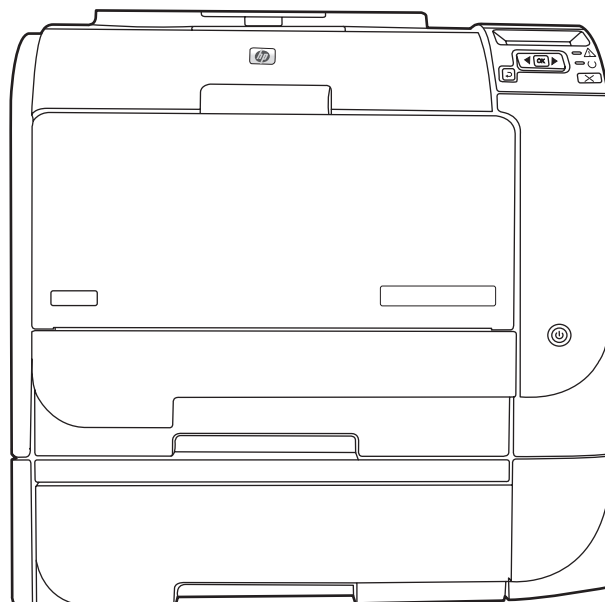


HP Color LaserJet CP2020 Series

Software Technical Reference



HP Color LaserJet CP2020 Series Printer
Software Technical Reference



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1 Purpose and scope

Introduction


This Software Technical Reference (STR) provides information about and troubleshooting tips for the printing-system software for the HP Color LaserJet CP2020 Series printers.

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

 **NOTE:** This STR describes software that is shipped on the software CD that comes with the HP Color LaserJet CP2020 Series printers. This STR does *not* describe drivers that will become available on the Web.

The following information is included in this technical reference:

- Overview of software and platforms
- Procedures for installing and uninstalling software components
- Descriptions of problems that can arise with the HP Color LaserJet CP2020 Series printer, and known solutions to those problems

 **NOTE:** An addendum to this STR describes system modification information, including file lists and changes to registry keys.

Topics:

- [Software technical reference overview](#)
- [Product comparison](#)
- [Documentation availability and localization](#)
- [Software availability and localization](#)

Software technical reference overview

The following table describes the structure of this STR.

Table 1-1 Software technical reference overview

Chapter	Content
Chapter 1, Purpose and scope	<p>This chapter contains basic information about the HP Color LaserJet CP2020 Series printer and its software:</p> <ul style="list-style-type: none"> ● Overview of the HP Color LaserJet CP2020 Series printer ● Printing-system software overview. This includes the following topics: <ul style="list-style-type: none"> ◦ System requirements ◦ Operating-system support ◦ Availability ● HP LaserJet software documentation
Chapter 2, Software description	<p>This chapter provides an overview of the printing-system software installer and print drivers.</p> <p>This chapter also contains general information about other software features, including the following topics:</p> <ul style="list-style-type: none"> ● HP Embedded Web Server (HP EWS) ● HP ToolboxFX
Chapter 3, Install Windows printing-system components	<p>This chapter provides instructions for installing the HP Color LaserJet CP2020 Series printer in Microsoft® Windows® operating systems by using various installation methods.</p>
Chapter 4, HP PCL 6 print driver and HP PS Universal Print Driver for Windows	<p>This chapter provides detailed descriptions of the HP drivers for Microsoft Windows 2000, Windows® XP, Windows Server 2003, and Windows Vista®.</p>
Chapter 5, Macintosh software and utilities	<p>This chapter provides instructions for installing the HP Color LaserJet CP2020 Series printer in Macintosh operating systems and how to use Macintosh features.</p>
Chapter 6, Engineering details	<p>This chapter contains information about the following special topics:</p> <ul style="list-style-type: none"> ● Troubleshooting ● Media attributes ● Firmware upgrades ● <i>HP Color LaserJet CP2020 Series Printing-System Install Notes</i>

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

Additional detailed information about the HP Color LaserJet CP2020 Series printing-system software is published in an addendum to this STR. The following information is available only in the addendum:

- Lists of installed files
- System-modification information, such as changes to the registry and registry keys

Product comparison

HP Color LaserJet CP2020 Series Printer

- Prints up to 21 pages per minute (ppm) on letter- and A4-sized paper.
- 50-sheet multipurpose tray (tray 1) and 250-sheet input tray (tray 2)
- Optional 250-sheet input tray (tray 3) (standard on HP Color LaserJet CP2025x)
- Hi-Speed universal serial bus (USB) 2.0 port
- Built-in networking to connect to 10Base-T/100Base-TX networks (HP Color LaserJet CP2025n, HP Color LaserJet CP2025dn, and HP Color LaserJet CP2025x)
- Automatic duplexer (HP Color LaserJet CP2025dn and HP Color LaserJet CP2025x)

Product features

Print	<ul style="list-style-type: none"> ● Prints up to 21 pages per minute (ppm) on letter-size paper. ● Prints at 600 dots per inch (dpi). ● Includes adjustable settings to optimize print quality. ● The print cartridges use HP ColorSphere toner. For information about the number of pages the cartridges can print, see www.hp.com/go/pageyield. Actual yield depends on specific use. ● Offers automatic duplexing (HP Color LaserJet CP2025dn and HP Color LaserJet CP2025x only).
Memory	<ul style="list-style-type: none"> ● Includes 128-megabyte (MB) random-access memory (RAM).
Supported operating systems	<p>Macintosh</p> <ul style="list-style-type: none"> ● Mac OS X V10.3.9 and later <p>Windows</p> <ul style="list-style-type: none"> ● Express Install only <ul style="list-style-type: none"> ◦ Windows 2000 ◦ Windows XP (64-bit) ◦ Windows Server 2003 (32-bit) ◦ Windows Vista Starter ● Express and Recommended Install <ul style="list-style-type: none"> ◦ Windows XP (32-bit) ◦ Windows Vista (32-bit) ◦ Windows Vista (64-bit) ● Not Supported <ul style="list-style-type: none"> ◦ Windows Server 2003 (64-bit) ◦ Windows Server 2000

Paper handling	<ul style="list-style-type: none">● Tray 1 (multipurpose tray) holds up to 50 sheets of paper or 10 envelopes.● Tray 2 holds up to 250 sheets of paper.● Optional Tray 3 holds up to 250 sheets of paper.● Output bin holds up to 125 sheets of paper.
Printer driver features	<ul style="list-style-type: none">● ImageREt 3600 produces 3600 dpi print quality for fast, high-quality printing of business text and graphics.
Interface connections	<ul style="list-style-type: none">● Includes a Hi-Speed USB 2.0 port.● Built-in networking to connect to 10Base-T/100Base-TX networks.
Environmental features	<ul style="list-style-type: none">● To determine the ENERGY STAR® qualification status for this product, see the Product Data Sheet or Specifications Sheet.
Economical printing	<ul style="list-style-type: none">● Provides N-up printing (printing more than one page on a sheet).● The print driver provides the option to manually print on both sides.
Supplies	<ul style="list-style-type: none">● Uses print cartridges with HP ColorSphere toner.
Accessibility	<ul style="list-style-type: none">● Online user guide is compatible with text screen-readers.● Print cartridges can be installed and removed by using one hand.● All doors and covers can be opened by using one hand.

Documentation availability and localization

The documentation in the following table is available for the HP Color LaserJet CP2020 Series printer.

Table 1-2 User documentation availability and localization

Document name	Languages	Location
<i>HP Color LaserJet CP2020 Series Printer User Guide</i>	English	The <i>HP Color LaserJet CP2020 Series Printer User Guide</i> is available in electronic format on the HP Color LaserJet CP2020 Series printer printing-system software CD.
	Arabic	
	Bulgarian	
	Catalan	
	Chinese (Simplified)	
	Chinese (Traditional)	
	Croatian	
	Czech	
	Danish	
	Dutch	
	Estonian	
	Finnish	
	French	
	German	
	Greek	
	Hebrew	
Hungarian		
Indonesian (Bahasa)		

Table 1-2 User documentation availability and localization (continued)

Document name	Languages	Location
<i>HP Color LaserJet CP2020 Series Printer User Guide (cont)</i>	Italian	The <i>HP Color LaserJet CP2020 Series Printer User Guide</i> is available in electronic format on the HP Color LaserJet CP2020 Series printer printing-system software CD.
	Japanese	
	Kazakh	
	Korean	
	Latvian	
	Lithuanian	
	Norwegian	
	Polish	
	Portuguese (Brazilian)	
	Romanian	
	Russian	
	Serbian	
	Spanish	
	Slovak	
	Slovenian	
	Swedish	
	Thai	
Turkish		
Ukrainian		
Vietnamese		

Table 1-2 User documentation availability and localization (continued)

Document name	Languages	Location
<i>HP Color LaserJet CP2020 Series Printer Getting Started Guide</i>	<ul style="list-style-type: none"> • English • French • Italian • German • Spanish • Catalan • Portuguese (Brazilian) • Dutch • Hebrew 	<p>The <i>HP Color LaserJet CP2020 Series Printer Getting Started Guide</i> is available in hard copy and comes in the box with your HP Color LaserJet CP2020 Series printer.</p> <p>The HP Color LaserJet CP2020 Series printing-system software CD also includes an animated version of the <i>HP Color LaserJet CP2020 Series Printer Getting Started Guide</i>.</p>
	<ul style="list-style-type: none"> • English • Danish • Finnish • Norwegian • Swedish • Lithuanian • Latvian • Estonian 	
	<ul style="list-style-type: none"> • English • Arabic • Turkish • Greek • Russian • Kazakh • Ukrainian • Bulgarian • French 	
	<ul style="list-style-type: none"> • English • Polish • Hungarian • Czech • Croatian • Romanian • Slovenian • Slovak • Serbian 	

Table 1-2 User documentation availability and localization (continued)


Document name	Languages	Location
<i>HP Color LaserJet CP2020 Series Printer Getting Started Guide (cont)</i>	<ul style="list-style-type: none"> • English • Thai • Indonesian (Bahasa) • Korean • Simplified Chinese • Traditional Chinese • Japanese • Vietnamese 	
<i>HP Paper and Print Media Guide</i>	English Arabic Bulgarian Catalan Czech Danish German Greek Spanish Estonian Finnish French Hebrew Croatian Hungarian Indonesian (Bahasa) Italian Japanese	<i>HP Paper and Print Media Guide</i> is included on the HP Color LaserJet CP2020 Series printer printing-system software CD.

Table 1-2 User documentation availability and localization (continued)

Document name	Languages	Location
<i>HP Paper and Print Media Guide (cont)</i>	Kazakh	<i>HP Paper and Print Media Guide</i> is included on the HP Color LaserJet CP2020 Series printer printing-system software CD.
	Korean	
	Lithuanian	
	Latvian	
	Dutch	
	Norwegian	
	Polish	
	Portuguese (Brazilian)	
	Romanian	
	Russian	
	Slovak	
	Slovenian	
	Serbian	
	Swedish	
	Thai	
	Turkish	
	Ukrainian	
Vietnamese		
Simplified Chinese		
Traditional Chinese		

Software availability and localization

Download the printing-system software from the Web, or order it on a CD from HP fulfillment centers.

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

The following table lists the availability of HP Color LaserJet CP2020 Series printer software components by installation method.

Table 1-3 HP Color LaserJet CP2020 Series software components by installation method

	Recommended Install	Express Install	Add Printer ¹
Supported Windows operating systems			
Windows XP 32-bit	X	X	X
Windows XP 64-bit	X	X	X
Windows Vista 32-bit	X	X	X
Windows Vista 64-bit	X	X	X
Windows 2000		X	X
Windows Server 2003 32-bit		X	X
Windows Server 2003 64-bit			X ²
Components installed			
HP PCL 6 print driver	X	X	X
HP PS Universal Print Driver			X ³
HP ToolboxFX w/Alerts	X		
SNP Alerts		X	X
Screen fonts	X		
Shop for HP supplies (desktop shortcut)	X		
Customer Participation Program 9.0	X		
HP Update	X		
Warranty Reminder (timed pop-up)	X		

¹ An Add-Printer Installation is supported, however, HP recommends using the Express Install option.

² The 64-bit HP PCL 6 driver can be found on the root of the HP Color LaserJet CP2020 Series software CD.

³ The 32-bit and 64-bit HP PS Universal Print Drivers found on the following Web site: www.hp.com/go/ljcp2020series_software. A link to this web site is available on the HP Color LaserJet CP2020 Series software CD under the **Install More Software** option.

Available from

Components

HP.com — links from Install More Software button on the HP Color LaserJet CP2020 Series software CD	HP PS Universal Print Driver
	Easy Printer Care
	Basic Color Match tool (Windows Vista and XP only)
	HP Smart Web Printing (Windows Vista and XP only)
	Marketing Resource Software (Windows Vista and XP only)

Topics:

- [Printing-system software on the Web](#)
- [In-box printing-system software CDs](#)

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 HP Web site offers an option for automatic e-mail notification about new software releases.

The HP Color LaserJet CP2020 Series printer printing-system software is available for download at the following Web site:

www.hp.com/go/ljcp2020series_software

In-box printing-system software CDs

The software CD for the HP Color LaserJet CP2020 Series printer contains a variety of files for installing the printing-system software on the computer.

The HP Color LaserJet CP2020 Series printing-system software CD is divided into two partitions, one for each of the following operating platforms:

- MS Windows
- Macintosh

Each partition includes the necessary software and files that are required to install and uninstall the printing-system components.

CD versions

The HP Color LaserJet CP2020 Series printing-system software CD is available in four versions, each of which contains printing-system software in various languages:

- **Americas/ Western Europe**
 - EN = English
 - CA = Catalan (Català)
 - HE = Hebrew
 - IT = Italian (Italiano)

- ES = Spanish (Español)
- NL = Dutch (Nederland)
- FR = French (Français)
- DE = German (Deutsch)
- PT = Brazilian Portuguese (Português)
- **Northern Europe**
 - EN = English
 - ET = Estonian (English driver)
 - DA = Danish (Dansk)
 - LV = Latvian (English driver)
 - LT = Lithuanian (English driver)
 - SV = Swedish (Svenska)
 - FI = Finnish (Suomi)
 - NO = Norwegian (Norsk)
- **Eastern Europe**
 - EN = English
 - AR = Arabic
 - BG = Bulgarian (English driver)
 - CS = Czech (Cesky)
 - HR = Croatian (English driver)
 - FR = French (Français)
 - EL = Greek
 - HU = Hungarian (Magyar)
 - KK = Kazakh (English driver)
 - PL = Polish (Polski)
 - RO = Romanian (English driver)
 - RU = Russian (Russ)
 - SR = Serbian (English driver)
 - SK = Slovak
 - SL = Slovenian (English driver)

- TR = Turkish (Turkçe)
- UK = Ukrainian (English driver)
- **Asia Pacific**
 - EN = English
 - JA = Japanese
 - ID = Indonesia (Bahasa) (English driver)
 - KO = Korean
 - ZHCN = Simplified Chinese
 - ZHTW = Traditional Chinese
 - TH = Thai
 - VI = Vietnamese (English driver)

2 Software description

Introduction

The HP Color LaserJet CP2020 Series printer comes with software and installers for Microsoft Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX® systems also support the HP Color LaserJet CP2020 Series printer, and software is available on the Web. For information about specific system installers, drivers, and components, see the section that corresponds to that system.

- [Windows printing-system software](#)
- [HP driver diagnostic printer check tool](#)
- [Advanced color use](#)
- [Match colors](#)
- [HP Basic Color Match tool](#)
- [HP Easy Printer Care](#)
- [HP ToolboxFX](#)
- [HP Embedded Web Server](#)
- [HP Customer Participation Program](#)
- [Optional software](#)
- [Font support](#)

Windows printing-system software

Topics:

- [Printing system and installer](#)
- [HP Color LaserJet CP2020 Series print drivers](#)

Printing system and installer

Topics:

- [HP Color LaserJet CP2020 Series printing-system software CD for MS Windows systems](#)
- [Installer features](#)

HP Color LaserJet CP2020 Series printing-system software CD for MS Windows systems

The following Windows operating system versions are supported by the HP Color LaserJet CP2020 Series printer:

- **Express Install only**
 - Windows 2000
 - Windows XP (64-bit)
 - Windows Server 2003 (32-bit)
 - Windows Vista Starter
- **Express and Recommended Install**
 - Windows XP (32-bit)
 - Windows Vista (32-bit)
 - Windows Vista (64-bit)
- **Not Supported**
 - Windows Server 2003 (64-bit)
 - Windows Server 2000

In supported Windows operating systems, insert the HP Color LaserJet CP2020 Series printing-system software CD in the CD-ROM drive to open the HP Color LaserJet CP2020 Series Animated Getting Started Guide. To open the installation CD browser, close the HP Color LaserJet CP2020 Series Animated Getting Started Guide.

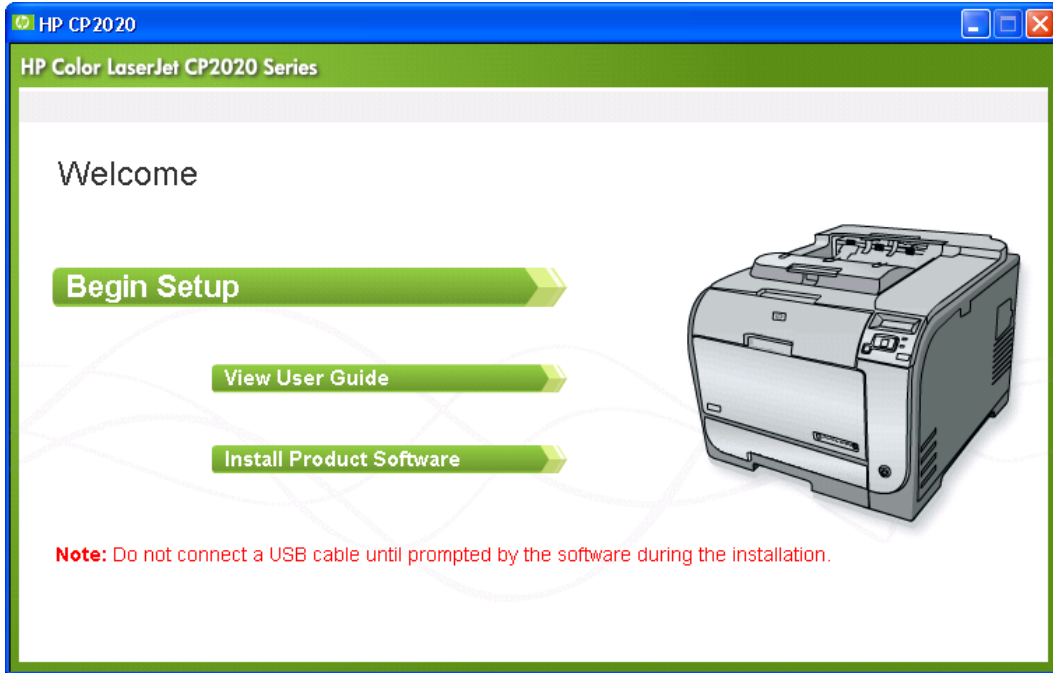
See the following for information about the opening screens of the HP Color LaserJet CP2020 Series Animated Getting Started Guide and CD browser.

HP Color LaserJet CP2020 Series Animated Getting Started Guide

Use the HP Color LaserJet CP2020 Series Animated Getting Started Guide to set up the HP Color LaserJet CP2020 Series printer.

The following figure shows the main screen of the HP Color LaserJet CP2020 Series Animated Getting Started Guide.

