COLOR LASERJET ENTERPRISE CM4540

MFP SERIES

Software Technical Reference

HP Color LaserJet Enterprise CM4540 MFP Series

Software Technical Reference

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Table of contents

1 Document and product basics 1

Purpose and scope 2

Software availability and localization 3

Printing-system software on the Web 3

In-box printing-system software CD 3

HP LaserJet software CD, Windows partition 3

CD versions and language support 4

2 Windows software description 9

Introduction 9

Advanced color use 10

Color Access Control 10

PANTONE color profiles 11

HP Print View Software 12

HP MFP Send Fax Driver 12

HP Scan to E-mail Setup Wizard 12

HP Save-to-Folder Setup Wizard 12

Font support 13

Basic fonts 13

HP Driver Deployment Utility 14

HP Driver Configuration Utility 15

3 Install Windows software and utilities 17

Introduction 17

Supported operating systems for Windows 18

System requirements 19

Print driver support in other operating systems 19

Install overview 20

Software Installer system check 20

Microsoft Windows Installer 3.1 20

Software installation types for Windows 20

Installation options 21
Detailed Microsoft Windows installation instructions 22
Perform the recommended print driver installation using the SW Installation CD 22
Use the Back, Next, Finish, and Cancel buttons 27
Set a default printer 27
Use the MFP Send Fax Driver 28
Download the HP Send Fax Driver 28
Install the HP Send Fax Driver 29
HP Driver Installation Utility (HP DIU) 29
Add Printer Wizard 33
Send a fax by using the HP Send Fax Driver 39
Create a network folder by using the Scan Setup Wizard 40
Install optional software 51
Uninstall software 53
Uninstall component list 53
Uninstall the printer driver or the HP Send Fax Driver by using the Windows Add or Remove Programs feature 54
Uninstall the printer driver or the HP Send Fax Driver by using the Server Properties feature 55

4 HP PCL 6 print driver for Windows 57
Introduction 57
Change the printer driver settings for Windows 58
Properties tab set 59
Printing Preferences tab set 59
Document preview image 59
Help system 60
"What's this?" Help 60
Incompatible Print Settings messages 60
Advanced tab features 62
Paper/Output 62
Copy Count 63
Graphic 63
Image Color Management 63
True Type Font 63
Document Options 64
Advanced Printing Features 64
Print Optimizations 64
Printer Features 65
Layout Options 65
Printing Shortcuts tab features 67

Use defined printing shortcuts 67
General Everyday Printing 68
Paper sizes 68
Paper source 69
Pages per sheet 70
Print on both sides 70
Paper type 70
Orientation 71
Eco-print (Two-sided Printing) 72
Factory Defaults 72
Booklet Printing 72
Envelopes 73
Create a custom printing shortcut 73
Paper/Quality tab features 74
Paper Options 75
Paper sizes 75
Custom Paper Size 76
Name 77
Paper size 77
Units 77
Custom width and height control limits 77
Paper source 78
Paper type 79
Special pages 81
Covers 81
Print pages on different paper 81
Insert blank or preprinted pages 82
Chapter separator pages 83
Document preview image 84
Print Quality 85
Gloss Level drop-down menu 85
Effects tab features 86
Resizing Options 86
Actual Size 87
Print Document On 87
Scale to Fit 87
% of Actual Size 88
Document preview image 88
Watermarks 89
Current watermarks 90
Watermark Message 91

Message Angle 91
Font Attributes 91
Default watermark settings 93
Finishing tab features 94
Document Options 94
Print on Both Sides 95
Print on both sides automatically 96
Print on both sides manually 96
Flip Pages Up 98
Booklet Layout 99
Book and Booklet Printing 99
Pages per Sheet 100
Print Page Borders 100
Page Order 100
Document preview image 101
Orientation 101
Job Storage tab features 103
Status group box 105
Job Storage Mode 105
Off 105
Proof and Hold 105
Personal Job 106
Quick Copy 106
Stored Job 107
PIN to print 107
Job Notification Options 107
User Name 108
Job Name 108
Use job-storage features when printing 109
Release a job-storage print job 109
Delete a job-storage print job 110
Color tab features 111
Color Options 112
Automatic 112
Manual 112
General 114
Neutral Grays 114
Halftone 114
Color Themes 115
Default (sRGB) 115
Photo (sRGB) 115

Photo (Adobe RGB 1998) 115
Vivid (sRGB) 116
None 116
Custom Profile 116
Document preview image 116
HP EasyColor 117
Services tab features 119
Internet Services 119
Device services 120
Device Settings tab features 121
Form to Tray Assignment 121
Font Substitution Table 122
External Fonts 122
Installing external fonts 123
Removing external fonts 124
Installable Options 124
Automatic Configuration 124
Tray 3 125
Tray 4 125
Tray 5 125
Duplex Unit (for 2-Sided Printing) 125
Allow Manual Duplexing 125
Printer Hard Disk 125
Job Storage 126
Job Separator 126
Mopier Mode 126
Mopier mode and collation 126
About tab features 128

5 Macintosh software and utilities 129

Introduction 129
Determine the Mac driver version 130
Supported operating systems for Macintosh 130
Macintosh system requirements 130
Hardware requirements 130
Supported printer drivers for Mac 130
Change printer-driver settings for Mac 131
Printing-system software 131
PDEs 131
HP Embedded Web Server 131
Install notes 132

Online help 132
Screen fonts 132
Macintosh installation instructions 133
HP LaserJet software CD, Macintosh partition 133
Install the HP LaserJet printing-system software for the Macintosh OS 133
General installation instructions 133
Mac OS X installation 134
Main Install dialog box sequence 134
Setup instructions 141
Setting up a printer with Mac OS X v10.4, v10.5, v.10.6, and later 141
Troubleshooting the product setup 144
Remove software from Mac operating systems 145
HP Printer Utility for Mac 146
Access to the HP (Printer) Utility 147
Supplies Status 148
Device Information 149
Color Usage 149
File Upload 150
Update Firmware 151
Upload Fonts 152
Commands 153
HP ePrint Center 153
Duplex mode 154
Trays Configuration 155
Stored Jobs 155
E-mail Alerts 157
Network Settings 157
Supplies Management 159
Protect Direct Ports 160
Additional Settings 161
Output Devices 161
Restrict Color 162

6 Engineering details 163

Introduction 163
Remote firmware update 164
Determine the current level of firmware 164
Download the new firmware from the HP Web site 164
Use the HP Embedded Web Server 165
Use the walkup USB port on the product control panel 166

Use HP Web Jetadmin 166
Printing print-ready documents 168
Print-ready file printing by using FTP through a browser 168
Print-ready file printing by using FTP on a direct network connection (Windows) 169
Print-ready printing by using a local Windows port 169
Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, or Windows Vista 170
Print-ready file printing in a Windows network 170
Print a print-ready file through the HP Embedded Web Server 170
Print-ready file printing by using the LPR command 170
Print-ready file printing by using FTP on a direct network connection (Macintosh) 171
Print-ready file printing in UNIX systems 172
Special paper guidelines 173
Media attributes and commands 174
Paper-source commands 174
Paper-type commands examples 175
File to E-mail utility 176

Index 177

List of tables

Table 1-1 Software CD supported languages 4
Table 1-2 Supported printer driver languages 6
Table 1-3 Installer component languages 7
Table 1-4 Documentation languages 8
Table 2-1 Color access control tools 10
Table 3-1 Windows software component support 18
Table 4-1 PCL 6 custom paper sizes 78
Table 4-2 **Font Attribute** settings for new and preset watermarks 93
Table 4-3 Page orientation 98
Table 4-4 Driver mopier mode and collation settings 127
Table 5-1 Adding a product in Macintosh operating systems 134
Table 6-1 Paper-source commands 174
Table 6-2 Paper-type commands 175

List of figures

Figure 3-1 Software Installation — **Connection Type** screen for USB connected installation 23
Figure 3-2 Software installation — **Connection Type** screen for network connected installation 24
Figure 3-3 Software Installation — **Network Product(s) Found** screen 25
Figure 3-4 Software Installation — Driver Installation Complete screen 26
Figure 3-5 Additional Options 26
Figure 3-6 **Installation Cancelled** dialog box 27
Figure 3-7 Send Fax Driver Installation–**License Agreement** screen 29
Figure 3-8 Send Fax Driver Installation–**Device Connection** screen 30
Figure 3-9 Send Fax Driver Installation–**Devices Found** screen 31
Figure 3-10 Send Fax Driver Installation–**Device Connection** screen 32
Figure 3-11 Send Fax Driver Installation–**Device Installation Complete** screen 33
Figure 3-12 Send Fax Driver Installation–**Local or Network Printer** screen 34
Figure 3-13 Send Fax Driver Installation–**Select a Printer Port** screen 35
Figure 3-14 Send Fax Driver Installation–**Install Printer Software** screen 35
Figure 3-15 Send Fax Driver Installation–**Install From Disk** screen 36
Figure 3-16 Send Fax Driver Installation–**Name Your Printer** screen 37
Figure 3-17 Send Fax Driver Installation–**Printer Sharing** screen 38
Figure 3-18 Send Fax Driver Installation–**Print Test Page** screen 39
Figure 3-19 Scan Setup Wizard–Welcome screen 41
Figure 3-20 Scan Setup Wizard–**Devices Found** screen 42
Figure 3-21 Scan Setup Wizard–Welcome screen 43
Figure 3-22 Scan Setup Wizard–Contacting Device screen 44
Figure 3-23 Scan Setup Wizard–**Add or Remove Folders** screen 45
Figure 3-24 Scan Setup Wizard–**Folder Name** screen 46
Figure 3-25 Scan Setup Wizard — Authentication screen 47
Figure 3-26 Scan Setup Wizard–**Folder Settings** screen 48
Figure 3-27 Scan Setup Wizard–Summary screen 49
Figure 3-28 Scan Setup Wizard–**Complete** screen 50
Figure 3-29 **More Options menu** 52
Figure 3-30 Windows Control Panel screen 54
Figure 3-31 **HP Driver Uninstall Utility** screen 55
Figure 3-32 Uninstall Complete screen 55

Figure 4-1 An **Incompatible Print Settings** message 60
Figure 4-2 The default appearance of the **Advanced** tab 62
Figure 4-3 Printing Shortcuts tab 67
Figure 4-4 **Printing Shortcuts** dialog box 73
Figure 4-5 **Paper/Quality** tab 74
Figure 4-6 **Paper Options** group box 75
Figure 4-7 **Custom Paper Size** dialog box 76
Figure 4-8 **Print pages on different paper** 82
Figure 4-9 Insert blank or preprinted pages 83
Figure 4-10 Chapter separator pages 84
Figure 4-11 **Effects** tab 86
Figure 4-12 Preview images – Legal on Letter; **Scale to Fit** off (left) and on (right) 87
Figure 4-13 Watermark Details dialog box 90
Figure 4-14 Finishing tab 94
Figure 4-15 Print on Both Sides Instructions dialog box 98
Figure 4-16 Page-order preview images 101
Figure 4-17 Job Storage tab 104
Figure 4-18 **Color** tab 111
Figure 4-19 **Color Settings** dialog box 113
Figure 4-20 Color Themes 118
Figure 4-21 **Services** tab 119
Figure 4-22 **Device Settings** tab 121
Figure 4-23 **Font Substitution Table** 122
Figure 4-24 **HP Font Installer** dialog box 123
Figure 4-25 **About** tab 128
Figure 5-1 Mac installer opening screen 135
Figure 5-2 Mac installer Introduction dialog 136
Figure 5-3 Mac installer License dialog 136
Figure 5-4 Mac installer license agreement dialog 137
Figure 5-5 Mac installer Destination dialog 137
Figure 5-6 Mac installer Installation Type dialog 138
Figure 5-7 Mac installer custom installation dialog 139
Figure 5-8 Mac installer authentication dialog 140
Figure 5-9 Mac installer Installation dialog 140
Figure 5-10 Mac installer Summary dialog 141
Figure 5-11 IP location on the Jetdirect page 143
Figure 5-12 **HP Utility** main screen 147
Figure 5-13 **Supplies Status** screen 148
Figure 5-14 **Device Information** screen 149
Figure 5-15 **Print Color Usage Job Log** screen 149
Figure 5-16 **File Upload** screen 150

Figure 5-17 **Update Firmware** screen 151
Figure 5-18 **Upload Fonts** screen 152
Figure 5-19 **Commands** screen 153
Figure 5-20 **HP ePrint Center** screen 153
Figure 5-21 Duplex Mode screen 154
Figure 5-22 **Trays Configuration** screen 155
Figure 5-23 **Enable Job Storing** screen 156
Figure 5-24 E-mail Alerts screen 157
Figure 5-25 **IPv4 Settings** screen 157
Figure 5-26 Bonjour Settings screen 158
Figure 5-27 **Replace Supplies** screen 159
Figure 5-28 **Protect Direct Ports** screen 160
Figure 5-29 **Additional Settings** screen 161
Figure 5-30 **Output Devices** screen 161
Figure 6-1 HP EWS Firmware Upgrade page 165
Figure 6-2 HP EWS Confirmation Page 165

1 Document and product basics

The chapter provides information about these topics:

- Purpose and scope
- Software availability and localization

Purpose and scope

This software technical reference (STR) provides information about, and troubleshooting tips for, the printing-system software for the product.

This STR 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 end users, as appropriate.

The following information is included in this STR:

- Descriptions of drivers, operating systems, and system environments
- Descriptions of installing and uninstalling the printing-system software components

For information about the location of information within chapters, see the table of contents. An index is also provided in this STR.

Software availability and localization

This section provides information about the availability of the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software and related software and firmware. Printing-system software on a CD is available from HP fulfillment centers. For more information, go to the following Web site:

www.hp.com/go/cljcm4540mfp_cdrom

Printing-system software on the Web

All software that is contained on the installation CD is also available on the Web.

Web deployment is the preferred method for obtaining the latest software. The Web site offers an option for automatic e-mail notification about new software releases.

The HP Color LaserJet Enterprise CM4540 MFP Series printing-system software is available for download at the following Web site:

www.hp.com/go/cljcm4540mfp_software

In-box printing-system software CD

The software CD for the HP Color LaserJet Enterprise CM4540 MFP Series product contains a variety of files for installing the printing-system software on the computer. This section describes the files that are available on the software CD and provides additional information about support and availability.

The HP Color LaserJet Enterprise CM4540 MFP Series printing-system software CD is divided into two partitions, one for Windows operating systems and one for Macintosh operating systems.

The files in each partition include documentation files and files that are required in order to install and uninstall the printing-system components.

HP LaserJet software CD, Windows partition

NOTE: For information about the contents of the Macintosh partition of the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software CD, see HP LaserJet software CD, Macintosh partition on page 133.

The root directory in the Windows partition of the software CD contains the AUTORUN.EXE file, the SETUP.EXE file, and the following directories:

- Drivers
- Installer
- Installer Content
- Languages
- Prerequistes
- Setup
- Utilities

The Utilities folder contains the files to run these stand-alone utilities:

- FileToEmail
- Scrubber

CD versions and language support

The HP Color LaserJet Enterprise CM4540 MFP Series printing-system software CD is available with the following components and languages.

Table 1-1 Software CD supported languages

Language	Two-letter abbreviation	HP-preferred name	File designation
Arabic	AR	Arabic	ARWW
Bahasa Indonesian	ID	Bahasa Indonesian	IDWW
Catalan	CA	Catalan	CAWW
Croatian	HR	Hrvatski	HRWW
Czech	CS	Cestina	CSWW
Danish	DA	Dansk	DAWW
Dutch	NL	Nederlands	NLWW
English	EN	English	ENWW
Finnish	FI	Suomi	FIWW
French	FR	Francais	FRWW
German	DE	Deutsch	DEWW
Greek	EL	Greek	ELWW
Hebrew	HE	Hebrew	HEWW
Hungarian	HU	Magyar	HUWW
Italian	IT	Italiano	ITWW
Japanese	JA	Japanese	JAWW
Korean	KO	Korean	KOWW
Norwegian	NO	Norsk	NOWW
Polish	PL	Polski	PLWW
Portuguese	PT	Portugues	PTWW
Romanian	RO	Romanian	ROWW
Russian	RU	Russian	RUWW
Simplified Chinese	ZHCN	Simplified Chinese	ZHCN
Slovak	SK	Slovak	SKWW
Slovenian	SL	Slovenian	SLWW

Table 1-1 Software CD supported languages (continued)

Language	Two-letter abbreviation	HP-preferred name	File designation
Spanish	ES	Espanol	ESWW
Swedish	SV	Svenska	SVWW
Thai	TH	Thai	THWW
Traditional Chinese	ZHTW	Traditional Chinese	ZHTW
Turkish	TR	Turkce	TUWW
Ukrainian	UK	Ukrainian	UKWW

Driver languages

The HP Color LaserJet Enterprise CM4540 MFP Series product provides driver support in the following languages.

Table 1-2 Supported printer driver languages

Component	Language list	
HP PCL 6 Print Driver	• Arabic	• Korean
HP PCL 5 Universal Print Driver	• Bulgarian	• Latvian
HP PCL 6 Universal Print Driver	• Catalan	• Lithuanian
HP PS Universal Print Driver	• Croatian	• Norwegian
	• Czech	• Polish
	• Danish	• Portuguese
	• Dutch	• Romanian
	• English	• Russian
	• Estonian	• Serbian
	• Finnish	• Slovak
	• French	• Slovenian
	• German	• Spanish
	• Greek	• Swedish
	• Hebrew	• Thai
	• Hungarian	• Turkish
	• Italian	• Ukrainian
	• Japanese	• Simplified Chinese
		• Traditional Chinese

Installer languages

The HP Color LaserJet Enterprise CM4540 MFP Series product provides installer component support in the following languages.

Table 1-3 Installer component languages

Component	Language list	
Administrator install	• Arabic	• Korean
Common Windows Installer	• Catalan	• Norwegian
Web Registration	• Croatian	• Polish
NOTE: Web Registration is run at the end of the install, but is not installed on the user's system.	• Czech	• Portuguese
	• Danish	• Romanian
	• Dutch	• Russian
	• English	• Slovak
	• Finnish	• Slovenian
	• French	• Spanish
	• German	• Swedish
	• Greek	• Thai
	• Hebrew	• Turkish
	• Hungarian	• Simplified Chinese
	• Italian	• Traditional Chinese
	• Japanese	• Ukrainian

Documentation languages

The HP Color LaserJet Enterprise CM4540 MFP Series product provides documentation in the following languages.

Table 1-4 Documentation languages

Component	Language list	

• *HP Color LaserJet Enterprise CM4540 MFP Series User Guide (.PDF file)*
• *HP Color LaserJet Enterprise CM4540 MFP Series User Guide (.CHM file)*
• *HP Color LaserJet Enterprise CM4540 MFP Series Driver Preconfiguration User Guide* (Available in English only)
• *HP JetDirect Administrator's Guide* (.PDF file) (with the following exceptions)
  ◦ Catalan documentation in Spanish only
  ◦ No documentation in Arabic, Bulgarian, Czech, Greek, Hebrew, Croatian, Estonian, Lithuanian, Latvian, Romanian, Slovak, Slovenian, Serbian, Turkish, Ukrainian
• *HP Color LaserJet Enterprise CM4540 MFP Series Install Notes (.HTML file)*
	• Arabic
	• Bahasa Indonesian
	• Bulgarian
	• Catalan
	• Croatian
	• Czech
	• Danish
	• Dutch
	• English
	• Estonian
	• Finnish
	• French
	• German
	• Greek
	• Hebrew
	• Hungarian
	• Italian
	• Japanese
		• Korean
		• Latvian
		• Lithuanian
		• Norwegian
		• Polish
		• Portuguese
		• Romanian
		• Russian
		• Serbian
		• Slovak
		• Slovenian
		• Spanish
		• Swedish
		• Thai
		• Turkish
		• Simplified Chinese
		• Traditional Chinese
		• Ukrainian

2 Windows software description

Introduction

The HP Color LaserJet Enterprise CM4540 MFP Series product comes with software and installers for Microsoft Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX systems are supported, and software is available on the Web. For information about specific system installers, drivers, and components, see the section that corresponds to that system. For information about Mac software, see Macintosh software and utilities on page 129.

This section contains information about the following topics:

- Advanced color use
- HP Print View Software
- HP MFP Send Fax Driver
- HP Scan to E-mail Setup Wizard
- HP Save-to-Folder Setup Wizard
- Font support
- HP Driver Deployment Utility
- HP Driver Configuration Utility

Advanced color use

Color Access Control

The HP Color LaserJet Enterprise CM4540 MFP Series has the ability to monitor and control color print-job use. For more information about color access control, go to the following Web site and look under **Learn More**.

www.hp.com/go/cac

The following table shows various tools that can be used to control color-printing access.

Table 2-1 Color access control tools

Tool	Description
HP Embedded Web Server	The HP Embedded Web Server (HP EWS) is a Web-browser-based utility that provides an interface to the product that you can use to change product settings, including color access control settings. No special software needs to be installed or configured. It allows you to set color printing restrictions and view a log of color printing use. The HP EWS is designed for one-to-one product configuration monitoring and management.
HP Web Jetadmin	The HP Web Jetadmin provides an interface to the product through a Web browser on single network-administration servers. Use HP Web Jetadmin to manage HP Jetdirect-connected products within an intranet. For more information, see the following Web site: www.hp.com/go/webjetadmin
Color usage job log	The color usage job log shows color and monochrome print job statistics for a product.
Product control panel	Use the product control panel to restrict color use in network-connected products. For more information, see the following procedure.

To restrict color-printing access to a network-connected HP Color LaserJet Enterprise CM4540 MFP Series from the product control panel, follow these steps:

1. Press the Home button to get to the main screen, if needed.
2. Press the up arrow ▲ or the down arrow ▼ to scroll to **General Settings**, and then press **General Settings**.

3. Press the up arrow ▲ or the down arrow ▼ to scroll to **Restrict Color Use**, and then press **Restrict Color Use**.

4. Press the up arrow ▲ or the down arrow ▼ to scroll to one of the following options, and then press the desired option:

   - Enable Color. This is the default setting. Use of color-printing features is unrestricted.
   - Disable Color. This setting denies the use of color-printing features to all users.
   - Color if Allowed. Network administrators can use this setting to allow color-printing to certain users and restrict it for other users. User privileges can be set using HP EWS. For more information, see the EWS online help.

PANTONE color profiles

Most software programs that support the use of PANTONE colors for graphic objects include the PANTONE name in the postscript output along with the color values that are assigned to the object. Select a software program that uses a PANTONE palette in a CMYK workspace, and print with the HP PS Universal Print Driver in Windows XP, Windows Server 2003, Windows Server 2008, Windows Vista, or Windows 7.

When **SWOP** (Specifications Web Offset Printing) is selected as the **CMYK Color** setting, these CMYK values provide a good reproduction of the PANTONE 4C spot-color simulations.

Vector graphics, such as company logos that are created in PANTONE Application Palettes, can be imported into Microsoft Word, PowerPoint, or other Microsoft Office software programs. The color program must create an encapsulated postscript (.eps) file of the image that will be imported. Use the **Insert file** function to import the file into the Office document.

NOTE: Cutting and pasting from the clipboard does not work. These tasks do not preserve the PANTONE name or the CMYK palette value.

HP Print View Software

Use HP Print View software to change various print settings and see immediately how those changes affect your document. When you are satisfied with the print settings, print the job directly from HP Print View to your supported and networked printer.

Print View 2.0 supports both print and cost estimation.

Download HP Print View Software from the following location:

www.hp.com/go/ihm

HP MFP Send Fax Driver

Use the HP Send Fax Driver to send faxes from your computer via the product if the optional Analog Fax Accessory 500 is installed. After the HP Send Fax Driver is installed, access and use it in the same manner as a printer driver. The HP Send Fax Driver can only be used with network connected printers.

Download the HP MFP Send Fax Driver from the following location:

www.hp.com/go/pcsendfax

NOTE: For complete information about using the HP Send Fax Driver, see the *HP LaserJet MFP Analog Fax Accessory 500 Send Fax Driver Guide*, which can be downloaded from www.hp.com/go/mfpfaxaccessory500. Click **Manuals** from the left navigation bar. It is also available on the User CD.

HP Scan to E-mail Setup Wizard

Use the Scan to E-mail Setup Wizard to quickly setup Scan to E-mail functionality. Scan to E-mail increases productivity by enabling documents to be scanned and sent as e-mail attachments to recipient e-mail addresses.

Download the HP Scan to E-mail Setup Wizard from the following location:

www.hp.com/go/scantoemail

HP Save-to-Folder Setup Wizard

Use the HP Save-to-Folder Setup Wizard to quickly setup Scan to Folder functionality. Scan to Folder increases productivity and improves file management by enabling documents to be scanned and saved to specific folders on your PC, which can later be retrieved for archiving, editing, e-mailing and/or re-printing.

Download the HP Save-to-Folder Setup Wizard from the following location:

www.hp.com/go/savetofolder

Font support

The basic fonts listed here are included with Microsoft Windows software.

NOTE: For complete font support information, see the Microsoft Windows documentation.

Basic fonts

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

- 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

HP Driver Deployment Utility

The HP Driver Deployment Utility (HP DDU) was created to simplify the deployment of print drivers onto a client computer.

It is a simple utility that packages the printer-driver files, and the code needed to deploy them, into 2 files: an .EXE file and a .CAB file. These files are run on the client computer to copy the printer-driver files to the Windows driver store, and for network packages, to install the product.

For more information, go to the following Web site:

www.hp.com/go/DDU

HP Driver Configuration Utility

The HP Driver Configuration Utility (DCU) is a small Windows application used to edit the configuration file associated with a particular driver. The configuration file controls the print driver settings and takes effect when the driver is installed.

The HP Driver Configuration Utility does not handle any part of the deployment or installation of the driver. Instead, the default driver configuration file is modified and saved back to the same driver directory in which it was opened (hpcpu*.cf_) or saved to the local host's directory [filename].cfm. After modification of custom settings, the settings become the defaults used during driver installation.

Please reference the HP Universal Print Driver System Administrator's Guide and the HP Driver Configuration Utility documentation for full details on installing and using the utility.

For more information, go to the following Web site:

www.hp.com/go/dcu

3 Install Windows software and utilities

Introduction

The HP Color LaserJet Enterprise CM4540 MFP Series product comes with software and installers for Microsoft Windows and Apple, Inc., Macintosh systems. Linux and UNIX systems are supported, and software is available on the Web.

This chapter provides procedures for installing and removing the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software for Windows operating systems. The chapter provides information about these topics:

- Supported operating systems for Windows
- Install overview
- Detailed Microsoft Windows installation instructions
- Use the MFP Send Fax Driver
- Create a network folder by using the Scan Setup Wizard
- Install optional software
- Uninstall software

NOTE: If the computer is running a 64-bit Windows operating system, you must install the corresponding 64-bit print driver.

Supported operating systems for Windows

Windows operating systems provide full-featured support for the HP Color LaserJet Enterprise CM4540 MFP Series product. Operating systems that are not described here provide varying levels of functionality.

Windows XP is used to denote Windows XP Home Edition, Windows XP Professional, and Windows XP Media Edition unless noted otherwise. Windows Vista is used to denote Windows Vista Home Basic, Windows Vista Home Premium, Windows Vista Business, Windows Vista Enterprise, and Windows Vista Ultimate unless noted otherwise. Windows 7 is used to denote Windows 7 Basic, Windows 7 Home Premium, Windows 7 Professional, Windows 7 Enterprise, and Windows 7 Ultimate.

Table 3-1 Windows software component support

	Windows XP SP2 and greater (32-bit and 64-bit)	Windows Server 2003 (32-bit and 64-bit)	Windows Server 2008 (32-bit, 64-bit, and R2 edition)	Windows Vista (32-bit and 64-bit)	Windows 7 (32-bit and 64-bit)
HP UPD PCL5 driver	x	x	x	x	x
HP UPD PCL6 driver	x	x	x	x	x
HP UPD PS driver	x	x	x	x	x
Discrete PCL6 driver	x	x	x	x	x
Installer CD (Windows/Mac)	x (32–bit only)	x (32–bit only)	x	x	x
HP MPA	x	x	x	x	x
HP DDU	x	x	x	x	x
HP DCU	x	x	x	x	x
HP Printview Software	x	x	x	x	x
HP MFP Send Fax driver	x	x	x	x	x
HP Scan Setup Wizard	x	x	x	x	x
HP Email Setup Wizard	x	x	x	x	x

In any of the supported operating systems, you must have administrator privileges to install the product printing-system software.

For more information about the HP Color LaserJet Enterprise CM4540 MFP Series product, go to the following Web site:

www.hp.com/support/cljcm4540mfp

System requirements

The system requirements for installing and using the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software for Windows and Macintosh are as follows:

- Same system requirements for running the supported Windows operating system (OS)
- Latest operating system updates installed through Windows Update
- 200 MB of available hard-disk space
- Mac OS X v10.4, v10.5, v 10.6, and later with 150 MB of free hard-disk space
- CD drive, DVD drive, or Internet connection
- Dedicated universal serial bus (High Speed USB 2.0) connectivity port or network connection

Print driver support in other operating systems

The HP Color LaserJet Enterprise CM4540 MFP Series product is also supported in the following operating environments:

- Mac OS X v10.4 or later. For more information, go to the following Web site:

  www.hp.com/go/cljcm4540mfp_software

- Linux. For more information, go to the following Web site:

  www.hplip.net

- UNIX. For more information, go to the following Web site:

  www.hp.com/go/jetdirectunix_software

- UNIX model scripts. Available *only* on the Web at the following Web site:

  www.hp.com/go/unixmodelscripts.

- Citrix and Windows Terminal Services. For more information, go to the **Documentation** tab and to UPD main page for PCL6, PCL5 and PS drivers at the following Web site:

  www.hp.com/go/upd

- Novell. For more information, go to the following Web site:

  www.novell.com/iprint

- SAP printing. For more information, go to the following Web sites:

  www.hp.com/go/sap/print and www.hp.com/go/sap/drivers

Install overview

The software for the product comes on a single CD. The software installer first checks the versions of Windows Installer and Microsoft .NET installed on the system, and then installs the printing-system software from the CD onto the hard disk and updates Windows files.

Depending on the configuration of your computer as well as the installation method selected, the following components might be installed during the printing-system software installation:

- HP Color LaserJet Enterprise CM4540 MFP Series PCL 6 printer driver
- *HP Color LaserJet Enterprise CM4540 MFP Series User Guide*
- Uninstall utility

For all of the supported platforms, each install option presents a series of query dialog boxes that guide you through the installation process.

Software Installer system check

The software installer checks the computer system to ensure that the following Windows features are the correct version to support the printing-system components.

Microsoft Windows Installer 3.1

When the user starts the installation process, the product software installer checks the computer system to determine the version number of the Windows Installer currently on the system. If the product software installer detects that the Windows Installer version is prior to version 3.1, a dialog box appears alerting the user that the Windows Installer must be updated. The user must click the **OK** button to continue. The product software installer then updates the Windows Installer and continues the HP Color LaserJet Enterprise CM4540 MFP Series printing-system installation process.

To determine which version of Windows Installer is currently running on the computer, follow these instructions.

1. For Windows 7 and Windows Vista, click the **Start** button, click the **Control Panel** option, and then click the **Programs** option.

   For Windows XP, Windows Server 2003, and Windows Server 2008, click the **Start** button, click the **Control Panel** option, and then double-click the **Add/Remove programs** option.

2. Scroll down until you find the entry for the **Windows Installer**.

Software installation types for Windows

The product printing-system software can be installed in the following ways:

- HP Color LaserJet Enterprise CM4540 MFP Series printing-system installer (Recommended)
- Microsoft Found New Hardware Wizard (Plug and Play installation)

Installation options

The printing-system software can be used with the product in the following configurations:

- Install the printing-system software on a computer that is directly connected to the product through a USB port.
- Install the printing-system software on a computer that has access to a wired network to which the product is connected.

Detailed Microsoft Windows installation instructions

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

Perform the recommended print driver installation using the SW Installation CD

The recommended installation installs the PCL 6 print driver and user guide.

A series of dialog boxes appear during installation of the product printing-system software in Windows environments.

NOTE: You can return to the previous dialog box by clicking the **Back** button, or exit the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software installation by clicking the **Cancel** button.

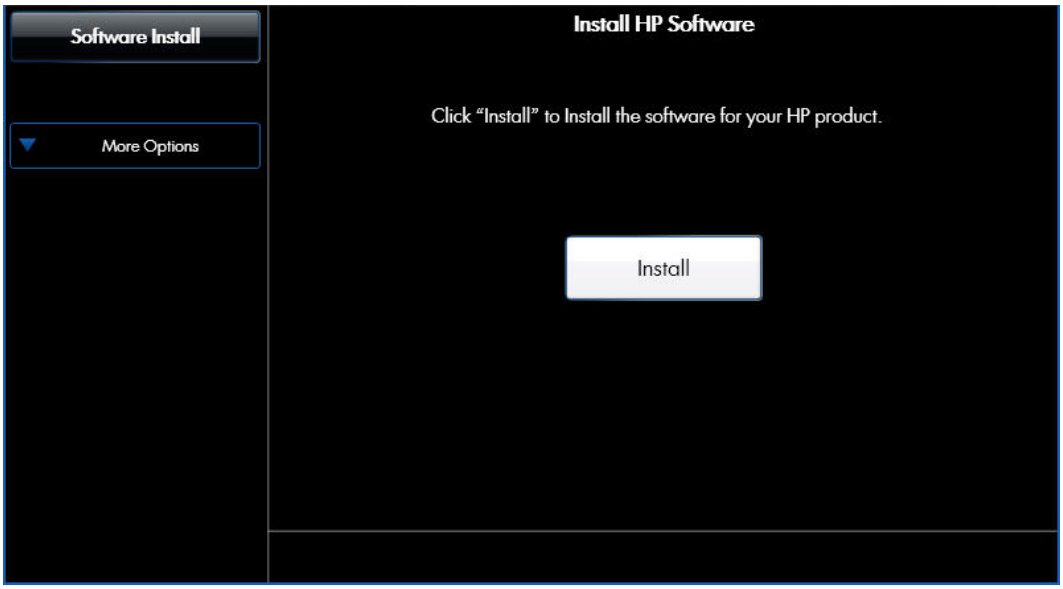
1. Close all programs.
2. Insert the CM4540 MFP printing system software CD into the CD-ROM drive. The software installer detects the language of the operating system, and then displays the main menu of the CD Browser program in the same language.

   If the installer program has not started after 30 seconds, complete these steps:

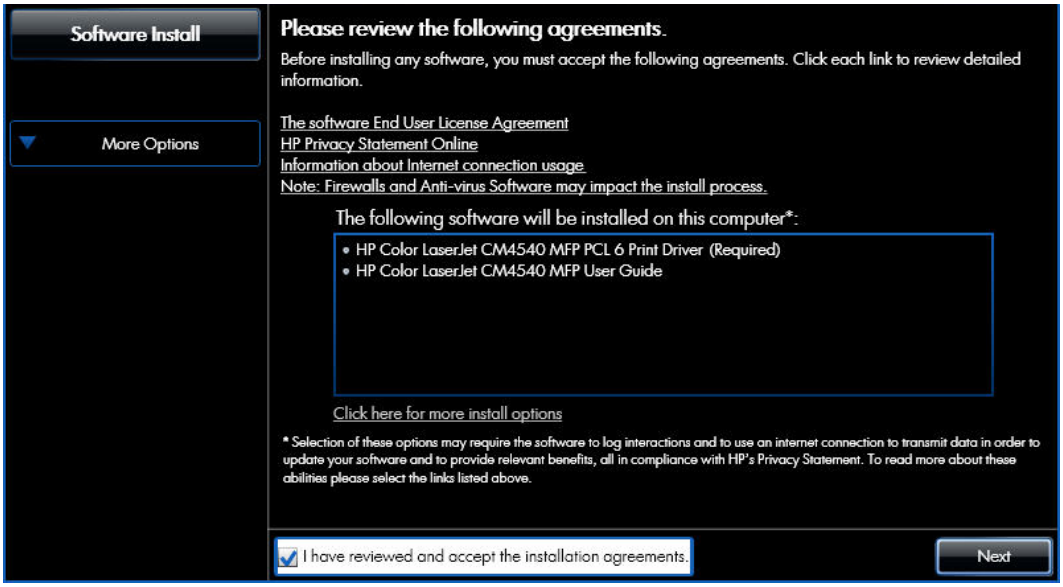
   a. On the **Start** menu, click the **Run** option.

   b. Type the following: X:\SETUP.EXE (where X is the letter of the CD-ROM drive).

   c. Click the **OK** button.
3. Click the **Install** button to begin the installation process.

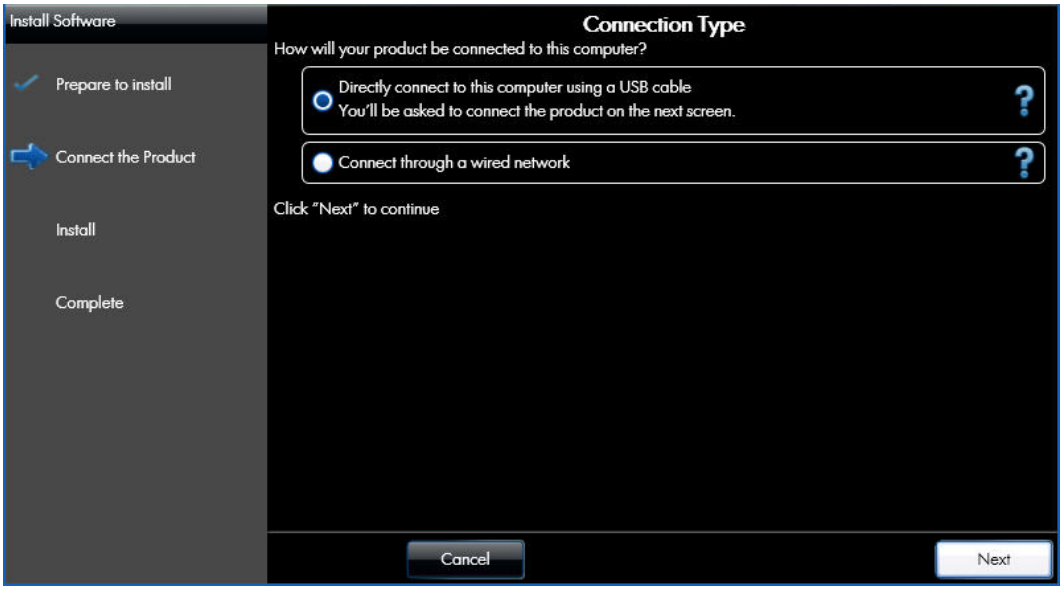


4. Read the license agreement, select the **I have reviewed and accept the installation agreements** check box, and then click the **Next** button to continue to the **Connection Type** screen.



5. Select a connection type option on the **Connection Type** screen, based on how the product connects to the computer.

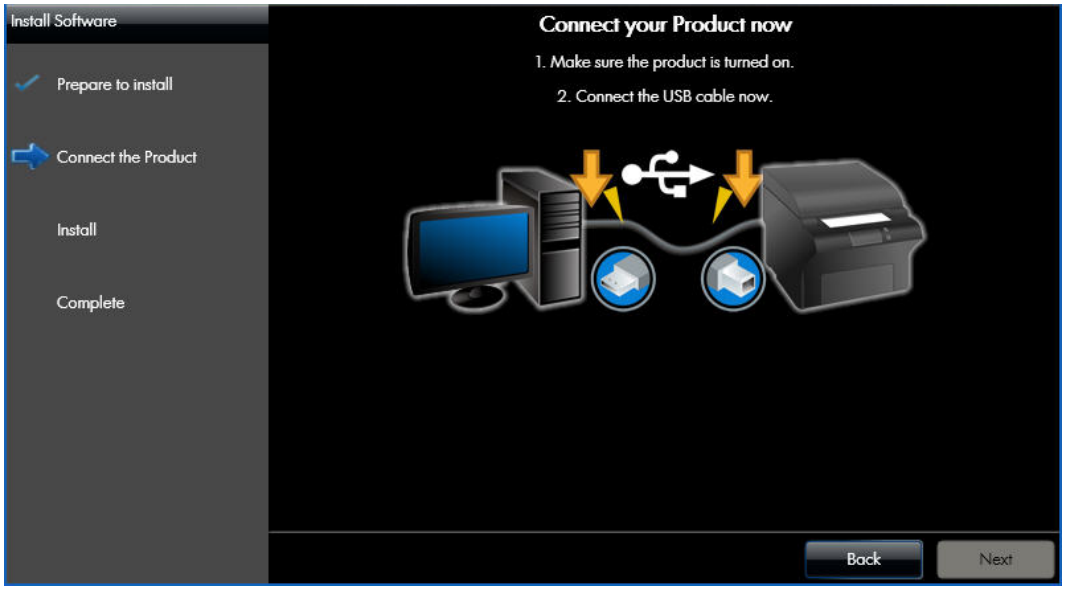
Figure 3-1 Software Installation — **Connection Type** screen for USB connected installation



- For USB connected products, follow these steps:

    a. Select the **Directly connect to this computer using a USB cable** option and then click the **Next** button.

b. Connect the product to the computer when prompted at the **Connect your Product now** screen.

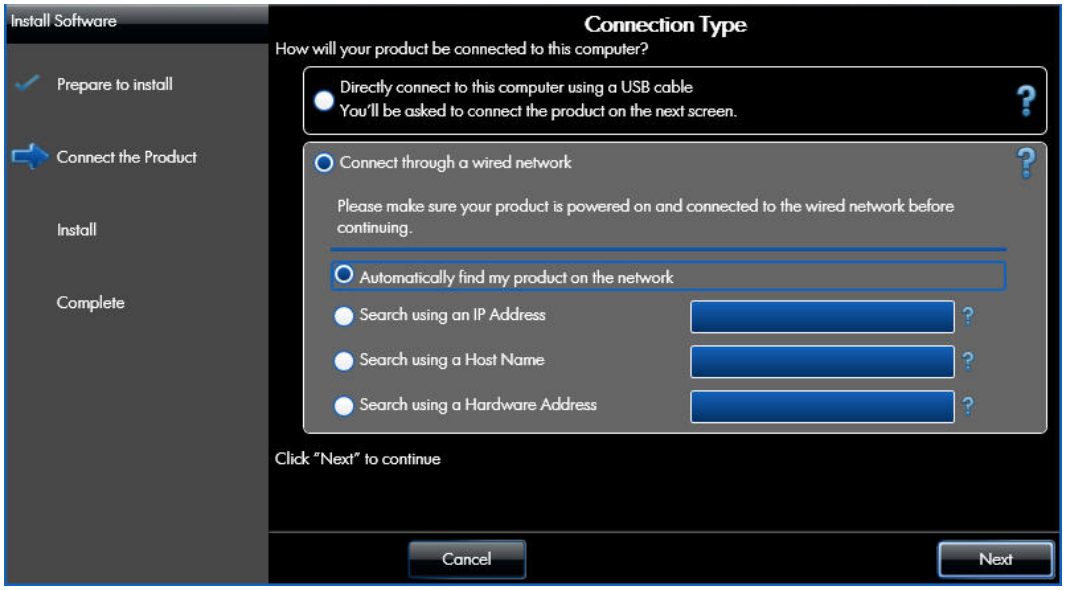


c. Click the **Next** button.

- For wired network connected products, follow these steps:

a. Select the **Connect through a wired network** option.

Figure 3-2 Software installation — **Connection Type** screen for network connected installation



b. If the product's network settings *are not* known, select the **Automatically find my product on the network** option.

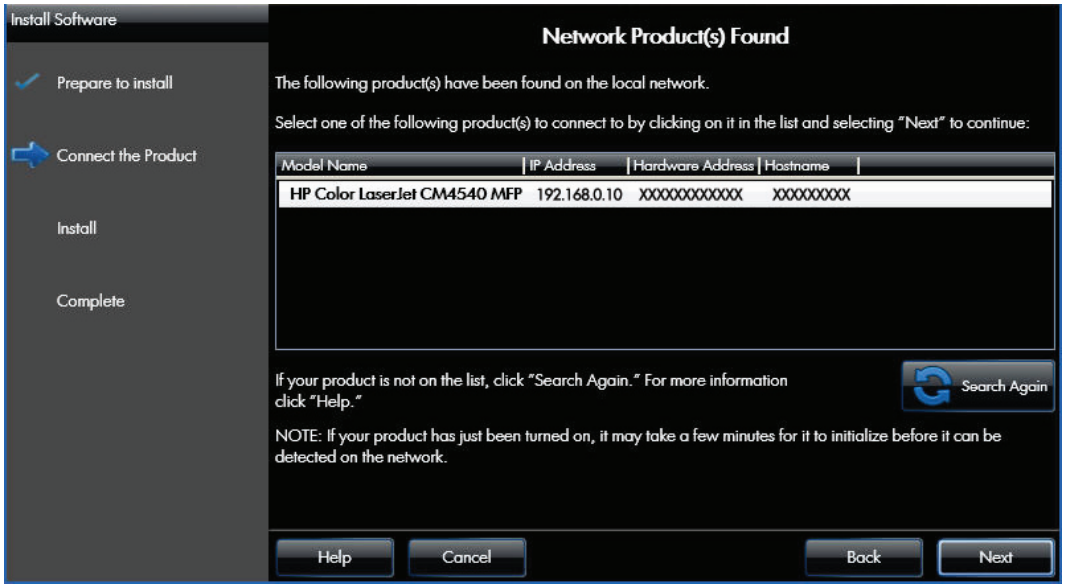
c. If the product's networking settings *are* known, enter either the product's host name, IP address, or hardware address.

