LASERJET PRO CM1410
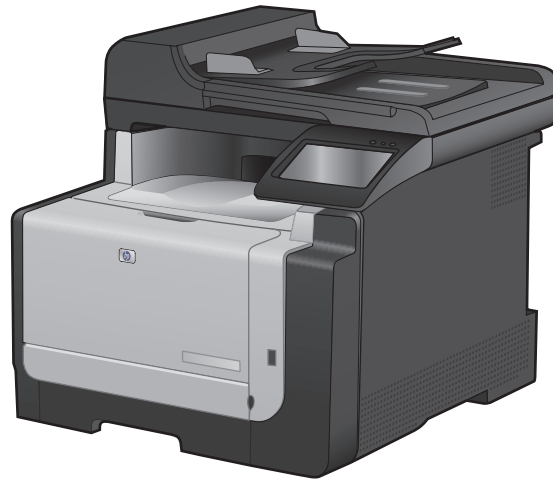## COLOR MFP SERIES

Software Technical Reference

HP LaserJet Pro CM1410 Color MFP Series

Software Technical Reference

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1 Document and product basics

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.

NOTE: This STR describes drivers that are available from the product firmware and shipped on the printing-system software CD that comes with the product. This STR does *not* describe drivers that will become available on the Web.

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.

Additional detailed information about the printing-system software is published in an addendum to this STR. The following information is available in the addendum:

● Lists of installed files

● System-modification information, such as files added or modified

Documentation availability and localization

The following table lists the availability of HP LaserJet Pro CM1410 Color MFP Series printing-system documentation by operating system.

Table 1-1 Documentation availability

Document	Windows XP/Server 2003/Server 2008/ Vista/7	Macintosh
HP LaserJet Pro CM1410 Color MFP Series User Guide (.PDF file)	x	x
HP LaserJet Pro CM1410 Color MFP Series Install Notes	x	

Access to HP LaserJet documents depends on the type of document and its location:

- Some documents can be opened from the Installer.

- Some documents are available on the Web through links in the Installer.

Documents are available in the following file formats:

- **Portable Document Format (.PDF)**. The HP LaserJet Pro CM1410 Color MFP Series printing-system software CD includes Adobe® Acrobat® Reader for viewing online documentation.

- **Compiled HTML (.CHM)**. When you click a documentation link to a .CHM document, a Microsoft HTML Viewer opens the file on the computer screen.

- **Hypertext Markup (.HTM)**. When you click a documentation link to an .HTM document, a Web browser opens the file on the computer screen.

- **Rich Text Format (.RTF)**. This is a text file. You can navigate to files and open them in Microsoft Word or Microsoft WordPad.

Documentation for the HP LaserJet Pro CM1410 Color MFP Series is divided into the following categories:

- User documentation

- Administrator documentation

User documentation

The following figure shows the **Documentation** screen, which appears when you click **More Options** then **Documentation** on the main screen of the HP LaserJet Pro CM1410 Color MFP Series printing-system software CD.

Figure 1-1 Installation software CD – User Documentation screen

HP LaserJet Pro CM1410 Color MFP Series User Guide

The *HP LaserJet Pro CM1410 Color MFP Series User Guide* describes the basic product features.

This guide may be accessed locally from the CD included with your product. The latest version of this guide may be accessed from the internet.

To access the local version from the CD:

1. In the main screen of the Installer, click the **More Options** then click the **Documentation** button.

2. Click the **User Guide (CD)** button. The **Help and Learn Center** opens.

3. Click on **Browse User Guide**.

To access the latest version from the internet:

1. In the main screen of the Installer, click the **More Options** button, then click the **Documentation** button.

2. Navigate to the Manuals\<language> folder.

    Click the **User Guide (Web)** button. The guide opens. This accesses the most up to date version.

HP LaserJet Pro CM1410 Color MFP Series Install Notes

The *HP LaserJet Pro CM1410 Color MFP Series Install Notes* (in .HTM format) contain important information about product features, instructions for installing the printing-system software, and technical assistance.

To view this guide from the software CD, follow these steps:

1. In the main screen of the Installer, click the **More Options** then click the **Documentation** button.

2. Click the **Readme** button. The guide opens.

You can also gain access to the file by following these steps:

1. Insert the software CD into the CD-ROM drive.

2. Navigate to the CD:\Setup\Docs\Readme\ folder.

3. Open the file that has the appropriate file name:

   LJCM1410_install-notes_XXWW.HTM

NOTE: The "XXWW" in the file name corresponds to the language. For instance, the file name for the French version of the document is LJCM1410_install-notes_FRWW.HTM.

Help and Learn Center

Click **Help and Learn Center** on the **Documentation** screen of the Installer to connect to a Web page that provides step-by-step instructions for performing specific tasks, including clearing jams and loading trays.

Administrator documentation

The following figure shows the **Administrator Documentation** screen.

To navigate to this screen, click the **More Options** button on the main screen of the Installer, and then click the **Admin Documentation** button.

NOTE: These links are to non-product specific documentation that may be useful and is available only online. Internet access is required.

Figure 1-2 Installation software CD – Administrator Documentation screen

HP Driver Configuration Utility User Guide

To view this guide from the software CD, follow these steps:

1. In the main screen of the Installer, click **More Options**, and then click **Admin Documentation**.

2. Click **HP Driver Configuration User Utility Guide**.

HP Jetdirect Guide

The *HP Jetdirect Guide* is a network administrator's guide (in .PDF format) that contains information about connecting the product directly to a network.

To view this guide from the software CD, follow these steps:

1. In the main screen of the Installer, click **More Options**, and then click **Admin Documentation**.

2. Click **HP Jetdirect Guide**.

Software availability and localization

This section provides information about the availability of the HP LaserJet Pro CM1410 Color 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:

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.

NOTE: This STR describes drivers that are shipped with the printing-system software CD. This STR does *not* describe any drivers that might be released for use by support personnel.

To view the product support web site from the CD, follow these steps:

1. In the main screen of the Installer, click **More Options**, and then click **Web Support**.

2. Click **Product Support**.

In-box printing-system software CD

The software CD for the HP LaserJet Pro CM1410 Color 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 LaserJet Pro CM1410 Color MFP Series comes with two printing-system software CDs, one for Windows operating systems and one for Macintosh operating systems.

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

HP LaserJet Windows software CD

NOTE: For information about the contents of the Macintosh CD, see Macintosh software and utilities on page 111.

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

- Installer
- Languages
- Prerequisites
- Setup
- Utilities

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

- FileToEmail
- Scrubber

CD versions and language support

The product printing-system software CD is available with the following components and languages.

Table 1-2 Software CD supported languages

Language	Two-letter abbreviation	HP-preferred name	File designation
Arabic	AR	Arabic	ARWW
Bahasa Indonesian	ID	Bahasa Indonesian	IDWW
Bulgarian	BG	Bulgarian	BGWW
Catalan	CA	Catalan	CAWW
Croatian	HR	Hrvatski	HRWW
Czech	CS	Cestina	CSWW
Danish	DA	Dansk	DAWW
Dutch	NL	Nederlands	NLWW
English	EN	English	ENWW
Estonian	ET	Eesti	ETWW
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
Kazakh	KK	Kazakh	KKWW
Korean	KO	Korean	KOWW
Latvian	LV	Latviski	LVWW
Lithuanian	LT	Lietuviskai	LTWW
Norwegian	NO	Norsk	NOWW
Polish	PL	Polski	PLWW
Portuguese	PT	Portugues	PTWW
Romanian	RO	Romanian	ROWW
Russian	RU	Russian	RUWW
Serbian	SR	Srpski	SRWW
Simplified Chinese	ZHCN	Simplified Chinese	ZHCN

Table 1-2 Software CD supported languages (continued)

Language	Two-letter abbreviation	HP-preferred name	File designation
Slovak	SK	Slovak	SKWW
Slovenian	SL	Slovenian	SLWW
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
Vietnamese	VI	Vietnamese	VIWW

Driver languages

The product provides driver support in the following languages.

Table 1-3 Supported printer driver languages

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

Installer languages

The product provides installer component support in the following languages.

Table 1-4 Installer component languages

Component	Language list	
Administrator install	● Arabic	● Latvian
Installer	● Bahasa Indonesian	● Lithuanian
Common Windows installer	● Bulgarian	● Norwegian
Web registration (with the following exceptions)	● Catalan	● Polish
	● Croatian	● Portuguese
● Arabic and Hebrew support in English only	● Czech	● Romanian
● Catalan support in Spanish only	● Danish	● Russian
	● Dutch	● Serbian
● No support for Bulgarian, Estonian, Croatian, Lithuanian, Latvian, Romanian, Slovak, Slovenian, Serbian, Thai, Ukrainian	● English	● Simplified Chinese
	● Estonian	● Slovak
	● Finnish	● Slovenian
	● French	● Spanish
	● German	● Swedish
	● Greek	● Thai
	● Hebrew	● Traditional Chinese
	● Hungarian	● Turkish
	● Italian	● Ukrainian
	● Japanese	● Vietnamese
	● Kazakh	
	● Korean	

Documentation languages

The product provides documentation in the following languages.

Table 1-5 Documentation languages

Component	Language list	

• *HP LaserJet Pro CM1410 Color MFP Series User Guide (.PDF file)*
 	
• *HP LaserJet Pro CM1410 Color MFP Series User Guide (.CHM file)*
 	
• *HP LaserJet Pro CM1410 Color 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 LaserJet Pro CM1410 Color MFP Series Install Notes (.HTML file)*
	• Arabic
	• Bahasa Indonesian
	• Bulgarian
	• Catalan
	• Croatian
	• Czech
	• Danish
	• Dutch
	• English
	• Finnish
	• French
	• German
	• Greek
	• Hebrew
	• Hungarian
	• Italian
	• Kazakh
	• Korean
		• Norwegian
		• Polish
		• Portuguese
		• Romanian
		• Russian
		• Slovak
		• Slovenian
		• Serbian
		• Spanish
		• Swedish
		• Thai
		• Turkish
		• Ukrainian
		• Simplified Chinese
		• Traditional Chinese

2 Windows software description

Introduction

The 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 111.

This section contains information about the following topics:

- Windows printing-system software

- Driver configuration for Windows

- HP Driver Diagnostic Printer Check Tool

- HP Customer Participation Program

- Scan software

- HP LaserJet Fax Setup Utility

- HP LaserJet Send Fax software

- Font support

- HP Driver Deployment Utility

Windows printing-system software

This section contains information about the following topics:

- [Windows printing-system software](#)

- [HP Color LaserJet print drivers](#)

Windows printing-system software

Table 2-1 Software components for Windows

Component	Description
HP installer	Installs the printing-system software based on the hardware it detects from the host computer.
Uninstaller	Removes files and folders that were installed when the printing-system software was originally installed on the computer.
Scrubber Utility	A standalone utility used remove all the installation files and folders that were installed with the printing system software was originally installed in the computer.
File-to-email Utility	Collects crash logs and attaches the data files to an e-mail to assist troubleshooting an installation or operation failure.
HP LaserJet Scan software	Provides access to the scan functions on the product.
HP LaserJet Send Fax software	Provides the ability to send faxes from the computer.
HP ToolboxFX	Provides an interface to manage the product. Use HP ToolboxFX to perform the following tasks: • Monitor the status of the product. • Change the print, phone book, and limited fax settings for the product. • Find troubleshooting information and instructions for performing basic tasks. • Receive Status Alerts when certain events occur or conditions exist on the product.

Table 2-1 Software components for Windows (continued)

Component	Description
Driver software	Use the driver software to print, fax, and scan with the computer and the product.
	This software includes the following drivers:
	● The HP PCL 6 printer driver. The HP PCL 6 printer driver is installed by default.
	● The HP PCL 5 Universal Printer Driver (UPD). This printer driver is *not* installed by default. To install the HP PCL 5 UPD, use the Microsoft Add Printer wizard.
	● The HP postscript level 3 emulation printer driver and PostScript printer description (PPD) file for printing with PS level 3 emulation. This printer driver is *not* installed by default. To install the HP PS printer driver, use the Microsoft Add Printer wizard.
	● The HP LaserJet Send Fax driver
	● Scan drivers
	◦ **Windows Image Acquisition (WIA) driver for Windows XP and Vista**. WIA scanning can be started from a WIA-compliant program or from the computer. WIA has its own user interface that is relatively simple and does not contain the wide range of image-quality options that are available in the TWAIN driver user interface.
	◦ **TWAIN driver**. TWAIN is an industry-standard scanning protocol. Scanning from the product can be initiated from any TWAIN-compliant software program.
Readiris Professional v12.0 text-recognition software by IRIS	Converts scanned images into text that can be edited in word-processing programs.
	The user interface is localized into six languages. However, the software supports text-recognition in 124 languages.
	Readiris Professional supports text recognition in 2-byte Asian characters. You must have your operating system set up to display 2-byte characters in order to see the text.
	NOTE: For better text-recognition scanning results, start Readiris and scan directly into the program. Readiris v12.0 automatically starts a wizard to help guide this process.
	When Readiris is installed on the computer, it appears as an option in the destination drop-down box in the HP Scan software. If you select Readiris as the destination, the image is scanned into .TIFF format and Readiris automatically starts the text-recognition process.
	The Readiris software uses a separate installer that comes on a separate CD. The initial release of the product includes Readiris Professional software.
Online Help	Provides help for using the product software.
	The user documentation for this product is included on the installation CD as both .CHM (online help) files and Adobe® Acrobat® .PDF files. A Web browser must be installed on the computer to view the contents from any .CHM file. Adobe Acrobat Reader must be installed on the computer to view the contents from any .PDF file.

HP Color LaserJet print drivers

HP LaserJet Pro CM1410 Color MFP Series print drivers provide the printing features and communication between the computer and the product. The software CD includes software for end users and network administrators who are working in the following operating environments:

- Windows XP (32-bit and 64-bit), Windows Server 2003 (32-bit and 64-bit), Windows Server 2008 (32-bit and 64-bit), and Windows Vista (32-bit and 64-bit), and Windows 7 (32-bit and 64-bit)

- Apple Mac OS X v10.5 and later

In Windows operating systems, automatic configuration, driver updates after a new product configuration, and preconfiguration features are available with the HP LaserJet Pro CM1410 Color MFP Series product.

NOTE: For additional information about installing the printing-system software, see the *HP LaserJet Pro CM1410 Color MFP Series Install Notes* on the printing-system software CD.

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

HP PCL 6 Print Driver, PCL 5 Universal Print Driver, and PS Universal Print Driver

All of the Windows drivers are supported by Microsoft 32-bit and 64-bit operating systems. The HP PCL 6 driver is included on the HP LaserJet Pro CM1410 Color MFP Series printing-system software CD. The PCL 5 Universal Print Driver and the PS Universal Print Driver are available for download at the following Web site:

www.hp.com/support/CM1410series

NOTE: If you select the recommended installation by clicking **Install Now** on the main screen of the Installer, the HP PCL 6 Print Driver is installed by default.

Print-driver version numbers for Windows operating systems

Access to print-driver version numbers varies, depending on the operating system in which the HP LaserJet Pro CM1410 Color MFP Series product is installed.

NOTE: For a list of HP LaserJet Pro CM1410 Color MFP Series print drivers, updated HP printing-system software, and product-support information, go to:

www.hp.com/support/CM1410series

The Windows XP, Windows Server 2003, Windows Server 2008, Windows Vista, and Windows 7 operating systems support the HP PCL 6, PCL 5 Universal Print Driver, and PS Emulation Universal Print

Drivers. If you are using an HP print driver in a Windows environment, follow these steps to find driver-version information:

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 icon.

3. Click **Properties**.

4. Click the **About** tab.

You can also gain information about driver versions by clicking the **About** button that appears on most driver tabs.

Driver configuration for Windows

The HP print drivers feature bidirectional communication technology which, in supported environments, provide automatic discovery and driver configuration for product accessories at the time of installation.

Some accessories that are automatically discovered and configured include the duplexing unit, optional paper trays, printer hard disk, and dual inline memory modules (DIMMs).

Driver autoconfiguration

Automatic discovery and driver configuration through bidirectional communication occurs in the following circumstances:

- When a print driver is installed by using the installer

- When using the Update Now feature for a driver that is already installed

However, as shown in the following table, driver autoconfiguration and Update Now are *not* available in Windows XP, Windows Server 2003, Windows Server 2008, Windows Vista, or Windows 7 operating systems over a direct connection when the HP LaserJet Pro CM1410 Color MFP Series product is installed by using the Add Printer wizard.

Table 2-2 Automatic discovery and driver configuration through bidirectional communication[1]

Connection type	Add Printer Wizard install	Common installer
Network	Yes	Yes
Direct connection	No	Yes

[1] The table applies to Windows XP, Windows Server 2003, Windows Server 2008, Windows Vista, and Windows 7.

Bidirectional communication

In environments that support bidirectional communication, the computer communicates with the product during installation, determines the physical configuration, and then configures the driver accordingly.

Bidirectional communication is the capability of the product to respond to data inquiries from the computer and report information back, such as what type of print paper is available or what accessories are connected to the product. Bidirectional communication depends on the network operating system and on the type of connection that exists between the computer and the HP LaserJet Pro CM1410 Color MFP Series. If the connection does not have this capability (that is, if it has no bidirectional mode), it can only accept commands from the host and cannot report information back to the host computer.

Enterprise AutoConfiguration

Enterprise AutoConfiguration (EAC) uses bidirectional communication to provide autoconfiguration functionality for installation of the print driver over a network, whether you use the installer on the printing-system software CD or the Add Printer wizard to install the driver. Driver installation that includes EAC is configured with the same settings as the physical configuration of the product. Configuration occurs without user interaction.

If bidirectional-communication software has been installed previously, EAC is not activated, and the pre-existing bidirectional-communication software is used to configure the print driver.

If bidirectional communication software has not been installed, EAC installs bidirectional-communication software that allows it to communicate with the product and automatically match the print driver with the actual product configuration. EAC is activated during installation of the driver or whenever the Update Now feature is used.

If the HP LaserJet Pro CM1410 Color MFP Series product configuration changes after installation, the driver can be automatically updated with the new configuration in environments that support bidirectional communication by using the Update Now feature. For more information, see Update Now on page 22.

The following tables show the availability of EAC for various operating systems and network environments that support bidirectional communication.

Table 2-3 EAC availability in Microsoft Windows and Microsoft Share

Method	Connection type			Microsoft Share[1]		
				2000	**XP**	**2000/XP host with 2000/XP client/ Windows Server 2008/ Windows Vista**
		USB				
	Network	Jetdirect	TCP/IP	x	x	x
			IPX/SPX	x	x	x
		Standard	TCP/IP (HP)	x	x	x
			TCP/IP (MS)	x	x	x
			IPX/SPX (HP)	x	x	x
Add Printer	Direct connect	Parallel				
		USB				
	Network	Jetdirect	TCP/IP	x	x	x
			IPX/SPX	x	x	x
		Standard	TCP/IP (HP)	x	x	x
			TCP/IP (MS)	x	x	x
			IPX/SPX (HP)	x	x	x

[1] This column represents the following Microsoft Share configurations: Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, or Windows Vista host with Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, or Windows Vista client.

Table 2-4 EAC availability in Novell Netware environments

Method	Connection type		Novell			
			Netware 4.x			**Netware 5.x**
			Bindery queue	**NDS queue**		**Bindery queue**
		USB				
	Network	Jetdirect	TCP/IP	x	x	x
			IPX/SPX			
		Standard	TCP/IP (HP)			
			TCP/IP (MS[1])			
			IPX/SPX (HP)			

[1] Bidirectional functionality is supported only with the client software from Novell. It is not supported with Microsoft Client Service for NetWare.

Update Now

If you have modified the configuration of the HP LaserJet Pro CM1410 Color MFP Series product since installation, the driver can be automatically updated with the new configuration in environments that support bidirectional communication. Use the Update Now feature to automatically reflect the new configuration in the driver.

For example, if the product is installed and an optional paper-handling accessory is added later, use the Update Now feature to query the product and update the settings to match the new product configuration.

The feature automatically updates the registry and changes the configuration information that appears on the **Device Settings** tab.

NOTE: Depending on which settings were updated, the Update Now feature might change the configuration information that displays on the print-driver tabs, instead of (or in addition to) changing the information on the **Device Settings** tab.

NOTE: The Update Now feature is not supported in environments where shared Windows XP clients are connected to Windows XP hosts.

To activate the Update Now 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 **Device Settings**.

5.   If necessary, click **Installable Options** to expand it and show the options.

6.   In the **Automatic Configuration** drop-down menu, select **Update Now**.

7.   Click **OK** to save the setting.

HP Driver Configuration

HP Driver Configuration is a software architecture and set of tools that permits HP printing-system software to be customized and distributed in managed corporate printing environments. Using HP Driver Configuration, information technology (IT) administrators in corporate and enterprise environments can preconfigure the printing and device defaults for HP print drivers before installing the drivers in the network environment.

HP Driver Configuration is most beneficial when configuring print drivers for multiple workstations or print servers for print queues that share the same configuration. Two types of features can be configured:

●   device settings

●   printing-preferences settings

The driver is configured to match the product hardware so that access to all of the product accessories through the driver is enabled correctly (for example, for duplexing units and additional input trays). Most driver-feature settings can also be configured.

HP Driver Configuration configures the driver to match the accessories that are installed on the product, or to match the settings that IT administrators make in the configuration (.CFG) file (for example, optional trays, total amount of memory, job-storage settings, or mopier settings).

The configuration process consists of three basic steps:

●   driver acquisition

●   driver configuration

●   driver installation and deployment

These steps can be accomplished in different ways, depending on the tool that is being used to define the configuration.

The driver configuration process is supported through three distinct tools. All three are designed with the same basic user-interface (UI) controls for interacting with the .CFG file, but are packaged

differently, either to support established product installation workflows or to leave the deployment and installation of the driver entirely up to the user. The following tools support driver preconfiguration:

- **HP Driver Configuration Utility**. The HP Driver Configuration Utility is a small, standalone, Windows-software program that the administrator can use to open the .CFG file that is associated with a particular driver and make modifications that are applied when that driver is installed on the target computer. It is intended for use in environments that have an established process for deploying drivers. This is the preconfiguration tool of choice to support any Novell or HP Print Server Appliance (PSA) and Point and Print environments. It is used in the way that any ordinary Windows software program is used.

  The HP Driver Configuration Utility is available at the following Web site:

  www.hp.com/go/dcu

- **HP Web Jetadmin Driver Configuration Plugin**. The HP Web Jetadmin provides a queue-creation program that can be used to create printer queues on Windows 2000, Windows XP, Windows Server 2003, or Windows Server 2008. The HP Web Jetadmin Driver Configuration Plugin adds a number of screens to the existing queue-creation workflow from which the drivers that are being installed for the queues can be customized as part of the process. The plug-in is limited to Internet Explorer browsers. Netscape Navigator is not supported.

  HP Web Jetadmin v10.0 is supported by the following:

  ◦ Windows XP (Professional only)

  ◦ Windows Server 2003 (R2 only)

  ◦ Windows Server 2008

  ◦ Windows Vista (Business and Enterprise Editions)

  The HP Web Jetadmin print management features are supported by the following:

  ◦ Windows XP Professional (with Service Pack 2 or higher)

  ◦ Windows Server 2003

- **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 print-driver files, and the code needed to deploy them, into two files: an .EXE file and a .CAB file. These files are run on the client computer to copy the print-driver files to the Windows driver store and, for network packages, to install the product. This utility is supported on Windows XP, Windows Server 2003, Windows Server 2008, and Windows Vista operating systems.

To gain access to the HP DDU, insert the software CD into the CD-ROM drive, and then navigate to the Driver Deployment Utility folder.

For more information about the HP DDU, refer to

For detailed information about gaining access to and installing these tools, see the **HP Driver Configuration Support Guide** at the following Web site and click on the **Manuals** link.

www.hp.com/go/dcu

Lockable features

The following driver features can be locked to prevent end-users from changing settings:

- **Print on Both Sides** (duplex). The options are **True** or **False**.

- **Print in Grayscale**. The options are **Disable** or **Enabled**.

- **Media Type**. The options include all the paper types that the HP LaserJet Pro CM1410 Color MFP Series product supports.

- **Paper Source**. The options are **Printer Auto Select**, **Manual Feed (Tray 1)**, **Tray 1**.

- **Job retention mode**. The option is **Off**.

- Orientation

- Color Options

When a feature is locked, the selected default option is the only option that is available to users. Generally, the feature is unavailable in the driver UI after it has been locked.

Continuous export

The term "continuous export" refers to the ability of the print driver to copy the latest print-driver settings back to the working copy of the preconfiguration file. Using this feature, the exported values can be transferred when a compatible version of the print driver is used to upgrade the print driver. For instance, if the orientation is set to **Landscape** for a driver originally installed in Windows XP, then the orientation setting automatically remains **Landscape** when the operating system is upgraded to Windows Vista, Windows Server 2003, or Windows Server 2008. The continuous export feature functions transparently from the user's perspective and works only between print drivers of identical product models.

NOTE: Not all of the driver parameters can be exported; however, the exportable components are always the same as the components that can be preconfigured.

The following table shows drivers and operating systems that support HP Driver Configuration.

Table 2-5 Operating systems that support HP Driver Preconfiguration

Driver	Windows XP	Windows Server 2003	Windows Server 2008	Windows Vista	Windows 7	Mac OS X v10.5 and later	Linux
HP PCL 6 Print Driver	Yes	Yes	Yes	Yes	Yes	NA	NA
HP PCL 5 Universal Print Driver	Yes	Yes	Yes	Yes	Yes	NA	NA
HP PS Universal Print Driver	Yes	Yes	Yes	Yes	Yes	NA	NA

[1] NA: Not applicable; the driver is not supported in this operating system.

HP Driver Diagnostic Printer Check Tool

The HP Driver Diagnostic Printer Check Tool is a Web-based diagnostic software that you can use to determine whether you are using the correct and most current Windows print driver for the HP LaserJet Pro CM1410 Color MFP Series product. Two methods are available to gain access to the HP Driver Diagnostic Printer Check Tool:

1. Open an Internet browser.

2. Go to the following Web site:

    www.hp.com/go/drivercheck

Or, use this alternative method.

1. Open an Internet browser.

2. Go to the HP Business Support Center (BSC) at the following Web site:

    www.hp.com/go/bsc

3. Click the **self-help resources** link on the left navigation bar.

4. Click **automatic driver checker** to run the HP Driver Diagnostic Printer Check Tool.

When the HP Driver Diagnostic Printer Check Tool runs, the products that are currently installed on the computer appear in a list. When you select the HP product that you would like to check, the HP Driver Diagnostic Printer Check Tool gathers information about your product, drivers, and system setup in order to diagnose the software driver configuration and check the print driver. The tool then verifies whether you are using the latest driver, informs you if you are using an incorrect driver for the HP product, and lets you know if an updated driver version is available for the product. If an updated driver is available, you can download and install the latest driver version by clicking it.

The data that the HP Driver Diagnostic Printer Check Tool gathers is stored anonymously so that HP can analyze and continuously improve its diagnostic tools. No private data is gathered from the computer.

HP Customer Participation Program

After the product is installed, you have the option of participating in HP's voluntary program for communication between your system and HP. This feature, available through software that is included on the printing-system software installation CD, helps HP monitor toner usage.

At the time of the invitation, about two weeks after installation, full disclosure of the information to be communicated is provided. Participation is entirely voluntary, and the impact on processing and connection speeds is negligible. Personal information is never sent to HP unless permission is given.

Figure 2-1 **Welcome to the HP Product Survey Program** screen
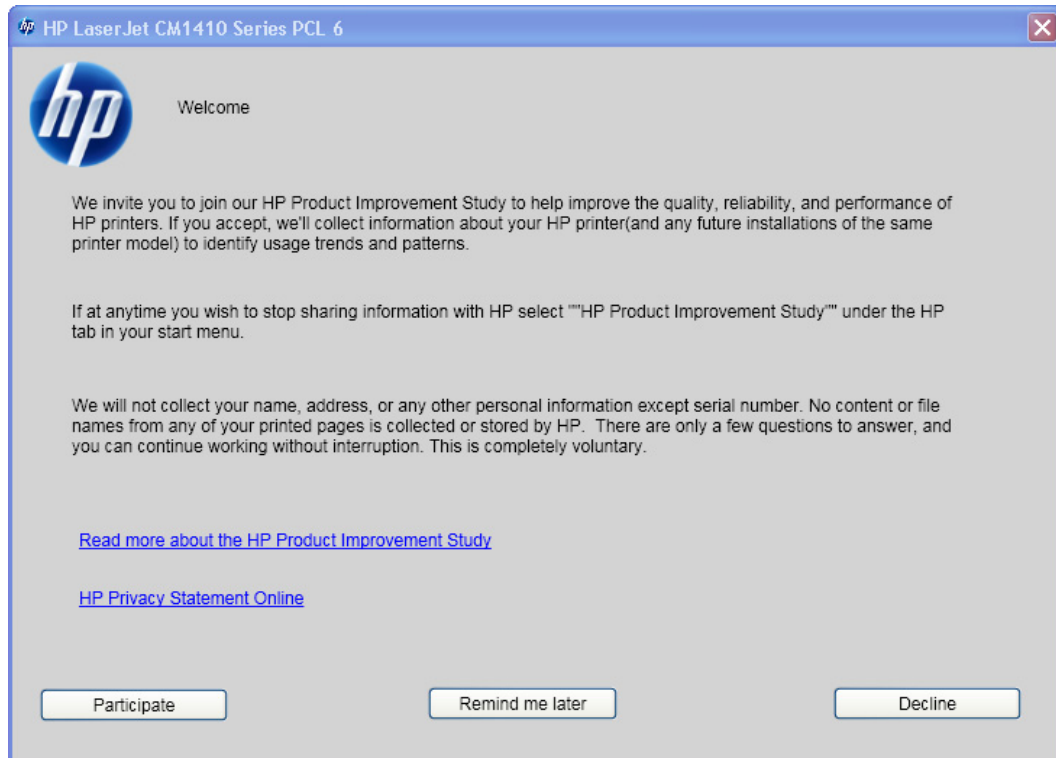
If you decline the invitation, the dialog box does *not* appear again and no data will be gathered.

Scan software

- [Scan methods](#)

- [HP Scan software](#)

- [Scan drivers](#)

Scan methods

Scan from the product by using any of the following methods:

- **From the product control panel.** On the product control panel, touch the Scan button. Use the arrow buttons to select an option, and then touch the Scan button to start the scan.

  📝 **NOTE:** Scanning from the product control panel is possible *only* after the option has been configured in the HP Scan software.

  The following options are configured by default for a USB connection:

  ◦ If you select **File**, the scanned photo will be saved to a directory that you specify.

  ◦ If you select **OCR**, the scanned document will be opened in the Readiris software to convert into an editable text document.

    📝 **NOTE:** This option *only* appears if Readiris text-recognition software is installed on the computer. For more information, see the help on the Readiris CD.

  ◦ If you select **EMAIL PIC**, the scanned photo will be attached to a new e-mail message. You can then add an e-mail address, add notes, and send the message.

  ◦ If you select **EMAIL DOC**, the scanned document will be attached to a new e-mail message. You can then add an e-mail address, add notes, and send the message.

  ◦ If you select **SETUP**, the HP Scan software opens the **Scan Setup Options** dialog box, where you can create, change, or delete the destination options that are available when you touch the Scan button on the product control panel.

    📝 **NOTE:** Photos are scanned at 150 dpi and documents are scanned at 300 dpi.

- **From the computer by using HP Scan (Windows).** Click **Start**, select **Programs** or **All Programs**, select **HP**, select the name of the product, and then click **Scan**. For more information, see HP Scan software on page 29.

- **From a WIA- or TWAIN-compliant software program.** Check the help system in the software program to learn how to scan by using a WIA- or TWAIN-compliant scanner from within that program. For more information, see Scan drivers on page 33.

HP Scan software

Use the HP Scan software to scan from the product and then complete any of the following tasks with the data:

- Save the scanned item to a file.

- Attach the scanned item to an e-mail.

- Perform text recognition on the scanned item through Readiris, if Readiris text-recognition software is installed on the computer.

- Open the scanned item with any third-party software program that supports the drag-and-drop function.

To use the HP Scan software, click **Start**, select **Programs** or **All Programs**, select **HP**, select the name of the product, and then click **Scan**.

The HP Scan software saves the scan as any of the following image file types:

- .BMP

- .GIF

- .JPG

- .PDF

- .TIFF (both regular and compressed)

Convert a scanned document into editable text by using the Readiris software. The following editable text file types are supported in Readiris:

- .BMP

- .DCA

- .DOC

- .DW

- .HTM

- .MM

- .PDF

- .RTF

- .TXT

- .WP

- .WPS

- .WS

- .WS2

The HP Scan software uses a simple user interface with a list of shortcuts, a **Restore Defaults** button, a **Advanced Settings** button, and a **Scan** button.

Figure 2-2 **HP Scan** dialog box
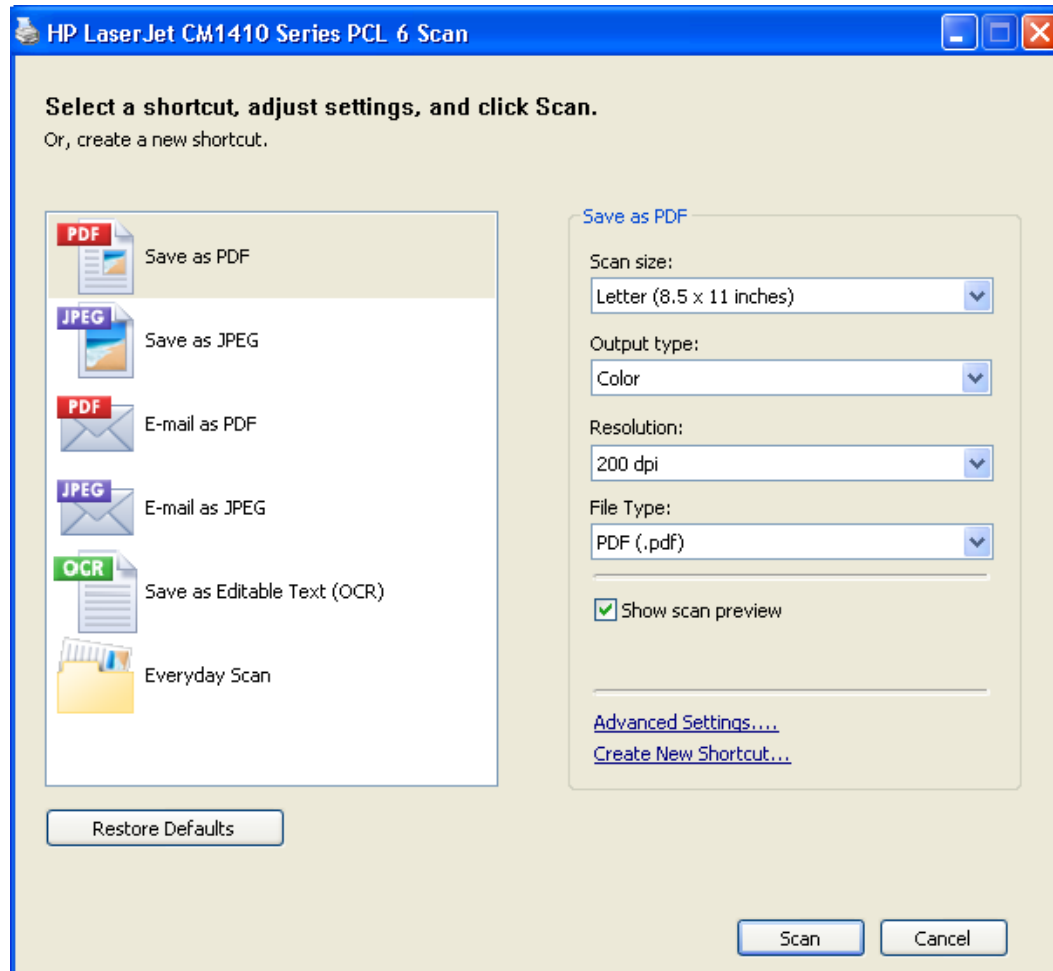
The list contains any user-defined destinations, and the following default destination options:

* **Save as PDF**

* **Save as JPEG**

* **E-mail as PDF**

* **E-mail as JPEG**

* **Save as editable text (OCR)** (if Readiris software is installed)

* **Everyday Scan**

After you select a destination, click **Scan** to start the scan.

Click **Advanced Settings** to open the **Advanced Settings** dialog box, where you can create, change, or delete the destination options that are available in the list and specify the destination options that are available when you press the Scan button on the product control panel. Each destination has a unique name and scan settings associated with it.