Figure 2-1 HP Color LaserJet CP2020 Series Animated Getting Started Guide – Main screen



If the screen does not appear when you insert the software CD into the CD-ROM drive, follow these steps to open the CD browser:

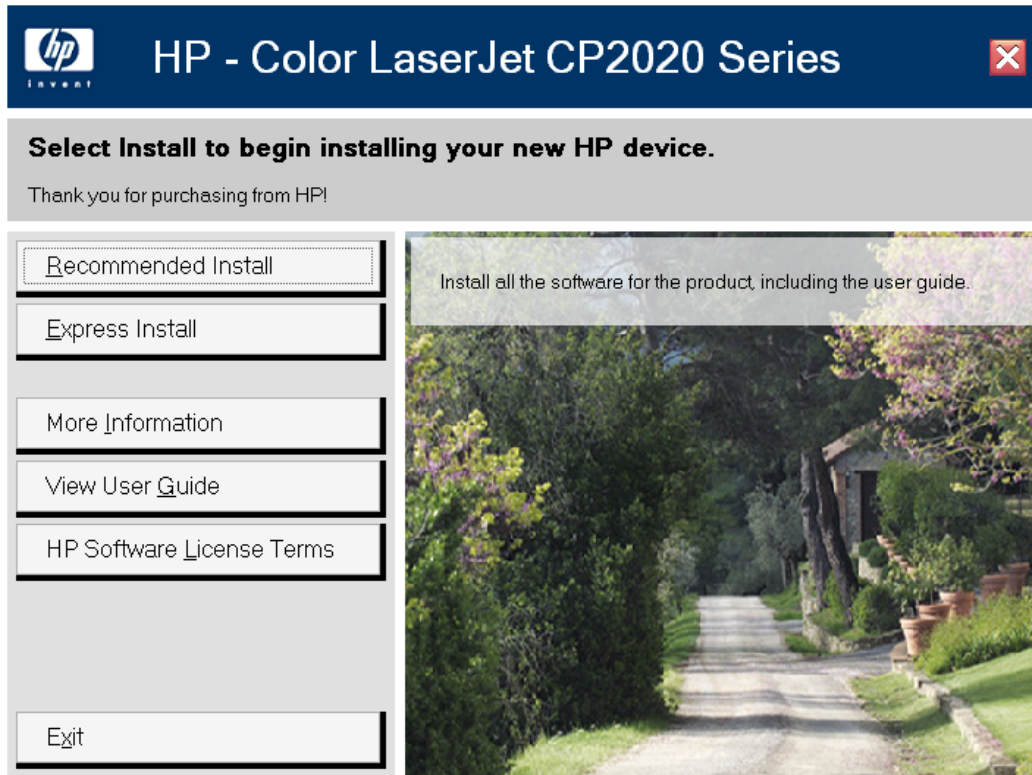
1. Click **Start**.
2. Click **Run**.
3. Click **Browse...** and navigate to the root directory of the software CD.
4. Double-click the **AUTORUN.EXE** file to start the Animated Getting Started Guide.

HP Color LaserJet CP2020 Series printing-system CD browser


Use the CD browser to install the drivers and related components, and to gain access to online user documentation, a customization utility, and optional HP software.

The following figure shows the main screen of the HP Color LaserJet CP2020 Series printing-system software CD.

Figure 2-2 Installation software CD browser



The main screen of the software CD browser contains installation and documentation options in the left panel. Move the cursor over each option to see a description of the option in the right panel.

 **NOTE:** The options available for each product might differ from those in the figure.

CD browser main menu	Description
Recommended Install	<p>Install the software for the product, including the user guide. Clicking this option launches the software installer. You are prompted to choose one of the following options during the installation process.</p> <ul style="list-style-type: none">● Easy Install (recommended). By selecting this option, you accept the installation agreements and default settings.● Advanced Install. By selecting this option, you prefer to review all the installation agreements and default settings, including the opportunity to choose what software is installed.

Express Install	<p>Install the minimum software for the product. Clicking this option opens a screen with the following options.</p> <ul style="list-style-type: none"> ● Express USB Install. Install the minimum software for a product that uses a direct USB connection. Clicking this button indicates your acceptance of HP's Software License terms. ● Express Network Install. Install the minimum software for a product that is connected to a network. Clicking this button indicates your acceptance of HP's Software License terms. ● HP Software License Terms. View the HP Software License Terms. ● Back. Return to the previous screen.
More Information	<p>Get access to product support on the Web or to other product help and useful tips. The following are available on this screen.</p> <ul style="list-style-type: none"> ● Read Me First. Open the latest information about the product. This selection opens the <i>HP Color LaserJet CP2020 Series Printer Install Notes</i>. ● Optimizing Print Quality (video) Watch a short video that shows the simple steps to getting the best print quality when printing on special paper such as cardstock, heavy paper, or transparencies. ● Product Support Website. Go to HP's website to view troubleshooting help and frequently asked questions. Download software updates. Contact a support specialist through live chat. ● View User Guide. Open the product user guide on this CD. The user guide is also available in a print-friendly PDF format. To access the PDF version, either browse this CD, and open the preferred language folder, or go to the Product Support website. <p>NOTE: You must have Adobe Acrobat Reader installed on the computer to read documents in .PDF format. Adobe Acrobat Reader is available as a free download at the following Web site:</p> <p>www.adobe.com</p> <ul style="list-style-type: none"> ● Animated Getting Started Guide. See videos of how to properly set up your product. ● Back. Return to the previous screen.
View User Guide	Open the product user guide on this CD (CHM version).
HP Software License Terms	View the HP Software License Terms.
Exit	Close this application.

Installer features

The common installer is designed to provide a simple and consistent installation method for the printer. The common installer is available for Microsoft Windows operating systems as listed below:

- **Express Install only**
 - Windows 2000
 - Windows XP (64-bit)

- Windows Server 2003 (32-bit)
- Windows Vista Starter
- **Express and Recommended Install**
 - Windows XP (32-bit)
 - Windows Vista (32-bit)
 - Windows Vista (64-bit)
- **Not Supported**
 - Windows Server 2003 (64-bit)
 - Windows Server 2000

The common installer offers the following features:

- The HP Color LaserJet CP2020 Series printing-system software CD features an interactive software interface.
- Network connection is integrated so that you can install drivers and connect to a networked printer in a single process.

The HP Color LaserJet CP2020 Series printing-system software CD also includes the following features:

- The HP LaserJet Uninstaller Utility
- Yahoo toolbar option

All of the MS Windows system components are installed by using the HP Color LaserJet CP2020 Series printing-system installer. The installer automatically detects the language of the operating system. See [Documentation availability and localization on page 5](#).

Select from the following types of installation:


- Recommended:
 - Easy (recommended)
Choose either USB or network installation.
 - Advanced Install
Choose either USB or network installation.
- Express:
 - USB
 - Network

HP Color LaserJet CP2020 Series print drivers

HP Color LaserJet CP2020 Series print drivers provide the printing features and communication between the computer and the printer. The printing system includes software for end users and network administrators who are working in the following operating environments:

The following Windows operating system versions are supported by the HP Color LaserJet CP2020 Series printer:

- **Express Install only**
 - Windows 2000
 - Windows XP (64-bit)
 - Windows Server 2003 (32-bit)
 - Windows Vista Starter
- **Express and Recommended Install**
 - Windows XP (32-bit)
 - Windows Vista (32-bit)
 - Windows Vista (64-bit)
- **Not Supported**
 - Windows Server 2003 (64-bit)
 - Windows Server 2000

 **NOTE:** For the latest information about the printing-system software components and additional information about installing the printing-system software, see the *HP Color LaserJet CP2020 Series Printing-System Install Notes* on the printing-system software CD.

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

Topics:

- [Select the best print driver](#)
- [HP print drivers](#)
- [Driver version numbers for MS Windows operating systems](#)

Select the best print driver

HP print drivers are designed for different environments and uses. See the print driver Help for available features.

Topics:

- [Complete LaserJet printing system \(Recommended Install\)](#)
- [HP PCL 6](#)
- [HP PS Universal Print Driver](#)

Complete LaserJet printing system (Recommended Install)

Use the printing-system software CD and choose the Recommended Install to install the HP PCL 6 driver and the full set of other software available for the HP Color LaserJet CP2020 Series printer. The HP PCL 6 driver is also available through the Express Install option and through the Add Printer Wizard.

HP PCL 6

Overall, the HP PCL 6 provides the best performance, print quality, and printer-feature support for most users. The driver aligns with MS Windows graphic device interface (GDI) for best performance in MS Windows environments.

The HP PCL 6 may not be fully compatible with third-party and custom solutions that are based on PCL 5.

Print Data Optimization

The HP Color LaserJet CP2020 Series printer is the first to offer Print Data Optimization (also known as hybrid printing). Implementation of this feature required changes to both the software (print driver) and the printer's firmware. The benefit of this feature is that files will print faster without any degradation of print quality. Print Data Optimization is a combination of the best of Page Description Language (PDL) printing with the best of host-based printing.

Print Data Optimization printing is possible only with the HP PCL 6 print driver. The Print Data Optimization feature allows the print job to use the host memory to ensure quick and high-quality printing. The print driver can be set to print like a host-based printer all the time (**Optimize for Raster**), a standard PCL printer all the time (**Optimize for Text and Vector**), or a mixture of both (**Auto**) depending upon the application you are printing from. By default, the feature is set to **Auto**. This sends data to the printer like a host-based print driver using the **Optimize for Raster** path for the list of applications below and the **Optimize for Text and Vector** path for all other applications. The feature is set in the **Advanced** tab of the Printing Preferences of the HP PCL 6 print driver.

Applications that cause use of the Raster path

- AutoCad (ACAD.EXE)
- Adobe Acrobat (ACROBAT.EXE)
- Adobe Reader (ACRORD32.EXE)
- CorelDRAW® (CORELDRW.EXE)
- Adobe Illustrator (ILLUSTRATOR.EXE)
- Adobe PhotoShop® (PHOTOSHP.exe or PHOTOSHOP.EXE)
- Microsoft PowerPoint (POWERPOINT.EXE)
- Quark Express (QUARKXPRESS.EXE)

Print Data Optimization is a feature that is only available in Windows printing. When the product is installed in the Windows environment, Print Data Optimization printing is automatically enabled. The Print Data Optimization feature is not available for Mac, Linux, or other operating systems.


The following Print Data Optimization options are available; Auto is selected by default.

- **Auto**. The default mode. In this mode, the driver behaves like a host-based printer only for the applications listed above and behaves like a standard PCL6 print driver for all other applications.
- **Optimize for Raster**. In this mode, the print driver always sends data like a host-based print driver.
- **Optimize for Text and Vector**. In this mode, the print driver always sends data like a standard PCL6 print driver.

The Print Data Optimization feature can be changed from **Auto** to **Optimize for Raster** or **Optimize for Text and Vector**.

Selecting **Optimize for Raster** causes the driver to always use the Raster path when printing; and, selecting **Optimize or Text and Vector** causes the driver to always use the PDL path.

HP PS Universal Print Driver

 **NOTE:** The HP PS Universal Print Driver is available for download from the HP Web site: www.hp.com/go/ljcp2020series_software. A link to the download page is also available from the **More Software** screen on the HP Color LaserJet CP2020 Series software CD.

The Universal Print Drivers are designed for corporate or IT-managed MS Windows environments. These drivers provide a single-driver solution for use with multiple printer models.

The HP Universal Print Drivers are recommended when printing to multiple printer models or from a mobile MS Windows computer.

- Provide a single-driver solution for use with multiple printer models — Designed for corporate or IT-managed Windows environments
- Preferred when printing in an enterprise or managed print server environment to multiple printer models in either a static or mobile print environment

The HP PS Universal Print Driver is recommended for printing with Adobe or other graphics-rich software programs. The driver is compatible with Adobe® PostScript® level-3 and supports postscript font DIMMs.


Use the HP PS Universal Print Driver in primarily postscript-specific software programs such as Adobe Photoshop, Adobe PageMaker, and CorelDRAW.

HP print drivers

The HP PCL 6 driver is available on the HP Color LaserJet CP2020 Series printing-system software CD for Windows operating system as listed below:

- **Express Install only**
 - Windows 2000
 - Windows XP (64-bit)
 - Windows Server 2003 (32-bit)
 - Windows Vista Starter
- **Express and Recommended Install**
 - Windows XP (32-bit)
 - Windows Vista (32-bit)
 - Windows Vista (64-bit)
- **Not Supported**
 - Windows Server 2003 (64-bit)
 - Windows Server 2000

The HP PS Universal Print Driver for Microsoft Windows 2000, Windows XP (32-bit and 64-bit), Windows Server 2003 (32-bit and 64-bit), and Microsoft Windows Vista (32-bit and 64-bit) is available for download from the HP Web site: www.hp.com/go/ljcp2020series_software. A link to the download page is also available from the **More Software** screen on the HP Color LaserJet CP2020 Series software CD.

 **NOTE:** During a Recommended Install from the printing-system software CD, the HP PCL 6 driver is installed by default. The HP PS Universal Print Driver can be downloaded and then installed through the Add Printer Wizard.


See the following table for detailed information regarding which driver versions are available using each install method and operating system.

Table 2-1 Drivers included with the HP Color LaserJet CP2020 Series printing-system software

Install method/Operating system	HP PCL 6	HP PS Universal Print Driver
Express Install only		
Microsoft Windows 2000	X	
Microsoft Windows Server 2003 (32-bit)	X	
Microsoft Windows XP (64-bit)	X	
Microsoft Windows Vista (Starter)	X	
Recommended and Express Install		
Microsoft Windows XP (32-bit)	X	
Microsoft Windows Vista (32-bit and 64-bit)	X	
Add Printer Wizard Install		
Microsoft Windows 2000	X	X
Microsoft Windows Server 2003 (32-bit)	X	X
Microsoft Windows XP (32-bit and 64-bit)	X	X
Microsoft Windows Vista (32-bit and 64-bit)	X	X
Macintosh install		
Macintosh OS	X	

Driver version numbers for MS Windows operating systems

Access to driver version numbers varies, depending on the operating system in which the HP Color LaserJet CP2020 Series printer is installed.

 **NOTE:** For a list of HP Color LaserJet CP2020 Series print drivers, updated HP printing-system software, and product-support information, go to:

www.hp.com/support/ljcp2020series

The Microsoft Windows 2000, Windows XP, Windows Server 2003, and Microsoft Windows Vista operating systems support the HP PCL 6 print driver and the HP PS Universal Print Driver. If you are

using an HP print driver in a Microsoft Windows 2000, Windows XP, Windows Server 2003, or Microsoft Windows Vista environment, follow these steps to find driver-version information:

1. In Windows Vista, click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

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

-or-

In Windows XP Home, click **Start**, click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

-or-

In Windows 2000, click **Settings**, and then click **Printers**.

2. Right-click the product icon.
3. Click **Properties**.
4. Click the **About** tab. To determine the latest version, view the overall build number (in parentheses after the model name).

HP driver diagnostic printer check tool

Use the HP driver diagnostic printer check tool, a Web-based diagnostic software program, to determine whether the correct and most current print driver for the HP Color LaserJet CP2020 Series printer is in use. Two methods are available to gain access to the HP driver diagnostic printer check tool:

1. Open a Web browser.
2. Go to the following Web site:

www.hp.com/go/drivercheck

When the HP driver diagnostic printer check tool runs, the products that are currently installed on the computer appear in a list. The tool gathers information about the product, drivers, and system setup in order to diagnose the software driver configuration and check the print driver.

When the HP driver diagnostic printer check tool is open, select the HP product that you want to check. The tool verifies whether the latest driver is being used, provides feedback if an incorrect driver is being used, and indicates whether an updated driver version is available. Click the latest driver version to download and install 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.

Advanced color use

The product provides automatic color features that generate excellent color results. Carefully designed and tested color tables provide smooth, accurate color rendition of all printable colors.

The product also provides sophisticated tools for the experienced professional.

HP ColorSphere toner

HP designs the print system (printer, print cartridges, toner, and paper) to work together to optimize print quality, product reliability, and user productivity. Original HP print cartridges contain HP ColorSphere toner that is specifically matched to your printer so that it will produce a wide range of brilliant colors. This helps you create professional looking documents that contain sharp, clear text and graphics and realistic printed photos.

HP ColorSphere toner produces print-quality consistency and intensity you can depend on across a wide range of papers. That means you can produce documents that help you make the right impression. Plus, HP professional-quality everyday and specialty papers (including a wide variety of HP paper types and weights) are designed for the way you work.

HP ImageREt 3600

ImageREt 3600 provides 3600 dots-per-inch (dpi) color laser-class quality through a multi-level printing process. This process precisely controls color by combining up to four colors within a single dot and by varying the amount of toner in a given area. ImageREt 3600 has been improved for this product. The improvements offer trapping technologies, greater control over dot placement, and more precise control of toner quality in a dot. These new technologies, coupled with HP's multi-level printing process, result in a 600 x 600 dpi printer that provides 3600-dpi color laser-class quality with millions of smooth colors.

In contrast, the single-level printing process found in the default mode of other color laser printers does not allow the colors to be mixed within a single dot. This process, called dithering, significantly hinders the ability to create a wide range of colors without reduced sharpness or visible dot structure.

Media selection

For the best color and image quality, select the appropriate paper type from the **Paper/Quality** tab in the Printing Preferences of the print driver.


Color options

Color options automatically provide optimal color output. These options use object tagging, which provides optimal color and halftone settings for different objects (text, graphics, and photos) on a page. The print driver determines which objects appear on a page and uses halftone and color settings that provide the best print quality for each object.

In the Windows environment, the **Automatic** and **Manual** color options are on the **Color** tab in the print driver.

Standard red-green-blue (sRGB)

Standard red-green-blue (sRGB) is a worldwide color standard that HP and Microsoft developed as a common color language for monitors, input products (scanners and digital cameras), and output products (printers and plotters). It is the default color space used for HP products, Microsoft operating systems, the World Wide Web, and most office software. The sRGB standard represents the typical Windows monitor and is the convergence standard for high-definition television.

 **NOTE:** Factors such as the type of monitor you use and the room lighting can affect the appearance of colors on your screen. For more information, see [Match colors on page 29](#).

The latest versions of Adobe PhotoShop, CorelDRAW, Microsoft Office, and many other programs use sRGB to communicate color. Because it is the default color space in Microsoft operating systems, sRGB has been adopted broadly. When programs and products use sRGB to exchange color information, typical users experience greatly improved color matching.

The sRGB standard improves your ability to match colors between the product, the computer monitor, and other input products automatically, and eliminates the need to become a color expert.

Use color themes to adjust the **RGB Color** options for the entire page.

Setting description	Setting options
RGB Color	<ul style="list-style-type: none">● Default (sRGB) instructs the product to interpret RGB color as sRGB. The sRGB standard is the accepted standard of Microsoft and the World Wide Web Consortium (http://www.w3.org).● Vivid instructs the product to increase the color saturation in the midtones. Less colorful objects are rendered more colorfully. This setting is recommended for printing business graphics.● Photo interprets RGB color as if it were printed as a photograph using a digital mini-lab. It renders deeper, more saturated colors differently than Default (sRGB) mode. Use this setting for printing photos.● Photo (AdobeRGB 1998) is for digital photos that use the AdobeRGB color space rather than sRGB. When printing from a professional software program that uses AdobeRGB, it is important to turn off the color management in the software program and allow the product to manage the color space.● None sets the printer to print RGB data in raw device mode. To render photographs correctly when this option is selected, you must manage color in the program in which you are working or in the operating system.

Match colors

The process of matching printer output color to your computer screen is complex, because printers and computer monitors use different methods of producing color. Monitors *display* colors by using light pixels that use an RGB (red, green, blue) color process, but printers *print* colors by using a CMYK (cyan, magenta, yellow, and black) process.