NOTE: At the product control panel, touch the **Network Address** button to identify the product IP address or host name.

d. Click the **Next** button.

e. A list of products is displayed on the **Network Product(s) Found** screen. Select the product to install and then click the **Next** button

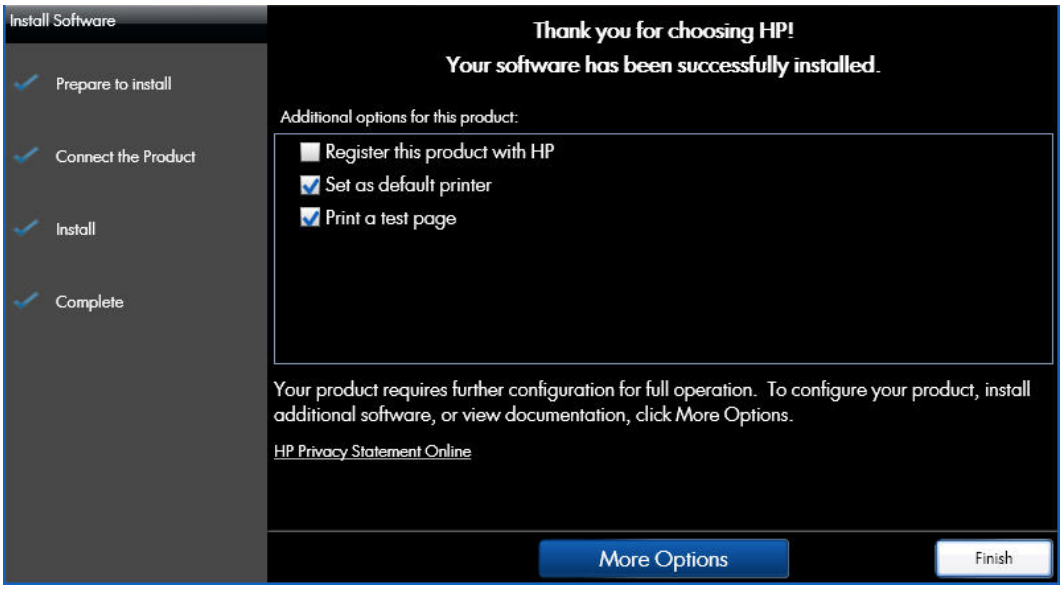
Figure 3-3 Software Installation — **Network Product(s) Found** screen



6. When the installation completes, the following screen appears.

   Register your product by selecting the **Register this product with HP** check box, make this product your default product by selecting the **Set as default printer** check box, and send a test page to the product by selecting the **Print a test page** check box.

Figure 3-4 Software Installation — Driver Installation Complete screen



7. Click the **Finish** button to complete the installation.

When you are finished with the installation, click the **More Options** button to open the **More Options** menu.

Figure 3-5 Additional Options

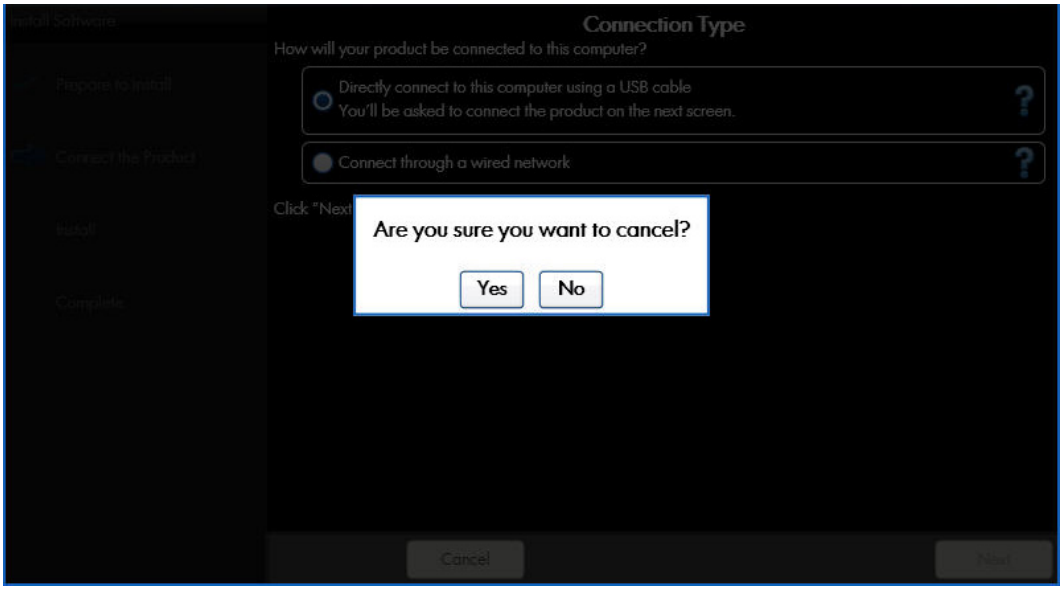
Use the options available on this screen to install additional product software and documentation.

Use the Back, Next, Finish, and Cancel buttons

The following buttons appear on various dialog boxes during the installation process.

- **Back**. Click this button to return to the previous dialog box.
- **Next**. After you select any options on a given screen, click this button to proceed to the next step in the installation sequence.
- **Finish**. Click this button to complete the installation process and proceed to the **Additional Options** screen.
- **Cancel**. Click this button to exit the installer without installing the product. When you click **Cancel**, the **Installation Cancelled** dialog box opens, stating that the installation was cancelled.

Figure 3-6 Installation Cancelled dialog box



Set a default printer

1. In Windows Vista and Windows 7, click the **Start** button, click **Control Panel**, and then click **Hardware and Sound**. Under the **Printers** section, click **Change default printer**.

   In Windows XP, Windows Server 2003, and Windows Server 2008, click **Start**, click **Control Panel**, and then click **Printers and Faxes** (Windows XP Professional) or **Printers and other hardware devices** (Windows XP Home).

2. Right-click the product that you want to set as the default printer.
3. Click **Set As Default**. A check mark appears next to the product set as the default.

Use the MFP Send Fax Driver

Use the HP Send Fax Driver to send faxes from your computer via the product if the optional Analog Fax Accessory 500 is installed. After the HP Send Fax Driver is installed, it can be accessed and used in the same manner as a printer driver. The HP Send Fax Driver can only be used with network connected printers.

NOTE: For complete information about using the HP Send Fax Driver, see the *HP LaserJet MFP Analog Fax Accessory 500 Send Fax Driver Guide*, which can be downloaded from www.hp.com/go/mfpfaxaccessory500. Click **Manuals** from the left navigation bar. It is also available on the User CD.

Download the HP Send Fax Driver

Use the following steps to download the HP Send Fax Driver:

1. Click the **More Options** menu on the software CD.
2. Click the **Get Specialized Drivers** button.
3. Click the **HP Send Fax Driver (Online)** button to navigate to the download page.
4. Click the **Download** button.
5. In the dialog box that opens, click the **Save** button.
6. In the **File Name** text box on the **Save As** dialog box that opens, type the location on your computer where you want to save the self-extracting Send Fax Driver file.
7. Click the **Save** button.
8. After the file has been downloaded, close the **File Download** dialog box if necessary.

Install the HP Send Fax Driver

You can install the HP Send Fax Driver by using either the HP Driver Installation Utility (HP DIU) or the Windows Add Printer Wizard. The HP DIU is included with the downloaded driver. Installing the HP Send Fax Driver by using the HP DIU is the same process as installing from the Admin CD.

HP Driver Installation Utility (HP DIU)

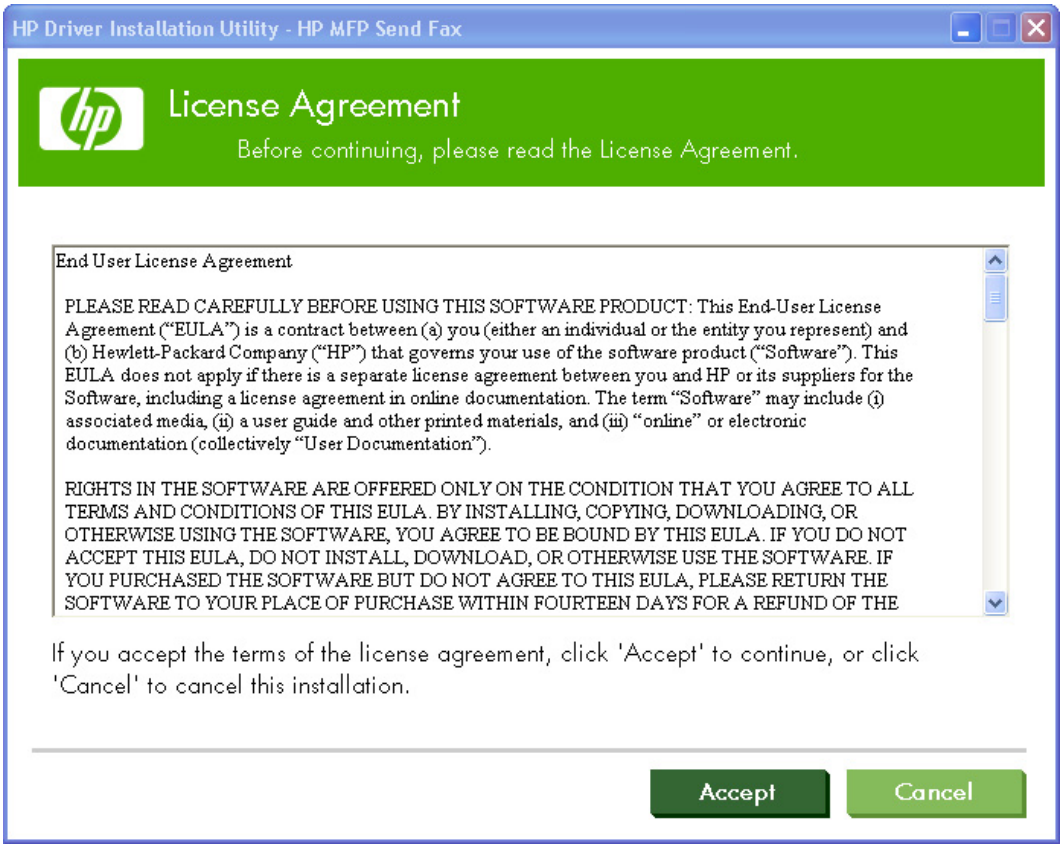
To install the HP Send Fax Driver by using the HP Driver Installation Utility (HP DIU), use the following steps:

1. In Windows Explorer, double-click the downloaded HP Send Fax Driver executable file to extract the driver files. A folder is created containing the HP Send Fax Driver files.
2. Browse to the location of the HP Send Fax Driver folder, and then double click the **HPDIU.EXE** file. The HP Driver Installation Utility (HP DIU) opens to the License Agreement.

NOTE: If installing from the Admin CD, click the **Advanced Install Options** button and then click the **Install HP MFP Send Fax Driver** button.

3. After reading the license agreement, click the **Accept** button to continue to the **Device Connection** screen.

Figure 3-7 Send Fax Driver Installation–**License Agreement** screen



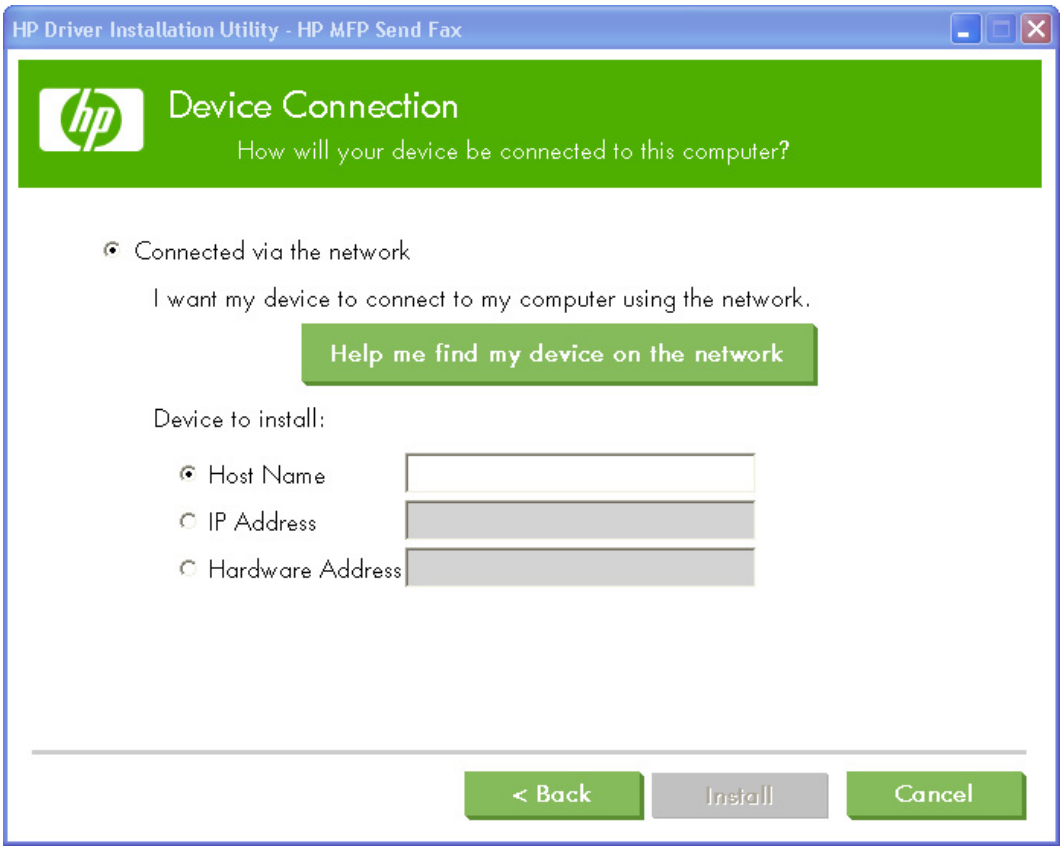
4. Select **Connected via the network**.

   - If the product's networking settings are known, you can enter either the **Host Name**, **IP Address**, or the **Hardware Address**, and then click the **Install** button. Once the software is installed, the **Driver Installation Complete** screen appears.
   - If the product's network settings are not known, click the **Help me find my device on the network** button. A **Discovery in Progress** window appears. After the computer searches the network, the **Devices Found** screen appears.

NOTE: The product name is HP MFP Send Fax when the HP Send Fax Driver is installed on a local printer.

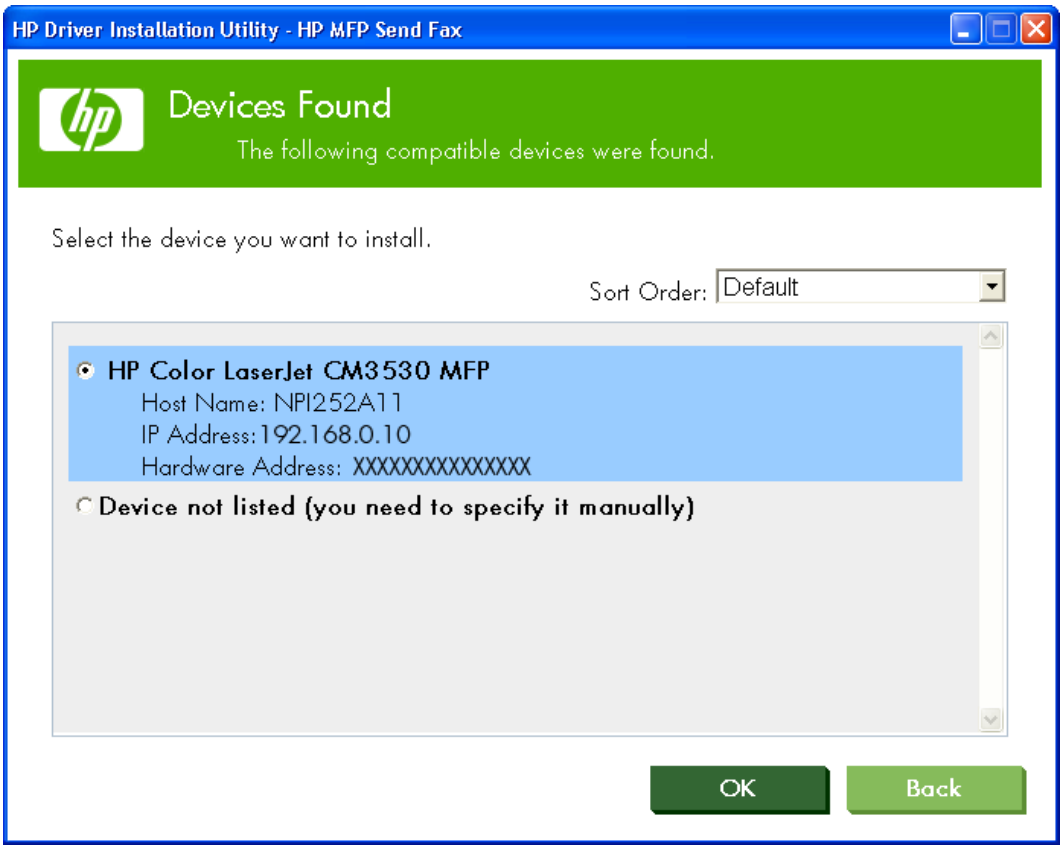
The HP Send Fax Driver cannot be installed on a product that is connected to the computer via a serial or parallel port. It must be on a network.

Figure 3-8 Send Fax Driver Installation–**Device Connection** screen



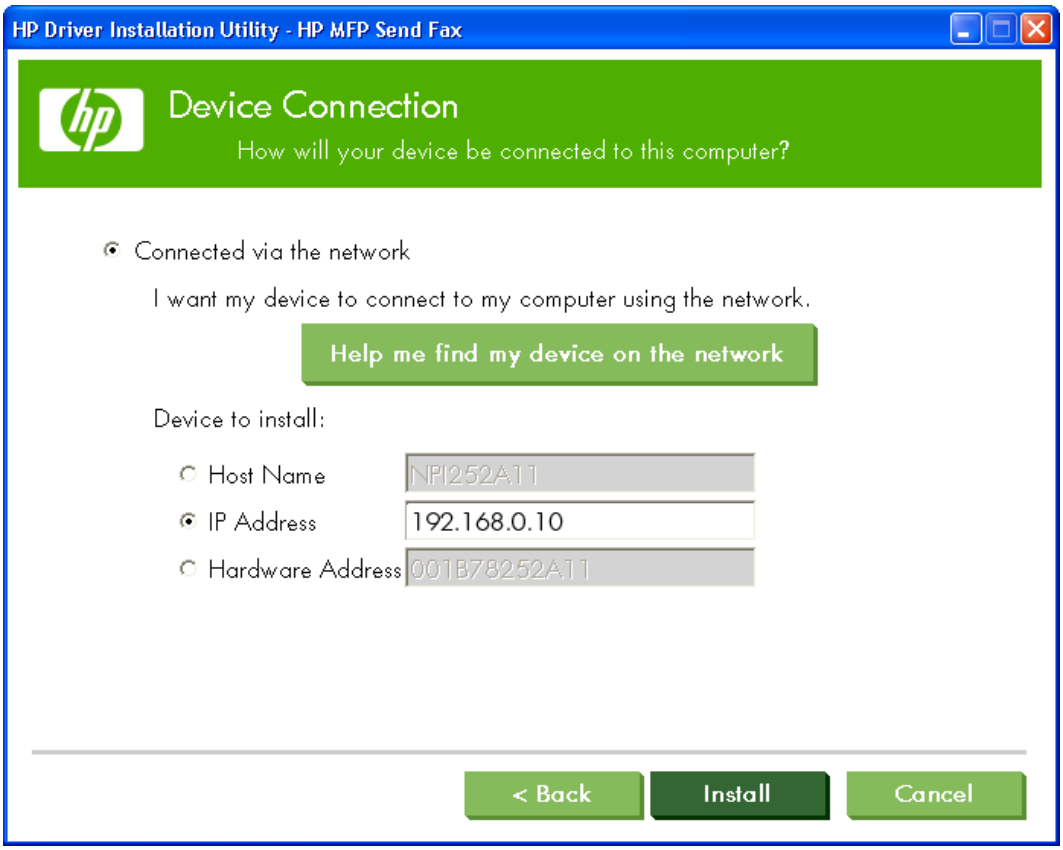
5. A list of products is displayed. Select the product you want to install, and then click the **OK** button to continue to the **Device Connection** screen.

Figure 3-9 Send Fax Driver Installation–**Devices Found** screen



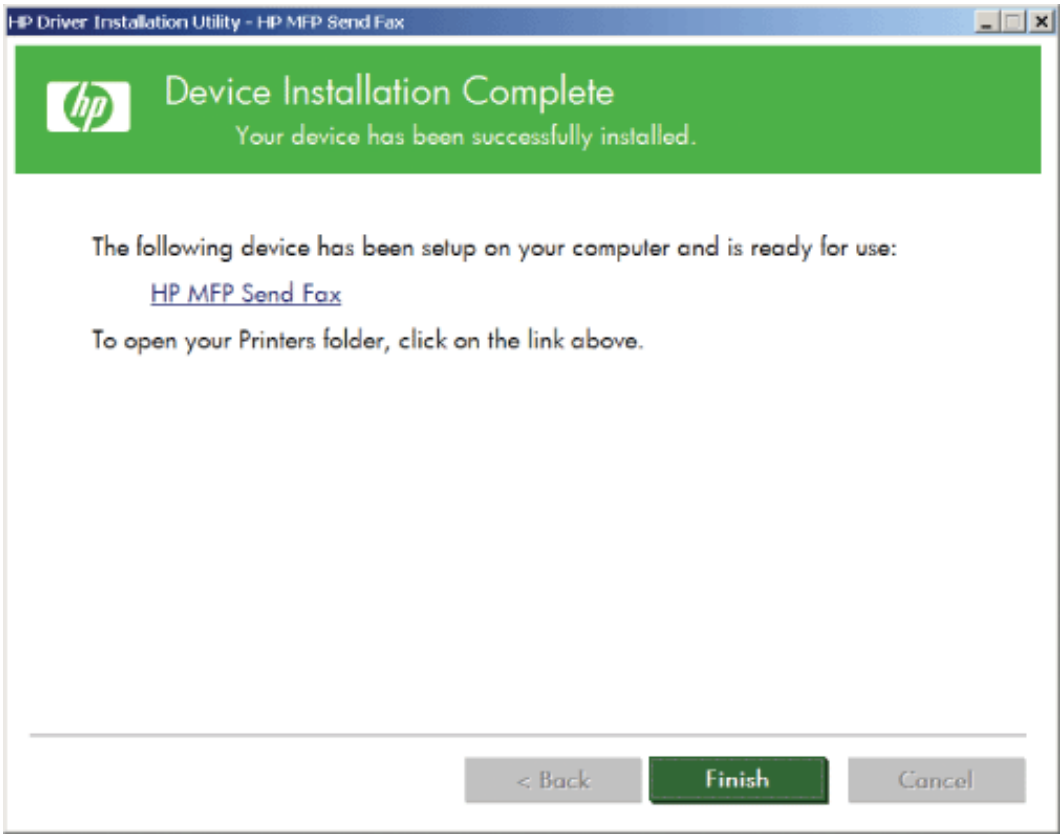
6. The network settings (**Host Name**, **IP Address**, and **Hardware Address**) for the product are displayed. Click the **Install** button. Once the software is installed, you will continue to the **Device Installation Complete** screen.

Figure 3-10 Send Fax Driver Installation–**Device Connection** screen



7. The following screen appears once the software is installed. Click the **Finish** button to complete the installation.

Figure 3-11 Send Fax Driver Installation–**Device Installation Complete** screen



Add Printer Wizard

To install the HP Send Fax Driver by using the Windows Add Printer Wizard, use the following steps:

1. In Windows Explorer, double-click the downloaded HP Send Fax Driver executable file to extract the driver files.
2. On the **Start** menu, click **Settings**, and then do one of the following:

   Windows XP Professional and Windows Server 2003: Click **Printers and Faxes**.

   -or-

   Windows Server 2008: Click **Start**, click **Control Panel**, and then open the **Printers** folder.

   -or-

   Windows Vista: Under the **Hardware and Sound** category, click **Printer**.
3. Click **Add a printer**.
4. Click the **Next** button on the **Add Printer Wizard** welcome screen.

5. Select **Local printer attached to this computer**, and then click the **Next** button.

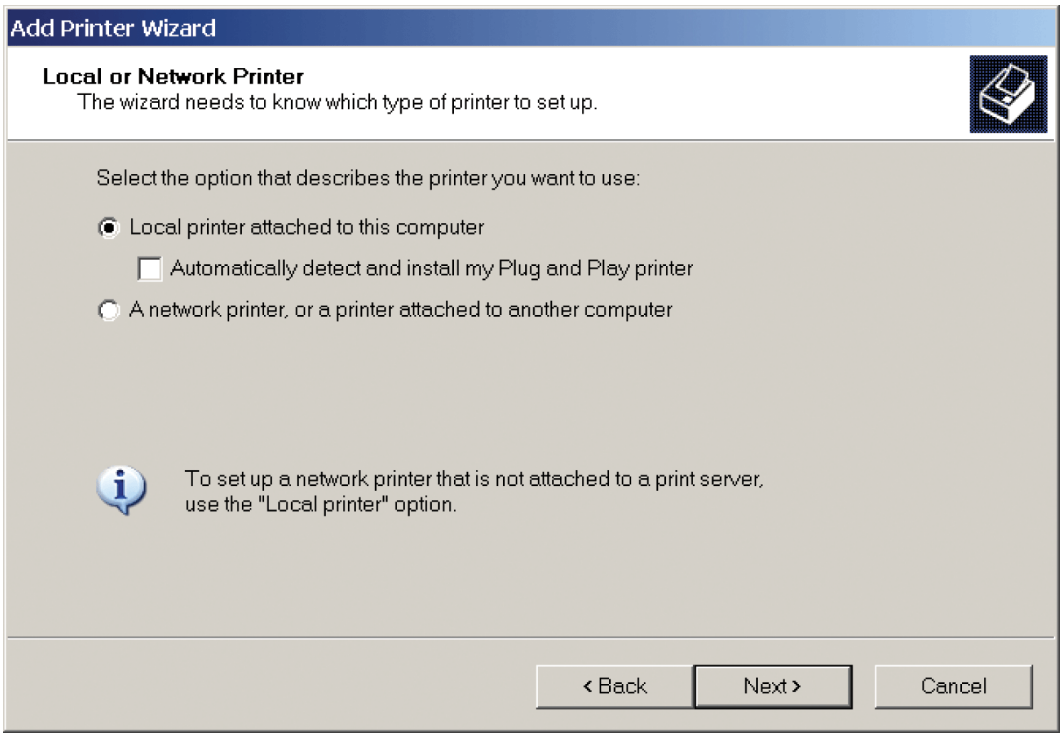
NOTE: The printer name is HP MFP Send Fax when the driver is installed on a local printer.

Select **Local printer attached to this computer** to install the HP MFP Send Fax Driver on a network printer.

If you select the **A network printer, or a printer attached to another computer** option (Point and Print installation), the IP address of the computer is required. Some features, such as fax preview, are not available if the driver is installed by using the network printer installation.

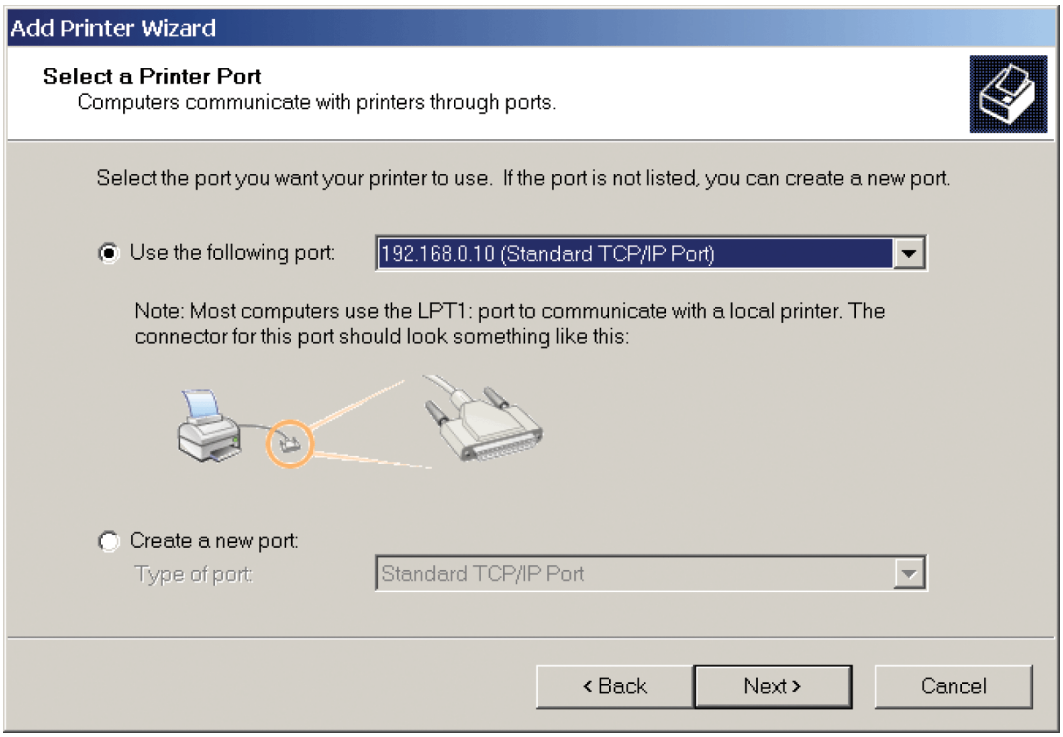
The HP Send Fax Driver cannot be installed on a printer that is connected to the computer via a USB, serial, or parallel port. It must be on a network.

Figure 3-12 Send Fax Driver Installation–**Local or Network Printer** screen



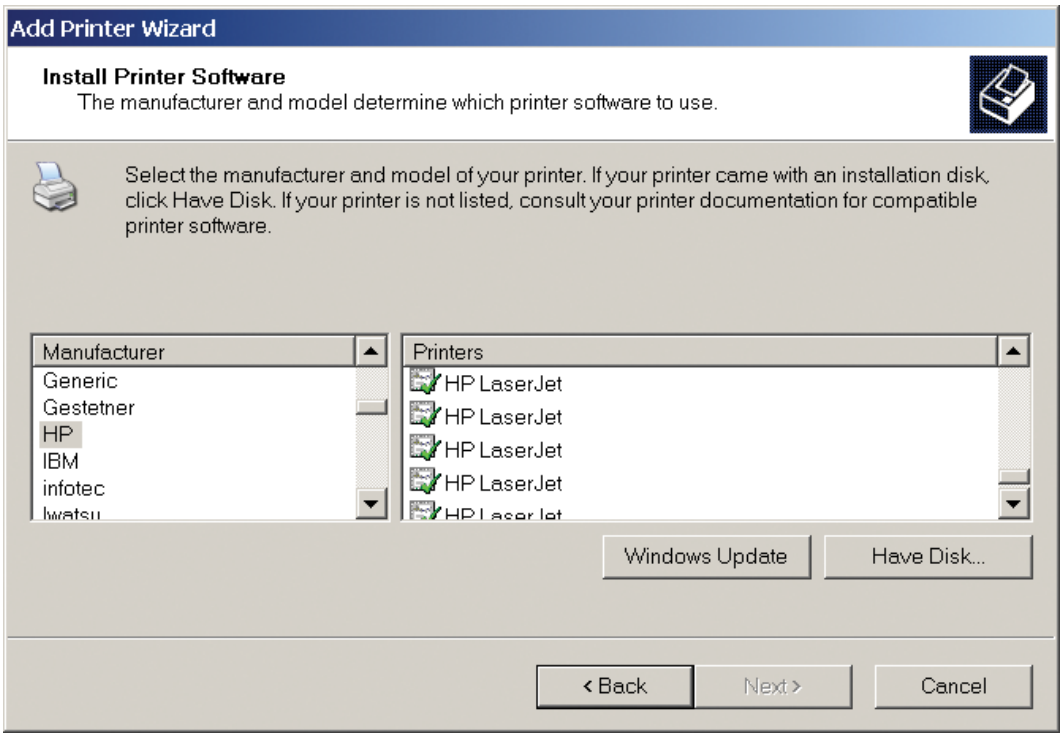
6. Select the product name, print path, or IP address of the product from the **Use the following port:** drop-down list, and then click the **Next** button.

Figure 3-13 Send Fax Driver Installation–**Select a Printer Port** screen



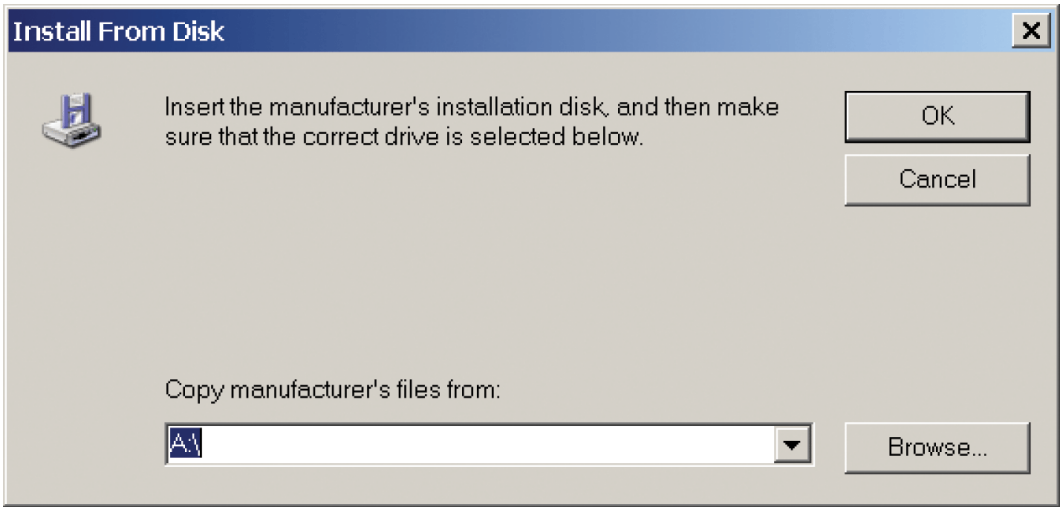
7. Click the **Have Disk...** button.

Figure 3-14 Send Fax Driver Installation–**Install Printer Software** screen



8. Click the **Browse...** button.

Figure 3-15 Send Fax Driver Installation–**Install From Disk** screen



9. Navigate to and select the HP Send Fax Driver .INF file.

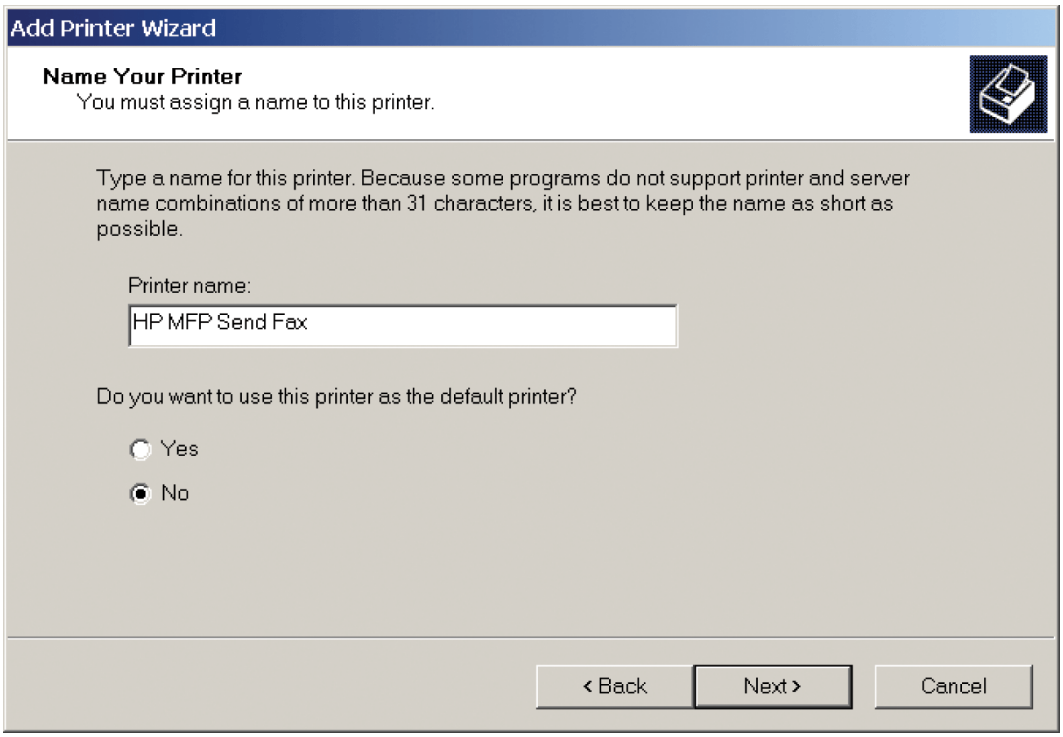
NOTE: Different versions of the .INF file are available: a 32-bit version for Windows XP, Windows Server 2003, Windows Server 2008, and Windows Vista; and a 64-bit version for Windows XP Professional x64, Windows Server 2003 x64, Windows Server 2008 x64, and Windows Vista x64.

The following message displays if you select the wrong version of the file: **The specified location does not contain information about your printer**.

10. Click the **Open** button.
11. Click the **OK** button.
12. Click the **Next** button.

13. Type a name for the driver in the **Printer name:** text box, and then click the **Next** button. The default name is HP MFP Send Fax.

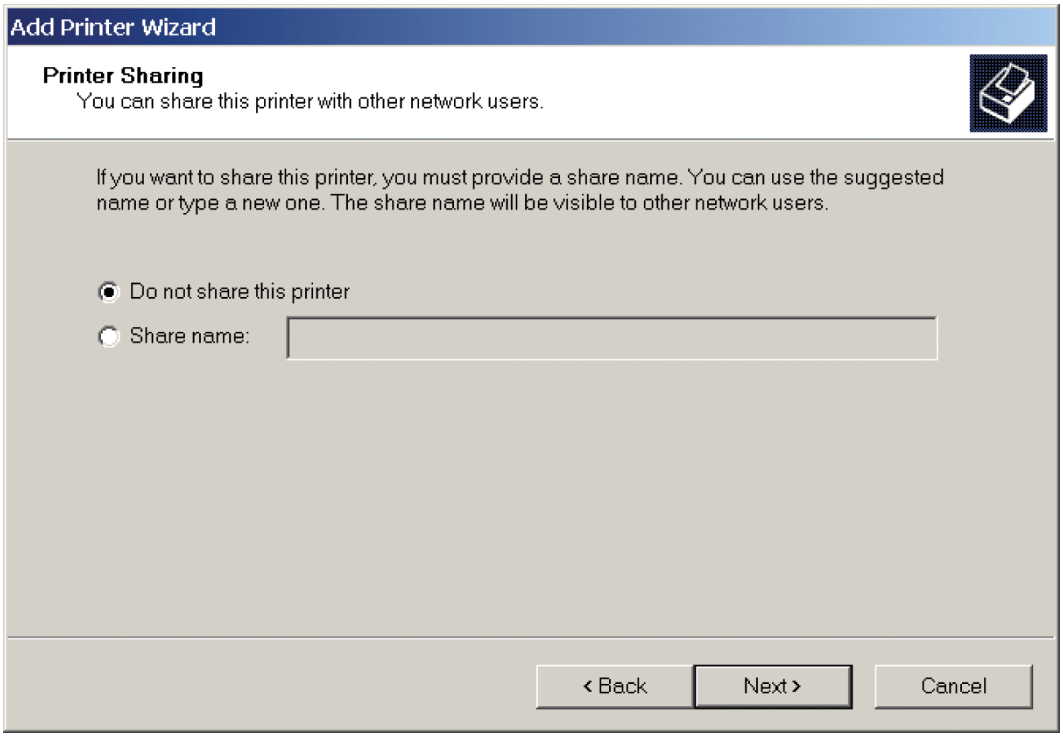
Figure 3-16 Send Fax Driver Installation–**Name Your Printer** screen



14. Select an option, and then click the **Next** button.

NOTE: You can share the product by selecting **Share name:** on the **Printer Sharing** screen. The HP Send Fax Driver is then available for a Point and Print connection. Some features, such as fax preview, are not available if the driver is accessed by using a Point and Print connection.

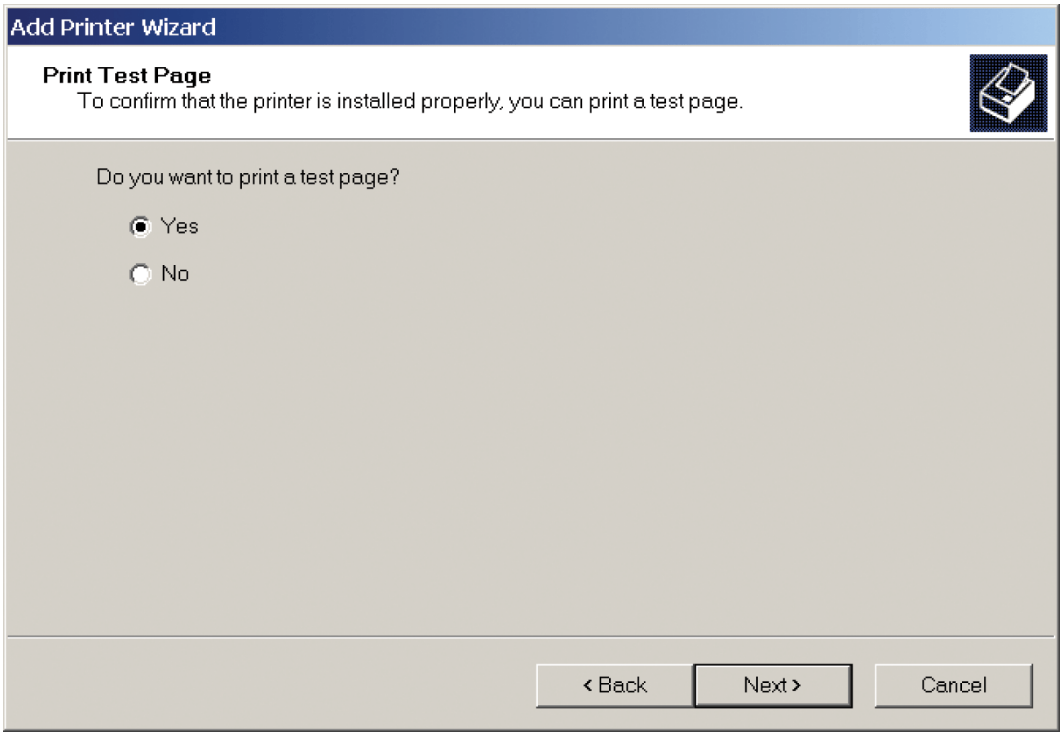
Figure 3-17 Send Fax Driver Installation–**Printer Sharing** screen



15. Select either **Yes** or **No** to send a test fax, and then click the **Next** button.

NOTE: If you select **Yes**, the HP Send Fax Driver opens once the installation is complete. No page is printed from the product; however, a fax is sent.

Figure 3-18 Send Fax Driver Installation–**Print Test Page** screen



16. Click the **Finish** button to complete the wizard.

NOTE: If you selected **Yes** to print a test page in the previous step, the **Setup** tab of the HP MFP Send Fax Driver appears.

Send a fax by using the HP Send Fax Driver

You can use the HP Send Fax Driver to send faxes from your computer via the product if the optional Analog Fax Accessory 500 is installed. After the HP Send Fax Driver is installed, it can be accessed and used in the same manner as a printer driver.

NOTE: For complete information about using the HP Send Fax Driver, see the *HP LaserJet MFP Analog Fax Accessory 500 Send Fax Driver Guide*, which can be accessed on your User CD or downloaded from www.hp.com/go/mfpfaxaccessory500. Click **Manuals** from the left navigation bar.

Create a network folder by using the Scan Setup Wizard

NOTE: You can return to the previous dialog box by clicking the **Back** button, or exit the Scan Setup Wizard by clicking the **Cancel** button.

1. Insert the CM4540 MFP printing-system Admin software CD in the CD-ROM drive to open an interactive CD Browser.

   If the CD Browser does not open, follow these steps:

   a. On the **Start** menu, click **Run**.

   b. Type the following: X:\SETUP.EXE (where X is the letter of the CD-ROM drive).

   c. Click **OK**.

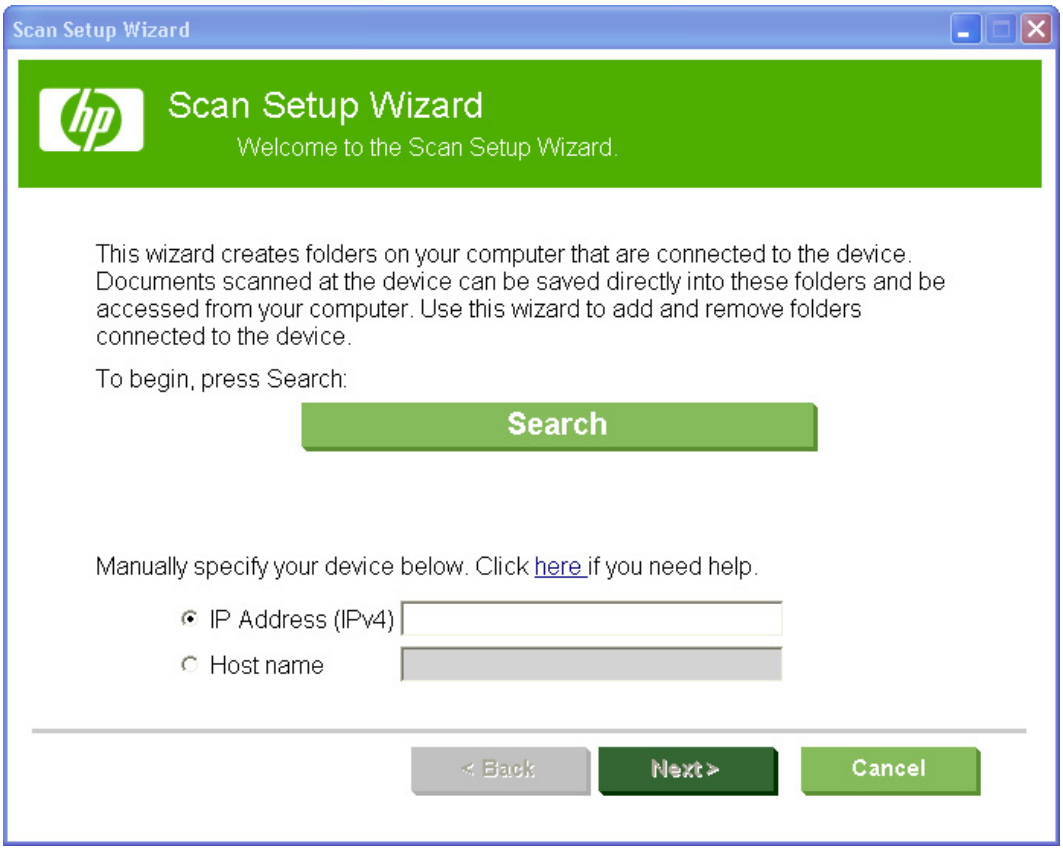
2. Click **Configure Product**, and then click the **Scan Setup Wizard** button from the main screen of the CD Browser.

3. Click the **Install Scan Setup Wizard** button.

4. If the product's networking settings are known, enter the **Host name** or **IP Address** into the appropriate text box, and then click the **Next** button to continue to the **Contacting Device** screen.