Figure 2-3 **Scan Setup Options** dialog box
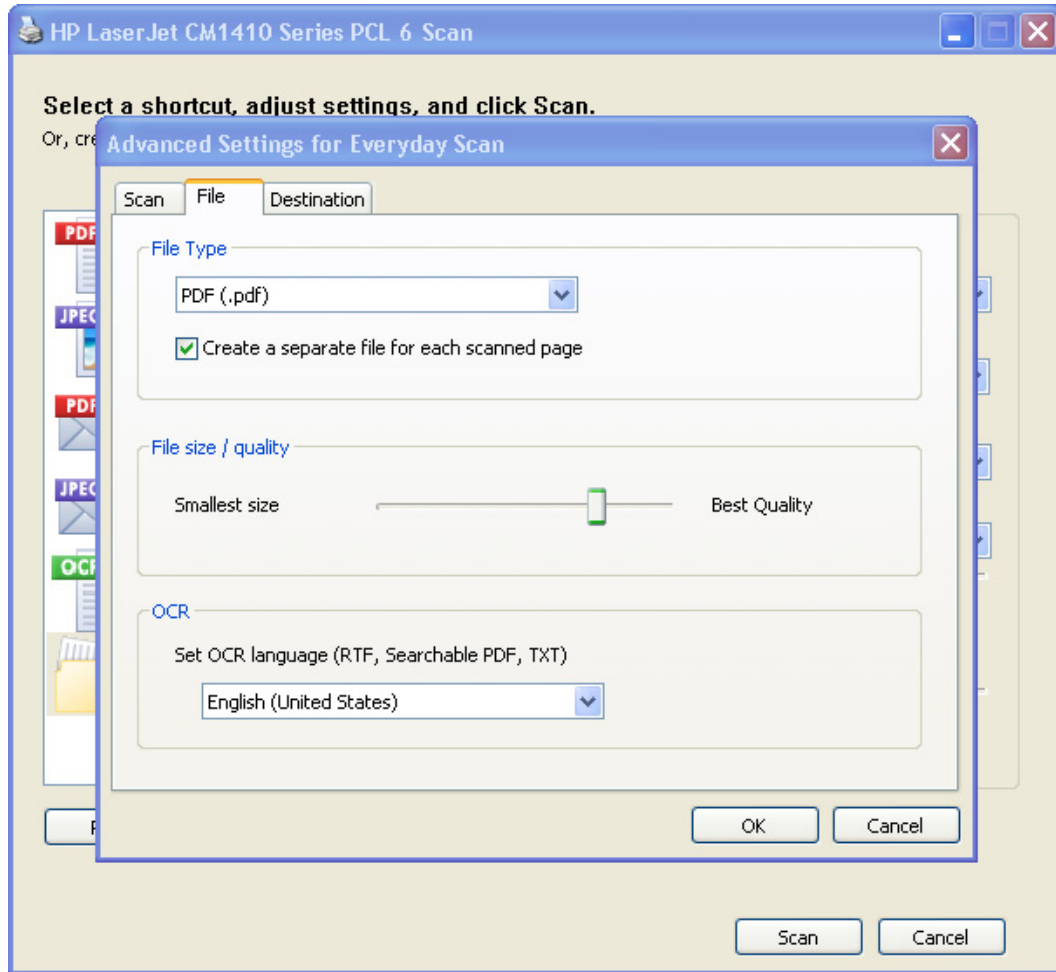
📝 **NOTE:** The **Change the destinations that show up on the all-in-one control panel when I press the <Scan To> button.** option appears *only* if HP ToolboxFX is running.

Many of the dialog boxes in the HP Scan software contain the following four common buttons:

● Click **Back** to return to the previous dialog box.

● Click **Next** to go to the next dialog box.

● Click **Cancel** to cancel the creation or deletion of a scan destination.

● Click **Help** to gain access to context-sensitive help for the dialog box.

The HP Scan software presents a series of dialog boxes that depend on the selections made in the HP Scan software dialog boxes.

Every time the HP Scan software is used, an HPPSCAN6.LOG file is generated in the current user's temporary directory. The HPPSCAN6.LOG file appends after every scan, and develops a log of operations that helps troubleshoot scanning problems. To gain access to the log file, follow these steps:

1. Click **Start** and then click **Run…**.

2. Type %TEMP% in the **Open:** field and then click **OK**.

3. Double-click the hppscan6.log file in the window that opens.

Selecting the third-party destination option saves the scanned image in a file of the specified file type. The HP Scan software then starts the specified software program by appending the filename after the software filename. Because the HP Scan software does not support automatic discovery of software programs, you must specify the correct software program and specify a file type that your program supports.

E-mail

The HP Scan software for Windows supports only 32-bit messaging application programming interface (MAPI)-compliant e-mail programs, and does *not* support Internet-based e-mail programs such as Hotmail, Yahoo, or MSN. The following table lists examples of supported e-mail programs.

Table 2-6 Examples of supported e-mail programs

Program Name	Windows OS
Microsoft Outlook	Yes: Outlook 97, Outlook 98, Outlook 2003, Outlook XP
Microsoft Outlook Express	Yes
Lotus Notes	Yes: V3.0 and later

E-mail is always sent through the default e-mail client. To see the default e-mail client in Windows XP (the path varies for other Windows operating system), click **Start**, click **Settings**, click **Control Panel**, click **Network and Internet Options**, click **Internet Options**, click the **Programs** tab, and review the **E-mail** setting.

Scan settings

The following table shows the available scan settings.

Table 2-7 Available scan settings

Option	Scan settings
Resolution **NOTE:** Scanning at higher resolution requires longer scan times and more memory.	• 75 dpi • 100 dpi • 150 dpi • 200 dpi • 300 dpi • 600 dpi • 1200 dpi
Image type (bit depth)	• Black and White (1 bit) • Grayscale (8 bit) • Color (24 bit)
File type	• Portable Network Graphics (*.png) • Adobe PDF (*.pdf) • Searchable PDF (*.pdf) • JPEG (*.jpg, *.jpeg) • GIF (*.gif) • Windows Bitmap (*.bmp) • TIFF (*.tiff, *.tif) • Rich Text (*.rtf) • Text (*txt)
Size to scan	• Entire Scan Area • Letter (8.5 x 11 inches) • Legal (8.5 x 14 inches) *Document Feeder Only • A4 (210 x 297 mm) • 3.5 x 5 in (9 x 13 cm) • 4 x 6 in (10 x 15 cm) • 5 x 7 in (13 x 18 cm) • 8 x 10 in (20 x 25 cm) • Custom Scan Size

Scan drivers

- [WIA driver](#)

WIA driver

📝 **NOTE:** The WIA driver does not support duplex scanning.

Use any of the following methods to open the Windows Image Acquisition (WIA) scanning feature for Windows XP:

- Start WIA scanning through a WIA-compliant software program.

- Right-click on the scanner icon in the **My Computer** folder, and then click **Scan**.

- Right-click on the scanner icon in the **My Computer** folder, and then click **Scanner Wizard**.

- Right-click on the scanner icon in the **Scanners and Cameras** folder in the **Control Panel**, and then click **Scan**.

- Right-click on the scanner icon in the **Scanners and Cameras** folder in the **Control Panel**, and then click **Scanner Wizard**.

The WIA user interface is relatively simple and does not contain the wide range of image-quality options that are available in the TWAIN-driver user interface.

Figure 2-4 WIA-driver user interface — flatbed
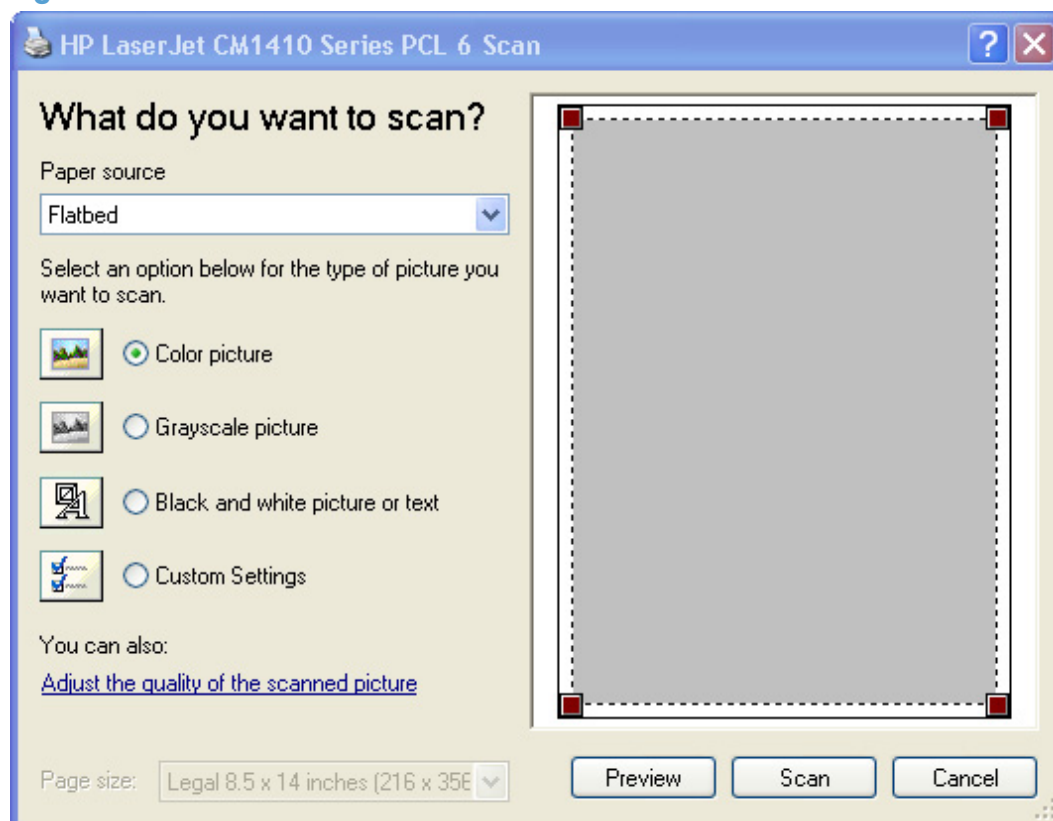
When you use the WIA scan driver, you must modify the brightness and contrast after you perform the scan. Contrast or brightness modifications cannot be set on the product. Only native product resolutions are supported, and no software interpolation is performed. The WIA scan driver supports document

feeder or flatbed scanning, but does not support duplex scanning. The WIA scan driver supports the following file types:

- .BMP
- .JPG
- .GIF
- .TIFF
- .FPX
- .PNG

NOTE: For more information about scanning, see the *HP LaserJet CM1410 MFP Series User Guide*, which is available on the printing-system CD that came with the product.

HP LaserJet Fax Setup Utility

The **HP LaserJet Fax Setup Utility** runs automatically after the printing-system software is installed. HP recommends that you run the utility to configure the fax settings for both the software and the product control panel. Run the utility even if you have already configured the fax settings. The settings in the **HP LaserJet Fax Setup Utility** are used by HP ToolboxFX to run other faxing features, such as the fax cover page.

NOTE: You can also start the **HP LaserJet Fax Setup Utility** by clicking **Start**, selecting **Programs** or **All Programs**, selecting **HP**, selecting the name of the product, and then clicking **HP Fax Setup Wizard**.

NOTE: For more information about faxing, see the *HP LaserJet CM1410 MFP Series User Guide*, which is available on the printing-system CD that came with the product.

HP LaserJet Send Fax software

Use the **HP LaserJet Send Fax** software to send faxes from the computer. To use the **HP LaserJet Send Fax** software, click **Start**, select **Programs** or **All Programs**, select **HP**, select the name of the product, and then click **Send Fax**.

Figure 2-5 **HP LaserJet Send Fax** dialog box – user interface
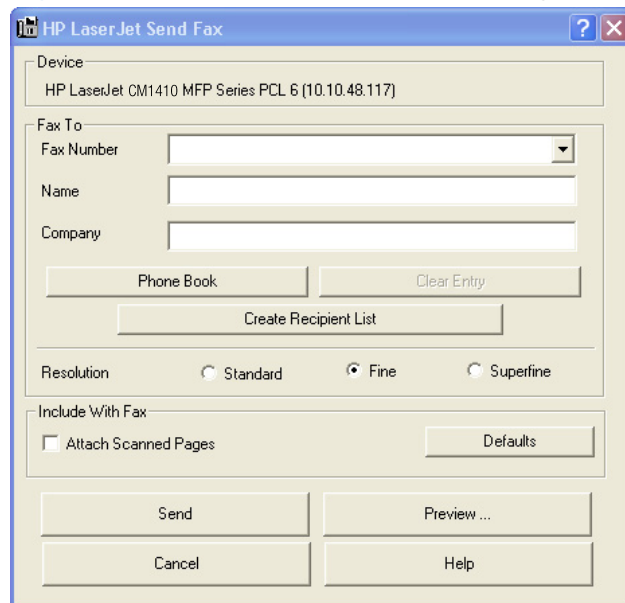
NOTE: The **HP LaserJet Send Fax** software works with HP ToolboxFX. If you turn off HP ToolboxFX, you cannot use some of the **HP LaserJet Send Fax** software features, such as the fax phone book. However, you can still preview and send faxes.

In some cases, faxing from the computer is more convenient and offers more choices than faxing from the product control panel, such as in the following:

● Fax to multiple recipients

● Create a cover page

● Fax pages scanned from the product document feeder

● Fax without first printing and scanning the document

For any fax job, click **Preview…** to view the fax and click **Send Now** to send the fax.

NOTE: For more information about faxing, see the *HP LaserJet CM1410 MFP Series User Guide*, which is available on the printing-system installation CD that came with the product.

Fax to multiple recipients

To send a fax to multiple recipients, use the **HP LaserJet Send Fax** software to create a recipient list by using one of the following methods:

●   Click **Create Recipient List** on the **HP LaserJet Send Fax** dialog box. For each recipient, type in the information and then click **Add to list**.

●   If you have stored entries in the fax phone book in HP ToolboxFX, click **Phone Book** on the **HP LaserJet Send Fax** dialog box, click **Create Recipient List**, and then drag-and-drop recipient names from the **Phone Book** field to the **Recipient List** field. To add new entries to the fax phone book in HP ToolboxFX, click **Edit** to open HP ToolboxFX.

📝 **NOTE:**   If you add new entries in HP ToolboxFX, click **Refresh** on the **HP LaserJet Send Fax** dialog box to see the new entries in the **Phone Book** field.

Create a cover page

If you want a cover page for the fax, select **Cover Page** in the **Include With Fax** options.

Your name, company name, phone number, and fax number are entered automatically into the cover-page template. Edit the data for the cover-page template by using one of the following methods:

●   Enter the data for the cover page in the **HP LaserJet Fax Setup Utility**.

●   Enter the data for the cover page on the product control panel.

●   Enter the data for the cover page by clicking **Defaults** and then clicking **Edit**.

When you select **Cover Page**, the **Notes** section appears. To view a completed cover-page template, select one from the drop-down menu and then click **Preview**.

📝 **NOTE:**   Cover page templates are *not* editable.

Fax pages scanned from the product document feeder

If you want to include fax pages scanned from the product document feeder, place the pages to be scanned in the product document feeder and select **Pages in Document Tray** in the **Include With Fax** options.

Fax without first printing and scanning the document

One of the most useful features of the **HP LaserJet Send Fax** software is the ability to fax documents without first printing and scanning them. For example, if you want to send a Microsoft Word document, open the document, click **File**, click **Print**, and then select **HP LaserJet CM1410 MFP Fax** from the drop-down menu.

The **HP LaserJet Send Fax** software starts with the document attached. Add a cover page by selecting **Cover Page**. Add pages scanned from the product document feeder by selecting **Pages in Document Tray**.

Font support

The basic fonts listed here are included with Microsoft Windows software. The additional PS fonts are available on the CD that came with the product.

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

Default fonts

The following default fonts are installed through a Full Installation of the HP LaserJet Pro CM1410 Color MFP Series printing-system software.

Table 2-8 Default fonts

Font name	Font style	File name
Albertus Extra Bold	Regular	ALBR85W.TTF
Albertus Medium	Regular	ALBR55W.TTF
Antique Olive	Regular	OLVR55W.TTF
Antique Olive	Bold	OLVR75W.TTF
Antique Olive	Italic	OLVR56W.TTF
CG Omega	Regular	CGOR45W.TTF

Table 2-8 Default fonts (continued)

Font name	Font style	File name
CG Omega	Bold	CGOR65W.TTF
CG Omega	Bold Italic	CGOR66W.TTF
CG Omega	Italic	CGOR46W.TTF
CG Times	Regular	CGTR45W.TTF
CG Times	Bold	CGTR65W.TTF
CG Times	Bold Italic	CGTR66W.TTF
CG Times	Italic	CGTR46W.TTF
Clarendon Condensed	Bold	CLAR67W.TTF
Coronet	Regular	CORONET.TTF
CourierPS	Regular	CPSR45W.TTF
CourierPS	Bold	CPSR65W.TTF
CourierPS	Bold Oblique	CPSR66W.TTF
CourierPS	Oblique	CPSR46W.TTF
Garamond	Antiqua	GARR45W.TTF
Garamond	Halbfett	GARR65W.TTF
Garamond	Kursiv	GARR46W.TTF
Garamond	Kursiv Halbfett	GARR66W.TTF
Helvetica	Regular	HELR45W.TTF
Helvetica	Bold	HELR65W.TTF
Helvetica	Bold Oblique	HELR66W.TTF
Helvetica Narrow	Regular	HELR47W.TTF
Helvetica Narrow	Bold	HELR67W.TTF
Helvetica Narrow	Bold Oblique	HELR68W.TTF
Helvetica Narrow	Oblique	HELR48W.TTF
Helvetica	Oblique	HELR46W.TTF
ITC Avant Garde Gothic	Book	AVGR45W.TTF
ITC Avant Garde Gothic	Book Oblique	AVGR46W.TTF
ITC Avant Garde Gothic Demi	Regular	AVGR65W.TTF
ITC Avant Garde Gothic Demi	Oblique	AVGR66W.TTF
ITC Bookman Light	Regular	BOKR35W.TTF
ITC Bookman Light	Italic	BOKR36W.TTF
ITC Bookman Demi	Regular	BOKR75W.TTF

Table 2-8 Default fonts (continued)

Font name	Font style	File name
ITC Bookman Demi	Italic	BOKR76W.TTF
ITC Zapf Chancery	Medium Italic	CHANC___.TTF
ITC Zapf Dingbats	Regular	DINGS___.TTF
Letter Gothic	Regular	LETR45W.TTF
Letter Gothic	Bold	LETR65W.TTF
Letter Gothic	Italic	LETR46W.TTF
Marigold	Regular	MARIGOLD.TTF
New Century Schoolbook	Bold	NCSR75W.TTF
New Century Schoolbook	Bold Italic	NCSR76W.TTF
New Century Schoolbook	Italic	NCSR56W.TTF
New Century Schoolbook	Roman	NCSR55W.TTF
Palatino	Bold	PALR65W.TTF
Palatino	Bold Italic	PALR66W.TTF
Palatino	Italic	PALR46W.TTF
Palatino	Roman	PALR45W.TTF
SymbolPS	Regular	SYMPS__.TTF
Times*	Bold	TIMR65W.TTF
Times	Bold Italic	TIMR66W.TTF
Times	Italic	TIMR46W.TTF
Times	Roman	TIMR45W.TTF
Univers	Bold	UNVR65W.TTF
Univers	Bold Italic	UNVR66W.TTF
Univers Condensed	Bold	UNVR67W.TTF
Univers Condensed	Bold Italic	UNVR68W.TTF
Univers Condensed	Medium	UNVR57W.TTF
Univers Condensed	Medium Italic	UNVR58W.TTF
Univers	Medium	UNVR55W.TTF
Univers	Medium Italic	UNVR56W.TTF

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

Table 2-9 Additional PS emulation fonts

Font name	Font style	File name
Albertus MT	Regular	PS_12639.TTF
Albertus MT	Italic	PS_12640.TTF
Albertus MT Lt	Regular	PS_14530.TTF
Antique Olive CompactPS	Regular	PS_11120.TTF
Antique Olive Roman	Regular	PS_11119.TTF
Antique Olive Roman	Bold	PS_11118.TTF
Antique Olive Roman	Italic	PS_11846.TTF
Apple Chancery	Italic	PS_24516.TTF
Bodoni Poster	Regular	PS_12704.TTF
Bodoni PosterCompressed	Regular	PS_14508.TTF
BodoniPS	Regular	PS_12581.TTF
BodoniPS	Bold	PS_12585.TTF
BodoniPS	Bold Italic	PS_12586.TTF
BodoniPS	Italic	PS_12582.TTF
Candid	Regular	PS_24517.TTF
Chicago	Regular	PS_24518.TTF
Clarendon Light	Regular	PS_14513.TTF
ClarendonPS	Regular	PS_10269.TTF
ClarendonPS	Bold	PS_12968.TTF
Cooper Black	Regular	PS_10369.TTF
Cooper Black	Italic	PS_10370.TTF
Copperplate32bc	Regular	PS_14514.TTF
Copperplate33bc	Regular	PS_14515.TTF
CoronetPS	Italic	PS_10249.TTF
Eurostile	Regular	PS_10267.TTF
Eurostile Bold	Regular	PS_10268.TTF
Eurostile ExtendedTwo	Bold	PS_14512.TTF
Eurostile ExtendedTwo	Regular	PS_14511.TTF
Geneva	Regular	PS_24509.TTF
GillSans	Regular	PS_13872.TTF
GillSans	Bold	PS_13874.TTF

Table 2-9 Additional PS emulation fonts (continued)

Font name	Font style	File name
GillSans	Bold Italic	PS_13875.TTF
GillSans Condensed	Regular	PS_14053.TTF
GillSans Condensed	Bold	PS_14054.TTF
GillSans ExtraBold	Regular	PS_14051.TTF
GillSans	Italic	PS_13873.TTF
GillSans Light	Italic	PS_13871.TTF
GillSans Light	Regular	PS_13870.TTF
Goudy	Bold	PS_12544.TTF
Goudy	Bold Italic	PS_10695.TTF
Goudy	Regular	PS_12542.TTF
Goudy ExtraBold	Regular	PS_12545.TTF
Goudy	Italic	PS_12543.TTF
Helvetica Condensed	Regular	PS_14526.TTF
Helvetica Condensed	Bold	PS_14528.TTF
Helvetica Condensed	Bold Italic	PS_14529.TTF
Helvetica Condensed	Italic	PS_14527.TTF
Hoefler Text	Regular	PS_24519.TTF
Hoefler Text Black	Regular	PS_24521.TTF
Hoefler Text Black	Italic	PS_24522.TTF
Hoefler Text	Italic	PS_24520.TTF
Hoefler Text Ornaments	Regular	PS_24523.TTF
Joanna MT	Regular	PS_14503.TTF
Joanna MT	Bold	PS_14505.TTF
Joanna MT	Bold Italic	PS_14506.TTF
Joanna MT	Italic	PS_14504.TTF
Letter Gothic	Italic	PS_13778.TTF
Letter GothicPS	Regular	PS_13777.TTF
Letter GothicPS	Bold	PS_13779.TTF
Letter GothicPS	Bold Italic	PS_13780.TTF
Lubalin Graph	Regular	PS_12675.TTF
Lubalin Graph	Bold	PS_12677.TTF
Lubalin Graph	Bold Italic	PS_12625.TTF

Table 2-9 Additional PS emulation fonts (continued)

Font name	Font style	File name
Lubalin Graph	Italic	PS_12623.TTF
MarigoldPS	Regular	PS_94073.TTF
Mona Lisa Recut	Regular	PS_14525.TTF
Monaco	Regular	PS_24524.TTF
New York	Regular	PS_24510.TTF
Optima	Regular	PS_12506.TTF
Optima	Bold	PS_12510.TTF
Optima	Bold Italic	PS_12511.TTF
Optima	Italic	PS_12507.TTF
Oxford	Italic	PS_14072.TTF
StempelGaramond Roman	Italic	PS_11546.TTF
StempelGaramond Roman	Regular	PS_11545.TTF
StempelGaramond Roman	Bold	PS_11547.TTF
StempelGaramond Roman	Bold Italic	PS_11548.TTF
Taffy	Regular	PS_14507.TTF
Univers 45 Light	Regular	PS_13501.TTF
Univers 45 Light	Bold	PS_14023.TTF
Univers 45 Light	Bold Italic	PS_14024.TTF
Univers 45 Light	Italic	PS_13502.TTF
Univers 47 CondensedLight	Bold	PS_14030.TTF
Univers 47 CondensedLight	Bold Italic	PS_14040.TTF
Univers 55	Regular	PS_14021.TTF
Univers 55	Italic	PS_14022.TTF
Univers 57 Condensed	Regular	PS_14029.TTF
Univers 57 Condensed	Italic	PS_14039.TTF
Univers ExtendedPS	Bold	PS_13548.TTF
Univers ExtendedPS	Regular	PS_13547.TTF
Univers ExtendedPS	Bold Italic	PS_14481.TTF
Univers ExtendedPS	Italic	PS_14480.TTF

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.

The HP DDU works with print drivers that can be installed by an .INF file. It is designed to work with print drivers that have their files contained in one directory structure. Because this utility is generic, it does not detect how specific print drivers are packaged. It packages all files in the directory (and subdirectories) where the print driver .INF file is found. The print driver must be expanded so that the HP DDU can process the .INF file. If you download an .EXE file with the print-driver files, you need to run it first to unpack all of the files. Then, run the HP DDU to package it for deployment on the client system.

HP DDU can be used to pre-configure a print driver for deployment. When the package is run on the client computer, the new configuration file is used to configure the print driver after it is installed. This does not break WHQL certification.

If the print driver was WHQL certified, and the print-driver files are organized within one directory structure, then HP DDU will not break WHQL certification. HP DDU packages all of the files found in the printer-driver directory structure without modifying them. If printer-driver pre-configuration is done, the new configuration file is used to configure the print driver after it is installed. This does not break WHQL certification.

NOTE: If you need the ability to configure unique settings for printer-driver deployment, the Universal Print Driver installer may be a better choice as an install tool. The Universal Print Driver installer allows the configuration of settings from the command line.

The HP DDU can be used with the Universal Print Driver installer, but the Universal Print Driver command line will not be accessible. The HP DDU is designed to package and stage/install print drivers. Print-driver specific features, like those found in the Universal Print Driver installer, are specific to the Universal Print Driver installer and not supported by the HP DDU.

The HP DDU installer could be used with the Universal Print Drivers to deploy a direct connect driver in traditional mode or a network install in traditional mode.

NOTE: Administrative rights are necessary on the client system where the install is being performed. For a direct connect, administrative rights are only required to run the .EXE package. The user can then connect the product without administrative rights. For a network connection, the .EXE package will copy files to the driver store, create the port, install the print driver and create the printer object.

Supported operating systems

- Microsoft Windows XP

- Microsoft Windows XP 64-Bit Edition

- Microsoft Windows Server 2003

- Microsoft Windows Server 2003 64-Bit Edition

- Microsoft Windows Server 2008

- Microsoft Windows Server 2008 64-Bit Edition

- Microsoft Windows Vista

- Microsoft Windows Vista (64-bit)

- Microsoft Windows 7

Install and run the HP DDU

Install the HP DDU

Copy the files to the administrative computer. If using the self-extracting .EXE file, just copy it to the administrative computer, then double click – it will expand the files into the proper directory structure.

DDU does not require an installation program. All of the files are contained in the "Driver Deployment Utility" directory. DDU does not require any registry entries.

Run the HP DDU

1. Create the printer-driver package to deploy by opening the HP DDU application. This can be done by double clicking HPDDU.EXE, which is found in the Driver Deployment Utility root directory. This utility packages the print driver and the code needed to stage/install the print driver into an .EXE file and a .CAB file. An informational .XML file is also created and can be used to identify the package selections.

2. Run the new printer-driver package (created in step 1) on the client computer. It can be copied to the client computer and run by double clicking, or it can be run from a server by pointing to it and double clicking. The package can also be run in a batch file.

For a **direct connect package**, the HP DDU will silently copy the printer-driver files into the Windows driver store and exit. Prior to exiting, an optional dialog can be shown to prompt the user to connect their product after the files are copied. Upon completion of the package executable, when the user connects the product to the computer, the operating system will install the product using Plug and Play software.

NOTE: If the product is never connected to the computer, the product will not be installed.

For a **network package**, the HP DDU will silently copy the printer-driver files into the Windows driver store, and then install the product using the network information entered by the administrator.

Use the HP DDU

The HP DDU user interface is divided into the following sections:

- **Package Source** describes the package type and printer-driver location that you want to create.

- **Package Target** identifies the name and location of the installation package.

- **Create Package** initiates the package creation process.

Figure 2-6 **Package Source**
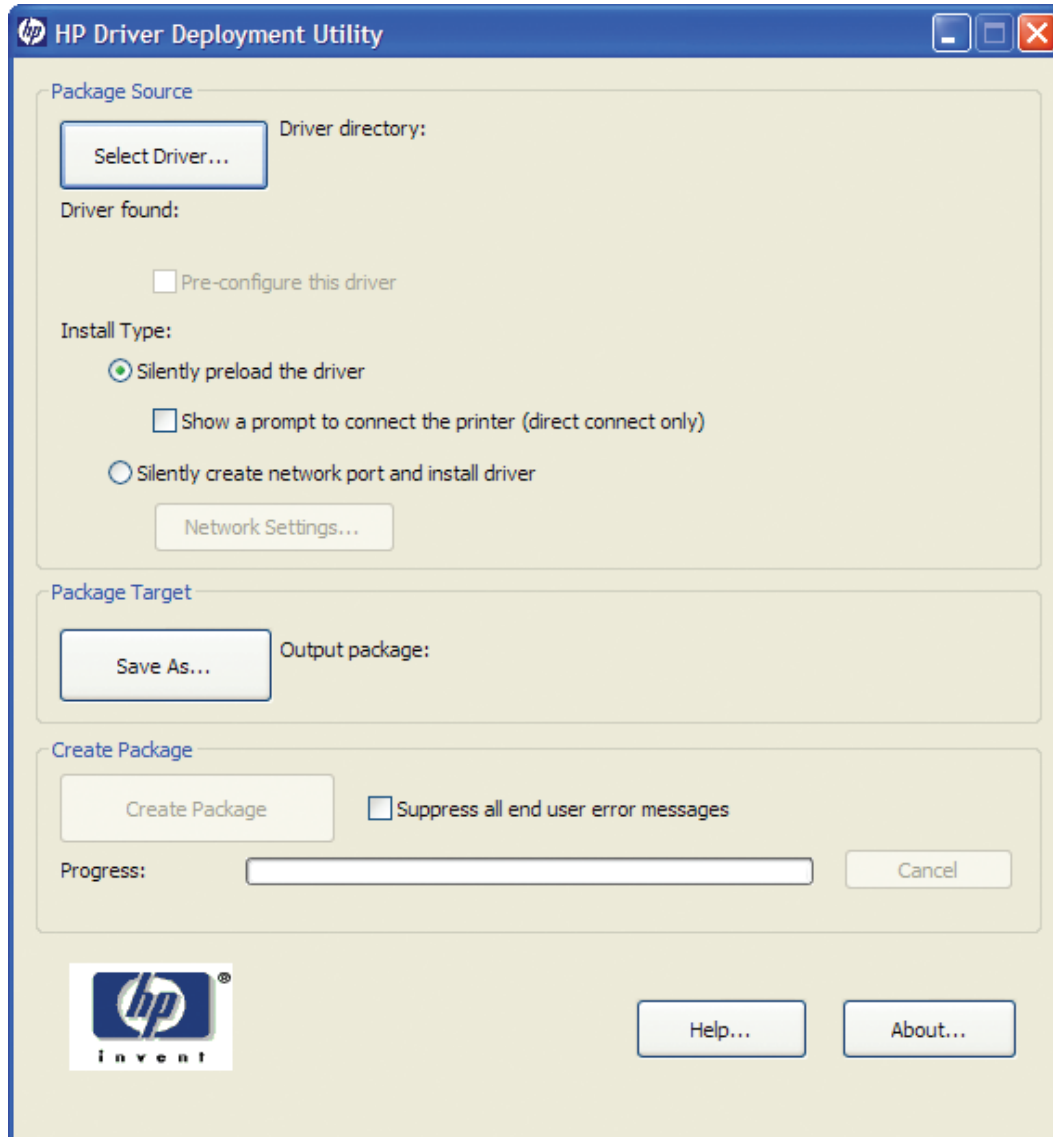
Driver Directory—Use the **Select Driver** button to enter the directory where the print driver resides by browsing or typing it in. You should only have one printer-driver package in this directory because this utility will package all the files found in this directory (and sub directories) into the executable file. If you have downloaded a compressed printer-driver package, you must expand it before using this utility.

In some cases, you may have multiple print-driver .INF files in the directory (sometimes one is for color and another for mono products). In this case, an additional dialog will allow you to select which print driver to package.

You will also get a warning if the directory is large. This is to help prevent packaging more than one print driver. You can choose to continue or not at this point.

Once the printer-driver directory is selected, and one print driver has been found, the printer-driver information is displayed below the directory selection box.

For print drivers that support preconfiguration, the check box below will be enabled. Selecting this will run a configuration dialog after clicking the **Create Package**.

Install Type—**Silently preload the driver** is the option to select for users that will be using a direct connection, like a USB cable. A future Plug and Play event will be necessary to install the print driver, but all the files will be installed in the Windows driver store by this package for future use.

By default the executable file runs silently. If you would like to prompt the end user to connect the product at the end of the install, select the **Show a prompt to connect the printer** checkbox.

For products using a network connection, select the **Silently create the network port and install driver** option. The **Network Settings** button will become enabled, and you should click on it to enter the required network settings.
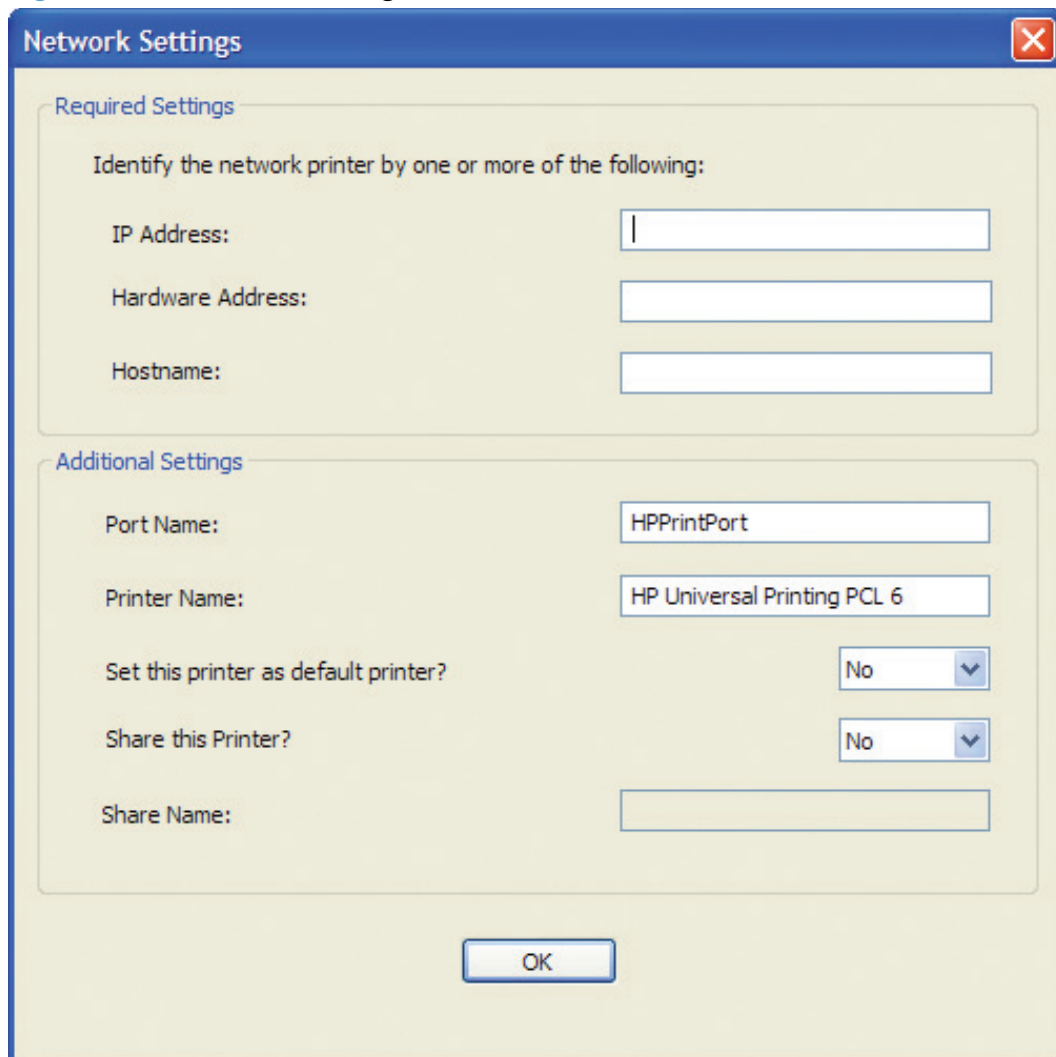
> **NOTE:** If you do not select the print driver first, an error dialog box appears. You must select the print driver first so that the product name can be derived from the printer-driver name.