Several factors can influence your ability to match printed colors to those on your monitor:

- Paper
- Printer colorants (inks or toners, for example)
- Printing process (inkjet, press, or laser technology, for example)
- Overhead lighting
- Personal differences in perception of color
- Software programs
- Printer drivers
- Computer operating systems
- Monitors
- Video cards and drivers
- Operating environment (humidity, for example)

Keep these factors in mind when colors on your screen do not perfectly match your printed colors.

For most users, the best method for matching colors is to print sRGB colors.

Use HP ToolboxFX to print the Microsoft Office Basic Colors palette

You can use HP ToolboxFX to print a palette of the Microsoft Office Basic Colors. Use this palette to select the colors that you want to use in printed documents. It shows the actual colors that print when you select these basic colors in a Microsoft Office program.

1. In HP ToolboxFX, click the **Help** folder.
2. Click **Color Printing Tools**, and then click **Print Basic Colors**.

HP Basic Color Match tool

The HP Basic Color Match tool allows you to adjust spot color in your printed output. For example, you can match the color of your company logo on your printed output. You can save and use the new color themes for specific documents or all printed documents, or you can create multiple color themes that you can choose from later.

The HP Basic Color Match tool can be downloaded from one of the following:


- HP Web site: www.hp.com
- HP ToolboxFX
- **Install more software** option on the HP Color LaserJet CP2020 Series printing-system software CD

Use HP ToolboxFX to download the HP Basic Color Match tool

1. In HP ToolboxFX, select the **Help** folder.
2. In the **Color Printing Tools** section, select **Basic Color Match**. This opens an HP.com Web page from which you can download the Basic Color Match tool.

HP Easy Printer Care

HP Easy Printer Care is a standalone software program that manages from 1 to 15 printers. It enables you to view the status of all HP printers, set up printer and status alerts, generate printer usage reports, and reorder supplies.

 **NOTE:** The HP Easy Printer Care Software will be available for the HP Color LaserJet CP2020 Series printer in early 2009 at the following Web site:

www.hp.com/go/easyprintercare

Or, on the printing-system CD, click **Install More Software**, and then click **HP Easy Printer Care** to be redirected to the HP Web site.

HP ToolboxFX

This section provides information about the following topics:

- [HP ToolboxFX overview](#)
- [System requirements](#)
- [Key features](#)
- [HP ToolboxFX folders](#)
- [Other screens](#)

HP ToolboxFX overview

 **NOTE:** HP ToolboxFX is available for Microsoft Windows XP and Windows Vista operating systems only. HP ToolboxFX is only available with a recommended install. It is not installed during an Express Install.

HP ToolboxFX allows end users to easily communicate with and manage the HP Color LaserJet CP2020 Series printer. HP ToolboxFX provides the following capabilities:

- A view of the current status of the product
- A view of the current status of the product consumables
- Alert functionality, notifying the end user when particular events or conditions occur at the product
- Access to troubleshooting information
- Access to some of the product settings, as an alternative to gaining access through the product control panel

The HP Embedded Web Server (HP EWS) and HP ToolboxFX

The HP Color LaserJet CP2020 Series printer supports the HP Embedded Web Server (HP EWS). The HP EWS handles HP ToolboxFX requests and HTTP requests from a Web browser. Use the HP EWS to set objects in the product, such as default configuration settings, and to simulate button presses.

The HP EWS provides the following functionality:

- The HP EWS is can be opened by typing the printer IP address into the address bar of a browser when the printer is connected to the network.
- HP ToolboxFX performs functions that are similar to the HP EWS . HP EWS is only available for printers with a network connection. HP ToolboxFX is available for all HP Color LaserJet CP2020 Series printers that have had a full installation regardless of whether the installation was performed with a network or USB connection.

For more information about the HP EWS, see [HP Embedded Web Server on page 86](#).

Start HP ToolboxFX

Start the HP ToolboxFX by using any of the following methods:

- Double-click the **HP ToolboxFX** icon in the Microsoft Windows system tray.
- Click **Start**, click **All Programs**, click **HP**, click **HP Color LaserJet CP2020 Series**, and then click **HP ToolboxFX**.
- Right-click the **HP ToolboxFX** icon in the Microsoft Windows system tray. Then click **Open HP ToolboxFX**.

Structure

HP ToolboxFX consists of a single framework divided into several sections.

- **Heading banner.** Each screen that is displayed in HP ToolboxFX has a heading banner at the top that includes the HP logo.
- **Devices pane.** The Devices pane is always visible on the left-hand side of the HP ToolboxFX window. The Devices pane shows the HP products that are available to the host computer system and folders for the types of information available about each product.
- **Main content area.** Click any of the products or folders listed in the Devices pane to see information about that product in the main content area of the HP ToolboxFX window.
- **Toolbar.** A toolbar appears at the top of the main content area. The toolbar contains buttons for printing, refreshing the screen, ordering supplies, and getting help.
- **Other Links pane.** The Other Links pane is always visible in the lower-left corner of the HP ToolboxFX window. The Other Links pane contains links to the HP Instant Support, Product Support, and Product Registration pages on the HP Web site.

Opening screen

The opening screen that appears in the HP ToolboxFX section depends on the installed configuration of HP ToolboxFX. If HP ToolboxFX is installed for a single HP LaserJet product, the **Device Status** screen for that HP LaserJet product appears when the toolbox is opened. Double-click any of the products listed to go to the **Device Status** screen for that product. If multiple products supported by HP ToolboxFX are installed, they will appear in the **Devices** pane.

System requirements

HP ToolboxFX is currently supported on the following operating systems:

- Microsoft Windows Vista
- Microsoft Windows XP

HP ToolboxFX also requires the installation of Microsoft .NET Framework 2.0 on the client machine, which happens automatically during installation of the HP Color LaserJet CP2020 Series printing-system software (if necessary).

Key features

The following alert messages are available:

- [HP product pop-up alert messages](#)

- [System-tray icon alert](#)
- [E-mail alert](#)

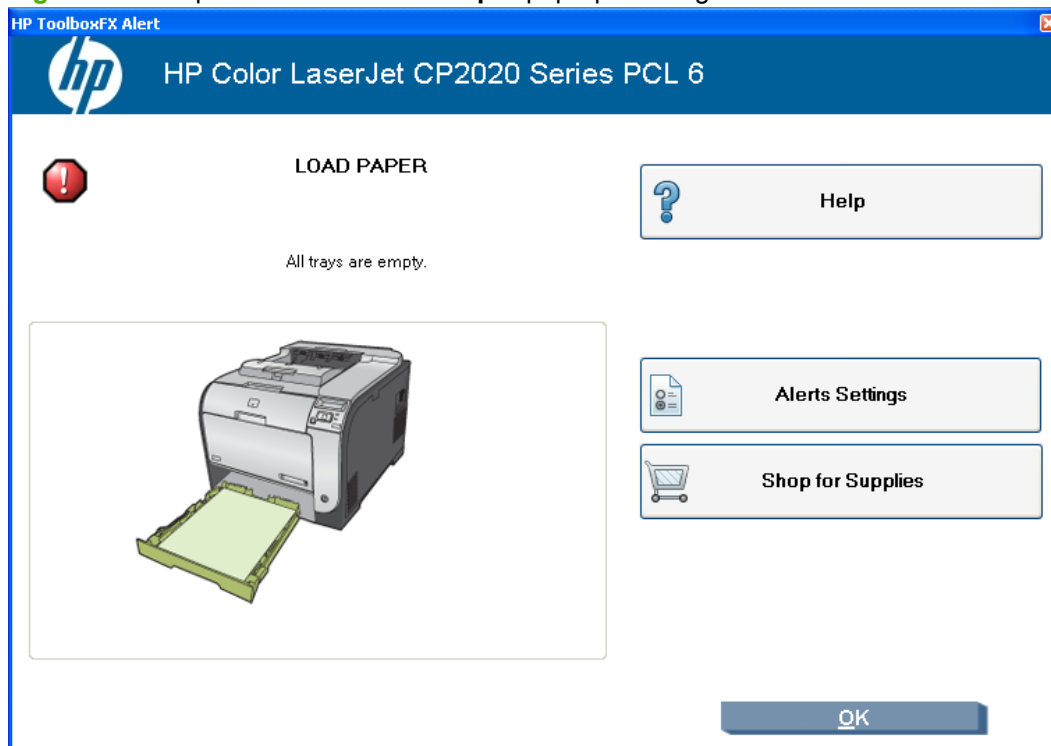
Through HP ToolboxFX, the appropriate person can be alerted when the HP Color LaserJet CP2020 Series printer needs attention. To see a list of the events that generate alerts in HP ToolboxFX, see [Set up Status Alerts on page 44](#).

For status alerts, a group of errors or a group of print-cartridge warnings can be selected, but not specific items within those groups. To configure alerts, use the **Set up Status Alerts** screen in the **Alerts** folder in HP ToolboxFX.

HP product pop-up alert messages

Pop-up alert messages give instant notification when an error or print-cartridge warning occurs in the product. An error, such as a “jam,” halts product operation and requires correction before the product continues operation. The alert condition can be corrected at any time. Alerts are sent only to the specific computer that prints to the product. This feature is provided through HP ToolboxFX and is turned *on* by default.

Figure 2-3 HP product alert – **Load Paper** pop-up message



System-tray icon alert

The system-tray icon feature shows information about all of the current alert conditions for the product. An **HP Device Alert** icon appears in the Microsoft Windows system tray when an alert condition occurs. This feature is turned *on* by default.

E-mail alert

E-mail alert messages notify up to two users when a specific alert condition occurs in the product. The alert condition can be a specific error alert or print-cartridge warning. This feature can be used to alert

administrators or service providers that the product requires attention. For instance, when the toner low alert occurs, the person in charge of ordering print cartridges can be notified by e-mail.

This feature is turned *off* by default. To activate this feature, type the appropriate e-mail address, select the notification events, configure the SMTP e-mail server, and enable the feature in HP ToolboxFX.

HP ToolboxFX folders

The HP ToolboxFX folders section describes the following:

- [Status folder](#)
- [Alerts folder](#)
- [Product Information folder](#)
- [Help folder](#)
- [Device Settings folder](#)
- [Network Settings folder](#)

Status folder

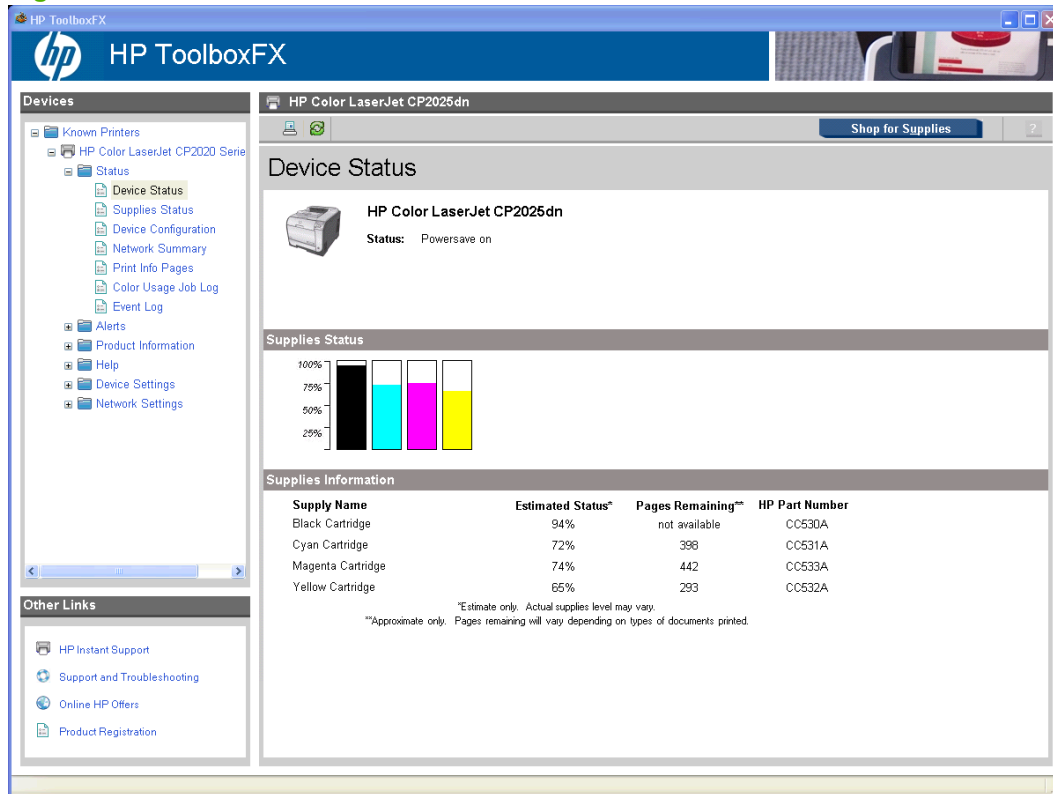
The **Status** folder contains the following screens:

- [Device Status](#)
- [Supplies Status](#)
- [Device Configuration](#)
- [Network Summary](#)
- [Print Info Pages](#)
- [Color Usage Job Log](#)
- [Event Log](#)

Device Status

The **Device Status** screen shows product status messages from the product. The **Device Status** screen also contains some pertinent printer information and product settings.

Figure 2-4 HP ToolboxFX Device Status screen



NOTE: The HP Color LaserJet CP2020 Series printers include a Supplies Status section and a Supplies Information section on the **Device Status** screen. These sections provide information about the estimated toner level, the approximate pages remaining based on the estimated toner level, and the HP part number for easy reference when ordering new consumables.

Supplies Status

The **Supplies Status** screen provides detailed information about the cyan, magenta, yellow, and black print cartridges. This information is not available if a non-HP cartridge is installed in the product.

Figure 2-5 HP ToolboxFX **Supplies Status** screen

The screenshot shows the HP ToolboxFX interface for an HP Color LaserJet CP2025dn printer. The main content area is titled "Supplies Status" and lists four cartridges with their respective levels and details:

Cartridge Color	Order HP Part	Level (%)	Approximate Pages Remaining	Low Reached	Serial Number	Pages Printed	First Install Date	Last Used Date
Black	CC530A	94%	not available	No	551749121	184	not available	20080320
Cyan	CC531A	72%	398	No	546833921	158	20070924	20080320
Magenta	CC533A	74%	442	No	547816962	158	20070924	20080320
Yellow	CC532A	65%	293	No	554567170	158	20070924	20080320

Ordering Information: Hewlett-Packard supplies can be ordered on the Internet, on-line through your printer software, or by calling an authorized reseller. Refer to your User Guide for instructions.

Return & Recycling: Please return your used genuine HP supplies for recycling to Hewlett-Packard. For more information, visit us at: <http://www.hp.com/go/recycle>

Software Description

Device Configuration

The **Device Configuration** screen shows the values for all of the settings available for the product and other configuration items, such as installed DIMMs, personalities, and page counts. The contents of this screen are consistent with the configuration page that the firmware generates.

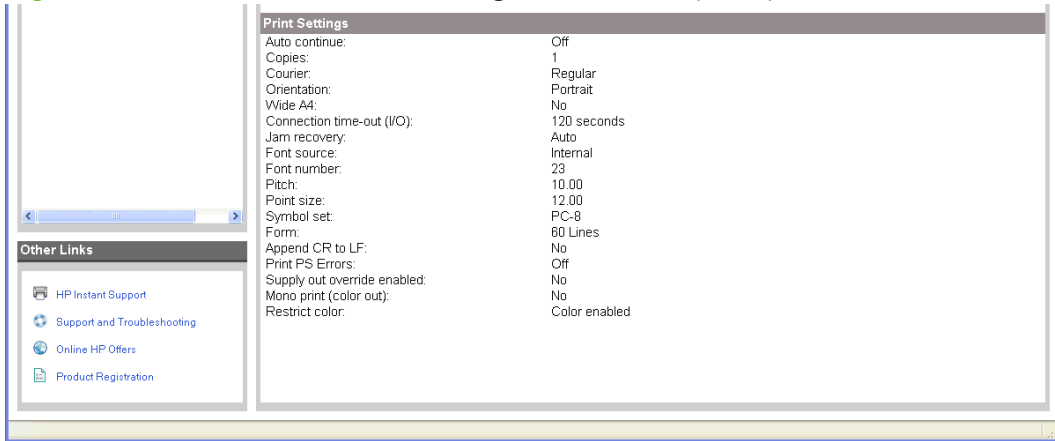
Figure 2-6 HP ToolboxFX Device Configuration screen (1 of 2)

The screenshot displays the HP ToolboxFX interface for an HP Color LaserJet CP2025dn printer. The main content area is titled 'Device Configuration' and is organized into four primary sections:

- Product Information:** Lists details such as Product name (HP Color LaserJet CP2025dn), Formatter number (MB0012H), Product serial number (XXXXXXXXXX), Service ID (17240), Firmware datecode (20080220), Maximum monochrome print quality (600 x 8), Maximum color print quality (ImageREt 3600), Controller number (8), Device description (HP Color LaserJet CP2025dn), Device language (English), Asset number, Company name, Contact person, Password (Not specified), Hardware address (00:1a:4b:27:2c:c4), Host name (NPI272CC4), IPv4 address (10.10.48.85), Show IPv4 address on control panel (Disabled), IPv6 address (FE80::21A:4BFF:FE27:2CC4), Total memory (128 MB), and Available memory (108.35 MB).
- Installed Personalities and Options:** Shows PCL5, PostScript, PCLXL, and DIMM Slot 1 (Empty).
- Page Counts:** Provides statistics on printing, including Total pages printed (1046), Color pages printed (930), Total monochrome pages printed (116), Duplex page counts (12), Pages mispicked in printer (9), Pages jammed in printer (0), PCL6 pages printed (25), PS pages printed (0), and PCL pages printed (0).
- Paper Settings:** Lists various paper types and their corresponding modes, such as Letter (Letter), Plain (Plain), HP LaserJet 90g (Heavy Mode), HP Color LaserJet Matte 105g (Heavy Mode), HP Premium Choice Matte 120g (Extra Heavy Mode), HP Color Laser Brochure Matte 160g (Cardstock Mode), HP Matte 200g (Cardstock Mode), HP Presentation Glossy 130g (Light Glossy Mode), HP Color Laser Brochure Glossy 160g (Glossy Mode), HP Tri-fold Color Laser Brochure Glossy 160g (Glossy Mode), HP Color Laser Photo Glossy 220g (Heavy Glossy Mode), and many others including Light, Mid-Weight, Heavy, Extra Heavy, and Transparency modes.

The left sidebar contains navigation links for Known Printers, HP Color LaserJet CP2020 Serie, Status, Device Status, Supplies Status, Device Configuration (selected), Network Summary, Print Info Pages, Color Usage Job Log, Event Log, Alerts, Product Information, Help, Device Settings, and Network Settings. A 'Shop for Supplies' button is located in the top right corner of the main window.

Figure 2-7 HP ToolboxFX **Device Configuration** screen (2 of 2)



Network Summary

The **Network Summary** screen shows the values for all of the network settings that are available for the product. The contents of this screen are consistent with the configuration page that the firmware generates.