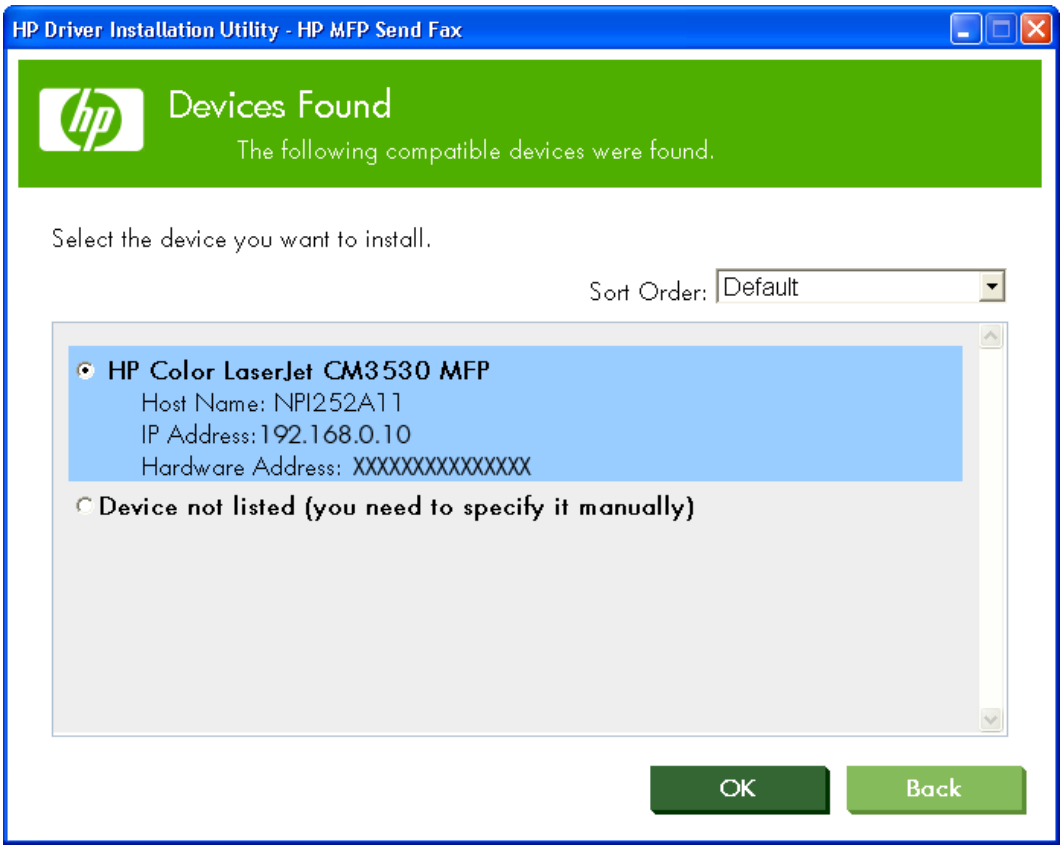
   If the product's network settings are not known, click the **Search** button. A **Discovery in Progress** window appears. After the computer searches the network, the **Devices Found** screen appears.

Figure 3-19 Scan Setup Wizard–Welcome screen



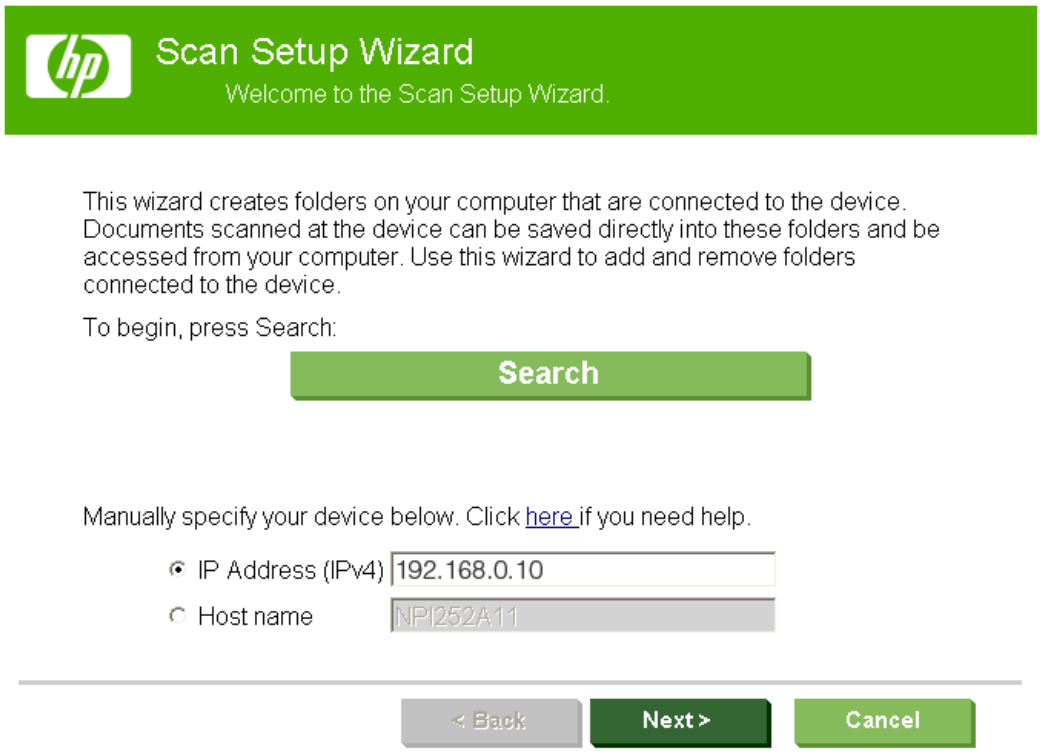
5. A list of HP Color LaserJet Enterprise CM4540 MFP Series products is displayed. Select the product you want to install and then click **OK** to continue to the **Network Settings** screen.

Figure 3-20 Scan Setup Wizard–**Devices Found** screen



6. The product's network settings (**IP Address** and **Host name**) are displayed. Click the **Next** button to continue to the **Contacting Device** screen.

Figure 3-21 Scan Setup Wizard–Welcome screen



7. The computer communicates with the product, and then you continue to the **Add or Remove Folders** screen.

NOTE: If the **Scan to Desktop has been disabled in the EWS** error message appears, open the HP EWS, click the **Device Settings** tab, click the **Send to Folder** menu item, and then select both the **Enable Send to Folder** and the **Enable Scan Setup Wizard** check boxes. You might also need to close and reopen the Scan Setup Wizard.

To gain access to the HP EWS, perform the following:

a. Make note of the TCP/IP address of the product on the Embedded Jetdirect Page. The Embedded Jetdirect Page is the second page of the configuration page printout.

To print a configuration page from the product control panel, perform the following:

i. Touch Administration.

ii. Touch Information.

iii. Touch Configuration/Status Pages.

iv. Touch Configuration Page.

v. Touch Print.

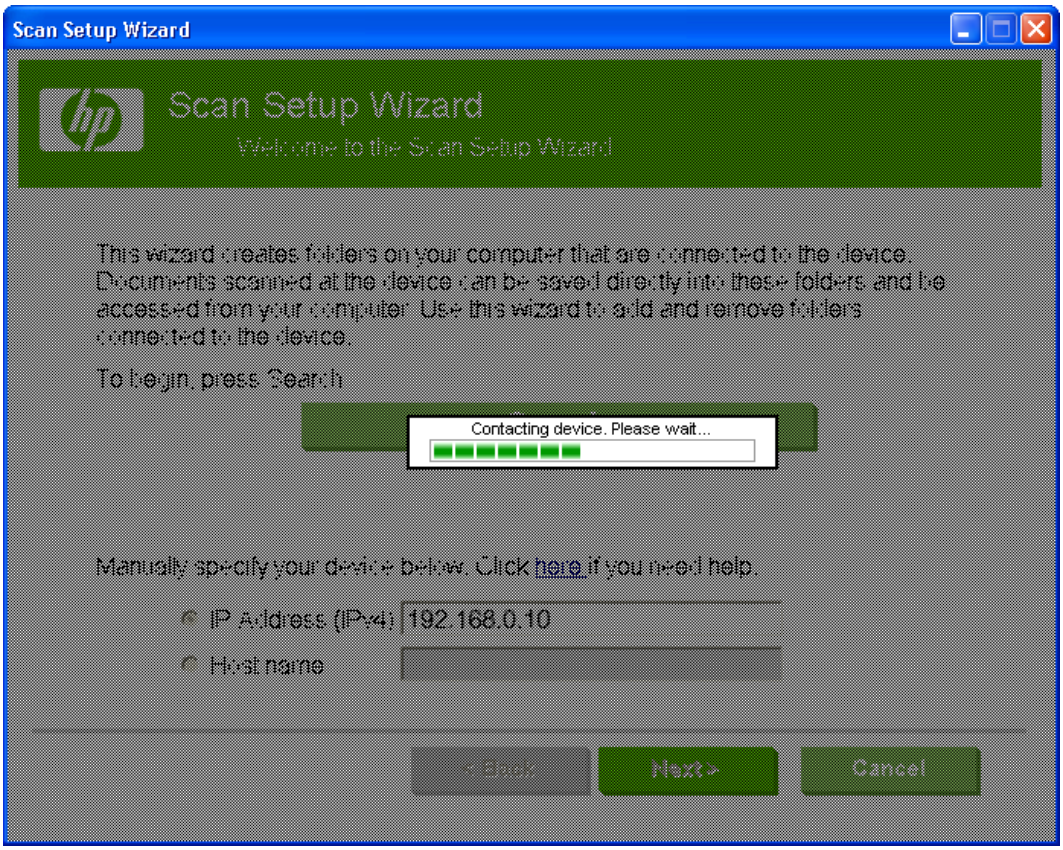
NOTE: If the product contains an HP Jetdirect EIO print server or an optional hard disk drive, additional configuration pages print that provide information about those options.

b. Open a Web browser window.

c. In the address line of the browser, type `ftp://<IPADDRESS>`, where <IPADDRESS> is the TCP/IP address of your product. For example, if the TCP/IP address is 192.168.0.10, type `ftp://192.168.0.10`.

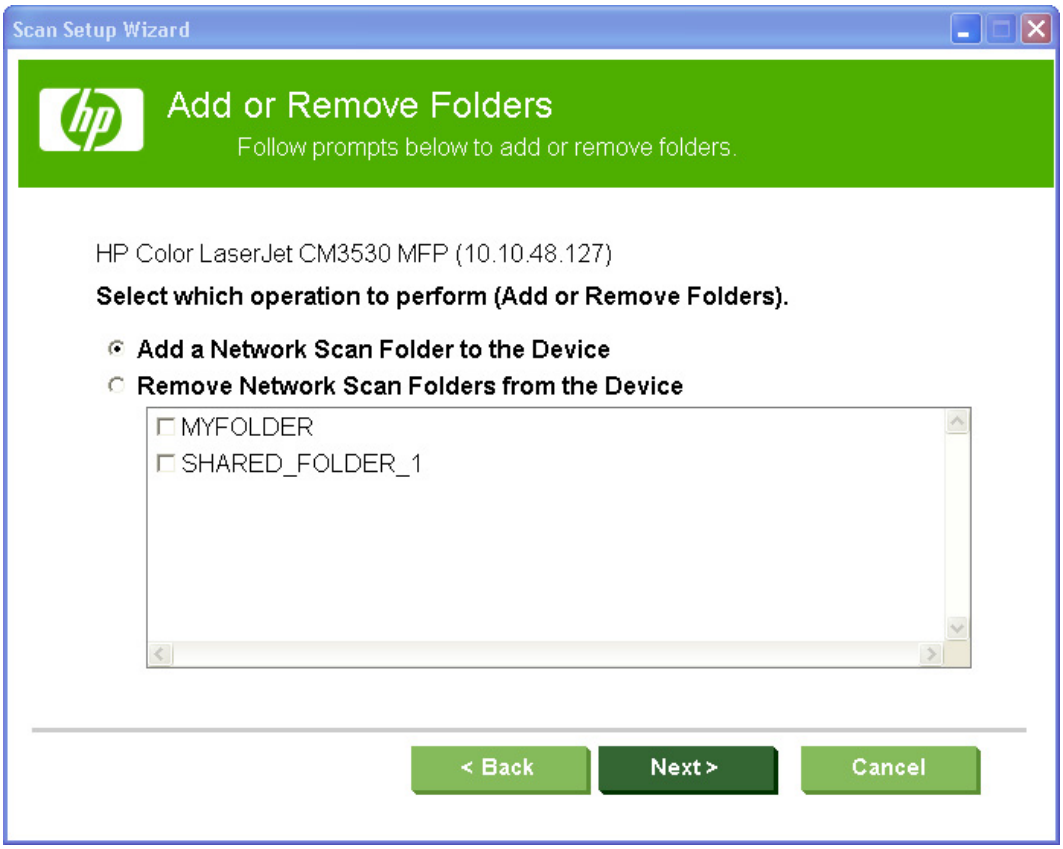
d. Press the **Enter** button.

Figure 3-22 Scan Setup Wizard–Contacting Device screen



8. Select **Add a Network Scan Folder to the Device** and then click the **Next** button to continue to the **Folder Name** screen.

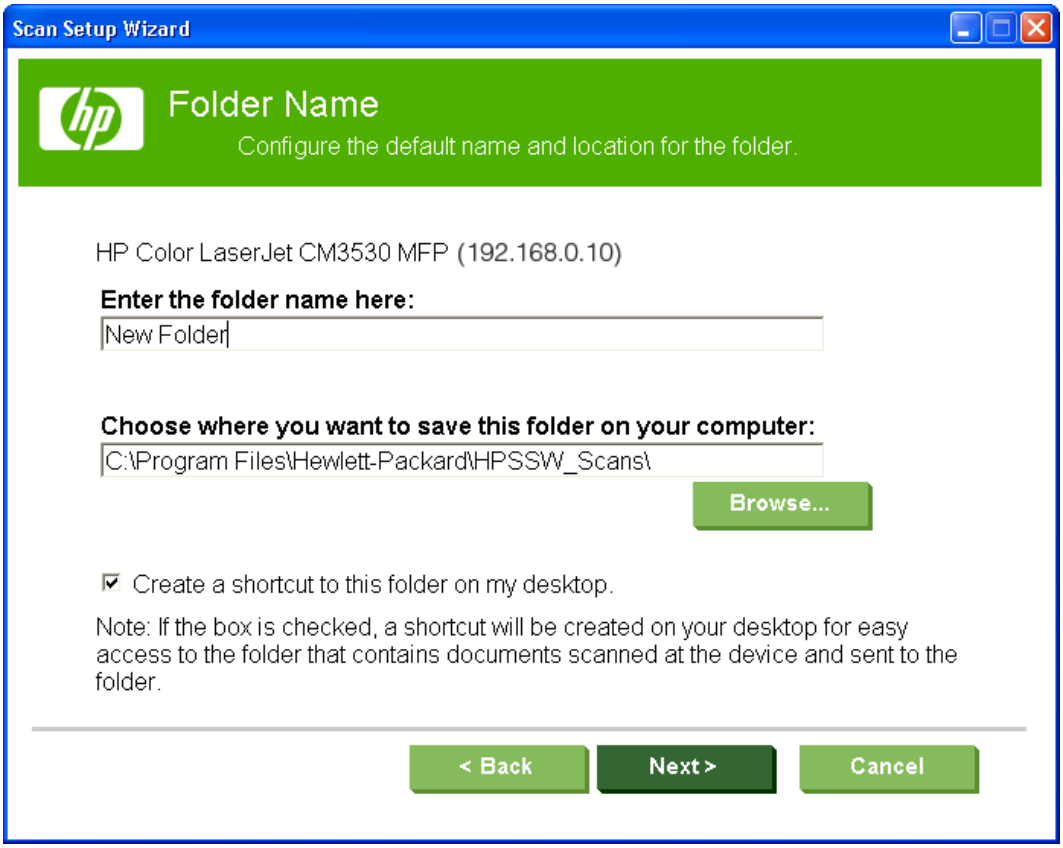
Figure 3-23 Scan Setup Wizard–**Add or Remove Folders** screen



9. Specify the folder name and location of the folder, and then click the **Next** button. Once the folder has been created, you will continue to the **Authentication** screen.

   - You can either type a folder name in the **Enter the folder name here:** text box, or use the default folder name.
   - You can either click the **Browse...** button and navigate to the path where scanned documents will be stored, or enter the path in the Location text box.
   - To create a shortcut, select the **Create a shortcut to this folder on my desktop** check box.

Figure 3-24 Scan Setup Wizard–**Folder Name** screen

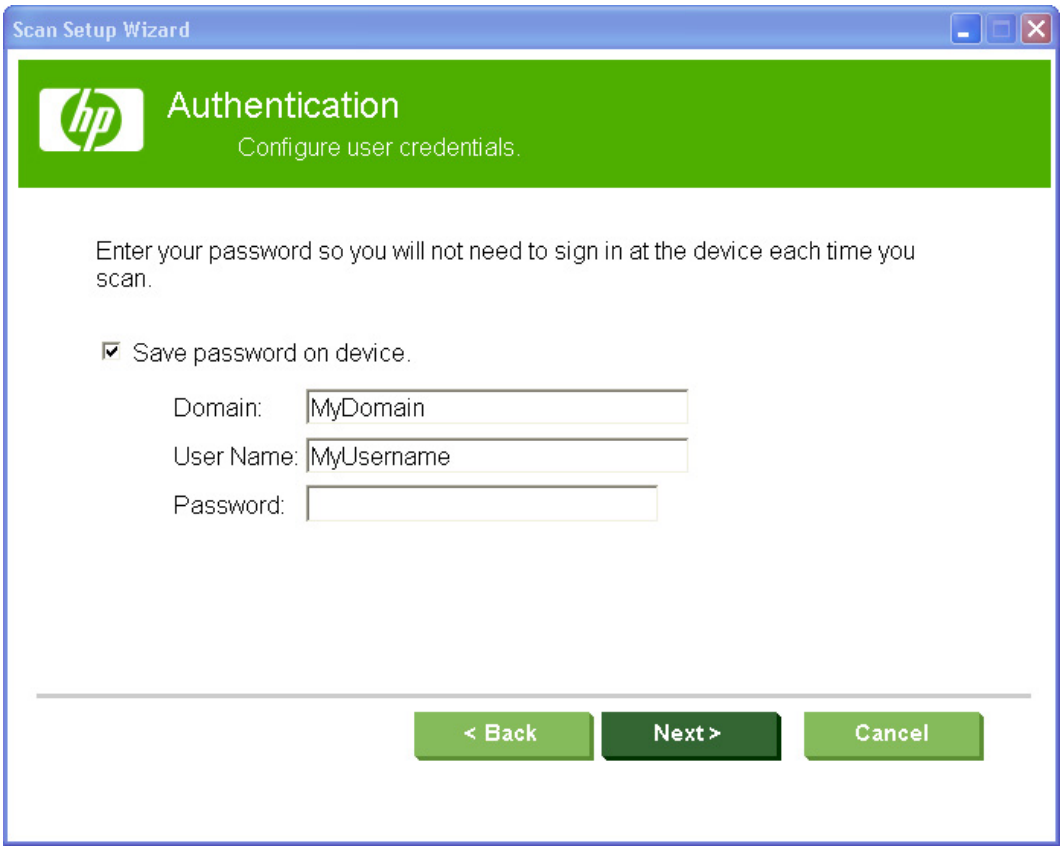


10. To require users to enter their credentials at the product, clear the **Save password on device** check box, and then click the **Next** button to continue to the **Folder Settings** screen.

-or-

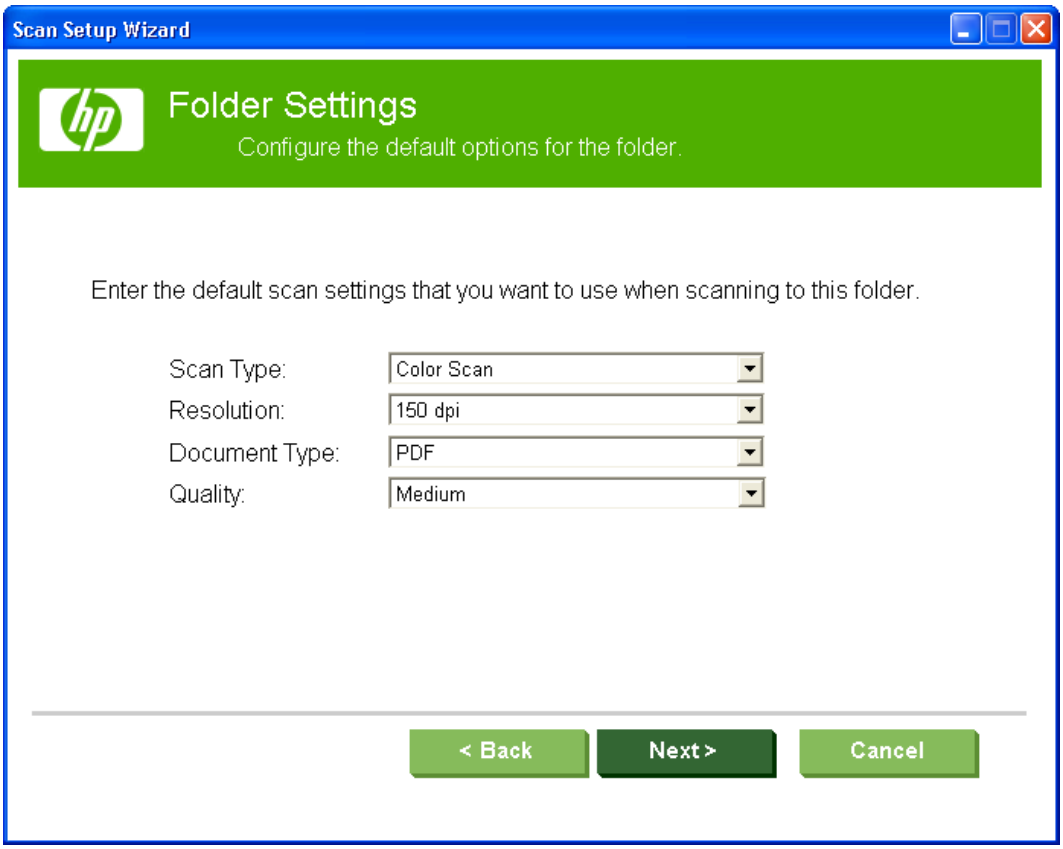
To use default credentials (users do not enter their credentials at the product), select the **Save password on device.** check box and enter your **Domain:**, **User Name:**, and **Password:** into the corresponding text boxes. Click the **Next** button to continue to the **Folder Settings** screen.

Figure 3-25 Scan Setup Wizard — Authentication screen



11. Select the default scan settings from the drop-down lists and then click the **Next** button to continue to the **Summary** screen.

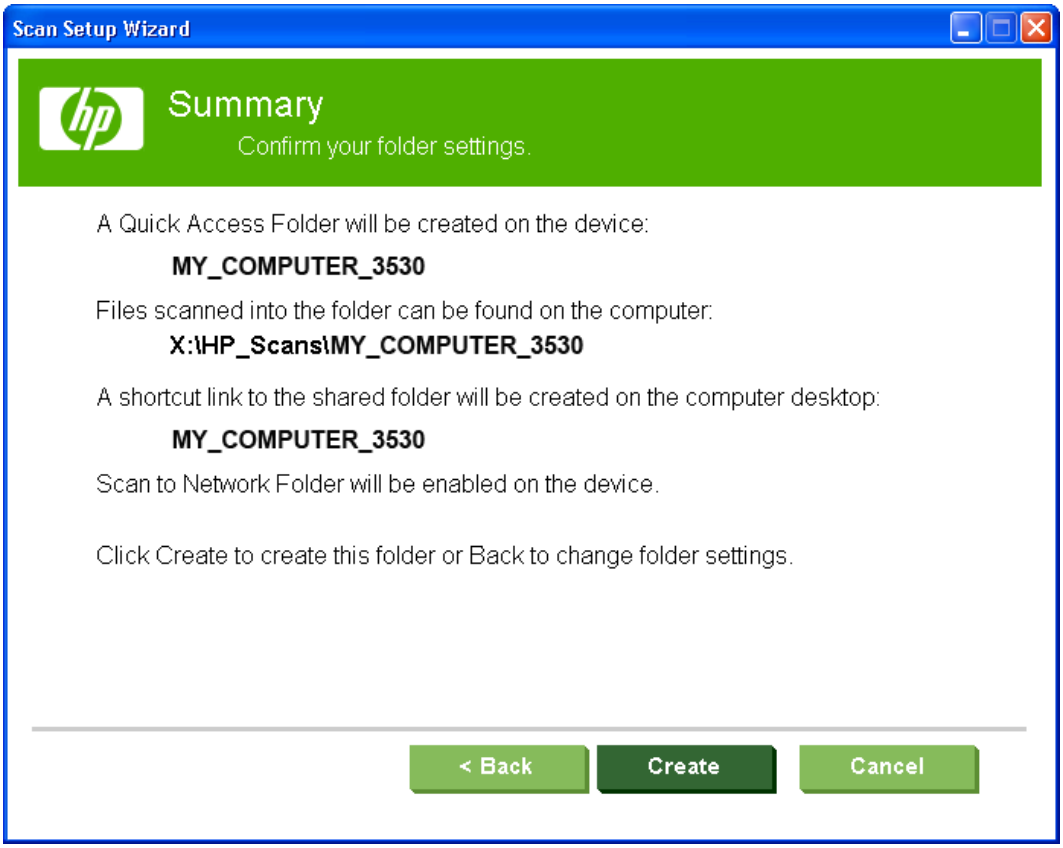
Figure 3-26 Scan Setup Wizard–**Folder Settings** screen



12. The **Summary** screen lists the details of the folder created: the name of the computer where the folder was created, the name of the folder, and the name of the desktop shortcut link to the folder that was created on the computer.

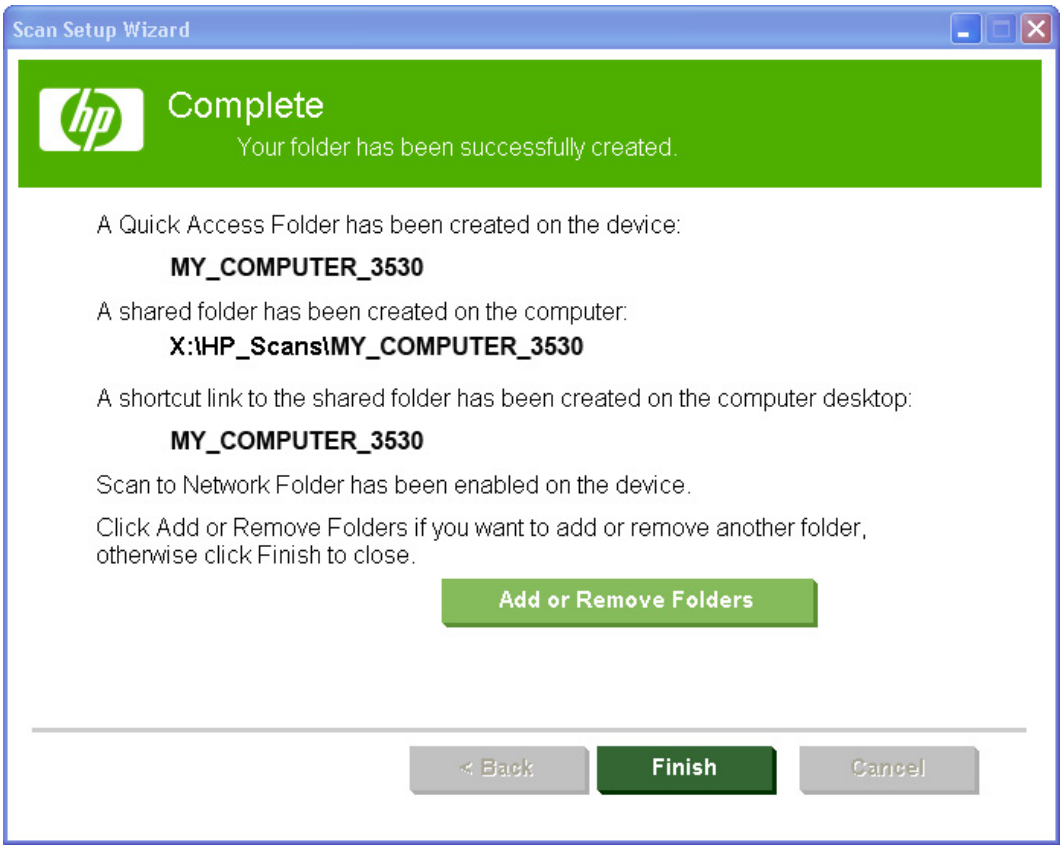
    To complete the creation of the folder, click **Create**. To make changes to the folder settings, click **Back**.

Figure 3-27 Scan Setup Wizard–Summary screen



13. Click the **Add or Remove Folders** button to add another folder, or click the **Finish** button to exit the Scan Setup Wizard.

Figure 3-28 Scan Setup Wizard–**Complete** screen



Install optional software

Use the following steps to install optional software programs:

1. Insert the CM4540 MFP software CD into the CD-ROM drive. The installer program should open.

   If the installer program has not started after 30 seconds, complete these steps:

   a. On the **Start** menu, click **Run**.

   b. Type the following: X:\SETUP.EXE (where X is the letter of the CD-ROM drive).

   c. Click the **OK** button.

2. Click the **More Options** menu.

NOTE: All of the software listed in the following steps is available via Web download only and does *not* come on the product software CD.

3. Click the **Configure Product** button to gain access to the following software:

   - **HP Scan to Email Setup Wizard (Online)**
   - **HP Save to Folder Setup Wizard (Online)**

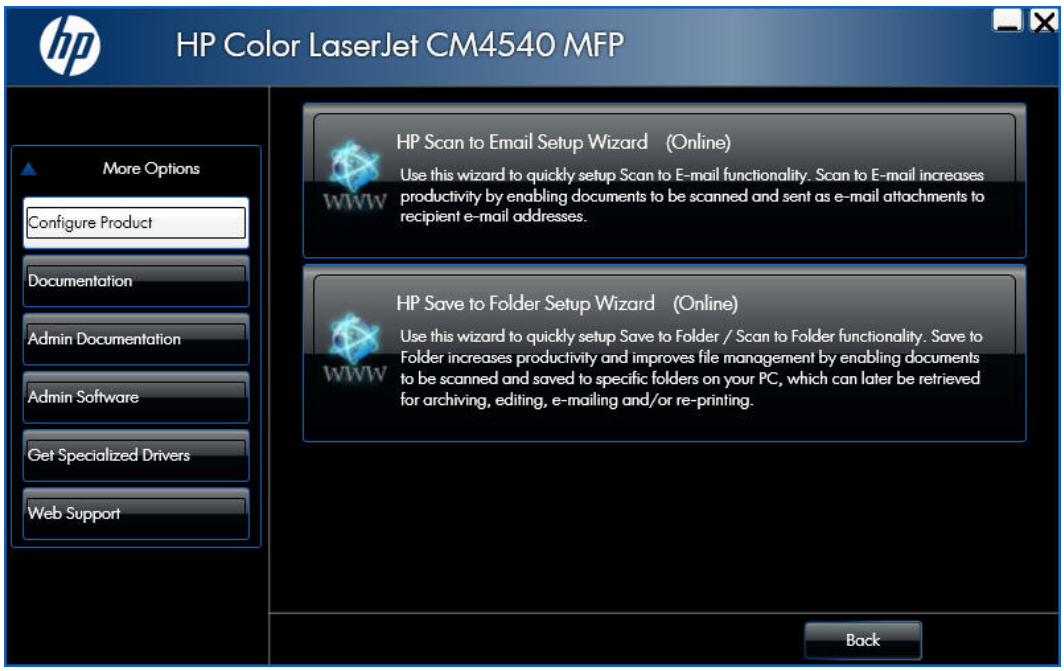
4. Click the **Admin Software** button to gain access to the following software:

   - **HP Universal Print Driver Portal (Online)**
   - **HP Web Jetadmin (Online)**
   - **HP Driver Deployment Utility (Online)**

- **HP Driver Configuration Utility (Online)**
- **Eco Print Solutions Console (Online)**

5. Click the **Get Specialized Drivers** button to gain access to the following software:
   - **HP Universal Print Driver Portal (Online)**
   - **HP Print View Software (Online)**
   - **HP PC Send Fax Driver (Online)**

Figure 3-29 More Options menu



Uninstall software

NOTE: If the printer driver was installed by using the HP Driver Installation Utility, follow the instructions in the Uninstall the printer driver or the HP Send Fax Driver by using the Windows Add or Remove Programs feature on page 54. If either one was installed using the Add Printer Wizard, follow the instructions in the Uninstall the printer driver or the HP Send Fax Driver by using the Server Properties feature on page 55.

Uninstall component list

You can remove the following product components from your computer by using the Windows Add or Remove Programs feature:

- HP Color LaserJet Enterprise CM4540 MFP Series PCL 6 driver
- HP Send Fax Driver

Uninstall the printer driver or the HP Send Fax Driver by using the Windows Add or Remove Programs feature

If the printer driver or the HP Send Fax Driver was installed by the HP Driver Installation Utility (HP DIU), perform the following to uninstall the driver:

NOTE: You do not need the CM4540 MFP printing-system software CD to use this uninstall method.

NOTE: To uninstall the software, you must log on with Administrator privileges.

1. Close all programs.
2. **Windows XP and Windows Server 2003**: On the **Start** menu, click **Control Panel**, and then double-click the **Add/Remove programs**.

   - or -

   Windows Vista: On the **Start** menu, click **Control Panel**, and then under the **Programs** menu click **Uninstall a program**.

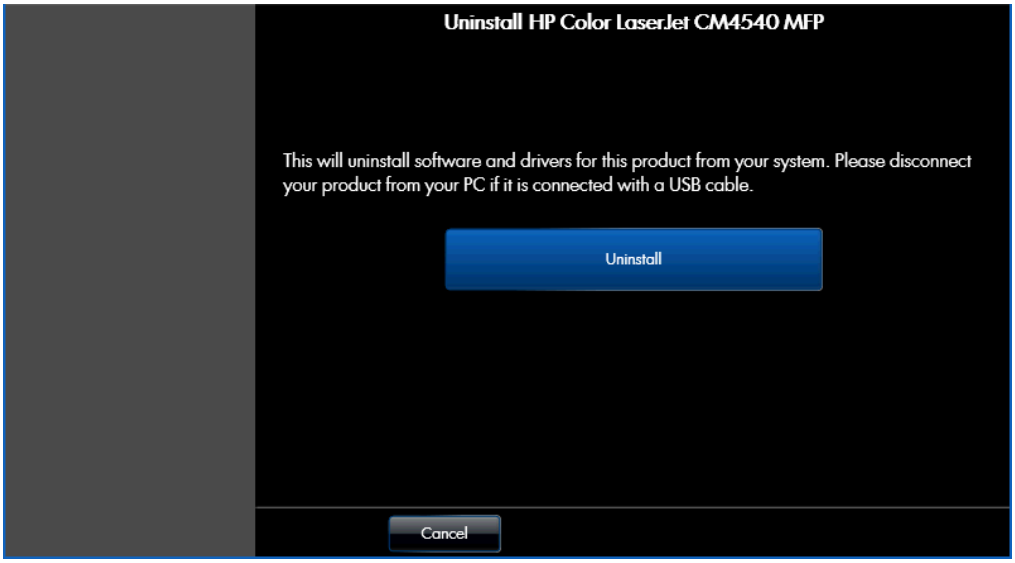
NOTE: For Server 2008, please see the System Administrators Guide at www.hp.com/go/upd

Figure 3-30 Windows Control Panel screen

3. Click **Change or Remove Programs**, select the component you want to remove, and then click **Change/Remove**. The following components might appear in the list of programs:
   - HP Color LaserJet Enterprise CP5520 Series Printer PCL 6 driver
   - HP Send Fax Driver

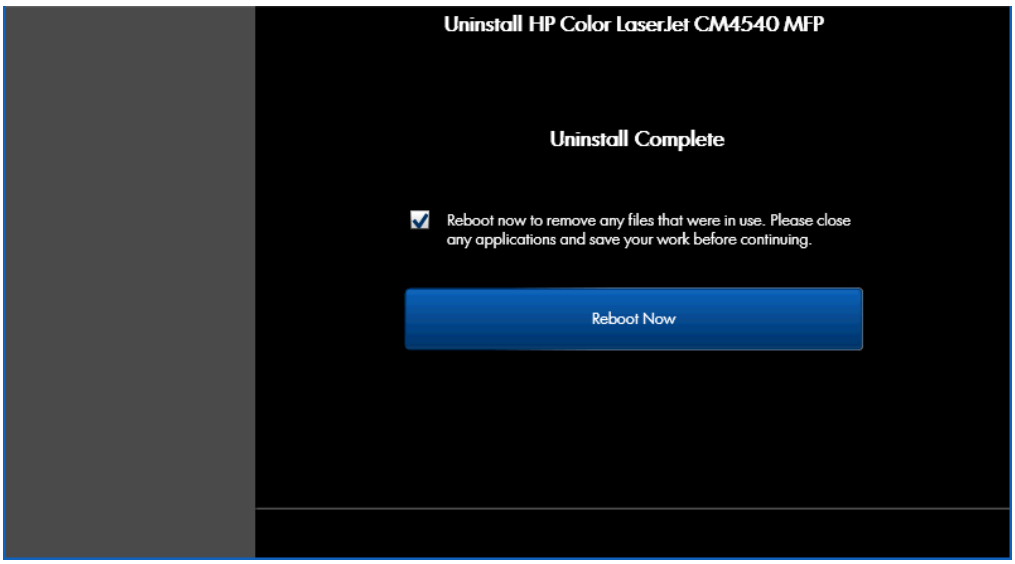
4. The HP Driver Uninstall Utility launches. Click **Uninstall** to start the uninstall process. Click **Cancel** to exit the HP Uninstall Utility.

Figure 3-31 HP Driver Uninstall Utility screen



5. When the Uninstall is complete, you will be prompted to reboot the computer. De-select the checkbox to reboot at a later time.

Figure 3-32 Uninstall Complete screen



Uninstall the printer driver or the HP Send Fax Driver by using the Server Properties feature

If the printer driver or the HP Send Fax Driver was installed by the Add Printer Wizard, perform the following to uninstall the driver:

NOTE: To uninstall the software, you must log on with Administrator privileges.

1. Close all programs.
2. On the **Start** menu, click **Settings**, and then do one of the following:

   Windows XP Professional and Windows Server 2003: Click **Printers and Faxes**.

   -or-

   Windows Server 2008: Click **Start**, click **Control Panel**, and then open the **Printers** folder.

   -or-

   Windows Vista: Under the **Hardware and Sound** category, click **Printer**.
3. Right-click the icon for your product and then click the **Delete** button. This removes the icon for the product only, but it does not remove the associated files.
4. To remove the associated files, click the **File** menu from inside the **Printers** folder, and then click **Server Properties**.
5. Click the **Driver** tab, click the name of your product, and then click the **Remove** button. When you are prompted to confirm the deletion, click the **Yes** button.
6. Click the **Close** button to close the **Server Properties** screen, and then close the **Printers** folder.

4 HP PCL 6 print driver for Windows

Introduction

This chapter describes the features of the HP Color LaserJet Enterprise CM4540 MFP Series PCL 6 Print Driver for, Windows XP (32-bit), Windows Server 2003 (32-bit), Windows Server 2008 (32-bit and 64-bit), Windows Vista (32-bit and 64-bit), and Windows 7 (32-bit and 64-bit).

You can control print jobs from several places:

- the product control panel
- the software program print dialog box
- the driver user interface

Generally, for features that are duplicated in more than one location (for instance, you can select the paper input tray from any of them), settings that are established in the software program take precedence over print-driver settings. Print-driver settings, in turn, override product control-panel settings.

When you install the printing-system software in Windows, the HP PCL 6 Print Driver is installed by default through the installer. The HP PS Universal Print Driver, the HP PCL 5 Universal Print Driver, and the HP PCL 6 Universal Print Driver can be installed by downloading the software from the Web.

Topics:

- Change the printer driver settings for Windows
- Help system
- Advanced tab features
- Printing Shortcuts tab features
- Paper/Quality tab features
- Effects tab features
- Finishing tab features
- Job Storage tab features
- Color tab features
- Services tab features

- Device Settings tab features
- About tab features

Change the printer driver settings for Windows

Operating System	To change the settings for all print jobs until the software program is closed	To change the default settings for all print jobs	To change the device configuration settings
Windows 7, XP, Server 2003, and Vista	1. On the **File** menu in the software program, click **Print**. 2. Select the driver, and then click **Properties** or **Preferences**. The steps can vary; this procedure is most common.	1. Click **Start**, click **Settings**, and then click **Devices and Printers** (Windows 7) or **Printers and Faxes** (Windows XP Professional and Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home). For Windows Vista, click **Start**, click **Control Panel**, and then click **Printer**. 2. Right-click the driver icon, and then select **Printing Preferences**.	1. Click **Start**, click **Settings**, and then click **Devices and Printers** (Windows 7) or **Printers and Faxes** (Windows XP Professional and Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home). For Windows Vista, click **Start**, click **Control Panel**, and then click **Printer**. 2. Right-click the driver icon, and then select **Properties**. 3. Click the **Configure** tab or the **Device Settings** tab.

To gain access to driver settings from within most software programs, click **File**, click **Print**, and then click **Properties**. The appearance and names of the driver tabs that appear can vary, depending on the operating system. These settings apply only while the software program is open.

You can also control the driver directly from the **Printers** folder. These settings change the default settings for all software programs.

- In Windows 7, click **Start**, select **Devices and Printers**, right-click the device name, and then click **Printing Preferences** to gain access to the same set of driver tabs that the software program controls.
- In Windows XP, click **Start**, select **Settings**, select **Printers and Faxes** (Windows XP Professional) or **Printers and Other Hardware Devices** (Windows XP Home), right-click the device name, and then click **Printing Preferences** to gain access to the same set of driver tabs that the software program controls.
- In Windows Vista, click **Start**, select **Printers**, right-click the device name, and then click **Printing Preferences** to gain access to the same set of driver tabs that the software program controls.

Click **Properties** after right-clicking the device name to gain access to the **Properties** tab set, which controls the driver behavior and driver connections.

Properties tab set

The **Properties** tab set contains information about and options for configuring the product.

NOTE: Windows also has tabs in the **Properties** tab set. For information about those tabs, see the documentation that came with the computer.

Printing Preferences tab set

The HP Color LaserJet Enterprise CM4540 MFP Series product **Printing Preferences** tabs contain options for formatting documents for the product. Gain access to the **Printing Preferences** tabs either through the software program or through the Windows **Printers and Faxes** folder.

The following tabs are included in **Printing Preferences** tab set:

- Advanced
- Printing Shortcuts
- Paper/Quality
- Effects
- Finishing
- Output
- Job Storage
- Color
- Services

Document preview image

The document preview image is a line-drawn image of a page that represents graphics and text. The document preview image is always oriented so that the contents of the page are right-side-up. The document preview image appears in the upper-right corner of all **Printing Preferences** tabs except the **Services** and **Job Storage** tab.

Switching between tabs does not change the location or appearance of the document preview image. Move the mouse over the document preview image, and the mouse cursor changes from an arrow to a gloved hand. Toggle between portrait and landscape page orientation by clicking on the image.

Help system

The HP PCL 6 Print Driver includes a full-featured Help system to provide assistance with printing and configuration options.

“What's this?” Help

Windows XP, Windows Server 2003, Windows Server 2008, Windows Vista, and Windows 7 support **What's this?** Help. You can gain access to “What's this?” Help messages in any of the following ways:

- Right-click a feature or control. A pop-up Help window appears.
- Click a feature or control, and then press the F1 key. The Help window for the currently selected control appears.

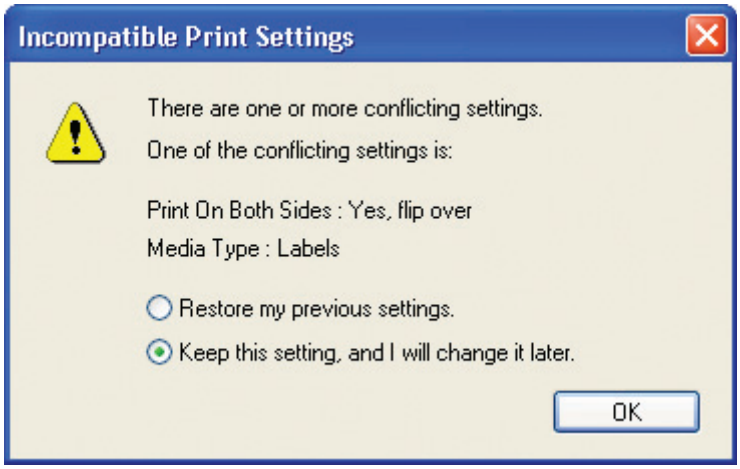
Incompatible Print Settings messages

Incompatible Print Settings (constraint) messages are unsolicited messages that appear in response to specific print-driver selections. These messages alert you to selections that are illogical or impossible given the product capabilities or the current settings of other controls.

NOTE: Constraint messages are limited, and the underlying software architecture might accept some settings that are illogical or impossible for the product to perform. Sending a job with incompatible settings can lead to unexpected results. If print jobs do not print as expected, check the product documentation for the product capabilities.

In supported Windows operating environments, some technically invalid print-driver configurations result in warning messages. Duplexing, for example, is not possible when the Transparency paper type is selected. The following figure shows an **Incompatible Print Settings** message.

Figure 4-1 An **Incompatible Print Settings** message



To resolve the conflicting settings, click **Restore my previous settings.**, and then click **OK**. The driver resets the conflicting control back to its previous state.

If you want to keep the conflicting setting, click **Keep this setting, and I will change it later.**, and then click **OK**.