Figure 2-7 Network Settings

You must identify the network product by one of the following methods. This utility does not communicate with the product to determine if the settings are valid, but it does perform syntax

checking. The administrator is responsible for identifying the product using either the correct IP address, the Hardware address, or the Hostname.

- **IP Address** — enter the IPv4 or IPv6 address of the product.

- **Hardware Address** — enter the hardware address of the product.

- **Hostname** — enter the hostname of the product.

The following network settings are additional. You may accept the default values pre-entered or change any of them.

- **Port Name**: This is the network port name that will be created. If the name already exists, a number will be appended to make it unique.

- **Printer Name**: This is the product name that will appear in the printers' folder. If the name already exists, a number will be appended to make it unique.

- **Set this printer as default**:

  - Yes - will make this product the default when printing from other applications.

  - No - will retain the current default, unless this is the only product installed.

- **Share this printer**: Yes - will allow others to use this product.

- **Share Name**: Share name for the product. Only enabled if 'Share this printer' is Yes. If the name already exists, a number will be appended to make it unique.

To exit the Network Settings dialog without saving, use the Windows close button in the upper corner.

Package Target

Use the **Save as** button to enter the name and location for the output package by browsing or typing it in. The utility will create the package in the temp directory and then move it to the final location.

Create Package

Click the **Create Package** button when you have entered all the above information. This button will be disabled until you have entered the required information. Once it is clicked, the **Cancel** button and Progress bar will be enabled.

To stop the package creation, click the **Cancel** button.

The executable file runs silently, unless a user prompt is requested for a direct-connect product. If an error is encountered during execution, an error dialog will appear. To suppress the error dialog, select the **Suppress all end user error messages** check box.

If you selected the **Pre-configure this driver** checkbox, the print driver configuration dialog will open when you click the **Create Package** button. Once you have configured the print driver, select **OK** to save the new configuration settings and continue creating the package. Clicking **Cancel** will cancel the entire package creation process.

Figure 2-8 HP DDU Driver Configuration settings
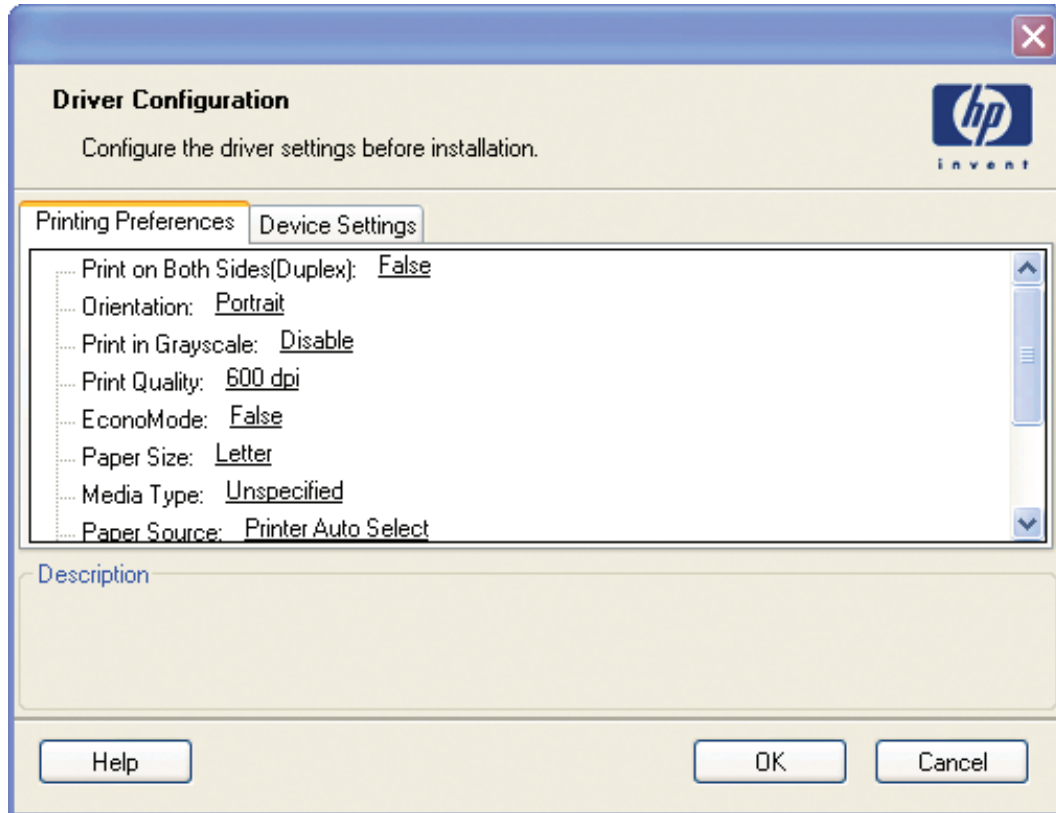
HP DDU Frequently Asked Questions

How do I use the HP DDU to deploy a direct connect driver with preconfiguration?

If you load multiple PDLs for one product, the operating system will determine which one satisfies the Plug and Play event. The operating system will create one printer object for that PDL.

1. Run HPDDU.EXE to start the package creation.

2. From Package Source section:

   a. Select the print driver to package by browsing to the .INF file in the directory.

   b. Select the **Pre-configuration** checkbox. This checkbox is enabled only for print drivers that support preconfiguration.

   c. Select the **Silently preload the driver** install type.

   d. Select the **Show a prompt to connect the printer** checkbox if you want to prompt the user after the files are copied.

3. From **Package Target** section:

   Select the output name and location. Three files will be written here: an .EXE file, a .CAB file, and an .XML file with information about the package.

4. From **Create Package** section:

   a. If you want to suppress any error messages, select the **Suppress all end user error messages** checkbox.

   b. Click the **Create Package** button

5. Run the new .EXE file from the client computer. You must have administrator rights to run the .EXE file because it will be copying files into the Windows driver store. Now the printer-driver files are on the system, and any user can connect the product to trigger the Plug and Play event.

   📝 **NOTE:** The printer object is not created until the product is connected.

📝 **NOTE:** If you deploy multiple direct connect print drivers, with preconfiguration, and they all use a pre-config file with the same name, the first one connected will be the only one configured properly. This might happen if you deploy the PCL6 and PCL5 print drivers for the same product. The reason is that the config file is copied to the \3 directory awaiting the product being connected. Each deployment will just copy over the same config file since they all use the same name. Once the product is connected, this config file gets consumed and deleted. Future Plug and Play events will not have the config file available.

How do I use the HP DDU to deploy a network product with preconfiguration?

📝 **NOTE:** Before running the HP DDU, you must download the driver you want to package, expand the driver, and place the driver in its own directory on the computer where the HP DDU will run.

1. Run HPDDU.EXE to create the package.

2. From **Package Source** section:

   a. Select the print driver to package by browsing to the .INF file in the directory.

   b. Select the **Pre-configuration** checkbox. This checkbox is enabled only for print drivers that support preconfiguration.

   c. Select the **Silently create network port and install driver** install type.

   d. Click the **Network Settings** button to enter the network settings.

3. From **Network Settings** dialog:

   a. From the **Required Settings** section, enter at least one way of identifying the product (IP address, Hardware address, or Hostname).

   b. Make any changes to the **Additional Settings** section (port name, product name, default printer, sharing and share name). You can leave the default settings if you don't need to make changes.

4. From **Package Target** section:

   Select the output name and location. Three files will be written here: an .EXE file, a .CAB file and an .XML file with information about the package.

5. From **Create Package** section:

   a. If you want to suppress any error messages, select the **Suppress all end user error messages** checkbox.

   b. Click the **Create Package** button.

   c. The configuration dialog will open and allow you to set configuration details for this print driver. After accepting the configuration changes, the package will be created.

6. Run the new .EXE file from the client computer. You must have administrator rights to run the .EXE file because it will be copying files into the Windows driver store. A port and printer object will be created with the information provided above.

Common Problems

I get a warning when I select the print driver.

If there are too many files in the driver directory, or the directory is really large, a warning appears so that the user doesn't accidentally package up something they didn't intend to (like the root directory). Some print drivers are really large, and you can choose to ignore this warning and continue.

To minimize package size, each print driver should be in it's own directory. This is usually the default behavior when you expand a print driver.

I get an error when I try to open the "Network Settings" dialog.

You need to first select a print driver before opening the "Network Settings" dialog. This populates the product name field based on the printer-driver name.

The Create Package button is not enabled.

This button will not be enabled until you have:

1. Selected the print driver.

2. If network connect – filled out one of the required network settings.

3. Selected the **Save as** name and directory.

How do I exit the HP DDU?

Use the Windows close button in the upper corner.

The Network Settings dialog keeps displaying an error, and I just want out.

If you do not want to save settings, or change your mind and don't want a network install, you need to close the network settings dialog with the Windows close button in the upper corner. Using the **OK** button, will try to validate the settings, and that is what is causing an error.

What if the user connects the printer before the HP DDU package is run?

If the user connects the product, but then cancels the Plug and Play event before it finishes, this creates an incomplete Plug and Play event. After copying the printer-driver files to the Windows driver store, the HP DDU code will cleanup incomplete Plug and Play events for products supported by this print driver. Then it will refresh the bus, causing the operating system to Plug and Play the product (installing the print driver and creating the printer object.)

How do I uninstall HP DDU?

Delete all the files in the root HP DDU directory.

NOTE: No registry changes have been made with this utility.

3   Install Windows printing-system components

The HP LaserJet Pro CM1410 Color MFP Series comes with software and installers for Microsoft Windows and Apple Macintosh systems. For information about Macintosh software, see Macintosh software and utilities on page 111. Linux and UNIX systems support the HP LaserJet Pro CM1410 Color MFP Series, and software is available on the Web. This chapter provides procedures for installing and uninstalling the HP LaserJet Pro CM1410 Color MFP Series printing-system software for Windows operating systems.

- Install overview

- Software installation types for Windows

- Installation options

- General Windows installation instructions

Install overview

The software for the HP LaserJet Pro CM1410 Color MFP Series product is available from the printing-system software CD.

For all supported operating systems, each install option presents a series of screens that guide you through the installation process.

Software installation types for Windows

The following printing-system software installation types are available:

- Select the recommended software (default)

- Select the minimum software

Selecting **Click here for more install options** allows you to choose between the installation types and allows you to view the software components that are installed with each installation type.

The installer guides the installation, whether you are configuring a direct-connected or a network-connected product.

The installer additionally detects hardware and network connections, and helps guide the installation. For example, if the installer detects an HP LaserJet Pro CM1410 Color MFP Series, it automatically configures the software connection to that product. This saves several steps. If the installer detects fax capabilities or a network, it also guides setting up those features.

Installation options

The HP LaserJet Pro CM1410 Color MFP Series printing-system software can be installed when the product is connected to the computer in the following configurations:

- on a computer that is directly connected to the product through a USB port. Directly connected via a USB port

- Connected via a wired or wireless network

General Windows installation instructions

General Windows installation for direct connections

Windows installation instructions for direct-connected (USB) products

Use the following instructions to install the printing-system software on a computer that is running Win 7, Windows Server 2003, Windows XP, or Windows Vista, and is directly connected to the product.

NOTE: Set up and turn on the product before installing the software. Do *not* connect the product to the computer until the software installation program prompts you.

You must have administrator privileges to install the software.

1. Quit all open programs.

2. Insert the printing-system software CD into the CD-ROM drive.

   NOTE: If the CD-ROM does not start automatically, click **Start**, click **Run**, and then browse to and double-click the SETUP.EXE file in the root directory of the printing-system software CD.

3. Click the appropriate installation type, and then follow the onscreen prompts.

4. When the installer software prompts you to select how the product will be connected, select **Directly to this computer using a USB cable.**, and then click **Next**. Follow the onscreen prompts.

5. If you are prompted to restart the computer, click **Yes**.

6. After installation of the printing-system software, dialog boxes appear that allow you to print a test page, register the product over the Web, and set up faxing on the product.

Printer-driver only installation instructions (Microsoft Add Printer Wizard)

NOTE: This printer-driver only software solution provides print-only functionality through a communications port that has already been created for this product (USB or network connected). Fax and scan functionality are not included with this software.

To use the printer-driver only software solution with a direct USB connection, a USB Print port must have already been created by a previous installation of the printing-system software. There are several direct USB printing-system software installation options that establish a USB Print port:

- Complete an installation using the in-box printing-system software CD.

- Download the "Recommended Solution", which provides installation options identical to the printing-system software CD.

Once a USB Print port is created by a previous direct USB installation, the printer-driver installation can be completed using that USB Print port.

Use the following instructions to install the printer driver only:

1. Click **Start**, and then do one of the following:

   -or-

   For Windows Server 2003 and Windows XP Professional: Select **Settings**, and then click **Printers and Faxes**.

   -or-

   For Windows XP Home: Click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

   -or-

   For Windows Vista: Click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

2. Click **Add Printer**, and then click **Next**.

3. When asked if the product is a local or network product, select **Local printer attached to this computer**, and then click **Next**.

   NOTE: Do not select the **Automatically detect and install my Plug and Play printer** option.

4. On the **Select a Printer Port** screen, select the USB Print port that was created by a previous USB installation, and then click **Next**.

5. On the **Install Printer Software** screen, click **Have Disk…**. The **Install from Disk** dialog box appears.

6. Insert the printing-system software CD into the CD-ROM drive.

7. Click **Browse…**, and then select the printer driver for the product.

   To install the PCL 6 printer driver, navigate to the root folder of the CD (where X is the letter of the CD-ROM drive) and select the hppdp608.inf file.

To install the HP postscript level 3 emulation printer driver, navigate to the appropriate folder and select the appropriate file:

- **For 32-bit**: \Drivers\win2k_xp_vista\hppcps08.inf

- **For 64-bit**: \Drivers\winxp_vistax64\hppdps08.inf

8. Click **Open**.

9. On the **Install from Disk** dialog box, click **OK**.

10. Click **Next**. Complete the installation. When prompted, print a test page to ensure that the printer driver is installed correctly.

General Windows installation for network connections

Network setup

NOTE: Set up, turn on, and connect the product to the network before installing the software.

To connect a product to a network, use the following instructions:

1. Connect the product to the network.

2. Turn on the product.

   NOTE: You must complete the power-up sequence in this order or the installer discovery utility fails to recognize the product. It might take a few minutes for the product to obtain a TCP/IP address.

3. To print a configuration page from the product control panel, touch Setup ⚒. Use the arrow buttons to select **Reports**, and then touch OK. Use the arrow buttons to select **Config Report** and then touch OK.

4. Install the printing-system software. Use the information from the test pages to specify the network variables during installation.

NOTE: A second page prints. On that page, the **Fax Settings** and **Imaging Settings** sections provide details about the product fax settings.

Windows installation instructions for network-connected products

NOTE: Complete the network setup before completing this procedure.

Each computer that has the printing-system software installed can use all of the product features that are available over a network connection, except for the **Receive faxes to this computer** feature, which can only be enabled for one computer.

Use the following instructions to install the printing-system software on a computer that is running Win 7, Windows XP, or Windows Vista, and is connected to the product through a network.

📝 **NOTE:** You must have administrator privileges to install the software.

1. Quit all open programs.

2. Insert the printing-system software CD into the CD-ROM drive.

    📝 **NOTE:** If the CD-ROM does not start automatically, click **Start**, click **Run**, and then browse to and double-click the SETUP.EXE file in the root directory of the CD.

3. Click the appropriate installation type and follow the onscreen prompts.

4. When the installer software prompts you to select how the product will be connected, select **Connect through a wired network.**. Follow the onscreen prompts.

5. If you are prompted to restart the computer, click **Yes**.

6. After installation of the printing-system software, a test page prints, and dialog boxes appear that allow you to register the product over the Web and set up faxing.

Printer-driver only installation instructions (Microsoft Add Printer Wizard)

📝 **NOTE:** This printer-driver only software solution provides print-only functionality through a communications port that has already been created for this product (USB or network connected). Fax and scan functionality are not included with this software.

Use the following instructions to install the printer driver only:

1. Click **Start**, and then do one of the following:

    -or-

    For Windows Server 2003 and Windows XP Professional: Select **Settings**, and then click **Printers and Faxes**.

    -or-

    For Windows XP Home: Click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

    -or-

    For Windows Vista: Click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

2. Click **Add Printer**, and then click **Next**.

3. When asked if the product is a local or network product, select **A network printer, or a printer attached to another computer**, and then click **Next**.

    📝 **NOTE:** Use of a local port is recommended, if it is available. If no local port is available, create a new TCP/IP port.

4. On the **Install Printer Software** screen, click **Have Disk…**. The **Install from Disk** dialog box appears.

5. Insert the printing-system software CD into the CD-ROM drive.

6. Click **Browse…**, and then select the printer driver for the product.

   To install the PCL 6 printer driver, navigate to the root folder of the CD and select the hppdp608.inf file.

   To install the HP postscript level 3 emulation printer driver, navigate to the appropriate folder and select the appropriate file:

   - **For 32-bit**: \Drivers\win2k_xp_vista\hppcps08.inf

   - **For 64-bit**: \Drivers\winxp_vistax64\hppdps08.inf

7. Click **Open**.

8. On the **Install from Disk** dialog box, click **OK**.

9. Click **Next**. Complete the installation. When prompted, print a test page to ensure that the printer driver is installed correctly.

Printer sharing disclaimer

HP does not support peer-to-peer networking, as the feature is a function of Microsoft operating systems and not of the HP printer drivers. Go to Microsoft at www.microsoft.com.

Point-and-Print installation for Windows

Use the following information to install a printer driver by using the Microsoft Point-and-Print feature when you do not connect directly to the product on the network.

Point-and-Print is a Microsoft term that describes a two-step printer driver installation process. The first step is to install a shared printer driver on a network print server. The second step is to "point" to the print server from a network client so that the client can use the printer driver.

This section outlines the procedures for installing printer drivers by using Point-and-Print. If these procedures are not successful, contact Microsoft. HP provides printer drivers that are compatible with the Point-and-Print feature, but this is a function of the Windows operating systems, *not* of HP printer drivers.

Administrator privileges are necessary to install the printer driver.

In a homogenous operating system environment (one in which all of the clients and servers are running in the same operating system), the same printer driver version that is vended from the server to the clients in a Point-and-Print environment also runs and controls the print queue configuration on the server. However, in a mixed operating system environment (one in which servers and clients might run on different operating systems), conflicts can occur when client computers run a version of the printer driver that is different from the one on the print server.

In an effort to increase operating system stability, Microsoft determined that, starting with Windows 2000 and continuing with all future operating systems, printer drivers would run as *user*-mode processes. User-mode drivers run in a protected part of the operating system, as do all of the normal

end-user processes and software programs. A user-mode printer driver that functions incorrectly can terminate (or "crash") only the process in which it is running—not the whole operating system. Because access to critical system resources is restricted, overall operating system stability is increased.

Modify a pre-existing installation

If an HP LaserJet Pro CM1410 Color MFP Series MFP Series has been installed, the initial Installer screen on the printing-system installation CD changes to the **Welcome Back!** screen. A pre-existing installation also changes the sequence of installation screens.

Figure 3-1 Installer screen — **Welcome Back!**
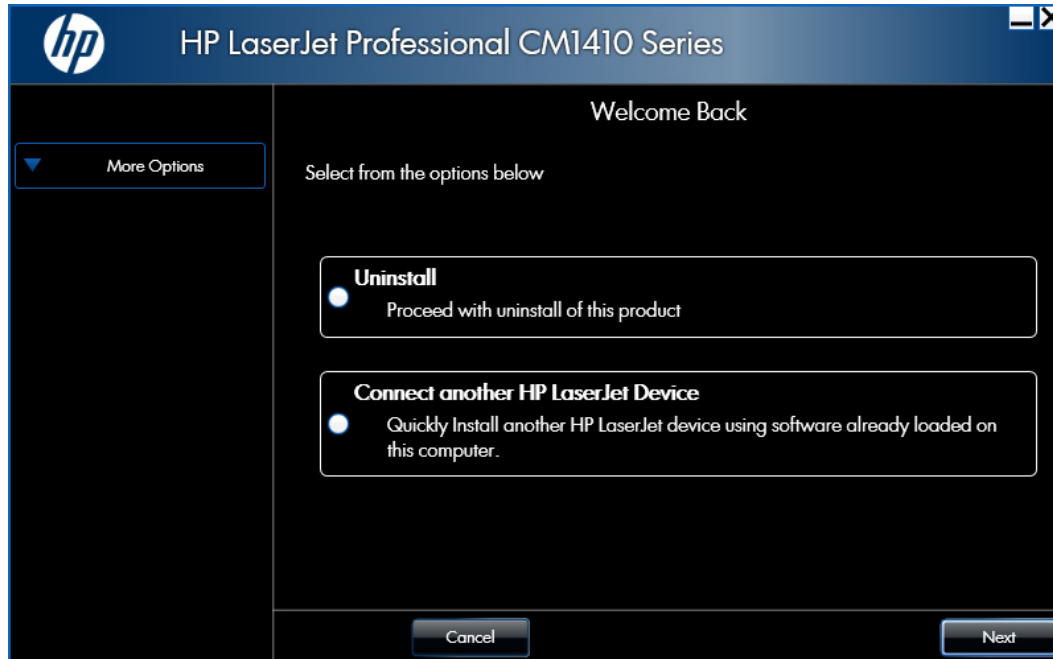
The **Welcome Back!** screen contains the following options:

● **Uninstall**. Click this option to uninstall the printing-system software.

● **Connect another HP LaserJet Device**. Click this option to quickly install another HP product using software that is already loaded on the computer.

● **More Options**. Click this option to open the product documentation on the CD (including the User Guide), Admin Documentation and Software, ot to gain access to specialized drivers and product support on the Web.

● **Cancel**. Click this button to close the Installer.

4 HP PCL 6 print driver and HP PS Universal Print Driver for Windows

Introduction

This chapter describes the features of the HP LaserJet Pro CM1410 Color MFP Series PCL 6 Print Driver for, Windows XP (32-bit and 64-bit), Windows Server 2003 (32-bit and 64-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 and the HP PCL 5 Universal Print Driver can be installed by downloading the software from the Web.

Topics:

- [Access print drivers](#)

- [Help system](#)

- [Advanced tab features](#)

- [Paper/Quality tab features](#)

- [Effects tab features](#)

- [Finishing tab features](#)

- [Color tab features](#)

- [Services tab features](#)

- [Device Settings tab features](#)

- [Printing Shortcuts tab features](#)

- [About tab features](#)

Access print drivers

Depending on the operating system on which you are installing the print drivers, you can gain access to the print drivers and different print-driver interfaces in several ways.

To gain access to the print-driver settings from within most software programs, follow these steps:

1. Click **File**.

2. Click **Print**.

3. Click **Properties**.

The appearance and names of the driver tabs can vary, depending on the operating system. These driver settings apply only while that software program is open.

You can control the drivers directly from the Printers folder. Here you have access to two sets of driver tabs: the **Printing Preferences** tabs and the **Properties** tabs. The settings that you make on the **Printing Preferences** driver tabs control the driver default settings for each user's profile. Installable options can be configured in **Properties** driver tabs.

Printing Preferences driver tabs

The **Printing Preferences** driver tabs change the default settings that are used across all software programs. To gain access to these tabs, 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 icon.

3. Click **Printing Preferences**.

The following **Printing Preferences** print-driver tabs are available:

- **Advanced**

- **Printing Shortcuts**

- **Paper/Quality**

- **Effects**

- **Finishing**

- **Color**

- **Services**

Properties driver tabs

This set of tabs controls the driver behavior and driver connections. To gain access to the **Properties** tabs, 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 icon.

3. Click **Properties**.

The following **Properties** print-driver tabs are available:

- **General**
- **Sharing**
- **Ports**
- **Advanced**
- **Color Management**
- **Security**
- **Device Settings**
- **About**

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 the **?** button in the upper-right corner of the frame, next to the **X**, to change the cursor to an arrow with a question mark. When you use this special cursor to select a control, the pop-up Help window for that feature 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
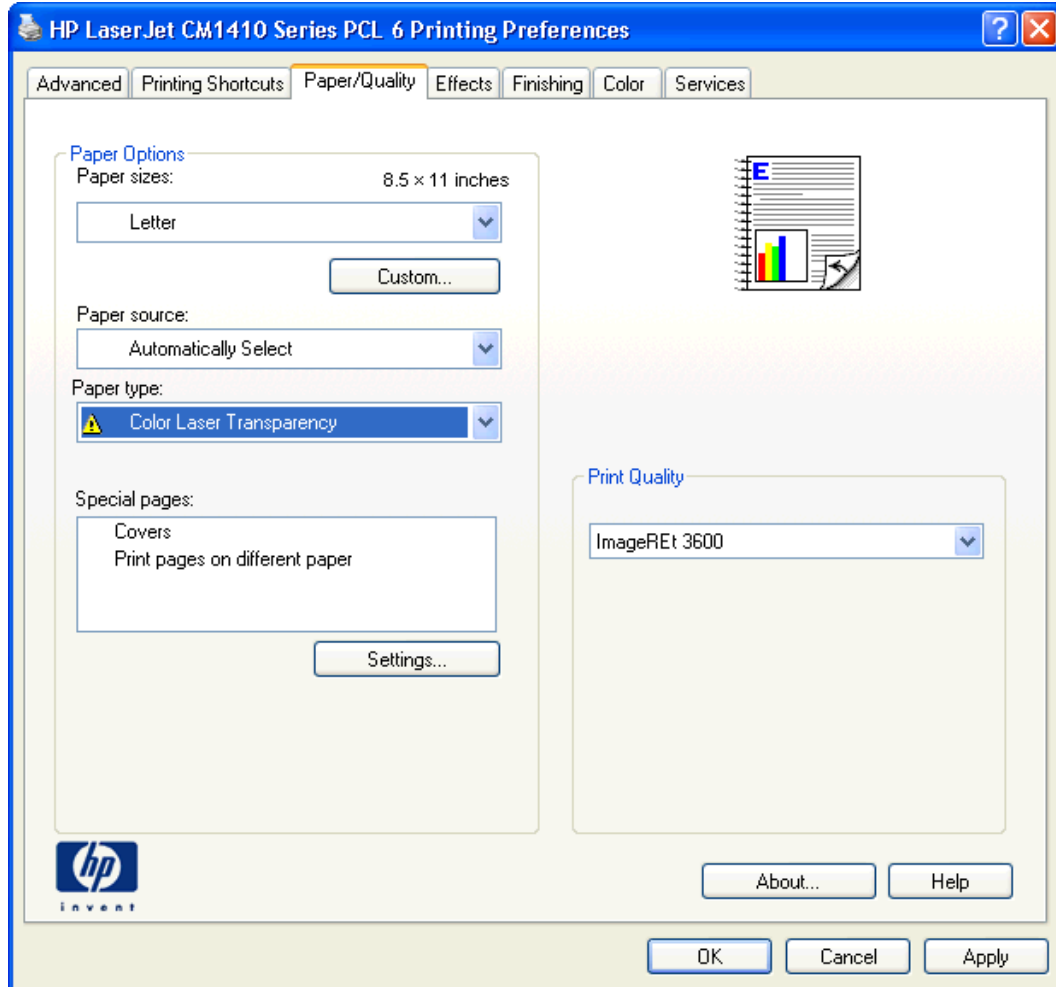
To resolve the conflicting settings, click **Restore my previous settings.**, and then click **OK**. The driver resets the conflicting control back to its previous state.

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

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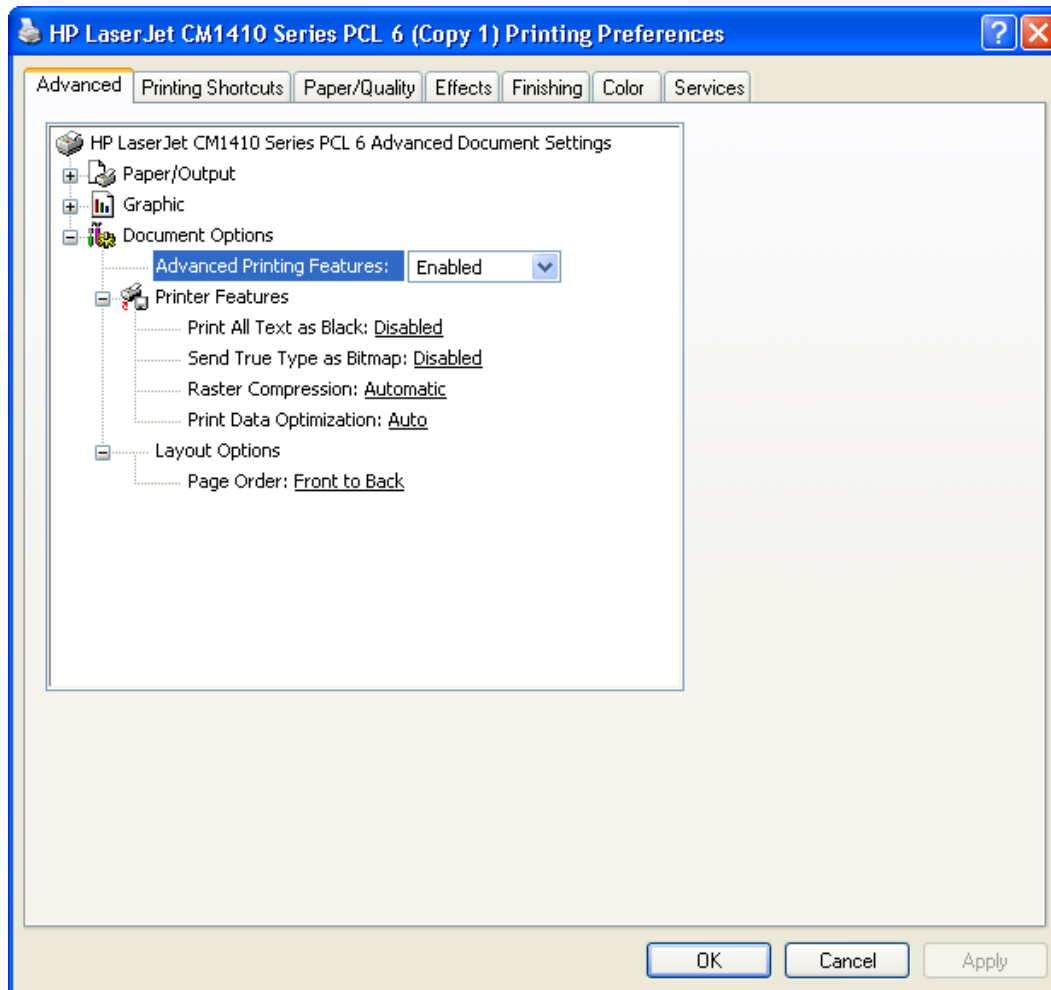
The **Advanced** tab contains the following controls:

- 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 HP LaserJet Pro CM1415 and HP LaserJet Pro CM1415fn 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.

Paper/Quality tab features

📝 **NOTE:** The **Paper/Quality** tab is located on the **Printing Preferences** tab set. For information about how to access these tabs, see ,

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 4-3 **Paper/Quality** tab
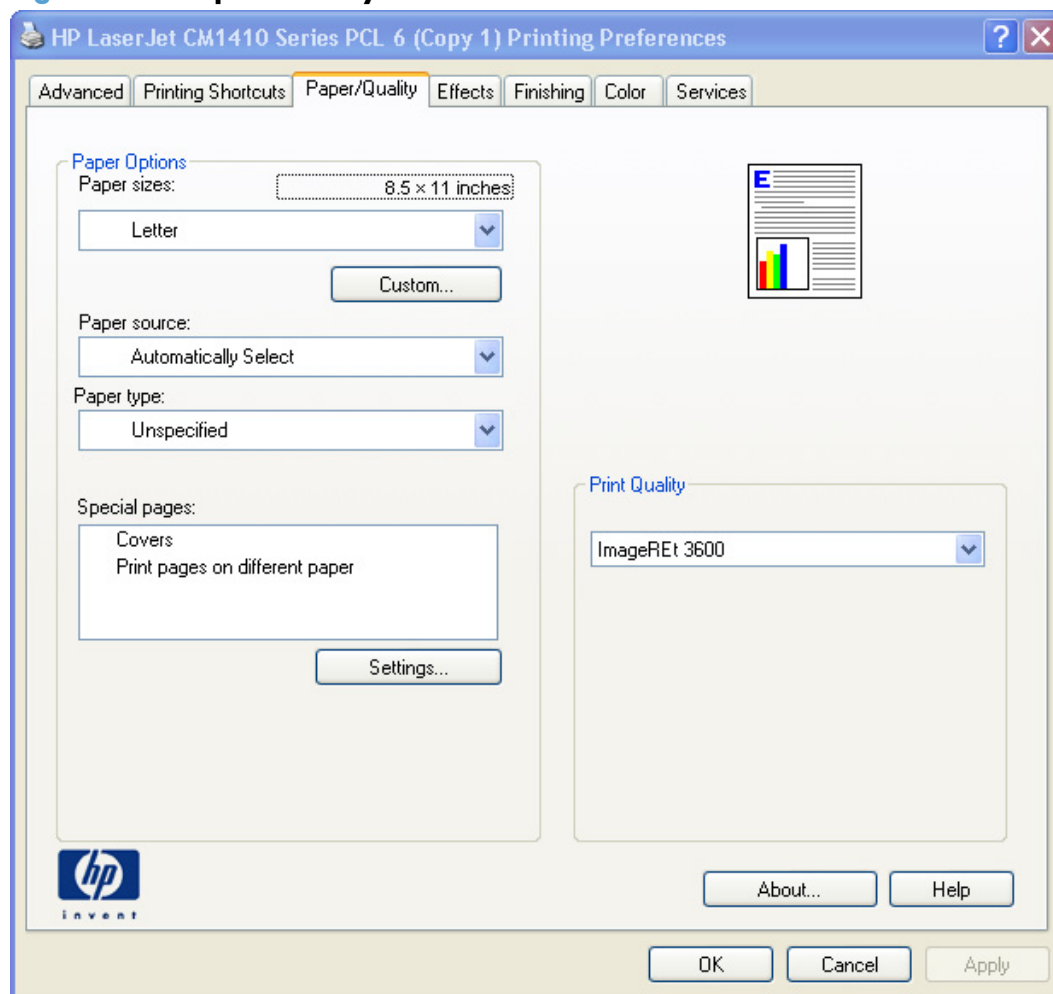
The **Paper/Quality** tab contains the following control sets:

- 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 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.

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 74.

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.

NOTE: The HP LaserJet Pro CM1410 Color 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 LaserJet Pro CM1410 Color MFP Series product is 76 x 127 mm (3 x 5 in) and the maximum is 215.90 x 355.60 mm (8.50 x 14.00 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)

The default setting is **Automatically Select**. When this setting is selected, the HP LaserJet Pro CM1410 Color 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.

Paper type

The **Paper type** drop-down menu shows the first few paper types that the HP LaserJet Pro CM1410 Color 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**

    ◦ **Bond**

    ◦ **Recycled**

- **Presentation 96-130g**

    ◦ **HP Color Laser Matte 105g**

    ◦ **HP Premium Choice Matte 120g**

    ◦ **Mid-Weight 96-110g**

    ◦ **Mid-Weight Glossy 96-110g**

- **Brochure 131-175g**

    ◦ **HP Color Laser Brochure Matte 160g**

    ◦ **HP Superior Laser Matte 160g**

    ◦ **HP Color Laser Brochure Glossy 160g**

    ◦ **HP Tri-fold Color Laser Brochure 160g**

    ◦ **HP Superior Laser Glossy 160g**

- **Photo/Cover 176-220g**

    ◦ **HP Cover Matte 200g**

    ◦ **HP Matte Photo 200g**

- HP Color Laser Photo Glossy 220g
- HP Color Laser Photo Glossy 220g (faster printing)
- HP Color Laser Photo Glossy 220g (high gloss)
- Card Glossy 176-220g

- **Other**
  - **Color Laser Transparency**
  - **Labels**
  - **Letterhead**
  - **Envelope**
  - **Heavy Envelope**
  - **Preprinted**
  - **Prepunched**
  - **Colored**
  - **Rough**
  - **Heavy Rough**
  - **HP Tough Paper**

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.