Figure 2-8 HP ToolboxFX Network Summary screen – Status folder

The screenshot shows the HP ToolboxFX interface for an HP Color LaserJet CP2025dn printer. The left sidebar contains a navigation menu with options like 'Known Printers', 'Status', 'Device Status', 'Supplies Status', 'Device Configuration', 'Network Summary', 'Print Info Pages', 'Color Usage Job Log', 'Event Log', 'Alerts', 'Product Information', 'Help', 'Device Settings', and 'Network Settings'. The main content area is titled 'Network Summary' and is divided into several sections:

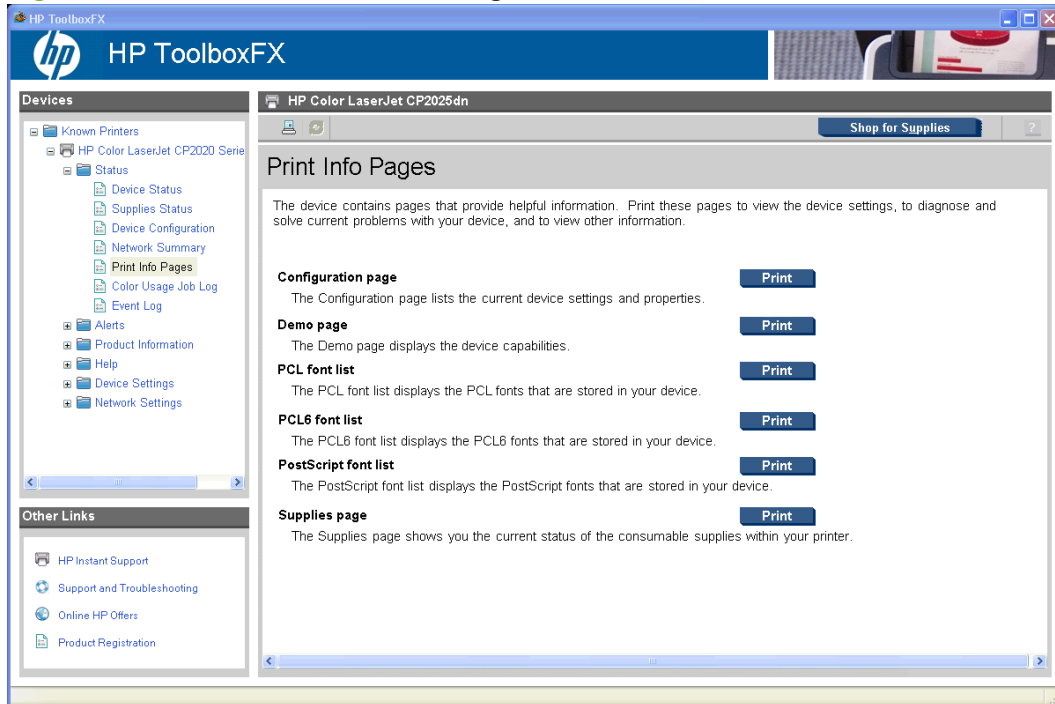
- TCP/IP (v4)**: Status: Ready; IPv4 address: 192.168.0.10; Subnet mask: 255.255.255.0; Default gateway: 192.168.0.1; IP configured by: Configured by DHCP; DHCP/BOOTP server: 192.168.0.1; DHCP expiration time: 01:19:00 (days:hours:minutes); WINS server: 192.68.0.200.
- TCP/IP (v6)**: Status: Ready; Link-Local address: FE80::21A:4BFF:FE27:2CC4; Stateless (from Router): Not configured; Stateful (from DHCPv6): Not configured.
- Network Identification**: Host name: NPI272CC4; Domain name (IPv4/IPv6): anyone@yourdomain.com; Domain name (IPv6 only): Not configured; Bonjour Service name: HP Color LaserJet CP2025dn (2...; Bonjour Domain name: NPI272CC4.local.
- Network Hardware Configuration**: Hardware address: XXXXXXXXXXXX; Firmware datecode: 20080220; Link speed and duplex negotiation: Automatic; Link speed: 100 Mbps; Duplex: Full; Automatic crossover: On; Connection time-out (I/O): 120.
- SNMP**: Status: Read-Write access enabled; SNMP version: v1; Set Community name: Not Specified (Defaults to "public"); Get Community name: Not Specified (Defaults to "public").
- Network Statistics**: Total packets received: 1217566; Unicast packets received: 34126; Bad packets received: 0; Framing errors received: 0; Total packets transmitted: 67554; Undersendable packets: 0; Transmit collisions: 0; Transmit late collisions: 0.
- Enabled Features**: IPv4: Enabled; IPv6: Enabled; LPD printing: Enabled; Bonjour: Enabled; SLP: Enabled; WS-Discovery: Enabled; SNMP: Enabled; Show IPv4 address on control panel: Disabled; DHCPv6: Enabled.

At the bottom left, there is an 'Other Links' section with links to 'HP Instant Support', 'Support and Troubleshooting', 'Online HP Offers', and 'Product Registration'.

Print Info Pages

Use the **Print Info Pages** screen to print the internal special pages that the product generates. The content of these reports is generated by the product firmware, *not* by the HP ToolboxFX. Click **Print** next to the name of the page to be printed.

Figure 2-9 HP ToolboxFX **Print Info Pages** screen

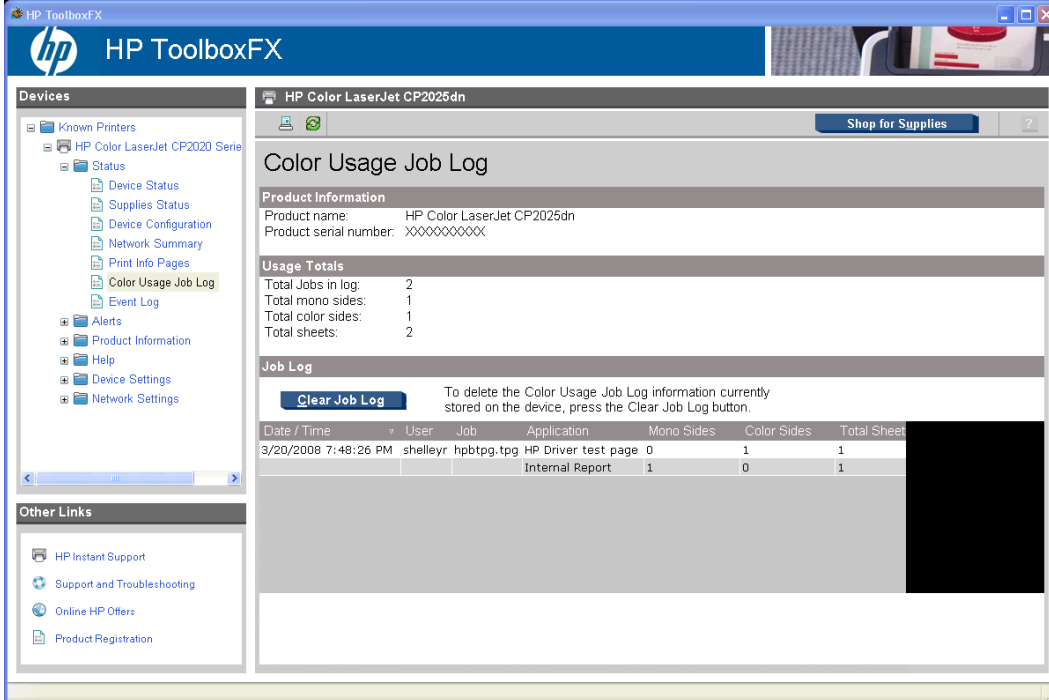


Color Usage Job Log

Use the **Color Usage Job Log** screen to complete the following tasks:

- Find the printer serial number under the **Product Information** subheading.
- Check the number of print jobs stored under the **Usage Totals** subheading. The log also includes information about how much color the printer has used.
- Delete the currently stored Color Usage Job Log information by selecting the **Clear Job Log** option.

Figure 2-10 HP ToolboxFX **Color Usage Job Log** screen



The screenshot displays the HP ToolboxFX interface for an HP Color LaserJet CP2025dn printer. The main content area is titled "Color Usage Job Log" and is divided into three sections:

- Product Information:** Shows the product name as "HP Color LaserJet CP2025dn" and the product serial number as "XXXXXXXXXX".
- Usage Totals:** A summary of print jobs:
 - Total Jobs in log: 2
 - Total mono sides: 1
 - Total color sides: 1
 - Total sheets: 2
- Job Log:** A table listing individual print jobs. A "Clear Job Log" button is visible above the table. The table contains the following data:

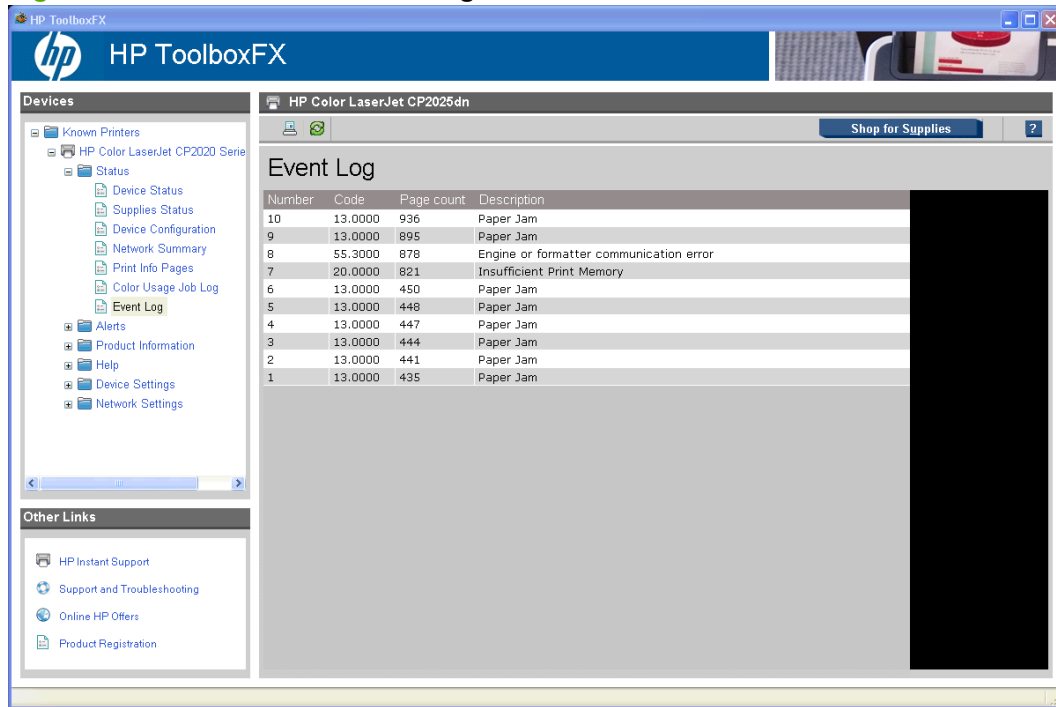
Date / Time	User	Job	Application	Mono Sides	Color Sides	Total Sheet
3/20/2008 7:48:26 PM	shelleyr	hpbtpg.tpg	HP Driver test page	0	1	1
			Internal Report	1	0	1

The left sidebar shows a navigation menu with options like "Device Status", "Supplies Status", "Device Configuration", "Network Summary", "Print Info Pages", "Color Usage Job Log", "Event Log", "Alerts", "Product Information", "Help", "Device Settings", and "Network Settings". The "Other Links" section at the bottom left includes "HP Instant Support", "Support and Troubleshooting", "Online HP Offers", and "Product Registration".

Event Log

Use the **Event Log** screen to monitor events for the HP Color LaserJet CP2020 Series printer. Up to 10 events can appear on this screen. If this screen is empty, no events have occurred on the printer.

Figure 2-11 HP ToolboxFX Event Log screen

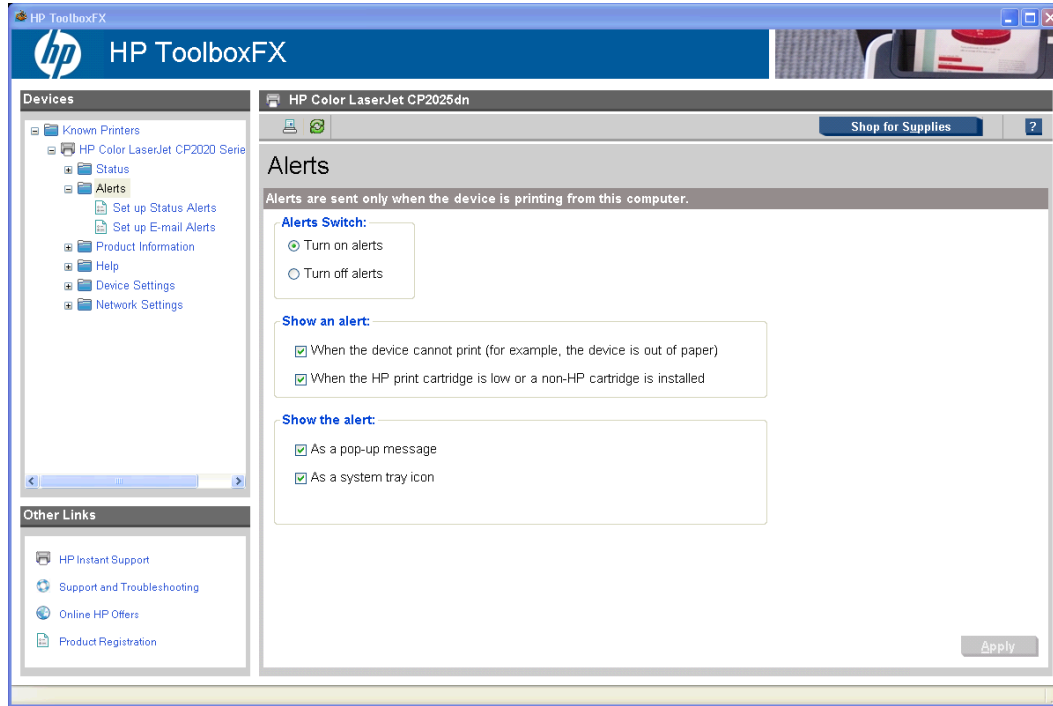


Alerts folder

The **Alerts** folder contains the following screens:

- [Set up Status Alerts](#)
- [Set up E-mail Alerts](#)

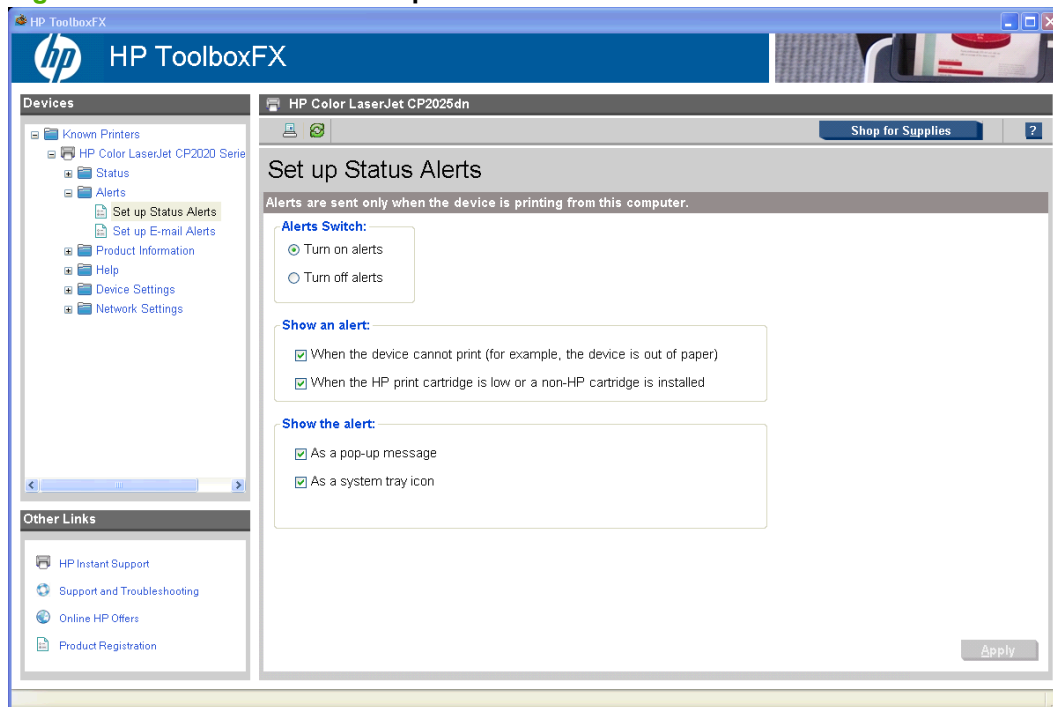
Figure 2-12 HP ToolboxFX Alerts folder



Set up Status Alerts

Use the **Set up Status Alerts** screen to set up status alerts for the HP Color LaserJet CP2020 Series printer. Select the **Turn on alerts** option and then click **Apply** to turn on alerts.

Figure 2-13 HP ToolboxFX Set up Status Alerts screen



Select options under **Show an alert** to receive alerts like those in the following table.

Table 2-2 Supported pop-up alerts for HP ToolboxFX

Pop-up alerts	Event
Printer Alerts	● Load Paper Tray 1 [TRAY] [SIZE]
	● Load Paper Tray 2 [TRAY] [SIZE]
	● Tray 1 Paper Out
	● Tray 2 Paper Out
	● Tray 3 Paper Out
	● Paper Mispick
	● Insufficient Memory
	● Door Cover Open
	● Manual Feed
	● Tray 1 Jam
	● Tray 2 Jam
	● Tray 3 Jam
	● Jam In Paper Path
	● Jam In Cartridge Area
	● Jam In Output Bin
	● Invalid Driver
	● Output Bin Full
	● Tray 1 Unexpected Size [SIZE]
	● Tray 2 Unexpected Size [SIZE]
	● Tray 3 Unexpected Size [SIZE]
	● Misprint
	● Top Detect Error
	● 507Error
	● 508Error
	● 509Error
	● 5120Error
	● 5121Error
	● 5122Error
	● 5123Error
	● Yellow Toner Level Sensor Error
	● Magenta Toner Level Sensor Error
	● Cyan Toner Level Sensor Error

Table 2-2 Supported pop-up alerts for HP ToolboxFX (continued)

Pop-up alerts	Event
	<ul style="list-style-type: none">• Black Toner Level Sensor Error• Top Sensor Error• 541 Error• 550 Error• DCC NVRAM Data Error• DCC NVRAM Access Error• DCC Error• 5601Error• 5701Error• 5706Error• 593Error• 594Error• 5950Error• 5953Error• 5960Error• 5963Error• 5973Error• 5983Error• 599Error• T2ClutchError• 59A0Error• 59C0Error• 59F0Error
Supplies Warning Alerts	<ul style="list-style-type: none">• Order Black Cartridge• Order Yellow Cartridge• Order Magenta Cartridge• Order Cyan Cartridge• Order Supplies• Replace Cyan Printing In Black• Replace Magenta Printing In Black• Replace Yellow Printing In Black• Printing In Black Replace Supply• Replace Supplies Override In Use

Table 2-2 Supported pop-up alerts for HP ToolboxFX (continued)


Pop-up alerts	Event
	<ul style="list-style-type: none">• Replace Black Override In Use• Replace Cyan Override In Use• Replace Magenta Override In Use• Replace Yellow Override In Use
Supplies Error Alerts	<ul style="list-style-type: none">• BlackElabelError• BlackElabelMissing• BlackIncorrect• NonHPBlackCartridge• ReplaceBlack• UnsupportedBlackCartridge• UsedBlackCartridge• UsedBlackInstalled• UnsupportedInstalledBlackCartridge• RemoveBlackLock• IncompatibleBlackCartridgeError• CyanElabelError• CyanElabelMissing• CyanIncorrect• ReplaceCyan• UnsupportedCyanCartridge• UsedCyanCartridge• UsedCyanInstalled• UnsupportedInstalledCyanCartridge• RemoveCyanLock• IncompatibleCyanCartridgeError• MagentaElabelError• MagentaElabelMissing• MagentaIncorrect• NonHPMagentaCartridge• ReplaceMagenta• UnsupportedMagentaCartridge• UsedMagentaCartridge• UsedMagentaInstalled

Table 2-2 Supported pop-up alerts for HP ToolboxFX (continued)