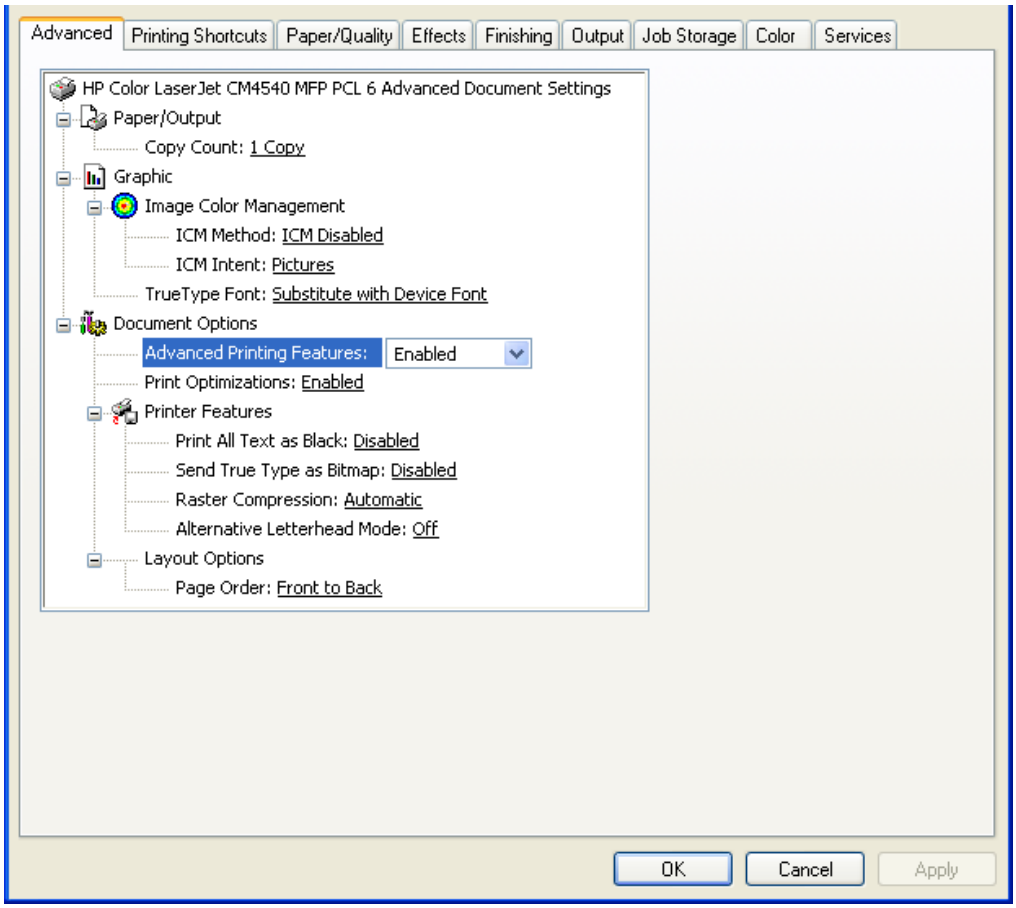
NOTE: In this example, the conflict can be resolved manually. If the conflict is not resolved when the driver is closed, then the same dialog appears again when a print job is sent to the product.

Advanced tab features

NOTE: The **Advanced** tab is located on the **Printing Preferences** tab set.

Use the **Advanced** tab to change the layout of printed pages. Use this tab to configure special controls that are not commonly used, as well as to control features such as collating and copies in the driver (although most current software programs support these features in the print dialog box or through the page settings in the software program). The following figure shows the **Advanced** tab.

Figure 4-2 The default appearance of the **Advanced** tab



The **Advanced** tab contains the following controls:

- Paper/Output
- Graphic
- Document Options

Paper/Output

The **Paper/Output** setting contains the **Copy Count** setting.

Copy Count

Copy Count specifies the number of copies to print. This driver setting is useful for software programs that do not provide a copy count. If a copy count is available in the software program, set the copy count in the software program.

The number of copies that you request appears in the **Copy Count** option. You can select the number by typing in the text box or by using the up and down arrows to the right of the text box. Valid entries are numbers from 1 to 9999. 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 **Advanced** tab, invalid entries into the text 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 text box. The default number of copies is 1.

Because you can set the number of copies that you want from some software programs, conflicts between the software program you are using and the driver can arise. In most cases, the software 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, whenever possible.

When the **Copy Count** option is set to more than 1, the **Collated** check box becomes available. Select this check box when you want the product to collate the printed copies. Most current software programs support the collating feature in the print dialog box or through the page settings in the software program.

Graphic

The **Graphic** setting contains the following controls:

- **Image Color Management** settings
- **True Type Font** settings

Image Color Management

This control lists the available Image Color Management (ICM) options used for printing color graphics. ICM, a set of calculations for color matching, makes it possible for programs to adjust colors before printing so that the color of images on the screen more closely match the color of those images when they are printed.

NOTE: The ICM control is typically set to **ICM Disabled**.

True Type Font

Use **Substitute with Device Font** (the default setting) to print documents that contain TrueType fonts by using equivalent printer fonts. This permits faster printing; however, you might lose special characters that the equivalent printer font does not support. Select **Download as Softfont** to download TrueType fonts for printing instead of using printer fonts.

Document Options

The **Document Options** setting contains the following controls:

- Advanced Printing Features
- Print Optimizations
- Printer Features
- Layout Options

Advanced Printing Features

When the **Advanced Printing Features** setting is **Enabled**, metafile spooling is turned on and **Finishing** tab options such as **Page Order**, **Booklet Layout**, and **Pages per Sheet** are available, depending on your product.

Enhanced metafile spooling is used to greatly reduce the amount of time that elapses between a request to print (initiated by an application) and the return of control to the application by the operating system.

For normal printing, leave the **Advanced Printing Features** setting at the default (**Enabled**). If compatibility problems occur, you can disable the feature. However, some advanced printing features might still appear in the print driver, even though they have been disabled. If you select an advanced printing feature in the print driver that has been disabled on the **Advanced** tab, the feature is automatically re-enabled.

Print Optimizations

The default setting for **Print Optimizations** is **Enabled**. When this feature is enabled and your document contains overlapping text and graphics, the text that is placed on top of a graphic might not print correctly. If the printed output is not correct, you can disable this feature. When this feature is disabled, print optimization-features, such as substituting device fonts for TrueType fonts and scanning for horizontal and vertical rules, are turned off.

Printer Features

The **Printer Features** setting contains the following controls:

- **Print All Text as Black**

  The feature is **Disabled** by default. When **Enabled** is selected, the driver prints all text as black regardless of the original document text color. Color text is printed as black, except for white text, which remains white. (White text is a reliable method of printing reverse typeface against a dark background.) This setting does not affect graphic images on the page, nor does it affect any text that is part of a graphic.

- **Send True Type as Bitmap**

  Send True Type as Bitmap provides an alternative for software programs that have trouble using TrueType fonts for special graphic aspects such as shading, rotation, or slanting. The setting is **Disabled** (off) by default. The TrueType fonts are converted to bitmap soft fonts before downloading. The **Enabled** setting causes the driver to send TrueType fonts to the product as outlines, which retains the standard format (outline) of the fonts.

- **Raster Compression**

  Use the **Raster Compression** feature to select the graphics-compression method:

  - **Automatic**. The software determines the best compression method to use.
  - **Best Quality**. This option forces the software to use a lossless compression method. (Lossless means that no data is lost during compression.)
  - **Maximum Compression**. Where applicable, this option requires the software to always use a lossy compression method (some data is lost).

- **Alternative Letterhead Mode**

  When selected, this option eliminates the need to flip or reload letterhead or preprinted paper in a tray, whether you are printing on one or both sides of the sheet. Load the paper as you would for printing on both sides. If the product tray has an icon that indicates whether to load paper either face-up or face-down, load the paper in opposite orientation of that shown.

  When this option is selected, you must use one of the following options in the **Paper type** setting:

  - Letterhead
  - Preprinted

NOTE: Because **Alternative Letterhead Mode** is available only if the product is equipped with an automatic duplexing unit, the CM4540 MFP and CM4540 MFPn models do not support this option.

Layout Options

The **Layout Options** setting contains the **Page Order** setting.

Page Order specifies the order in which the pages of your document are printed. **Front to Back** prints the document so that page 1 prints first. **Back to Front** prints the document so that page 1 prints last.

NOTE: The page-ordering operation works on whole sheets of paper rather than on individual logical pages. Accordingly, if you set **Pages per Sheet** (on the **Finishing** tab) to be greater than one, the ordering of logical pages on a physical sheet of paper does not change.

Printing Shortcuts tab features

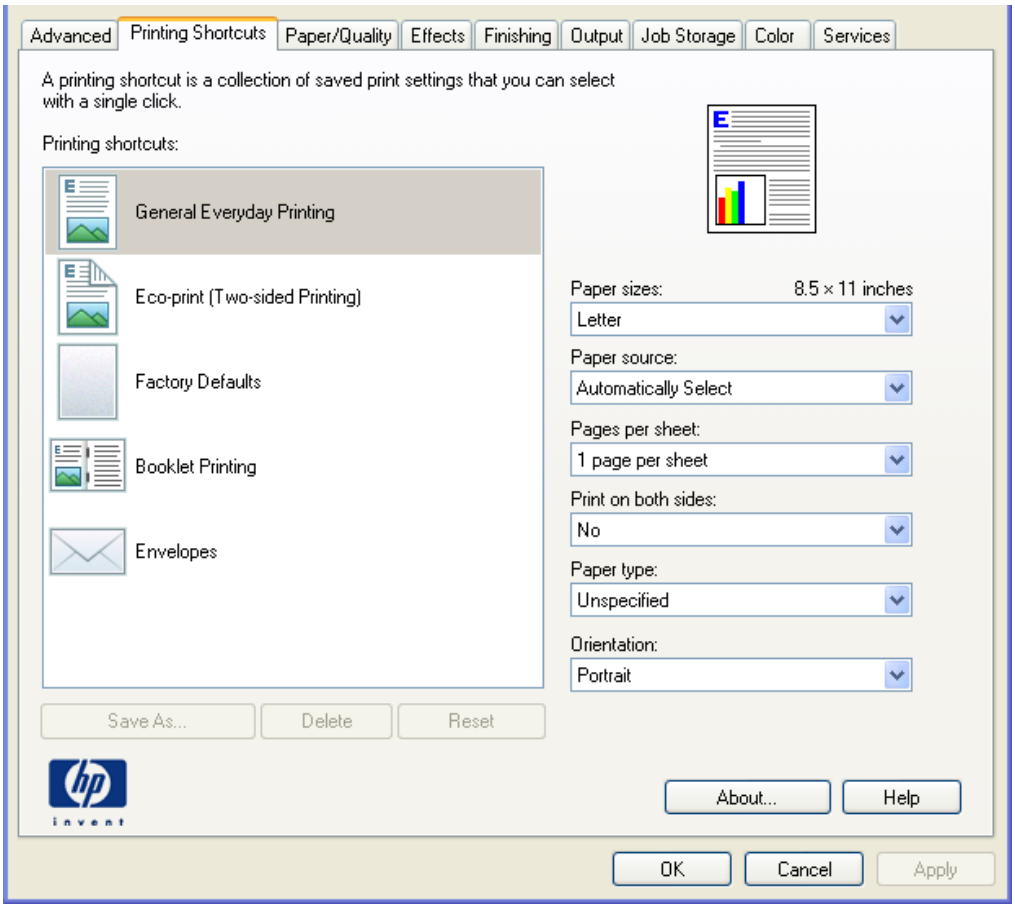
- Use defined printing shortcuts
- Create a custom printing shortcut

NOTE: The **Printing Shortcuts** tab is located on the **Printing Preferences** tab set.

Use the **Printing Shortcuts** tab to store specific combinations of driver settings for easy use.

The following figure shows the **Printing Shortcuts** tab.

Figure 4-3 Printing Shortcuts tab



The **Printing Shortcuts** tab is a new tab that appears on the HP PCL 6 Print Driver beginning with the HP Color LaserJet CM4730 MFP. In previous drivers, the Print Task Quick Sets appeared in most of the driver tabs, and was used to capture commonly used driver settings. Like Quick Sets, the **Printing Shortcuts** tab saves commonly used driver settings under a shortcut name.

- Use defined printing shortcuts
- Create a custom printing shortcut

Use defined printing shortcuts

The **Printing Shortcuts** tab contains the following pre-defined shortcuts:

- General Everyday Printing
- Eco-print (Two-sided Printing)
- Factory Defaults
- Booklet Printing
- Envelopes

General Everyday Printing

When **General Everyday Printing** is selected, the following controls are available:

- **Paper sizes:**
- **Paper source:**
- **Pages per sheet:**
- **Print on both sides:**
- **Paper type:**
- **Orientation:**

When options other than the defaults are selected, the **Save as...** and **Reset** buttons become active.

Click **Save as...** to create a custom printing shortcut.

Click **Reset** to change customized settings back to the default settings.

Paper sizes

The following options are available:

- **Letter** (default)
- **Legal**
- **Executive**
- **Statement**
- **8.5x13**
- **4x6**
- **5x7**
- **5x8**
- **A4**
- **A5**
- **A6**

- **RA4**
- **B5 (JIS)**
- **B6 (JIS)**
- **10x15cm**
- **16k 195x270mm**
- **16k 184x260mm**
- **16k 197x273mm**
- **Japanese Postcard**
- **Double Japan Postcard Rotated**
- **Envelope #9**
- **Envelope #10**
- **Envelope Monarch**
- **Envelope B5**
- **Envelope C5**
- **Envelope C6**
- **Envelope DL**

Paper source

The following options are available:

- **Automatically Select** (default)
- **Printer auto select**
- **Manual Feed in Tray 1**
- **Tray 1**
- **Tray 2**
- **Tray 3** (CM4540 MFP f and fskm; optional on all other HP Color LaserJet Enterprise CM4540 MFP Series models).
- **Tray 4** (CM4540 MFP f and fskm; optional on all other HP Color LaserJet Enterprise CM4540 MFP Series models).
- **Tray 5** (CM4540 MFP f and fskm; optional on all other HP Color LaserJet Enterprise CM4540 MFP Series models).

Pages per sheet

The following options are available:

- **1 page per sheet** (default)
- **2 pages per sheet**
- **4 pages per sheet**
- **6 pages per sheet**
- **9 pages per sheet**
- **16 pages per sheet**

Print on both sides

NOTE: Because the CM4540 MFP and CM4540 MFPn models do not include a duplexing unit, the **Print on both sides** option is available, but duplexing is a manual process.

The following options are available:

- **No** (default)
- **Yes, Flip Over**
- **Yes, Flip Up**

Paper type

The following options are available:

- **Unspecified** (default)
- **Plain**
- **HP LaserJet 90g**
- **Intermediate 85–95g**
- **HP Color Laser Matte 105g**
- **HP Premium Choice Matte 120g**
- **HP Color Laser Brochure Matte 160g**
- **HP Cover Matte 200g**
- **HP Matte Photo 200g**
- **HP Presentation Soft Gloss 120g**
- **HP Professional Soft Gloss 120g**
- **HP Presentation Glossy 130g**
- **HP Professional Laser Glossy 130g**

- **HP Color Laser Brochure Glossy 160g**
- **HP Superior Laser Glossy 160g**
- **HP Color Laser Photo Glossy 220g**
- **Light 60-74g**
- **Mid-Weight 96-110g**
- **Heavy 111-130g**
- **Extra Heavy 131-175g**
- **Extra Heavy Glossy 131–175g**
- **Cardstock 176-220g**
- **Card Glossy 176-220g**
- **Mid-Weight Glossy 96-110g**
- **Heavy Glossy 111-130g**
- **Color Laser Transparency**
- **Labels**
- **Letterhead**
- **Envelope**
- **Preprinted**
- **Prepunched**
- **Colored**
- **Bond**
- **Recycled**
- **Rough**
- **HP Tough Paper**
- **Opaque Film**

Orientation

The following options are available:

- **Portrait** (default)
- **Landscape**

Eco-print (Two-sided Printing)

NOTE: Because the CM4540 MFP and CM4540 MFPn models do not include a duplexing unit, the **Two-sided (Duplex) Printing** option is available, but duplexing is a manual process.

When **Two-sided (Duplex) Printing** is selected, the following options are selected.

- **Paper sizes: Letter**
- **Paper source: Automatically Select**
- **Pages per sheet: 1 page per sheet**
- **Print on both sides: Yes, flip over**
- **Paper type: Unspecified**
- **Orientation: Portrait**

Factory Defaults

When **Factory Defaults** is selected, the customizable options are grayed out, locking in those default options.

The **Factory Defaults** are as follows:

- **Paper sizes: Letter** (This setting changes according to country/region.)
- **Paper source: Automatically select**
- **Pages per sheet: 1 page per sheet**
- **Print on both sides: No**
- **Paper type: Unspecified**
- **Orientation: Portrait**
- **Color options: Color**

Booklet Printing

NOTE: Because the CM4540 MFP and CM4540 MFPn models do not include a duplexing unit.

- **Paper sizes: Letter** (This setting changes according to country/region.)
- **Paper source: Automatically Select**
- **Booklet Layout: Left binding**
- **Paper type: Unspecified**
- **Orientation: Portrait**

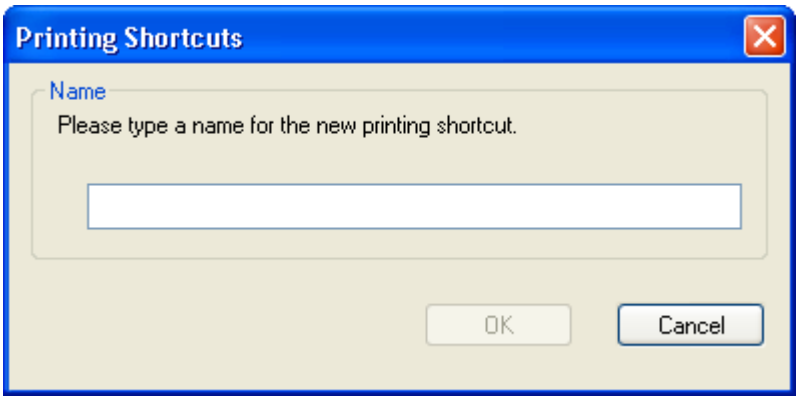
Envelopes

- **Paper sizes: Envelope #10**
- **Paper source: Automatically Select**
- **Paper type: Envelope**
- **Orientation: Portrait**

Create a custom printing shortcut

1. Select **General Everyday Printing** as a base.
2. Select the appropriate print settings on the **Printing Shortcuts** tab or use the settings on any of the **Printing Preferences** tabs.
3. On the **Printing Shortcuts** tab, click **Save As...**. The **Printing Shortcuts** dialog box appears.

Figure 4-4 Printing Shortcuts dialog box



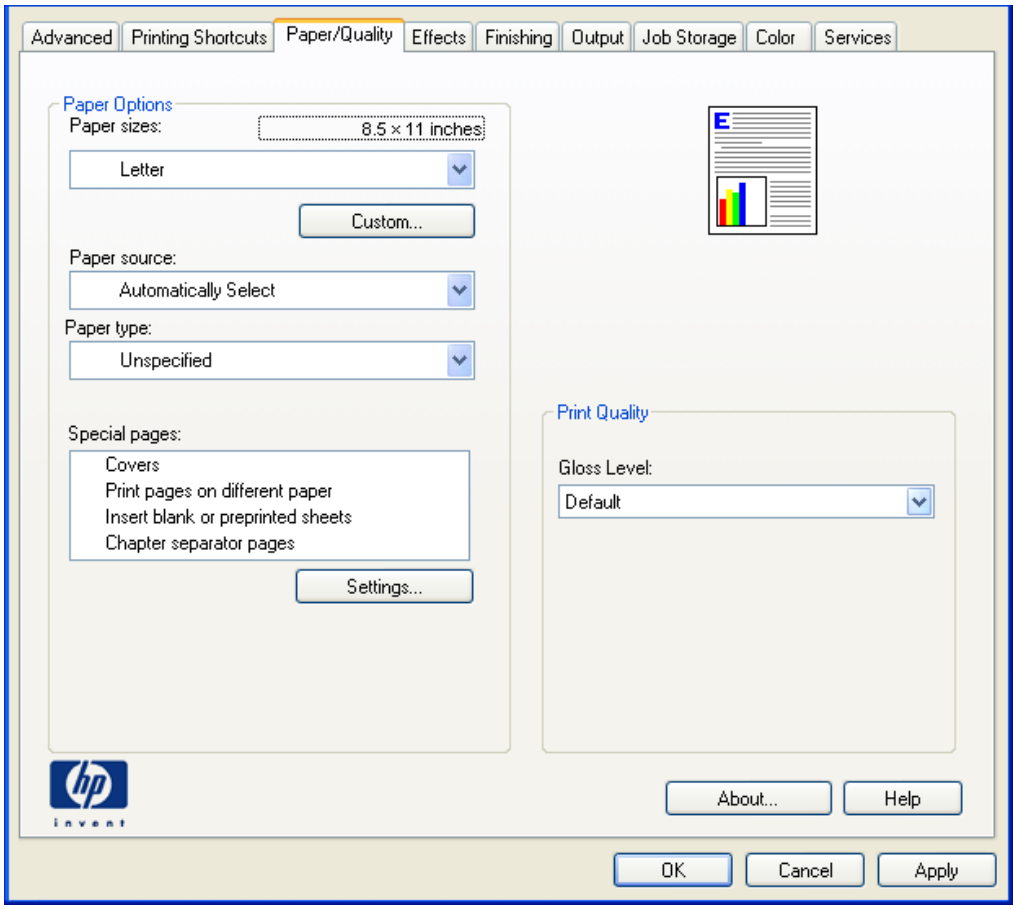
4. Type a name for the custom printing shortcut, and then click **OK**. The custom printing shortcut appears in the **Printing Shortcuts** list.
5. To delete a custom printing shortcut, click the custom shortcut, then click the **Delete** button.

Paper/Quality tab features

NOTE: The **Paper/Quality** tab is located on the **Printing Preferences** tab set.

Use the **Paper/Quality** tab to specify paper size, type, and source. You can also use this tab to specify different paper selections for the front cover, first page, other pages, last page, and back cover of the document. The following figure shows the **Paper/Quality** tab.

Figure 4-5 Paper/Quality tab



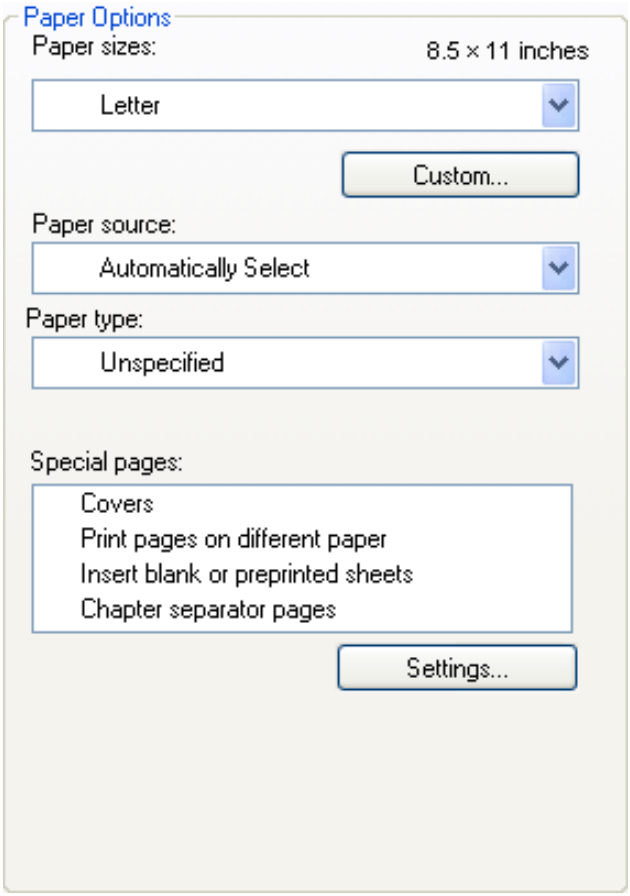
The **Paper/Quality** tab contains the following control sets:

- Paper Options
- Document preview image
- Print Quality

Paper Options

The settings specified in the **Paper Options** group box on the **Paper/Quality** tab apply to all of the pages of the document. The following figure shows the **Paper Options** group box and the selections that are available by default.

Figure 4-6 Paper Options group box



The settings in the **Paper Options** group box are described in the following order:

- Paper sizes
- Custom Paper Size
- Paper source
- Paper type
- Special pages

Paper sizes

The **Paper sizes** setting is a drop-down menu that lists all of the supported paper sizes.

When you move the mouse over the dimensions label, the mouse cursor changes from an arrow to a gloved hand. Click the dimensions label to toggle between English and metric units.

Because paper-size settings in most software programs override driver settings, it is generally best to use the driver to set paper size only when you are printing from software programs that do not include a paper-size setting, such as NotePad, or when you are producing a book or a booklet that does not require different paper sizes.

NOTE: Certain software programs can override the size command and specify different paper sizes within a single document.

When you change the print-driver setting to a paper size that is not currently loaded in the product, a control-panel message appears that prompts you to load the paper size or select another tray.

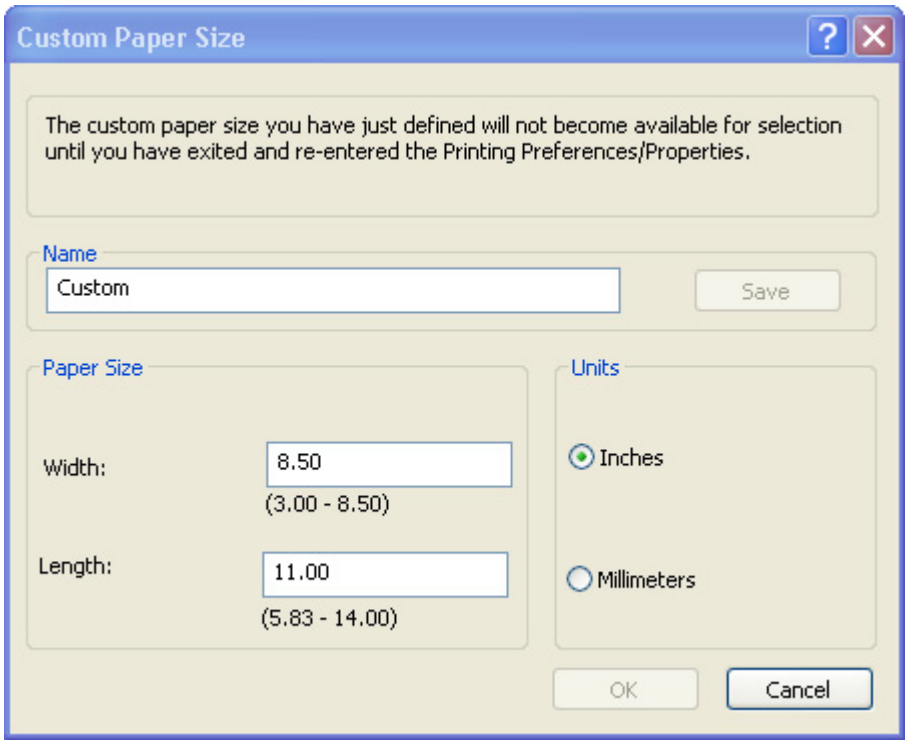
For information about paper sizes, see Media attributes and commands on page 174 .

When the **Settings** under the **Special Pages** section have been changed, the **Paper sizes**, **Paper source**, and **Paper type** menus change also, offering a variety of options. For more information, see Special pages on page 81.

Custom Paper Size

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

Figure 4-7 Custom Paper Size dialog box



NOTE: The HP Color LaserJet Enterprise CM4540 MFP Series product supports custom paper sizes up to 14 inches in length. To use this paper size, set the custom paper size to match the custom paper size that you are using, up to 14 inches in length.

Name

Use the **Name** text box to type a new name for a custom paper size. When you change the name to something other than **Custom**, the **Save** and **OK** buttons become active.

The name that appears in the **Name** text box depends on the following conditions:

- If a saved custom paper size has been selected from the drop-down menu on the **Paper/Quality** tab, then the **Name** text box shows the name of the selected custom paper size.
- If a standard paper size has been selected on the **Paper/Quality** tab, then the **Name** text box shows the default name of **Custom** .
- If a new name has been typed into the **Name** text box for the purpose of saving a new size or renaming an existing size, then that new name will remain in the text box until the new size is saved or the dialog box is closed.

If you type a new name into the **Name** text box, but then do not click **Save**, you can change the width and height values without losing the name. However, if you close the dialog box without clicking **Save**, any unsaved name or size values are lost without warning.

Paper size

The width and height values can be changed by typing numeric strings into the edit boxes in the **Paper Size** group box.

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.

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 minimum value. Width and height entries are validated when the focus has changed.

The resolution of each control is 1 millimeter or 1/10 of an inch, depending on the current measurement units.

Units

To change measurement units, click one of the options in the **Units** group box (either **Inches** or **Millimeters**).

Custom width and height control limits

The minimum paper size for the HP Color LaserJet Enterprise CM4540 MFP Series product is 76.2 x 148 mm (3.0 x 5.83 in) and the maximum is 215.90 x 355.60 mm (8.50 x 14.00 in). The following table summarizes paper size limits for each paper-handling device.

Table 4-1 PCL 6 custom paper sizes

Tray	Dimensions	Minimum	Maximum
Tray 1 (100-sheet multipurpose)	Width	76.2 mm (3.0 in)	216 mm (8.5 in)
	Length	148 mm (5.83 in)	356 mm (14.0 in)
Tray 2 (250-sheet)	Width	148.0 mm (5.83 in)	216 mm (8.5 in)
	Length	210.0 mm (8.27 in)	356 mm (14.0 in)
Tray 3 (500-sheet)	Width	148 mm (5.38 in)	216 mm (8.5 in)
	Length	210 mm (8.27 in)	356 mm (14.0 in)
Tray 4 (500-sheet)	Width	148 mm (5.38 in)	216 mm (8.5 in)
	Length	210 mm (8.27 in)	356 mm (14.0 in)
Tray 5 (500-sheet)	Width	148 mm (5.38 in)	216 mm (8.5 in)
	Length	210 mm (8.27 in)	356 mm (14.0 in)

Paper source

The **Paper source** setting specifies the source tray to use for printing a document. The list of source trays depends on the product accessories that are installed. Any optional source trays that are installed through the **Device Settings** tab also appear here.

The **Paper source** drop-down menu can contain the following options, depending on what has been installed on the product:

- **Automatically select**
- **Printer Auto Select**
- **Manual Feed in Tray 1**
- **Tray 1** (100-sheet multipurpose tray)
- **Tray 2** (250-sheet tray)
- **Tray 3** (500-sheet paper tray)
- **Tray 4** (CM4540 MFPfskm only; optional on all other HP Color LaserJet Enterprise CM4540 MFP Series models).
- **Tray 5** (CM4540 MFPfskm only; optional on all other HP Color LaserJet Enterprise CM4540 MFP Series models).

The default setting is **Automatically Select**. When this setting is selected, the HP Color LaserJet Enterprise CM4540 MFP Series uses the source tray that supports the paper size that you have selected. If you select a source tray other than **Automatically select**, make sure that the correct paper size is loaded in the source tray. For information about paper sources, see Media attributes and commands on page 174 .

Paper type

The **Paper type** drop-down menu shows the first few paper types that the HP Color LaserJet Enterprise CM4540 MFP Series supports and an entry for **More**. Clicking **More** opens the **Type Is** dialog box. Click the **+** next to **Type Is** and its subcategories to view all of the paper types that the product supports, listed in the following categories.

- **Everyday <96g**
  - **Unspecified**
  - **Plain**
  - **HP LaserJet 90g**
  - **Light 60-74g**
  - **Intermediate 85–95g**
  - **Bond**
  - **Recycled**
- **Presentation 96-130g**
  - **HP Color Laser Matte 105g**
  - **HP Premium Choice Matte 120g**
  - **HP Presentation Soft Gloss 120g**
  - **HP Professional Soft Gloss 120g**
  - **HP Presentation Glossy 130g**
  - **HP Professional Laser Glossy 130g**
  - **Mid-Weight 96-110g**
  - **Heavy 111-130g**
  - **Mid-Weight Glossy 96-110g**
  - **Heavy Glossy 111-130g**
- **Brochure 131-175g**
  - **HP Color Laser Brochure Matte 160g**
  - **HP Superior Laser Matte 160g**
  - **HP Color Laser Brochure Glossy 160g**
  - **HP Superior Laser Glossy 160g**
  - **Extra Heavy 131-175g**
  - **Extra Heavy Glossy 131–175g**

- **Photo/Cover 176-220g**
  - **HP Cover Matte 200g**
  - **HP Matte Photo 200g**
  - **Cardstock 176-220g**
  - **Card Glossy 176-220g**
  - **HP Color Laser Photo Glossy 220g**
- **Other**
  - **Color Laser Transparency**
  - **Labels**
  - **Letterhead**
  - **Envelope**
  - **Preprinted**
  - **Prepunched**
  - **Colored**
  - **Rough**
  - **HP Tough Paper**
  - **Opaque Film**

The default setting is **Unspecified**.

No mechanism exists for manually adding custom paper types through the driver. Use HP Web Jetadmin to add custom paper types. Custom types can be added only by using bidirectional communication, so they must already exist in the product when the bidirectional query occurs. If bidirectional communication is enabled, then an updated list of paper types is returned. If bidirectional communication is not enabled, then the driver looks for custom paper types that have been saved from a previous bidirectional communication query, and uses those. Otherwise, no custom paper types are available through the driver.

NOTE: To download a current version of HP Web Jetamin and for the latest list of supported host systems, go to the following Web site:

www.hp.com/go/webjetadmin

If you select a setting other than the default, make sure that the correct paper type is loaded in the tray that you selected in the **Paper source** setting. For more information about paper types, see Media attributes and commands on page 174 .

When you change the print-driver setting to a paper type that is not currently loaded in the product, a control-panel message appears that prompts you to load the paper type or select another tray.

Special pages

To specify special pages to be used, click the **Settings** button under **Special Pages**.

Covers

To use specific cover settings, click **Covers** in the **Special Pages** group box.

Use the **Covers** options to include a blank or preprinted cover on a document, or to include a front/back cover from a source tray that is different from the one used for the remainder of the document.

The following are the **Covers** options:

- **Add a blank or preprinted cover:** Select which cover is customized: **Front**, **Back**, or **Both**.
- **Paper source:** The **Paper source** setting specifies the source tray to use for adding a front and/or back cover to the document. The list of source trays depends on the accessories that are installed. Any optional trays that are installed through the **Device Settings** tab also appear here.
- **Paper type:** The **Paper type** setting specifies the paper size to use for front and/or back covers. Changes made to the **Paper type** setting here override any previous **Paper type** settings using the same paper source.

NOTE: The same size of paper will be used for the entire print job.

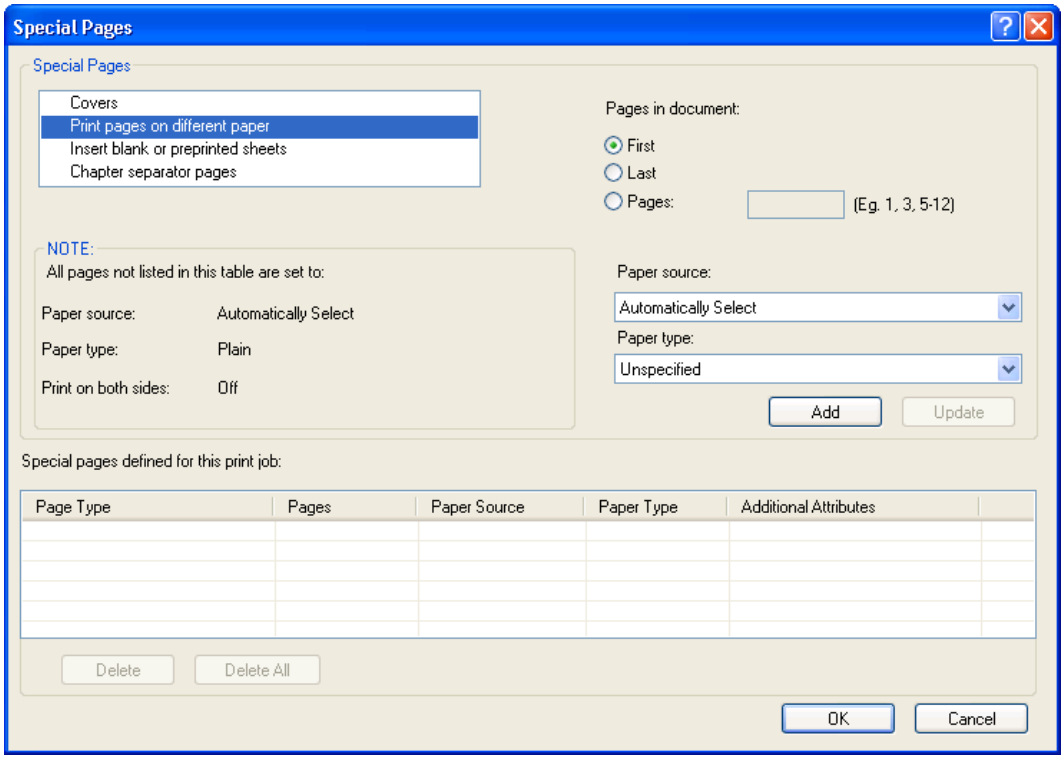
When you change the type and source of the paper and covers, the settings remain configured until you close the software program.

Print pages on different paper

Use the **Print pages on different paper** options to select an alternative paper type or source for the first, last, or other pages of a document.

The following figure shows the **Print pages on different paper** settings and options.

Figure 4-8 Print pages on different paper



The following are the **Print pages on different paper** options:

- **Pages in document.** Select which pages are customized: the **First** page, the **Last** page, or specify a page range with the **Pages** option.
- **Paper source:** The **Paper source** setting specifies the source tray to use for printing a document. The list of source trays depends on the accessories that are installed. Any optional trays that are installed through the **Device Settings** tab also appear here.
- **Paper type:** The **Paper type** drop-down menu shows all of the paper types that the HP Color LaserJet Enterprise CM4540 MFP Series supports.

NOTE: The same type of paper is used for the entire print job.

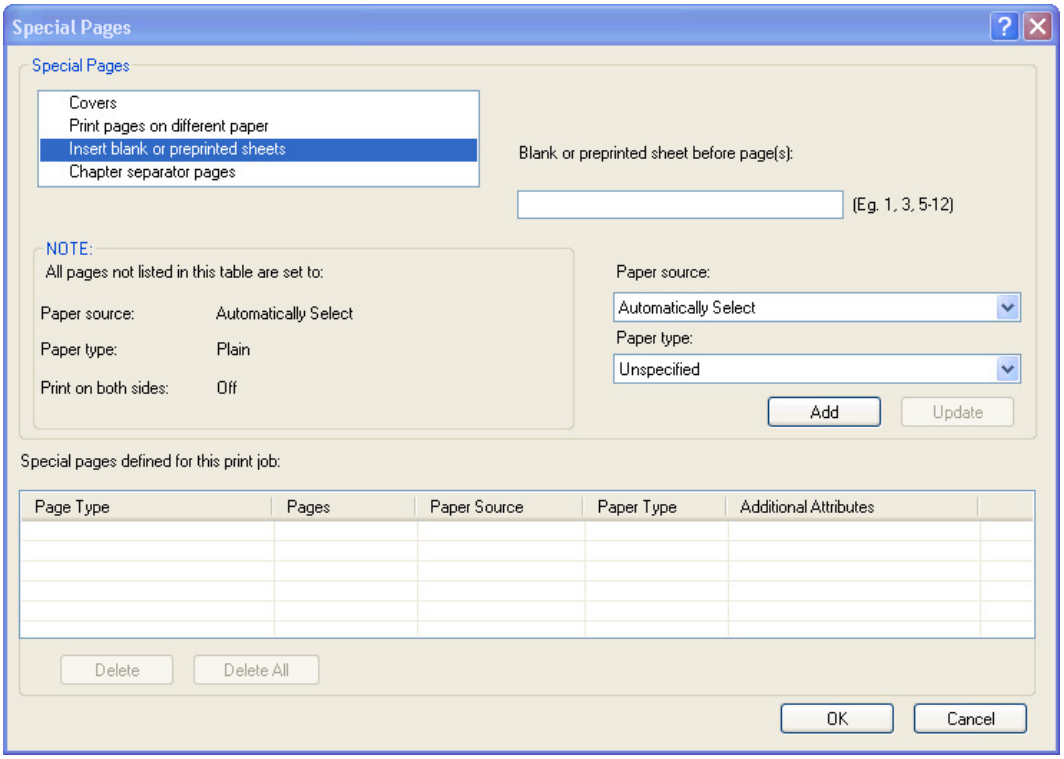
When you change the type and source of the paper and covers, the settings remain configured until you close the software program.

Insert blank or preprinted pages

Use the **Insert blank or preprinted pages** options to designate where to insert preprinted pages or blank pages into a document.

The following figure shows the **Print pages on different paper** settings and options.

Figure 4-9 Insert blank or preprinted pages



The following are the **Insert blank or preprinted pages** options:

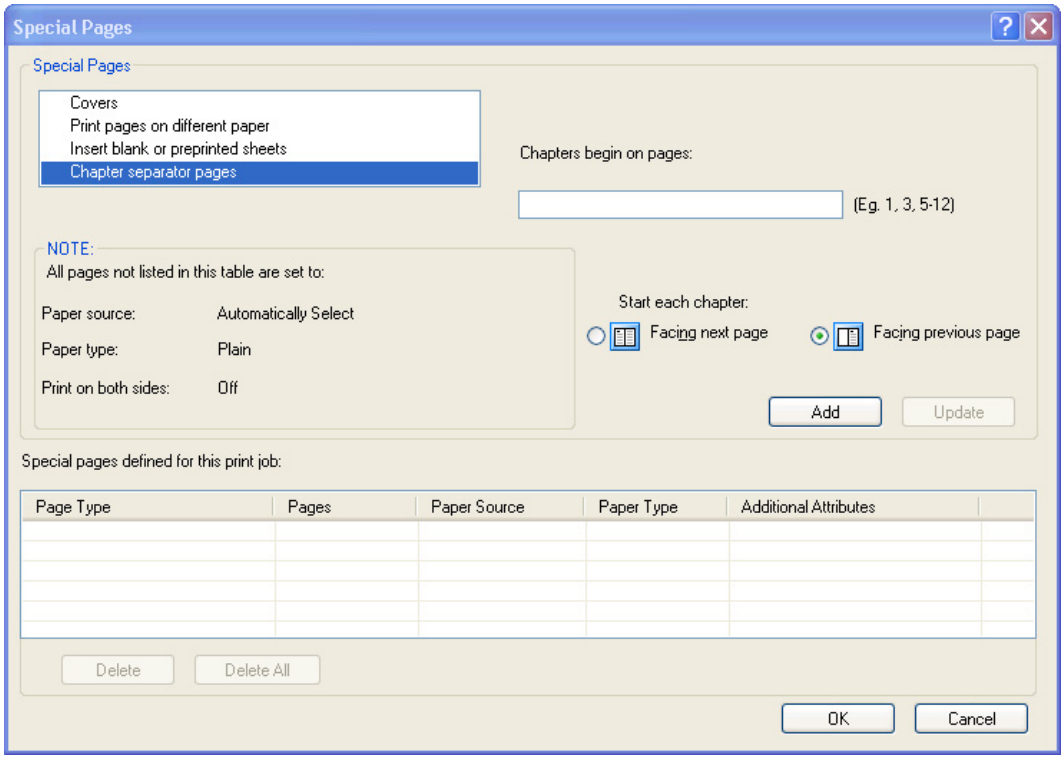
- **Blank or preprinted sheet before page(s):** Specify where in the document you want to insert blank or preprinted pages by designating the page numbers or page ranges that the blank or preprinted pages will precede. For example, to insert a blank or preprinted page on page four, specify **5** in the **Blank or preprinted sheet before page(s):** option.
- **Paper source:** The **Paper source** setting specifies the source tray to use for printing a document. The list of source trays depends on the accessories that are installed. Any optional trays that are installed through the **Device Settings** tab also appear here.
- **Paper type:** The **Paper type** drop-down menu shows all of the paper types that the HP Color LaserJet Enterprise CM4540 MFP Series supports.

Chapter separator pages

Use the **Chapter separator pages** options to designate where the first page of a chapter appears in the document.

The following figure shows the **Chapter separator pages** settings and options.

Figure 4-10 Chapter separator pages



The following are the **Chapter separator pages** options:

- **Chapters begin on pages:** Specify where in the document the chapters begin by designating a page number for each chapter.
- **Start each chapter:** Select **Facing next page** to make each chapter begin on the left side of the document. Select **Facing previous page** to make each chapter begin on the right side of the document.

Document preview image

The document preview image is a line-drawn image of a page that represents graphics and text. The document preview image is always oriented so that the contents of the page are right-side-up. The document preview image appears in the upper-right corner of the following **Printing Preferences** driver tabs:

- **Printing Shortcuts**
- **Paper/Quality**
- **Effects**
- **Finishing**
- **Color**

Switching between tabs does not change the location or appearance of the document preview image. When you move the mouse over the document preview image, the mouse cursor changes from an

arrow to a gloved hand. You can toggle between portrait and landscape page orientation by clicking the image.

Print Quality

The **Print Quality** group box contains the following controls:

- Gloss Level drop-down menu

Gloss Level drop-down menu

The **Gloss Level** drop-down menu contains the following resolution options.

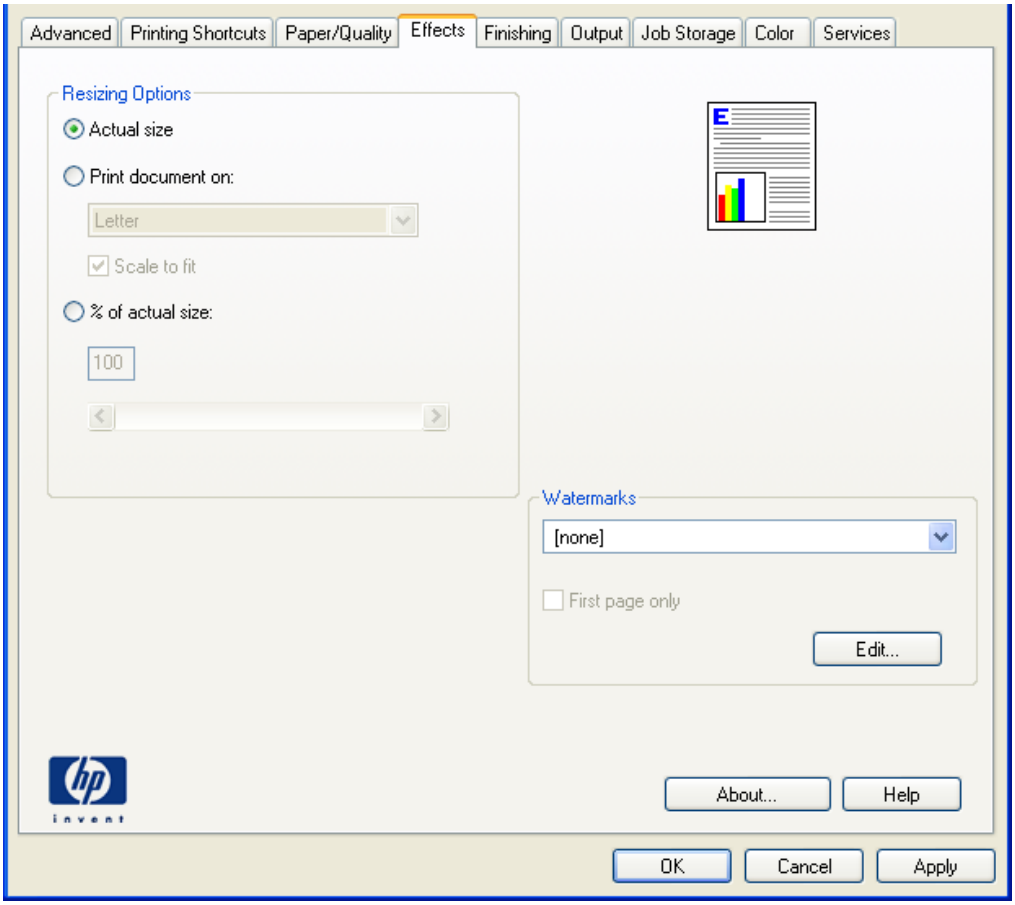
- **Best**. This setting increases gloss output and stability, but slows printing and reduces drum life.
- **Standard**. This setting produces normal gloss output at full speed, without reducing drum life.
- **Device**. This setting is selected by default and uses the setting that is selected on the device control panel.

