Adobe Acrobat Reader	printer features 16
ADA (Americans with Disabilities Act) compliance 22	description 45
PS level 3 printer drivers and fonts 84	driver support 90
Web site 84	driver support 121
availability by operating system 116	context-sensitive help 90
presence on CD-ROM 22	continuous export 120
Adobe PS Level 3 Emulation support 84	control panel, page showing layout 26
Advanced tab in drivers 85	Copies option in drivers 75
configuring in HP Web Access 32	Copy Count option in drivers 92
All Pages tab in drivers 62	cover, back, option in drivers 95
Allow Scaling from Large Paper option in driver 80	covers for booklets 53
Americans with Disabilities Act (ADA) compliance 22	Current Watermarks options in drivers 103
AppleTalk 31	custom installation for Windows 151
availability by operating system 116	driver support 124
availability of drivers and related software 116	Custom Paper Size option in drivers 65
autoconfiguration. See Enterprise AutoConfiguration (EAC)	custom Quick Sets 51
Back Cover option in drivers 95	customer support for product 28
Back Cover tab in drivers 63	availability by operating system 116
back to front printing 92	description 40
Basics tab in drivers 75	description 159
	document properties 55
availability by operating system 116	Quick Sets 49
description 23	
driver support 119	watermarks 61
driver UI controls 24	deleting print jobs 109
support in various operating systems 23	Destination tab in drivers 105
binding options in drivers 51	destinations, enabling in driver 79
accessory output options 111	Device Information page, HP Web Access 26
custom sizes 67	Device Settings tab in drivers 111
output options 109	Device Status page, HP Web Access 27
bins, driver options 73	diagnostics information 31
bitmap screen fonts supported for Macintosh operating systems	different paper sizes, printing documents with 94
167	DIMMs (dual inline memory modules), status 35
bitmaps, converted from TrueType 56	Direct Connect Bidirectional Communications 116
black, printing all text as 56	directory structure for files on printing system software CD-ROM
Booklet Layout option in drivers 99	113
Booklet Printing option in drivers 51	installation requirements for Macintosh, IBM OS/2, and
borders option for pages in drivers 54	Linux operating systems 165
Bubble help 46	installation requirements for Windows operating systems
cartridges. See print cartridges	129

in-box file layout 113

character sets. See fonts Citrix Terminal Server 21 collation settings 112

language versions 114 regional versions 114

configuring for watermarks 104

color, configuring for watermarks 60 ColorSync profiles for Macintosh operating systems 166

disk storage status 35	job storage support 122
description 160	Job Storage tab 86
document layout features driver support 121	job stream output support 119
Document Options in drivers 85	Layout tab 90
document preview image 48	localization 118
Help feature support 120	localization support 126
installing online 22	NT Forms tab 83
localization 117	operating system bundles 115
localization 118	Other Pages tab 63
localization 118	Page Setup tab 84
online, availability by operating system 116	paper sizes support 124
printer 22	
Quick Set for use guide 50	paper source commands 188
	paper sources support 125
double-sided printing option in drivers 51	Paper tab 61
firmware 114	paper type support 125
firmware 115	Paper/Quality tab 93
optional software 42	print controls support 122
printing system software 114	Print Quality options 55
printing system software 115	printer model information 77
accessories supported 25	Quick Sets 49
description 25	standalone 115
Driver Extensions information in drivers 76	stream output mode support 119
description 160	types and sizes of media supported 188
driver support 120	user interface support 120
Driver Work Space (DWS) 80	using older with new printers 41
Driver Work Space (DWS) information 78	Watermarks options 58
About tab 110	watermarks support 124
accessibility support 120	dual inline memory modules (DIMMs), status 35
Adobe PS Level 3 84	duplex printing option in drivers 51
Advanced tab 85	custom sizes 67
All Pages tab 62	driver support 126
availability by operating system 116	
availability for IBM operating systems 42	enabling in driver 112
availability for Linux operating systems 42	enabling in driver 78
availability for UNIX operating systems 42	sources and destinations 187
Basics tab 75	DWS (Driver Work Space) 80
bidirectional communication support 119	DWS (Driver Work Space) information 78
changing in printer object for IBM operating systems 185	description 25
	EconoMode 56
Configure tab 77	Effects tab in drivers 100
configuring for printer hard disk 70	command and response 37
connectivity support 119	e-mail alerts, configuring 32
constraints support 121	embedded Web server (EWS). See EWS (embedded Web
Destination tab 69	server)
Destination tab 105	availability by operating system 116
Device Settings tab 89	description 25
Device Settings tab 111	custom sizes 67
document layout features support 121	driver support 126
document options 51	enabling in driver 79
Driver Management and Configuration (DMC) support	input media supported 190
120	paper source commands 188
Effects tab 57	sources and destinations 187
Effects tab 100	envelope types and sizes supported 188
enabling accessories 78	driver support 124
Finishing tab 48	EPS support 119
Finishing tab 97	paper source 188
Help feature support 120	paper type 191
installable components 41	euro characters 38
installable options support 126	event log 26
installation for Windows 161	and HP Web Access 26
installation using Windows Point and Print 162	Web site 26
Job Storage options 70	extension for driver 76
g <del>-</del>	