Pop-up alerts	Event
	<ul style="list-style-type: none">• UnsupportedInstalledMagentaCartridge• RemoveMagentaLock• IncompatibleMagentaCartridgeError• YellowElabelError• YellowElabelMissing• YellowIncorrect• NonHPYellowCartridge• ReplaceYellow• UnsupportedYellowCartridge• UsedYellowCartridge• UsedYellowInstalled• UnsupportedInstalledYellowCartridge• RemoveYellowLock• IncompatibleYellowCartridgeError

Select one or more formats for the alert under **Show the alert:**

- A pop-up message
- A system tray icon

 **NOTE:** Click **Apply** to make the changes take effect.

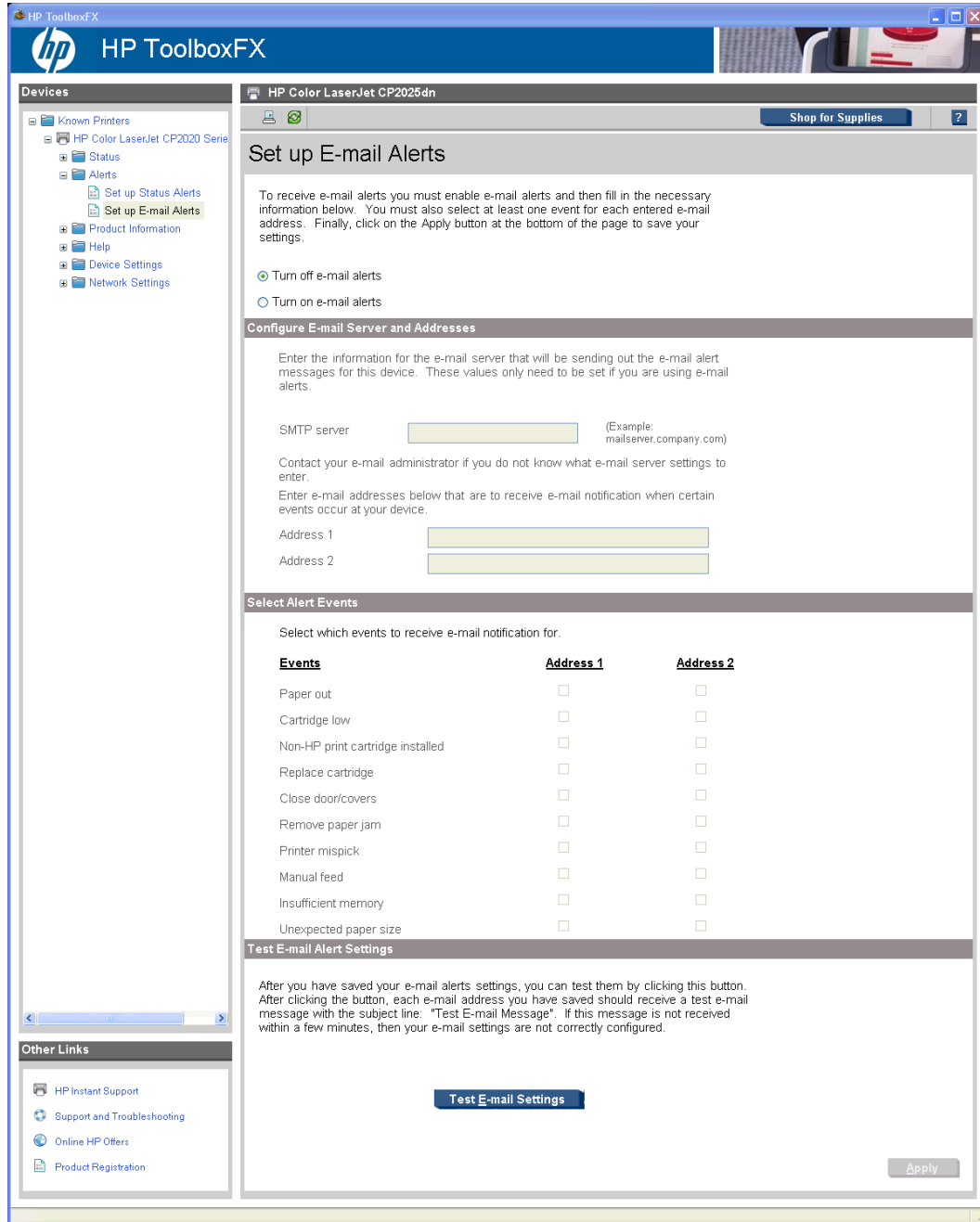
Set up E-mail Alerts

Use the **Set up E-mail Alerts** screen to set up e-mail alerts for the HP Color LaserJet CP2020 Series printer.

The default settings for the **Set up E-mail Alerts** screen are as follows:

- E-mail alerts are turned off by default.
- The SMTP server box and the address boxes are disabled.
- Supplies alert events are selected for both e-mail addresses.

Figure 2-14 HP ToolboxFX **Set up E-mail Alerts** screen



E-mail messages can be sent about the supplies status or events (such as a jam) related to the HP Color LaserJet CP2020 Series printer. Select the specific events about which you want notification.

The following E-mail Alerts are available:

- Cartridge Low
- Replace Cartridge
- Close doors/covers
- Insufficient memory
- Manual feed
- Non-HP print cartridge installed
- Unauthorized supply installed
- Paper out
- Printer mispick
- Remove paper jam
- Unexpected paper size

Use the following procedure to activate this feature:

1. Click to select the **Turn on e-mail alerts** option.
2. Configure the SMTP e-mail server that will be used to send the e-mail message.
3. Type in a valid e-mail address. Up to two e-mail addresses can be configured to receive messages for each event.
4. Select the events for which you want notification.
5. Click **Apply** to make the changes take effect.

To ensure that the correct e-mail addresses have been used and that the SMTP server information is valid, click the **Test E-mail Settings** button.

Product Information folder

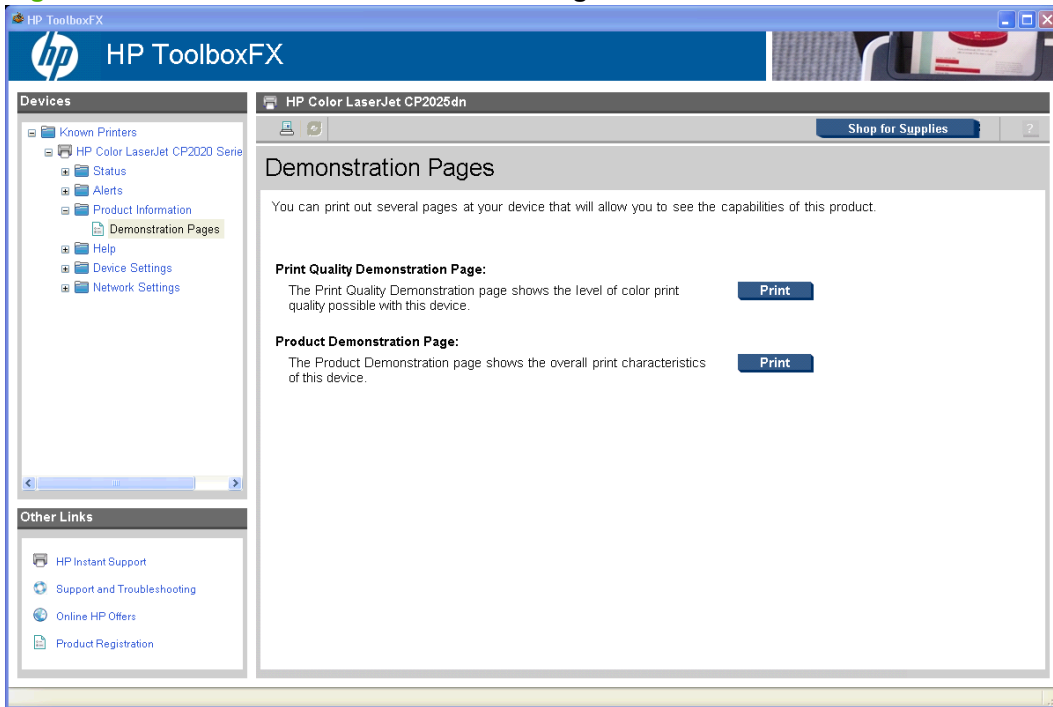
The **Product Information** folder contains the following screen:

- [Demonstration Pages](#)

Demonstration Pages

Use the **Demonstration Pages** screen to print a Print Quality Demonstration page or a Product Demonstration page. Click the **Print** button next to the page you want to print.

Figure 2-15 HP ToolboxFX **Demonstration Pages** screen



Help folder

The **Help** folder contains the following screens:

- [Troubleshooting](#)
- [Paper and Print Media](#)
- [Color Printing Tools](#)
- [Animated Demonstrations](#)
- [User Guide](#)

Troubleshooting

The following sections appear on the Troubleshooting screen:

- **Troubleshoot a problem.** Click **Troubleshooting** to open the Troubleshooting chapter of the *HP Color LaserJet CP2020 Series Printer User Guide*.
- **Print Quality Troubleshooting.** The following options are available:
 - **Print.** Click this button to print the Print Quality Troubleshooting pages. Use these pages to troubleshoot page defects.
 - **Print Basic Colors.** Click this button to print a single page of basic color palette options. Use this option to match a specific color.
 - **View Custom Colors.** Click this button to explore the basic and custom printer color palette options. The color samples .PDF file opens in Adobe Acrobat Reader.

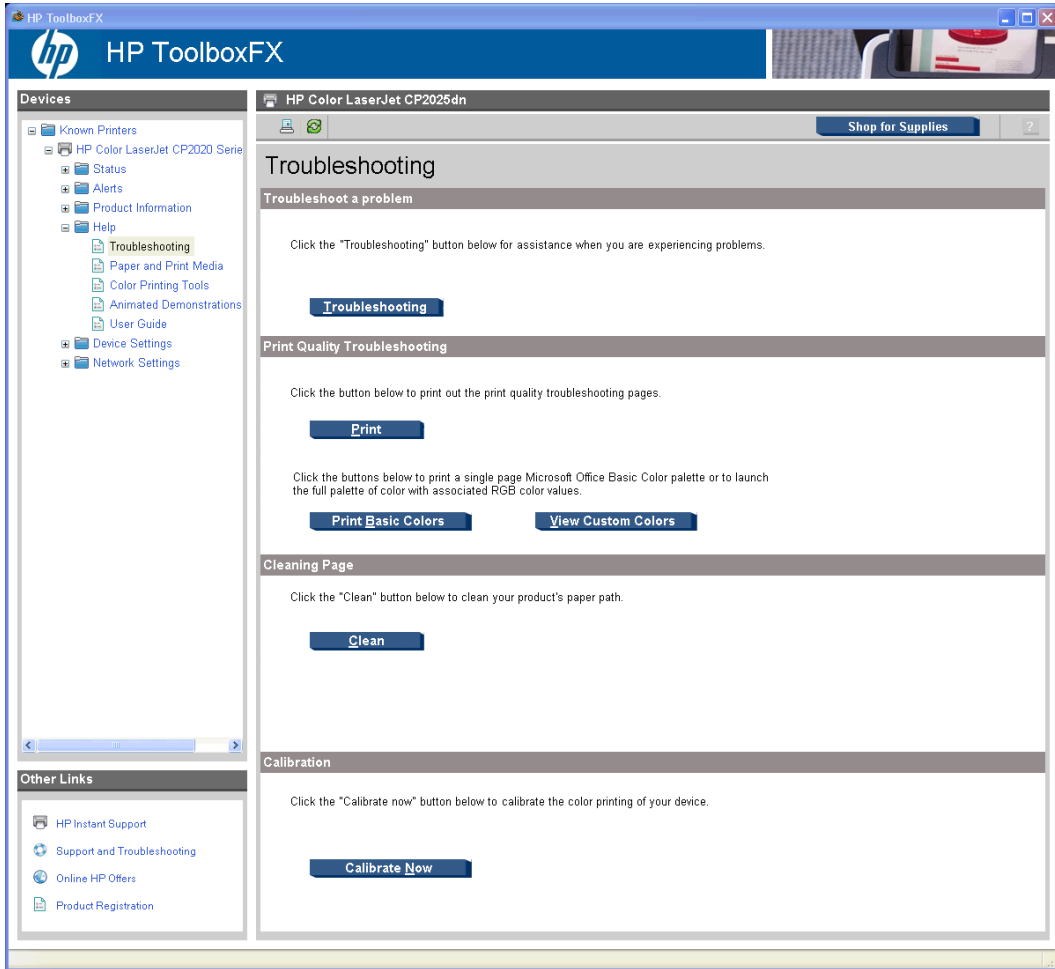


NOTE: You must have Adobe Acrobat Reader installed on the computer to read documents in .PDF format. Adobe Acrobat Reader is available as a free download at the following Web site:

www.adobe.com

- **Cleaning Page.** Follow the onscreen directions to clean the printer paper path.
- **Calibration.** Click **Calibrate Now** to calibrate the printer.

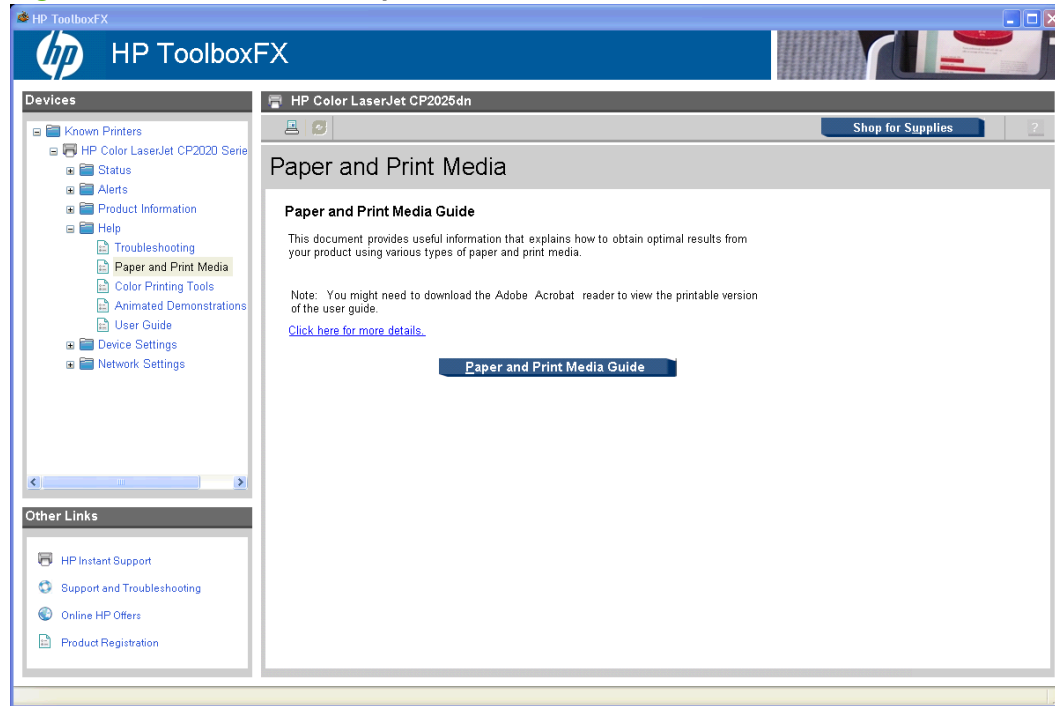
Figure 2-16 HP ToolboxFX Troubleshooting screen



Paper and Print Media

From this screen you can open the Paper and Print Media Guide in .PDF format.

Figure 2-17 HP ToolboxFX Paper and Print Media screen



Color Printing Tools

Use the **Color Printing Tools** to solve certain color printing problems.

The following options are available on the **Color Printing Tools** screen:

- **Print Basic Colors**
- **View Custom Colors**
- **Basic Color Match**


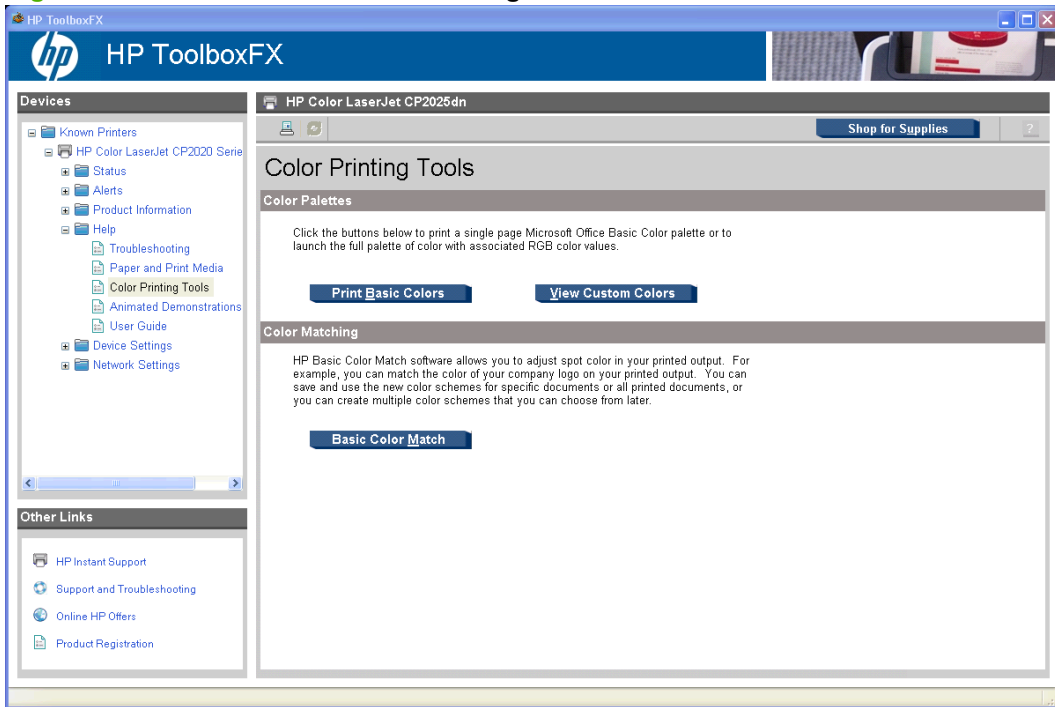
 **NOTE:** Clicking **Basic Color Match** opens the HP Color Match Software if the software is installed. If the software is not installed, the HP Color Match Software Web site opens where you can download the software.