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 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 LaserJet Pro CM1410 Color 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 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 LaserJet Pro CM1410 Color 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 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:

- Print Quality drop-down menu

Print Quality drop-down menu

Use this control to select print quality. ImageREt settings precisely control colors by combining up to 4 colors and varying the amount of toner in a given area to create many smooth colors, sharp images, and crisp text.

The **Print Quality** drop-down menu contains the following resolution options.

- **ImageREt 3600**. This setting is selected by default.

- **1200 x 1200**. This setting may improve the rendering of fine lines and text.

Effects tab features

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

Figure 4-4 Effects tab
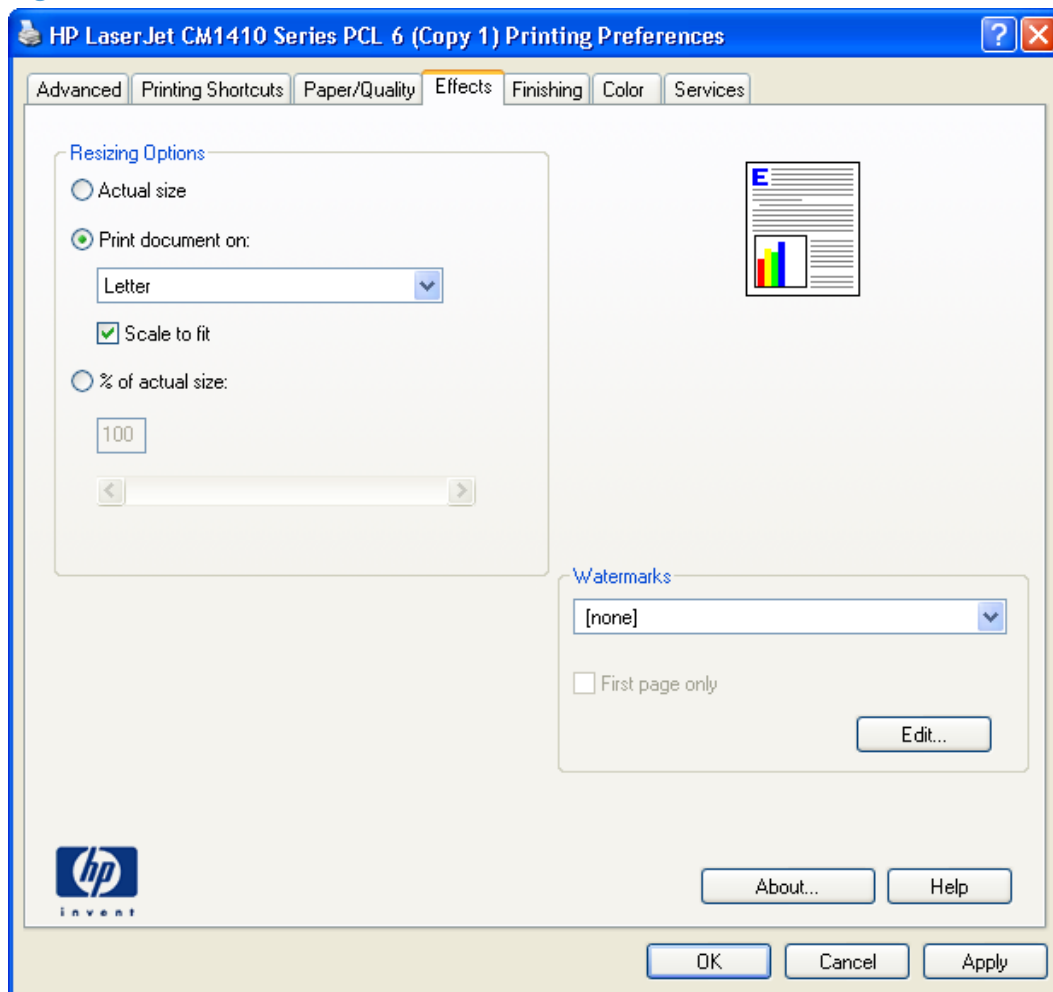
The **Effects** tab contains the following controls:

- 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.

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.

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 4-1 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**

Table 4-1 Font Attribute settings for new and preset watermarks (continued)

Setting	New watermark	Preset watermark
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

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

Figure 4-5 **Finishing** tab
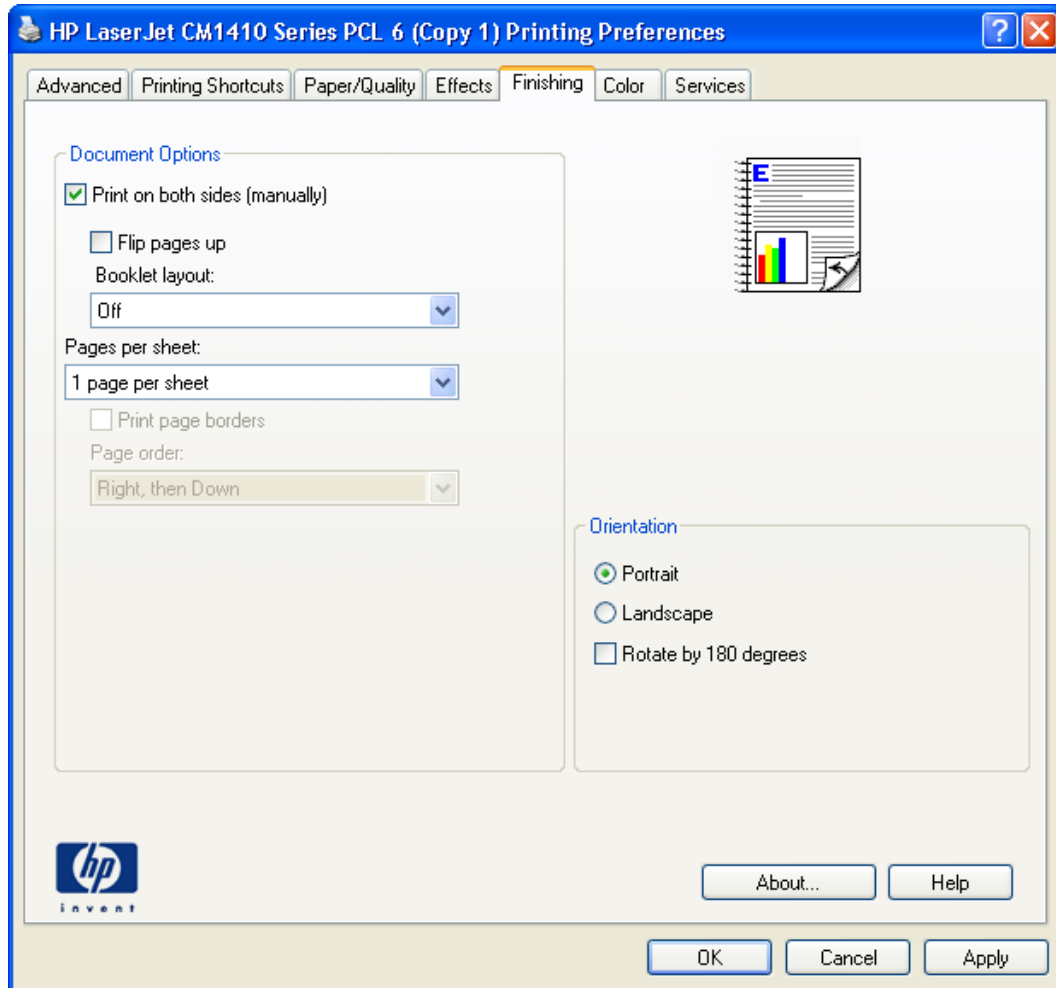
The **Finishing** tab contains the following controls:

- 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

📝 **NOTE:** This feature is called **Print on Both Sides (manually)** for the HP LaserJet Pro CM1415 and the HP LaserJet Pro CM1415fn, because these models do not include an automatic duplex unit. For all other product models, this feature is called **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**

- **Paper sizes** is set to any paper size *except for* the following sizes:

  - **Envelope #10**

  - **Double Postcard (JIS)**

  - **Envelope #9**

  - **Envelope Monarch**

  - **Envelope B5**

  - **Envelope C5**

  - **Envelope C6**

  - **Envelope DL**

Print on both sides manually

Select the **Print on Both Sides (Manually)** check box to print on the second side of the paper for the HP LaserJet Pro CM1415 and HP LaserJet Pro CM1415fn product models, which do not have a duplexing unit installed. Also, select **Print on Both Sides (Manually)** on the other HP LaserJet Pro CM1410 Color 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 100.

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 **Allow manual duplexing** 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 4-6 Print on Both Sides Instructions dialog box
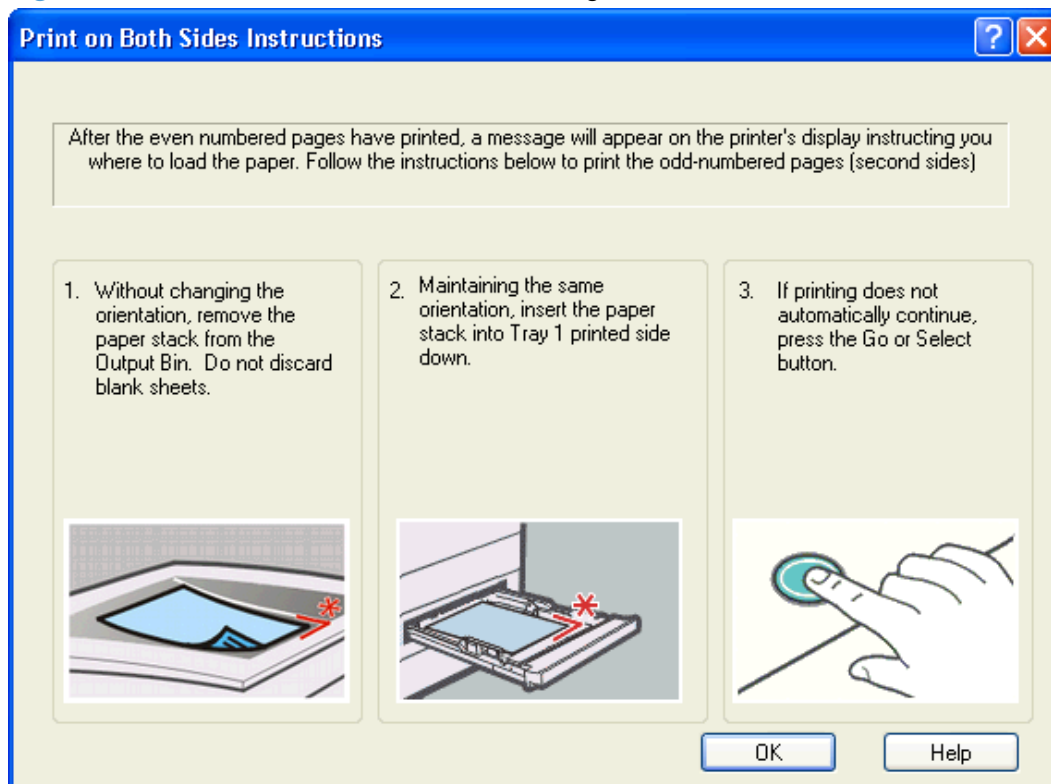
When you have completed the steps that appear in the dialog box, the second half of the print job prints on the back side of the stack of paper. The driver does not require the program to specifically support odd- and even-page printing, because the driver coordinates this function.

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 4-2 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 90 for more information.

Book and Booklet Printing

The HP LaserJet Pro CM1410 Color 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 70.

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. For information about how to access the **Printing Preferences** tab set, see Printing Preferences driver tabs on page 62.

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**

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.

Color tab features

📝 **NOTE:** The **Color** tab is located on the **Printing Preferences** tab set. For information about how to access these tabs, see Printing Preferences driver tabs on page 62,

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 4-7 **Color** tab
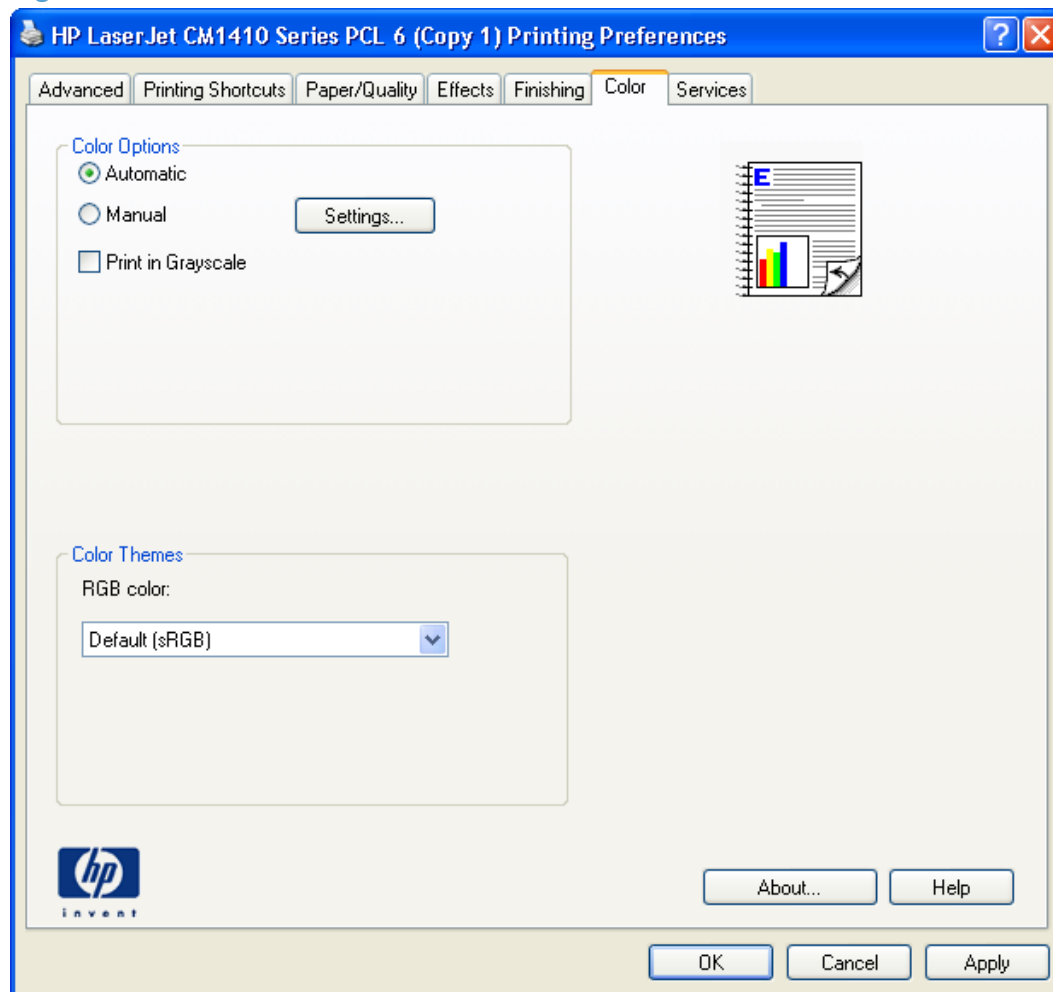
The **Color** tab contains the following sets of controls:

● Color Options

● Color Themes

● Document preview image

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

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.

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

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

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**.

Color Themes

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

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.

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.

Services tab features

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

Figure 4-8 Services tab
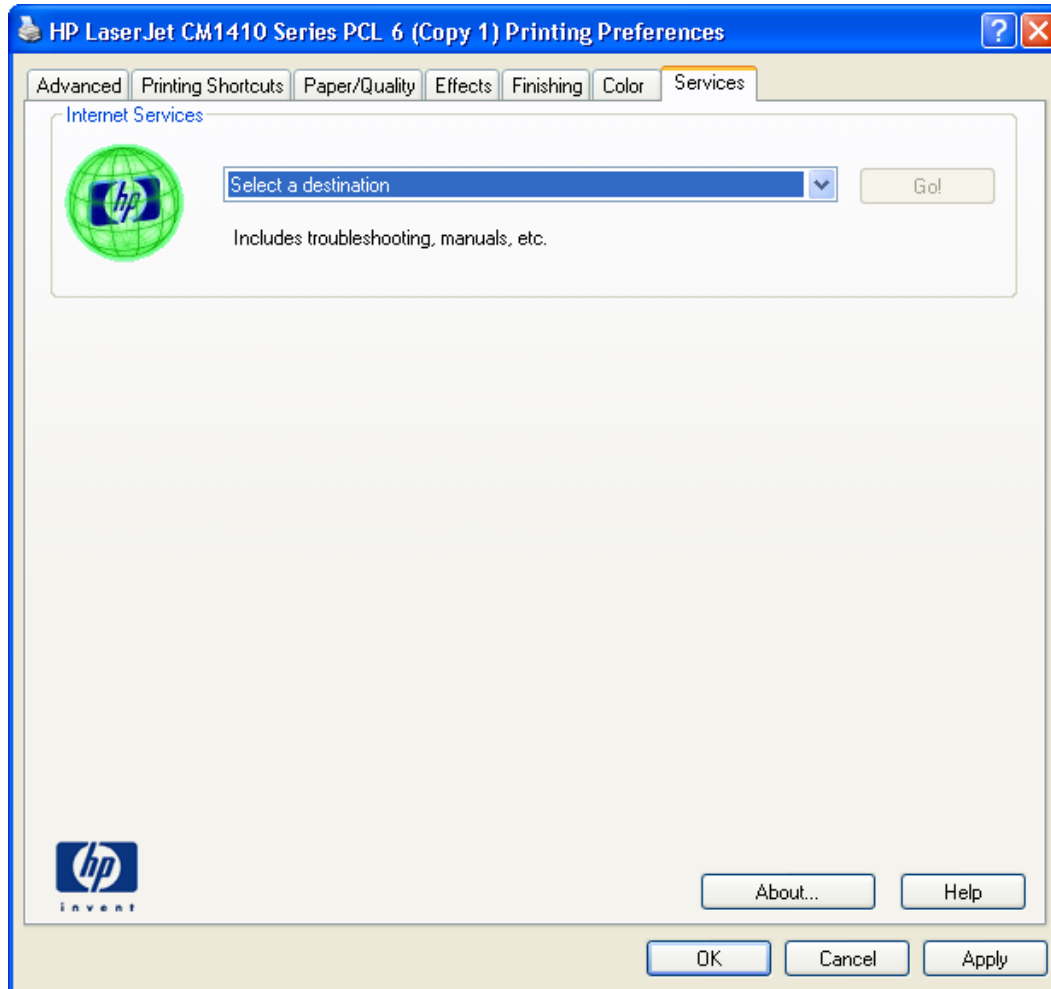
The **Services** tab contains the following group boxes:

- 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 LaserJet Pro CM1410 Color MFP Series product support.

- **Product manuals**. View or download HP LaserJet Pro CM1410 Color 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 LaserJet Pro CM1410 Color 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 LaserJet Pro CM1410 Color MFP Series product.

Some enterprise customers want to disable the Services tab because it allows users to go to HP Web sites. Use the HP Driver Preconfiguration Editor to disable the Services tab. The HP Driver Preconfiguration Editor is available at the following Web site:

www.hp.com/go/dcu

Device Settings tab features

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

Figure 4-9 **Device Settings** tab
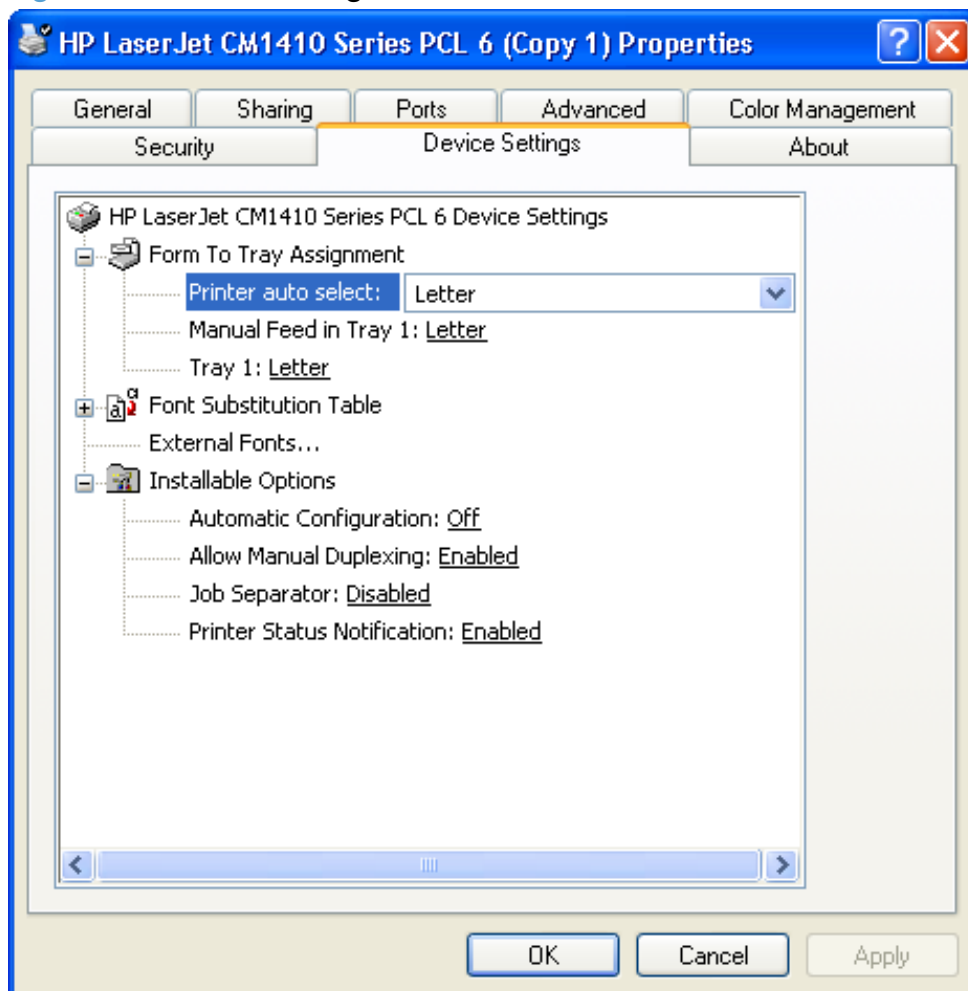
The **Device Settings** tab contains controls for paper-handling devices and controls for managing the HP LaserJet Pro CM1410 Color MFP Series product.

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 LaserJet Pro CM1410 Color 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 **Font Substitution Table** option to open a list of fonts, as show in the following figure. Use the settings to change the TrueType-to-product font mappings.

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.

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 LaserJet Pro CM1410 Color MFP Series product has printing options that you can install and configure in this section. The following controls are available:

- Automatic Configuration

- Allow Manual Duplexing

- Job Separator

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.

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.

Job Separator

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

Printing Shortcuts tab features

- [Use defined printing shortcuts](#)

- [Snapshot Photos](#)

- [Labels](#)

- [Labels](#)

- [Create a custom printing shortcut](#)

NOTE: The **Printing Shortcuts** tab is located on the **Printing Preferences** tab set. For information about how to access these tabs, see ,

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

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

Figure 4-10 **Printing Shortcuts** tab
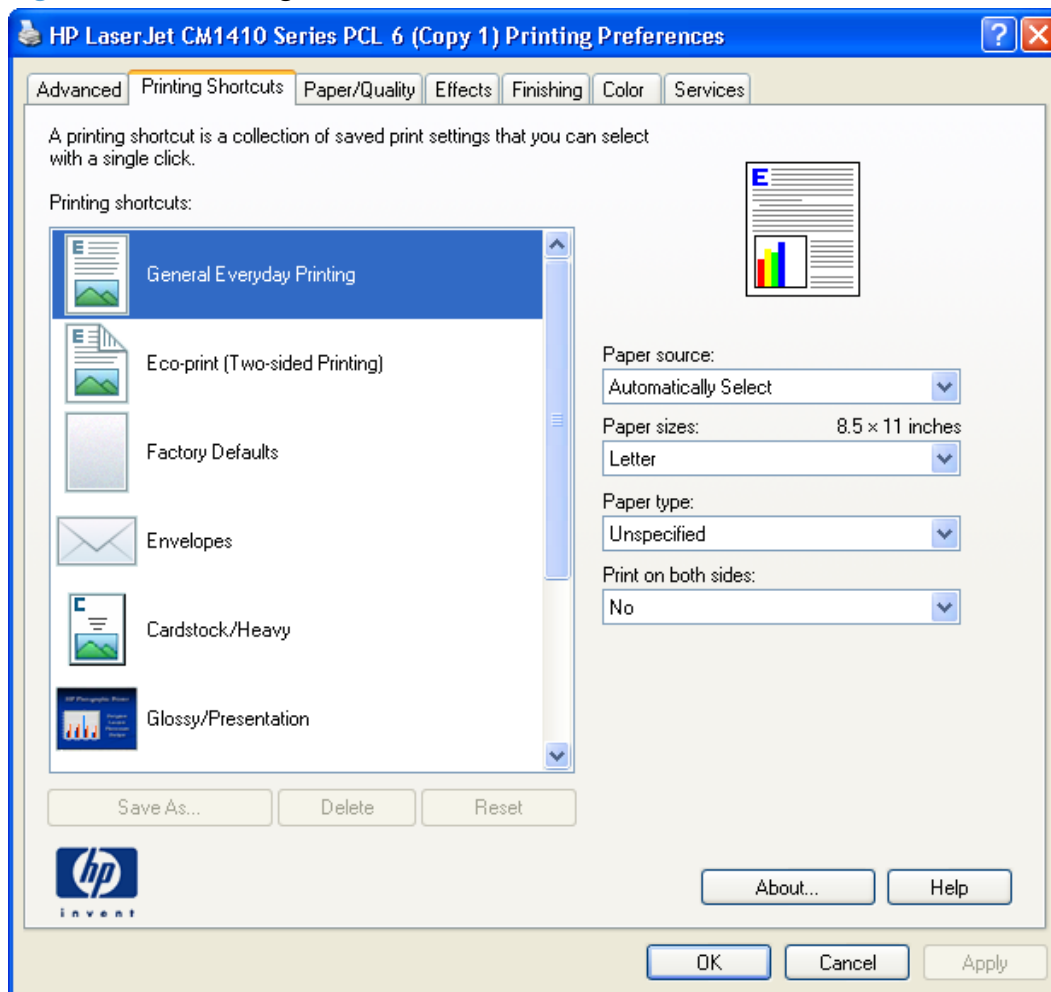
The **Printing Shortcuts** tab is a new tab that appears on the HP PCL 6 Print Driver beginning with the HP Color LaserJet CM4730 MFP. In previous drivers, the Print Task Quick Sets appeared in most of the driver tabs, and was used to capture commonly used driver settings. Like Quick Sets, the **Printing Shortcuts** tab saves commonly used driver settings under a shortcut name.

- Use defined printing shortcuts

- Snapshot Photos

- Labels

- Labels

- 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

- Envelopes

- Cardstock Heavy

- Glossy/Presentation

General Everyday Printing

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

- **Paper source:**

- **Paper sizes:**

- **Paper type:**

- **Print on both sides:**

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 source

The following options are available:

- **Automatically Select** (default)

- **Printer auto select**

- **Manual Feed in Tray 1**

- **Tray 1**

Paper sizes

The following options are available:

- **A4/Letter** (default)
- **Legal**
- **Executive**
- **8.5x13**
- **4x6**
- **5x8**
- **A4**
- **A5**
- **A6**
- **RA4**
- **SRA4**
- **B5 (JIS)**
- **10x15cm**
- **16k 195x270mm**
- **16k 184x260mm**
- **16k 197x273mm**
- **Japanese Postcard**
- **Double Japan Postcard Rotated**
- **Envelope #10**
- **Envelope Monarch**
- **Envelope B5**
- **Envelope C5**
- **Envelope DL**

Paper type

The following options are available:

- **Unspecified** (default)
- **Plain**
- **HP LaserJet 90g**

- **HP Color Laser Matte 105g**

- **HP Premium Choice Matte 120g**

- **HP Color Laser Brochure Matte 160g**

- **HP Superior Laser Matte 160g**

- **HP Cover Matte 200g**

- **HP Matte Photo 200g**

- **HP Tri-fold Color Laser Brochure 160g**

- **HP Superior Laser Glossy 160g**

- **HP Color Laser Photo Glossy 220g**

- **HP Color Laser Photo Glossy 220g (faster printing)**

- **HP Color Laser Photo Glossy 220g (higher gloss)**

- **Light 60-74g**

- **Mid-Weight 96-110g**

- **Mid-Weight Glossy 96-110g**

- **Card Glossy 176-220g**

- **Color Laser Transparency**

- **Labels**

- **Letterhead**

- **Envelope**

- **Heavy Envelope**

- **Preprinted**

- **Prepunched**

- **Colored**

- **Bond**

- **Recycled**

- **Rough**

- **Heavy Rough**

- **HP Tough Paper**

Print on both sides

> 📝 **NOTE:** Because the HP LaserJet Pro CM1415 and HP LaserJet Pro CM1415fn 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**

Eco-print (Two-sided Printing)

- **Paper source: Automatically Select**
- **Paper sizes: Letter**
- **Paper type: Unspecified**
- **Print on both sides: Yes, flip over**

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 source: Automatically select**
- **Paper sizes: Letter** (This setting changes according to country/region.)
- **Paper type: Unspecified**
- **Print on both sides: No**
- **Color Options: Color**

Envelopes

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

Cardstock Heavy

- **Paper source: Automatically Select**
- **Paper sizes: Letter** (This setting changes according to country/region.)
- **Paper type: HP Cover Matte 200g**

- **Print on both sides:No**
- **Color options: Color**

Glossy/Presentation

- **Paper source: Automatically Select**
- **Paper sizes: Letter** (This setting changes according to country/region.)
- **Paper type: Unspecified**
- **Print on both sides: No**
- **Color theme: Default (sRGB)**

Snapshot Photos

- **Paper source: Automatically Select**
- **Paper sizes: 4x6**
- **Paper type: HP Color Laser Photo Glossy 220g (faster printing)**
- **Color theme: Photo**

Labels

- **Paper source: Automatically Select**
- **Paper sizes: Letter**
- **Paper type: Labels** (this option is grayed out so it cannot be changed)
- **Color options: Color**

Labels

- **Paper source: Automatically Select**
- **Paper sizes: Letter**
- **Paper type: Transparency** (this option is grayed out so it cannot be changed)
- **Color options: Color**

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.

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.

About tab features

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 LaserJet Pro CM1410 Color MFP Series model number, driver, date, and versions. The **About** tab is shown in the following figure.

Figure 4-11 **About** tab
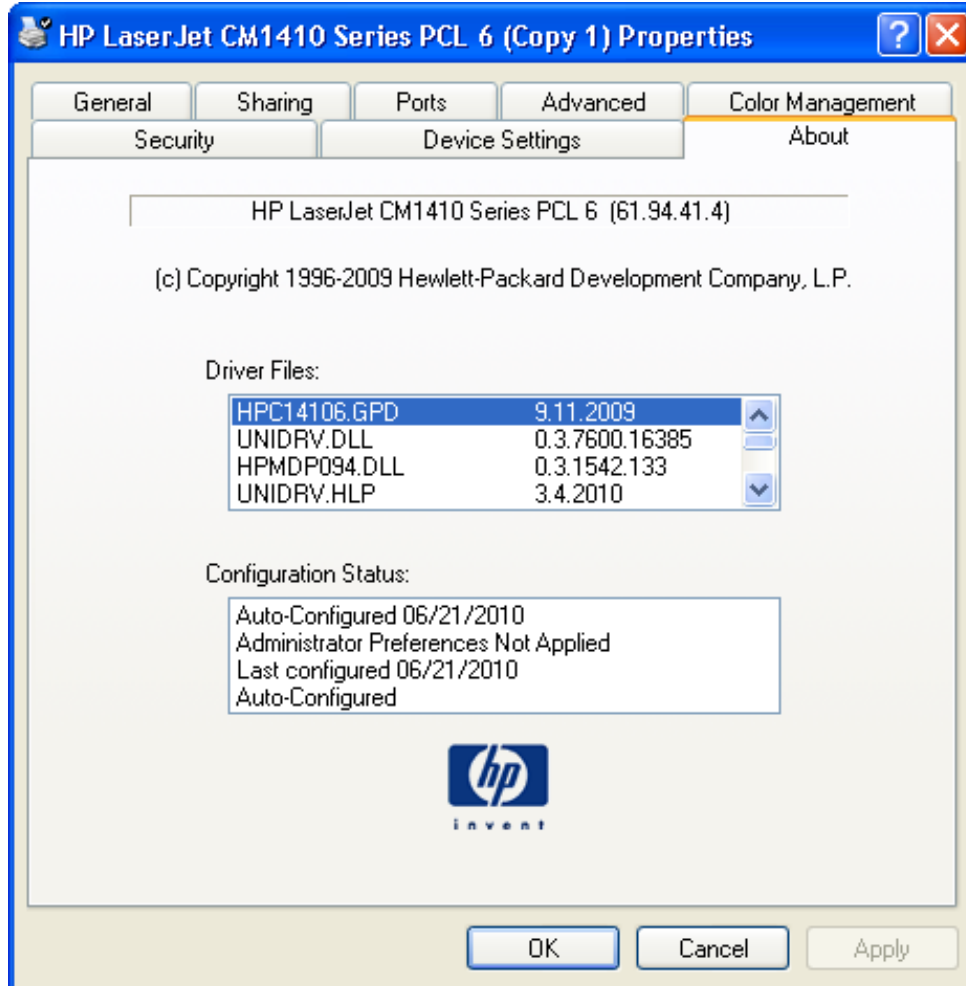
The **About** tab lists driver installation file names and their version numbers. The **About** tab also indicates whether the driver was autoconfigured, whether administrator preferences were set, the date the driver was last configured, and whether the configuration is autoconfigured or user-configured.

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

-
-
-
-

Supported operating systems for Macintosh

The product supports the following Macintosh operating systems:

● Mac OS X v10.5 and v10.6

📝 **NOTE:** PPC and Intel Core Processor Macs are supported.

Macintosh system requirements

Hardware requirements

● 256 MB RAM

● 150 MB HD free space

● CD-ROM

● Hi-Speed USB 2.0

Macintosh printing-system software

The printing-system software for Macintosh is composed of an HP-created postscript (PS) printer definition file (PPD) and a Printer Dialog Extension (PDE) file that work together with the Macintosh OS printing system. These files are used by the Macintosh OS printing system to determine default printer-driver settings and to allow the user to select between the various print options and settings. An HP-supplied Macintosh printer configuration utility is provided, which allows the user to access the HP Embedded Web Server (HP EWS) for additional configuration and product status monitoring. The following are provided on the printing-system CD:

● The HP LaserJet Installer for Macintosh

The following components are installed by the HP LaserJet Installer for Macintosh:

● HP LaserJet Pro CM1410 Color MFP Series PPD

● HP LaserJet Pro CM1410 Color MFP Series PDE

● HP USB EWS Gateway

● HP LaserJet Utility

HP LaserJet Pro CM1410 Color MFP Series PPD

A postscript printer description (PPD) file is a text file that contains keywords and other information to specify printer features, options, and settings. PPD files are created by printer vendors for a specific postscript printer or printer family. PPD files are created by printer vendors to describe the set of printer features available for their postscript printers. On the Macintosh, PPD files provide all the information necessary to describe a postscript printer's features, including options and default settings. They also contain the postscript code used to invoke those features.

HP LaserJet Pro CM1410 Color MFP Series PDE

A Print Dialog extension file can specify one or more PDEs to load in the Print dialog box to provide HP printer specific features. A printing dialog extension (PDE) is a way to extend the Print dialog box in Mac OS X with custom printer features.

A PPD file and printing dialog extension (PDE) for a printer are bound to a printer queue when the queue is created.

HP USB EWS Gateway

For network connected printers, the EWS can be accessed directly by typing the network IP address or DNS name of the product into the Web browser. HP USB EWS Gateway software, which is automatically installed, allows a Web browser to access the product's EWS if the product is connected using a USB cable. Click the **Utility** button when using a USB connection to access the EWS though the Web browser.

HP LaserJet Utility

Use the HP LaserJet Utility to configure, administer, and set up product features that are not available from the printer driver. You can use the HP LaserJet Utility with HP printers connected via USB, and ethernet.