Effects tab features

NOTE: The **Effects** tab is located on the **Printing Preferences** tab set.

Use the **Effects** tab to create unique paper effects such as scaling and watermarks. The following figure shows the **Effects** tab.

Figure 4-11 Effects tab



The **Effects** tab contains the following controls:

- Resizing Options
- Document preview image
- Watermarks

Resizing Options

The **Resizing Options** group box consists of the following controls:

- **Actual Size** (default)
- **Print Document On**

- **Scale to Fit**
- **% of Actual Size**

Actual Size

Actual Size is the default setting. It prints the document without changing the document size.

Print Document On

Click the **Print Document On** option 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:

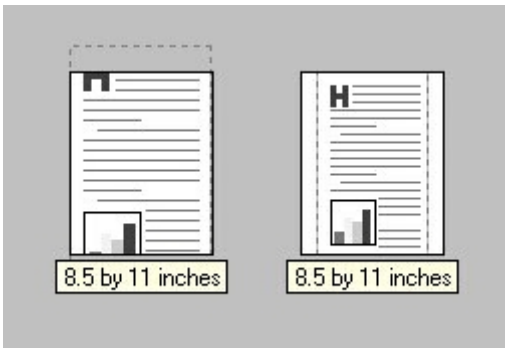
- The **% of Actual Size** value is not 100.
- The **Pages per Sheet** value (on the **Finishing** tab) is not 1.

When **Print Document On** is selected, the drop-down menu shows the paper sizes on which you can print. The list contains all of the standard paper sizes that the selected paper source supports and any custom sizes that you have created. When **Print Document On** is selected, **Scale to Fit** is automatically selected. Clear this check box if you do not want your document reduced or enlarged to fit on the selected paper.

Scale to Fit

The **Scale to Fit** option box 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 figure shows preview images for a document formatted for Legal-size paper with the **Print Document On** check box selected, and the target size specified as **Letter**.

Figure 4-12 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 paper size.

% of Actual Size

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

The limits of the range are from 25% to 400%, and any values outside the range are adjusted 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 upper-left corner of the preview.

The slider bar controls the scale directly. The value in the edit box changes as the slider-bar indicator is dragged, and the document preview image is updated to the new image scale. Each click on the arrows increases or decreases the scale by 1%. Each click on the slider bar affects the scale by 10%.

You cannot achieve an exact value by dragging the slider-bar indicator. Instead, either use the slider-bar indicator to approximate the value that you want and then use the arrows to refine the value, or type the value into the entry box.

The following settings disable **% of Actual Size**:

- **Print Document On** (on the **Effects** tab) is selected
- **Pages per Sheet** (on the **Finishing** tab) is not 1

Document preview image

The document preview image is a line-drawn image of a page that represents graphics and text. The document preview image is always oriented so that the contents of the page are right-side-up. The document preview image appears in the upper-right corner of the following Printing Preferences driver tabs:

- **Printing Shortcuts**
- **Paper/Quality**
- **Effects**
- **Finishing**
- **Color**

Switching between tabs does not change the location or appearance of the document preview image. When you move the mouse over the document preview image, the mouse cursor changes from an arrow to a gloved hand. You can toggle between portrait and landscape page orientation by clicking the image.

Watermarks

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

- **(none)**
- **[Username]**
- **Confidential**
- **Draft**
- **SAMPLE**

The Watermarks feature can be configured using the Driver Configuration Utility.

If the **[Username]** watermark is selected, the driver will use the network username of the logged in user for the watermark.

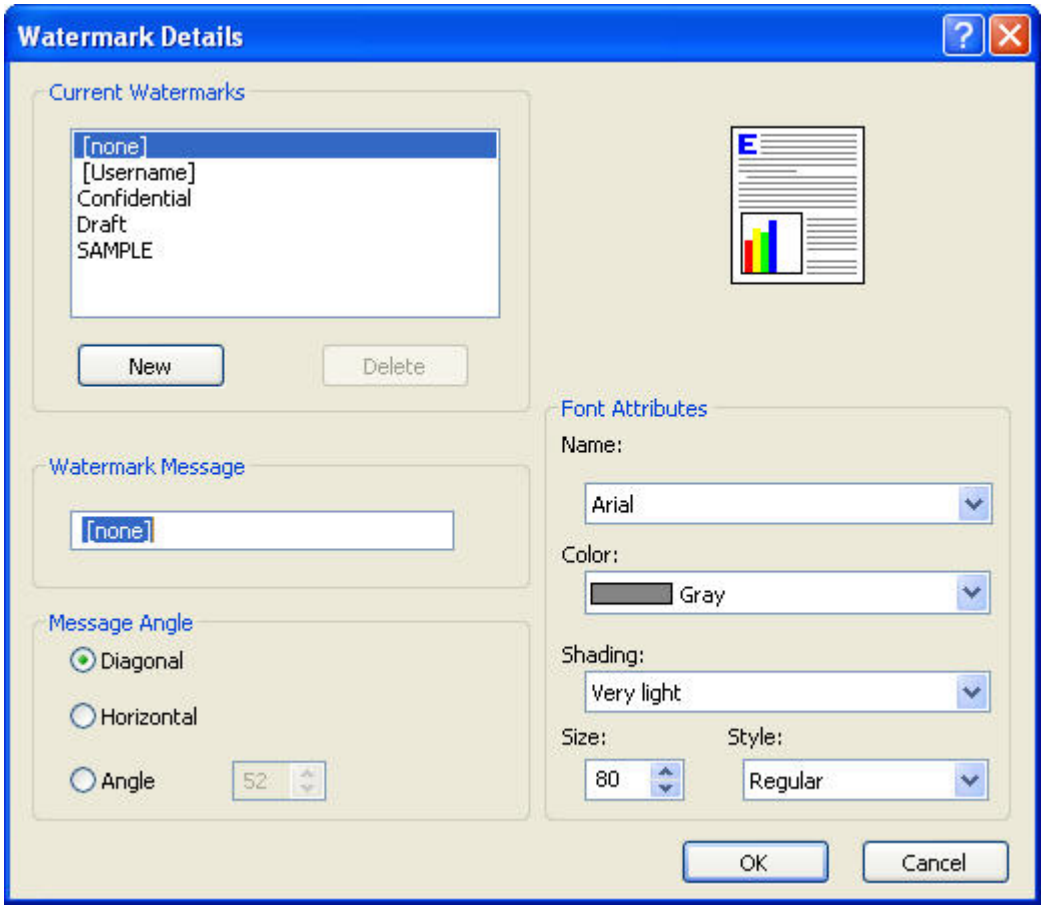
The drop-down menu shows alphabetically sorted watermarks that are currently available on the system, plus the string "(none)," which indicates that no watermark is selected. This is the default setting. Any watermark that is selected from this list appears in the preview image.

When the **First Page Only** check box 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 4-13 Watermark Details dialog box



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 of the changes that are made in the **Watermark Details** dialog box. However, clicking **Cancel** does not cancel all of the changes. If you make changes to a watermark and then select a different watermark or click **New**, all of the changes 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 that are available in the driver and any new watermarks that 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. The name that you type in the **Watermark Message** field appears in the **Current Watermarks** group box in the **Watermark Details** dialog box and in the **Watermarks** group box on the **Effects** tab.

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 then click **Delete**. A warning appears asking whether you are sure you want to delete the selected item. Click **Cancel** if you want to keep the watermark. Click **OK** to delete the selected watermark.

NOTE: You can have no more that 30 watermarks in the **Current Watermarks** list at one time. When you reach the limit of 30 watermarks, the **New** button is disabled.

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 typeface or font 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 (**Draft #3**, **Draft #4**, and so on).

Message Angle

Use the controls in the **Message Angle** group box to print the watermark in different orientations on the page. All settings center the watermark string within the page; the selection of a particular setting affects only the angle of the string placement. The following settings are available:

- **Diagonal**. This is the default setting. Select this setting to place the text along a line that spans the lower-left to upper-right corners of the page.
- **Horizontal**. Select this setting to place the text along a line that spans the mid-left and mid-right edges of the page.
- **Custom**. Select this setting to place the text at the specified angle across the page. Use the numeric spin box to select the angle.

Font Attributes

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

The **Font Attributes** group box contains the following controls:

- **Name**

  The **Name** drop-down menu lists fonts that are currently installed on the system. The default is language-dependent.

- **Color**

  The **Color** drop-down menu contains the following selections:

  - **Gray**
  - **Red**

- **Yellow**
- **Green**
- **Cyan**
- **Blue**
- **Magenta**

- **Shading**

  The default **Shading** setting for new and preset watermarks is **Very Light**. The following range of shades is available from the **Shading** drop-down menu:

  - **Lightest**
  - **Very Light** (default)
  - **Light**
  - **Medium Light**
  - **Medium**
  - **Medium Dark**
  - **Dark**
  - **Very Dark**
  - **Darkest**

  These values represent the intensity of the gray that is used. Select **Light** to produce a lightly saturated gray watermark. Select **Lightest** to produce the lightest shade of watermark. Select **Darkest** to produce a black watermark.

- **Size**

  Font sizes from 1 to 999 points are available from the **Size** menu. The default point size is language-dependent.

- **Style**

  The following settings are available:

  - **Regular**
  - **Bold**
  - **Italic**
  - **Bold Italic**

    The default **Style** setting for new and preset watermarks is **Regular**.

Default watermark settings

The following table shows **Font Attribute** settings for new and preset watermarks.

Table 4-2 Font Attribute settings for new and preset watermarks

Setting	New watermark	Preset watermark
Name	**Arial**	Varies by language
Color	**Gray**	**Gray**
Shading	**Very Light**	**Very Light**
Size	**80**	Varies by language
Style	**Regular**	**Regular**

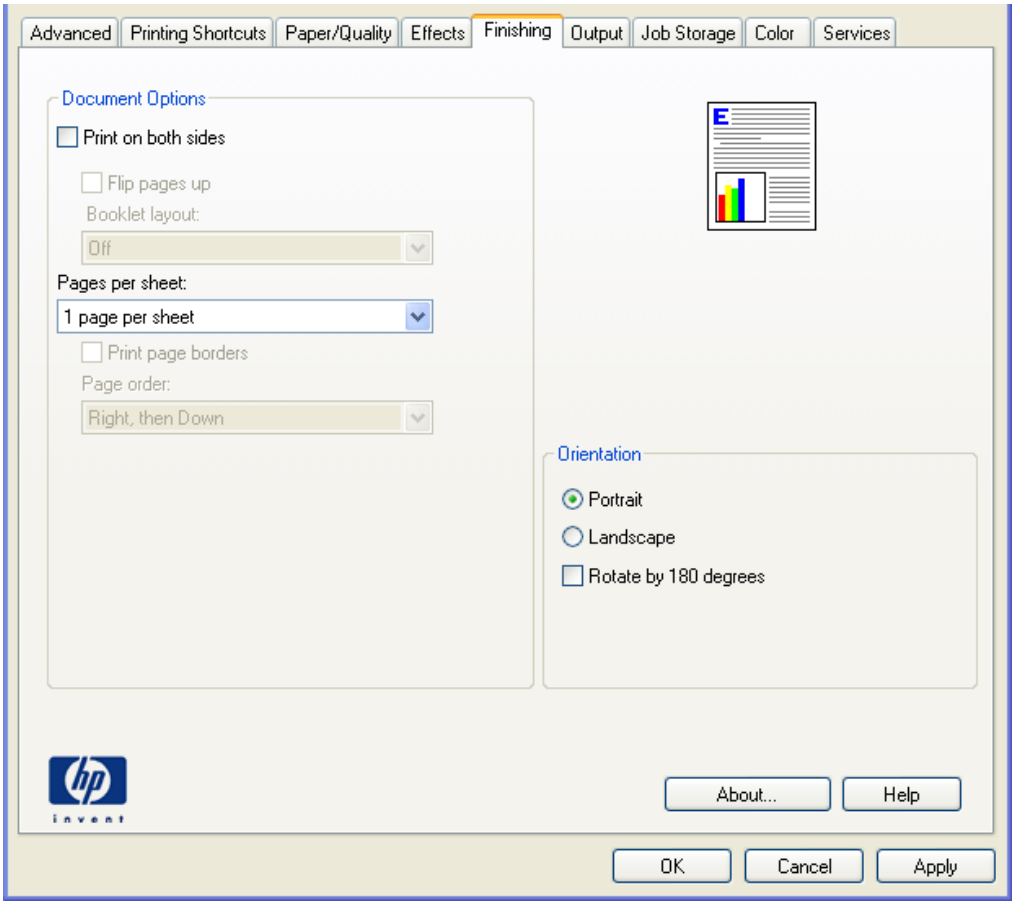
Click **OK** to accept all of the changes that have been made in the **Watermark Details** dialog box. Clicking **Cancel** does not cancel all of the changes. If you make changes to a watermark and then select a different watermark or click **New**, all of the changes are saved, and only the current,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

Finishing tab features

NOTE: The **Finishing** tab is located on the **Printing Preferences** tab set.

Use the **Finishing** tab to print booklets and control the paper output. The following figure shows the **Finishing** tab.

Figure 4-14 Finishing tab



The **Finishing** tab contains the following controls:

- Document Options
- Document preview image
- Orientation

Document Options

The **Document Options** group box contains the following controls:

- Print on Both Sides
- Flip Pages Up
- Booklet Layout

- Pages per Sheet
- Print Page Borders
- Page Order

Print on Both Sides

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

- **Paper type** on the **Paper** tab is set to any paper type *except for* the following types:
  - **Labels**
  - **Color Laser Transparency**
  - **Envelopes**
- **Paper sizes** is set to any paper size *except for* the following sizes:
  - **Statement**
  - **4x6**
  - **5x7**
  - **5x8**
  - **A6**
  - **B6**
  - **10x15cm**
  - **Envelope #10**
  - **Japanese Postcard**
  - **Double Japan Postcard Rotated**
  - **Envelope #9**
  - **Envelope Monarch**
  - **Envelope B5**
  - **Envelope C5**
  - **Envelope C6**
  - **Envelope DL**

Print on both sides automatically

The duplexing unit in the HP Color LaserJet Enterprise CM4540 MFP Series product prints on two sides of a sheet of paper when the **Print on Both Sides** option is specified in the print job. The HP Color LaserJet Enterprise CM4540 MFP Series product comes with a duplexing unit installed in all models:

- CM4540 MFP
- CM4540 MFPf
- CM4540 MFPfskm

These product models support smart duplexing. The smart duplexing feature increases printing performance by preventing one-page print jobs or single-sided pages of a duplexed print job from going through the duplexing unit even when the duplexing feature has been selected in the driver.

All paper types support the smart duplexing feature, except for paper types that cannot be printed on both sides (such as labels, transparencies, and envelopes) and the following paper types:

- Prepunched
- Preprinted
- Letterhead
- Cardstock

When the paper type is set to **Unspecified**, the smart duplexing feature is disabled.

To achieve the best print quality when printing on the second side of the page, the product needs to make adjustments to its print modes. When you select a paper type, you are, in effect, instructing the product to use a group of settings (such as fuser temperature and print speed) to print the paper with the best possible quality. This group of settings is known as print mode. A different print mode is used with each paper type. Print-mode adjustments for the second side of a duplexed page are automatic.

Print on both sides manually

Select **Print on Both Sides (Manually)** on the other HP Color LaserJet Enterprise CM4540 MFP Series product models for paper types that are not available when using the automatic duplexing unit, such as cardstock and thick paper.

Manually printing on the second side of a page is available when you are using the HP PCL 6 driver. If a duplexing unit is installed and manual duplexing is enabled in the driver, the product automatically prints on both sides of paper types that are supported for automatic duplexing (Letter, A4, Legal, and 8.5 x 11 only). For paper types that are *not* supported for automatic duplexing, a Help message appears prompting you to configure the driver settings for manual printing on both sides. Manual printing on both sides does not occur automatically.

Select the paper type that corresponds to the paper that you are using for the print job. The following paper types have a different print modes when you manually print on the second side:

- Plain
- Preprinted
- Letterhead

- Prepunched
- Bond
- Recycled
- Colored
- Rough

NOTE: To make the **Print on Both Sides (Manually)** check box available in the document options, select the **Allow Manual Duplexing** option on the **Device Settings** tab in the print-driver **Properties** tab set. See Installable Options on page 124.

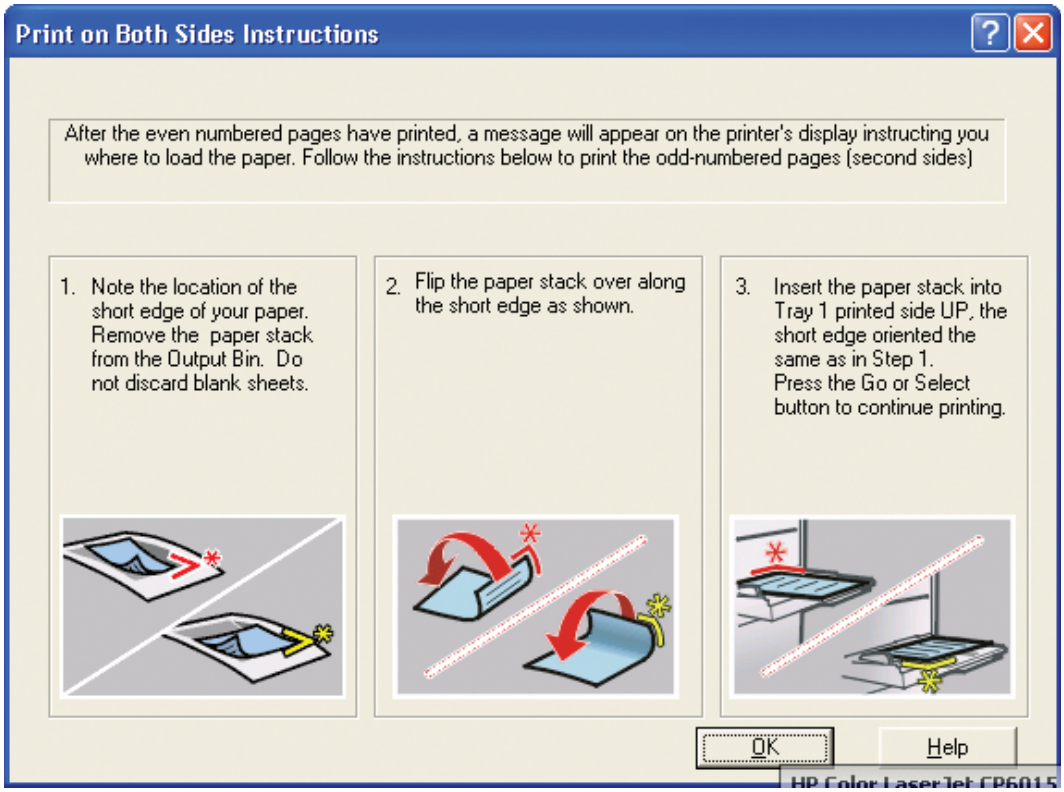
If you want to print on both sides manually while using paper that is supported for automatic duplexing, you must select and apply the **Not Installed** setting on the **Duplex Unit (for 2-Sided Printing)** option on the **Device Settings** tab.

Cardstock paper can be manually printed on the second side, but no change occurs to the print mode. Transparencies and labels should *never* be manually printed on the second side.

To print a multiple-page document, follow these steps:

1. Select the **Print on Both Sides (Manually)** check box.
2. Click **OK**. The even-number pages of the document print.
3. When the control panel shows the **MANUALLY FEED** message, insert the stack of paper (on which the even-number pages have been printed) as indicated in the following figure.

Figure 4-15 Print on Both Sides Instructions dialog box



When you have completed the steps that appear in the dialog box, the second half of the print job prints on the back side of the stack of paper. The driver does not require the program to specifically support odd- and even-page printing, because the driver coordinates this function.

Flip Pages Up

Use the **Flip Pages Up** check box to specify the duplex-binding option. By default, the **Flip Pages Up** check box is not available. It is available only when **Print on Both Sides** is selected. The following table demonstrates the results of selecting this check box, depending on the paper orientation selected on the **Finishing** tab.

Table 4-3 Page orientation

Orientation (Finishing 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 edge 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 occurs 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.

Short-side binding is for print jobs with pages that read by flipping over like the pages of a calendar. Long-side binding is for print jobs with pages that read by turning like the pages of a book.

Booklet Layout

The **Booklet Layout** drop-down menu, visible when **Print on Both Sides** is selected, offers choices that are based on the current paper size. The default setting for the **Booklet Printing** drop-down menu is **Off**. The other settings have the following format, where **[paper size]** depends on the paper size that is set on the **Paper/Quality** tab:

- **Left Binding**
- **Right Binding**

When you select **Left Binding** or **Right Binding**, the document preview image changes to show the location of the binding. If the **Pages per Sheet** setting is on the default setting of 1, it automatically changes to **2 pages per sheet**. If you change the **Pages per Sheet** setting manually to 4, 6, 9, or 16 pages per sheet, the booklet setting is disabled. See Pages per Sheet on page 100 for more information.

Book and Booklet Printing

The HP Color LaserJet Enterprise CM4540 MFP Series supports book and booklet printing.

A book is a print job consisting of at least two pages. It can have a different paper type for the front cover, first page, other pages, last page, or back cover. Use the **Covers** and **Print pages on different paper** settings on the **Paper/Quality** tab to select different paper for the front cover, first page, other pages, and back cover. For more information, see Paper/Quality tab features on page 74.

A booklet is a print job that places two pages on each side of a sheet that can then be folded into a booklet that is half the size of the paper. Use the **Booklet Layout** drop-down menu on the **Finishing** tab to control booklet settings.

Print a booklet

1. Open the driver **Printing Preferences** tab set and click the **Printing Shortcuts** tab.
2. Click to select **Booklet Printing**.

NOTE: Typically, you select the size of each page of the booklet in your software program by clicking **File**, clicking **Page**, and then clicking **Setup**. If your software program does not allow you to set the paper size, use the **Paper sizes** drop-down menu on the **Printing Shortcuts** tab.

3. Select the appropriate settings from the following drop-down menus on the **Printing Shortcuts** tab.
   - **Paper type**
   - **Paper source**
   - **Orientation**
   - **Booklet Layout**
4. Click **OK** to print.

Pages per Sheet

Use the **Pages per Sheet** option to select the number of pages that you want to print on a single sheet of paper. If you choose to print more than one page per sheet, the pages appear smaller and are arranged on the sheet in the order that they would otherwise be printed. The **Pages per Sheet** drop-down menu provides six settings:

- **1 page per sheet** (this is the default)
- **2 pages per sheet**
- **4 pages per sheet**
- **6 pages per sheet**
- **9 pages per sheet**
- **16 pages per sheet**

NOTE: When you select an option other than **2 pages per sheet**, booklet printing is unavailable.

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

Print Page Borders

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

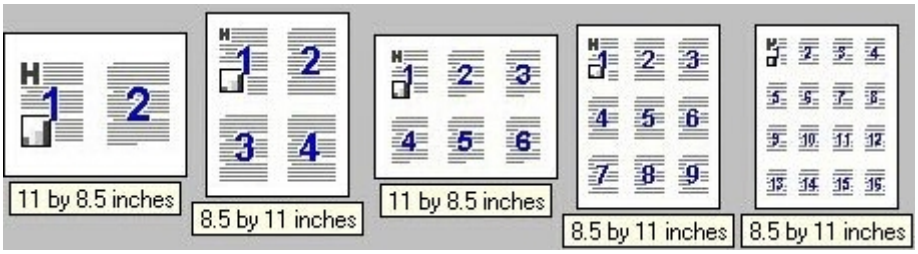
Page Order

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 figure.

Figure 4-16 Page-order preview images



- **2 pages per sheet**
- **4 pages per sheet**
- **6 pages per sheet**
- **9 pages per sheet**
- **16 pages per sheet**

Document preview image

The document preview image is a line-drawn image of a page that represents graphics and text. The document preview image is always oriented so that the contents of the page are right-side-up. The document preview image appears in the upper-right corner of the following **Printing Preferences** driver tabs:

- **Printing Shortcuts**
- **Paper/Quality**
- **Effects**
- **Finishing**
- **Color**

Switching between tabs does not change the location or appearance of the document preview image. When you move the mouse over the document preview image, the mouse cursor changes from an arrow to a gloved hand. You can toggle between portrait and landscape page orientation by clicking the image.

Orientation

Orientation refers to the layout of the image on the page, and does not affect the way that paper feeds into the product. You can specify the orientation of the print job. The three available orientations are portrait, landscape, and rotated. The default orientation is **Portrait**.

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

The **Orientation** group box contains the following options:

- **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°. This setting is useful for printing prepunched paper.

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

Job Storage tab features

NOTE: The **Job Storage** tab is located on the **Printing Preferences** tab set or the **Properties** tab set.

Use the job-storage feature to store print jobs in the HP Color LaserJet Enterprise CM4540 MFP Series product memory or hard disk for printing at a later time.

The **Job Storage** tab appears among the driver tabs only if the job-storage feature is enabled on the **Device Settings** tab. To support job-storage features for complex jobs, or if you often print complex graphics, print postscript (.PS) documents, or use many downloaded fonts, HP recommends that you install additional memory, install a hard disk, or both. Added memory also gives you more flexibility in supporting job-storage features. A minimum total memory of 288 MB is required to use the **Proof and Hold** and **Personal Job** job-storage features. A hard disk is required to use the **Quick Copy** and **Stored Job** job-storage features.

After a hard disk is installed, the driver must be configured to reflect the changes in the product. If bidirectional communication is enabled in your environment, the Update Now feature can be used to update the drivers. For more information, see Automatic Configuration on page 124.

To configure the drivers manually after installing a hard disk, follow these steps:

1. In Windows Vista and Windows 7, click the **Start** button, click **Control Panel**, click **Hardware and Sound**, and then click **Printers**.

   In Windows XP, Windows Server 2003, and Windows Server 2008, click **Start**, click **Settings**, and then click **Printers and Faxes**.

2. Right-click the product name.

3. Click **Properties**.

4. Click the **Device Settings** tab.

5. Select **Installed** for the **Printer Hard Disk** under **Installable Options**, and then select **Installed** in the drop-down menu.

6. Click **OK** to make the printer hard disk and job-storage features available.

You can disable the job-storage feature while leaving the printer hard disk enabled. To disable the job-storage feature, follow these steps:

1. In Windows Vista and Windows 7, click the **Start** button, click **Control Panel**, click **Hardware and Sound**, and then click **Printers**.

   In Windows XP, Windows Server 2003, and Windows Server 2008, click **Start**, click **Settings**, and then click **Printers and Faxes**.

2. Right-click the product name.

3. Click **Properties**.

4. Click the **Device Settings** tab.

5. Select **Job Storage**.
6. Select **Disabled** in the **Change 'Job Storage' Setting** dialog box that appears.

If the job-storage feature is enabled (without installing a hard disk but with at least 288 MB of total memory), two **Job Storage Mode** settings are available on the **Job Storage** tab:

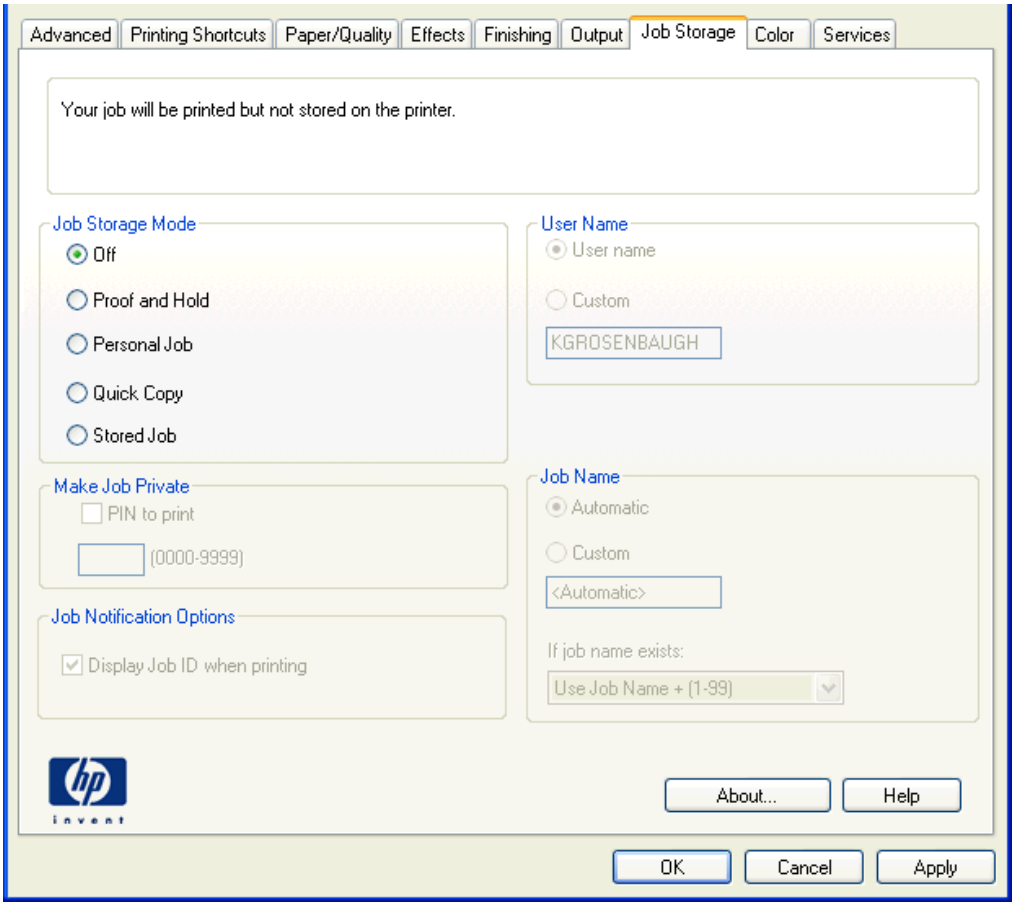
- **Proof and Hold**
- **Personal Job**

Two additional **Job Storage Mode** settings become available on the **Job Storage** tab if a hard disk is installed:

- **Quick Copy**
- **Stored Job**

The following figure shows the **Job Storage** tab.

Figure 4-17 Job Storage tab



The **Job Storage** tab contains the following controls:

NOTE: Information about using the job-storage feature when printing is also provided here.

- Status group box

- Job Storage Mode
- PIN to print
- Job Notification Options
- User Name
- Job Name
- Use job-storage features when printing

Status group box

The unlabeled group box on the **Job Storage** tab contains a status message about the destination of a print job. The status information changes depending on the selections that are made on the **Job Storage** tab.

Job Storage Mode

Use the **Job Storage Mode** options on the HP Color LaserJet Enterprise CM4540 MFP Series product to store documents at the product and then control their printing at the product control panel.

The HP Color LaserJet Enterprise CM4540 MFP Series product offers the following **Job Storage Mode** options:

- **Off**
- **Proof and Hold**
- **Personal Job**
- **Quick Copy**
- **Stored Job**

These options and the settings that control them are described below.

Off

When selected, this option turns the job-storage feature off (it is disabled), which means that the print job will not be stored in the product.

Proof and Hold

To use the **Proof and Hold** option, the job-storage feature must be enabled.

When selected, this option stores the print job in 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 at the control panel. You can set the number of proof-and-hold print jobs that can be stored in the product at the control panel.

After it is released for printing, the proof-and-hold job is immediately deleted from the product. If more copies are needed, you must reprint the job from the software program. If you send a second proof-

and-hold job to the product with the same user name and job name as an existing proof-and-hold job (and you have not released the original job for printing), the job overwrites the existing job. Proof-and-hold jobs are deleted if you turn off the product.

NOTE: The product configuration can be set to hold a maximum of 50 quick-copy or proof-and-hold jobs. The number is set at the product control panel in the **CONFIGURATION** menu, and the default is 32. When this preset limit is reached, the new document overwrites the oldest held document. Also, a document that has the same user name and job name as one that is already stored on the printer hard disk will overwrite the existing document.

Personal Job

To use the **Personal Job** option, the job-storage feature must be enabled.

When you select **Personal Job**, the print job is sent to the product, but is not printed until you request the job at the product control panel. Selecting **Personal Job** activates the **PIN** group box. If **PIN to print** is selected, the print job can be printed only after you type the correct PIN at the control panel. After the job is printed, the job is immediately deleted from the product. 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.

The Private Job/PIN coupling has a PIN restriction of four ASCII numeric characters (0 though 9). 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 the PIN contains exactly four digits. The default initialized value for the PIN is 0000 for **Personal Job**.

After it is released for printing, the private job is immediately deleted from the product. If more copies are needed, you must reprint the job from the software program. If you send a second private job that has the same user name and job name as an existing private job (and you have not released the original job for printing), the job overwrites the existing job, regardless of the PIN. Private jobs are deleted if you turn off the product.

Quick Copy

To use the **Quick Copy** option, a printer hard disk must be installed, and the job-storage feature must be enabled.

When you select **Quick Copy**, the entire print job prints and a copy of the print job is stored on the product, after which you can print additional copies of the print job at the product control panel. The number of quick-copy print jobs that can be stored in the product is set by using the product control panel.

NOTE: The product configuration can be set to hold a maximum of 50 quick-copy or proof-and-hold jobs. The number is set at the product control panel in the **CONFIGURATION** menu, and the default is 32. When this preset limit is reached, the new document overwrites the oldest held document. Also, a document that has the same user name and job name as one that is already stored on the printer hard disk will overwrite the existing document. **Quick Copy** jobs are deleted if you turn off the product.

Stored Job

To use the **Stored Job** option, a hard disk must be installed on the product and the job-storage feature must be enabled.

Use the **Stored Job** option to send a print job directly to the printer hard disk without printing it. The print job is stored in the product as if it is an electronic file cabinet. After the print job is stored on the printer hard disk, you can print the job at the product control panel.

The job remains stored in the product until it is deleted or overwritten by a document that has the same user name and job name. Stored jobs remain on the printer hard disk when the product is turned off. Use this feature for forms and other common or shared documents.

A stored job can be managed in two ways: as either a private or a public job.

Select the **PIN to Print** check box to set the private mode. Use a private stored job to send a print job directly to the product, which can then be printed only after you type a PIN up to 4 digits long at the product control panel. (You can set the PIN in the **PIN** group box.)

After the job is printed, the job remains in the product and can be printed again at the product control panel.

The box labeled **PIN** is usually inactive. The **PIN to Print** option becomes available when you select **Stored Job**. If you select the **PIN to Print** box, you must type a PIN to make the stored job private.

NOTE: A *private* stored job is not the same as a *personal* job. *Personal* jobs are deleted from the product after they are printed. *Private stored* jobs are retained in the product after printing, but require that a PIN be typed each time they are printed. A printer hard disk is required for *Private stored* jobs.

PIN to print

PIN to print check box is available when **Stored Job** is selected. Select the **PIN to Print** box, then type a 4-digit PIN number in the box provided. The stored job is sent to the product, where you must enter the 4-digit PIN on the control panel to retrieve the personal job.

The **PIN to Print** check box is available when **Personal Job** is selected. Select the **PIN to Print** option, and then type a 4-digit PIN number in the box provided. The personal job is sent to the product, where you must type the 4-digit PIN on the control panel to retrieve the stored job.

Job Notification Options

Clicking a **Job Storage Mode** selection causes the **User Name** and **Job Name** options to become available. The **Display Job ID when printing** check box is selected by default. The **Display Job ID when printing** option causes a pop-up dialog box to appear when the job-storage print job is printed. The dialog box shows the user name and job name that are associated with the stored print job, as well as the printer name, port, and location.

User Name

Use the **User Name** settings to help identify the job at the product control panel. The following are the **User Name** settings:

- **User Name.** This option associates your Windows user name with the stored print job. The Windows user name automatically appears in the text field below the **User Name** options.
- **Custom.** Use this option to type a custom name for the stored print job. When you click **Custom**, the text field below the option becomes available. The **User Name** field can contain no more than 16 characters, and is limited to A through Z and 0 through 9 because the name appears on the product control-panel display. If you try to type a lowercase character, it automatically shifts to uppercase. If you try to type a character in an ASCII code of fewer than 32 or more than 126 characters, the character is removed from the edit field, along with all of the characters that follow it. If you try to type more than 16 characters, any character beyond 16 is truncated.

Job Name

Use the **Job Name** options to specify a name to identify the job at the product control panel. The following are the **Job Name** settings:

- **<Automatic>** This option, which is the default selection, automatically generates the job name that is associated with the stored print job. The file name of the print job is used if it is available to the print driver. Otherwise, the software program name or a time stamp is used for the job name.
- **Custom**. Use this to type a custom job name for the stored print job. When you click **Custom**, the text field below the option becomes available. In those languages for which **<Automatic>** 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 product control-panel display.

The **Job Name** field can contain no more than 16 characters, and is limited to A through Z (uppercase or lowercase) and 0 through 9 so that the name can appear on the product control-panel display. If you try to type a character in an ASCII code of fewer than 32 or more than 126 characters, the character is removed from the edit field, along with all of the 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 as soon as the focus is removed from the control (that is, when the Tab key is pressed or another control is selected), an empty string is replaced with **<Automatic>**. 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 product control-panel display.

If Job Name Exists. When you store a print job, you can create a print-job name or the product software can assign one automatically. If a print job with the same name already exists, the new print job will overwrite the existing print job. To eliminate the chances of a new print job overwriting an old print job because both have the same name, select **Use Job Name + (1-99)**. After you create the print job name, or when one is created automatically, the product software assigns a number between 1 and 99 to the end of the print job name to make the name unique. Select **Replace Existing File** if you always want the product software to overwrite an existing print job with the same print job name.

Use job-storage features when printing

To use job-storage features when printing, follow these steps:

1. Click **File**, and then click **Print** from the software program. The **Print** dialog box appears.

   NOTE: Clicking the print icon in the software program toolbar prints the job without using job-storage features.

2. Click **Properties**. The **Properties** dialog box appears.
3. Click the **Job Storage** tab.
4. Select the job-storage options by clicking the appropriate option button, and then complete any required fields.
5. Click **OK**.

Release a job-storage print job

After you send a print job that uses the job-storage feature, you can release the job to print from the product control panel.

1. Press the Home button to open the menus.
2. Press the up arrow ▲ or the down arrow ▼ until **Open from Device Memory** is highlighted on the product control panel, and then press OK.
3. Press the up arrow ▲ or the down arrow ▼ to scroll to your user name, and then press OK.
4. Press the up arrow ▲ or the down arrow ▼ to scroll to the job name, and then press OK.
5. Press the up arrow ▲ or the down arrow ▼ until **PRINT** is highlighted on the product control panel, and then press OK.
6. Press OK.
7. If a PIN number is assigned to the job, press the up arrow ▲ or the down arrow ▼ to select the first digit of the PIN, and then press OK. The number in the product control-panel display changes to an asterisk. Repeat this step for each of the remaining three digits of the PIN number.

   If no PIN number is assigned to the job, continue with the next step.
8. Press the up arrow ▲ or the down arrow ▼ to select the number of copies to print.
9. Press OK to print the job.

Delete a job-storage print job

Sometimes it is necessary to delete a print job from the printer hard disk. You can do this from the product control panel.

1. Press the Home button to open the menus.
2. Press the up arrow ▲ or the down arrow ▼ until **Open from Device Memory** is highlighted on the product control panel, and then press OK.
3. Press the up arrow ▲ or the down arrow ▼ to scroll to your user name, and then press OK.
4. Press the up arrow ▲ or the down arrow ▼ to scroll to the job name, and then press OK.
5. Press the up arrow ▲ or the down arrow ▼ until **DELETE** is highlighted on the product control panel, and then press OK.
6. Press OK.
7. If a PIN number is assigned to the job, press the up arrow ▲ or the down arrow ▼ to select the first digit of the PIN, and then press OK. The number in the product control-panel display changes to an asterisk. Repeat this step for each of the remaining three digits of the PIN number.

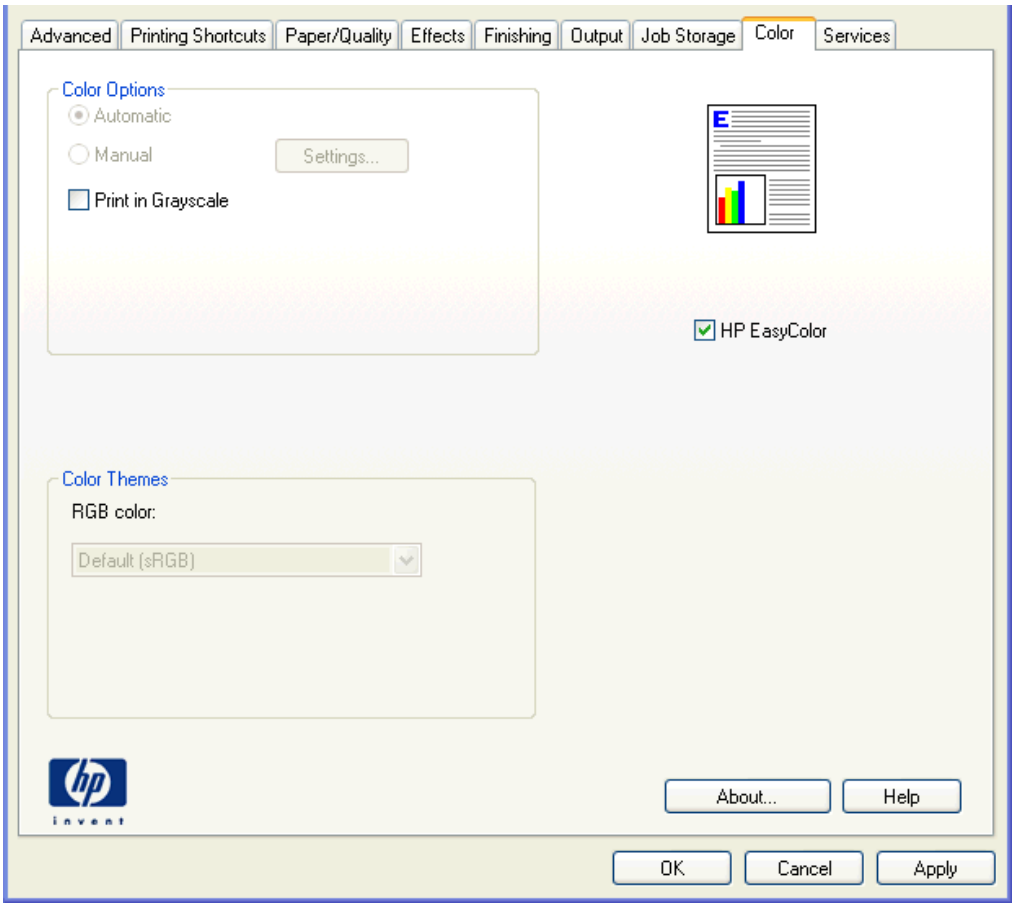
   If no PIN number is assigned to the job, continue with the next step.
8. Press OK to delete the job.

Color tab features

NOTE: The **Color** tab is located on the **Printing Preferences** tab set.

Use the **Color** tab to specify predefined color-option settings or to fine-tune the color treatments and halftoning. Color output can also be converted to grayscale. The **Color** tab is shown in the following figure.

Figure 4-18 Color tab



The **Color** tab contains the following sets of controls:

- Color Options
- Color Themes
- Document preview image
- HP EasyColor

Color Options

Use the **Color Options** group box to adjust the independent color controls. The settings affect the print job color rendering and print quality. The **Color Options** group box contains the following controls:

- **Automatic** option (default)
- **Manual** option
- **Settings** button (Click this button to open the **Color Settings** dialog box.)
- **Print in Grayscale** check box

Automatic

Use the **Automatic** option for color settings that automatically fine-tune the printed output. The **Automatic** color settings provide high-quality output while maintaining product performance for most color printing needs.

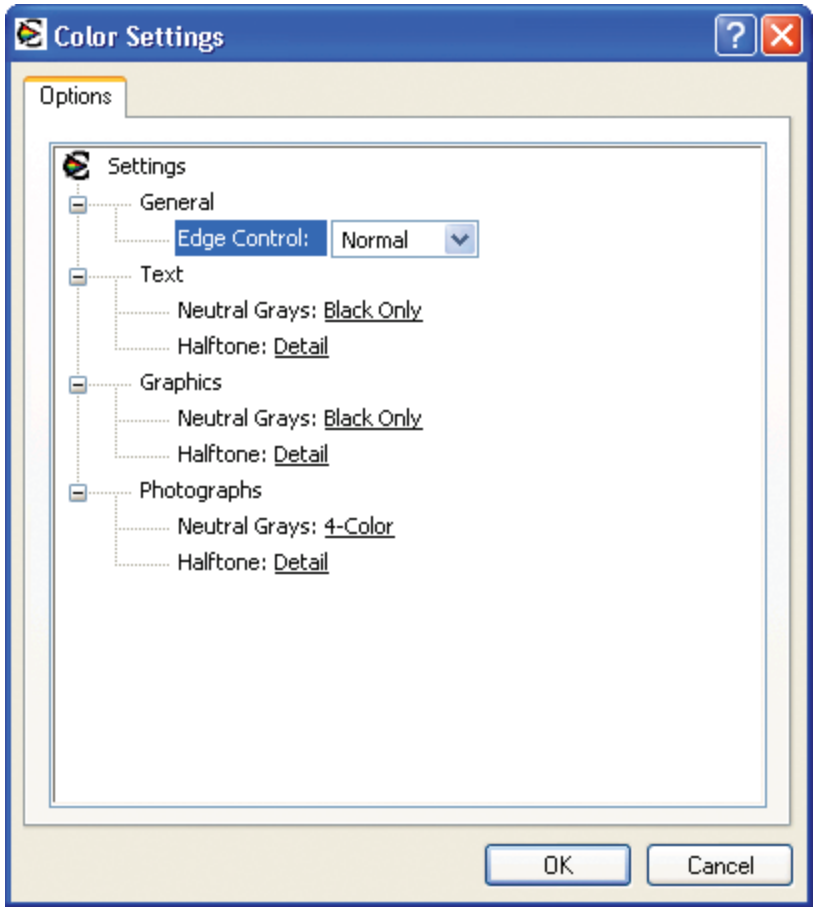
Manual

NOTE: To change color settings, first de-select the **HP EasyColor** option.