Figure 2-18 HP ToolboxFX Color Printing Tools screen



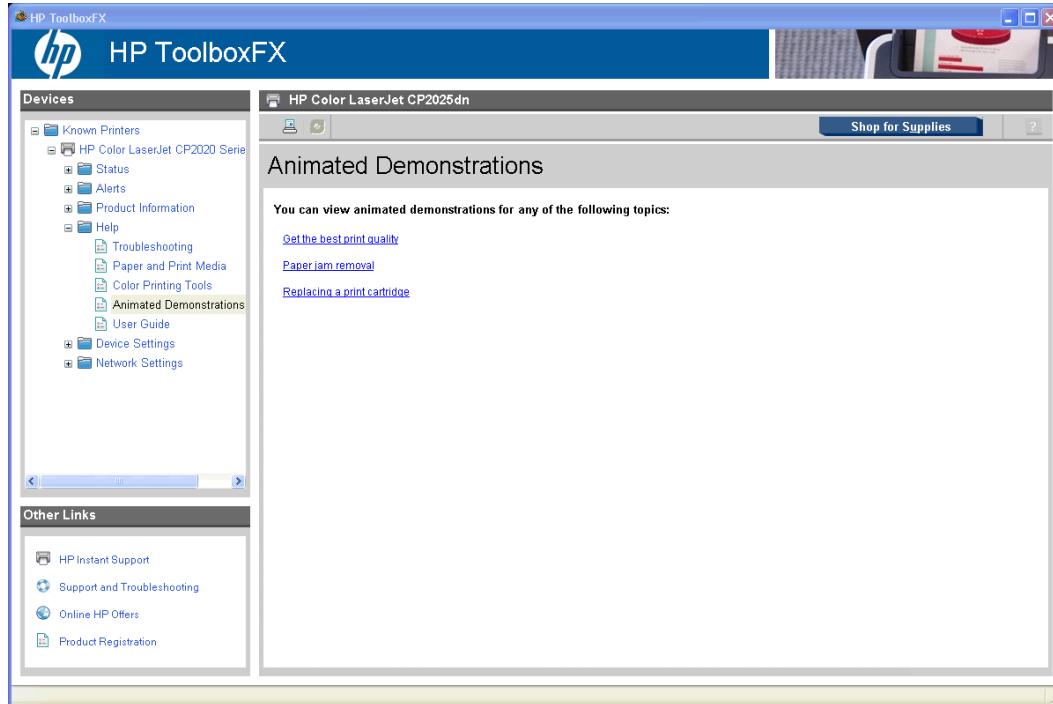
Software Description

Animated Demonstrations

The following demonstrations are available on the **Animated Demonstrations** screen:

- **Get the best print quality**
- **Paper jam removal**
- **Replacing a print cartridge**

Figure 2-19 HP ToolboxFX Animated Demonstrations screen

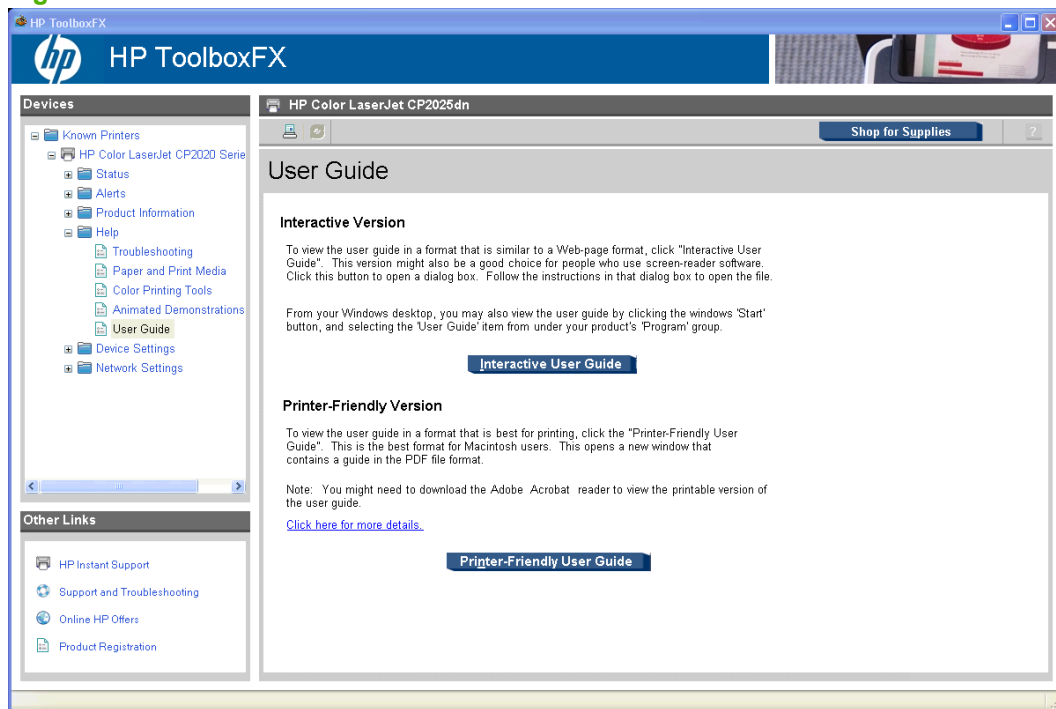


User Guide

The following options are available on the **User Guide** screen:

- **Interactive User Guide.** Click this to open the user guide in a .CHM version. This view is similar to a Web-page format.
- **Printer-Friendly User Guide.** Click this button to open a .PDF version of the user guide. Opening the document in this view might require downloading the Adobe Acrobat reader. For more information, see the following Web site: www.adobe.com

Figure 2-20 HP ToolboxFX User Guide screen



Device Settings folder

The **Device Settings** folder contains the following screens:

- [Device Information](#)
- [Paper Handling](#)
- [Printing](#)
- [PCL5](#)
- [PostScript](#)
- [Print Quality](#)
- [Print Density](#)
- [Paper Types](#)
- [Extended Print Modes screen](#)
- [System Setup](#)

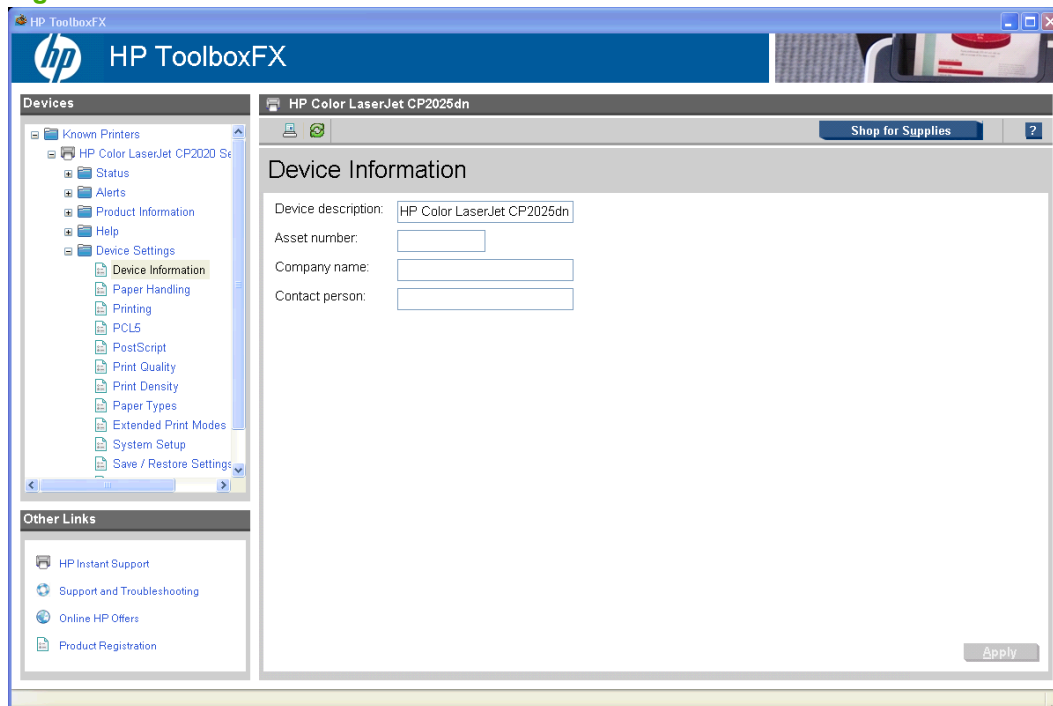
- [Save/Restore Settings](#)
- [Password](#)


Device Information

The **Device Information** screen contains identifying information about the printer:

- **Device Description.** This field shows the version of the HP Color LaserJet CP2020 Series printer that is installed.
- **Asset Number.** Use this field to assign an identifying asset control number to the printer.
- **Company Name.**
- **Contact Person.**

Figure 2-21 HP ToolboxFX Device Information screen

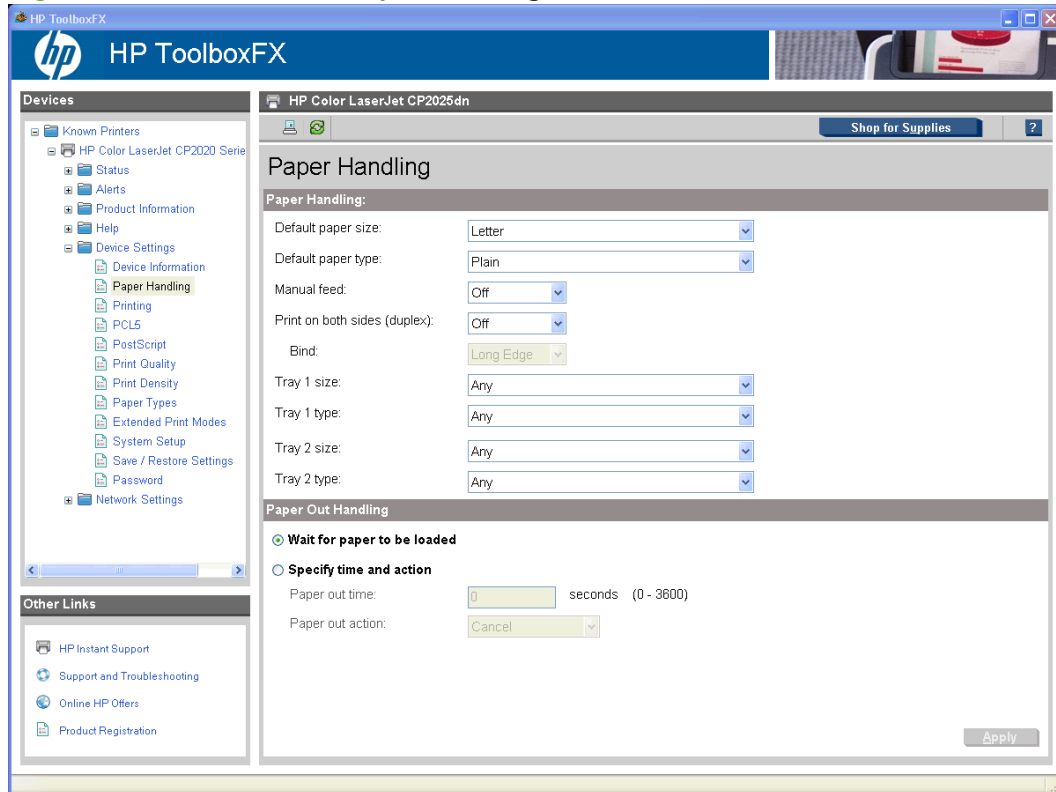


 **NOTE:** Click **Apply** to make any changes take effect.

Paper Handling

Use this screen to configure the paper-handling defaults for the printer. Change the default settings by clicking the blue arrow next to each option and highlighting the selection. Click **Apply** to save the new settings.

Figure 2-22 HP ToolboxFX Paper Handling screen



The following options are available.

- **Default paper size.** This drop-down menu lists all of the supported paper sizes.

Because paper-size settings in most software programs override driver settings, use the driver to set paper size only when printing from software programs that do not include a paper-size setting, such as NotePad, or when 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 printer, a control-panel message prompts you to load the paper size or select another tray.

- **Default paper type.** This drop-down menu shows a selection of the paper types that the HP Color LaserJet CP2020 Series printer supports. When you use the default setting, **Unspecified**, the printer uses the default paper type, which is usually **Plain**. For more information about paper types, see [Paper type: on page 192](#).

- **Duplex.** The duplexing unit in the HP Color LaserJet CP2020 Series product prints on two sides of a sheet of paper when the **Print on Both Sides** option is specified in the print job. The HP Color LaserJet CP2020 Series product comes with a duplexing unit installed in the following models:
 - HP Color LaserJet CP2025dn
 - HP Color LaserJet CP2025x

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

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

- Prepunched
- Preprinted
- Letterhead

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

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

For more information about the duplex feature, see [Finishing tab features on page 206](#).

- **Bind.** Binding occurs along either the left edge or the top edge of the page. 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.

For more information about binding, see [Finishing tab features on page 206](#).

- **Tray size and type.** Network administrators can use this feature 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 tab set. This constraint prevents (or reduces the likelihood of) tying up the printer with paper-mount messages that occur when users request sizes or types that are not available.

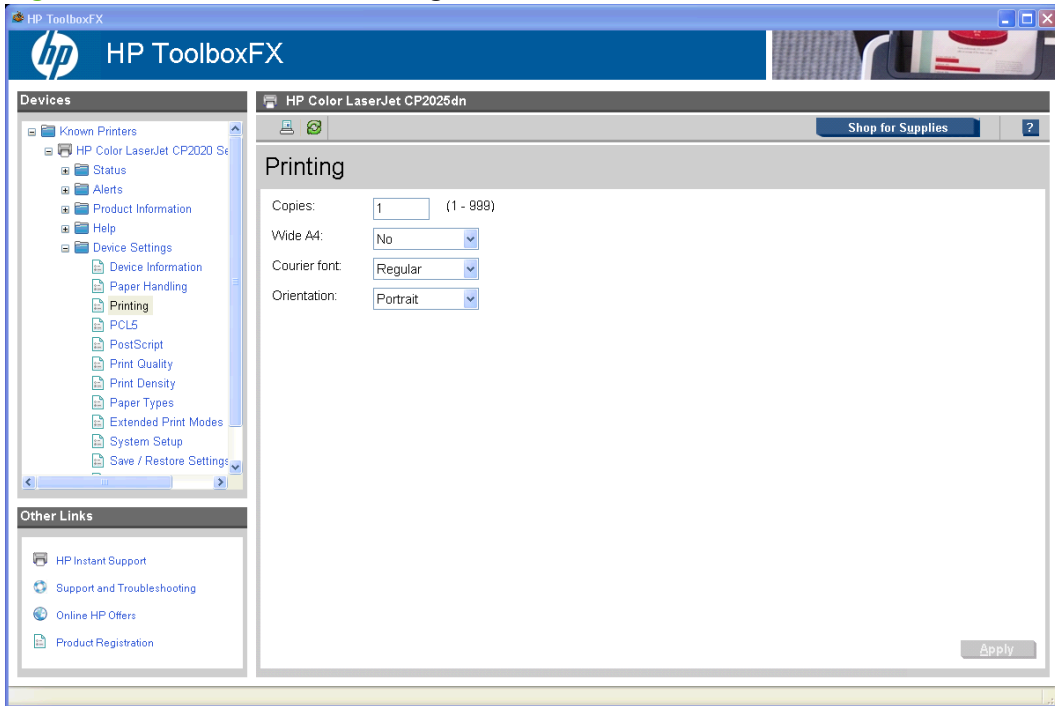
The trays listed on this screen include standard trays and optional accessory trays. Generally, items that are installed separately have a separate **Installable Options** setting.

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

Printing

Use the **Printing** screen to change the printing defaults for the printer.

Figure 2-23 HP ToolboxFX Printing screen



The following options are available.

- **Copies.** This setting 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 requested number of copies appears in the **Copies** option. Select the number by typing in the box or by using the up and down arrows on the right side of the text box. For the HP Color LaserJet CP2020 Series printer, 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.

Invalid entries into the edit box (such as non-numerical input, numbers less than 1, or numbers greater than 9999) change to the last valid value that appeared in the box. The default number of copies is 1.

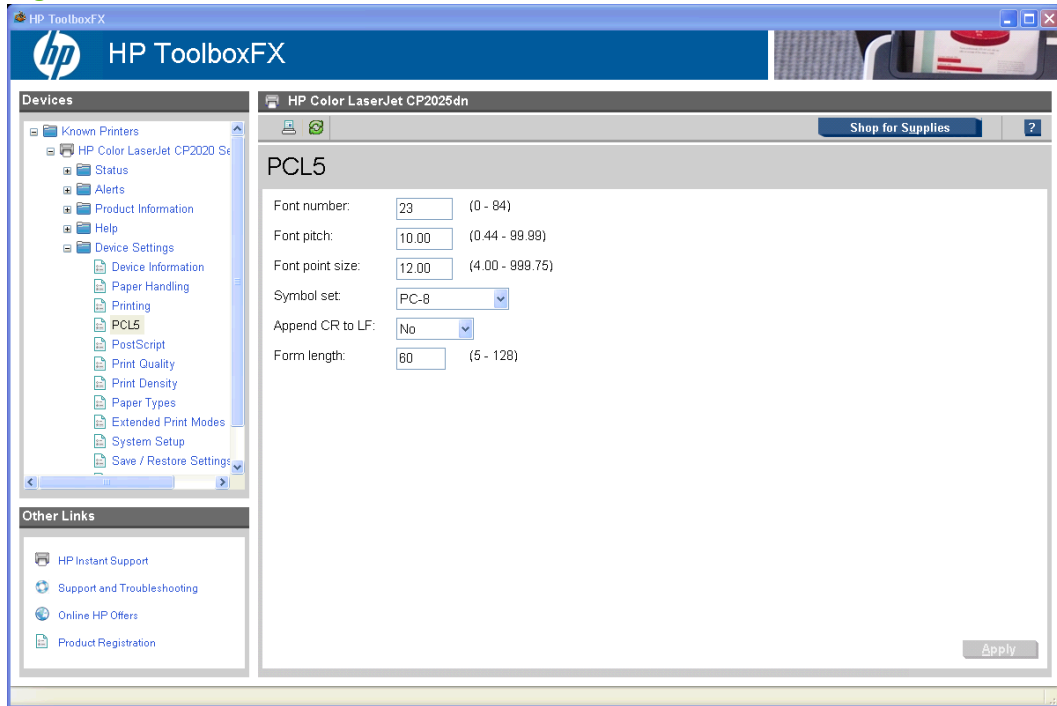
Problems can develop when a software program and the driver it is running on both allow the user to set the number of copies to print. In most cases, the software program and the driver communicate, so that the number of copies set in one location (such as the program) appears in the other (such as the driver). For some software programs, this communication does not take place, and the copies values are treated independently. For example, setting 10 copies in the program and then setting 10 copies in the driver might result in the printer making 100 copies (10 x 10). Set the number of copies in the software program, whenever possible.


- **Orientation.** Use this feature to choose the direction of the print job.
 - **Portrait.** The top edge of the document is the shorter edge of the paper. This is the default setting.
 - **Landscape.** The top edge of the document is the longer edge of the paper.

PCL5

Use the **PCL5** screen to change font information and form length.

Figure 2-24 HP ToolboxFX **PCL5** screen

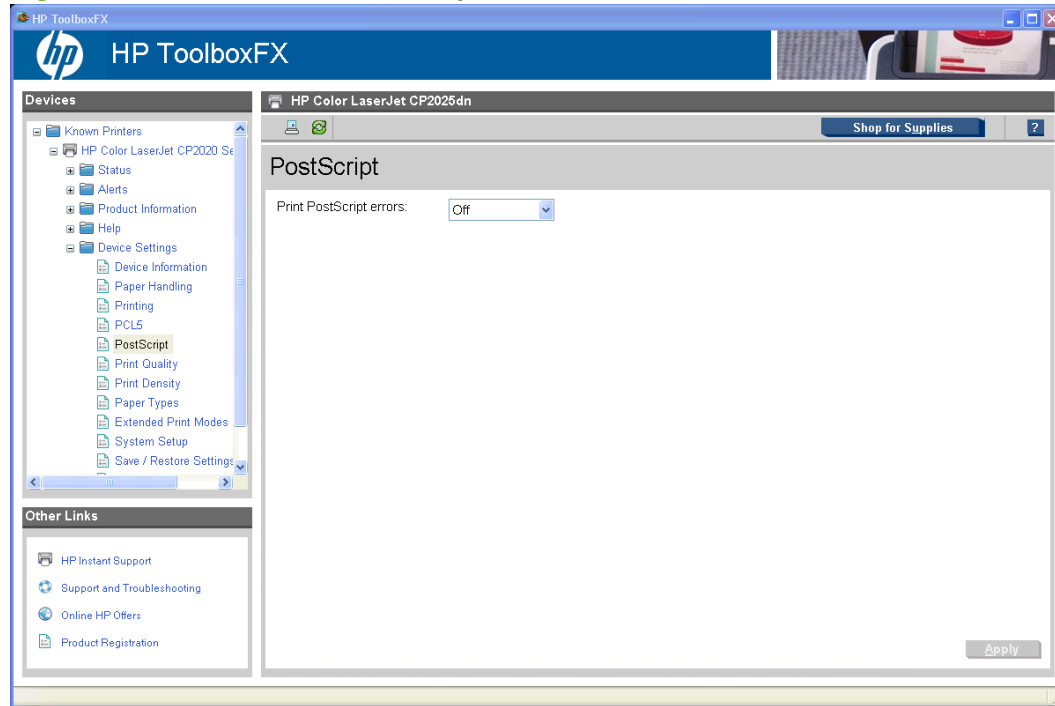



 **NOTE:** Click **Apply** to make any changes take effect.

PostScript

Use the **PostScript** screen to turn postscript error printing on or off.