Supported printer drivers for Macintosh

The HP installer provides Postscript Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP Printer Utility for use with Macintosh computers.

The PPDs, in combination with the Apple postscript printer drivers, provide access to device features. Use the Apple postscript printer driver that comes with the computer.

Priority for print settings for Macintosh

Changes to print settings are prioritized depending on where the changes are made:

📝 **NOTE:** The names of commands and dialog boxes might vary depending on your software program.

- **Page Setup dialog box**: Click **Page Setup** or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed here might override settings changed anywhere else.

- **Print dialog box**: Click **Print**, **Print Setup**, or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed in the **Print** dialog box have a lower priority and do *not* override changes made in the **Page Setup** dialog box.

- **Default printer driver settings**: The default printer driver settings determine the settings used in all print jobs, *unless* settings are changed in the **Page Setup**, **Print**, or **Printer Properties** dialog boxes.

- **Printer control-panel settings**: Settings changed at the printer control panel have a lower priority than changes made anywhere else.

Change printer-driver settings for Macintosh

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 **Print**.	1. On the **File** menu, click **Print**.	1. From the Apple menu, click **System Preferences** and then **Print & Fax**.
2. Change the settings that you want on the various menus.	2. Change the settings that you want on the various menus.	2. Click **Options & Supplies**.
	3. On the **Presets** menu, click **Save as** and type a name for the preset.	3. Click the **Driver** menu.
	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.	4. Select the driver from the list, and configure the installed options.

Software for Macintosh computers

HP LaserJet Utility

Use the HP LaserJet Utility to set up product features that are not available in the printer driver.

You can use the HP LaserJet Utility when the product uses a universal serial bus (USB) cable or is connected to a TCP/IP-based network.

Open the HP LaserJet Utility

Open the HP Printer Utility in Mac OS X v10.5 and v10.6

1. In **System Preferences**, click the **Printer & Fax** icon.

2. Select the printer and then click the **Open Print Queue...** button.

3. Click the **Utility** icon.

Embedded Web Server

The product is equipped with the HP Embedded Web Server (HP EWS), which provides access to information about device and network activities. For a complete explanation of the features and functionality of the HP EWS, see the product user guide, which is available on the printing-system software CD.

Availability

This STR provides information about the availability of the printing-system software and related software and firmware. Printing-system software on a CD is available from HP fulfillment centers.

- Printing-system software on the Web

- In-box printing-system software CD

Printing-system software on the Web

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

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

NOTE: This STR describes drivers that are shipped on the printing-system software CD that comes with the product. This STR does *not* describe drivers that will become available on the Web.

The printing-system software is available for download at the following Web site:

www.hp.com/support/CM1410series

In-box printing-system software CD

One CD is included in-box with the product. The printing-system software CD contains the following components:

- Software installer

- Links to the HP Universal Print Drivers on the Web

- User guides

- Support information

The CD is divided into two partitions, one for each of the following operating systems:

- Windows

- Macintosh

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

- Macintosh disk

Macintosh disk

The HP Macintosh printing-system software files reside on the Macintosh disk. The HP LaserJet Installer for Macintosh is at the root of the Macintosh CD. The user manuals (.PDF) are grouped by language and are in the Documentation directory on the Macintosh partition of the software CDs.

Macintosh install and uninstall instructions

- Install the Macintosh printing-system software

- Remove the printing-system software from Macintosh operating systems

Install the Macintosh printing-system software

On a Macintosh computer, the printing-system software installation procedures are the same for a network administrator, a network client, or a single user. Install the printing-system software on any computer that has access rights to the product. The computer user must also have administrative rights on the computer to install the printing-system software.

- General installation for Macintosh operating systems

- Setup instructions

General installation for Macintosh operating systems

1. 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, connect the USB cable.

2. Insert the Macintosh printing-system software CD into the CD-ROM drive.

   NOTE: If the **HP LaserJet** installer browser screen does not open automatically when the CD is inserted into the CD-ROM drive, double-click the product CD image on the desktop to open the installer browser screen.

3. In the **HP LaserJet** installer browser screen, double-click the product .dmg icon, then double-click the .pkg icon. This begins the printing-system installation.

   NOTE: In the HP LaserJet installer browser screen, double-click the **Documentation** icon to gain access to the manuals. Select a language folder and locate the available guides which are in .PDF format. The user guide is a .PDF file that is named LJCM1130–M1210_use_xxww.pdf, where "xx" is a language abbreviation

4. The **Introduction** screen appears. Click **Continue** and then follow the onscreen instructions to complete the printing-system software installation.

   NOTE: When the printing-system software is installing, be patient. The installer must perform an initial search of the computer, which can take up to 1 minute. During this time, the installer might appear to be stalled.

5. When the printing-system software installation is complete, click **Close**.

6. Continue with the steps for setting up a product.

Setup instructions

This section contains information about the following topics:

- Setting up a printer with Mac OS X v10.5 and v10.6

- Troubleshooting the product setup

Setting up a printer with Mac OS X v10.5 and v10.6

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

1. If you are installing the product using a USB connection, verify the USB cable is connected 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. In the **Applications** folder (in the **Finder** utility), open the **System Preferences** folder, and then open **Printer & Fax**.

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 .

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

4. Click the add **+** icon beneath the **Printer List** to open the **Printer Browser** screen.

5. Select your product model from the list of printers with Bonjour as the Kind. Click the **Add** button.

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.

- Try forcing the product into USB Full Speed mode by using the control panel.

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 the printing-system software from Macintosh operating systems

1. Open **Finder**.

2. Navigate to **Applications/HP Laserjet Professional CM1410 MFP Series**.

3. Double-click **HP Uninstaller.app**. The uninstaller will run and remove the software.

6 Solve problems

Problem-solving checklist

Follow these steps when trying to solve a problem with the product.

- [Step 1: Check that the product power is on](#)
- [Step 2: Check the environment where the product is installed](#)
- [Step 3: Check the control panel for error messages](#)
- [Step 4: Test print functionality](#)
- [Step 5: Test copy functionality](#)
- [Step 6: Test the fax sending functionality](#)
- [Step 7: Test the fax receiving functionality](#)
- [Step 8: Try sending a print job from a computer](#)
- [Step 9: Test the walk-up USB printing functionality](#)

Step 1: Check that the product power is on

1. Make sure the product is plugged in and turned on.

2. Make sure the power cable is connected to the product and the outlet.

3. Check the power source by connecting the power cable to a different outlet.

4. If the product motors do not rotate, make sure the print cartridges are installed and that the doors are all closed. The control panel displays messages to indicate these problems.

5. If the document feeder motor does not rotate, open the document feeder cover and remove any packing material or shipping tape.

6. If the scanner bulb does not light during copying, scanning, or faxing, contact HP support.

Step 2: Check the environment where the product is installed

- Is the product installed on a solid, level surface (± 1°)?
- Is the operating environment within the specified parameters?
- Is the product exposed to direct sunlight?

Step 3: Check the control panel for error messages

The control panel should indicate ready status. If an error message appears, resolve the error.

Common problems that result in control-panel error messages include the following:

- Paper incorrectly installed in the tray
- Paper guides not aligned with the paper stack in the tray

Step 4: Test print functionality

1. From the control panel Home screen, touch the Setup ⚙ button.

2. Open the Reports menu, and select the Configuration Report item to print the report.

3. If the report does not print, make sure paper is loaded in the tray, and check to control panel to see if paper is jammed inside the product.

   📝 **NOTE:** Make sure the paper in the tray meets specifications for this product.

Step 5: Test copy functionality

1. Place the configuration page into the document feeder and make a copy. If paper does not feed smoothly through the document feeder, you might need to clean the document feeder rollers and separation pad. Make sure the paper meets specifications for this product.

2. Place the configuration page onto the scanner glass and make a copy.

3. If the print quality on the copied pages is not acceptable, clean the scanner glass and the small glass strip.

Step 6: Test the fax sending functionality

1. From the control panel Home screen, touch the Setup ⚙ button.

2. Open the Service menu, and then open the Fax Service menu. Touch the Run Fax Test button to test the fax functionality.

3. Touch the Fax button on the product control panel, and then touch the Start Fax button.

Step 7: Test the fax receiving functionality

1. From the control panel Home screen, touch the Setup ⚙ button.

2. Open the Service menu, and then open the Fax Service menu. Touch the Run Fax Test button to test the fax functionality.

3. Use another fax machine to send a fax to the product.

4. If the product does not receive the fax, make sure that you do not have too many telephone devices connected to the product, and that all telephone devices are connected in the correct order.

5. Review and reset the product fax settings.

6. Turn off the Private Receive feature.

Step 8: Try sending a print job from a computer

1. Use a word-processing program to send a print job to the product.

2. If the job does not print, make sure you selected the correct printer driver.

3. Uninstall and then reinstall the product software.

Step 9: Test the walk-up USB printing functionality

1. Load a .PDF document or .JPEG photo onto a USB flash drive, and insert it in the slot on the front of the product.

2. On the control panel, touch the USB Flash Drive button, and try printing the document or photo.

3. If no documents are listed, try a different type of USB flash drive.

Troubleshooting process

Power subsystem

Power-on checks

Turn on the power. If the control-panel LEDs do not illuminate, perform the power-on checks to find the cause of the problem.

1. Verify that the product is plugged into an active electrical outlet that delivers the correct voltage.

2. Verify that the power switch is in the on position.

3. Make sure that the product makes the expected start-up sounds.

Tools for troubleshooting

Component diagnostics

LED diagnostics

Network LEDs

The onboard network solution has two network port LEDs. When the product is connected to a properly working network through a network cable, the yellow LED indicates network activity, and the green LED indicates the link status. A blinking yellow LED indicates network traffic. If the green LED is off, a link has failed.

For link failures, check all of the network cable connections. In addition, you can try to manually configure the link settings on the onboard network solution by using the product control-panel menus.

1. Touch the Setup ⚙ button.

2. Scroll to and touch the Network Setup menu.

3. Touch the Link Speed menu.

4. Select one of the following options.

Setting	Description
Automatic	The print server automatically configures itself for the highest link speed and communication mode allowed on the network.
10T Half	10 megabytes per second (Mbps), half-duplex operation
10T Full	10 Mbps, full-duplex operation
100TX Half	100 Mbps, half-duplex operation
100TX Full	100 Mbps, full-duplex operation

5. Touch the OK button. The product turns off and then on.

Control panel LEDs

The state of the Ready light and Attention light on the product signal the product status. The following table outlines the possible control-panel light states.

> **NOTE:** Wireless models have a blue LED that illuminates when the product wireless function is enabled and available.

Product state	Ready light state	Attention light state
Initializing	Blinking	Blinking
Ready	On	Off
Receiving data/processing job or cancelling job	Blinking	Off

Product state	Ready light state	Attention light state
Error message	Off	Blinking
Fatal error (49 or 79 error)[1]	On	On

[1] The product restarts after one of these errors occurs.

Control-panel diagnostics

The product includes diagnostic tests for the control panel.

Test the control-panel display

1. Touch the Setup ✎ button.

2. Touch the left arrow button ◄, and then quickly touch the Cancel ✕ button.

3. Touch the Setup ✎ button to return to the main menus.

4. Open the **2ndary Service** menu.

5. Open the **Display test** menu.

Test the control-panel buttons

1. Touch the Setup ✎ button.

2. Touch the left arrow button ◄, and then quickly touch the Cancel ✕ button.

3. Touch the Setup ✎ button to return to the main menus.

4. Open the **2ndary Service** menu.

5. Open the **Button test** menu.

Engine Diagnostics

Engine test

1. With the product off, open the front and rear doors.

2. Turn the power on, and close both doors within ten seconds.

3. An engine test page (a page containing multiple horizontal colored lines) will print.

Use the HP ToolboxFX software

HP ToolboxFX is a program that you can use to complete the following tasks:

- Check the product status.
- Configure the product settings.
- View troubleshooting information.

You can view HP ToolboxFX when the product is directly connected to your computer or is connected to the network. You must perform a recommended software installation to use HP ToolboxFX.

📝 **NOTE:** HP ToolboxFX is not supported for Windows 2000, Windows Server 2003, Windows XP (64-bit), or Macintosh operating systems. To use HP ToolboxFX, you must have TCP/IP protocol installed on your computer.

You do not have to have Internet access to open and use HP ToolboxFX.

View the HP ToolboxFX

Open HP ToolboxFX in one of these ways:

- In the Windows system tray, double-click the HP ToolboxFX icon (⬚).
- On the Windows **Start** menu, click **Programs** (or **All Programs** in Windows XP and Vista), click **HP**, click the name of this product, and then click **HP ToolboxFX**.

Status

The **Status** folder contains links to the following main pages:

- **Device status**. This page indicates product conditions such as a jam or an empty tray. After you correct a problem, click **Refresh status** to update the product status.
- **Supplies status**. View details such as the estimated percent of life remaining in the print cartridge and the number of pages that have been printed with the current print cartridge. This page also has links for ordering supplies and for finding recycling information.
- **Device configuration**. View a detailed description of the current product configuration, including the amount of memory installed and whether optional trays are installed.
- **Network summary**. View a detailed description of the current network configuration, including the IP address and network status.
- **Reports**. Print the Configuration report and other information pages.
- **Color usage job log**. View color usage information for the product.
- **Event log**. View a history of product errors.

  The event log is a table where the product events are logged for your reference. The log contains codes that correspond to the error messages that appear on the product control panel display. The number in the Page Count column specifies the total number of pages that the product had printed when the error occurred. The most recent error is listed first.

Fax

Use the HP ToolboxFX **Fax** tab to perform fax tasks from your computer. The **Fax** tab contains links to the following main pages:

- **Fax Receive**. Set the fax receive mode.

- **Fax Phone Book**. Add, edit, or delete entries in the product phone book.

- **Fax Send Log**. View all of the recent faxes that have been sent from the product.

- **Fax Receive Log**. View all of the recent faxes that have been received by the product.

- **Block Faxes**. Add, delete, or view fax numbers that are blocked.

Fax Receive

The following options are available when receiving a fax:

- Print the fax. You can also select an option to have a message appear on your computer to notifying you when the fax was printed.

- Forward the fax to another fax machine.

> **NOTE:** You must click **Apply** before the changes take effect.

Fax phone book

Use the HP ToolboxFX fax phone book to add and remove individuals or groups on your speed-dial list, import phone books from a variety of sources, and update and maintain the contact list.

- To add an individual contact to the speed-dial list, select the row of the speed dial number that you want to specify. Type the contact name in the **Contact name** window. Type the fax number in the **Fax number** window. Click **Add**.

- To add a group of contacts to the speed-dial list, select the row of the speed-dial number that you want to specify. Click **Add Group**. Double-click a contact name from the list on the left to move it to the group list on the right, or select a name on the left and then click the appropriate arrow to move it to the group list on the right. You can also use those two methods to move names from right to left. When you have created a group, type a name in the **Group name** window, and then click **OK**.

- To edit an existing individual speed-dial entry, click anywhere on the row containing the contact name to select it, and then click **Update**. Type changes in the appropriate windows, and then click **OK**.

- To edit an existing group-speed-dial entry, click anywhere on the row containing the group name to select it, and then click **Update Group**. Make any required changes, and then click **OK**.

- To delete an entry from the speed-dial list, select the item, and then click **Delete**.

- To move speed dial entries, select the entry and then click **Move**, or select **Move** and then specify the entry in the dialog box. Either select **Next empty row** or specify the number of the row where you want to move the entry.

> **NOTE:** If you specify a row that is occupied, the new entry will overwrite the existing entry.

● To import contacts from a phone book that exists in Lotus Notes, Outlook, or Outlook Express, click **Import/Export Phone Book**. Select the **Import** option, and then click **Next**. Select the appropriate software program, navigate to the appropriate file, and then click **Finish**. To export contacts from a phone book, click **Import/Export Phone Book**. Select the **Export** option, and then click **Next**. Enter the file name or browse to the file to which you want to export contacts, and then click **Finish**. You can also select individual entries from the phone book instead of importing the entire phone book.

● To delete all entries, click **Delete All**, and then click **Yes**.

In addition to numerical digits, the following are valid characters for fax numbers:

● (

●)

● +

● -

● *

● #

● R

● W

● .

● ,

● <space>

📝 **NOTE:** You must click **Apply** before the changes take effect.

Fax send log

The HP ToolboxFX fax send log lists all recently sent faxes and information about them, including the date and time sent, job number, fax number, page count, and the results.

Click any column heading in the fax send log to re-sort the information in that column in ascending or descending order.

The **Results** column provides the fax status. If the fax attempt was unsuccessful, this column provides a description of why the fax was not sent.

Fax receive log

The HP ToolboxFX fax receive log provides a list of all recently received faxes and information about them including the date and time received, job number, fax number, page count, results, and an abbreviated fax image.

The fax receive log can be used to block future faxes. Check the **Block Fax** box next to a received fax listed on the log.

Click on any column heading in the fax receive log to re-sort the information in that column in ascending or descending order.

The **Results** column provides the fax status. If the fax attempt was unsuccessful, this column provides a description of why the fax was not received.

NOTE: You must click **Apply** before the changes take effect.

Block Faxes

Block Faxes provides a list of all numbers that are blocked. Add, modify, or delete blocked fax numbers on this tab.

Help

The **Help** folder contains links to the following main pages:

● **Color Printing Tools**. Open Microsoft Office Basic Colors or the full palette of color with associated RGB values. Use the HP Basic Color Match to adjust spot colors in your printed output.

System Settings

The HP ToolboxFX **System Settings** tab contains links to the following main pages:

- **Device Information**. View information about the product, such as the product description and a contact person.

- **Paper Setup**. Change the product paper-handling settings, such as default paper size and default paper type.

- **Print Quality**. Change the product print-quality settings.

- **Print Density**. Change the print-density settings, such as contrast, highlights, midtones, and shadows.

- **Paper Types**. Change the mode settings for each media type, such as letterhead, prepunched, or glossy paper.

- **System Setup**. Change the system settings, such as jam recovery and auto-continue. Change the **Cartridge low threshold** setting, which sets the toner level that causes a Low toner pop-up alert.

- **Device Polling**. Change the product polling settings, which determine how often HP ToolboxFX collects data from the product.

- **Save/Restore Settings**. Save the current settings for the product to a file on the computer. Use this file to load the same settings onto another product or to restore these settings to this product at a later time.

- **Product Security**. Set, change, or clear the product security password.

Device Information

The Device Information page stores data about your product for future reference. The information that you type in the fields on this page appears on the Configuration page. You can type any character in each of these fields.

NOTE: You must click **Apply** before your changes take effect.

Paper Setup

Use these options to configure your default settings.

The following options are available for handling print jobs when the product is out of paper:

- Select **Wait for paper to be loaded**.

- Select **Cancel** from the **Paper out action** drop-down list to cancel the print job.

The **Paper out time** field specifies how long the product waits before acting on your selections. You can specify from 0 to 3600 seconds.

📝 **NOTE:** You must click **Apply** before your changes take effect.

Print Quality

Use these options to improve the appearance of your print jobs.

Color Calibration
- **Power On Calibration**. Specify whether the product should calibrate when you turn it on.

- **Calibration Timing**. Specify how frequently the product should calibrate.

- **Calibrate Now**. Set the product to calibrate immediately.

📝 **NOTE:** You must click **Apply** before your changes take effect.

Print Density

Use these settings to make fine adjustments in the amount of each color of toner that is used for your printed documents.

- **Contrasts**. Contrast is the range of difference between light (highlight) and dark (shadow) colors. To increase the overall range between light and dark colors, increase the **Contrasts** setting.

- **Highlights**. Highlights are colors that are nearly white. To darken highlight colors, increase the **Highlights** setting. This adjustment does not affect midtone or shadow colors.

- **Midtones**. Midtones are colors that are halfway between white and solid density. To darken midtone colors, increase the **Midtones** setting. This adjustment does not affect highlight or shadow colors.

- **Shadows**. Shadows are colors that are nearly solid density. To darken shadow colors, increase the **Shadows** setting. This adjustment does not affect highlight or midtone colors.

Paper Types

Use these options to configure print modes that correspond to the various media types. To reset all modes to factory default settings, select **Restore modes**.

📝 **NOTE:** You must click **Apply** before your changes take effect.

System setup

Use the HP ToolboxFX system settings options to configure global settings for copy, fax, scan, and print, such as jam recovery and auto-continue.

📝 **NOTE:** You must click **Apply** before the changes take effect.

Device polling

You can turn off HP ToolboxFX device polling to reduce network traffic.

📝 **NOTE:** You must click **Apply** before the changes take effect.

Print Settings

The HP ToolboxFX **Print Settings** tab contains links to the following main pages:

● **Printing**. Change the default product print settings, such as number of copies and paper orientation.

● **PCL5**. View and change the PCL5 settings.

● **PostScript**. View and change the PS settings.

Printing

Use these options to configure the settings for all print functions. These are the same options that are available on the control panel.

📝 **NOTE:** You must click **Apply** before your changes take effect.

PCL5

Use these options to configure the settings when you are using the PCL print personality.

📝 **NOTE:** You must click **Apply** before your changes take effect.

PostScript

Use this option when you are using the PostScript print personality. When the **Print PostScript error** option is turned on, the PostScript error page automatically prints when PostScript errors occur.

📝 **NOTE:** You must click **Apply** before your changes take effect.

Network Settings

The network administrator can use this tab to control the network-related settings for the product when it is connected to an IP-based network.

📝 **NOTE:** You cannot configure wireless network settings by using the HP ToolboxFX software.

Internal print-quality test pages

Configuration page

The configuration page lists current product settings and properties. This page also contains a status log report.

1. From the Home screen, touch the Setup ⚒ button.

2. Touch the Reports button.

3. Touch the Configuration Report button.

Print-quality troubleshooting tools

Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the System Setup menu.

2. Open the Print Quality menu, and select the Color Calibration item.

3. Select the Calibrate Now option.

Control panel menus

Setup Menu

To open this menu, touch the Setup ⚲ button. The following sub menus are available:

- Reports

- Quick Forms

- Fax Setup

- System Setup

- Service

- Network Setup

Reports menu

Menu item	Description
Demo Page	Prints a page that demonstrates print quality
Menu Structure	Prints a control-panel menu layout map.
Configuration Report	Prints a list of the product settings
Supplies Status	Prints the print-cartridge status. Includes the following information: ● Estimated percentage of cartridge life remaining ● Approximate pages remaining ● Part numbers for HP print cartridges ● Number of pages printed ● Information about ordering new HP print cartridges and recycling used HP print cartridges
Network Summary	Displays status for: ● Network hardware configuration ● Enabled features ● TCP/IP and SNMP information ● Network statistics ● Wireless network configuration (wireless models only)
Usage Page	Displays the number of pages printed, faxed, copied, and scanned by the product
PCL Font List	Prints a list of all installed PCL 5 fonts
PS Font List	Prints a list of all installed PS fonts
PCL6 Font List	Prints a list of all installed PCL 6 fonts
Color Usage Log	Prints information about the color supply usage
Service Page	Prints the service page The service page includes information about supported paper types, copy settings, and other settings that are not included on the configuration page.
Diagnostics Page	Prints diagnostic information about calibration and color quality
Print Quality Page	Prints a page that helps solve problems with print quality

Quick Forms menu

Menu item	Sub-menu item	Description
Notebook Paper	Narrow Rule	Prints pages that have preprinted lines
	Wide Rule	
	Child Rule	
Graph Paper	1/8 inch	Prints pages that have preprinted graph lines
	5 mm	
Checklist	1-Column	Prints pages that have preprinted lines with check boxes
	2-Column	
Music Paper	Portrait	Prints pages that have preprinted lines for writing music
	Landscape	

Fax Setup menu

In the following table, items that have an asterisk (*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Fax Set-Up Utility			This is a tool for configuring the fax settings. Follow the on-screen prompts and select the appropriate response for each question.
Basic Setup	Time/Date	(Settings for time format, current time, date format, and current date.)	Sets the time and date setting for the product.
	Fax Header	Enter your fax number.	Sets the identifying information that is sent to the receiving product.
		Enter company name.	Identifies the fax sender (optional)
	Answer Mode	Automatic* Manual TAM Fax/Tel	Sets the type of answer mode. The following options are available: ● Automatic: The product automatically answers an incoming call on the configured number of rings. ● Manual: The user must press the Start Fax button or use an extension phone to make the product answer the incoming call. ● TAM: A telephone answering machine (TAM) is attached to the Auxilary phone port of the product. The product will not pick up any incoming call, but only listen for fax tones after the answering machine has picked up the call. ● Fax/Tel: The product must automatically pick up the call and determine if the call is a voice or fax call. If the call is a fax call, the product handles the call as usual. If the call is a voice call, an audible synthesized ring is generated to alert the user of an incoming voice call.
	Rings to Answer		Sets the number of rings that must occur before the fax modem answers. The default setting is 5.

Menu item	Sub-menu item	Sub-menu item	Description
	Distinctive Ring	All Rings* Single Double Triple Double and Triple	If you have distinctive ring phone service, use this item to configure how the product responds to incoming calls. ● All Rings: The product answers any calls that come through the telephone line. ● Single: The product answers any calls that produce a single-ring pattern. ● Double: The product answers any calls that produce a double-ring pattern. ● Triple: The product answers any calls that produce a triple-ring pattern. ● Double and Triple: The product answers any calls that produce a double-ring or triple-ring pattern.
	Dial Prefix	On Off*	Specifies a prefix number that must be dialed when sending faxes from the product. If you turn this feature on, the product prompts you to enter the number and then it automatically includes that number every time you send a fax.
Advanced Setup	Fax Resolution	Standard Fine* Superfine Photo	Sets the resolution for sent documents. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller and the fax takes less time to transmit.
	Lighter/Darker		Sets the darkness of outgoing faxes.
	Fit to Page	On* Off	Shrinks incoming faxes that are larger than the paper size set for the tray.
	Glass Size	Letter A4	Sets the default paper size for documents being scanned from the flatbed scanner. NOTE: The default setting is determined by the choice of location during the initial product setup.
	Dialing Mode	Tone* Pulse	Sets whether the product should use tone or pulse dialing.
	Redial if Busy	On* Off	Sets whether the product should attempt to redial if the line is busy.
	Redial if No Answer	On Off*	Sets whether the product should attempt to redial if the recipient fax number does not answer.
	Redial if Comm. Error	On* Off	Sets whether the product should attempt to redial the recipient fax number if a communication error occurs.

Menu item	Sub-menu item	Sub-menu item	Description
	Detect Dial Tone	On Off*	Sets whether the product should check for a dial tone before sending a fax.
	Billing Codes	On Off*	Enables the use of billing codes when set to **On**. A prompt appears where you can enter the billing code for an outgoing fax.
	Extension Phone	On* Off	When this feature is enabled, you can press the **1-2-3** buttons on the extension phone to cause the product to answer an incoming fax call.
	Stamp Faxes	On Off*	Sets the product to print the date, time, sender's phone number, and page number on each page of incoming faxes.
	Private Receive	On Off*	Setting **Private Receive** to **On** requires you to set a product password. After setting the password, the following options are set: ● Private Receive is turned on. ● All old faxes are deleted from memory. ● Fax forwarding is set to Off and is not allowed to be changed. ● All incoming faxes are stored in memory.
	Confirm Fax Number	On Off*	Confirm a fax number by entering it a second time.
	Allow Fax Reprint	On* Off	Sets whether incoming faxes are stored in memory for reprinting later.
	Fax/Tel Ring Time	20 30 40 70	Sets the time, in seconds, after which the product should stop sounding the Fax/Tel audible ring to notify the user of an incoming voice call.
	Fax Speed	Fast(V.34)* Medium(V.17) Slow(V.29)	Sets the allowed fax communication speed.

System Setup menu

In the following table, items that have an asterisk (*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Language	(List of available control-panel display languages.)		Sets the language in which the control panel displays messages and product reports.
Paper Setup	Default Paper Size	Letter A4 Legal	Sets the size for printing internal reports, faxes, or any print job that does not specify a size. **NOTE:** The default setting is determined by the choice of location during the initial product setup.
	Default Paper Type	Lists available paper types.	Sets the type for printing internal reports, faxes, or any print job that does not specify a type.
	Tray 1	Paper Type Paper Size	Configures the size and type for the tray.
	Paper Out Action	Wait forever* Cancel Override	Determines how the product reacts when a print job requires a paper size or type that is unavailable or when the tray is empty. ● Wait forever: The product waits until you load the correct paper. ● Override: Print on a different size paper after a specified delay. ● Cancel: Automatically cancel the print job after a specified delay. ● If you select either the Override or Cancel item, the control panel prompts you for the number of seconds to delay.
Print Quality	Color Calibration	Calibrate Now Power-On Calibration	Performs a full calibration. ● Calibrate Now: Performs an immediate calibration. ● Power-On Calibration: Specify the length of time the product should wait after you turn it on before it calibrates.
Volume Settings	Alarm Volume Ring Volume Key-Press Volume Phone Line Volume		Set the volume levels for the product. The following options are available for each volume setting: ● Off ● Soft ● Medium* ● Loud

Menu item	Sub-menu item	Sub-menu item	Description
PowerSave Time	Sleep Delay	Off	Specifies the amount of idle time before the product enters sleep mode.
		1 Minute	
		15 Minutes*	
		30 Minutes	
		1 Hour	
		2 Hours	
Time/Date	(Settings for time format, current time, date format, and current date.)		Sets the time and date setting for the product.
Product Security	On		Sets the product-security feature. If you select the On setting, you must set a password.
	Off*		
At Very Low	Black Cartridge	Stop	Sets how the product behaves when the black print cartridge reaches the very low threshold.
		Prompt	
		Continue*	● Stop: The product stops printing until you replace the print cartridge.
			● Prompt: The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing.
			● Continue: The product alerts you that the print cartridge is very low, but it continues printing.
	Color Cartridges	Stop	Sets how the product behaves when one of the color print cartridges reaches the very low threshold.
		Prompt	
		Continue	● Stop: The product stops printing until you replace the print cartridge.
		Print Black*	● Prompt: The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing.
			● Continue: The product alerts you that the print cartridge is very low, but it continues printing.
			● Print Black: When a color print cartridge becomes very low, the product prints in black only to prevent fax interruptions. To configure the product to print in color and use the remaining toner in the print cartridge past very low, follow these steps:
			1. On the product control panel, touch the Setup 🔧 button, and then touch the System Setup button.
			2. Touch the At Very Low button, and then touch the Color Cartridges button. Touch the Continue button.

Menu item	Sub-menu item	Sub-menu item	Description
			When you choose to replace the very low print cartridge, color printing resumes automatically.
User-Defined Low	Black		Type the percentage of estimated life remaining at which the product alerts you that the print cartridge is low.
	Cyan		
	Magenta		
	Yellow		
USB Flash Drive	On*		Enables or disables the USB flash drive.
	Off		
Color Copy	On*		Enables or disables color copying.
	Off		
Courier Font	Regular*		Sets Courier font values.
	Dark		

Service menu

In the following table, items that have an asterisk (*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Fax Service	Clear Saved Faxes		Clears all faxes in memory.
	Run Fax Test		Performs a fax test to verify that the phone cord is plugged in the correct outlet and that there is a signal on the phone line. A fax test report is printed indicating the results.
	Print T.30 Trace	Now	Prints or schedules a report that is used to troubleshoot fax transmission issues.
		Never*	
		If Error	
		At End of Call	
	Error Correction	On*	The error correction mode allows the sending device to re-transmit data if it detects an error signal.
		Off	
	Fax Service Log		The fax service log prints out the last 40 entries in the fax log.
Cleaning Page			Cleans the product when specks or other marks appear on printed output. The cleaning process removes dust and excess toner from the paper path.
			When selected, the product prompts you to load plain Letter or A4 paper in Tray 1. Touch the OK button to begin the cleaning process. Wait until the process completes. Discard the page that prints.
USB Speed	High*		Sets the USB speed for the USB connection to the computer. For the product to actually operate at high speed, it must have high speed enabled and be connected to an EHCI host controller that is also operating at high speed. This menu item also does not reflect the current operating speed of the product.
	Full		

Menu item	Sub-menu item	Sub-menu item	Description
Less Paper Curl	On Off*		When printed pages are consistently curled, this option sets the product to a mode that reduces curl.
Archive Print	On Off*		When printing pages that will be stored for a long time, this option sets the product to a mode that reduces toner smearing and dusting.
Firmware Datecode			Displays the current firmware datecode
Restore Defaults			Sets all settings to the factory default values

Network Setup menu

In the following table, items that have an asterisk (*) indicate the factory default setting.

Menu item	Sub-menu item	Description
Wireless Menu (wireless models only)	Wireless Setup Wizard	Guides you through the steps to set up the product on a wireless network
	Wi-Fi Protected Setup	If your wireless router supports this feature, use this method to set up the product on a wireless network. This is the simplest method.
	Run Network Test	Tests the wireless network and prints a report with the results.
	Turn Wireless On/Off	Enables or disables the wireless network feature.
TCP/IP Config	Automatic* Manual	Automatic: The product automatically configures all the TCP/IP settings via DHCP, BootP or AutoIP. Manual: You can manually configure the IP address, subnet mask, and default gateway. The control panel prompts you to specify values for each address section. As each address is completed, the product prompts for address confirmation before moving to the next one. After all three addresses are set, the network reinitializes.
Auto Crossover	On* Off	Enables or disables the use of a standard 10/100 network cable when the product is directly connected to a computer.
Network Services	IPv4 IPv6	Enable or disable the IPv4 and IPv6 protocols. By default, each protocol is enabled.
Link Speed	Automatic* 10T Full 10T Half 100TX Full 100TX Half	Sets the link speed manually if needed. After setting the link speed, the product automatically restarts.
Restore Defaults		Resets all network configurations to their factory defaults.

Function specific menus

The product features function-specific menus for copying, faxing, scanning, and using a USB flash drive. To open these menus, touch the button for that function on the control panel.

Copy Menu

To open this menu, touch the Copy button, and then touch the Settings... button.

📝 **NOTE:** Settings that you change with this menu expire 2 minutes after the last copy completes.

Menu item	Sub-menu item	Sub-menu item	Description
ID Copy **NOTE:** This item is available from the main Copy screen. You do not need to touch the Settings... button to access it.			Copies both sides of identification cards, or other small-size documents, onto the same side of one sheet of paper.
Number of Copies	(1–99)		Specifies the number of copies
Reduce/Enlarge	Original=100% Legal to Letter=78% Legal to A4=83% A4 to Letter=94% Letter to A4=97% Full Page=91% Fit to Page 2 Pages per Sheet 4 Pages per Sheet Custom: 25 to 400%		Specifies the size of the copy.
Lighter/Darker			Specifies the contrast of the copy.
Optimize	Describe Original	Auto Select* Mixed Text Picture	Specifies the type of content in the original document, so the copy is the best match for the original.

Menu item	Sub-menu item	Sub-menu item	Description
Paper	Paper Size Paper Type		Specifies the paper size and type. **NOTE:** The default paper size setting is determined by the choice of location during the initial product setup. The default paper type setting is plain.
Multi-Page Copy	Off* On		When this feature is on, the product prompts you to load another page onto the scanner glass or to indicate that the job is complete.
Collation	On* Off		Specifies whether to collate copy jobs
Draft Mode	Off* On		Specifies whether to use draft-quality printing for copies
Image Adjustment	Lightness Contrast Sharpen Background Removal Color Balance Grayness		Adjusts the image quality settings for copies
Set as New Defaults			Saves any changes you have made to this menu as the new defaults
Restore Defaults			Restores the factory defaults for this menu

Fax Menu

To open this menu, touch the Fax button, and then touch the Fax Menu button.

Menu item	Sub-menu item	Sub-menu item	Description
Fax Reports	Fax Confirmation	On Every Fax On Send Fax Only On Receive Fax Only Never*	Sets whether the product prints a confirmation report after a successful fax job.

Menu item	Sub-menu item	Sub-menu item	Description
	Include First Page	On* Off	Sets whether the product includes a thumbnail image of the first page of the fax on the report.
	Fax Error Report	On Every Error* On Send Error On Receive Error Never	Sets whether the product prints a report after a failed fax job.
	Print Last Call Report		Prints a detailed report of the last fax operation, either sent or received.
	Fax Activity Log	Print Log Now Auto Log Print	Print Log Now: Prints a list of the faxes that have been sent from or received by this product. Auto Log Print: Automatically prints a report after every fax job.
	Print Phone Book		Prints a list of the speed dials that have been set up for this product.
	Print Junk Fax list		Prints a list of phone numbers that are blocked from sending faxes to this product.
	Print Billing Report		Prints a list of billing codes that have been used for outgoing faxes. This report shows how many sent faxes were billed to each code. This menu item appears only when the billing codes feature is turned on.
	Print All fax Reports		Prints all fax-related reports.
Send Options	Send Fax Later		Allows a fax to be sent at a later time and date.
	Broadcast Fax		Sends a fax to multiple recipients.
	Fax Job Status		Displays pending fax jobs, and allows you to cancel pending fax jobs.