To change the color settings, select the **Manual** option, and then click **Settings**. The **Color Settings** dialog box appears.

To change the settings, make your selections by using the drop-down menus in the **Color Settings** dialog box, and then click **OK**. The following figure shows the **Color Settings** dialog box with "Custom" settings.

Figure 4-19 Color Settings dialog box



The **Color Settings** dialog box contains the following controls:

- **General**
  - **Edge Control**
- **Text**
  - **Neutral Grays**
  - **Halftone**
- **Graphics**
  - **Neutral Grays**
  - **Halftone**
- **Photographs**
  - **Neutral Grays**
  - **Halftone**

General

Use the **General** setting group to control **Edge Control** settings for all color printing.

Edge Control determines how edges are rendered. **Edge Control** consists of three components:

- Adaptive Halftoning, which increases edge sharpness
- Trapping, which reduces the effect of color plane misregistration by slightly overlapping the edges of adjacent objects
- Color Resolution Enhancement Technology (C-REt), which increases the apparent resolution by placing each dot for the smoothest edges

The **Edge Control** option offers four settings:

- **Off.** The **Off** setting turns Trapping, Adaptive Halftoning, and C-REt to **Off**.
- **Light.** The **Light** setting provides minimal trapping. Adaptive Halftoning is set to **On** and C-REt is set to **On**.
- **Normal.** The **Normal** setting provides the default trapping settings. Adaptive Halftoning is set to **On**, and C-REt is set to **On**.
- **Maximum.** The **Maximum** setting provides the most trapping. Adaptive Halftoning is set to **On**, and C-REt is set to **On**.

Neutral Grays

The **Neutral Grays** drop-down menu controls the selection of a device-dependent color table that is embedded in the product firmware. You can adjust the **Neutral Grays** setting independently for text, graphics, or photographs. The following options are available:

- **Black Only**. This option generates neutral colors (grays and black) by using only black toner. This option guarantees that neutral colors do not have a color cast. **Black Only** is the default setting for the **Text** and **Graphics** components.
- **4-Color**. This option generates neutral colors by combining all four colors of toner, which produces smoother gradients and transitions to non-neutral colors. It also produces the darkest possible black. **4-Color** is the default setting for **Photographs**.

Halftone

The **Halftone** setting controls the selection of a product-dependent halftone algorithm that is embedded in the product firmware. Halftoning is a method by which the product mixes the four primary colors (cyan, magenta, yellow, and black) in varying proportions to create the appearance of many colors. The **Halftone** options affect the resolution and clarity of the color on the printed page. You can select **Halftone** settings for text, graphics, and photographs independently.

The following Halftone options are available:

- **Detail**. This is the default option; it is useful for text and graphics that require sharp distinctions among lines or colors, or for images that contain a pattern or a high level of detail. Select this option for sharp edges and detail.
- **Smooth**. This option provides better results for large, solid-filled print areas. It also enhances photographs by smoothing out fine color gradations. Select this option for uniform and smooth area fills.

Color Themes

NOTE: To change Color Themes, first de-select the **HP EasyColor** option.

The **Color Themes** group box contains the following **RGB color** options, which determines how colors are rendered:

- Default (sRGB)
- Photo (sRGB)
- Photo (Adobe RGB 1998)
- Vivid (sRGB)
- None
- Custom Profile

Default (sRGB)

Select **Default (sRGB)** for most printing needs. This setting instructs the product to interpret RGB color as sRGB, which is the accepted standard of Microsoft and the World Wide Web Consortium (W3C). Colors are matched to optimize the RGB colors on the screen and to provide vivid images and graphics.

Photo (sRGB)

Select **Photo (sRGB)** to enhance documents in which the content is mainly bitmap images, such as .GIF or .eps files. This setting instructs the product to use the best color matching for rendering sRGB bitmap images. This setting affects only raster data; it has no effect on text or vector-based graphics. Using glossy paper in combination with this setting provides the maximum enhancement.

Photo (Adobe RGB 1998)

Select **Photo (AdobeRGB 1998)** for documents that use the AdobeRGB color space rather than sRGB. For example, some digital cameras capture images in Adobe RBG, and documents that are produced with Adobe PhotoShop use the Adobe RGB color space. When printing from a professional software program that uses Adobe RGB, it is important that you turn off the color management in the software program and allow the product software to manage the color space.

Vivid (sRGB)

The **Vivid (sRGB)** feature instructs the printer to increase the color saturation in the midtones. Less colorful objects are rendered more colorfully. This value is recommended for printing business graphics.

None

Select **None** to instruct the printer to print RGB data in raw device mode. To render documents properly when this option is selected, you must manage color in the program in which you are working or in the operating system.

⚠ **CAUTION:** Use this option only if you are familiar with the procedures for managing color in the software program or in the operating system.

Custom Profile

Select **Custom Profile** when you want to duplicate the printed output from other products or for using special effects. This setting instructs the product to use a custom profile to emulate color output from another product by modifying how color is rendered.

The default custom profile is an emulation of the color table used on the HP Color LaserJet 4650 product. The product holds only one custom profile at a time, so when you download and install another color table, it erases the default color table and installs the new one.

You can download custom profiles from the following Web site:

www.hp.com

Document preview image

The document preview image is a line-drawn image of a page that represents graphics and text. The document preview image is always oriented so that the contents of the page are right-side-up. The document preview image appears in the upper-right corner of the following **Printing Preferences** driver tabs:

- **Printing Shortcuts**
- **Paper/Quality**
- **Effects**
- **Finishing**
- **Color**

Switching between tabs does not change the location or appearance of the document preview image. When you move the mouse over the document preview image, the mouse cursor changes from an arrow to a gloved hand. You can toggle between portrait and landscape page orientation by clicking the image.

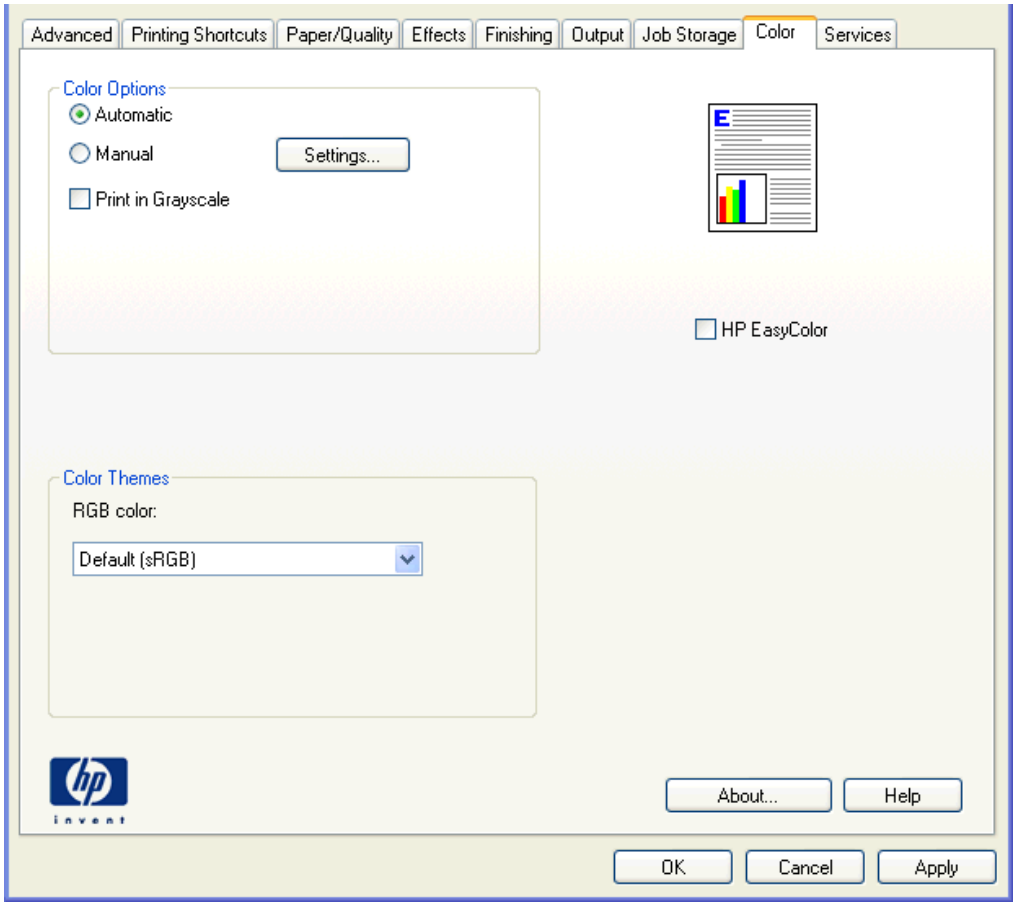
HP EasyColor

If you are using the HP PCL 6 printer driver for Windows, the **HP EasyColor** technology automatically improves mixed-content documents that are printed from Microsoft Office programs. This technology scans documents and automatically adjusts photographic images in .JPEG or .PNG format. **HP EasyColor** technology enhances the entire image at one time, rather than dividing it into several pieces, which results in improved color consistency, sharper details, and faster printing.

In the following example, the images on the left were created without using the **HP EasyColor** option. The images on the right show the enhancements that result from using the **HP EasyColor** option.

The **HP EasyColor** option is enabled by default in the HP PCL 6 printer driver, so you do not need to make manual color adjustments. To disable the option so you can manually adjust the color settings, open the **Color** tab, and click the **HP EasyColor** check box to clear it.

Figure 4-20 Color Themes

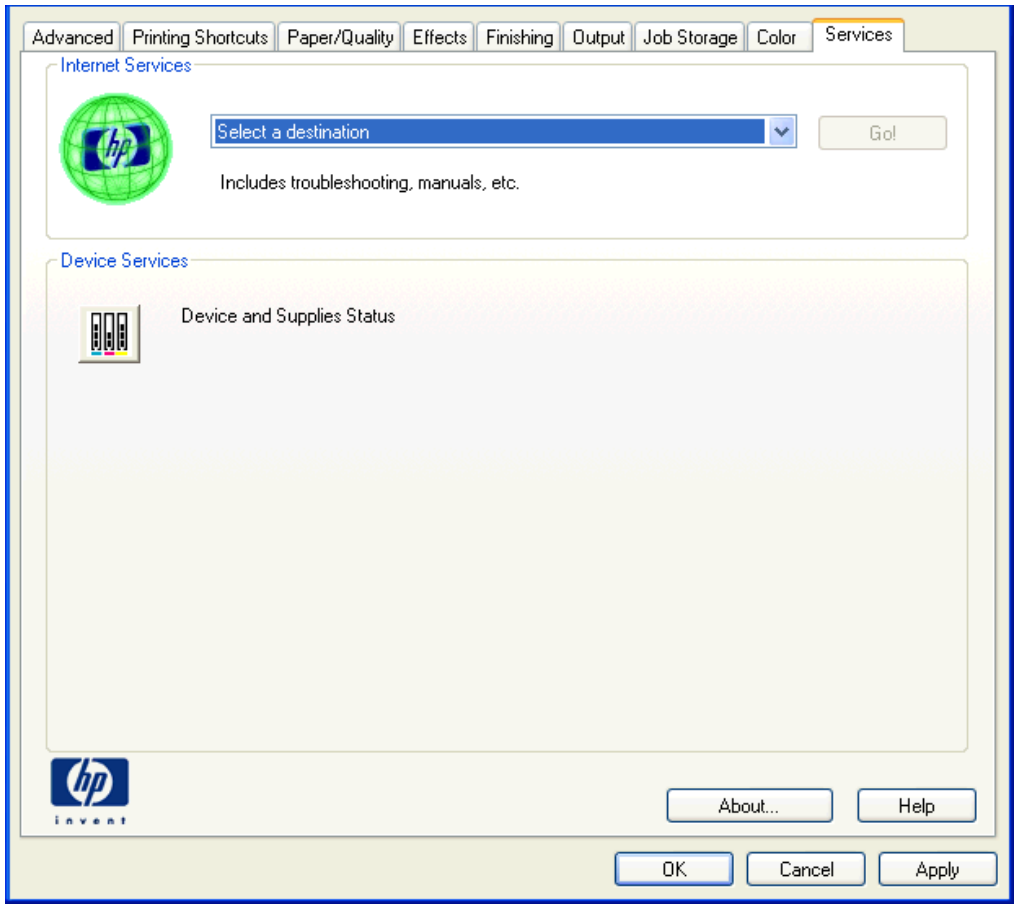


Services tab features

NOTE: The **Services** tab is located on the **Printing Preferences** tab set or **Properties** tab set.

The **Services** tab is shown in the following figure.

Figure 4-21 Services tab



The **Services** tab contains the following group boxes:

- Internet Services
- Device services

Internet Services

The **Internet Services** group box contains the **Select a destination** drop-down menu with the following selections:

- **Online diagnostic tools**. This is the HP Instant Support Web site, where you can find interactive tools and contacts for troubleshooting.
- **Support and troubleshooting**. This is the main Web site for HP Color LaserJet Enterprise CM4540 MFP Series product support.

- **Product manuals**. View or download HP Color LaserJet Enterprise CM4540 MFP Series product manuals.
- **Check for driver updates**. Automatically check your print drivers to see whether the correct and most up-to-date print drivers are installed.
- **Color printing access/usage**. Find information about enabling and disabling color printing and tracking color print-job usage.
- **Shop for supplies**. Shop online for HP Color LaserJet Enterprise CM4540 MFP Series product supplies.

If you have Internet access, select any of these items and click **Go!** to open the corresponding HP Web page.

Device services

Click the **Device and Supplies Status** icon to open the **Device Status** screen of the HP EWS, which shows supply levels and control panel status.

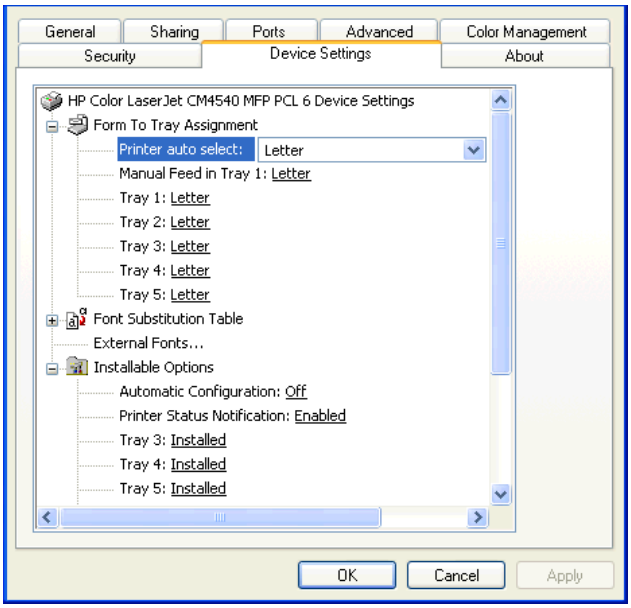
Click the **Print color usage job log** icon to print a page that shows information about users, print jobs, and applications that have printed to the HP Color LaserJet Enterprise CM4540 MFP Series product.

Device Settings tab features

NOTE: The **Device Settings** tab is located on the **Properties** tab set.

Available options depend on the feature. The following figure shows the **Device Settings** tab.

Figure 4-22 Device Settings tab



The **Device Settings** tab contains controls for paper-handling devices and controls for managing the HP Color LaserJet Enterprise CM4540 MFP Series product.

The **Device Settings** tab contains the following controls:

- Form to Tray Assignment
- Font Substitution Table
- Installable Options

Form to Tray Assignment

A network administrator can use **Form to Tray Assignment** to specify the paper size in each input tray.

The HP Color LaserJet Enterprise CM4540 MFP Series product supports more than one source of paper. You can assign a form (which defines the paper size and margins) to each paper source. When a form is matched to a source, you can select the form when you print. The product prints from the tray to which that form is assigned.

Network administrators can use the **Form to Tray Assignment** setting to specify, in the driver, the paper size that is loaded into each available input tray. The use of forms constrains the choices that are available in the paper-size list on the **Paper/Quality** tab in the **Printing Preferences** driver tabs. This constraint prevents (or reduces the likelihood of) tying up the product with paper-mount messages that occur when users request sizes or types that are not available.

The trays listed in the **Form to Tray Assignment** setting include standard trays and optional accessory trays. Generally, items that are installed separately have a separate **Installable Options** setting.

The input trays listed here are also listed as paper sources on the **Paper/Quality** tab.

Configuring the trays

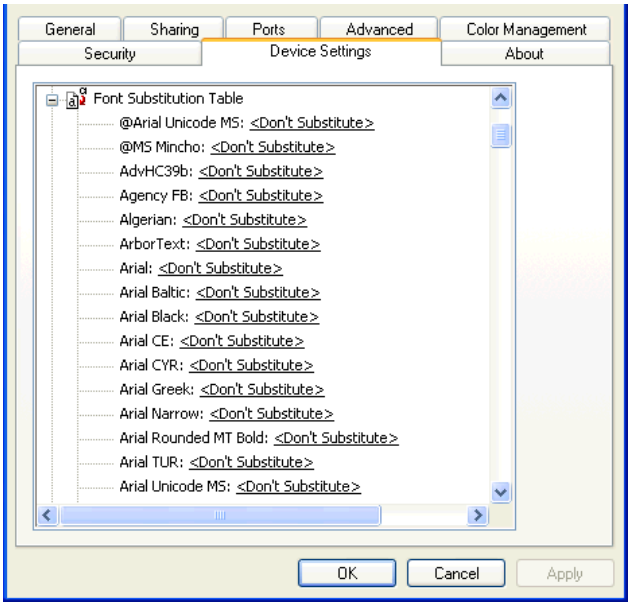
1. Select the appropriate tray in the **Form to Tray Assignment** list.
2. Use the drop-down menu to select the paper size (or form) that is loaded in that tray.
3. Repeat steps 1 and 2 for the remaining trays.
4. Click **OK** to enable your settings, or, if necessary, click **Cancel** to reconfigure all the trays, and remove the size and type constraints that have been imposed on the **Paper/Quality** tab.

Font Substitution Table

Use the **Font Substitution Table** settings to change the TrueType to printer font mapping and to install and remove external fonts for the product through the **External Fonts** option. External fonts can be soft fonts or DIMM fonts.

Click the plus (+) symbol next to the **Font Substitution Table** option to open a list of fonts, as shown in the following figure. Use the settings to change the TrueType-to-product font mappings.

Figure 4-23 Font Substitution Table

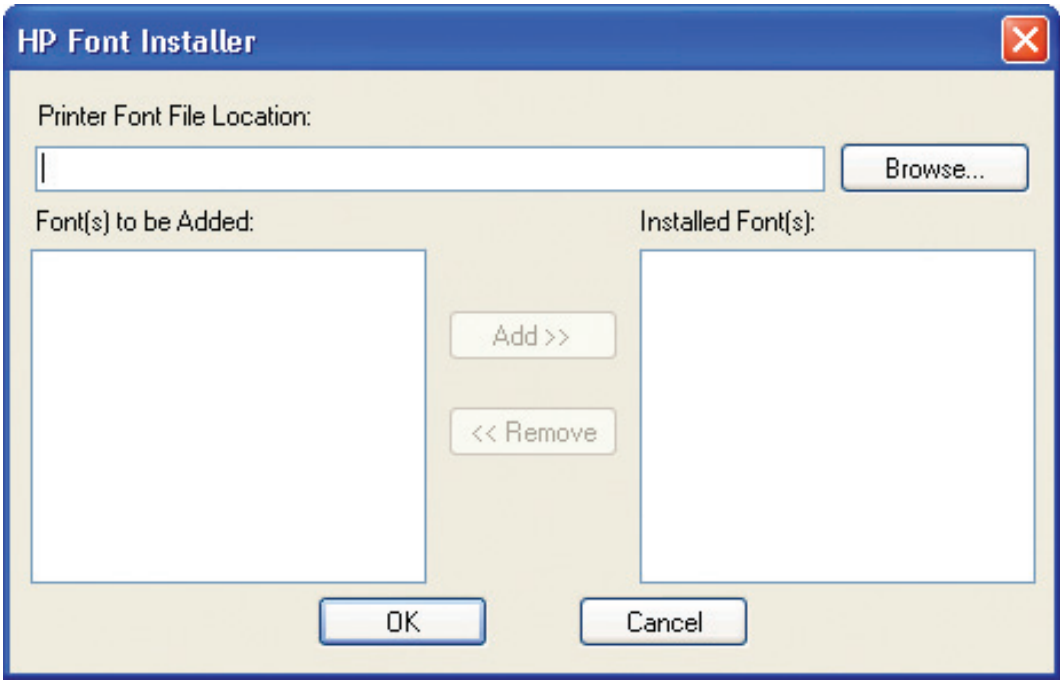


External Fonts

Use the **External Fonts** option to install and remove external fonts for the product. External fonts can be soft fonts or DIMM fonts.

Click the **External Fonts** option to make the **Properties** button available. Click **Properties** to open the **HP Font Installer** dialog box, which is shown in the following figure.

Figure 4-24 HP Font Installer dialog box



Installing external fonts

Follow these steps to install external fonts.

1. In Windows Vista and Windows 7, click the **Start** button, click **Control Panel**, click **Hardware and Sound**, and then click **Printers**.

   In Windows XP, Windows Server 2003, and Windows Server 2008, click **Start**, click **Settings**, and then click **Printers and Faxes**.

2. Right-click the name of the product.
3. Click **Properties**.
4. Click the **Device Settings** tab.
5. Click the **External Fonts** option. The **Properties** button appears.
6. Click **Properties**. The **HP Font Installer** dialog box appears.
7. Type the name and path of the font metric file in the **Printer Font File Location** text box, or click **Browse** to locate the file on the computer. The font file names appear in the **Font(s) to be Added** window.
8. Select the fonts that you want to add, and then click **Add**. The fonts are installed and the file names appear in the **Installed Font(s)** window.
9. Click **OK** to close the **HP Font Installer** dialog box.

Removing external fonts

1. In Windows Vista and Windows 7, click the **Start** button, click **Control Panel**, click **Hardware and Sound**, and then click **Printers**.

   In Windows XP, Windows Server 2003, and Windows Server 2008, click **Start**, click **Settings**, and then click **Printers and Faxes**.

2. Right-click the name of the product.
3. Click **Properties**.
4. Click the **Device Settings** tab.
5. Click the **External Fonts** option. The **Properties** button appears.
6. Click **Properties**. The **HP Font Installer** dialog box appears. The external fonts that are installed appear in the **Installed Fonts** window.
7. Select the fonts that you want to remove, and then click **Remove**. The fonts are removed.
8. Click **OK** to close the **HP Font Installer** dialog box.

Installable Options

Items under **Installable Options** are automatically populated and their defaults set when the driver is installed.

The HP Color LaserJet Enterprise CM4540 MFP Series product has printing options that you can install and configure in this section. The following controls are available:

- Automatic Configuration
- Tray 3
- Tray 4
- Tray 5
- Duplex Unit (for 2-Sided Printing)
- Allow Manual Duplexing
- Printer Hard Disk
- Job Storage
- Job Separator
- Mopier Mode

Automatic Configuration

Use the **Device Settings** tab to tell the driver about the hardware configuration of the product. If bidirectional communication is enabled in a supported environment, update this tab by selecting the

Update Now setting in the **Automatic Configuration** setting. The default setting is **Off**. After an automatic configuration, the setting returns to **Off** after the changes are made.

If your environment does not support bidirectional communication, the **Update Now** setting is unavailable, so you must manually configure the options on this tab.

If you have more than one driver installed for the product (for example, the default HP PCL 6 Print Driver and the HP PCL 5 Universal Print Driver), the Update Now feature works automatically only on the driver on which it is activated. The other driver will not be updated, and might show the default setting for the specific product model.

Tray 3

This control specifies whether you have Tray 3, an additional 500-sheet tray, installed on the product. Tray 3 comes standard on the CM4540 MFPf and CM4540 MFPfskm product model, and is optional on the other HP Color LaserJet Enterprise CM4540 MFP Series models.

Tray 4

This control specifies whether you have Tray 4, an additional 500-sheet tray, installed on the product. Tray 4 comes standard on the CM4540 MFPfskm product model, and is optional on the other HP Color LaserJet Enterprise CM4540 MFP Series models.

Tray 5

This control specifies whether you have Tray 5, an additional 500-sheet tray, installed on the product. Tray 5 comes standard on the CM4540 MFPfskm product model, and is optional on the other HP Color LaserJet Enterprise CM4540 MFP Series models.

Duplex Unit (for 2-Sided Printing)

The duplexing unit comes installed on all the CM4540 MFP models.

NOTE: The HP Color LaserJet Enterprise CM4540 MFP Series product supports smart duplexing. The product uses the smart duplexing feature to detect information on both sides of the print job pages and only runs the pages through the duplexing unit if printable information appears on the second side of the page.

Allow Manual Duplexing

Select **Allow Manual Duplexing** to print on both sides of any supported size and most types of paper (except transparencies, envelopes, and labels). To use this feature, you must reinsert the paper stack into the input tray to print the second side. The product pauses while you make this adjustment.

This setting is enabled by default.

Printer Hard Disk

When this option is installed, the **Job Storage** option and the **Mopier Mode** are enabled in the print driver. Use the **Job Storage** option to store print jobs and then print them later from the control

panel. The multiple-original print (mopy) function is an HP-designed feature that produces multiple, collated copies from a single print job.

Job Storage

When **Job Storage** is enabled, the product can store print jobs so that you can gain access to those print jobs later at the control panel.

Job Separator

Use this control to specify whether a print job identifier page should be printed between print jobs.

Mopier Mode

The multiple-original print (mopy) function is an HP-designed feature that produces multiple, collated copies from a single print job. Multiple-original printing (mopying) increases performance and reduces network traffic by transmitting the job to the product once, and then storing it in memory or on the hard disk. The remainder of the copies are printed at the fastest speed. All documents that are printed in mopier mode can be created, controlled, managed, and finished from the computer, which eliminates the extra step of using a photocopier.

The HP Color LaserJet Enterprise CM4540 MFP Series supports the transmit-once mopying feature when the **Mopier Mode:** setting on the **Device Settings** tab is **Enabled**.

When you use the HP PCL 6 Print Driver, mopying is performed in one of two ways: either through the software or through the product hardware. When mopier mode is enabled, mopying takes place through the product hardware. One copy of a multiple-page print job is transmitted once through the network to the product, together with a printer job language (PJL) command directing the product to make the specified number of copies.

When you disable mopier mode, you are not necessarily disabling multiple collated copies, which the driver can still perform through the software rather than the product hardware (the mopying path that is disabled when you change the **Mopier Mode** setting to **Disabled**). However, a multiple-copy print job that is sent when the mopier is disabled loses the advantage of transmitting the print job once, because the job is sent through the network for each collated copy.

Mopier mode and collation

Mopying and collating print jobs are independent but closely related functions. Mopying, the ability to send original print jobs to the product, is performed by the print driver. Collating can be controlled by either the print driver or the document software program. The mopying mode is selected by default in the driver, and can be disabled by changing the **Mopier Mode** setting on the **Device Settings** tab to **Disabled**.

Control collation through the print driver by selecting or clearing the **Collated** check box on the **Advanced** tab. Click **Copy Count** under the **Paper Output** setting. You can clear the check box, which is available only when the **Copy Count** option is set to more than 1 copy, to allow the software program to control collation.

To receive uncollated multiple copies of a print job, you must clear the **Collated** check box *and* make sure that the software program collation feature is not selected.

The following table shows the relation between mopier mode settings and collation settings in the software program and the driver. The first three columns show the settings; the last column, "Expected result", shows how a 3-page print job would appear.

Table 4-4 Driver mopier mode and collation settings

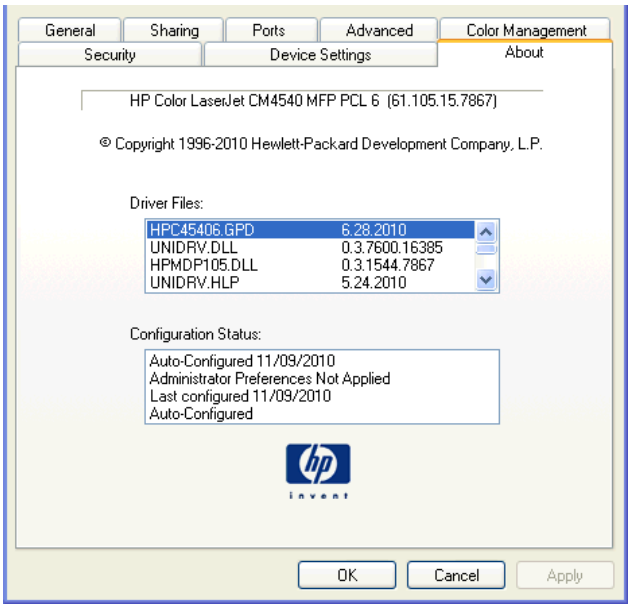
Mopier mode	Application collation	Driver collation	Expected result
Disabled	Not selected	Not selected	3 copies uncollated
Disabled	Not selected	Selected	3 copies uncollated
Disabled	Selected	Not selected	3 copies collated
Disabled	Selected	Selected	3 copies collated
Enabled	Not selected	Not selected	3 copies uncollated
Enabled	Not selected	Selected	3 copies uncollated
Enabled	Selected	Not selected	3 copies collated
Enabled	Selected	Selected	3 copies collated

About tab features

NOTE: The **About** tab is located on the **Properties** tab set.

The **About** tab provides detailed information about driver component versions. It contains an overall build version number (in parentheses after the model name) together with specific information about each of the components. The information varies according to the HP Color LaserJet Enterprise CM4540 MFP Series model number, driver, date, and versions. The **About** tab is shown in the following figure.

Figure 4-25 About tab



The **About** tab lists driver installation file names and their version numbers. The **About** tab also indicates whether the driver was autoconfigured, whether administrator preferences were set, the date the driver was last configured, and whether the configuration is autoconfigured or user-configured.

The **About** button is also available on most driver screens. The **About** button provides a driver version number and creation date.

5 Macintosh software and utilities

Introduction

The HP Color LaserJet Enterprise CM4540 MFP Series comes with software and installers for Apple, Inc. Macintosh systems.

This chapter provides procedures for installing and removing the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software for Macintosh operating systems, as well as descriptions about the software and utilities. The chapter provides information about these topics:

- Determine the Mac driver version
- Supported operating systems for Macintosh
- Printing-system software
- Macintosh installation instructions
- Remove software from Mac operating systems
- HP Printer Utility for Mac

Determine the Mac driver version

Mac OS X 10.5 and 10.6

1. From the Apple menu , click the **System Preferences** menu and then click the **Print & Fax** icon.
2. Select the product in the left side of the window.
3. Click the **Options & Supplies** button.
4. Click the **General** tab to view the driver version number.

Supported operating systems for Macintosh

The product supports the following Mac operating systems:

- Mac OS X 10.4, 10.5, 10.6, and later

NOTE: For Mac OS X 10.4 and later, PPC and Intel® Core™ Processor Macs are supported.

Macintosh system requirements

Hardware requirements

- PowerPC G3, G4, G5 or Intel Core processor
- 256 MB RAM
- 150 MB of available hard-disk space
- CD-ROM drive or Internet connection

Supported printer drivers for Mac

The HP LaserJet software installer provides PostScript® Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP Utility for use with Mac OS X computers. The HP printer PPD and PDE files, in combination with the built-in Apple PostScript printer drivers, provide full printing functionality and access to specific HP printer features.

Change printer-driver settings for Mac

Change the settings for all print jobs until the software program is closed	Change the default settings for all print jobs	Change the product configuration settings
1. On the **File** menu, click the **Print** button. 2. Change the settings that you want on the various menus.	1. On the **File** menu, click the **Print** button. 2. Change the settings that you want on the various menus. 3. On the **Presets** menu, click the **Save As...** option and type a name for the preset. These settings are saved in the **Presets** menu. To use the new settings, you must select the saved preset option every time you open a program and print.	**Mac OS X 10.4** 1. From the Apple menu, click the **System Preferences** menu and then click the **Print & Fax** icon. 2. Click the **Printer Setup** button. 3. Click the **Installable Options** menu. **Mac OS X 10.5 and 10.6** 1. From the Apple menu, click the **System Preferences** menu and then click the **Print & Fax** icon. 2. Select the product in the left side of the window. 3. Click the **Options & Supplies** button. 4. Click the **Driver** tab. 5. Configure the installed options.

Printing-system software

The product includes the following software for Macintosh computers:

- PDEs for Mac OS X only (v10.4, v10.5, and later)

PDEs

Printer Dialog Extensions (PDEs) are code plug-ins that provide access to product features, such as number of copies, duplexing, and quality settings. The PDEs are HP additions to Apple's print driver.

HP Embedded Web Server

Mac OS X v10.4 and later support the HP Embedded Web Server (HP EWS). Use the HP LaserJet Utility to control features that are not available in the driver. Use the HP EWS to perform the following tasks:

- Name the product and assign it to a zone on the AppleTalk network.
- Change product settings.

- Set a password for the product.
- From the computer, lock out functions on the control panel to prevent unauthorized access (see the printing-software help).

Install notes

This text file contains important information about product features, instructions for installing the printing-system software, and technical assistance.

Online help

This HTML-based help system replaces the Apple Guide help system that was provided with Mac OS 9.*x* HP products. The help system is in English only, and can be viewed through a browser or in the Macintosh OS Help Center.

Screen fonts

The printing-system software for Macintosh operating systems no longer includes a font installer. The HP Color LaserJet Enterprise CM4540 MFP Series product uses previously installed system fonts when it is installed on a Macintosh computer.

Macintosh installation instructions

On a Macintosh computer, the installation procedures are basically the same for a network administrator, a network client, and a single user. Install the software on any computer that has save rights to the product. Users must have Administrator rights to install the software.

NOTE: If the computer is connected to the product by a LocalTalk (printer port) connection, you must configure the AppleTalk (or network) control panel for the correct connection to communicate with the product. You must set up the HP Color LaserJet Enterprise CM4540 MFP Series, connect it to the computer or network, and turn it on *before* the software is installed. Macintosh operating systems do not support parallel connections.

The Macintosh partition contains an installer program for each language. Find the appropriate language for the operating system that is being used, and then use the installer program for that language.

NOTE: Detailed installation steps can be found in Mac OS X installation on page 134.

HP LaserJet software CD, Macintosh partition

The files contained in the Macintosh partition of the HP LaserJet software CD are grouped by language and reside in the following directory:

- HP Color LaserJet CM4540 MFP
- Documents

NOTE: File layouts differ by language for each regional version of the software CD.

Install the HP LaserJet printing-system software for the Macintosh OS

Topics:

- General installation instructions
- Mac OS X installation
- Setup instructions

General installation instructions

1. Insert the Macintosh printing-system software CD 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. Double-click the HP Color LaserJet CM4540 MFP icon.

3. Follow the onscreen instructions to complete the software installation.

NOTE: If you are installing the printing-system software on a Macintosh OS X system, be patient. The installer must perform an initial search of the computer for up to 1 minute. During this time the installer might appear to be stalled.

4. When software installation is complete, click **Quit**. Use the following chart to finish setting up the product:

The software program that you use to finish setting up the product varies by operating system. The following table shows the print setup tools that are available.

Table 5-1 Adding a product in Macintosh operating systems

Operating System	Print Center	Printer Setup Utility
Mac OS X v10.4	x	x
Mac OS X v10.5 & v10.6	x	x

Mac OS X installation

This section provides information about the various installation dialog-box sequences for the Mac OS X operating system.

Main Install dialog box sequence

NOTE: If you are connecting the product to a network, connect the network cable to the network port. If you are connecting the product to a computer by using the USB cable, install the software **before** connecting the USB cable.

1. Insert the HP Color LaserJet Enterprise CM4540 MFP Series printing-system software CD in the CD-ROM drive.

NOTE: If the CD screen does not open automatically when the CD is put into the CD-ROM drive, double-click the CD-ROM icon on the desktop to open the installer folder.

2. The installer program opens.

Figure 5-1 Mac installer opening screen

NOTE: The file name displayed on your HP LaserJet installer browser screen may be different than the file name displayed in the above figure.

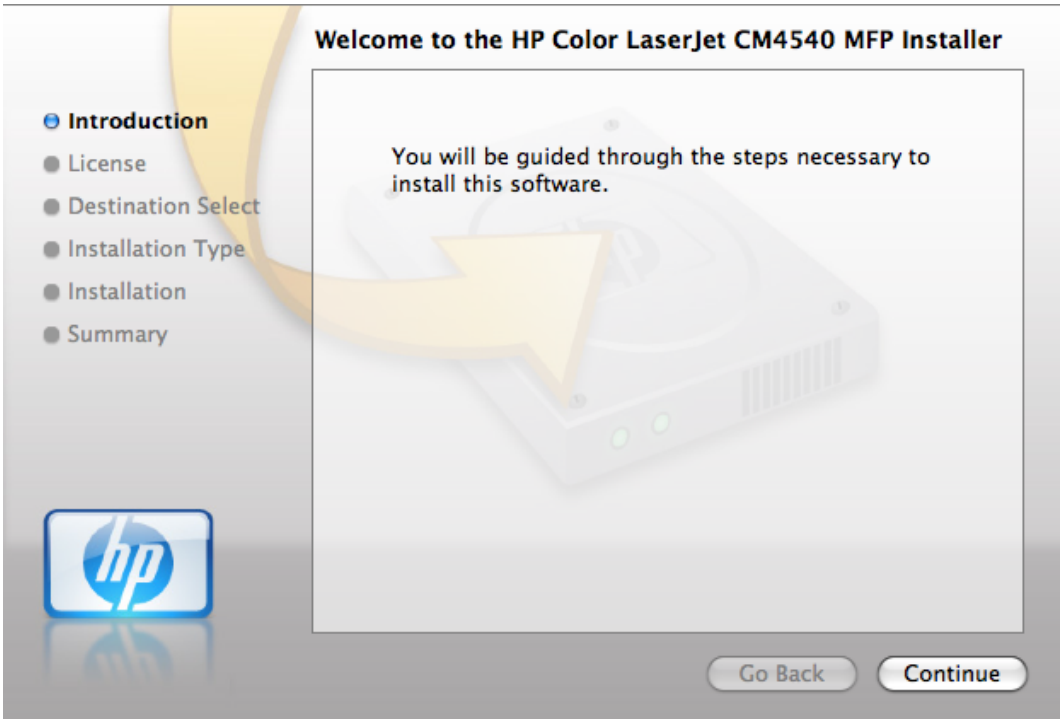
NOTE: In the HP LaserJet installer browser screen, double-click the **Documents** icon to gain access to the product manuals. Select a language folder and locate the available ReadMe file which are in .htm format.

NOTE: For more information, see the User Guide on the web at:

www.hp.com/go/cljcm4540mfp_manuals

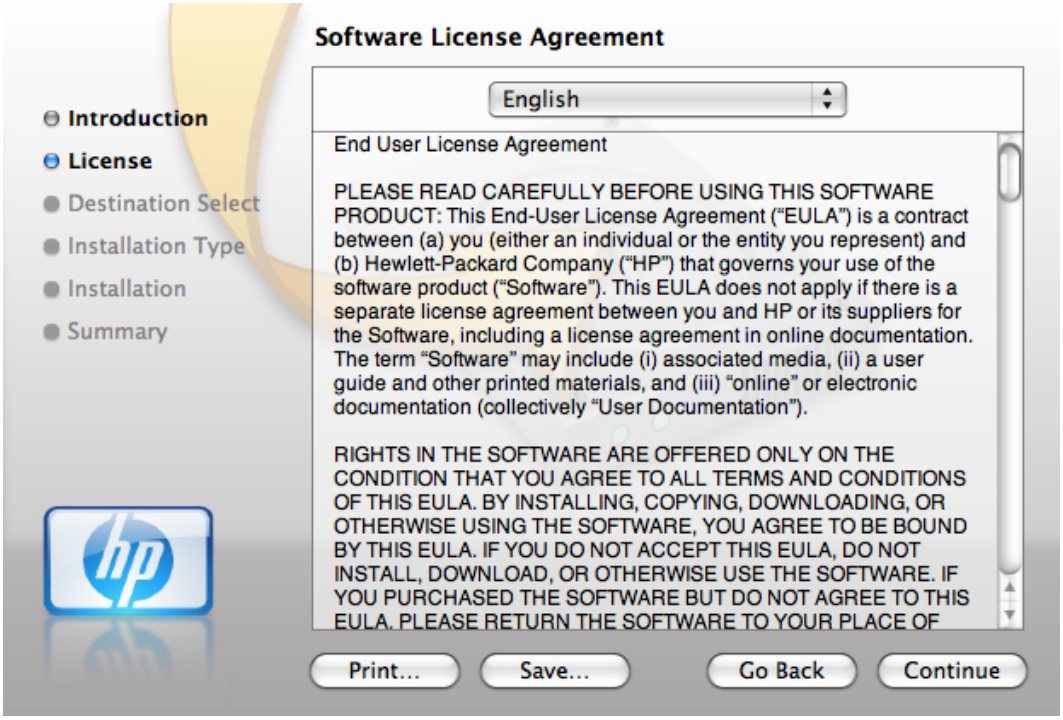
3. In the HP LaserJet installer browser screen, double-click the product icon to open the installer program Introduction dialog.

Figure 5-2 Mac installer Introduction dialog



4. Click the **Continue** button. The License dialog appears.

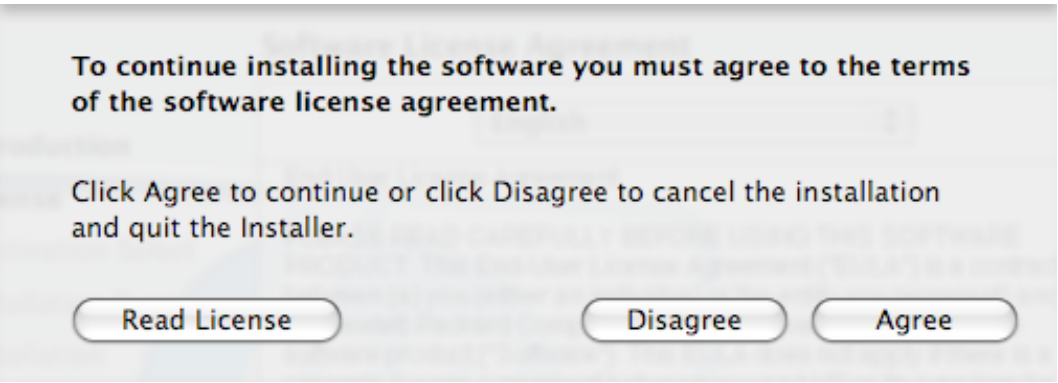
Figure 5-3 Mac installer License dialog



5. You can save or print the license file by clicking the **Save** button or the **Print** button.

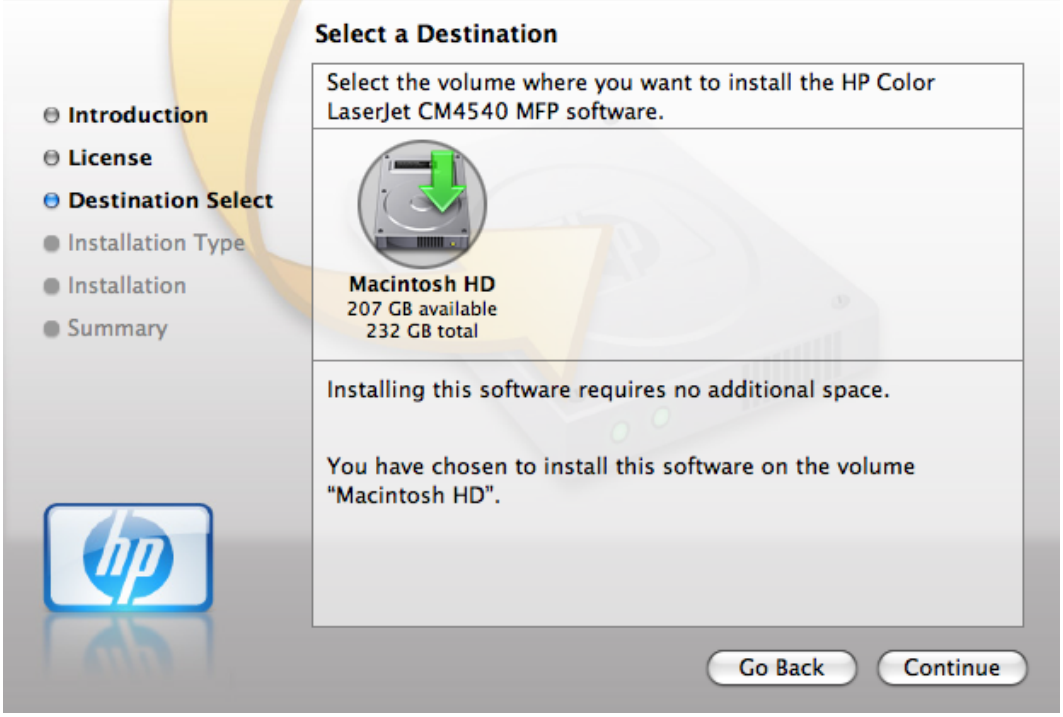
6. Read the software license agreement, and then click the **Continue** file. The license agreement dialog appears.