FastRes option in drivers 96	Settings tab 28
features of the printer 16	and HP Web Access 26
file layout for printing system software CD-ROM 113	availability by operating system 116
Finishing tab in drivers 97	description 42
date code 35	localization 117
downloading 115	using to access EWS 43
fulfillment information 114	Web site 43
First Page option in drivers 94	availability by operating system 116
Flip Pages Up option in drivers 51	description 42
Font DIMM option in drivers 81	description 153
Font Settings options in drivers 56	HPNRA (HP Network Registry Agent) 25
availability of DIMMs by operating system 117	availability of software components 116
configuring for watermarks 60	changing job properties 185
configuring for watermarks 104	changing printer drivers in the printer object 185
DIMM support in drivers 126	changing printer properties 185
euro characters 38	driver availability 42
installers 116	fonts supported 183
localization 118	installing printer software 182
PS Level 3 emulation 84	supporting the printing system software 21
send TrueType as bitmaps 56	system requirements 165
send TrueType as bitmaps 93	Ignore Application Collation options in drivers 82
supported for IBM operating systems 183	image of printer in drivers 61
supported for Macintosh operating systems 167	Include types in application source list option in drivers 80
supported for Windows operating systems (basic) 130	HP Web Access 26
supported for Windows operating systems (default) 130	Input Paper Handling Options in drivers 111
supported for Windows operating systems (PS) 84	input trays. See trays
supported for Windows operating systems (PS) 131	Install Printer wizard 39
Fonts option in drivers 81	custom for Windows 151
Form to Tray Assignment option in drivers 113	driver only for Windows 161
front to back printing 92	silent for Windows 160
fulfillment information for printing system software, related	system requirements for Macintosh, IBM OS/2, and
software, and firmware 114	Linux operating systems 165
generic printer description (GPD) for PCL 5 driver 116	system requirements for Windows operating systems
GPD (generic printer description) for PCL 5 driver 116	129
Graphic option in drivers 85	using Customization Utility for Windows 159
Graphics Mode in printer drivers 93	using Windows Point and Print 162
guides. See documentation	Macintosh operating systems 166
configuring drivers for 105	printing system software 22
configuring drivers for 106	availability by operating system 116
configuring drivers for 70	description 40
enabling in driver 112	fonts 116
Bubble 46	localization 117
context-sensitive 45	online user guide 22
context-sensitive 90	printer software for IBM OS/2 182
for drivers 45	printer software for Macintosh 170
for drivers 89	printer software for Windows 133
online, availability by operating system 117	Instant Support 28
What's this? 89	Internet Printing Protocol (IPP) 30
HP Fast InfrRed Receiver Guide 117	IPP (Internet Printing Protocol) 30
HP Instant Support 28	IPX/SPX 31
HP Jetdirect Guide 117	job accounting information support 119
availability by operating system 116	job properties, changing in IBM operating systems 185
description 166	job status 35
localization 117	Job Storage options in drivers 70
HP Network Registry Agent (HPNRA) 25	job storage support in drivers 122
and HP Web JetAdmin 26	Job Storage tab in drivers 86
Configuration Page 28	job storage, enabling in driver 80
description 26	job stream output support 119
Device Status page 27	deleting 109
Information tab 26	enabling stored in driver 80
localization 118	private 71
Networking tab 30	private 71