Menu item	Sub-menu item	Sub-menu item	Description
	Fax Resolution	Standard Fine* Superfine Photo	Sets the resolution for sent documents. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.
Receive Options	Print Private Faxes		Prints stored faxes when the private-receive feature is on. This menu item appears only when the private-receive feature is turned on. The product prompts you for the system password.
	Block Junk Faxes	Add Number Delete Number Delete All Numbers Print Junk Fax list	Modifies the junk fax list. The junk fax list can contain up to 30 numbers. When the product receives a call from one of the junk fax numbers, it deletes the incoming fax. It also logs the junk fax in the activity log along with job-accounting information.
	Reprint Faxes		Prints the received faxes stored in available memory. This item is available only if you have turned on the Allow Fax Reprint feature in the Fax Setup menu.
	Forward Fax	On Off*	Sets product to send all received faxes to another fax machine.
	Polling Receive		Allows the product to call another fax machine that has polling send enabled.
Phone Book Setup	Individual Setup		Edits the fax phone book speed dials and group-dial entries. The product supports up to 120 phone book entries, which can be either individual or group entries.
	Group Setup		
	Delete Entry	Deletes a specific phone book entry.	
	Delete All Entries	Deletes all entries in the phone book	

Menu item	Sub-menu item	Sub-menu item	Description
	Print Report Now	Prints a list of all the individual and group dial entries in the phone book.	
Change Defaults			Opens the Fax Setup menu.

Scan Menu

Menu item	Description
Scan to USB Drive	Scans a document and stores it as a .PDF file or .JPEG image on the USB flash drive.

USB Flash Drive

The following types are supported:

- .PDF

- .JPG

Menu item	Description
Print Documents	Prints documents stored on the USB drive. Use the arrow buttons to scroll through the documents. Touch the names of documents that you want to print.
	Touch the summary screen to change settings such as the number of copies, the paper size, or the paper type.
	Touch the Print button when you are ready to print the documents.
View and Print Photos	Previews photos on the USB drive. Use the arrow buttons to scroll through the photos. Touch the preview image for each photo that you want to print. You can adjust the settings, and you can save the changes as the new default settings. When you are ready to print the photos, touch the Print button.
Scan to USB Drive	Scans a document and stores it as a .PDF file or .JPEG image on the USB flash drive.

Interpret control-panel messages

Control panel message types

Alert and warning messages appear temporarily and might require you to acknowledge the message by touching the OK button to resume or by touching the Cancel ✗ button to cancel the job. With certain warnings, the job might not complete or the print quality might be affected. If the alert or warning message is related to printing and the auto-continue feature is on, the product will attempt to resume the printing job after the warning has appeared for 10 seconds without acknowledgement.

Critical error messages can indicate some kind of failure. Turning off and then turning on the power might fix the problem. If a critical error persists, the product might require service.

Control panel messages

10.100X Supply Memory Error

Description

A specific print cartridge has a faulty or missing memory chip.

"X" indicates the cartridge: 0=black, 1=cyan, 2=magenta, 3=yellow.

Recommended action

Check the memory chip. If it is missing, broken or damaged, replace the cartridge.

Verify that the cartridge is installed in the correct location.

Reinstall the print cartridge.

Turn off and then turn on the product.

If the error persists, replace the cartridge.

49 Error, Turn off then on

Description

The product has experienced an internal embedded software error. Under most conditions, the product automatically restarts.

Recommended action

Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.

If the error persists, try the following solutions:

1. Perform an NVRAM initialization.

2. Update the firmware.

50.x Fuser Error

Description

The product has experienced an internal hardware error.

- **50.1**

  Low fuser temperature error

- **50.2**

  Slow fuser error

- **50.3**

  High fuser temperature error

- **50.4**

  Fuser drive circuit error

- **50.7**

  Fuser open error

- **50.8**

  Low subthermistor fuser error

- **50.9**

  High subthermistor fuser error

Recommended action

1. Turn off the power by using the power switch, and then wait at least 30 seconds.

2. If a surge protector is being used, remove it. Plug the product directly into the wall socket.

3. Turn on the power and wait for the product to initialize.

79 Error Turn off then on

Description

The product has experienced an internal firmware error. Under most conditions, the product automatically restarts.

Recommended action

Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.

If a surge protector is being used, remove it. Plug the product directly into the wall socket. Use the power switch to turn the product on.

If the error persists, try the following solutions:

1. Perform an NVRAM initialization.

2. Update the firmware.

Black Cartridge Low

Description

The print cartridge is nearing the end of its useful life.

Recommended action

Printing can continue, but consider having a replacement supply on hand.

Black in wrong position

Description

The print cartridge is installed in the incorrect slot.

Recommended action

Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.

Black Very Low

Description

The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue.

Recommended action

To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.

Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low

mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

Canceled scan. Clear document

Description

A page might be jammed in the document feeder. You touched the Cancel ✕ button while scanning, faxing, or copying to cancel the current job while pages were feeding from the document feeder. The cancel process does not automatically clear the document feeder.

Recommended action

Remove the jammed item. Then, clear the items in the document feeder tray and start over.

Communication error.

Description

A fax communication error occurred between the product and the sender or receiver.

Recommended action

Allow the product to retry sending the fax. Unplug the product telephone cord from the wall, plug in a telephone, and try making a call. Plug the product phone cord into a jack for another phone line.

Try a different phone cord.

Set the Fax Speed option to the Slow(V.29) setting or disable the Fast(V.34) setting.

Turn off the Error Correction feature to prevent automatic error correction.

NOTE: Turning off the Error Correction feature can reduce image quality.

Print the Fax Activity Log report from the control panel to determine if the error occurs with a specific fax number.

Cyan Cartridge Low

Description

The print cartridge is nearing the end of its useful life.

Recommended action

Printing can continue, but consider having a replacement supply on hand.

Cyan in wrong position

Description

The print cartridge is installed in the incorrect slot.

Recommended action

Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.

Cyan Very Low

Description

The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue.

Recommended action

To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.

Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

Device error, press OK

Description

Generic engine error.

Recommended action

This is a warning message only. Job output might be affected.

If the error persists, try the following solutions:

1. Turn off, then on.

2. Perform an NVRAM initialization.

3. Update the firmware.

4. Replace the product.

Device is busy. Try again later

Description

The product is currently in use.

Recommended action

Wait for the product to finish the current job, or to finish initializing.

Document feeder jam. Clear and reload.

Description

A piece of paper is jammed in the document feeder tray.

Recommended action

Clear the jam.

If the error persists, replace the document feeder pickup roller assembly.

Document feeder mispick. Reload

Description

The product did not pick up the paper in the document feeder.

Recommended action

Remove the paper from the document feeder tray, and then reload it.

If the error persists, try the following solutions:

▲   Clean the roller.

Door open

Description

The print cartridge door is open.

Recommended action

Close the print cartridge door.

Engine Communication Error

Description

The product has experienced an engine communication time-out error.

Recommended action

Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.

If a surge protector is being used, remove it. Plug the product directly into the wall socket. Use the power switch to turn the product on.

Engine error. Press OK to continue.

Description

The product experienced a print engine error.

Recommended action

This is a warning message only. Job output might be affected.

Fax is busy. Canceled send.

Description

The fax line to which you were sending a fax was busy. The product has canceled sending the fax.

Recommended action

Call the recipient to ensure that the fax machine is on and ready.

Check that you are dialing the correct fax number.

Check that the Redial if Busy option is enabled.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

Fax is busy. Redial pending.

Description

The fax line to which you were sending a fax was busy. The product automatically redials the busy number.

Recommended action

Allow the product to retry sending the fax.

Call the recipient to ensure that the fax machine is on and ready.

Check that you are dialing the correct fax number.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

Fax receive error.

Description

An error occurred while trying to receive a fax.

Recommended action

Ask the sender to resend the fax.

Try faxing back to the sender or another fax machine.

Check that the telephone cord is securely connected by unplugging and replugging the cord.

Make sure that you are using the telephone cord that came with the product.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

Decrease the fax speed. Ask the sender to resend the fax.

Turn off error-correction mode. Ask the sender to resend the fax.

NOTE: Turning off error-correction mode can reduce the quality of the fax image.

Connect the product to a different phone line.

Fax Send error.

Description

An error occurred while trying to send a fax.

Recommended action

Try resending the fax.

Try faxing to another fax number.

Check that the telephone cord is securely connected by unplugging and replugging the cord.

Make sure that you are using the telephone cord that came with the product.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

Connect the product to a different phone line.

Set the fax resolution to Standard instead of the default of Fine.

Fax storage is full. Canceling the fax receive.

Description

The amount of available memory for storing faxes is insufficient to store an incoming fax.

Recommended action

If you are using the Private Receive feature, print all received faxes to regain some memory.

If you still need more memory, clear faxes from memory. Open the Service menu. In the Fax Service menu, select the Clear Saved Faxes option.

Fax storage is full. Canceling the fax send.

Description

During the fax job, the memory filled. All pages of the fax have to be in memory for a fax job to work correctly. Only the pages that fit into memory were sent.

Recommended action

Cancel the current job. Turn the product off, and then turn it on again. Try sending the job again.

If the error reoccurs, cancel the job and turn the product off and then on a second time. The product might not have enough memory for some jobs.

Fit to Page on flatbed only

Description

The copy reduce/enlarge feature (called "Fit to Page") applies only to copies made from the flatbed scanner.

Recommended action

Use the flatbed or select another reduction/enlargement setting.

Install [color] cartridge

Description

One of the color cartridges is not installed with the door closed.

Recommended action

Install the indicated color cartridge.

If the error persists, replace the print cartridge drawer.

Invalid driver Press OK

Description

You are using the incorrect printer driver.

Recommended action

Select the printer driver that is appropriate for your product.

Invalid entry

Description

Invalid data or response.

Recommended action

Correct the entry.

Jam in (area), Open door and clear jam

Description

There is a paper jam in the print paper path or output bin.

Recommended action

Clear the jam from the area indicated on the product control panel, and then follow the control panel instructions.

Remove any debris from the paper path.

Jam in Tray 1, Clear jam and then press OK

Description

The product has detected a jam in Tray 1.

Recommended action

Clear the jam, and then follow the control panel instructions.

Load paper

Description

The tray is empty.

Recommended action

If paper is already loaded in the tray, test the paper sensors.

Load Tray 1 <TYPE> <SIZE>, Press OK to use available media

Description

Device is processing a job, but the tray does not match.

Recommended action

Load paper in the correct orientation.

Touch the OK button to use existing tray settings.

Load Tray 1, <PLAIN> <SIZE> / Cleaning mode, OK to start

Description

Cleaning mode paper prompt.

Recommended action

Load a clean sheet of paper in the correct orientation, then touch the OK button to begin the cleaning procedures.

Magenta Cartridge Low

Description

The print cartridge is nearing the end of its useful life.

Recommended action

Printing can continue, but consider having a replacement supply on hand.

Magenta in wrong position

Description

The print cartridge is installed in the incorrect slot.

Recommended action

Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.

Magenta Very Low

Description

The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue.

Recommended action

To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.

Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

Manual Duplex Load Tray 1, Press OK

Description

Manual duplex mode.

Recommended action

Load paper in the correct orientation.

Manual feed <SIZE> <TYPE>, Press OK to use available media

Description

Print Manual Feed mode.

Recommended action

Load paper into Tray 1.

Memory is low. Try again later

Description

The product does not have enough memory to start a new job.

Recommended action

Wait until the current job is finished before starting a new job.

Turn the product off and then on to clear the memory.

If the error persists, try the following solutions:

1. Perform an NVRAM initialization.

2. Update the firmware.

Memory is low. Press OK.

Description

The product memory has been almost completely filled.

Recommended action

Touch the OK button to cancel the job.

Break the job into smaller jobs that contain fewer pages.

Turn the product off and then on to clear the memory.

Memory low Only 1 copy made. Press OK to continue.

Description

The product does not have enough memory to complete the collated copy job.

Recommended action

Break the job into smaller jobs that contain fewer pages.

Turn the product off and then on to clear the memory.

Misprint, Press OK

Description

Feed delay misprint.

Recommended action

Verify that paper is loaded in the input tray.

Reload paper.

No dial tone.

Description

The product could not detect a dial tone.

Recommended action

Check for a dial tone on the phone line by touching the Start Fax button.

Unplug the telephone cord from both the product and the wall and replug the cord.

Make sure that you are using the telephone cord that came with the product.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

No fax answer. Canceled send.

Description

Attempts to redial a fax number failed, or the Redial if No Answer option was turned off.

Recommended action

Call the recipient to ensure that the fax machine is on and ready.

Check that you are dialing the correct fax number.

Check that the redial option is enabled.

Unplug the telephone cord from both the product and the wall and replug the cord.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

No fax answer. Redial pending.

Description

The receiving fax line did not answer. The product attempts to redial after a few minutes.

Recommended action

Allow the product to retry sending the fax.

Call the recipient to ensure that the fax machine is on and ready.

Check that you are dialing the correct fax number.

If the product continues to redial, unplug the product telephone cord from the wall, plug in a telephone, and try making a voice call.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

No fax detected.

Description

The product answered the incoming call but did not detect that a fax machine was calling.

Recommended action

Allow the product to retry receiving the fax.

Open the Service menu, and touch the Fax Service button. Touch the Run Fax Test button. This test verifies that the phone cord is connected to the correct port and that the phone line has a signal. The product prints a report with the results.

Print failure, press OK. If error repeats, turn off then on.

Description

The product could not print the current page because of its complexity.

Recommended action

Touch the OK button to clear the message.

Replace [color]

Description

The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Stop.

Recommended action

To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.

Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

Scanner error #, Turn off then on

Description

The product has experienced an error in the scanner sub-assembly area.

Recommended action

- **Scanner error 12, Turn off then on**

  Motor test failure. This error will only appear on the Error report. The document-feeder motor is not blocked from turning.

  1. Clear any jammed paper from the document feeder.

  2. Turn the product off, and then on.

- **Scanner error 13, Turn off then on**

  RAM Wall failure. This error appears on the control panel. The scanner motor or scanner module is obstructed.

  ▲ Turn the product off, and then on.

- **Scanner error 14, Turn off then on**

LED test failure. This error will only appear on the Error report. The LED did not illuminate during initialization.

- ○ Replace the document-feeder scanner assembly.

- **Scanner error 17, Turn off then on**

Scanner error. This error appears on the control panel. The scanner motor is obstructed.

Scanner reserved for PC scan

Description

A computer is using the product to create a scan.

Recommended action

Wait until the computer scan has finished, or cancel the scan from the computer software, or touch the Cancel ✗ button.

Scanning error Cannot connect

Description

The product cannot transmit scan information to a computer.

Recommended action

Verify that the connection cable is not loose or damaged. Replace the cable if necessary, and try the scan again.

Settings cleared

Description

The product has cleared job settings.

Recommended action

Re-enter any appropriate job settings.

Used [color] installed, to accept press OK

Description

A used color printer cartridge has been installed or moved.

Recommended action

Touch the OK button to return to the Ready state.

Yellow Cartridge Low

Description

The print cartridge is nearing the end of its useful life.

Recommended action

Printing can continue, but consider having a replacement supply on hand.

Yellow in wrong position

Description

The print cartridge is installed in the incorrect slot.

Recommended action

Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.

Yellow Very Low

Description

The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue.

Recommended action

To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.

Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

Event-log messages

The following product events do not produce a message that appears on the control panel. Instead, they are recorded in the event log. To print the event log, open the secondary service menu, select **Service Reports**, and then select **Error Report**.

Table 6-1 Event-log messages

Event code	Description
13.0000	Paper jam
20.0000	Memory out
21.0000	Page misfeed or mispick
41.2000	Beam detect malfunction
41.3000	Unexpected size
50.1000	Low fuser temperature error
50.2000	Slow fuser error
50.3000	High fuser temperature error
50.4000	Fuser drive circuit error
50.7000	Fuser open error
50.8000	Low subthermistor fuser error
50.9000	High subthermistor fuser error
51.2000	Black scanner laser error
51.2100	Cyan scanner laser error
51.2200	Magenta scanner laser error
51.2300	Yellow scanner laser error
54.0600	Density sensor error
54.1200	Black density measurement abnormality
54.1201	Cyan density measurement abnormality
54.1202	Magenta density measurement abnormality
54.1203	Yellow density measurement abnormality
54.1400	Color plane registration sensor error
54.1599	Black CPR pattern can't be read
54.1501	Cyan CPR pattern can't be read
54.1502	Magenta CPR pattern can't be read
54.1503	Yellow CPR pattern can't be read
54.1500	Yellow toner level sensor error
54.1600	Magenta toner level sensor error

Table 6-1 Event-log messages (continued)

Event code	Description
54.1700	Cyan toner level sensor error
54.1800	Black toner level sensor error
54.1900	Bad top-of-page (TOP) sensor
54.2100	Beam detect (BD) error
55.0000	Engine internal communication error
55.0601	DC controller NVRAM data error
55.0602	DC controller NVRAM access error
55.1000	DC controller memory error
59.0160	ITB or main motor rotation error (59.A0)
59.0192	Developer motor rotation error (59.C0)
59.0240	Transfer alienation failure (59.F0)
59.3000	Fuser motor startup error
59.4000	Fuser motor error
59.5000	Image drum motor startup error—black
59.5300	Image drum motor startup error—yellow
59.6000	Image drum motor rotation error- black
59.6300	Image drum motor rotation error- yellow
59.7000	Black developer motor startup error
59.7300	Yellow developer motor startup error
59.8000	Black developer motor rotation error
59.8300	Yellow developer motor rotation error
59.9000	Main motor start error

Menu map

Use the following procedure to print a control-panel menu layout map.

1. From the Home screen, touch the Setup 🔧 button.

2. Touch the Reports button.

3. Touch the Menu Structure button.

Paper feeds incorrectly or becomes jammed

- The product does not pick up paper
- The product picks up multiple sheets of paper
- Prevent paper jams
- Clear jams

The product does not pick up paper

If the product does not pick up paper from the tray, try these solutions.

1. Open the product and remove any jammed sheets of paper.

2. Load the tray with the correct size of paper for your job.

3. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

The product picks up multiple sheets of paper

If the product picks up multiple sheets of paper from the tray, try these solutions.

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper.* Return the stack of paper to the tray.

2. Use only paper that meets HP specifications for this product.

3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.

4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.

5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

Prevent paper jams

To reduce the number of paper jams, try these solutions.

1. Use only paper that meets HP specifications for this product.

2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.

3. Use paper that has not previously been printed or copied on.

4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.

5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

6. Make sure that the tray is fully inserted in the product.

Clear jams

Jam locations

Jams can occur in these locations:
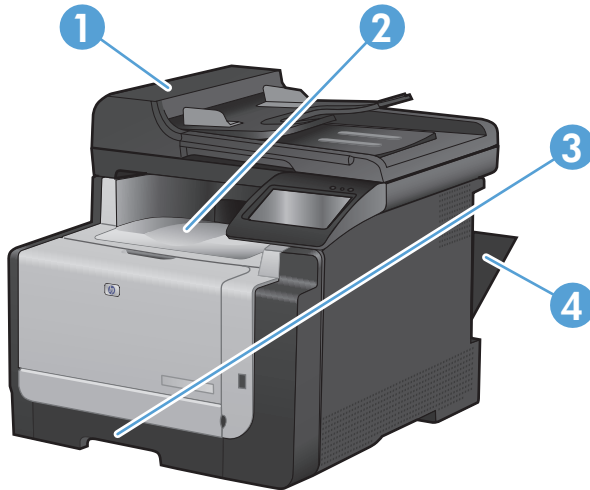
1	Document feeder
2	Output bin
3	Tray 1
4	Rear door

Loose toner might remain in the product after a jam. This problem typically resolves itself after a few sheets have been printed.

Clear jams from the document feeder

1. Turn the product off.
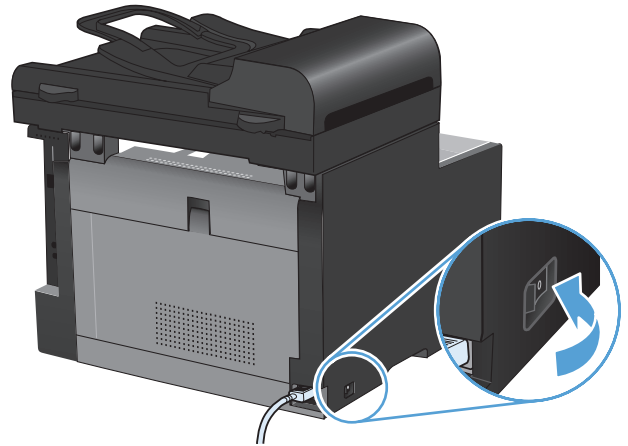
2. Open the document feeder cover.

3. Lift the document feeder mechanism, and gently pull the jammed paper out.
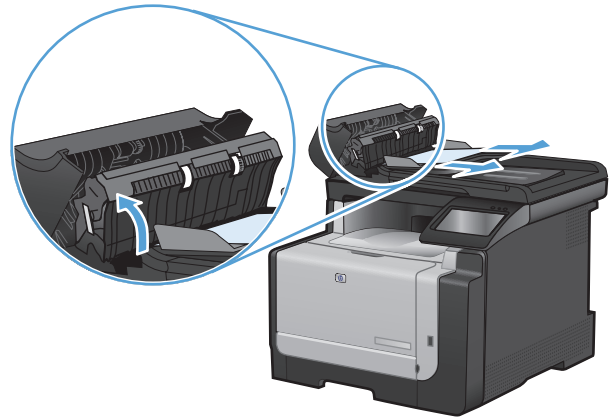
4. Close the document feeder cover.

Clear jams from the input tray

⚠ **CAUTION:** Do not use sharp objects, such as tweezers or needle-nose pliers, to remove jams. Damage caused by sharp objects is not covered by the warranty.

When removing jammed paper, pull it straight out from the product. Pulling jammed paper out of the product at an angle can damage the product.

📝 **NOTE:** Depending on where the jam is located, some of the following steps might not be necessary.

1. Remove Tray 1, and lift the jam access door above the tray.
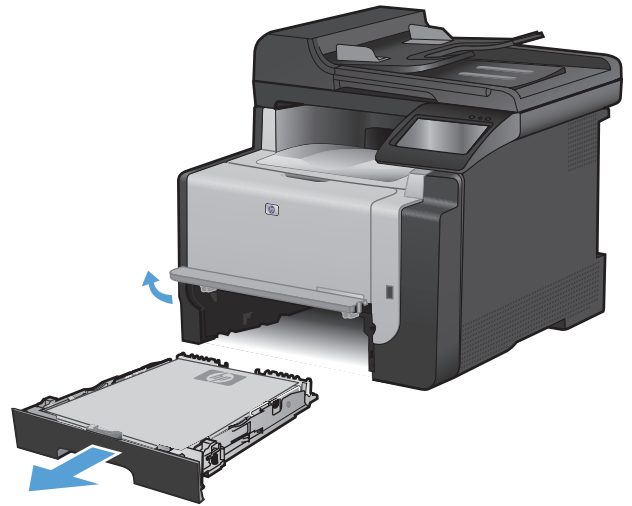
2. With both hands, grasp the paper, and carefully pull it free from the product.
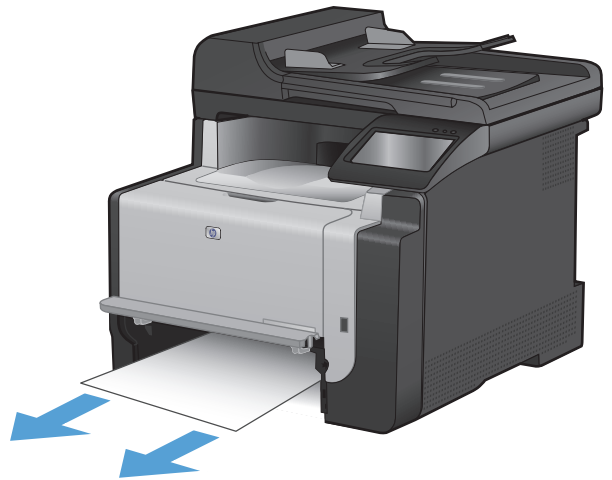
3. Open the rear door.

   CAUTION: The fuser, located in the back of the product, is hot. Wait for the fuser to cool before continuing.
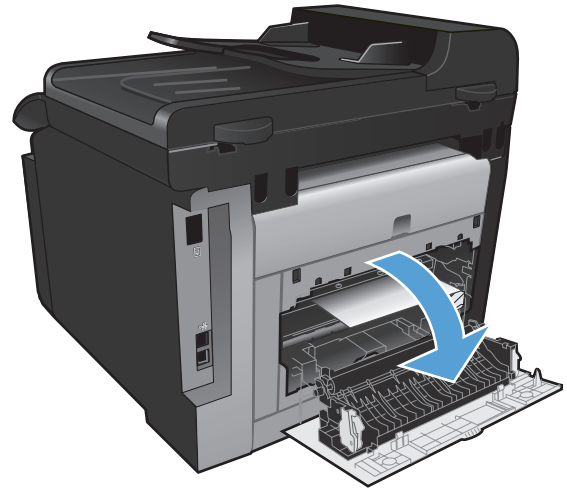
4. With both hands, grasp the paper, and carefully pull it free from the product.
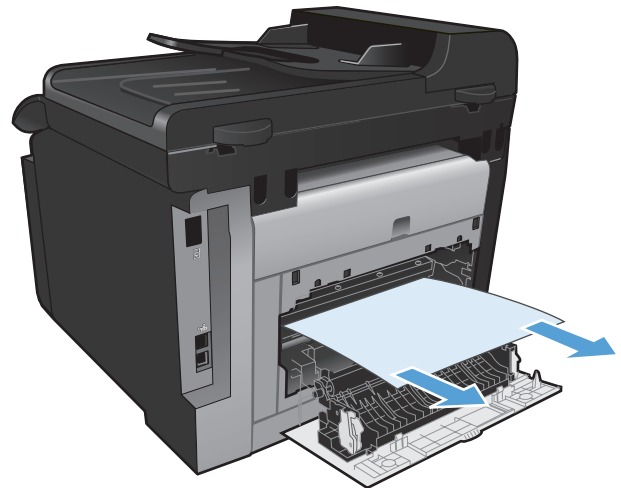
5. Reinsert the tray.
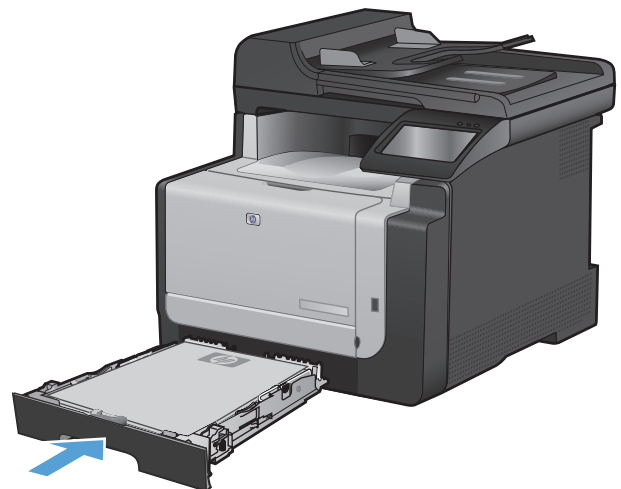
6. Close the rear output door.
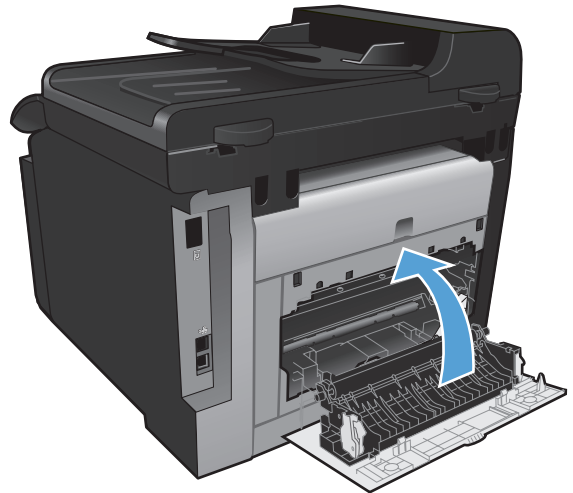
7. Print a cleaning page, which removes excess toner from the paper path.

    a. From the Home screen, touch the Setup ⚒ button.

    b. Touch the Service menu.

    c. Touch the Cleaning Page button.

    d. Load plain letter or A4 paper when you are prompted.

    e. Touch the OK button to begin the cleaning process.

       A page feeds through the product slowly. Discard the page when the process is completed.

Clear jams from the output bin

> △ **CAUTION:** Do not use sharp objects, such as tweezers or needle-nose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

1. With both hands, grasp the paper, and carefully pull it free from the product.

Improve print quality

You can prevent most print-quality problems by following these guidelines.

- [Use the correct paper type setting in the printer driver](#)
- [Adjust color settings in the printer driver](#)
- [Use paper that meets HP specifications](#)
- [Print a cleaning page](#)
- [Calibrate the product to align the colors](#)
- [Check the print cartridges](#)
- [Use the printer driver that best meets your printing needs](#)
- [Improve print quality for copies](#)

Use the correct paper type setting in the printer driver

Check the paper type setting if you are having any of the following problems:

- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.
- Printed pages are curled.
- Toner flakes off the printed pages.
- Printed pages have small unprinted areas.

Change the paper type setting for Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand each category of paper types until you find the paper type that you are using.
7. Select the option for the type of paper you are using, and click the **OK** button.

Change the paper type setting for Mac

1. On the **File** menu in the software program, click the **Print** option.
2. In the **Copies & Pages** menu, click the **Page Setup** button.
3. Select a size from the **Paper Size** drop-down list, and then click the OK button.

4. Open the **Finishing** menu.

5. Select a type from the **Media-type** drop-down list.

6. Click the **Print** button.

Adjust color settings in the printer driver

Change the color theme for a print job

1. On the **File** menu in the software program, click **Print**.

2. Click **Properties** or **Preferences**.

3. Click the **Color** tab.

4. Select a color theme from the **Color Themes** drop-down list.

- **Default (sRGB)**: This theme sets the product to print RGB data in raw device mode. When using this theme, manage color in the software program or in the operating system for correct rendering.

- **Vivid**: The product increases the color saturation in the midtones. Use this theme when printing business graphics.

- **Photo**: The product interprets RGB color as if it were printed as a photograph using a digital mini lab. The product renders deeper, more saturated colors differently than with the Default (sRBG) theme. Use this theme when printing photos.

- **Photo (Adobe RGB 1998)**: Use this theme with printing digital photos that use the AdobeRGB color space rather than sRGB. Turn off color management in the software program when using this theme.

- **None**

Change the color options

Change the color options settings for the current print job from the color tab of the printer driver.

1. On the **File** menu in the software program, click **Print**.

2. Click **Properties** or **Preferences**.

3. Click the **Color** tab.

4. Click the **Automatic** or **Manual** setting.

- **Automatic** setting: Select this setting for most color print jobs

- **Manual** setting: Select this setting to adjust the color settings independent from other settings.

  NOTE: Changing color settings manually can impact output. HP recommends that only color graphics experts change these settings.

5. Click the **Print in Grayscale** option to print a color document in black and white. Use this option to print color documents for photocopying or faxing.

6. Click the **OK** button.

Use paper that meets HP specifications

Use different paper if you are having any of the following problems:

● The printing is too light or seems faded in areas.

● Specks of toner are on the printed pages.

● Toner is smearing on the printed pages.

● Printed characters seem misformed.

● Printed pages are curled.

Always use a paper type and weight that this product supports. In addition, follow these guidelines when selecting paper:

● Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.

● Use paper that has not been previously printed on.

● Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.

● Use paper that is not too rough. Using smoother paper generally results in better print quality.

Print a cleaning page

Print a cleaning page to remove dust and excess toner from the paper path if you are having any of the following problems:

● Specks of toner are on the printed pages.

● Toner is smearing on the printed pages.

● Repeated marks occur on the printed pages.

Use the following procedure to print a cleaning page.

1. From the Home screen, touch the Setup �™ button.

2. Touch the Service menu.

3. Touch the Cleaning Page button.

4. Load plain letter or A4 paper when you are prompted.
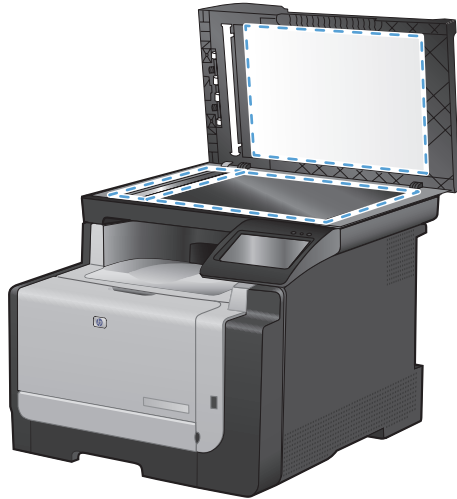
5. Touch the OK button to begin the cleaning process.

   A page feeds through the product slowly. Discard the page when the process is completed.

Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the System Setup menu.

2. Open the Print Quality menu, and select the Color Calibration item.

3. Select the Calibrate Now option.

Check the print cartridges

Check each print cartridge, and replace it if necessary, if you are having any of the following problems:

- The printing is too light or seems faded in areas.

- Printed pages have small unprinted areas.

- Printed pages have streaks or bands.

NOTE: If you are using a draft print setting, the printing might appear light.

If you determine that you need to replace a print cartridge, print the Supplies Status Page to find the part number for the correct genuine HP print cartridge.

Type of print cartridge	Steps to resolve the problem
Refilled or remanufactured print cartridge	Hewlett Packard Company cannot recommend the use of non-HP supplies, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. If you are using a refilled or remanufactured print cartridge and are not satisfied with the print quality, replace the cartridge with a genuine HP cartridge that has the words "HP" or "Hewlett-Packard" on it, or has the HP logo on it.
Genuine HP print cartridge	1. The product control panel or the Supplies Status page indicates **Very Low** status when the cartridge has reached the end of its estimated life. Replace the print cartridge if print quality is no longer acceptable.
	2. Print a Print Quality Page from the Reports menu on the control panel. If streaks or marks are in one color on the page, you might have a defect in that color cartridge. See the instructions in this document for interpreting the page. Replace the print cartridge if necessary.
	3. Visually inspect the print cartridge for damage. See the instructions that follow. Replace the print cartridge if necessary.
	4. If printed pages have marks that repeat several times at the same distance apart, print a cleaning page. If this does not solve the problem, use the repetitive defects ruler in this document to identify the cause of the problem.

Print the Supplies Status page

The Supplies Status page indicates the estimated life remaining in print cartridges. It also lists the part number for the correct genuine HP print cartridge for your product so you can order a replacement print cartridge, as well as other useful information.

1. On the product control panel, open the Reports menu.

2. Select the Supplies Status page to print it.

Interpret the Print Quality Page

1. On the product control panel, open the Reports menu.

2. Select the Print Quality Page item to print it.

This page contains five bands of color, which are divided into four groups as indicated in the following illustration. By examining each group, you can isolate the problem to a particular print cartridge.
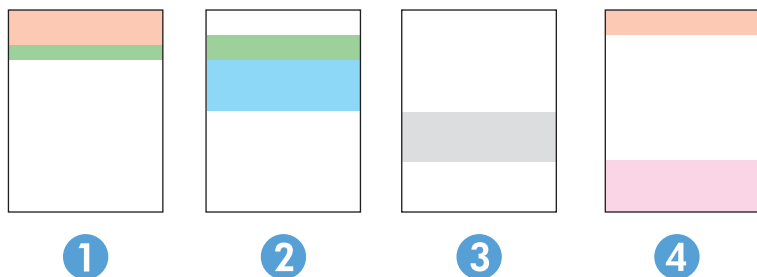
Section	Print-cartridge
1	Yellow
2	Cyan
3	Black
4	Magenta

- If dots or streaks appear in only one of the groups, replace the print cartridge that correlates with that group.

- If dots appear in more than one group, print a cleaning page. If this does not solve the problem, determine if the dots are always the same color; for example, if magenta dots appear in all five color bands. If the dots are all the same color, replace that print cartridge.

- If streaks appear in multiple color bands, contact HP. A component other than the print cartridge is probably causing the problem.