Figure 5-4 Mac installer license agreement dialog



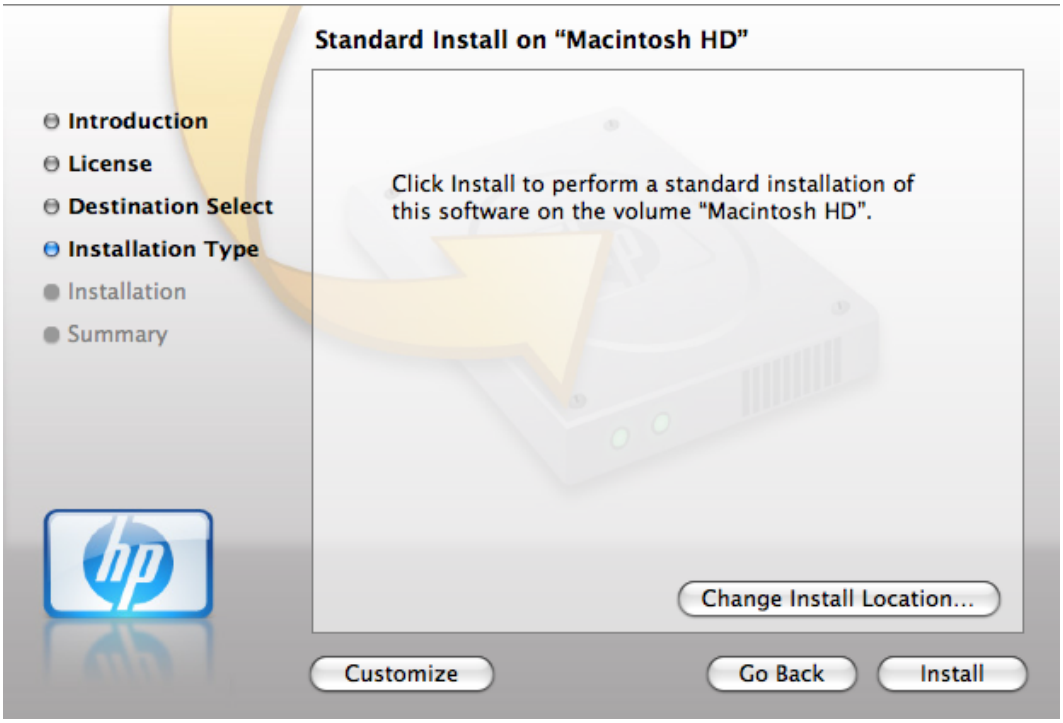
7. Click the **Disagree** button to end the installation and close the installer, or click the **Agree** button to continue the installation.

Figure 5-5 Mac installer Destination dialog



8. Select the destination for the software and click **Continue**. The Installation Type dialog appears.

Figure 5-6 Mac installer Installation Type dialog



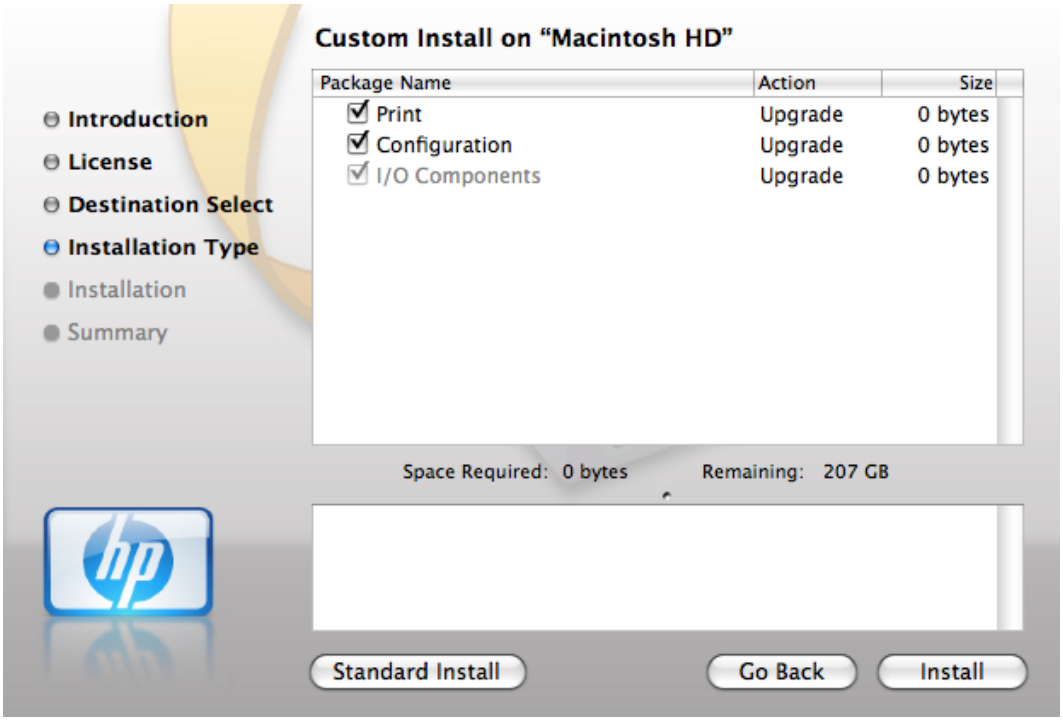
9. Click the **Go Back** button to go back to the previous screen.

To change the installation location, click the **Change Install Location** button, navigate to the desired location, click the **Continue** button, and then click the **Install** button. Go to step 9.

Click the **Install** button to continue the standard installation. Go to step 9.

Click the **Customize** button to open a dialog that lists separate software programs that you can choose to install.

Figure 5-7 Mac installer custom installation dialog



Click the **Standard Install** button to revert to the standard installation process.

Click **Go Back** to go back to the previous dialog box.

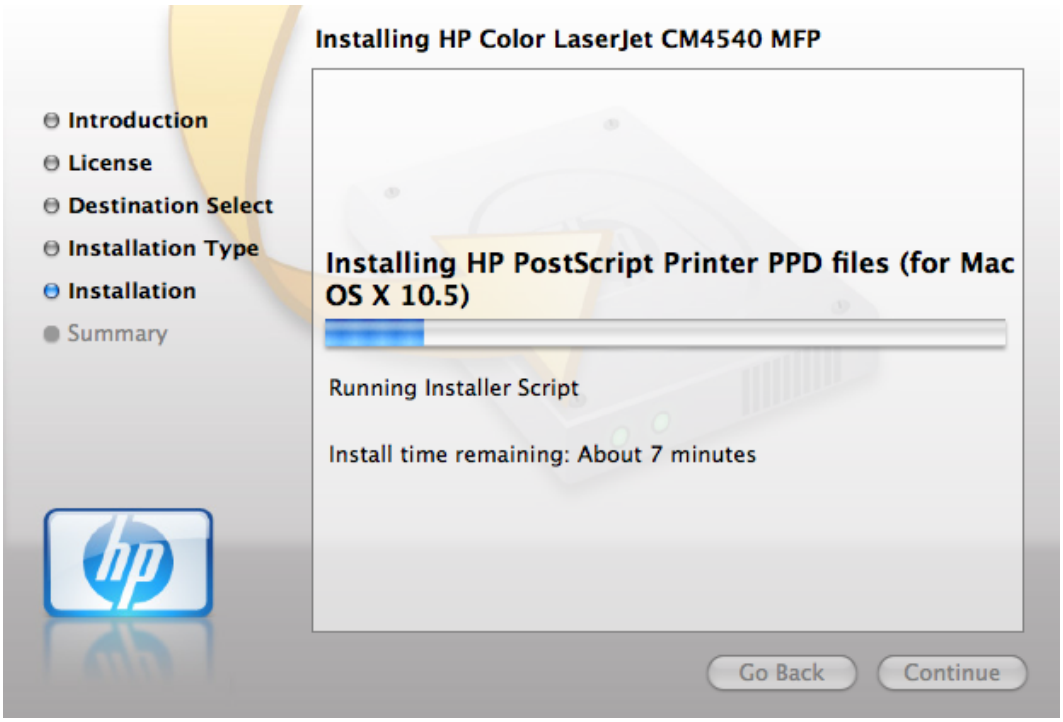
Use the check boxes in the **Package Name** list to select the printing-system components to install, and then click the **Install** button.

10. An authentication dialog appears. Type the required user name and password, and then click the **OK** button.

Figure 5-8 Mac installer authentication dialog

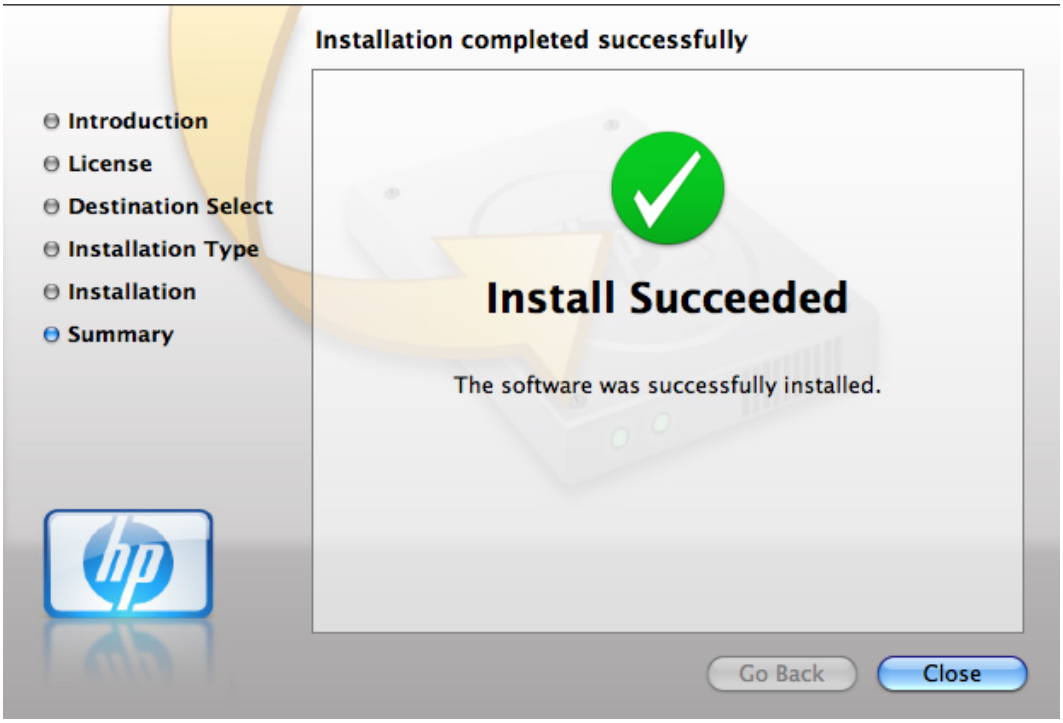
11. The Installation dialog appears. A progress bar shows the percentage of the installation progress that has been completed. Allow the program to install the software.

Figure 5-9 Mac installer Installation dialog



12. When the installation is complete, the **Summary** dialog appears, stating that the installation was successful.

Figure 5-10 Mac installer Summary dialog



Click the **Close** button to exit the installer.

NOTE: Complete the instructions in the next section to set up a printer queue.

Setup instructions

This section contains information about the following topics:

- Setting up a printer with Mac OS X v10.4, v10.5, v.10.6, and later
- Troubleshooting the product setup

Setting up a printer with Mac OS X v10.4, v10.5, v.10.6, and later

Complete these steps *after* completing the printing-system software installation.

1. If you are installing the product using a USB connection, connect the USB cable between the product and the computer. Turn on the product. If you are installing using a network connection, verify that the network cable is connected to the product and that the product is on.
2. Mac OS X 10.4: In the **Applications** folder (in the **Finder** utility), open the **Utilities** folder, and then run the **Printer Setup Utility**.

   -or-

   Max OS X 10.5 and 10.6: From the Apple menu, click the **System Preferences** menu, then click the **Print & Fax** icon.

3. If you are installing the product using a USB connection, verify that the product appears in the printer list. The **Name** column in the printer list should display the product name. If this is the case, the USB setup is complete.

   If the product does not appear, or if the correct information does not appear in the field, see Troubleshooting the product setup on page 144.

   If you are installing the product using a network connection, continue with the following steps.

4. Mac OS X 10.4: Click **Add** in the **Printer List** to open the **Printer Browser** screen.

   -or-

   Max OS X 10.5 and 10.6: Click the plus symbol in the **Printer List** to open the **Printer Browser** screen.

5. You can use either Bonjour (default browser) or IP Printing for the network connection.

NOTE: Bonjour is the easiest method and is the best method to use if the product is installed on your local network.

IP Printing *must* be used if you are installing the product on a different network.

If you are using Bonjour, carry out the following steps:

a. Click the **Default Browser** tab.

b. Select the product from the list. The software verifies that the product is connected to the network and the **Print Using** field is automatically populated with the correct PPD for the product.

NOTE: If you are on a network that has more than one product, print a configuration page and match the Bonjour Printer Name to the name on the list to identify the product that you are installing.

NOTE: If the product does not appear in the list, verify that the product is on and connected to the network, then try turning the product off and then on again. If the product PPD does not appear in the **Print Using** pull-down list, turn the computer off and then on again, then restart the setup process. For more troubleshooting information, see Troubleshooting the product setup on page 144.

c. Click the **Add** button.

d. You are finished with the setup process.

If you are using the IP Printing method, carry out the following steps:

a. Click the **IP Printer** tab.

b. Choose **HP Jet Direct – Socket** from the **Protocol** pull-down menu. This is the recommended setting for HP products.

c. At the product control panel, touch the **Network Address** button to identify the product IP address or host name.

   Follow these steps to print the configuration pages.

If the **Network Address** button is not visible, you can find the IP address or host name by printing a configuration page.

i. At the product control panel, scroll to and touch the **Administration** button.

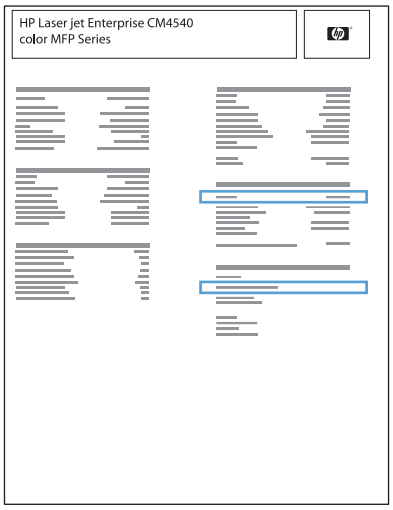
ii. Open the following menus:

- Reports
- Configuration/Status Pages
- Configuration Page

iii. Touch the **View** button to view the information on the control panel, or touch the **Print** button to print the pages.

iv. Find the IP address on the Jetdirect page.

Figure 5-11 IP location on the Jetdirect page



v. IPv4: If the IP address is 0.0.0.0, or 192.0.0.192, or 169.254.x.x, you must manually configure the IP address. Otherwise, the network configuration was successful.

IPv6: If the IP address begins with "fe80:", the product should be able to print. If not, you must manually configure the IP address.

d. Type the IP address into the **Address** field on the add printer screen.

e. The **Name**, **Location**, and **Print Using** information will automatically be filled in. If the product PPD does not appear in the **Print Using** field, turn the computer off and then on again and restart the setup process.

6. Mac OS v10.4: Select the product and click **Add**. The **Installable Options** screen appears.

-or-

Mac OS v10.5 and v10.6: Select the product ,click the **Options and Supplies** button, then click the **Driver** button.

7. In the **Optional Trays:** drop-down menu, select the trays that are installed on the product. In Mac OSv 10.5 and v10.6 each tray is listed with a checkbox.
8. For Mac OS v10.4: In the **Collation in Printer:** drop-down menu, select the amount of memory and hard disk combination that is installed in the product.

   -or-

   For Mac OS v10.5 and v10.6: In the **Collation in Printer:** drop-down menu, select the checkbox next to the printer disk. The amount of memory is set automatically.
9. If the product has a hard disk, select **Installed** from the **Printer Hard Disk** drop-down menu.
10. If the product has a duplex unit, select the **Duplex Unit** check box.
11. In the **Accessory Output Bins:** drop-down menu, select the output bins that are installed on the product.
12. In the **Paper Matching:** drop-down menu, select one of the following options:
    - **Prompt User for correct size**
    - **Nearest Size & Scale**
    - **Nearest Size & Crop**
13. After you have selected the settings in the **Installable Options** screen, click **Continue**. The product name appears in the **Printer List** and the setup is complete.

Troubleshooting the product setup

If the product does not appear in the printer list after an installation:

Complete each one of these solutions in the order given, and restart the setup process after each one to see if the issue has been resolved.

- Verify that the USB or network cable is connected between the product and the computer and that the product is powered on.
- Try disconnecting and reconnecting the cable. If the computer has more than one USB port, try a different USB port.
- Turn the product off and then back on.
- Turn the computer off and then back on.
- If you are using a USB hub on the computer, disconnect any other USB devices from the hub.

If the wrong PPD appears in the Kind column in the printer list after installation:

1. Unplug the USB cable.
2. Delete the print queue with the incorrect type (for example, Generic PostScript Printer).
3. Reinstall the printing-system software.

4. Turn the computer off and then on.
5. Reconnect the USB cable from the computer to the product.

If these steps do not resolve the problem, delete the incorrect print queue, click **Add**, choose the product from the list, and then browse manually for the product PPD.

Remove software from Mac operating systems

You must have administrator rights to remove the software.

1. Open **System Preferences**.
2. Select **Print & Fax**.
3. Highlight the product.
4. Click the minus (-) symbol.
5. Delete the print queue, if necessary.
6. Delete the .GZ file from the following hard-drive folder:
   - **Mac OS X 10.4:** Select **Macintosh HD**, then go to the following directory `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where <lang> is the two-letter language code for the language that you are using.
   - **Mac OS X 10.5 and 10.6:** Select **Macintosh HD**, then go to the following directory`Library/Printers/PPDs/Contents/Resources`

HP Printer Utility for Mac

The HP Printer Utility is a software program that gives you access to the product in Mac OS X.

The HP Printer Utility does not work when it is installed by using the AppleTalk protocol. Use IP, Bonjour or Rendezvous to enable the HP Printer Utility.

The following topics are discussed:

- Access to the HP (Printer) Utility
- Supplies Status
- Device Information
- Color Usage
- File Upload
- Update Firmware
- Upload Fonts
- Commands
- HP ePrint Center
- Duplex mode
- Trays Configuration
- Stored Jobs
- E-mail Alerts
- Network Settings
- Supplies Management
- Protect Direct Ports
- Additional Settings
- Output Devices
- Restrict Color

Click the **HP Support** button to go to the **HP Online Support** Web site for more help on any of these topics.

Access to the HP (Printer) Utility

In Mac OS X v10.4, v10.5, v 10.6, and later, follow these steps to gain access to the HP (Printer) Utility:

1. Mac OS X 10.4 and above: Open the Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.

   -or-

   Mac OS X 10.5 and above: From the **Printer Browser** menu, click **Printer Utility**

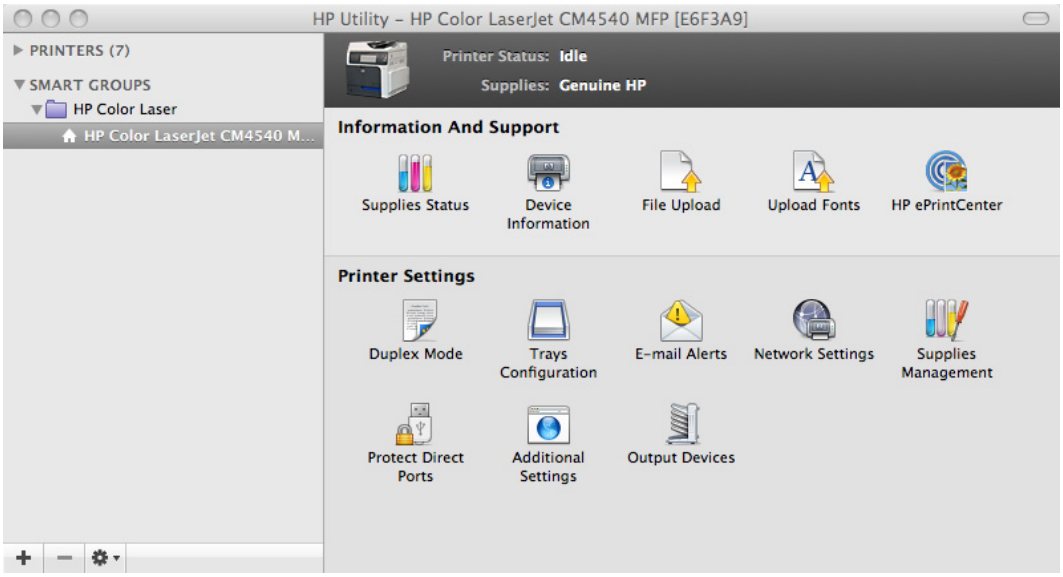
   -or-

   Mac OS X 10.5 and above: From the **Print Queue**, click the **Utility** icon.

2. The main **HP Utility** screen appears. Click the product in the **Printers** list.

   Click to select the **HP (Printer) Utility**. The main **HP Utility** screen appears. Click the product in the **Printers** list.

Figure 5-12 HP Utility main screen

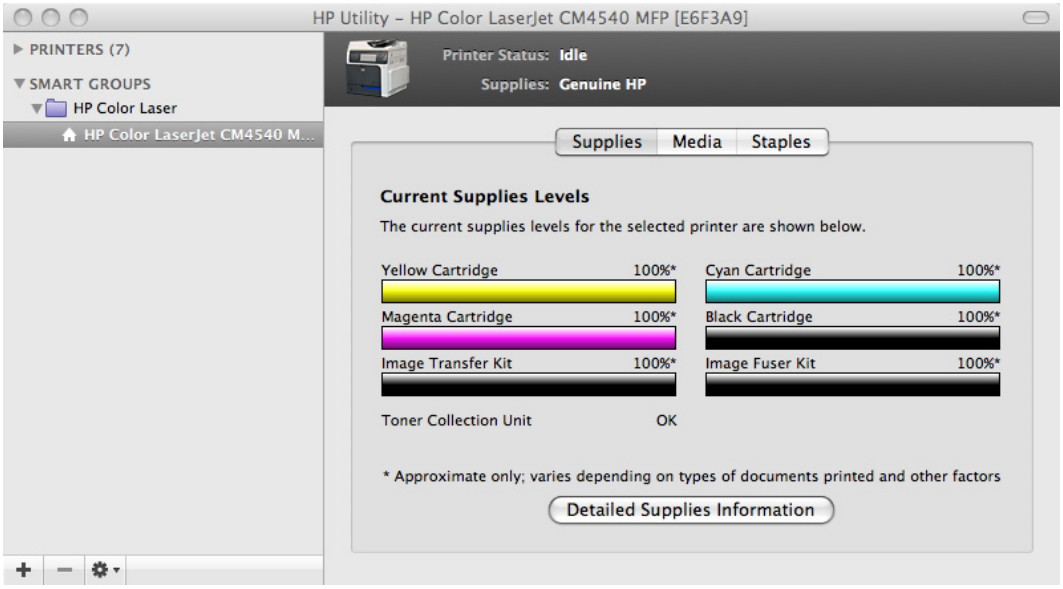


The following sections describe the screens and features that are available in the HP Utility.

Supplies Status

In the **Information And Support** section of the HP Utility, click **Supplies Status** to open the **Supplies Status** screen.

Figure 5-13 Supplies Status screen



Click **Detailed Supplies Information...** to open the **Supplies Status** details screen.

Use the scroll button to see information about the color print cartridges.

On the **Supplies Status** screen, click **Media** to see the status of the trays.

You can also order supplies at anytime by clicking **Supplies** in the toolbar on the HP Print Utilities main screen.

Device Information

In the **Information And Support** section of the HP Utility, click **Device Information** to find the product **Service ID** (if assigned), the firmware version (**FW Version**), and the **Serial Number**.

Figure 5-14 Device Information screen

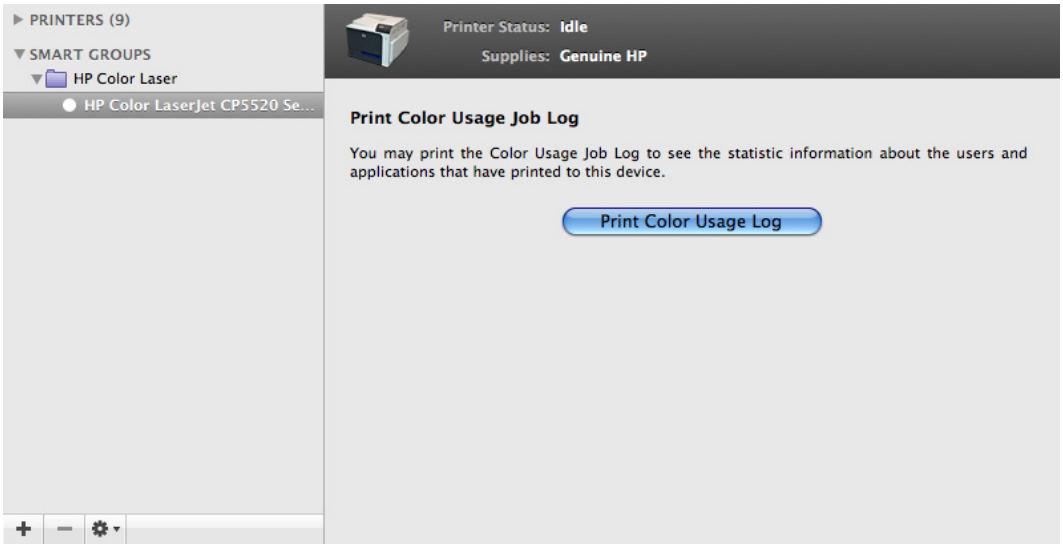
The product configuration page shows other settings; click **View Configuration Page** .

Color Usage

NOTE: Functionality for this option is not supported on this product in the HP Printer Utility for Mac. Use the Embedded Web Server to use this functionality.

In the **Information And Support** section of the HP Utility, click **Color Usage** to open a screen and print a color-usage job log.

Figure 5-15 Print Color Usage Job Log screen



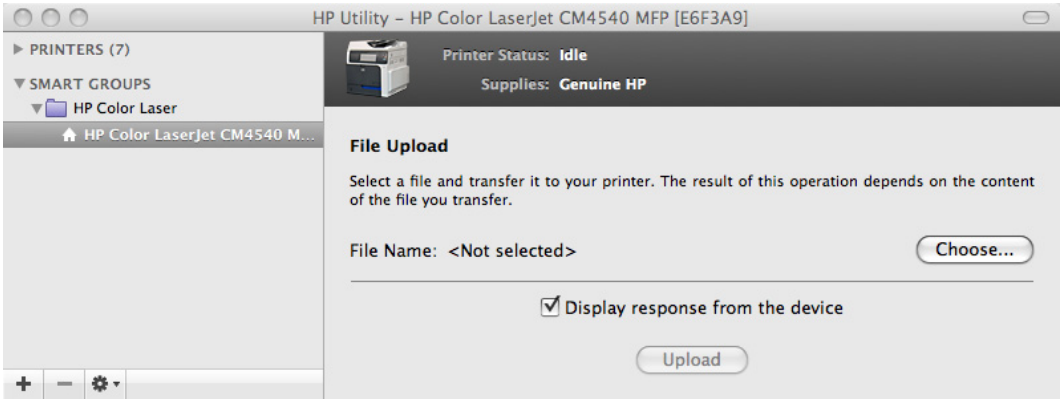
Click **Print Color Usage Log** to print a page that shows information about users, print jobs, and software programs that have printed to the HP Color LaserJet Enterprise CM4540 MFP Series product. In addition, the color-usage log lists the following details about print jobs:

- Date and time
- Total number of jobs
- Mono (monochrome, or black-and-white) sides
- Color sides
- paper sheets

File Upload

In the **Information And Support** section of the HP Utility, click **File Upload** to open the **File Upload** screen.

Figure 5-16 File Upload screen



The **File Upload** command is supported for file types that can be sent directly to the product without first being opened through a software program. Some files can be uploaded to the product, but some cannot.

Documents in the following file formats can be printed by using a command line. That is, they do not need to be opened in a software program that supports the file format (such as the Adobe Acrobat or Acrobat Reader programs for .PDF files), but can be sent directly to the product by using the **File Upload** command.

- HP LaserJet printer command language (.PRN)
- Portable document format (.PDF)
- Postscript (.PS)
- Text (.TXT)

On the **File Upload** screen, click **Choose...** to open a navigation screen. Locate the file you want to upload and click **Open**.

On the **File Upload** screen, click **Display response from the device** to see whether the upload was successful. If the file loads successfully, no message appears.

On the navigation screen, select the file and click **Open**. The file name appears in the **File Upload** screen of the HP Printer Utility. Click **Upload**.

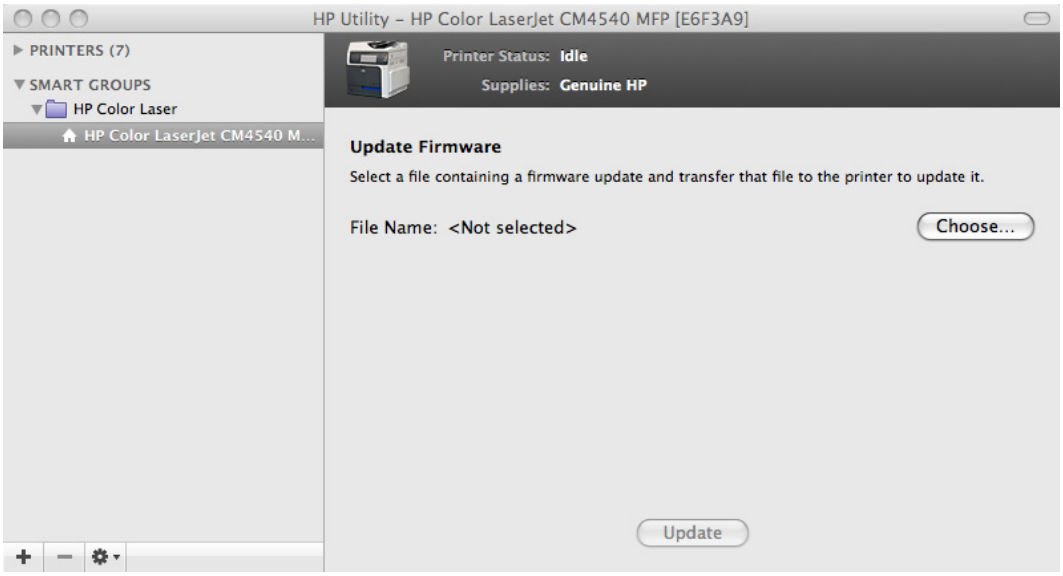
Update Firmware

NOTE: This option is available only after you open the **View** menu and select the **Show Advanced** option.

The firmware file can be downloaded from the following Web site:

www.hp.com/cljcm4540mfp_firmware

Figure 5-17 Update Firmware screen



After you have the firmware file, you are ready to begin the update process. Complete the following steps:

1. In the **Information And Support** section of the HP Utility, select **Update Firmware**, click **Choose**, browse to firmware upgrade file, and then click **Open**.
2. On the **Update Firmware** screen, click **Upload**.

NOTE: You might receive an error message on the screen indicating that the product is offline. Verify that the product is turned on. If it is, ignore the message. The **Updating** screen appears and the update proceeds as expected.

3. The update process can take several minutes. Let the process finish without further interaction with the product or the computer.

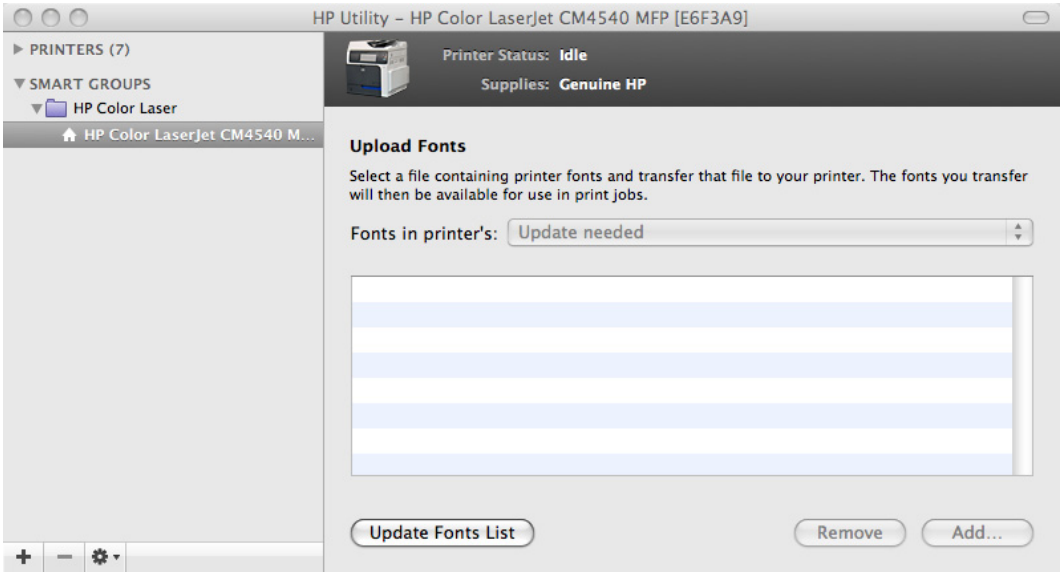
NOTE: The product automatically turns off and then on again to activate the update; this can happen more than once. At the end of the update process, the **READY** message appears on the control panel. Do *not* turn off the product or interfere with the update until you see this message.

4. Print a configuration page and verify that the firmware revision number matches the revision of the current update.

Upload Fonts

In the **Information And Support** section of the HP Utility, click **Upload Fonts** to gain access to fonts that you can upload to the HP Color LaserJet Enterprise CM4540 MFP Series product.

Figure 5-18 Upload Fonts screen



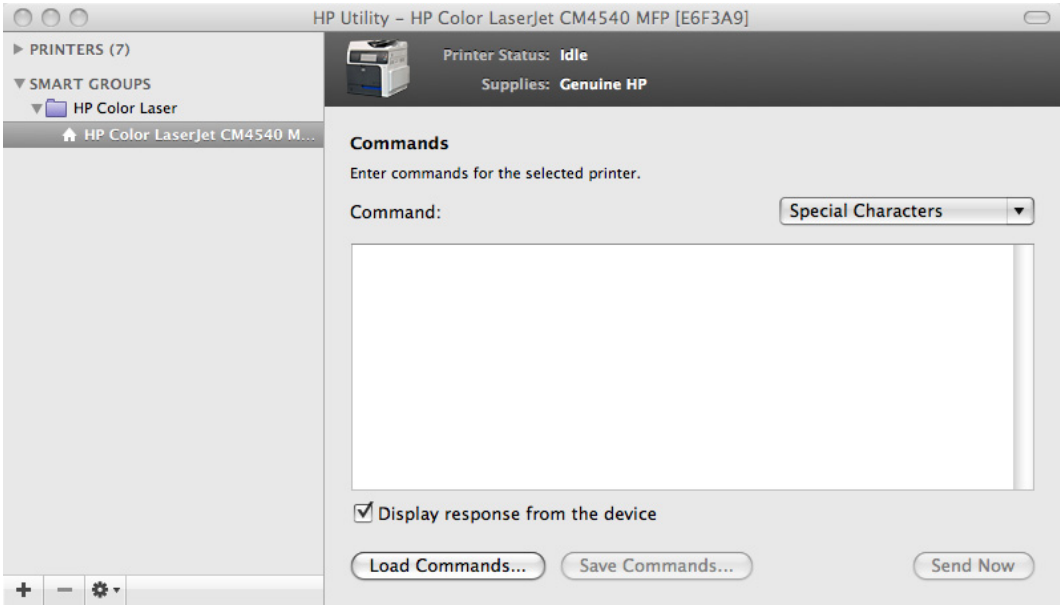
The drop-down menu in the **Upload Fonts** pane has the following options:

- **Memory**. Fonts that are available in the printer memory are listed.
- **Disk**. Select this option to show any fonts that are installed on the printer hard disk or flash disk. By default, no fonts are stored on either of these disks. To upload fonts, select the font name, and then click **Add**.

Commands

The **Commands** screens gives the user the ability to send special characters or print commands to the product after the print job.

Figure 5-19 Commands screen



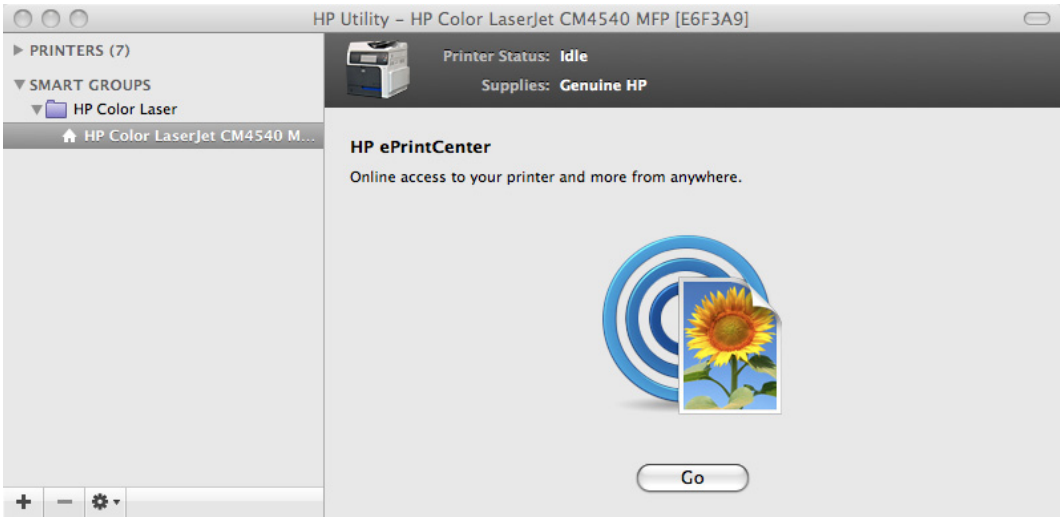
HP ePrint Center

Simplified printing for internet connected products from anywhere.

For instructions on how to enable HP Web Servies and configure HP ePrint, go to:

www.hp.com/go/ePrint

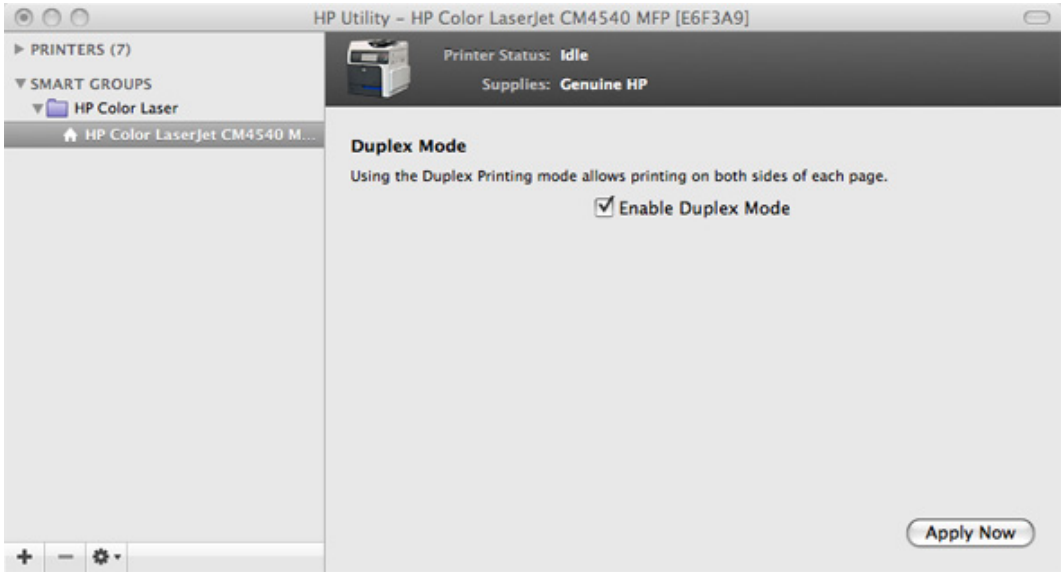
Figure 5-20 HP ePrint Center screen



Duplex mode

For the CM4540 MFPdn and CM4540 MFPfskm product models, the **Printer Settings** section includes a **Duplex Mode** setting. Click this setting to open the **Duplex Mode** screen.

Figure 5-21 Duplex Mode screen



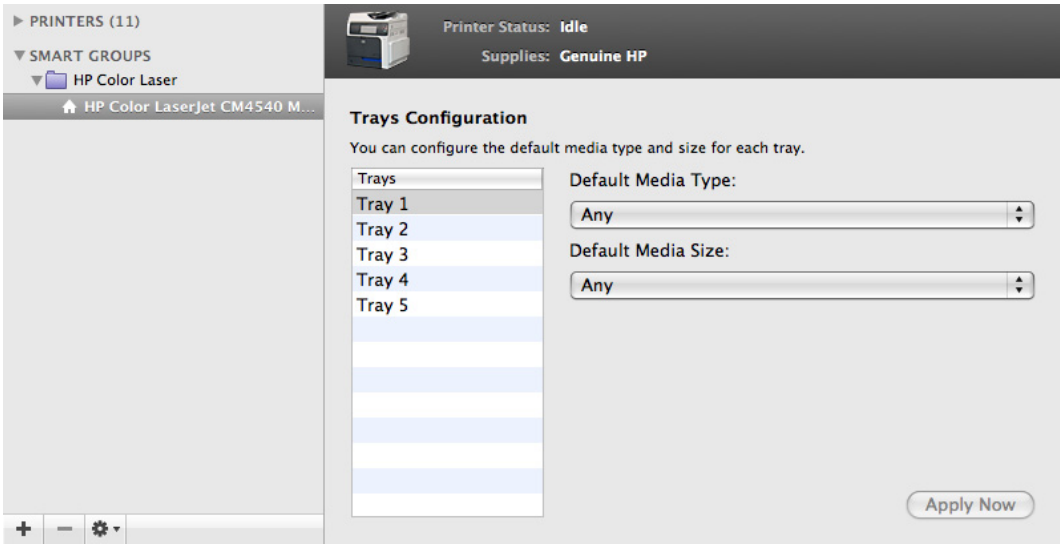
Use the Enable Duplex Mode command to print internal diagnostic and test pages on both sides of the page.

1. Select the **Enable Duplex Mode** check box. This box is clear by default.
2. Click **Apply Now** to enable printing on both sides of the page.

Trays Configuration

The **Trays Configuration** screen is shown in the following figure.

Figure 5-22 Trays Configuration screen



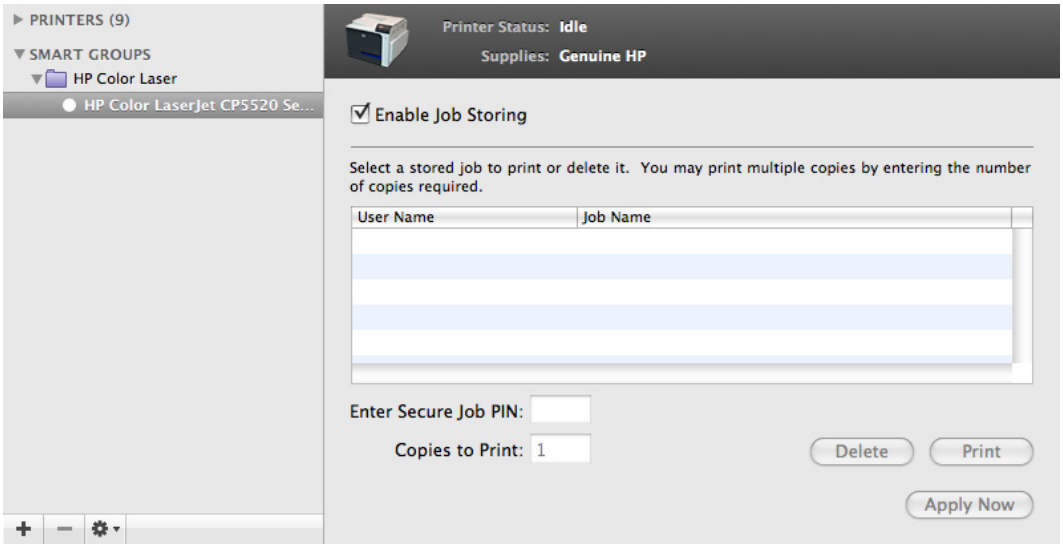
1. In the **Printer Settings** section of the HP Utility, select **Trays Configuration** to change paper size and type for each of the trays installed on your product.
2. To change the paper type, select a tray and then select a different paper type in the **Default Media Type** drop-down menu.
3. To change the paper size, select a tray and then select a different paper size in the **Default Media Size** drop-down menu.
4. Click **Apply Now** to save the settings.

Stored Jobs

NOTE: Functionality for this option is not supported on this product in the HP Printer Utility for Mac. Use the embedded web server to use this functionality.

In the **Printer Settings** section of the HP Utility, select **Stored Job** to change the **Enable Job Storing** setting. This setting is selected by default. Click to clear the check box to disable the job-storing feature.

Figure 5-23 Enable Job Storing screen



You can type a PIN for your job in the **Enter Secure Job PIN** field.

Select the number of copies in the **Copies to Print** field.

Select a stored job and click **Print** to print the job.

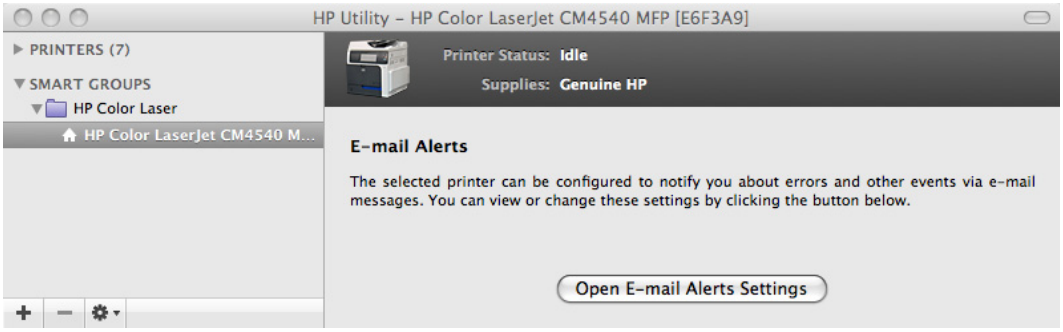
Select a stored job and click **Delete** to delete the job.

E-mail Alerts

In the **Printer Settings** section of the HP Utility, select **E-mail Alerts** to configure the HP Color LaserJet Enterprise CM4540 MFP Series product to send e-mail notifications to users.

If a user name and password have been set, you might need to obtain them from the IT administrator. For more information, see the HP EWS online help.