Figure 2-25 HP ToolboxFX **PostScript** screen



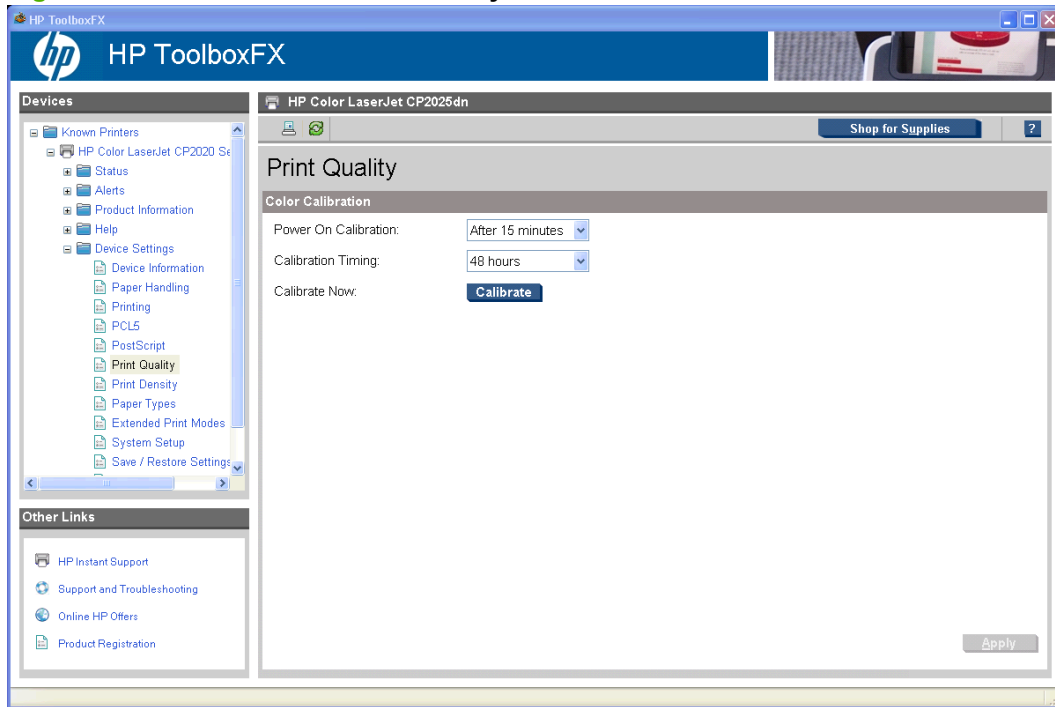
 **NOTE:** Click **Apply** to make the changes take effect.


The **Print PostScript errors** setting specifies whether a PS error-handler message is sent. To get the printer to print an error page when an error occurs in the print job, click **On**.

Print Quality

Use the **Print Quality** screen to change when and how often the printer calibrates. You can also use the **Calibrate Now** button on this screen to cause the printer to calibrate.

Figure 2-26 HP ToolboxFX **Print Quality** screen

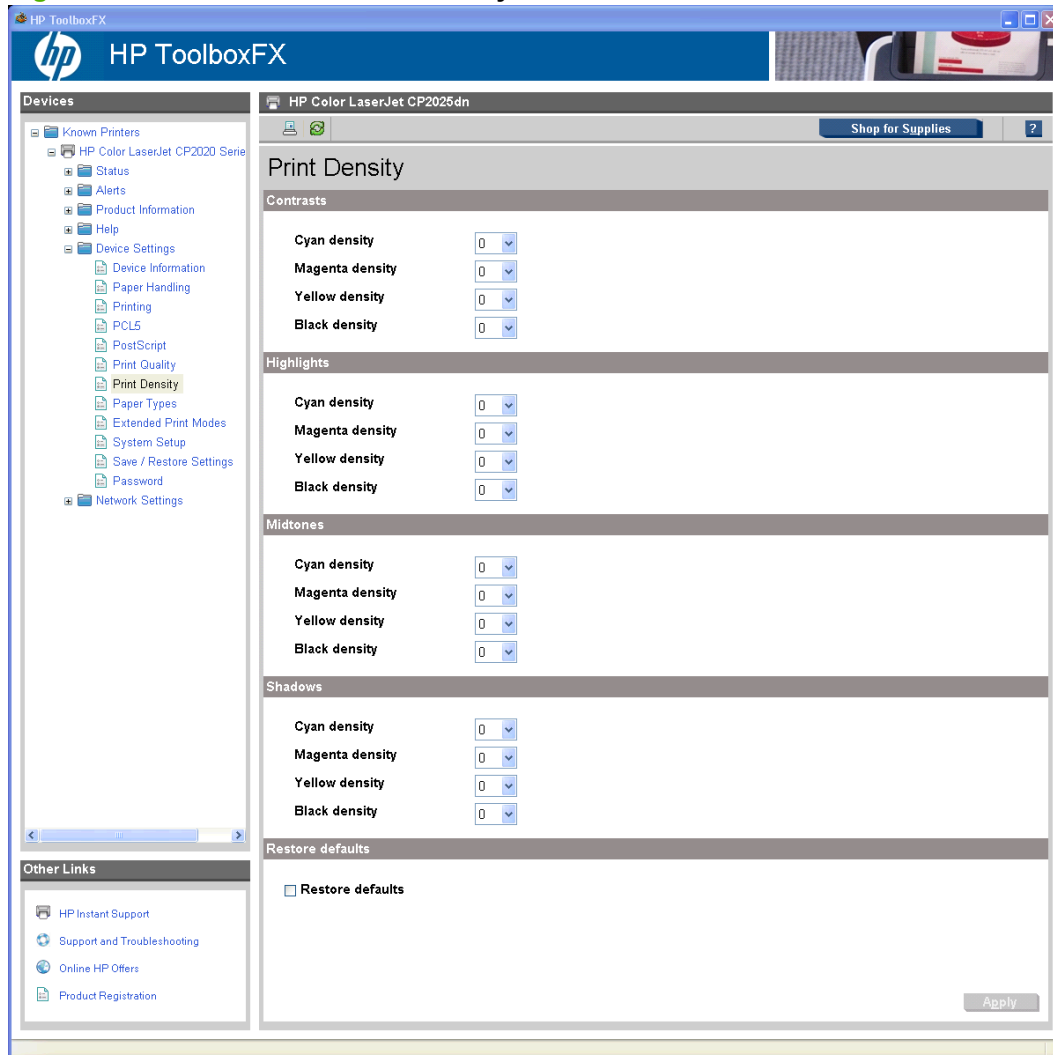


 **NOTE:** Click **Apply** to make the changes take effect.

Print Density

Use the settings on the **Print Density** screen to adjust the amount of toner the printer uses for images, pages, and documents.

Figure 2-27 HP ToolboxFX Print Density screen



The **Print Density** screen contains the following settings:

- **Contrasts.** Contrast is the density difference between light (highlight) and dark (shadow) colors. To increase the difference between light and dark colors (equivalent to a negative highlight adjustment and a positive shadow adjustment), use a positive contrast setting. To decrease the difference between light and dark colors (equivalent to a positive highlight adjustment and a negative shadow adjustment), use a negative contrast setting.
- **Highlights.** Highlight colors are colors near white. To make highlight colors darker, use a positive highlight setting. To make highlight colors lighter, use a negative highlight setting. This adjustment does not affect midtone or shadow colors.
- **Midtones.** Midtone colors are about halfway between white and solid density. To make midtone colors darker, use a positive midtone setting, and to make midtone colors lighter, use a negative highlight setting. This adjustment does not affect highlight or shadow colors.

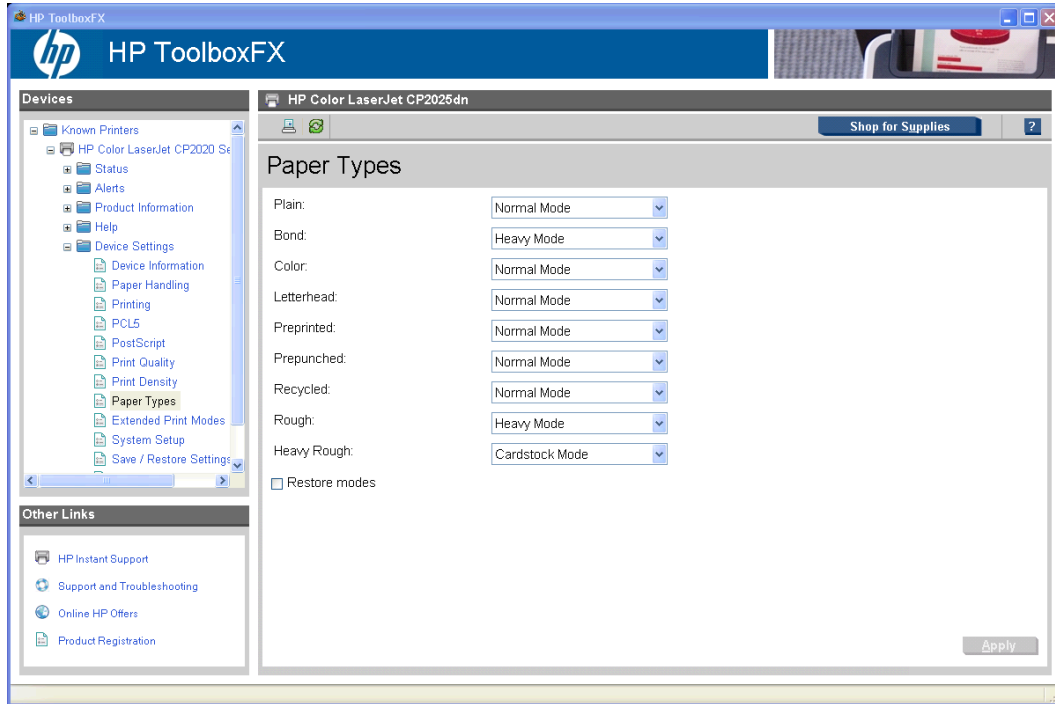
- **Shadows.** Shadow colors are colors near solid density. To make shadow colors darker, use a positive shadow setting. To make shadow colors lighter, use a negative shadow setting. This adjustment does not affect highlight or midtone colors.
- **Restore defaults.** Resets factory defaults for the Print Density settings on the printer.

 **NOTE:** Click **Apply** to make the changes take effect.


Paper Types

Use the **Paper Types** screen to map the print modes that the printer will use for each paper type.

Figure 2-28 HP ToolboxFX Paper Types screen



The purpose of this menu is to specify the engine print mode for paper types that are non-specific. Also, the Plain paper type can be remapped for workflow reasons. A print mode is a special setting that controls the print speed and the fuser temperature of the printer. The product speed and fuser temperature are adjusted to match the print mode selected, which can result in better print quality when printing on certain paper types.

 **WARNING!** Printing on heavier paper, such as glossy or photo paper, without setting the correct print mode can cause damage to the printer.


 **NOTE:** Not all of the paper types listed in the driver can be adjusted on the **Paper Types** screen.

Table 2-3 Standard print modes

Standard print modes	Target media/weight	Print speed	Color tables
Normal Mode	75-90 g/m2	Full speed	Plain
Heavy Mode	90-130 g/m2	3/4 speed	Plain
Cardstock Mode	131-175 g/m2	3/4 speed	Plain
Light Mode	60-74 g/m2	Full speed	Plain

Table 2-3 Standard print modes (continued)

Standard print modes	Target media/weight	Print speed	Color tables
Light Glossy Mode	105-130 g/m2	3/4 speed	Glossy
Glossy Mode	131-175 g/m2	3/4 speed	Glossy
Heavy Glossy Mode	176-220 g/m2	3/4 speed	Glossy
Tough Paper Mode	Tough Paper	3/4 speed	Glossy
Transparency Mode	Transparencies	3/4 speed	Overhead Transparency (OHT)
Label Mode	Labels	3/4 speed	Plain

Extended Print Modes screen

Use the **Extended Print Modes** screen to adjust the printing process to optimize print quality for various paper types and sizes.

Figure 2-29 HP ToolboxFX Extended Print Modes screen (1 of 2)

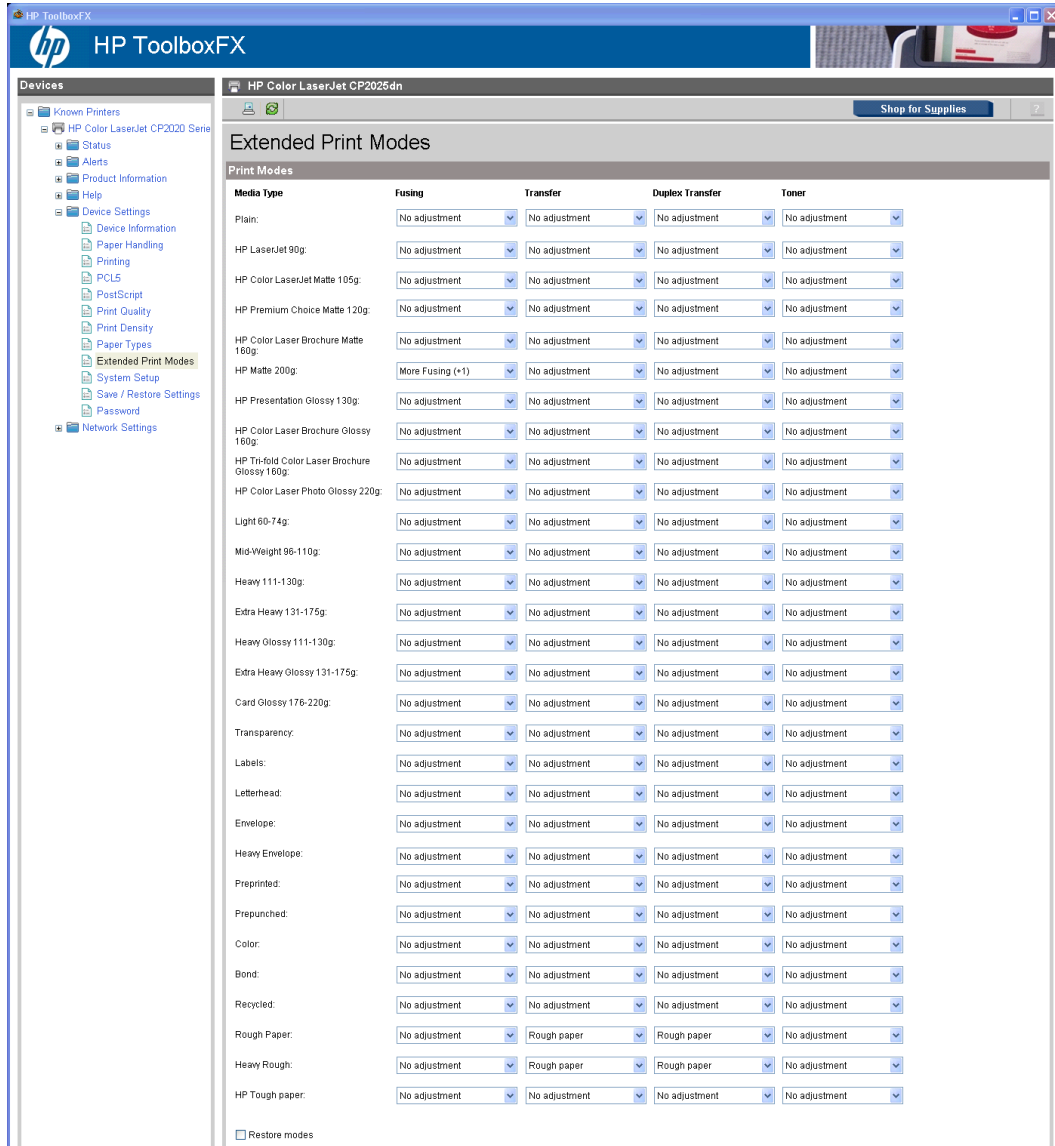


Table 2-4 Print Modes — Fusing

Fusing adjustments	Range (*default)	Description
Paper curl-up	Off*/On	This setting is used for dry climates or light paper. This setting optimizes fuser temperature for paper with the ends curled up in the output tray.
Paper curl-down	Off*/On	This setting optimizes fuser temperature for paper with the ends curled down in the output tray.

Table 2-4 Print Modes — Fusing (continued)

Fusing adjustments	Range (*default)	Description
Flap sealing	Off*/On	This setting reduces fuser temperature for envelope print modes to reduce flap sealing.
Less/More fusing	Off*/-2 to +2	These settings give four levels of direct control of fuser temperature.

Table 2-5 Print Modes — Transfer

Transfer adjustments (only first side)	Range (*default)	Description
Dry paper	Off*/On	
Humid paper	Off*/On	
Rough paper	Off*/On	
Less/More transfer	Off*/-5 to +5	

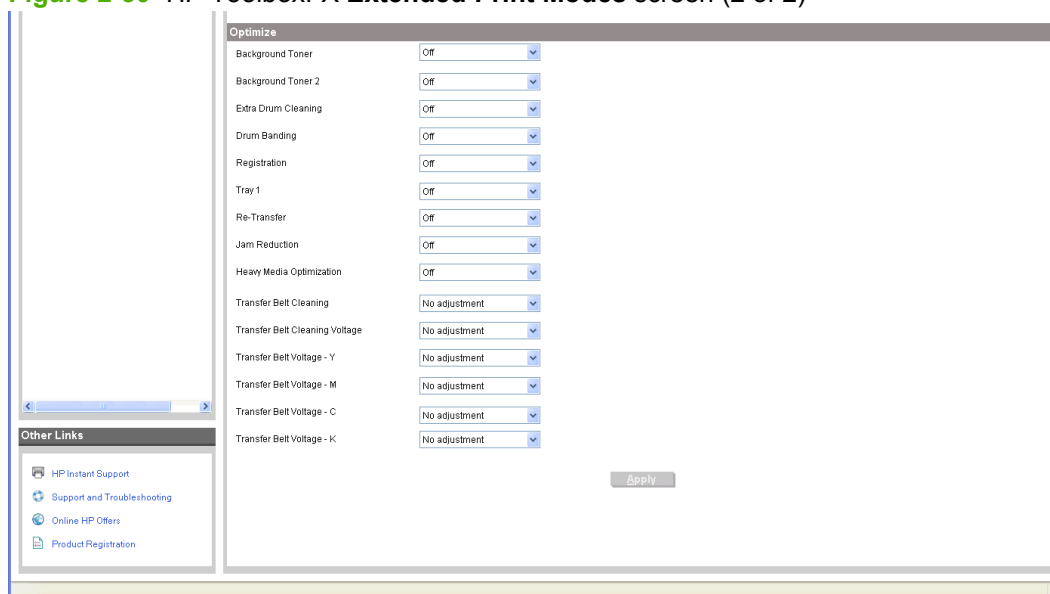
Table 2-6 Print Modes — Duplex Transfer

Duplex transfer adjustments (only second side)	Range (*default)	Description
Dry paper	Off*/On	This setting optimizes the transfer voltage (between the transfer belt and paper) for dry conditions or high resistivity paper.
Humid paper	Off*/On	This setting optimizes the transfer voltage for humid conditions.
Rough paper	Off*/On	This setting optimizes the transfer voltage for rough, textured papers.
Less/More transfer	Off*/-5 to +5	These settings give ten levels of direct control of transfer voltage.