private 87	Bubble 46
private 88	constraint 45
private 107	constraint 90
proof and hold 71	MFP module support in drivers 126
releasing stored 73	availabilty by operating system 116
releasing stored 109	moire effect, handling 56
stored 71	collation settings 112
stored 72	description 112
stored 88	enabling in driver 79
stored 108	enabling in driver 112
landscape orientation in drivers 51	MS EMF output support 119
landscape orientation option in drivers 84	multipurpose tray. See trays
language versions for printing system software 114	NetWare. See Novell NetWare operating systems
driver support 126	configuring settings 30
key to abbreviations 118	configuring settings 31
localization of software components 117	statistics 31
LaserJet Utility. See HP LaserJet Utility	Network Bidirectional Communications 116
Layout tab in drivers 90	bidirectional communication support 119
links to off-printer solutions 28	driver support 119
availability of drivers 42	Networking tab, HP Web Access 30
availability of software components 116	bidirectional communication support 23
printer support Web site 165	NT Forms tab in drivers 83
Printing Architecture 116	installing 22
system requirements 165	Bubble 46
driver support 126	for drivers 45
software components 117	for Macintosh operating systems 166
Mac QuickDraw PPD 116	availability of additional drivers 42
availability of software components 116	availability of software components 116
bidirectional communication support 23	bidirectional communication support 119
changes made by installation 171	bidirectional communication support 23
ColorSync profiles 166	constraints support 121
driver versions 41	document layout features support 121
	driver bundles 115
fonts supported 167 HP LaserJet Utility 166	Driver Management and Configuration (DMC) support
installation notes 166	120
installers 116	Help feature support 120
	installable options support 126
installing printer software for Mac OS 170	job storage support 122
online help 166	job storage support 122
PDEs 166	localization support 126
PPDs 166	paper sizes support 124
printing system software components 42	paper sources support 125
setting up AppleTalk networked printers with Mac OS	
8.6 to 9.1 171	paper type support 125
setting up printers with Mac OS X 171	print controls support 122
setting up USB direct printer connection with Mac OS	software component localization 117
8.6 to 9.1 170	standalone drivers 115
supporting the printing system software 21	stream output mode support 119
system requirements 165	supporting the printing system software 21
uninstalling printer software 171	user interface support 120
manuals. See documentation	watermarks support 124
media 187	Optional Paper Sources options in drivers 79
types and sizes supported 188	order of pages option in drivers 54
information about total 78	ordering software CD-ROMs through the Web 114
information about total installed 80	ordering supplies 28
installable options support 112	orientation option in drivers 51
installable options support 126	orientation options in drivers 91
installation requirements for Macintosh, IBM OS/2, and	OS/2. See IBM operating systems
Linux operating systems 165	Other Pages option in drivers 94 Other Pages tab in drivers 63
installation requirements for Windows operating systems	Output Bin Options in drivers 109
129	Output Settings options in drivers 55
printer features 16	Page Order option in drivers 92
	. 550 01001 0011011 111 0117010 02

Page Setup tab in drivers 84	job stream output support 119
Pages per Sheet option in drivers 54	localization 117
paper 187	localization support 126
sources and destinations 187	paper source commands 188
types and sizes supported 188	point-and-print bundle 116
device status 35	print controls support 122
printer features 16	stream output mode support 119
Paper Handling Options in drivers 78	types and sizes of media supported 188
Paper Size option in drivers 92	Unidriver 116
driver support 124	user interface support 120
paper source commands 188	watermarks support 124
driver support 125	description 166
Paper tab in drivers 61	Percentage of Normal Size option in drivers 58
paper trays. See trays	PINs, using for private and stored jobs 88
paper type commands 191	Point and Print installation for Windows operating systems 162
driver support 125	point-and-print bundle for PCL 6 driver 116
driver support 125	portrait orientation 76
Paper/Output option in drivers 85	portrait orientation option in drivers 51
Paper/Quality tab in drivers 94	portrait orientation options in drivers 91
bidirectional communication support 119	PostScript Printer Definition (PPD) files. See PPD (PostScript
driver support 119	Printer Definition) files
passwords, configuring 30	PostScript Printer Description (PPD) files. See PPD (PostScript
bidirectional communication support 119	Printer Description) files
connectivity support 119	description 166
constraints support 121	availability by operating system 116
document layout features support 121	localization 117
Driver Management and Configuration (DMC) support	preview image 48
120	printer features 16
GPD (generic printer description) 116	print controls support in drivers 122
Help feature support 120	Print Document On option in drivers 57
installable options support 126	Print Document On options in drivers 101
job storage support 122	deleting 109
job stream output support 119	deleting 73
localization support 126	Print on Both Sides option in drivers 51
print controls support 122	Print Page Borders option in drivers 99
stream output mode support 119	Print Quality options in drivers 55
types and sizes of media supported 188	documentation 22
Unidriver 116	features 16
user interface support 120	Printer Dialog Extensions (PDEs). See PDEs (Printer Dialog
watermarks support 124	Extensions)
escape sequence for paper type 191	printer drivers. See drivers
description 41	Printer Model information in driver 77
escape sequence for paper source 188	availability by operating system 116
features for Windows 2000 and XP 89	description 33
features for Windows 95, 98, Me, and NT 4.0 45	icons 34
localization 117	localization 117
paper source commands 188	navigating 35
Unidriver 116	requirements 33
bidirectional communication support 119	restrictions that apply to HP products 33
connectivity support 119	changing properties for IBM operating systems 185
constraints support 121	setting default for Windows 163
description 41	support for Windows 3.1x ***
document layout features support 121	support for Windows 3.1x 163
Driver Management and Configuration (DMC) support	CD-ROM for Windows systems 39
120	components 39
escape sequence for paper source 188	downloading 115
features for Windows 2000 and XP 89	installation notes 22
features for Windows 95, 98, Me, and NT 4.0 45	optional software 42
Help feature support 120	printer documentation 22
	Printer Status and Alerts 33
installable options support 126	regional and language versions 114
job storage support 122	release notes 23