Figure 5-24 E-mail Alerts screen

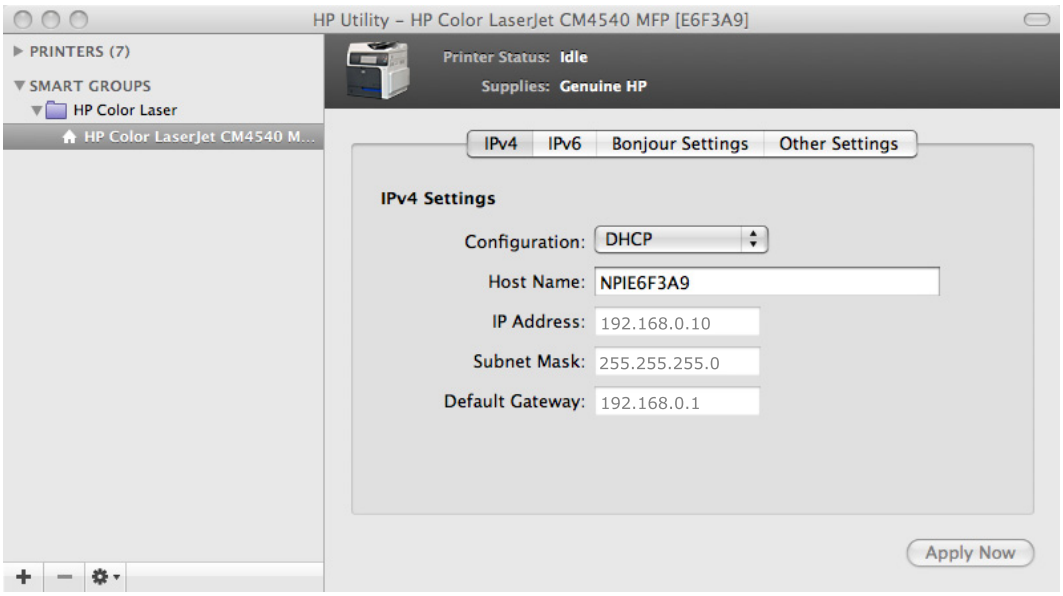


Click **Open E-mail Alerts Settings** to open the HP EWS. The HP EWS opens to the **Setup** screen on the **Alerts** tab, where you can set notifications.

Network Settings

In the **Printer Settings** section of the HP Utility, select **Network Settings** to open the **IP Settings** screen.

Figure 5-25 **IPv4 Settings** screen



The **Network Settings** screen provides access to **IPv4**, **IPv6**, **Bonjour Settings**, and **Other Settings** then click **Additional Network Settings**.

Select **Configuration**, to modify the following settings:

- **DHCP**
- **BootP**
- **Manual**

You can also use this screen to modify the following settings:

- **Host Name**
- **IP Address**
- **Subnet Mask**
- **Default Gateway**

To save new settings, click **Apply Now**.

To view and change other network settings, click **Other Settings**.

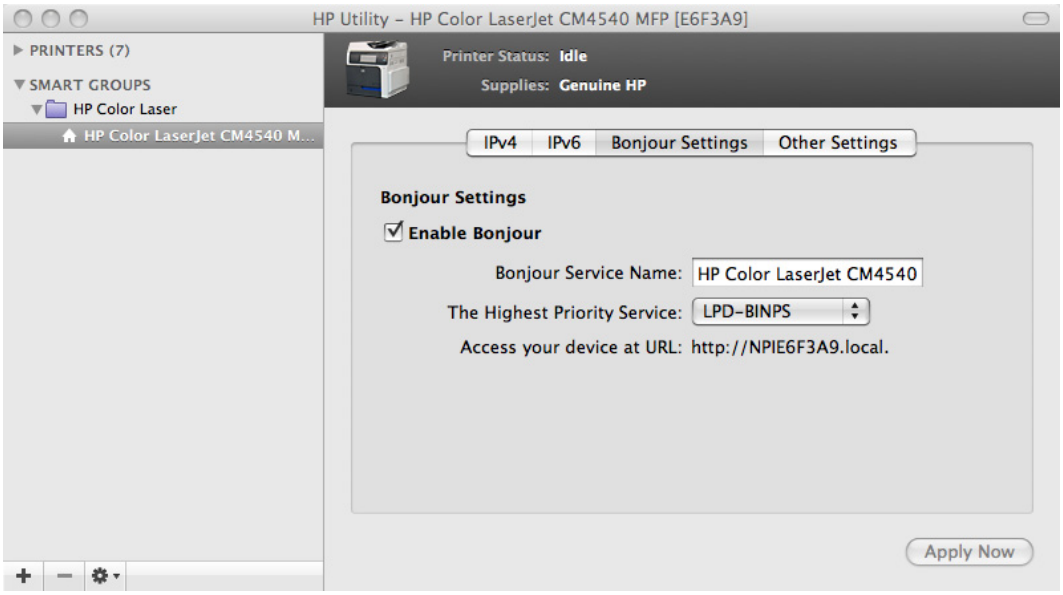
If a user name and password have been set, you might need to obtain them from your IT administrator. For more information, see the HP EWS online help.

The HP EWS opens to the **Network Settings** screen.

To view and change the Bonjour network settings, click **Bonjour Settings**. Bonjour is enabled by default.

To disable Bonjour, click to clear the **Enable Bonjour** check box and then click **Apply Now**.

Figure 5-26 Bonjour Settings screen



Select **Bonjour Settings** to open the **Bonjour Settings** screen. Bonjour is enabled by default.

The following options are available in the **The highest priority service** drop-down menu:

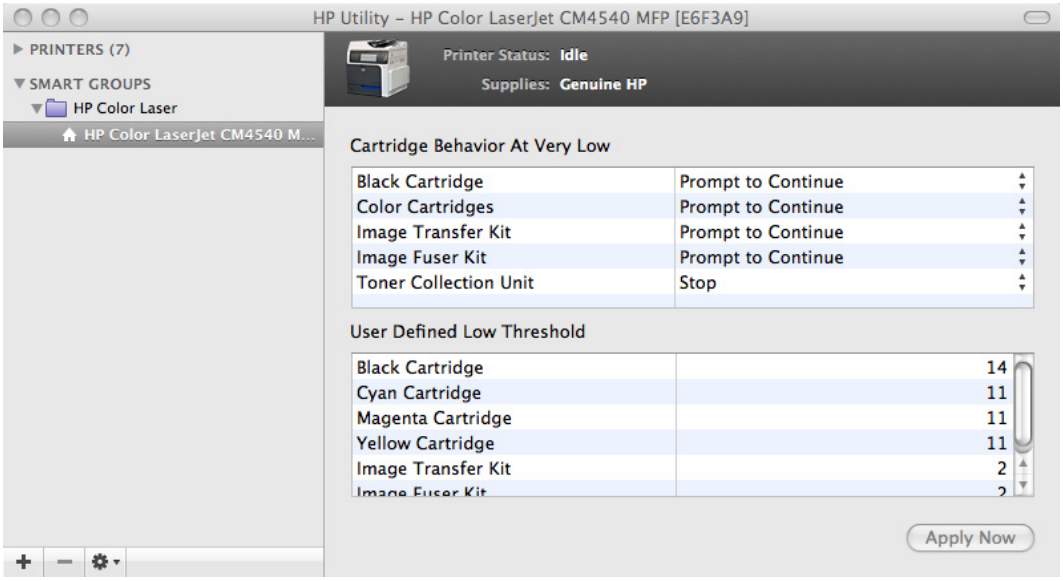
- **Port 9100**
- **IPP**
- **LPD-RAW**
- **LPD-TEXT**
- **LPD-AUTO**
- **LPD-BINPS** (default)

After you select a new setting, click **Apply Now** to save it.

Supplies Management

In the **Printer Settings** section of the HP Utility, click **Supplies Management** to open the **Supplies Management** screen.

Figure 5-27 Replace Supplies screen



The **Supplies Management** screen allows you to define how the product responds when the supply states are **At Very Low** for cartridges, image transfer/fuser kits, and the toner collection unit. The **Supplies Management** screen also allows you to define when that very low message state or alert is given by setting the **User Defined Low Threshold** (the percentage of estimated supply life left, at which you want the product to alert you that the supply is low).

In the **Cartridge Behavior at Very Low** area, select one of the following actions for the product to take when the black cartridge, color cartridges, image transfer, image fuser, or toner collection kits, are **At Very Low**.

- **Stop**
- **Prompt to Continue** (default)
- **Continue**

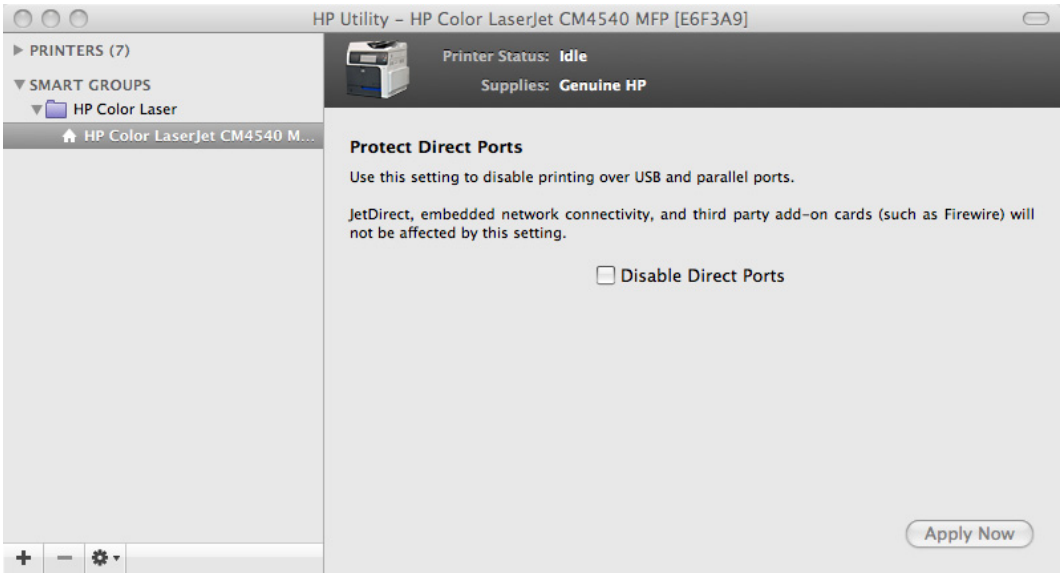
In the **User Defined Low Threshold** area, select a percentage life remaining next to the cartridge or image transfer/fuser kit to define the low threshold alert level for that cartridge or image transfer/fuser kit.

Click **Apply Now** to save the new settings.

Protect Direct Ports

In the **Printer Settings** section of the HP Utility, select **Protect Direct Ports** to disable printing over USB and parallel ports. JetDirect, embedded network connectivity, and third-party add-on cards, such as FireWire, will not be affected by this setting.

Figure 5-28 Protect Direct Ports screen

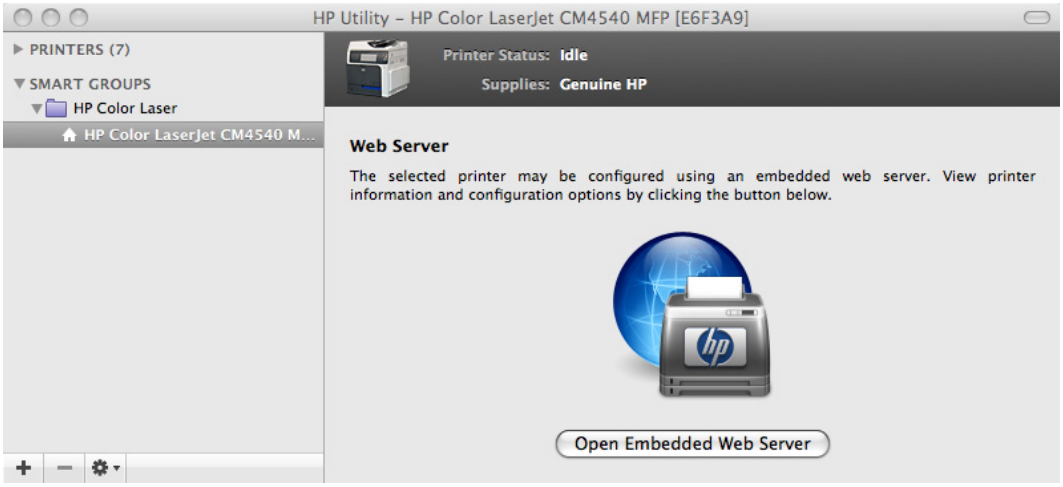


Click **Disable Direct Ports**.

Additional Settings

In the **Printer Settings** section of the HP Utility, select **Additional Settings** to gain access to the HP EWS.

Figure 5-29 Additional Settings screen



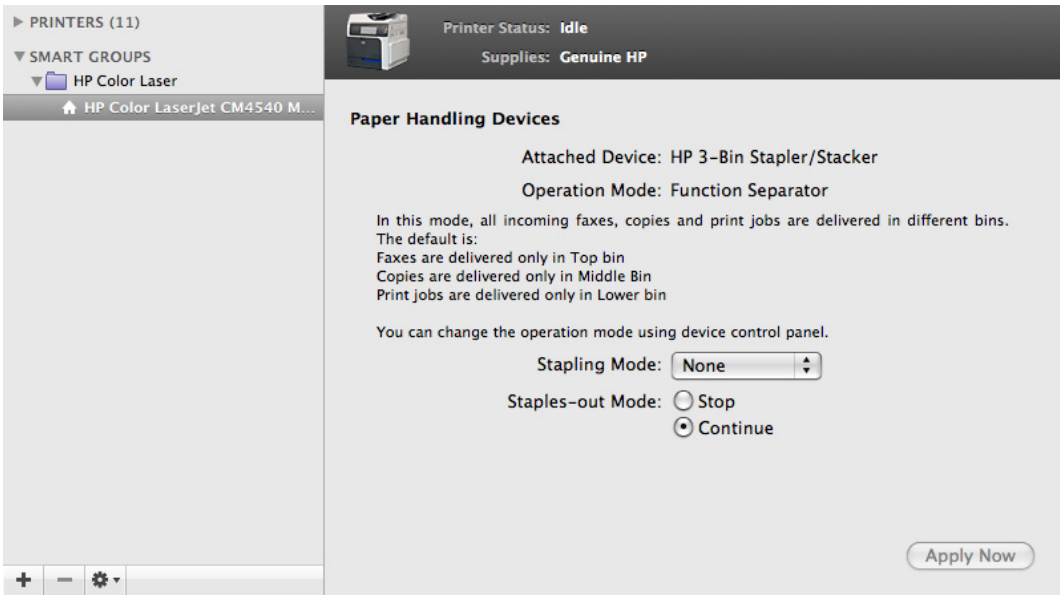
To open the HP EWS, click **Open Embedded Web Server**.

For information about HP EWS settings, consult the HP EWS online help.

Output Devices

Shows the paper handling devices on the printer and allows configuration.

Figure 5-30 Output Devices screen



Restrict Color

NOTE: Functionality for this option is not supported on this product in the HP Printer Utility for Mac. Use the embedded web server to use this functionality.

Configures color-printing restrictions for specific users and software programs.

NOTE: This option is available only after you open the **View** menu and select the **Show Advanced** option.

6 Engineering details

Introduction

This chapter presents engineering detail for the following topics:

- Remote firmware update
- Printing print-ready documents
- Special paper guidelines
- Media attributes and commands
- File to E-mail utility

Remote firmware update

The product features remote firmware update capability. The method for downloading remote firmware updates from the Web site is similar to that used to download the latest printing-system software and printer drivers.

NOTE: Firmware for the embedded Jetdirect print server updates when the product firmware is updated.

The process for remotely upgrading firmware involves three steps:

1. Determine the current level of firmware that is installed on the product.
2. Go to the HP Web site and download the latest firmware to the computer.
3. Download the new firmware to the product.

Determine the current level of firmware

To determine the current level of firmware, print the configuration page.

1. From the Home screen on the product control panel, touch the Administration button.
2. Open the following menus:
   - Reports
   - Configuration/Status Pages
3. Touch the Configuration Page item, and then touch the Print button.

On the printed configuration page, look in the section marked "Device (or Printer) Information" for the firmware date code and version. It will look similar to the following examples:

- Firmware Datecode: 20100831
- Firmware Revision: 103067_104746

Download the new firmware from the HP Web site

The firmware update file and an associated readme file are packaged together as a self-extracting .EXE file. For detailed instructions about how to download the .EXE file, go to the following Web site:

The .EXE file consists of a readme file and the .bdl upgrade file.

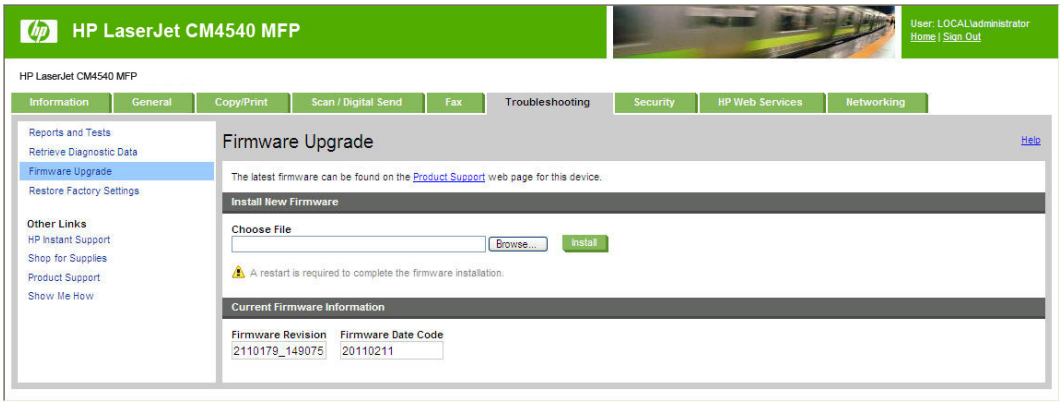
NOTE: You cannot update the product firmware using the traditional FTP, LPR or Port 9100 methods. Only the following methods can be used to update the firmware of the product.

IMPORTANT: Make sure that the product is ready to receive the firmware file and that no error messages are being displayed on the control panel.

Use the HP Embedded Web Server

1. Open a browser window.
2. Enter the product IP address in the URL line to open the HP Embedded Web Server.
3. Click the **Troubleshooting** tab, and then click the **Firmware Upgrade** link.

Figure 6-1 HP EWS Firmware Upgrade page



NOTE: If you get a warning screen, follow the instructions for setting an administrator password from the **Security** tab.

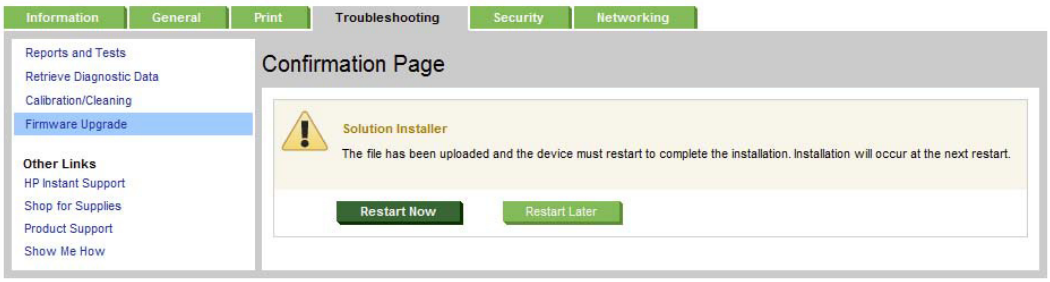
4. Browse to the location that the firmware upgrade file was downloaded to, and then select the firmware file (the file with the .bdl extension). Click the **Install** button to perform the upgrade.

IMPORTANT: Do not close the browser window until the HP Embedded Web Server (EWS) displays the confirmation page.

NOTE: The upgrade process might take some time, as the file size is large.

5. Perform one of the following steps:
   - Click the **Restart Now** button on the EWS confirmation page, or turn the product off, and then on again using the power switch. This is the recommended action, as the restart process completes the firmware upgrade.
   - Click the **Restart Later** button on the EWS confirmation page to restart the product at a later time. If you click this button, the update will not be complete until the product is restarted.

Figure 6-2 HP EWS Confirmation Page



Use the walkup USB port on the product control panel

1. Download the .EXE file from the Web, and then uncompress the .EXE file to gain access to the readme file and the .bdl upgrade file.
2. Copy the .bdl firmware upgrade file to a portable USB flash memory storage device (thumb drive).
3. Turn the product on, and then wait until it reaches the **Ready** state.
4. Touch the Device Maintenance button.
5. Insert the portable USB storage device with the firmware upgrade file on it into the USB port on the front of the product, and then touch the OK button.
6. Touch the USB Firmware Upgrade menu.
7. Touch the firmware update file, and then touch the Upgrade button.

TIP: If there is more than one firmware upgrade file on the storage device, make sure that you select the correct file for this product.

If you touch the Details button, the screen that opens can be used to determine if the version on the USB thumb drive is newer, older, or the same as the firmware that is currently installed on the product.

8. Depending on the file that you selected to upload, the product displays one of the following controls:
   - If you selected a firmware version that is newer than the current version, the Upgrade button appears. Touch it to start the upgrade process.
   - If you selected a firmware version that is the same version as the current version, the Reinstall button appears. Touch it to start the reinstallation process.
   - If you selected a firmware version that is older than the current version, the Rollback button appears. Touch it to start the rollback process.

   The product will start to update the firmware from the USB storage device. When the upgrade is complete, the product will initialize.

NOTE: Do not interrupt the updating process. The product will restart automatically.

9. When the upgrade process has completed, the product will restart. Once the product is back online, print a configuration page and verify that the new firmware has been installed.

Use HP Web Jetadmin

NOTE: The latest version of HP Web Jetadmin can be configured to get firmware details from HP.com directly. HP Web Jetadmin might be able to get firmware listing and firmware image files directly from HP.com, if this is allowed on the network on which HP Web Jetadmin is installed.

1. Start HP Web Jetadmin.
2. From the **Device Management** section, select **All Devices** (or the appropriate device group). An **All Devices** list will appear in the center window.

3. Find your product in the list, or type the IP address of the product in the **Quick Device Discovery** section in the lower-left of the screen (this will highlight your product in the device list). You can sort the product list by clicking on a column name at the top.
4. If your product list is sorted my model number, you may select multiple products with the same model number by Control-Click or Shift-Click.
5. Right-click on the product and select the **Upgrade firmware** item.
6. An **Upgrade Firmware** window will appear. Select **Device firmware**, and then click **Next**.
7. A list of available firmware will appear. If the correct version is listed, click **Next**, and the upgrade process will start.

If the correct firmware version does not appear on the list, perform a manual upload. New firmware may be available on an FTP site prior to appearing on HP.com. The instructions below allow you to upload a RFU file from your local PC to WJA 10.

Perform a manual firmware upload

1. Click on **Firmware/Firmware Repository** in the **Device Management** pane.
2. A Firmware Repository window displays in the center of the screen
3. Click **Upload** in the upper-right of the window.
4. Browse to the .bdl file on the computer.
5. Click **Upload**.
6. Once the .bdl file is uploaded, perform steps 2 through 6 in the previous section.

NOTE: Do not turn the product off during the update process. When the update process is complete, the product will automatically restart. If the firmware update process fails, HP Web JetAdmin will provide notification with a page (screen) of information regarding the reason(s) for failure. A link will be provided to attempt the process again.

Printing print-ready documents

Several methods are available for printing documents independently of the original software program that was used to create the document. Normally, the document is printed by opening the original application and printing it to a file, or is printed by means of a distribution method such as internet downloading. The following print-ready file formats can be sent directly to the HP Color LaserJet Enterprise CM4540 MFP Series product without first opening the original software program:

- HP LaserJet Printer Control Language (.PRN)
- Portable Document Format (.PDF)
- Postscript (.PS)
- Text (.TXT)

Use one of the following methods to send print-ready files to your product.

NOTE: The examples that are used here are for printing .PDF documents. However, any print-ready file type can be substituted.

Print-ready file printing by using FTP through a browser

Complete the following steps to print print-ready files directly by using FTP through a browser.

NOTE: The following instructions can be used on Windows or Macintosh operating systems.

1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout.
2. Open a browser window.
3. In the address line of the browser, type `ftp://<IPADDRESS>`. For example, if the TCP/IP address of your product is 192.168.0.90, type the following:

   `FTP:// 192.168.0.90`
4. Locate the print-ready file for the product.
5. Drag and drop the print-ready file onto the **PORT** icon in the browser window.

NOTE: If the **PORT** icon does not appear as a folder name, you might have to enable folder viewing for FTP sites in your Web browser. In Microsoft Internet Explorer, use the following procedure to enable the folder view.

1. Select **Tools**, then select **Internet Options**, and then select the **Advanced** tab.
2. Select the **Enable folder view for FTP sites**.
3. Click **OK** to save the setting.

Print-ready file printing by using FTP on a direct network connection (Windows)

If the HP Color LaserJet Enterprise CM4540 MFP Series uses a direct network connection, use file transfer protocol (FTP) to print a print-ready file. Complete the following steps for the operating system:

1. Take note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the Configuration page printout.
2. Open a command window on the computer.
3. Type `ftp <TCP/IP product ADDRESS>`. For example, if the TCP/IP address is 192.168.0.90, type the following:

   ```
   ftp 192.168.0.90
   ```

4. Press Enter on the keyboard.
5. When prompted for the user name, press Enter.
6. When prompted for the password, press Enter.
7. Type `bin` at the command prompt.
8. Press Enter. The message **200 Types set to I, Using binary mode to transfer files** appears in the command window.
9. Type `put <FILENAME>`, where <FILENAME> is the name of the print-ready file to be printed, including the path. For example, type the following:

   ```
   put C:\LJ\CP4520FW.PDF
   ```

   NOTE: If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type `put "c:\My Documents\LJ\CP4520FW.PDF"`

   The following series of messages appears in the command window:

   200 PORT command successful

   150 Opening BINARY mode data connection

   226 Ready

   226 Processing Job

10. Press Enter on the keyboard.
11. The print-ready file prints.
12. At the command prompt, type `bye` to exit the FTP command.
13. At the command prompt, type `exit` to return to the Windows interface.

Print-ready printing by using a local Windows port

To print directly by using a local Windows port, follow the instructions for your operating system.

Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, or Windows Vista

The print-ready file can be sent directly to the product by typing a `copy` command at a command prompt or in an MS-DOS window.

1. At a command prompt, type `copy /b <FILENAME> <PORTNAME>`, where <FILENAME> is the name of the print-ready file (including the path) and <PORTNAME> is the name of the appropriate printer port (such as LPT1). For example, type the following:

   ```
   C:\>copy /b c:\CP4520FW.PDF lpt1
   ```

2. Press Enter on the keyboard.

NOTE: If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type `C:\>copy /b "c:\My Documents\CP4520FW.PDF"`. The message **PROCESSING JOB** appears on the control panel, and the job prints.

3. At the command prompt, type `exit` to close the command window.

Print-ready file printing in a Windows network

If the product is shared on a Windows network, complete the following steps.

1. From a command prompt or in an MS-DOS window, type `copy /b <FILENAME> \\<COMPUTERNAME>\<SHARENAME>`, where <FILENAME> is the name of the print-ready file (including the path), <COMPUTERNAME> is the name of the computer from which the product is being shared, and <SHARENAME> is the product share name. For example, type the following:

   ```
   C:\>copy /b c:\CP4520FW.PDF \\your_server\sharename
   ```

NOTE: If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type `C:\>copy /b "c:\My Documents\CP4520FW.PDF" \\your_server\sharename`

2. Press Enter on the keyboard. The message **PROCESSING JOB** appears on the control panel, and the job prints. The message **1 file(s) copied** appears on the computer screen.

Print a print-ready file through the HP Embedded Web Server

1. Open the HP Embedded Web Server (HP EWS).
2. On the **Information** tab, click the **Print** menu item.
3. Click **Browse** and navigate to the file that you want to print.
4. Click **Apply**.

Print-ready file printing by using the LPR command

NOTE: This direct printing method is for use in Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, and Windows Vista.

Complete the following steps to print a print-ready file by using the LPR command.

1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout.
2. From a command window, type the following:

   ```
   lpr -P <IPADDRESS> -S <IPADDRESS> -o l <FILENAME>
   ```

   or

   ```
   lpr -S <IPADDRESS> -Pbinps <FILENAME>
   ```

   where IPADDRESS can be either the TCP/IP address or the host name of the product, and where FILENAME is the file name of the print-ready file.

   NOTE: The parameter (-o l) consists of a lowercase "O", not a zero, and a lowercase "L", not the numeral 1. This parameter sets the transport protocol to binary mode.

3. The file prints, but no messages appear in the command prompt window.
4. Type `exit` at the command prompt to close the command window.

Print-ready file printing by using FTP on a direct network connection (Macintosh)

If the HP Color LaserJet Enterprise CM4540 MFP Series uses a direct network connection, use file transfer protocol (FTP) to print a print-ready file. Complete the following steps for the operating system:

1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout.
2. Open a Terminal window on your Macintosh. You can find the Terminal program on the computer in the following location:

   System/Applications/Utilities/Terminal

   Open the Finder, select **Applications**, and then click **Utilities**. Double-click to open the Terminal utility.

3. Type `FTP <TCP/IP product ADDRESS>`. For example, if the TCP/IP address is 192.168.0.90, type the following:

   ```
   FTP 192.168.0.90
   ```

4. Press Enter on the keyboard.
5. When prompted for a user name and password, press Enter.
6. You can drag and drop the firmware file into the Terminal folder (System/Applications/Utilities/Terminal). Alternatively, you can type `put <path>`, where <path> is the location where the print-ready file was downloaded from the Web. For example, type the following:

   ```
   put /username/desktop/CP4520FW.PDF
   ```

NOTE: If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type `put "/user name/desktop/CP4520FW.PDF"`

To ensure that the entire path to the print-ready file is placed in the `put` command, type `put` and a space, and then click and drag the print-ready file onto the terminal window. The complete path to the file is automatically placed after the `put` command.

7. Press Enter.
8. The download process begins and the firmware is updated on the product. This can take about five minutes. Let the process finish without further interaction with the product or computer.
9. The product automatically turns off and on again to activate the update.

Print-ready file printing in UNIX systems

For UNIX systems, any command method that delivers the print-ready file to the product is acceptable, including the following:

- At the command prompt, type `cp </home/yourmachine/FILENAME/ dev/parallel>`, where </home/yourmachine/FILENAME> is the location of the print-ready file.

Special paper guidelines

For more information on Special paper guidelines; Supported paper sizes; Supported paper types; Tray and bin capacity; and Paper orientation see the User Guide at the following link: www.hp.com/go/cljcm4540mfp_manuals.

Media attributes and commands

This section includes the following information about paper attributes:

- Paper-source commands
- Paper-type commands examples

Paper-source commands

The PCL 6 Print driver attribute for paper source is `ubyte # MediaSource` or `ubyte_array "string" MediaSource`. See the following table for values of #. For example, "`ubyte 4 MediaSource`" is the command for Tray 2.

The PCL 5 print driver escape sequence for paper source is `Esc&l#H` (the "l" is a lowercase "L" rather than the numeral "1"). See the following table for values of #. For example, `Esc&l1H` is the command for Tray 2.

NOTE: The HP Color LaserJet Enterprise CM4540 MFP Series products support Tray 1, Tray 2, and Tray 3, Tray 4, and Tray 5.

Table 6-1 Paper-source commands

Input source	PCL 5 `Esc&l#H`	PCL 6 `ubyte # MediaSource`	PCL 6 `ubyte_array "string" MediaSource`	PostScript `/MediaPosition # or null/ ManualFeed true or false`
Automatically select	NA	NA	NA	NA
Printer auto select	7	1	AUTOSELECT	null false
Manual feed in tray 1	2	2	MANUALFEED	3 true
Tray 1 (100-sheet)	4	3	TRAY1	3 false
Tray 2 (250-sheet)	1	4	TRAY2	0 false
Tray 3 (500-sheet)	5	5	TRAY3	1 false
Tray 4	8	7	TRAY4	4 false
Tray 5	9	None	TRAY5	38 false
Tray 6	NA	None	TRAY6	39 false
Tray 7	NA	None	TRAY7	40 false
Tray 8	NA	None	TRAY8	41 false
Tray 9	NA	None	TRAY9	42 false

Paper-type commands examples

The PCL 5 print driver 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.

Table 6-2 Paper-type commands

Esc&	n#	Wd	Paper type
Esc&	6	Wd	Plain
Esc&	11	Wd	Preprinted
Esc&	11	Wd	Letterhead
Esc&	13	Wd	Transparency[1]
Esc&	11	Wd	Prepunched
Esc&	7	Wd	Labels
Esc&	5	Wd	Bond
Esc&	9	Wd	Recycled
Esc&	6	Wd	Color
Esc&	6	Wd	Light
Esc&	13	Wd	Interpaperte
Esc&	6	Wd	Heavy
Esc&	12	Wd	Extra Heavy
Esc&	11	Wd	Cardstock[2]
Esc&	6	Wd	Rough
Esc&	7	Wd	Glossy
Esc&	12	Wd	Tough Paper
Esc&	9	Wd	Envelope

[1] You must spell out the word "Transparency" in the string, although it is abbreviated as TRNSPRNCY on the control panel.

[2] The correct command for cardstock is "Esc&n11WdCard Stock", with a space between the "d" and the "S", and with an uppercase "S".

File to E-mail utility

The File to E-mail utility collects the data specified in an .INI file and then attaches the data files to an e-mail that can be sent to HP Customer Support to assist troubleshooting. The utility runs on the computer, but does not interact with the product.

The tool is included on the installer CD, but is *not* copied to the computer during the software installation. HP Customer Support can also send the utility by e-mail or by posting it to an HP Web site.

The tool is compatible with Windows XP, Windows Vista, and Win 7.

The File to E-mail utility runs with any MAPI-compliant e-mail applications. It does not run with Web-based e-mail services such as Yahoo, Hotmail, or AOL.

Depending on the speed of the computer, it might take a few minutes for the utility to gather the log files and attach them to an e-mail message.

The File to E-mail utility consists of two files that are located in the util folder on the product printing-system software CD:

- <CD-ROM drive>Utilities\FileToEmail.exe
- <CD-ROM drive>Utilities\FileToEmail.ini

To use the File to E-mail utility, copy these files to the desktop, navigate to them in Explorer, and double-click **FileToEmail.exe** to open the utility. The utility generates files, opens an e-mail message, and attaches the files so that you can send them to the system administrator.

If the File to E-mail utility is not successful for any reason (for instance, if you cancel the new message or you are using Web-based e-mail software), all the files are copied to a folder on the desktop that is named HpCCC, possibly with strings of zeros attached to the end. You can zip these files and e-mail them separately.

Index

A

Adobe Acrobat Reader
  printing PDF files without 168
alerts, e-mail
  Macintosh 157
Alternative Letterhead Mode
  supported products 65

B

Back button, Windows installation dialog boxes 27
blank or preprinted pages 82
  options 83
booklet printing
  Booklet Layout settings 99

C

Cancel button, Windows installation dialog boxes 27
cardstock, paper type commands 175
CD
  directory structure, Macintosh 133
  directory structure, Windows 3
  languages 4
  Macintosh printing-system software installation 133
chapter separator pages 83
Color
  Color Options settings 112
  Color Themes settings 115
  Custom Profile setting 116
  Default (sRGB) setting 115
  features, print drivers 111
  Neutral Gray settings 114
  None 116
  Photo (Adobe RGB 1998) setting 115
  Photo (sRGB) setting 115
  Vivid setting 116
color
  change default settings, manually 112
  Edge Control settings 114
  fine-tune default settings 112
  Halftone setting 114
  PANTONE color profiles 11
  printing settings, controlling 10
  restricting printing 10
color printing
  Pantone color profiles 11
Color Usage log, Macintosh 149
command-line printing, Windows 168
components, software
  Macintosh 131
connection type
  installation 23
constraint messages
  print drivers 60
copies
  Quick Copy setting 106
covers
  settings 81
custom paper types
  adding 80

D

DCU
  see HP Driver Configuration Utility 15
DDU
  see HP Driver Deployment Utility 14
default printer, setting 27
Device Status screen
  EWS 120
diagnostics
  troubleshoot 119
dialog boxes, printing-system software installation
  Mac OS X 134
direct printing
  FTP, Mac 171
  FTP, Windows 169
  local port, Windows 169
  LPR 170
  networks, Windows 170
  UNIX 172
directory structure, software CD
  Macintosh 133
  Windows 3
disk space requirements
  Macintosh 130
document preview image 59
documentation
  installing (Windows) 51
  languages 8
download
  firmware 164
drivers
  Automatic Configuration setting 124
  changing settings (Mac) 131
  document preview image 59
  languages 6
  Linux OS 19
  Printing Preferences tab 59
  UNIX OS 19
  Update Now, bidirectional communication 124
drivers, install
  license agreement 23
drivers, Windows
  change settings 58

duplexing 95
  supported products 70
  Tray 3 125

E
e-mail
  troubleshooting File to E-mail utility 176
e-mail alerts
  Macintosh 157
envelopes, paper type commands 175
escape sequences
  paper source 174
  paper type 175

F
fax driver. *See* HP Send Fax Driver
File to E-mail utility 176
File Upload, Macintosh 150
firmware
  determine current level 164
  download 164
  HP Web Jetadmin updates 166
  Macintosh updates 151
  remote update, Macintosh 151
  update remotely 164
  upload, HP Printer Utility 151
fonts
  install/remove external fonts 122
  Macintosh 132
  Send True Type as Bitmap, print drivers 65
  supported by Windows 13
  True Type, print drivers 63
  Upload Fonts, HP Printer Utility 152
  upload, Configuration Settings menu 152
FTP
  direct printing, Mac 171
  direct printing, Windows 169

H
heavy paper, paper type commands 175
help
  Macintosh 132
  print drivers 60
Help button, Windows installation dialog boxes 27
host-based driver
  document preview image 59
  Printing Preferences tab 59
HP (Printer) Utility, Macintosh
  access 147
HP Driver Configuration Utility (DCU) 15
HP Driver Deployment Utility (DDU) 14
HP Driver Installation Utility (HPDIU) 22
HP Embedded Web Server
  HP Printer Utility, accessing from 161
  Macintosh support 131
HP EWS
  print print-ready files 170
HP MFP Send Fax Driver
  sending a fax 39
HP PCL 6 Print Driver
  features 57
  settings 57
HP Printer Utility for Macintosh
  firmware update 151
HP Printer Utility, Macintosh 151
  about 146
  Color Usage log 149
  Device Information 149
  E-mail Alerts 157
  Embedded Web Server access 161
  File Upload 150
  Network Settings 157
  Supplies Management 159
  trays configuration 155
  Upload Fonts 152
HP Send Fax Driver
  install with the Add Printer Wizard 33
  install with the HP Driver Installation Utility 29
  installation 12, 28
HP Utility, Macintosh
  Supplies Status 148
HP Web Jetadmin
  firmware updates 166

I
ICM. *See* Image Color Management
Image Color Management
  color graphics printing 63
  enabling 63
Incompatible Print Settings messages. *See* constraint messages
installation
  component languages 7
  connection type 23
  dialog boxes, Mac OS X 134
  fax driver 12, 28
  File to E-mail utility 176
  HP Driver Installation Utility 22
  Macintosh printing-system software 133
  options 20
  system requirements for Macintosh 130
  troubleshooting Macintosh 144

J
Jetadmin. *See* HP Web Jetadmin
Job storage
  Macintosh 155
job storage mode
  personal job 106
  proof and hold 105

L
languages
  CD 4
  driver 6
  installer component 7
Linux OS
  driver availability 19
local port command line printing, Windows 169
localized CD 4
LPR commands
  printing PDF files 170

M

Mac
  driver settings 131
  removing software 145
Macintosh
  hardware requirements 130
  software components 131
  supported operating systems 130
Macintosh OS
  Color Usage log 149
  Device Information 149
  dialog boxes, Mac OS X printing-system software installation 134
  direct printing 168
  directory structure, software CD 133
  e-mail alerts 157
  File Upload command 150
  firmware upgrades 151
  fonts supported 132
  HP EWS 131
  HP Printer Utility 146
  install notes 132
  network settings 157
  network setup 133
  online help 132
  PDEs 131
  printing-system software installation 133
  stored jobs 155
  Supplies Management 159
  supplies status 148
  trays configuration 155
  troubleshooting setup 144
  Upload Fonts 152
memory
  Macintosh requirements 130
messages, constraint
  print drivers 60
Microsoft Windows
  installation options 20
model scripts, UNIX 19
mopy 126
multiple-original print. *See* mopy

N

networks
  color printing, restricting 10
  direct printing 170
  Macintosh settings 157
  Macintosh setup 133

O

operating systems
  supported 18
OS. *See* operating systems

P

pages
  blank or preprinted 82
Pantone
  color profile 11
paper
  adding custom types 80
  Alternative Letterhead Mode 65
  custom sizes 77
  duplex binding settings, print drivers 98
  orientation 101
  settings, print drivers 75
  source commands 174
  source setting 78
  type commands 175
  type setting 79
  types and sizes supported 174
PCL files, command-line printing 168
PDEs (Printer Dialog Extensions) 131
PDF files
  command-line printing 168
  LPR commands, printing 170
  Macintosh, File Upload command 150
personal job option
  job storage 106
PIN
  Personal Job setting 106
  PIN to print setting 107
PPDs, Macintosh
  troubleshooting 144
preview image 59
print drivers
  About tab contents 128
  Advanced Printing Features settings, print drivers 64
  Advanced tab content 62
Allow Manual Duplexing setting, Device Settings tab 125
Alternative Letterhead Mode, Advanced tab 65
Automatic Configuration setting, Device Settings tab 124
Automatic settings, Color tab 112
Booklet Layout settings, Finishing tab 99
collation settings 126
Color Options settings, Color tab 112
Color tab contents 111
Color Themes settings, Color tab 115
Copy Count settings, Advanced tab 63
device services, Services tab 120
Device Settings tab content 121
Document Options setting, Advanced tab 64
Document Options settings, Finishing tab 94
document preview image 84, 88, 101, 116
duplex unit, Device Settings tab 125
Effects tab content 86
Factory Defaults setting, Printing Shortcuts tab 72
Finishing tab contents 94
Flip Pages Up setting, Finishing tab 98
Font Substitution Table settings, Device Settings tab 122
Form to Tray Assignment setting, Device Settings tab 121
General Everyday Printing setting, Printing Shortcuts tab 68
General settings, Color tab 114
Graphic setting, Advanced tab 63
Halftone setting, Color tab 114

Help system 60
ICM options, Advanced tab 63
incompatible print settings messages 60
installable options, Device Settings tab 124
Internet Services options, Services tab 119
job name settings, Job Storage tab 108
job notification options, Job Storage tab 107
Job Separator setting, Device Settings tab 126
Job Storage Mode settings, Job Storage tab 105
job storage settings, Job Storage tab 109
Job Storage tab contents 103
Layout Options setting, Advanced tab 65
Macintosh 131
Manual settings, Color tab 112
mopier mode, Device Settings tab 126
Neutral Grays settings, Color tab 114
Orientation settings, Finishing tab 101
Page Order settings, Finishing tab 100
Pages per Sheet setting, Finishing tab 100
Paper Options settings, Paper/ Quality tab 75
paper source commands 174
Paper source setting, Paper/ Quality tab 78
paper supported 174
paper type commands 175
Paper type setting, Paper/ Quality tab 79
Paper/Output settings, Advanced tab 62
Paper/Quality tab contents 74
Personal Job setting, Job Storage tab 106
PIN to print setting, Job Storage tab 107
Print All Text as Black setting, Advanced tab 65
Print on Both Sides settings, Finishing tab 95
Print Optimizations setting, Advanced tab 64
Print Quality settings, Paper/ Quality tab 85
Printer Features setting, Advanced tab 65
printer hard disk, Device Settings tab 125
Printing Shortcuts tab contents 67
Proof and Hold setting, Job Storage tab 105
Quick Copy setting, Job Storage tab 106
Raster Compression feature, Advanced tab 65
Resizing Options settings, Effects tab 86
Send True Type as Bitmap setting, Advanced tab 65
Services tab content 119
status message, Job Storage tab 105
Stored Job setting, Job Storage tab 107
tray 3, Device Settings tab 125
tray 4, Device Settings tab 125
tray 5, Device Settings tab 125
True Type font settings, Advanced tab 63
Two-sided (Duplex) Printing setting, Printing Shortcuts tab 72
user name settings, Job Storage tab 108
Watermarks settings, Effects tab 89
What's this? Help 60
print job
delete stored job 110
hard disk, job storage 125
job name settings 108
job separator 126
job storage 126
Personal Job setting 106
Proof and Hold setting 105
Quick Copy setting 106
release stored job 109
Stored Job setting 107
user name 108
print on both sides 95
automatically 96
manually 96
supported products 70
Tray 3 125
print pages on different paper settings 83
print-ready files
command-line printing 168
print through HP EWS 170
printing by FTP 168
printing by local WIndows port 169
printing by Windows network 170
printing in UNIX systems 172
printing with LPR command 170
Printer Dialog Extensions (PDEs) 131
printer drivers
install, license agreement 29
uninstall, Add/Remove Programs 54
uninstall, Server Properties 55
printer drivers (Mac)
changing settings 131
printer, setting default 27
printing
direct in a Windows network 170
direct in UNIX 172
direct using FTP 168
direct using local Windows port 169
direct using LPR command 170
Printing Preferences tab set 59
Printing Shortcuts tab
paper size options 68
paper type options 70

printing-system software
availability 3
installation, Macintosh 133
requirements 19
printing-system software, install
license agreement 23, 29
printing-system software, uninstall
Add/Remove Programs 54
Server Properties 55
proof and hold 105
Properties tab
59
PS files, command-line printing
168

R
regional versions, CD 4
remote firmware updates
about 164
determine current firmware
level 164
downloading 164
HP Web Jetadmin 166
Macintosh 151
removing Mac software 145
RFU. *See* remote firmware updates

S
Scan Setup Wizard
create network folder 40
settings
drivers (Mac) 131
software
license agreement 29
option install (Windows) 51
uninstall, component list 53
uninstalling 53
uninstalling Mac 145
software license agreement 23
special media
guidelines 173
Special Pages
covers 81
special paper
guidelines 173
status
Macintosh supplies 148, 159
storage, job
Macintosh 155
supplies
Macintosh status 148, 159
system requirements
printing-system software 19

T
text files, command-line printing
168
transparencies, paper type
commands 175
trays
Alternative Letterhead Mode
65
duplex unit 125
Macintosh configuration 155
paper source commands 174
paper type commands 175
specify paper size 121
tray 3 125
tray 4 125
tray 5 125
troubleshoot
diagnostics 119
troubleshooting
File to E-mail utility 176
Macintosh setup 144
TXT files, command-line printing
168

U
uninstall
component list 53
Windows software 53
uninstalling Mac software 145
UNIX OS
direct printing 172
driver availability 19
print-ready printing 172
updating firmware remotely. *See*
remote firmware update
Upload fonts
Configuration Settings menu
152

W
Web Jetadmin. *See* HP Web
Jetadmin
Web sites
download software 3
firmware download 164
Internet Services options,
Services tab 119
other OS support links 19
Windows
installation options 20
Windows operating systems
change driver settings 58
default printer, setting 27
fonts supported 13
Windows OS
direct printing, FTP 168
direct printing, local port 169
direct printing, networks 170
directory structure, software
CD 3
HP PCL 6 Print Driver features
57
LPR commands 170
supported 18

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