Inspect the print cartridge for damage

1. Remove the print cartridge from the product, and verify that the sealing tape has been removed.

2. Check the memory chip for damage.

3. Examine the surface of the green imaging drum on the bottom of the print cartridge.

    △ **CAUTION:** Do not touch the green roller (imaging drum) on the bottom of the cartridge. Fingerprints on the imaging drum can cause print-quality problems.
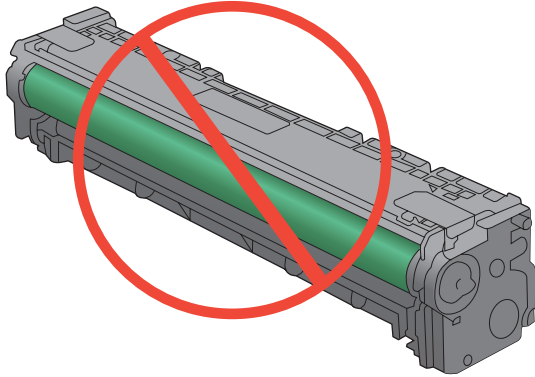
4. If you see any scratches, fingerprints, or other damage on the imaging drum, replace the print cartridge.

5. If the imaging drum does not appear to be damaged, rock the print cartridge gently several times and reinstall it. Print a few pages to see if the problem has resolved.

Repetitive image defects

If the product output has a consistent, repetitive defect, then use the table in this section to determine which part needs to be replaced based on the measured distance between the repetitions of the defect.

NOTE: The following table replaces the graphical repetitive defect ruler. You can make your own ruler by using these measurements. For the most accurate results, use a metric ruler.

Table 6-2 Repetitive image defects

Distance between identical defects	Component	Notes
22.3 mm (0.87 in)	Developer roller (one rotation)	Appears in a single color plane.
26.7 mm (1.05 in)	Charger roller	Appears in a single color plane.
28.5 mm (1.12 in)	Developer RS roller (one rotation)	Inside developer, this roller removes and supplies toner to the developer sleeve.
44.0 mm (1.73 in)	Registration roller	
56.5 mm (2.22 in)	Fuser film (one rotation)	Appears in all color planes.
56.8 mm (2.23 in)	Fuser pressure roller (one rotation)	Appears in all color planes.
57.0 mm (2.24 in)	Transfer roller	Appears in all color planes.
69.0 mm (2.71 in)	Cartridge-to-cartridge spacing	Distance between each color image drum
75.8 mm (2.98 in)	Image drum (one rotation)	Appears in a single color plane and might be either a dark or white spot.
633.6 mm (24.94 in)	ITB	Because the ITB is longer than a page, you might have to look at multiple pages to determine if repetitive defect is present.

Use the printer driver that best meets your printing needs

You might need to use a different printer driver if the printed page has unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

HP PCL 6 driver	• Provided as the default driver. This driver is automatically installed unless you select a different one.
	• Recommended for all Windows environments
	• Provides the overall best speed, print quality, and product-feature support for most users
	• Developed to align with the Windows Graphic Device Interface (GDI) for the best speed in Windows environments
	• Might not be fully compatible with third-party and custom software programs that are based on PCL 5
HP UPD PS driver	• Recommended for printing with Adobe® software programs or with other highly graphics-intensive software programs
	• Provides support for printing from postscript emulation needs, or for postscript flash font support
HP UPD PCL 5	• Recommended for general office printing in Windows environments
	• Compatible with previous PCL versions and older HP LaserJet products
	• The best choice for printing from third-party or custom software programs
	• The best choice when operating with mixed environments, which require the product to be set to PCL 5 (UNIX, Linux, mainframe)
	• Designed for use in corporate Windows environments to provide a single driver for use with multiple printer models
	• Preferred when printing to multiple printer models from a mobile Windows computer

Download additional printer drivers from this Web site: www.hp.com/support/CM1410series.

Improve print quality for copies

If you encounter print quality problems in copied documents, review the solutions for printed documents listed previously in this document. However, some print-quality problems occur only in copied documents.

- If streaks appear on copies made by using the document feeder, clean the small glass strip on the left side of the scanner assembly.

- If dots or other defects appear on copies made by using the scanner glass, clean the scanner glass and the white plastic backing.

1. Use the power switch to turn off the product, and then unplug the power cord from the electrical socket.

2. Open the scanner lid.

3. Clean the scanner glass and the white plastic backing with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.

   △ **CAUTION:** Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the product; these can damage the product. Do not place liquids directly on the glass or platen. They might seep and damage the product.

4. Dry the glass and white plastic backing with a chamois or a cellulose sponge to prevent spotting.

5. Plug in the product, and then use the power switch to turn on the product.

Clean the product

Clean the exterior

Use a damp lint-free cloth to wipe the exterior of the product.

Clean the paper path

During the printing process, paper, toner, and dust particles can accumulate inside the product. Over time, this buildup can cause print-quality problems such as toner specks or smearing. This product has a cleaning mode that can correct and prevent these types of problems.

Clean the paper path from the product control panel

1. From the Home screen, touch the Setup ⚙ button.

2. Touch the Service menu.

3. Touch the Cleaning Page button.

4. Load plain letter or A4 paper when you are prompted.

5. Touch the OK button to begin the cleaning process.

   A page feeds through the product slowly. Discard the page when the process is completed.

Clean the scanner glass strip and platen

Over time, specks of debris might collect on the scanner glass and white plastic backing, which can affect performance. Use the following procedure to clean the scanner glass and white plastic backing.

1. Use the power switch to turn off the product, and then unplug the power cord from the electrical socket.

2. Open the scanner lid.

3. Clean the scanner glass and the white plastic backing with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.

⚠ **CAUTION:** Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the product; these can damage the product. Do not place liquids directly on the glass or platen. They might seep and damage the product.

4. Dry the glass and white plastic backing with a chamois or a cellulose sponge to prevent spotting.

5. Plug in the product, and then use the power switch to turn on the product.

Clean the document feeder pickup rollers and separation pad

If the product document feeder experiences paper-handling problems, such as jams or multiple-page feeds, clean the document feeder rollers and separation pad.

1. Open the document feeder cover.
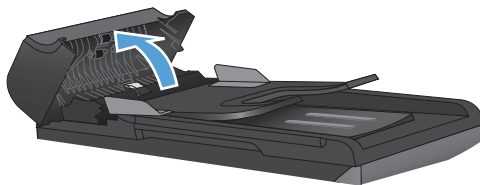
2. Use a moist, lint-free cloth to wipe both pickup rollers and the separation pad to remove dirt.
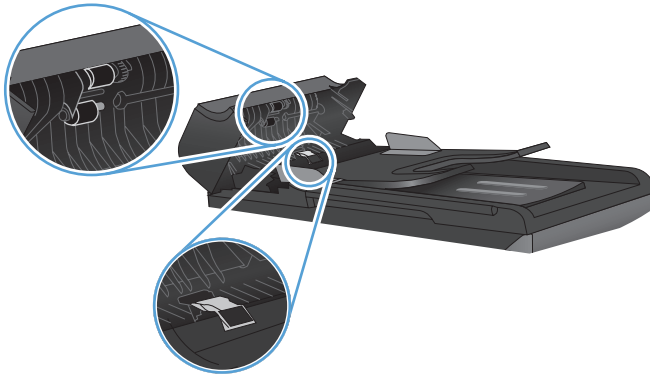
3. Close the document feeder cover.
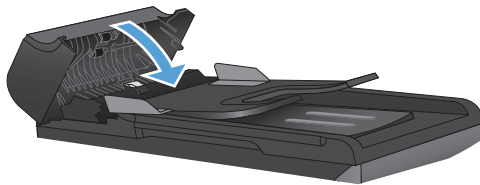
Clean the touch screen

Clean the touch screen whenever it is necessary to remove fingerprints or dust. Wipe the touch screen gently with a clean, water-dampened, lint-free cloth.

⚠ **CAUTION:** Use water only. Solvents or cleaners can damage the touch screen. Do not pour or spray water directly onto the touch screen.

The product does not print or it prints slowly

The product does not print

If the product does not print at all, try the following solutions.

1. Make sure the product is turned on and that the control panel indicates it is ready.

   ◦ If the control panel does not indicate the product is ready, turn the product off and then on again.

   ◦ If the control panel indicates the product is ready, try sending the job again.

2. If the control panel indicates the product has an error, resolve the error and then try sending the job again.

3. Make sure the cables are all connected correctly. If the product is connected to a network, check the following items:

   ◦ Check the light next to the network connection on the product. If the network is active, the light is green.

   ◦ Make sure that you are using a network cable and not a phone cord to connect to the network.

   ◦ Make sure the network router, hub, or switch is turned on and that it is working correctly.

4. Install the HP software from the CD that came with the product. Using generic printer drivers can cause delays clearing jobs from the print queue.

5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.

   ◦ If you are using a network cable to connect to the network, make sure the printer name listed on the **Ports** tab matches the product name on the product configuration page.

   ◦ If you are using a USB cable and are connecting to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.

6. If you are using a personal firewall system on the computer, it might be blocking communication with the product. Try temporarily disabling the firewall to see if it is the source of the problem.

7. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

   📝 **NOTE:** A blue LED on the product control panel is illumintated when the wireless function is enabled and available.

The product prints slowly

If the product prints, but it seems slow, try the following solutions.

1. Make sure the computer meets the minimum specifications for this product. For a list of specifications, go to this Web site: www.hp.com/support/CM1410series.

2. When you configure the product to print on some paper types, such as heavy paper, the product prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.

3. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

Solve walk-up USB printing problems

- The USB Flash Drive menu does not open when you insert the USB accessory
- The file does not print from the USB storage accessory
- The file that you want to print is not listed in the USB Flash Drive menu

The USB Flash Drive menu does not open when you insert the USB accessory

1. You might be using a USB storage accessory or a file system that this product does not support. Save the files on a standard USB storage accessory that uses File Allocation Table (FAT) file systems. The product supports FAT12, FAT16, and FAT32 USB storage accessories.

2. If another menu is already open, close that menu and then reinsert the USB storage accessory.

3. The USB storage accessory might have multiple partitions. (Some USB storage accessory manufacturers install software on the accessory that creates partitions, similar to a CD.) Reformat the USB storage accessory to remove the partitions, or use a different USB storage accessory.

4. The USB storage accessory might require more power than the product can provide.

   a. Remove the USB storage accessory.

   b. Turn the product off and then on.

   c. Use a USB storage accessory that has its own power supply or that requires less power.

5. The USB storage accessory might not be functioning correctly.

   a. Remove the USB storage accessory.

   b. Turn the product off and then on.

   c. Try printing from another USB storage accessory.

The file does not print from the USB storage accessory

1. Make sure paper is in the tray.

2. Check the control panel for messages. If paper is jammed in the product, clear the jam.

The file that you want to print is not listed in the USB Flash Drive menu

1. You might be trying to print a file type that the USB printing feature does not support. The product supports .PDF and .JPEG file types.

2. You might have too many files in a single folder on the USB storage accessory. Reduce the number of files in the folder by moving them to subfolders.

3. You might be using a character set for the file name that the product does not support. In this case, the product replaces the file names with characters from a different character set. Rename the files using ASCII characters.

Solve connectivity problems

Solve direct-connect problems

If you have connected the product directly to a computer, check the cable.

● Verify that the cable is connected to the computer and to the product.

● Verify that the cable is not longer than 5 m (16.4 ft). Try using a shorter cable.

● Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

Solve network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page from the product control panel and locate the product IP address that is listed on this page.

● Poor physical connection

● The computer is using the incorrect IP address for the product

● The computer is unable to communicate with the product

● The product is using incorrect link and duplex settings for the network

● New software programs might be causing compatibility problems

● The computer or workstation might be set up incorrectly

● The product is disabled, or other network settings are incorrect

Poor physical connection

1. Verify that the product is attached to the correct network port using a cable of the correct length.

2. Verify that cable connections are secure.

3. Look at the network port connection on the back of the product, and verify that the amber activity light and the green link-status light are lit.

4. If the problem continues, try a different cable or port on the hub.

The computer is using the incorrect IP address for the product

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the product is selected. The product IP address is listed on the product configuration page.

2. If you installed the product using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes.**

3. If you installed the product using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.

4. If the IP address is correct, delete the product and then add it again.

The computer is unable to communicate with the product

1. Test network communication by pinging the network.

    a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type cmd.

    b. Type ping followed by the IP address for your product.

    c. If the window displays round-trip times, the network is working.

2. If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the product, and the computer are all configured for the same network.

The product is using incorrect link and duplex settings for the network

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). If you change these settings, you must also change them for your network.

New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct printer driver.

The computer or workstation might be set up incorrectly

1. Check the network drivers, printer drivers, and the network redirection.

2. Verify that the operating system is configured correctly.

The product is disabled, or other network settings are incorrect

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.

2. Reconfigure the network settings if necessary.

Solve wireless network problems

NOTE: Wireless models only.

- [Wireless connectivity checklist](#)
- [The control panel displays the message: The wireless feature on this product has been turned off](#)
- [The product does not print after the wireless configuration completes](#)
- [The product does not print, and the computer has a third-party firewall installed](#)
- [The wireless connection does not work after moving the wireless router or product](#)
- [Cannot connect more computers to the wireless product](#)
- [The wireless product loses communication when connected to a VPN](#)
- [The network does not appear in the wireless networks list](#)
- [The wireless network is not functioning](#)

Wireless connectivity checklist

- The product and the wireless router are turned on and have power. Also make sure the wireless radio in the product is turned on.
- The service set identifier (SSID) is correct. Print a configuration page to determine the SSID. If you are not sure the SSID is correct, run the wireless setup again.
- With secured networks, make sure the security information is correct. If the security information is incorrect, run the wireless setup again.
- If the wireless network is working correctly, try accessing other computers on the wireless network. If the network has Internet access, try connecting to the Internet over a wireless connection.
- The encryption method (AES or TKIP) is the same for the product as it is for the wireless access point (on networks using WPA security).
- The product is within the range of the wireless network. For most networks, the product must be within 30 m (100 ft) of the wireless access point (wireless router).
- Obstacles do not block the wireless signal. Remove any large metal objects between the access point and the product. Make sure poles, walls, or support columns containing metal or concrete do not separate the product and wireless access point.
- The product is located away from electronic devices that might interfere with the wireless signal. Many devices can interfere with the wireless signal including motors, cordless phones, security system cameras, other wireless networks, and some Bluetooth devices.
- The printer driver is installed on the computer.
- You have selected the correct printer port.
- The computer and product connect to the same wireless network.

The control panel displays the message: The wireless feature on this product has been turned off

1. Touch the Wireless Menu button.

2. Touch the Turn Wireless On/Off button, and then touch the On button.

The product does not print after the wireless configuration completes

1. Make sure the product is turned on and in the ready state.

2. Make sure you are connecting to the correct wireless network.

3. Make sure that the wireless network is working correctly.

    a. Open the Network Setup menu, and then open the Wireless Menu item.

    b. Select the Run Network Test item to test the wireless network. The product prints a report with the results.

4. Make sure that the correct port or product is selected.

    a. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.

    b. Make sure the box is checked next to **Virtual printer port for USB**.

5. Make sure that your computer is working correctly. If necessary, restart your computer.

The product does not print, and the computer has a third-party firewall installed

1. Update the firewall with the most recent update available from the manufacturer.

2. If programs request firewall access when you install the product or try to print, make sure you allow the programs to run.

3. Temporarily turn off the firewall, and then install the wireless product on the computer. Enable the firewall when you have completed the wireless installation.

The wireless connection does not work after moving the wireless router or product

Make sure that the router or product connects to the same network that your computer connects to.

1. Open the Reports menu, and select the Configuration Report item to print the report.

2. Compare the service set identifier (SSID) on the configuration report to the SSID in the printer configuration for your computer.

3. If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

Cannot connect more computers to the wireless product

1. Make sure that the other computers are within the wireless range and that no obstacles block the signal. For most networks, the wireless range is within 30 m (100 ft) of the wireless access point.

2. Make sure the product is turned on and in the ready state.

3. Turn off any third-party firewalls on your computer.

4. Make sure that the wireless network is working correctly.

    a. On the product control panel, open the Network Setup menu, and then open the Wireless Menu item.

    b. Select the Run Network Test item to test the wireless network. The product prints a report with the results.

5. Make sure that the correct port or product is selected.

    a. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.

    b. Click the **Configure Port** button to verify that the IP address matches the IP address listed on the Run Network Test report.

6. Make sure that your computer is working correctly. If necessary, restart your computer.

The wireless product loses communication when connected to a VPN

- Typically, you cannot connect to a VPN and other networks at the same time.

The network does not appear in the wireless networks list

- Make sure the wireless router is turned on and has power.

- The network might be hidden. However, you can still connect to a hidden network.

The wireless network is not functioning

1. To verify if the network has lost communication, try connecting other devices to the network.

2. Test network communication by pinging the network.

   a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type cmd.

   b. Type ping followed by the service set identifier (SSID) for your network.

   c. If the window displays round-trip times, the network is working.

3. Make sure that the router or product connects to the same network that your computer connects to.

   a. Open the Reports menu, and select the Configuration Report item to print the report.

   b. Compare the service set identifier (SSID) on the configuration report to the SSID in the printer configuration for your computer.

   c. If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

Service mode functions

Secondary service menu

Use the secondary service menu to print service-related reports and to run special tests. Customers do not have access to this menu.

Open the secondary service menu

1. Touch the Setup ⚒ button.

2. Touch the middle of the screen along the left-hand edge (callout 1), and then immediately touch the lower-right corner (callout 2) of the screen.

3. When the Home screen appears, touch the Setup ⚒ button.

4. Touch the **2ndary Service** button to open the menu.

💡 **TIP:** When you are finished with the **2ndary Service** menu, touch the lower-right corner of the screen until the **Job Settings Cleared** message appears on the Home screen. This step removes the **2ndary Service** option from the Setup Menu.

Secondary service menu structure

Table 6-3 Secondary service menu

Menu item	Sub-menu item	Description
Service Reports	Cont. Self-Test	This item prints a continuous configuration page.
	Error report	This item prints an error report that contains the last 5 instances of **49 Error, Turn off then on** or **79 Error Turn off then on** errors.
Location	A list of available locations appears	This item sets certain product parameters that are dependent on the location, such as the default paper size and the symbol set. Scroll to the appropriate location and select **Yes** to set the location. The product automatically restarts after you change the location.

Table 6-3 Secondary service menu (continued)

Menu item	Sub-menu item	Description
Display test		This test verifies that the LEDs and characters on the control-panel display function correctly.
		At the beginning of the test, each of the LEDs is turned on one-at-time. Touch the OK button to continue to the next LED.
		After the LED test is complete, the character test begins by testing the pixels on each line. Then, each of the 255 characters is displayed in groups of 16. Touch the OK button to continue to the next group of 16 characters. You can cancel the test at any time by touching the Cancel ✕ button.
Button test		This test verifies that the control-panel buttons function correctly. The display prompts you to press each button.
Color Cal.	**Adjust color**	This item adjusts density settings for contrast, highlights, midtones, and shadows. Adjust each color individually.
	Timing	This item specifies how frequently the product should automatically perform a color calibration. The default setting is 48 hours. You can turn automatic calibration off.
PBX ring detect	On or Off	Configure the PBX ring detect setting.
Clean Belt		This item runs additional belt-cleaning cycles.
Pick roller		This item puts the pickup roller in position for replacement.

Product resets

The product resets—**Restore Defaults** and the NVRAM initialization—perform the same function. If possible, use the **Restore Defaults** function in the **Service** menu. If that menu is not accessible, use the NVRAM sequence.

Restore the factory-set defaults

⚠ **CAUTION:**   Restoring the factory-set defaults returns all of the product and network settings to the factory defaults, and it also clears the fax header name, phone number, and any stored faxes in the product memory. This procedure also clears the fax phone book, and deletes any pages that are stored in the memory. The procedure then automatically restarts the product.

1.   On the product control panel, touch the Setup ⚙ button.

2.   Scroll to and touch the Service menu.

3.   Scroll to and touch the Restore Defaults button, and then touch the OK button.

The product automatically restarts.

NVRAM initialization

Performing an NVRAM initialization resets the following settings and information:

- All menu settings are reset to factory default values.

- All localization settings, including language and country/region, are reset.

⚠ **CAUTION:** All onboard network settings are also reset. Be sure to print a configuration page before restoring defaults. Make note of the IP address that is listed on the Jetdirect configuration page. You might need to restore the IP address after an NVRAM initialization.

After performing an NVRAM initialization, reconfigure any computers that print to this product. Uninstall and then reinstall the product software on the computers.

1. Turn the product off.

2. Touch the right arrow button. Hold this button as you turn the product on.

    📝 **NOTE:** The right arrow button is not visible when the product is off, but it is still active. Note its position before you turn off the product.

3. When **Permanent storage init.** appears on the display, release the right arrow button.

When the product has finished the NVRAM initialization, it returns to the Ready state.

Solve fax problems

Fax troubleshooting checklist

- Several possible fixes are available. After each recommended action, retry faxing to see if the problem is resolved.

- For best results during fax problem solving, make sure the line from the product is plugged directly into the wall phone port. Disconnect all other devices that are connected to the product.

1. Verify that the telephone cord is plugged into the correct port on the back of the product.

2. Check the phone line by using the fax test:

    a. On the control panel, open the Setup ⚙ menu, and then open the Service menu.

    b. Select the Fax Service option.

    c. Select the Run Fax Test option. The product prints a fax test report.

The report contains the following possible results:

- **Pass**: The report contains all of the current fax settings for review.

- **Fail**: The cord is in the wrong port. The report contains suggestions for how to resolve the issue.

- **Fail** : The phone line is not active. The report contains suggestions for how to resolve the issue.

3. Verify that the product firmware is current:

   a. Print a configuration page from the control panel Reports menu to obtain the current firmware date code.

   b. Go to www.hp.com.

      1. Click the **Support & Drivers** link.

      2. Click the **Download drivers and software (and firmware)** link option.

      3. In the **For product** box, type the product model number, and then click the **Go** button.

      4. Click the link for your operating system.

      5. Scroll to the Firmware section of the table.

         ◦ If the listed version matches the version on the configuration page, you have the most current version.

         ◦ If the versions are different, download the firmware upgrade and update the firmware on the product following the instructions onscreen.

         > 📝 **NOTE:** The product must be connected to a computer with internet access to upgrade firmware.

         ◦ Resend the fax.

4. Verify that the fax was set up when the product software was installed.

   From the computer, in the HP program folder, run the Fax Setup Utility.

5. Verify that the telephone service supports analog fax.

   - If using ISDN or digital PBX, contact your service provider for information about configuring to an analog fax line.

   - If using a VoIP service, change the Fax Speed setting to Slow(V.29) or disable Fast(V.34) from the control panel. Ask if your service provider supports fax and for the recommended fax modem speed. Some companies might require an adapter.

   - If using a DSL service, ensure that a filter is included on the phone line connection to the product. Contact the DSL service provider or purchase a DSL filter if you do not have one. If a DSL filter is installed, try another since these filters can be defective.

6. If the error persists, find more detailed problem-solving solutions in the sections that follow this one.

Troubleshoot fax codes and trace reports

View and interpret fax error codes

Use fax error codes from the fax activity log to solve problems with the product fax features.

Table 6-4 Fax receive error codes

Error code	Description	Solution
200	The fax session has completed without errors.	N/A
221	User has touched the Cancel ✖ button, causing the fax session to be prematurely halted.	Have the sender resend the fax.
222	The receiving product has answered a call but has been unable to detect the presence of a calling fax product for one of the following reasons: • Typically this will be due to the receiving fax product answering a voice call. • The sender canceled the fax transmission by touching the Cancel ✖ button immediately prior to, or just as the receiving product answered the call. • The sending product automatically ended the call immediately prior to, or just as the receiving product answered the call. • The sending (sending) fax product determined there was a feature incompatibility between the two and disconnected immediately before transmitting any further fax tones or T.30 frames. (This is very rare.)	1. Confirm that the sender is a fax product and not a voice caller—typically you must rely on the sender informing the caller that the fax session is failing. 2. If the sending product ends the call just as the receiving product starts reception, reduce the ring count after which the receiving product answers. Alternatively suggest that the sender manually dials to the receiving product and then manually starts the fax session, by touching the Start Fax button once fax tones have been heard from the receiving product. 3. Confirm that the sender is not inadvertently attempting to poll transmit from the receiving product, instead of transmitting to the receiving product. 4. Reconfigure the receiving fax product to use different configuration settings, toggle the ECM state, and/or select a slower reception speed.
223 (ECM error)	The receiving product has been unable to receive an entire page even after multiple attempts to re-receive the parts of the page that contain errors. This is usually due to extremely poor line conditions.	1. Reattempt the fax reception at a different time when telephone line conditions have improved. 2. If the error persists, disable ECM. Errors may still occur, and may result in degraded image quality on the received page. However, the ability to receive the entire document will be improved.
224	The receiving product has received one or more pages with excessive errors. This is usually due to extremely poor line conditions. Error correction is not used during this session so errors are not corrected.	Reattempt the fax reception at a different time when telephone line conditions have improved.
225	The sending product has attempted to initiate a sending diagnostic session with this product even though sending diagnostic access is disabled.	Enable the sending diagnostics capability on the receiving product.

Table 6-4 Fax receive error codes (continued)

Error code	Description	Solution
226	The sending product has attempted to initiate a sending diagnostic session with this product but the sending diagnostic versions supported by the two products are incompatible.	None. Sending diagnostics cannot occur between products with incompatible sending versions.
227	The sending product has attempted to initiate a fax session at a speed and modulation that is not supported by the receiving product.	Reconfigure the receiving product to receive at a slower speed.
228	The sending product has attempted to initiate a poll transmission from the receiving product even though the receiving product is not configured for poll transmission.	1. Confirm that polling by the sender is desired. It is possible that the sender has inadvertently attempted to poll. If this is the case reattempt a normal transmission from the sending product. 2. If polling by the remote user was desired, confirm that the receiving product was correctly configured for poll transmission.
229	The sending product has attempted to initiate a secure poll transmission from the receiving product but has not provided a valid password.	If the sender is the desired recipient for the polled document, confirm that the sender has the correct password, and that the receiving product is configured with the same password.
230	The sending product has attempted to initiate an operation that requires error correction but has not selected error correction for the session.	Enable ECM on both the receiving product and the sending product.
231	The sending product has attempted to initiate a transmission to the receiving product even though the capability to receive is disabled at the receiving product.	Ensure that the receiving product is capable of receiving a document. Check that paper is correctly loaded, paper is not jammed within the product, and any other system abnormalities have been cleared.
232 233 and 234 235 and 236 (ECM error) 237	One of the following has occurred: • A communication failure has occurred between the two products. • The user at the remote product may have touched the Cancel ✖ button. • The power at the remote product has been interrupted or deliberately turned off, causing the fax session to be interrupted.	1. Re-attempt the fax reception at a different time when telephone line conditions have improved. 2. If the error persists, and error correction is in use for the fax session, disable ECM.
238 239–241	The sending fax product sent an unexpected communication. This is a defect in the sending product.	N/A
242	The sending fax product is attempting to receive instead of send. Both products have attempted to start a reception at the same time. It is possible to accidentally initiate a fax reception after dialing on many products, if there is no paper in the product or if the paper is not correctly loaded and cannot be sensed by the appropriate document sensor.	Ensure that a document is ready and correctly loaded in the sending fax product and that the sending product is attempting to initiate a transmission and not a reception.

Table 6-4 Fax receive error codes (continued)

Error code	Description	Solution
243 and 244	One of the following has occurred: ● The user of the remote product has touched the Cancel ✖ button, causing the session to be prematurely terminated. ● The sending fax product determined there was a feature incompatibility between the two products and has terminated the session. An example would be when the receiving product wanted to initiate polling, but the sending product did not support this mode of operation.	**1.** Confirm that the sender is not inadvertently attempting to poll transmit from the receiving product, instead of transmitting to the receiving product. This mode of operation must be specially configured on the receiving product. If poll transmission from the receiving product is the desired mode of operation, confirm that the receiving product has been configured for this operation. **2.** Reconfigure the receiving fax product to use different configuration settings, toggle the ECM state, and/or select a slower reception speed.
245 and 246 (ECM error)	The user of the sending product has touched the Cancel ✖ button, causing the session to be prematurely terminated. The receiving product has been "holding off" the remote product during reception of a large and/or complex document due to lack of available memory. This hold-off time has exceeded the timeout (typically 60 seconds) used by the sending product, and it has terminated the session.	**1.** If the document was large, ask the sender to retransmit the document as two or more smaller documents. **2.** Disable ECM and reattempt the fax reception.
247-251	The sending product appears to be "stuck on."	N/A
252	Telephone line conditions were too poor to receive a fax.	**1.** Reattempt the fax reception at a later time when line conditions may have improved. **2.** Configure the receiving product to start reception at a lower speed. **3.** If the receiving product received successfully several pages of a larger document, ask the sender to transmit the document in several smaller parts.
253	The sending product has attempted to initiate a page transmission using a page width that is not supported by the receiving product.	Ask the sender to reconfigure the fax product to transmit using a "normal" (letter/A4) page width.

Table 6-4 Fax receive error codes (continued)

Error code	Description	Solution
281	The receiving product has not received any data at the start of a page during non-ECM reception, although the modem has not detected a sending disconnect. The sending product is probably transmitting fill bytes instead of data and has either jammed or broken.	Reattempt the fax reception after first requesting that the sender check the sending product.
282	The receiving product has not received any data at the start of a page during ECM reception although the modem has not detected a sending disconnect. The sending product is probably transmitting sync frames instead of data and has either jammed or broken.	
283	The receiving product has detected that the modem carrier has stopped. Either the line has been disconnected or the sending product has aborted the transmission.	
284	The receiving product has not received any data during non-ECM page reception and a timeout failure has occurred. The sending product is probably transmitting fill bytes instead of data and has either jammed or broken.	
285	The receiving product has stopped receiving any data during an ECM page reception although the modem has not detected a sending disconnect. The sending product is probably transmitting sync frames instead of data and has either jammed or broken.	
286	The sending product has transmitted invalid data. The receiving product has received frames with errors during an ECM reception and requested retransmission of the errored frames. The data that is resent does not correspond to the data that was requested. This is an implementation error from the sending product.	Disable ECM and reattempt the reception.
290	The sending product has attempted to renegotiate the session mode from ECM to non-ECM between pages. This operation is not supported and the session has been abandoned.	Reattempt the fax reception and split the document into two portions corresponding to the ECM and non-ECM portions. Some products will attempt to use non-ECM for photo mode, so this may be associated with a between-page encoding change to support photo mode.

Table 6-4 Fax receive error codes (continued)

Error code	Description	Solution
291	This is not a communication error and it is not expected that this error will occur under non-development scenarios. Reception has failed because the receiving product is unable to open a file to receive data into. May be associated with low memory, although low memory should be handle more gracefully than this.	If the error persists, reinitialize the product.
292	The sending product has attempted to renegotiate the encoding mode from non-JPEG to JPEG. This operation is not supported and the session has been abandoned.	Reattempt the fax reception and split the document into two portions corresponding to the JPEG and non-JPEG portions. Some products will attempt to use JPEG for photo mode, so this may be associated with a between-page encoding change to support photo mode.

Table 6-5 Fax send error codes

Error code	Description	Solution
300	Fax session has completed without errors	N/A
311	The user of the receiving product has touched the Cancel ✖ button, causing the session to be prematurely halted before all pages have been transmitted.	Resend the fax.
312	A sending fax product has failed to answer the call. Specifically fax tones or the fax handshake from a sending product has not been detected. Typically this is due to the user calling the wrong number, the correct number has been called but the product has been configured not to answer, or the sending product has temporarily disabled answering due to a condition such as lack of paper or a paper jam.	Confirm the sending fax product is ready to receive a document and reattempt the transmission.
313	A busy signal has been detected each time the receiving product has attempted to call the sending product.	Reattempt the fax transmission at a later time when the line is no longer busy.
314	The receiving product has attempted to initiate a sending diagnostic session but has detected that sending diagnostics are disabled at the sending product.	Enable sending diagnostics on the sending product.
315	The receiving product has attempted to initiate a sending diagnostic session but has detected that the sending diagnostic version supported by the sending product is incompatible.	No solution. Sending diagnostics cannot occur between products with incompatible sending versions.

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
316	The receiving product is setup to initiate document transmission, but it has detected that the sending product is not able to receive a document. This error should be very rare since normally a sending product will not answer if it cannot receive a document. On of the few exceptions to this would occur if the sending product was configured to poll transmit a document but was unable to receive.	Configure the sending product for reception. Typically the sender should ensure paper is loaded in the product, paper jams are fixed, and any other system abnormalities are cleared.
317	The sending product cannot support a fax reception at any speed or modulation that is supported by the receiving product.	N/A
318	The sending product cannot support a fax reception at the page width selected by the receiving product.	N/A
319	The receiving product has attempted to initiate a binary file transfer (BFT) but has detected that the sending product does not support this mode of operation.	Do one of the following: ● Enable the BFT capability on the sending product if it is supported. ● Retransmit the document as a normal fax, rather than attempting a BFT transfer.
320	The receiving product is set up to initiate poll reception with a sending product, but it has detected that the sending product is not configured to do this. Poll transmission from a sending product is typically configured on a session-by-session basis.	Do one of the following: ● Confirm that the receiver really wants to attempt a poll reception. If not, reconfigure the receiving product for a normal fax transmission ● Configure the sending product for poll transmission. The sender must load a document to transmit and then configure the product for polling.
321	There was a communication error with the receiving fax product due to poor telephone line conditions.	Reattempt the fax transmission at a different time when telephone line conditions have improved.
322–324	Telephone line conditions were too poor to send a fax.	1. Reattempt the fax transmission at a different time when telephone line conditions have improved. 2. If the session fails after transmitting several pages of a large document, retransmit the document as several smaller documents.

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
325-328 (ECM error)	Telephone line conditions were very poor.	1. Reattempt the fax transmission at a different time when telephone line conditions have improved. 2. If the error persists, disable ECM. Errors may still occur, and may result in a degraded image quality on the received page. However, the ability to transmit the entire document will be improved.
329–331	The sending product has reported that one or more pages have been received (non-ECM mode) with excessive errors. This error does not result in the session being terminated immediately. Subsequent page transmission can still occur and later pages may be received without error.	1. Reattempt the fax transmission at a different time when telephone line conditions have improved. 2. If the error persists, select a lower speed for the initial transmission speed.
332–337	There is a defect in the sending fax product.	Send from another product.
338–342 (ECM error)		
343		
344–348	One of the following has occurred:	1. Reattempt the fax transmission at a different time when telephone line conditions have improved.
349-353 (ECM error)	• The sending product has failed to respond to a fax command from the receiving product due to the connection being interrupted.	2. fax session was using error correction, disable ECM.
354 and 355	• The sender has touched the Cancel ✖ button while the reception was in progress. • In rare conditions, incompatibility between the two products may cause the sending product to abandon the call.	
356-361	One of the following has occurred:	1. Configure the sending product for document reception by clearing any paper jams, loading sufficient paper, and clearing any other system errors.
362-366 (ECM error)	• The sender has touched the Cancel ✖ button, causing the session to be aborted. • The sending product has encountered a system problem such as no paper or a paper jam, which has inhibited it from receiving any more pages, and which has caused it to terminate the session prematurely. • A feature incompatibility has been encountered by the sending product, causing it to terminate the session.	2. Configure the receiving fax product to use different configurations, toggle the ECM state, or select a slower reception speed.
367-372	The sending product appears to be "stuck on".	N/A
373-377 (ECM error)		
378 and 379		

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
380	The sending product has failed to issue a valid response to a CTC frame. This occurs during ECM transmission after multiple retransmissions of erred data.	Send from another product.
381	One of the following has occurred: • The sending product has failed to respond to a fax command from the receiving product due to the connection being interrupted. • The sender has touched the Cancel ✕ button while the reception was in progress.	1. Reattempt the fax transmission at a different time when telephone line conditions have improved. 2. If the error persists, disable ECM.
382	The sending fax product has been "holding off" the receiving fax product from continuing the ongoing transmission due to a temporary low memory condition at the sending product. If this "hold-off" period exceeds a product's specific timeout value, the session will terminate.	1. Resend the document as two or more separate fax transmissions. Wait several minutes between the end of one transmission and the start of the next transmission. 2. If the error persists, disable ECM.
383	One of the following has occurred: • The sending product has failed to respond to a fax command from the receiving product due to the connection being interrupted • The sender has touched the Cancel ✕ button while the reception was in progress.	1. Reattempt the fax transmission at a different time when telephone line conditions have improved. 2. If the error persists, disable ECM.
384	The receiving product has attempted a black JPEG transmission to a product that does not support this mode.	Reattempt the fax transmission using a different mode.