software component localization 117	shading, configuring for watermarks 104
supporting operating systems 21	silent installer for Windows 160
private jobs 71	Size Is option in drivers 64
PRN file driver identification support 119	sizes of media supported 188
registering 42	sizing documents to fit 58
registration 153	slots, status 35
support 28	availability of components by operating system 116
Proof and Hold feature 107	component localization 117
ProRes option in drivers 96	fulfillment information 114
configuring 31	ordering through the Web 114
viewing information about 31	source commands for paper 188
proxy server 116	Source Is options in drivers 95
bidirectional communication support 119	source options in drivers 79
connectivity support 119	printer features 16
	enabling in driver 79
constraints support 121	media types supported 190
description 41	sources and destinations 187
document layout features support 121	enabling in driver 79
Driver Management and Configuration (DMC) support	standalone drivers 115
120	
features 84	media types supported 190
Help feature support 120	sources and destinations 187
installable options support 126	Stapling Options in drivers 100
job storage support 122	devices 27
job stream output support 119	jobs 35
localization support 126	supplies 26
paper source commands 188	viewing for devices in Printer Status and Alerts 35
print controls support 122	stored jobs 71
stream output mode support 119	stream output mode support 119
types and sizes of media supported 188	ordering 28
user interface support 120	viewing status 26
watermarks support 124	viewing status 35
availability by operating system 117	support for product 28
PS fonts supported 131	description 21
PS Level 3 Emulation support 84	Printer Status and Alerts support 33
PScript Driver, availability by operating system 116	test page and diagnostics 31
Quick Copy feature 107	text, printing all as black 56
custom 51	toner, saving with EconoMode 56
defaults 49	configurations 187
description 49	custom sizes 67
for printing use guide 50	enabling in driver 79
QuickDraw PPD for Mac 116	input media supported 190
raster graphics 93	installable options support 126
RAW output support 119	paper source commands 188
and diagnostics 31	status 35
Printer Status and Alerts 35	viewing diagnostics information 31
regional versions for printing system software 114	TrueType, sending as bitmaps 93
registering the product 42	Type Is options in drivers 95
release notes for printing system software 23	types of media supported 188
releasing stored jobs 73	Unidriver for PCL 6 and PCL 5 drivers 116
default 55	printer software for Macintosh operating systems 171
printer features 16	availability of drivers 42
Resolution Enhancement technology (REt) 93	availability of software components 116
resolution options in drivers 96	model scripts 42
REt (Resolution Enhancement technology) 93	Usage Page, HP Web Access 26
rotated orientation 100	bidirectional communication support 119
Scale Patterns feature 56	driver support 119
Scale to Fit option in drivers 58	Use different paper option in drivers 94
screen-readable documentation 22	UTF-8 encoding for PJL 119
access control 30	vector graphics 93
Send TrueType as Bitmaps option in drivers 93	version number for driver 76
serial number for printer 35	driver support 124
Settings tab, HP Web Access 28	Watermarks options in drivers 58
	The state of the s

```
Web Registration. See HP Web Registration
       Adobe 84
       EWS (embedded Web server) 26
       firmware 115
       HP Web JetAdmin 43
       Linux printer support 165
       ordering software CD-ROMs 114
       printing system software 115
       printing system software, related software, and firmware
       product registration 153
       supported printers and printer drivers 21
       UNIX model scripts 42
What's this? help 89
What's this? Help 45
Windows Cluster Server 21
       availability of software components 116
       bidirectional communication support 23
       driver versions 41
       fonts supported 130
       installation using Point and Print 162
       installers 116
       installing printer software 133
       PCL 5e and PCL 6 driver features for Windows 2000
       and XP 89
       PCL 5e and PCL 6 driver features for Windows 95, 98,
       Me, and NT 4.0 45
       printer support for Windows 3.1x 163
       printer support for Windows 3.1x ***
       proxy server 116
       PS driver features for Windows 95, 98, Me, and NT 4.0
       supporting the printing system software 21
       system requirements 129
Windows Terminal Server 21
XL 3.0 support 119
XL color support 119
XPS fonts supported for Macintosh operating systems 167
```