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
386	The receiving product has failed to complete the third phase of the initial V.34 handshake after originating a fax session. This is usually due to poor line conditions although it may be a compatibility issue with certain products and/or line conditions.	1. Reattempt the fax transmission at a different time when telephone line conditions have improved. 2. Disable V.34 on the receiving product and attempt the transmission using the V.17 mode.
387	The receiving product has failed to successfully negotiate the initial V.8 handshake with the sending product after originating a fax session. Typically this will occur when the sending product is not fax capable or has disabled reception. It may also be a compatibility issue with certain products and/or line conditions.	
388	The receiving product has originated a fax session and detected a sending fax product but has been unable to detect any T30 frames. If the product is in V.17 mode it is likely that the connection has been interrupted. In V.34 mode is also possible for this error to occur due to compatibility problems with certain products and/or line conditions.	
389	The receiving product has originated a fax session and has reattempted V.8 negotiations multiple times without success.	
390	The receiving product has originated a fax session using error correction (either V.34 or V.17). Transmission of an image has been abandoned after a timeout when no data has become ready for transmission. This is most likely due to a low memory condition although it could be due to other internal problems that cause generation of data for transmission to stall.	Reattempt the transmission after making sure documents stored in memory are printed and the product has paper ready for printing. If the problem persists reinitialize permanent storage.
391	The receiving product has originated a fax session without error correction (not V.34). Transmission of an image has been abandoned after a timeout when no data has become ready for transmission. This is most likely due to a low memory condition although it could be due to other internal problems that cause generation of data for transmission to stall.	

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
392	The receiving product has answered a fax session and completed the initial V.34 handshake but has been to detect any T30 frames. This failure is either a compatibility problems with certain products or is due to line conditions.	1. Reattempt the fax reception at a different time when telephone line conditions have improved. 2. Disable V.34 on the receiving product and attempt the transmission using the V.17 mode.
393	The receiving product has failed to complete the third phase of the initial V.34 handshake after answering a fax session. This is usually due to poor line conditions although it may be a compatibility issue with certain products and/or line conditions.	
394	The receiving product has failed to successfully negotiate the initial V.8 handshake with the sending product after answering a fax session. Typically this will occur when the calling product is not fax capable. It may also be a compatibility issue with certain products and/or line conditions.	
395	An unexpected T.30 frame has been received between pages during a multipage V.34 reception. This is almost certainly a compatibility problem with the sending product and may be due to an error with the implementation of the sending product.	1. Reattempt the fax reception. If transmission errors are not encountered because line conditions have improved, then this error will probably be avoided. 2. Disable V.34 on the receiving product and attempt the transmission using the V.17 mode.

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
396–409	An error occurred during a V.34 transmission when the receiving product was unable to correctly handshake with the sending product and was consequently unable to transmit a T30 frame. This occurs when the line was disconnected or if line conditions degrade during the session.	Reattempt the fax transmission at a different time when telephone line conditions have improved.
410–419	An error occurred during a V.34 reception when the receiving product was unable to correctly handshake with the sending product and was consequently unable to transmit a T30 frame. This occurs when the line is disconnected or if line conditions degrade during the session.	
420	V.34 negotiations have failed from the originating product during phase four, which occurs after V.8 and before the first T.30 frames are exchanged. Compatibility problems have been observed in this area when sending to non-HP units.	
421	V.34 negotiations have failed from the originating product during phase three, which occurs after V.8, before phase four, and before the first T.30 frames are exchanged. Compatibility problems have been observed in this area when sending to non-HP units.	
422	V.34 negotiations have failed from the answering product during phase four, which occurs after V.8 and before the first T.30 frames are exchanged.	
423	V.34 negotiations have failed from the answering product during phase three, which occurs after V.8, before phase4, and before the first T.30 frames are exchanged.	
430	The transmitting product is unable to send continuous ones at the end of the control channel prior to starting the primary channel. This is a V.34 error. This error may be associated with line conditions although it is more likely to be due to internal problems with the modem.	

Table 6-5 Fax send error codes (continued)

Error code	Description	Solution
431	The transmitting product has not received a response after aborting a transmission. Depending upon when the session is aborted, some sending products may not respond. It should be noted that the receiving unit always attempts to abort the session in a way that allows the sending product to respond to the final PPS_EOP.	N/A
440–445	An error occurred during a V.34 transmission after one or more partial pages (image data) were transmitted using the primary channel. The transmitting product was unable to restart the control channel in order to resume the T30 handshake. This typically occurs when the receiving product prematurely disconnects during partial page reception, although it is possible it may also be due to compatibility issues.	Reattempt the fax reception at a different time when telephone line conditions have improved.

Fax trace report

A fax T.30 trace report has information that can help resolve fax transmission problems. If you call HP for help in resolving these problems, print a T.30 trace report before you call.

1. From the Home screen, touch the Setup ⚒ button.

2. Touch the Service menu.

3. Touch the Fax Service menu.

4. Touch the Print T.30 Trace button, and then touch the Now button.

Fax logs and reports

Use the following instructions to print fax logs and reports:

Print all fax reports

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

- Last Call Report

- Fax Activity Log

- Phone Book Report

- Junk Fax List

- Billing Report (when Billing Codes are turned on)

- Configuration Report

- Usage Page

1. From the Home screen, touch the Fax button.

2. Touch the Fax Menu button.
3. Touch the Fax Reports button.
4. Touch the Print All fax Reports button.

Print individual fax reports

1. From the Home screen, touch the Fax button.

2. Touch the Fax Menu button.

3. Touch the Fax Reports button.

4. Touch the name of the report that you want to print.

Set the fax error report

A fax error report is a brief report that indicates the product experienced a fax job error. You can set it to print after the following events:

- Every fax error (the factory-set default)

- Send fax error

- Receive fax error

- Never

  NOTE: With this option, you will have no indication that a fax failed to be transmitted unless you print a fax activity log.

1. From the Home screen, touch the Fax button.

2. Touch the Fax Menu button.

3. Touch the Fax Reports button.

4. Touch the Fax Error Report button, and then touch the printing option that you want to use.

Change error correction and fax speed

Set the fax-error-correction mode

Usually, the product monitors the signals on the telephone line while it is sending or receiving a fax. If the product detects an error during the transmission and the error-correction setting is On, the product can request that the portion of the fax be resent. The factory-set default for error correction is On.

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

1. From the Home screen, touch the Setup 🔧 button.

2. Touch the Service menu.

3. Touch the Fax Service menu.

4. Touch the Error Correction button, and then touch the On button.

Change the fax speed

The fax-speed setting is the modem protocol that the product uses to send faxes. It is the worldwide standard for full-duplex modems that send and receive data across telephone lines at up to 33,600 bits per second (bps). The factory-set default for the fax-speed setting is Fast(V.34).

You should change the setting only if you are having trouble sending a fax to or receiving a fax from a particular device. Decreasing the fax speed might be useful when you are trying to send a fax overseas, or receive one from overseas, or if you are using a satellite telephone connection.

1. From the Home screen, touch the Setup ⚙ button.

2. Touch the Fax Setup menu.

3. Touch the Advanced Setup menu.

4. Scroll to and touch the Fax Speed button, and then touch the speed setting that you want to use.

Solve problems sending faxes

- An error message displays on the control panel

- The control panel displays a Ready message with no attempt to send the fax

- The control panel displays the message "Storing page 1" and does not progress beyond that message

- Faxes can be received, but not sent

- Unable to use fax functions from the control panel

- Unable to use speed dials

- Unable to use group dials

- Receive a recorded error message from the phone company when trying to send a fax

- Unable to send a fax when a phone is connected to the product

An error message displays on the control panel

The Communication error. message appears

- Allow the product to retry sending the fax. Re-sending temporarily reduces the fax speed.

- Unplug the product telephone cord from the wall, plug in a telephone, and try making a call. Plug the product phone cord into a jack for another phone line.

- Try a different phone cord.

- From the control panel, change the Fax Speed option to the Medium(V.17) setting or Slow(V.29) setting.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Fax Setup menu.

c. Open the Advanced Setup menu.

d. Open the Fax Speed menu.

e. Select the correct setting.

- Turn off the Error Correction option.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Service menu.

  c. Open the Fax Service menu.

  d. Open the Error Correction menu.

  e. Select the Off setting.

📝 **NOTE:** Turning off the Error Correction option can reduce image quality.

- If the error persists, contact HP. See www.hp.com/support/CM1410series or the support flyer that came in the product box.

No dial tone.

- Make sure that the telephone cord is plugged into the correct port on the product.

- Make sure that the telephone cord from the product is plugged directly into the wall telephone jack.

- Check for a dial tone on the phone line by using the Start Fax button.

- Unplug the product telephone cord from the wall, plug in a telephone, and try making a voice call.

- Unplug the telephone cord from both the product and the wall and replug the cord.

- Make sure that you are using the telephone cord that came with the product.

- Plug the product phone cord into a jack for another phone line.

- Check the phone line by using the Run Fax Test option from the Service menu on the control panel.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Service menu.

  c. Open the Fax Service menu.

  d. Select the Run Fax Test item.

The Fax is busy. message appears

- Try sending the fax again.

- Call the recipient to ensure that the fax machine is on and ready.

- Check that you are dialing the correct fax number.

- Check for a dial tone on the phone line by using the Start Fax button.

- Make sure that the phone is working by disconnecting the product, plugging in a telephone to the phone line, and making a voice call.

- Plug the product phone cord into a jack for another phone line, and try sending the fax again.

- Try a different phone cord.

- Send the fax at a later time.

- If the error persists, contact HP. See www.hp.com/support/CM1410series or the support flyer that came in the product box.

The No fax answer. message appears

- Try to resend the fax.

- Call the recipient to ensure that the fax machine is on and ready.

- Check that you are dialing the correct fax number.

- Unplug the product telephone cord from the wall, plug in a telephone, and try making a voice call.

- Plug the product phone cord into a jack for another phone line.

- Try a different phone cord.

- Make sure that the phone cord from the wall telephone jack is plugged into the line � port.

- Check the phone line by using the Run Fax Test option from the Service menu on the control panel.

    a. From the Home screen, touch the Setup ⚒ button.

    b. Open the Service menu.

    c. Open the Fax Service menu.

    d. Select the Run Fax Test item.

- If the error persists, contact HP. See www.hp.com/support/CM1410series or the support flyer that came in the product box.

Document feeder paper jam

- Verify that the paper meets product size requirements. The product does not support pages longer than 381 mm (15 in) for faxing.

- Copy or print the original to letter, A4, or legal size paper, and then resend the fax.

The Fax storage is full. message appears

- Turn the product off then on.

- Print stored faxes that have not been printed.

  a. Touch the Fax button, and then touch the Fax Menu button.

  b. Open the Receive Options menu.

  c. Select the Print Private Faxes item.

  d. Provide the password when the product prompts you.

- Delete stored faxes from memory.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Service menu.

  c. Open the Fax Service menu.

  d. Select the Clear Saved Faxes item.

- Divide the large fax job into smaller sections, and then fax them individually.

Scanner error

- Verify that the paper meets product size requirements. The product does not support pages longer than 381 mm (15 in) for faxing.

- Copy or print the original onto letter, A4, or legal size paper and then resend the fax.

The control panel displays a Ready message with no attempt to send the fax

- Check the fax activity log for errors.

  a. Touch the Fax button, and then touch the Fax Menu button.

  b. Open the Fax Reports menu.

  c. Open the Fax Activity Log menu.

  d. Select the Print Log Now option.

- If a phone is connected to the product, make sure that the phone is hung up.

- Disconnect all other lines between the fax and the product.

- Connect the product directly into the wall telephone jack and resend the fax.

The control panel displays the message "Storing page 1" and does not progress beyond that message

- Delete stored faxes from memory.

    a. From the Home screen, touch the Setup ⚒ button.

    b. Open the Service menu.

    c. Open the Fax Service menu.

    d. Select the Clear Saved Faxes item.

Faxes can be received, but not sent

Send fax and nothing happens.

1. Check for a dial tone on the phone line by using the Start Fax button.

2. Turn the product off then on.

3. Use the control panel or the HP Fax Setup Wizard to configure the fax time, date, and fax header information.

    a. From the Home screen, touch the Setup ⚒ button.

    b. Open the Fax Setup menu.

    c. Open the Basic Setup menu.

    d. Open the Fax Header menu.

    e. Enter the correct settings.

4. Verify that any extension phones on the line are hung up.

5. If using a DSL service, make sure that the phone line connection to the product includes a high-pass filter.

Unable to use fax functions from the control panel

- The product might be password protected. Use the HP Embedded Web Server, HP Toolbox software, or the control panel to set a password.

- If you do not know the password for the product, contact your system administrator.

- Verify with the system administrator that the fax functionality has not been disabled.

Unable to use speed dials

- Make sure that the fax number is valid.

- If an outside line requires a prefix, turn on the Dial Prefix option or include the prefix in the speed dial number.

  a. From the Home screen, touch the Setup ⚲ button.

  b. Open the Fax Setup menu.

  c. Open the Basic Setup menu.

  d. Open the Dial Prefix menu.

  e. Select the On setting.

Unable to use group dials

- Make sure that the fax number is valid.

- If an outside line requires a prefix, turn on the Dial Prefix option or include the prefix in the speed dial number.

  a. From the Home screen, touch the Setup ⚲ button.

  b. Open the Fax Setup menu.

  c. Open the Basic Setup menu.

  d. Open the Dial Prefix menu.

  e. Select the On setting.

- Set up all entries in the group with speed dial entries.

  a. Open an unused speed dial entry.

  b. Enter the fax number for the speed dial.

  c. Touch the OK button to save the speed dial.

Receive a recorded error message from the phone company when trying to send a fax

- Make sure you dial the fax number correctly, and make sure that the phone service is not blocked. For example, some phone services might prevent long distance calling.

- If an outside line requires a prefix, turn on the Dial Prefix option or include the prefix in the speed dial number.

  a. From the Home screen, touch the Setup ⚲ button.

  b. Open the Fax Setup menu.

  c. Open the Basic Setup menu.

d. Open the Dial Prefix menu.

e. Select the On setting.

📝 **NOTE:** To send a fax without a prefix, when the Dial Prefix option is turned on, send the fax manually.

- Send a fax to an international number

    a. If a prefix is required, manually dial the telephone number with the prefix.

    b. Enter the country/region code before dialing the phone number.

    c. Wait for pauses as you hear the tones on the phone.

    d. Send the fax manually from the control panel.

Unable to send a fax when a phone is connected to the product

- Make sure that the telephone is hung up.

- Make sure that the telephone is not being used for a voice call when faxing.

- Unplug the phone from the line, and then try sending the fax.

Solve problems receiving faxes

- The fax does not respond
- An error message displays on the control panel
- A fax is received but does not print
- Sender receives a busy signal
- No dial tone
- Cannot send or receive a fax on a PBX line

The fax does not respond

The fax has a dedicated phone line

- Set the Answer Mode option to the Automatic setting from the control panel.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Fax Setup menu.

  c. Open the Basic Setup menu.

  d. Open the Answer Mode menu.

  e. Select the Automatic setting.

An answering machine is connected to the product

- Set the Answer Mode option to the TAM setting and plug the answering machine into the "telephone" port.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Fax Setup menu.

  c. Open the Basic Setup menu.

  d. Open the Answer Mode menu.

  e. Select the TAM setting.

  If the TAM setting is unavailable, set the Answer Mode option to the Automatic setting.

- Set the Rings to Answer setting to at least one ring more than the number of rings for which the answering machine is set.

  a. From the Home screen, touch the Setup ⚙ button.

  b. Open the Fax Setup menu.

  c. Open the Basic Setup menu.

d. Open the Rings to Answer menu.

e. Select the correct setting.

- Plug the answering machine into the "telephone" port.

- If the product has a telephone handset connected, set the Answer Mode option to the Fax/Tel setting to route calls to the correct device. When detecting a voice call, the product generates a ring tone that alerts you to pick up the telephone handset.

    a. From the Home screen, touch the Setup ⚒ button.

    b. Open the Fax Setup menu.

    c. Open the Basic Setup menu.

    d. Open the Answer Mode menu.

    e. Select the Fax/Tel setting.

A telephone handset is connected to the product

Set the Answer Mode option to the Automatic setting.

1. From the Home screen, touch the Setup ⚒ button.

2. Open the Fax Setup menu.

3. Open the Basic Setup menu.

4. Open the Answer Mode menu.

5. Select the Automatic setting.

The Answer Mode setting is set to the Manual setting

- Touch the Start Fax button on the control panel.

Voice mail is available on the fax line

- Add a distinctive ring service to your telephone line and change the Distinctive Ring setting on the product to match the ring pattern supplied by the telephone company. Contact your telephone company for information.

    a. Verify that the answer mode is set to the Automatic setting.

    b. From the Home screen, touch the Setup ⚒ button.

    c. Open the Fax Setup menu.

    d. Open the Basic Setup menu.

> **e.** Open the Distinctive Ring menu.
>
> **f.** Select the correct setting.

- Buy a dedicated line for faxing.

- Set the Answer Mode option to the Manual setting.

  > **a.** From the Home screen, touch the Setup �’ button.
  >
  > **b.** Open the Fax Setup menu.
  >
  > **c.** Open the Basic Setup menu.
  >
  > **d.** Open the Answer Mode menu.
  >
  > **e.** Select the Manual setting.

  > 📝 **NOTE:** You must be present to receive faxes.

The product is connected to a DSL phone service

- Check the installation and features. A DSL modem requires a high-pass filter on the phone line connection to the product. Contact your DSL service provider for a filter or buy a filter.

- Verify that the filter is plugged in.

- Replace the existing filter to make sure that it is not defective.

The product uses a fax over IP or VoIP phone service

- Set the Fax Speed option to the Slow(V.29) or Medium(V.17) setting, or disable the Fast(V.34) setting.

  > **a.** From the Home screen, touch the Setup �’ button.
  >
  > **b.** Open the Fax Setup menu.
  >
  > **c.** Open the Advanced Setup menu.
  >
  > **d.** Open the Fax Speed menu.
  >
  > **e.** Select the correct setting.

- Contact your service provider to make sure that fax is supported and for a recommended fax speed settings. Some companies might require an adapter.

An error message displays on the control panel

The No fax detected. message appears

> 📝 **NOTE:** This error does not always refer to a missed fax. If a voice call is made to a fax number by mistake and the caller hangs up, the **No fax detected.** message appears on the control panel.

- Ask the sender to resend the fax.

- Make sure that the telephone cord from the product is plugged into the wall telephone jack.

- Try a different phone cord.

- Plug the product phone cord into a jack for another phone line.

- Make sure the telephone line and phone wall jack are active by plugging in a telephone and checking for a dial tone.

- Make sure that the telephone cord is plugged into the "line" port on the product.

- Check the phone line by running a fax test from the control panel.

- If the error persists, contact HP. See www.hp.com/support/CM1410series or the support flyer that came in the product box.

The Communication error. message appears

- Ask the sender to send the fax again or send at a later time when line conditions have improved.

- Unplug the product telephone cord from the wall, plug in a telephone, and try making a call. Plug the product phone cord into a jack for another phone line.

- Try a different phone cord.

- Set the Fax Speed option to the Slow(V.29) or Medium(V.17) setting, or disable the Fast(V.34) setting.

  a. From the Home screen, touch the Setup ⚒ button.

  b. Open the Fax Setup menu.

  c. Open the Advanced Setup menu.

  d. Open the Fax Speed menu.

  e. Select the correct setting.

- Turn off the Error Correction feature to prevent automatic error correction.

  NOTE: Turning off the Error Correction feature can reduce image quality.

  a. From the Home screen, touch the Setup ⚒ button.

  b. Open the Service menu.

  c. Open the Fax Service menu.

  d. Open the Error Correction menu.

  e. Select the Off setting.

- Print the Fax Activity Log report from the control panel to determine if the error occurs with a specific fax number.

  a. Touch the Fax button, and then touch the Fax Menu button.

  b. Open the Fax Reports menu.

c. Open the Fax Activity Log menu.

d. Select the Print Log Now option.

- If the error persists, contact HP. See www.hp.com/support/CM1410series or the support flyer that came in the product box.

The Fax storage is full. message appears

- Turn the product off then on.

- Print all of the faxes, and then have the sender resend the fax.

- Ask the sender to divide a large fax job into smaller sections, and then fax them individually.

- Make sure that the resolution of the sending fax machine is not set to the Photo setting or the Superfine setting.

  a. From the Home screen, touch the Setup ⚲ button.

  b. Open the Fax Setup menu.

  c. Open the Advanced Setup menu.

  d. Open the Fax Resolution menu.

  e. Select the correct setting.

- Cancel all fax jobs or clear the faxes from memory.

The Fax is busy. message appears

- The product cannot receive a fax while attempting to send one. Cancel the fax send and try sending at a later time.

- Allow the product to try sending the fax again.

A fax is received but does not print

The Private Receive feature is on

- When the Private Receive feature is activated, received faxes are stored in memory. A password is required to print the stored faxes.

- Enter the password to print the fax. If you do not know the password, contact the product administrator.

📝 **NOTE:** Memory errors might occur if the faxes are not printed. The product will not answer if the memory is full.

Sender receives a busy signal

A handset is connected to the product

- Make sure the phone is hung up.

- Change the Answer Mode option to match the product setup.

    a. From the Home screen, touch the Setup ⚒ button.

    b. Open the Fax Setup menu.

    c. Open the Basic Setup menu.

    d. Open the Answer Mode menu.

    e. Select the setting that matches the product setup.

        Set the Answer Mode option to the Fax/Tel setting to automatically receive faxes. The Fax/Tel setting automatically detects whether the incoming transmission is a fax or a voice call and routes the call to the appropriate device.

A phone line splitter is being used

- If you are using a phone line splitter, remove the splitter and set up the phone as a downstream phone.

- Make sure the phone is hung up.

- Make sure the phone is not being used for a voice call when faxing.

No dial tone

- If using a phone line splitter, remove the phone line splitter and set up the phone as a downstream phone.

Cannot send or receive a fax on a PBX line

- If you are using a PBX phone line, contact your PBX administrator to configure an analog fax line for your product.

Solve general fax problems

- [Faxes are sending slowly](#)

- [Fax quality is poor](#)

- [Fax cuts off or prints on two pages](#)

Faxes are sending slowly

The product is experiencing poor phone line quality.

- Retry sending the fax when the line conditions have improved.

- Check with the phone service provider that the line supports fax.

- Turn off the Error Correction setting.

  a. Open the Setup 🔧 menu.

  b. Open the Service menu.

  c. Open the Fax Service menu.

  d. Open the Error Correction menu.

  e. Select the Off setting.

  📝 **NOTE:** This can reduce image quality.

- Use white paper for the original. Do not use colors such as gray, yellow, or pink.

- Increase the Fax Speed setting.

  a. Open the Setup 🔧 menu.

  b. Open the Fax Setup menu.

  c. Open the Advanced Setup menu.

  d. Open the Fax Speed menu.

  e. Select the correct setting.

- Divide large fax jobs into smaller sections, and then fax them individually.

- Change the fax settings on the control panel to a lower resolution.

  a. Open the Setup 🔧 menu.

  b. Open the Fax Setup menu.

  c. Open the Advanced Setup menu.

  d. Open the Fax Resolution menu.

  e. Select the correct setting.

Fax quality is poor

Fax is blurry or light.

- Increase fax resolution when sending faxes. Resolution does not affect received faxes.

    a. Open the Setup 🔧 menu.

    b. Open the Fax Setup menu.

    c. Open the Advanced Setup menu.

    d. Open the Fax Resolution menu.

    e. Select the correct setting.

    📝 **NOTE:** Increasing resolution slows transmission speed.

- Turn on the Error Correction setting from the control panel.

    a. Open the Setup 🔧 menu.

    b. Open the Service menu.

    c. Open the Fax Service menu.

    d. Open the Error Correction menu.

    e. Select the On setting.

- Check the print cartridges and replace if necessary.

- Ask the sender to darken the contrast setting on the sending fax machine, and then resend the fax.

Fax cuts off or prints on two pages

- Set the Default Paper Size setting. Faxes print on a single size of paper based on the Default Paper Size settings.

    a. Open the Setup 🔧 menu.

    b. Open the System Setup menu.

    c. Open the Paper Setup menu.

    d. Open the Default Paper Size menu.

    e. Select the correct setting.

- Set the paper type and size for the tray used for faxes.

- Turn on the Fit to Page setting to print longer length faxes on letter or A4 size paper.

    a. Open the Setup 🔧 menu.

    b. Open the Fax Setup menu.

    c. Open the Advanced Setup menu.

d. Open the Fit to Page menu.

e. Select the On setting.

NOTE: If the Fit to Page setting is off and the Default Paper Size setting is set to letter, a legal size original prints on two pages.

Product updates

Software and firmware updates and installation instructions for this product are available at www.hp.com/support/CM1410series. Click **Downloads and drivers**, click the operating system, and then select the download for the product.

7 Engineering Details

Introduction

This chapter presents engineering detail for the following topics:

- Printing print-ready documents
- Paper and print media
- Parameter settings (fax data-store parameters)
- Installation notes

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 LaserJet Pro CM1410 Color 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 **PORT1** icon in the browser window.

NOTE: If the **PORT1** 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

If the HP LaserJet Pro CM1410 Color 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:

Windows operating systems

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\P3010FW.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\P3010FW.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.

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 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/P3010FW.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/P3010FW.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 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 Service Pack 3, 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:\P3010FW.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\P3010FW.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:\P3010FW.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\P3010FW.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-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.

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.

Paper and print media

- Media sources and destinations

- Source commands

- Media types

Media sources and destinations

The following table shows the standard and optional media sources and destinations for the product.

Table 7-1 **HP LaserJet Pro CM1410 Color MFP Series MFP Series media sources and destinations**

Media sources	Priority input tray	standard
	Tray 1	standard
	Document feeder input bin	standard
Media destinations	Output bin	standard
	Document feeder output bin	standard

Source commands

The PCL 6 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 escape sequence for media 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.

Table 7-2 **Media-source commands**

Media source	PCL 6	PCL 5 UPD	PostScript
	ubyte # MediaSource **or** ubyte_array "string" MediaSource[1]	Esc&l#H	/MediaPosition # / ManualFeed true | false **or** null
Tray 1	3	4	3 false
Auto Select	1	7	NA
Manual feed in tray 1	2	2	3 true

[1] For the string value, you must use include the quotation marks around the variable. For example, ubyte_array "TRAY2" MediaSource is the PCL 6 command for Tray 2.

Media types

Media-type commands

The PCL 5 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 7-3 Media-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&	11	Wd	Cardstock[2]
Esc&	6	Wd	Rough
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".

Parameter settings (fax data-store parameters)

NOTE: Refer to the service manual for your HP LaserJet all-in-one product for information about changing the fax data-store parameters.

Installation notes

I. INTRODUCTION

PURPOSE OF THIS DOCUMENT

This file provides specific installation, compatibility, and troubleshooting information. For additional information about product and driver features, see the product user guide and the online help that is included with each software component.

SUPPORTED OPERATING SYSTEMS

The CD that ships with your product includes software for the following operating systems:

- Windows XP 32-bit (Service Pack 2 and higher)

- Windows Vista 32-bit and 64-bit

- Windows 7 32-bit and 64-bit

- Windows Server 2003 32-bit (Service Pack 3)

- Windows Server 2008 32-bit and 64-bit

The following operating systems support the recommended software components:

- Windows XP 32-bit (Service Pack 2 and higher)

- Windows Vista 32-bit and 64-bit

- Windows 7 32-bit and 64-bit

The recommended software includes the following components:

- HP LaserJet Help and Learn Center

- HP ToolboxFX

- HP LaserJet PCL 6 print driver

- HP Web Registration

- HP Scan Application (multifunction products only)

- HP LaserJet Send Fax Application (multifunction products only)

- HP LaserJet Fax Setup Utility (multifunction products only)

- HP LaserJet Fax Driver (multifunction products only)

📝 **NOTE:** The minimum software may be installed instead of the recommended by choosing **Click here for more install options** on the Software to Install screen.

The following operating systems support only the minimum software components:

- Windows Server 2003 32-bit (Service Pack 3)

- Windows Server 2008 32-bit and 64-bit

The minimum software includes the following components::

- HP LaserJet PCL 6 print driver

- HP Scan Application (multifunction products only)

- HP LaserJet Send Fax Application (multifunction products only)

- HP LaserJet Fax Setup Utility (multifunction products only)

- HP LaserJet Fax Driver (multifunction products only)

For information about Linux printer drivers, go to www.hp.com/go/linux.

For information about UNIX printer drivers, go to www.hp.com/go/jetdirectunix_software

OVERVIEW OF THE PRINTING-SYSTEM COMPONENTS

The Windows CD-ROM has software for IBM-compatible computer systems. For more information about a particular driver or software component, see its associated online help.

Drivers

A driver is software that allows software applications to access product features. Typically, you should install drivers for each product. The printing-system software CD-ROM that came with your device includes the following Windows drivers:

- HP PCL 6 print driver for the supported operating systems listed above

- HP WIA Scan driver that includes TWAIN compatibility.

Software Applications

- HP ToolboxFX

- HP LaserJet Help and Learn Center (provides access to the product user guide and troubleshooting information)

- Uninstaller

Additional drivers might be available from your Hewlett-Packard distributor or from online sources. See the "Technical Assistance" section of this document or the product user guide for more information about obtaining drivers and other HP software.

HP ToolboxFX

The printing system software includes HP ToolboxFX software. HP ToolboxFX provides product status information such as toner and paper levels as well as pop-up alert messages when the product requires attention. You can also use HP ToolboxFX to configure the product settings.

HP Help and Learn Center

The HP Help and Learn Center is installed with the recommended software set and provides access to product documentation and help. To view the product documentation without installing the recommended software, insert the CD-ROM into the CD-ROM drive. When the installer screen appears, click the documentation button on the left side of the screen.

Uninstaller

The Uninstaller allows you to remove Windows HP printing system components. See the "Uninstaller" section for instructions

II. INSTALLATION INSTRUCTIONS

The CD-ROM setup or installation software detects the version and language of the operating system that you are running.

INSTALLING SOFTWARE

NOTE: Administrator privileges are required to install the printing system.

NOTE: For USB installations DO NOT plug the USB cable into the computer and product until instructed to do so by the software

The following methods are available for installing printer drivers and software components.

- **Install Now**. This method installs the drivers and software. Recommended for most users.

- **Advanced Install Options**. Provides flexibility for installing your choice of drivers and software. Recommended for advanced users and system administrators.

INSTALLING SOFTWARE

NOTE: Connecting the product to the computer using a USB cable before installing software, also called "Plug and Play," is *not* recommended. See the installation guide for more information.

NOTE: Administrator privileges are required to install the printing system on all Windows operating systems.

1. Quit all programs.

2. Insert the CD-ROM.

3. If the HP printing-system installer program has not started after 30 seconds, complete steps 4 through 8.

4. Click **Start** and then select **Computer** or **My Computer** from the right hand Start menu

5. Browse to the root directory for the CD-ROM drive.

6. Double click the AUTORUN.EXE file.

7. When the main menu appears, click **Install** button to start the software installation.

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

Printing-system installation from the CD or Internet download for network and USB connections

📝 **NOTE:** If you download the printing-system or driver from the Internet, you might need to first run the EXE file(s). If SETUP.EXE does not run automatically, browse to its root location, double-click the file, and follow the onscreen instructions.

Port selection

When the installation process is complete, you might need to assign the product to a port on your network if you did not assign a port during setup. Perform one of the following procedures:

Windows XP, Windows Server 2003, or Windows Server 2008

1. Click **Start**, select **Settings**, select **Control Panel**, and then select **Printers**.

2. Select the printer that you just installed.

3. On the toolbar, click **File**.

4. Click **Properties**.

5. Click the **Port** tab to change the port information.

Windows Vista and Windows 7

1. Click **Start**, click **Control Panel**, and then in the category for **Hardware and Sound**, click **Printers** or **Devices and Printers**.

2. Right-click the printer that you just installed.

3. Click **Printer Properties**.

4. Click the **Port** tab to change the port information.

Printer driver only (Add Printer) - Windows XP, Windows Server 2003, and Windows Server 2008

1. Close all programs.

2. Click **Start**, click **Settings**, click **Control Panel**, and then click **Printers**.

3. Click **Add (a) printer**.

4. Answer the questions in the Add Printer Wizard until you reach the screen that shows the printer manufacturer list.

5. Click **Have Disk**.

6. Browse to the printer driver location using one of the following options:

   - **CD-ROM**: Browse to the \DRIVERS\[OS]\[PDL] directory for your operating system on the software CD.

   - **Internet download**: Browse to the folder where the Web files were downloaded and decompressed.

7. Select the appropriate INF file.

8. Click **Open**, and then click **OK**.

9. Select the appropriate printer.

10. Follow the remaining onscreen instructions to complete the printer installation.

Printer driver only (Add Printer) - Windows Vista and Windows 7

1. Close all programs.

2. Click **Start**, click **Control Panel**, and then click **Hardware and Sound**.

3. Under the **Printers** or **Devices and Printers** section, click **Add a printer**.

4. Select **Add Local Printer** and either use an existing port or create a new port.

   a. For a new port, select **Standard TCP/IP**.

   b. Enter the **IP Address** or **Host Name**.

5. Answer the questions in the Add Printer Wizard until you reach the screen that shows the printer manufacturer list.

6. Click **Have Disk**.

7. Browse to the printer driver location using one of the following options:

   - **CD-ROM**: Browse to the \DRIVERS\[OS]\[PDL] directory for your operating system on the software CD.

   - **Internet download**: Browse to the folder where the Web files were downloaded and decompressed.

8. Select the appropriate INF file.

9. Click **Open**, and then click **OK**.

10. Select the appropriate printer.

11. Follow the remaining onscreen instructions to complete the printer installation.

UNINSTALLER

The uninstall utility is available if the recommended or minimum software has been installed. The Uninstaller removes the HP printing system software components.

1. From the **Start** menu, select **All Programs**, and then click **HP**. If you have more than one HP product, choose the specific product and then click **Uninstall** from the program group.

2. Follow the onscreen instructions to complete the software uninstall.

III. LATE-BREAKING INFORMATION

KNOWN ISSUES AND WORKAROUNDS

General

- The SNMP Community Name can be set in HP ToolboxFX or the embedded Web server. If the Community Name is changed to something other than "public", network scanning stops working.

- Firewall software can interfere with the HP software installer. Disable the firewall before starting a network installation or the product might not be detected.

- Certain high-speed USB 2.0 cards ship with unsigned host controller drivers. If you have purchased a USB 2.0 add-in card and have an unsigned driver, you might experience driver installation problems or communication problems between the device and HP software. It is recommended that you always use a Microsoft WHQL Certified host controller driver with your USB hardware.

- Functionality is limited on systems that only meet minimum system requirements. Many images and videos require a system that meets the recommended system requirements for acceptable performance and reliability.

- If the product is not detected during software installation, check the following:

  ◦ Verify that your cable is Hi-Speed USB 2.0 compliant.

  ◦ Ensure that your cable is connected correctly. Remove the USB cable, look at the end of the cable, and then match it to the pattern on the USB port. Make sure that it is not upside down. Insert one end of the USB cable completely into the USB port on the HP product, and insert the other end into the back of the computer.

  ◦ Verify that the product is turned on. The product will not be discovered by the software if the power is off.

  ◦ Ensure that your USB cable is no more than 5 m (16.4 ft) in length.

  ◦ Verify that the USB port is enabled. Some computers ship with disabled USB ports.

Upgrading Windows

HP recommends that you uninstall HP products before upgrading to a newer supported version of Windows. For example, when upgrading from Windows Vista to Windows 7, uninstall your HP product using the Uninstaller program provided in the HP program group (see the Uninstaller section),

and then upgrade to the new operating system. After the operating system upgrade is complete, reinstall your HP product using the latest software available at HP.com

IV. TECHNICAL ASSISTANCE

CUSTOMER SUPPORT

For customer support information, see the user guide or the support flyer that was in the box, or call your local authorized HP dealer

WEB

You can also browse to the following URL(s) for online technical support:

- HP Color LaserJet CM1410 Series technical support: www.hp.com/support/CM1410series

- www.hp.com/go/support

HP SOFTWARE AND SUPPORT SERVICES - ADDITIONAL INFORMATION

See either the user guide or the in-box flyer for additional methods of obtaining software and support information, such as printer-driver distribution centers, other online services, fax services, and other online support.

V. LEGAL STATEMENTS

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