Table 2-7 Print Modes — Toner

Less toner adjustments	Range (*default)	Description
Less toner	Off*/-1 to -3	These settings give ten levels of direct control of transfer voltage.

Figure 2-30 HP ToolboxFX **Extended Print Modes** screen (2 of 2)



The **Extended Print Modes** screen contains a **Print Modes** section and an **Optimize** section.

Table 2-8 Optimize modes

Adjustment	Range (*default)	Description
Background Toner	Off*/On	Optimize printer settings to reduce background toner. (Glossy paper picks up background toner more readily than plain paper.)
Background Toner 2		This is designated when a background of small vertical lines appears on the image.
Extra Drum Cleaning	Off*/On	Talc from paper with high talc content gets coated on the imaging drums and degrades the image quality. The printer will use extra cleaning rotations when stopping to eliminate this coating on the drums.
Drum Banding	Off*/On	This mode reduces the occurrence of sharp lines at the OPC drum pitch (75 mm) by extra prerotations and by jogging the drums slightly after each job. The jogging motion is slightly audible.
Registration		Extends the pre-rotation and post-rotation sequences.
Tray 1		When this option is turned on and a print job is printing from Tray 1 using the universal size command, which is the default, the printer will clean the belt every time the printer spins down.
Re-Transfer		This setting reduces or eliminates re-transfer.

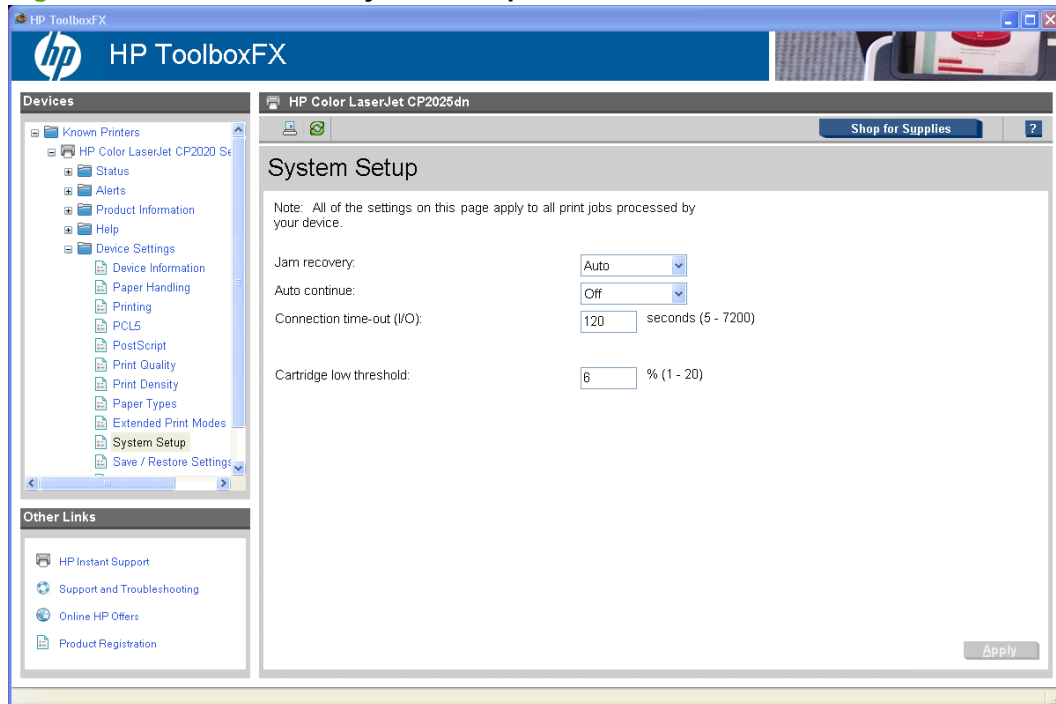
Table 2-8 Optimize modes (continued)

Adjustment	Range (*default)	Description
Jam Reduction		When this setting is turned on, the interpage gap is increased. Printing performance is reduced slightly.
Heavy Media Optimization		
Transfer Belt Cleaning	Off*/+1 to +2	This mode increases transfer belt (ITB) cleaning effectiveness by increasing the ICL (ITB Cleaning) roller/brush voltage for the +1 setting, and by increasing cleaning frequency for the +2 setting. This should be used when the ghost of previous heavy coverage pages appears on following pages.
Transfer Belt Cleaning Voltage	Off*/-5 to +5	This adjustment allows fine control of the ICL roller/brush voltage. Decreasing the voltage is better for OPC drum ghosting. Increasing the voltage is better for heavy coverage cleaning.
Transfer Belt Voltage – Y	Off*/-5 to +5	This adjustment allows fine control of the Yellow station OPC-to-ITB transfer voltage. (There is currently no known defect associated with this adjustment.)
Transfer Belt Voltage – M	Off*/-5 to +5	This adjustment allows fine control of the Magenta station OPC-to-ITB transfer voltage. (There is currently no known defect associated with this adjustment.)
Transfer Belt Voltage – C	Off*/-5 to +5	This adjustment allows fine control of the Cyan station OPC-to-ITB transfer voltage. (There is currently no known defect associated with this adjustment.)
Transfer Belt Voltage – K	Off*/-5 to +5	This adjustment allows fine control of the Cyan station OPC-to-ITB transfer voltage. (There is currently no known defect associated with this adjustment.)

System Setup

Use the **System Setup** screen to change settings on the printer such as Jam Recover and Auto Continue.

Figure 2-31 HP ToolboxFX System Setup screen



The following **Jam recovery** settings are available:

- Auto (default)
- On
- Off

The following **Auto continue** settings are available:

- On
- Off (default)

Set the **Connection time-out (I/O)** setting to any value from 5 to 7200 seconds (default is 120).

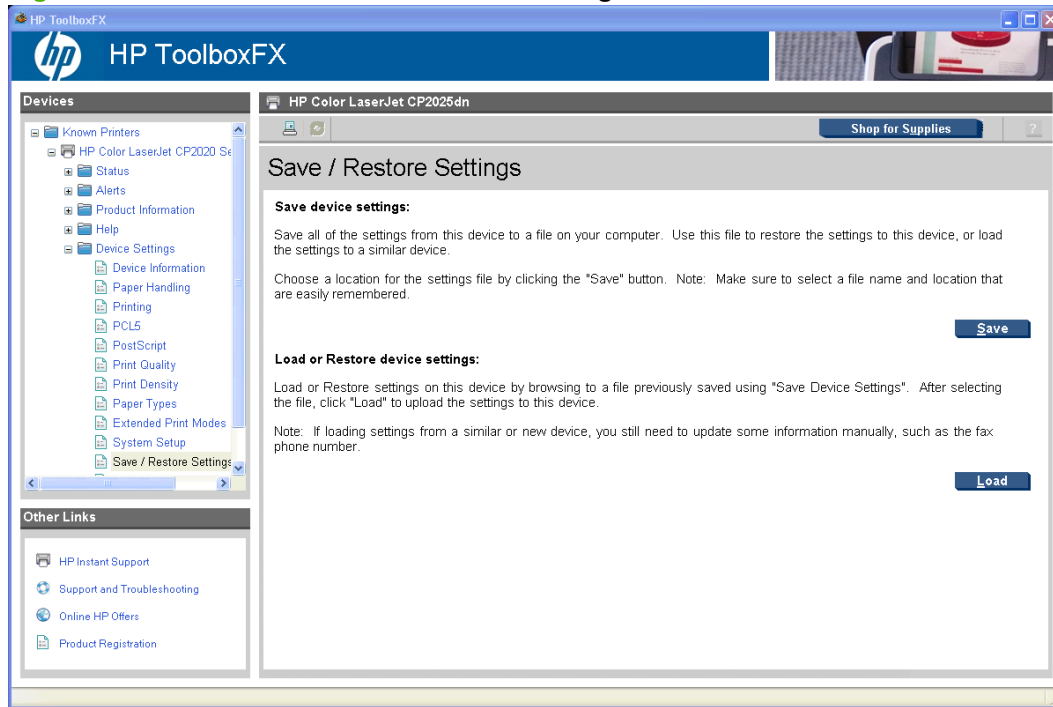
Set the **Cartridge low threshold** setting to any value from 1 to 20% (default is 6%). The **Cartridge low threshold** option sets the percentage threshold that triggers a toner low alert in HP ToolboxFX.

 **NOTE:** Click **Apply** to make the changes take effect.

Save/Restore Settings

Use the **Save/Restore Settings** screen to save all of the product settings to a file on the computer. The settings that have been saved into the printer can also be loaded from this screen.

Figure 2-32 HP ToolboxFX Save/Restore Settings screen



When you click **Save**, the **Save as** dialog box might be hidden. Look behind the browser window or on the taskbar.

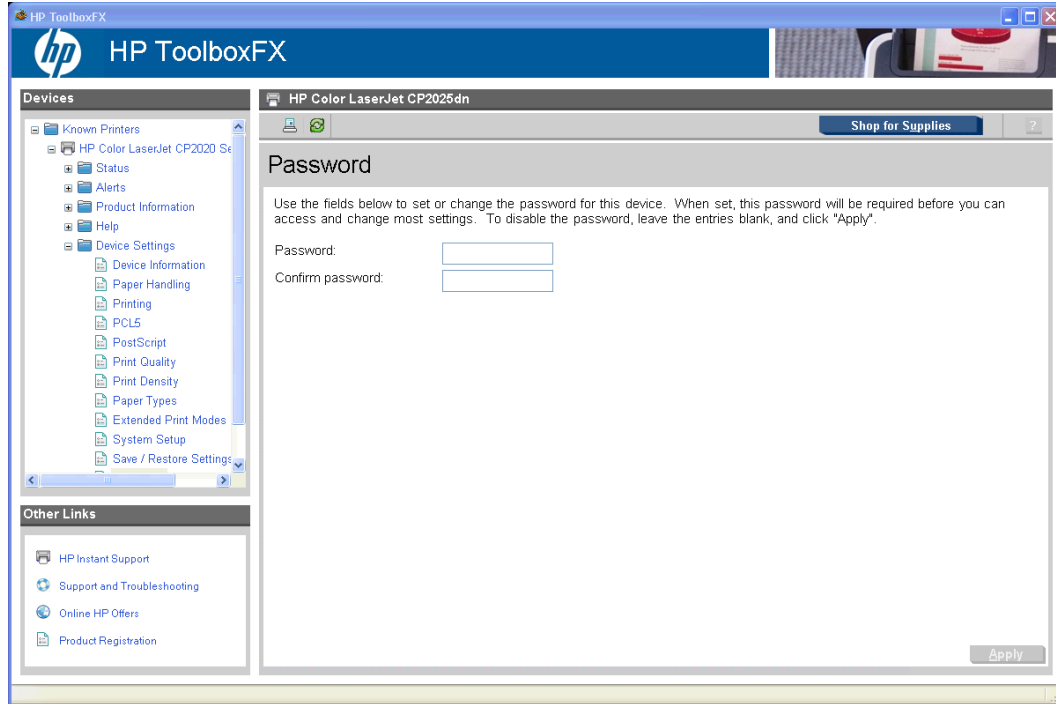
Settings that were saved from a previous HP product cannot be restored. Only settings that were saved from an HP Color LaserJet CP2020 Series printer can be restored.

NOTE: HP ToolboxFX will not function until settings have been fully loaded and the HP Color LaserJet CP2020 Series printer control panel returns to the **Ready** state.

Password


Use this screen to set or change the Administrator password.

Figure 2-33 HP ToolboxFX Password screen



Network administrators can set user passwords to protect network settings. After a password is set, only users who know the password have access to certain screens within HP ToolboxFX. If a password has been set, users are prompted to type the password. If the typed-in password matches the password stored in the printer, users can navigate through the password protected screens and make changes to the settings.

If the password is lost or forgotten, the factory settings for the HP Color LaserJet CP2020 Series printer must be restored and a new password assigned.

 **NOTE:** Click **Apply** to make the changes take effect.

The following HP ToolboxFX features become locked when a password is set:

- **Shop for Supplies** button
- **HP Instant Support** link
- **System Setup** screens
- **Print settings** screens
- **Network Settings** screens
- **Event Log** screen

 **NOTE:** Setting a password on this screen also sets the password for the HP EWS.

Network Settings folder

The **Network Settings** folder is only available with a network installation.

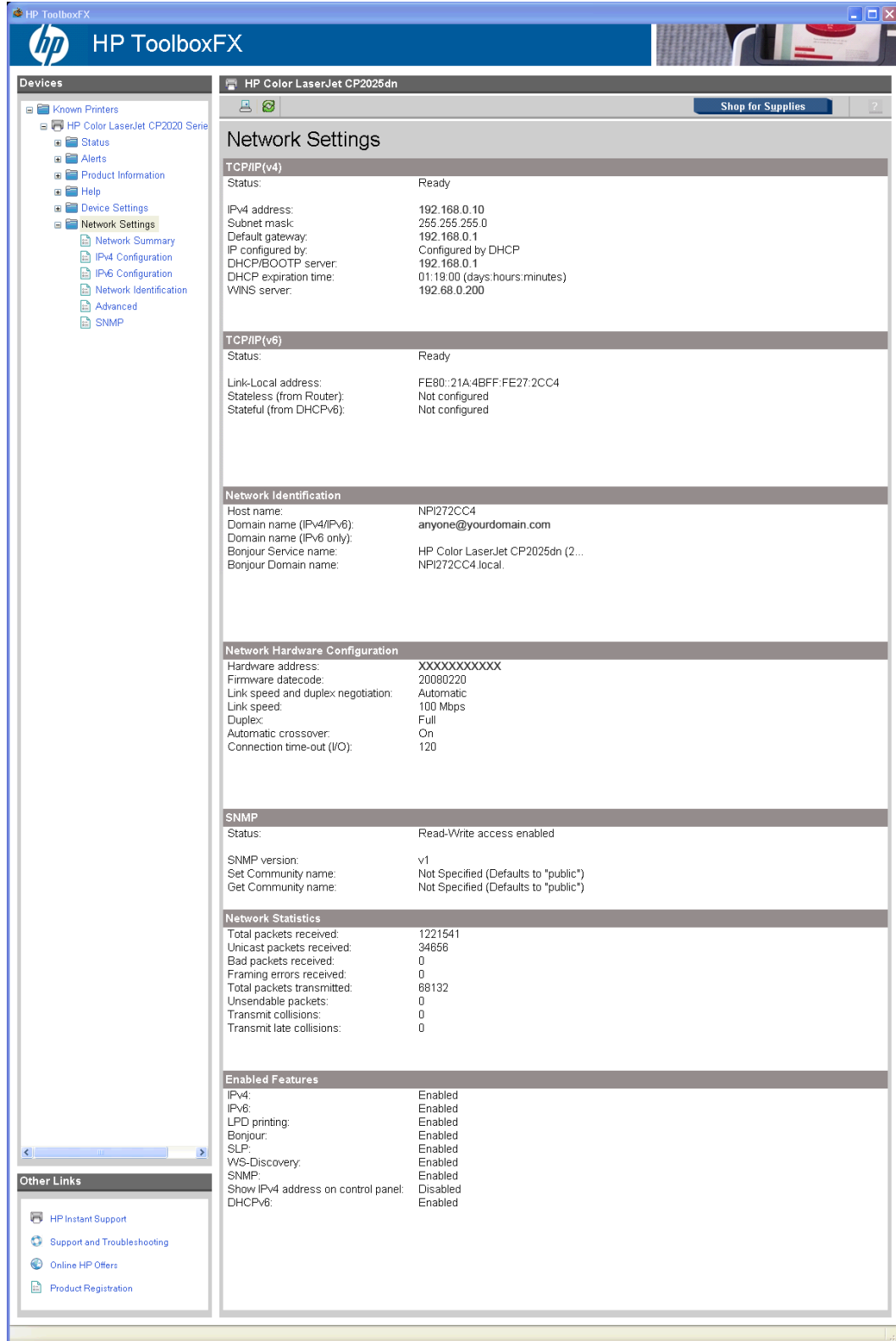
The HP Color LaserJet CP2020 Series printers contain onboard networking support. This printer model does not require the use of an external Jetdirect box for network connectivity. Use **Network Settings** options to configure the network settings for the HP Color LaserJet CP2020 Series printer.

For network installations, HP ToolboxFX communicates with the HP Color LaserJet CP2020 Series printer by using the network settings that appear on the following **Network Settings** screens:

- [Network Summary](#)
- [IPv4 Configuration](#)
- [IPv6 Configuration](#)
- [Network Identification](#)
- [Advanced](#)
- [SNMP](#)

△ **CAUTION:** Changing network settings can cause communication problems between HP ToolboxFX and the HP Color LaserJet CP2020 Series printer.

Figure 2-34 HP ToolboxFX Network Settings screen



Software Description

Network Summary

The **Network Summary** screen provides an overview of the network settings that are enabled for the HP Color LaserJet CP2020 Series printer.

Figure 2-35 HP ToolboxFX Network Summary screen – Network Settings folder

The screenshot shows the HP ToolboxFX interface for an HP Color LaserJet CP2025dn printer. The left sidebar contains a 'Devices' tree with 'Network Settings' expanded to show 'Network Summary'. The main content area is titled 'Network Summary' and contains the following sections:

- TCP/IP (v4)**: Status: Ready; IP-v4 address: 192.168.0.10; Subnet mask: 255.255.255.0; Default gateway: 192.168.0.1; IP configured by: Configured by DHCP; DHCP/BOOTP server: 192.168.0.1; DHCP expiration time: 01:19:00 (days:hours:minutes); WINS server: 192.68.0.200
- TCP/IP (v6)**: Status: Ready; Link-Local address: FE80::21A:4BFF:FE27:2CC4; Stateless (from Router): Not configured; Stateful (from DHCPv6): Not configured
- Network Identification**: Host name: NPI272CC4; Domain name (IPv4/IPv6): anyone@yourdomain.com; Domain name (IPv6 only): Not configured; Bonjour Service name: HP Color LaserJet CP2025dn (2...; Bonjour Domain name: NPI272CC4.local.
- Network Hardware Configuration**: Hardware address: XXXXXXXXXXXX; Firmware datecode: 20080220; Link speed and duplex negotiation: Automatic; Link speed: 100 Mbps; Duplex: Full; Automatic crossover: On; Connection time-out (I/O): 120
- SNMP**: Status: Read-Write access enabled; SNMP version: v1; Set Community name: Not Specified (Defaults to "public"); Get Community name: Not Specified (Defaults to "public")
- Network Statistics**: Total packets received: 1221734; Unicast packets received: 34872; Bad packets received: 0; Framing errors received: 0; Total packets transmitted: 88151; Undersendable packets: 0; Transmit collisions: 0; Transmit late collisions: 0
- Enabled Features**: IPv4: Enabled; IPv6: Enabled; LPD printing: Enabled; Bonjour: Enabled; SLP: Enabled; WS-Discovery: Enabled; SNMP: Enabled; Show IPv4 address on control panel: Disabled; DHCPv6: Enabled

At the bottom left, there is an 'Other Links' section with links to HP Instant Support, Support and Troubleshooting, Online HP Offers, and Product Registration.

The settings appear under the following headings:

- TCP/IP(v4)
- TCP/IP(v6)
- Network Identification
- Network Hardware Configuration
- SNMP
- Network Statistics
- Enabled Features

IPv4 Configuration

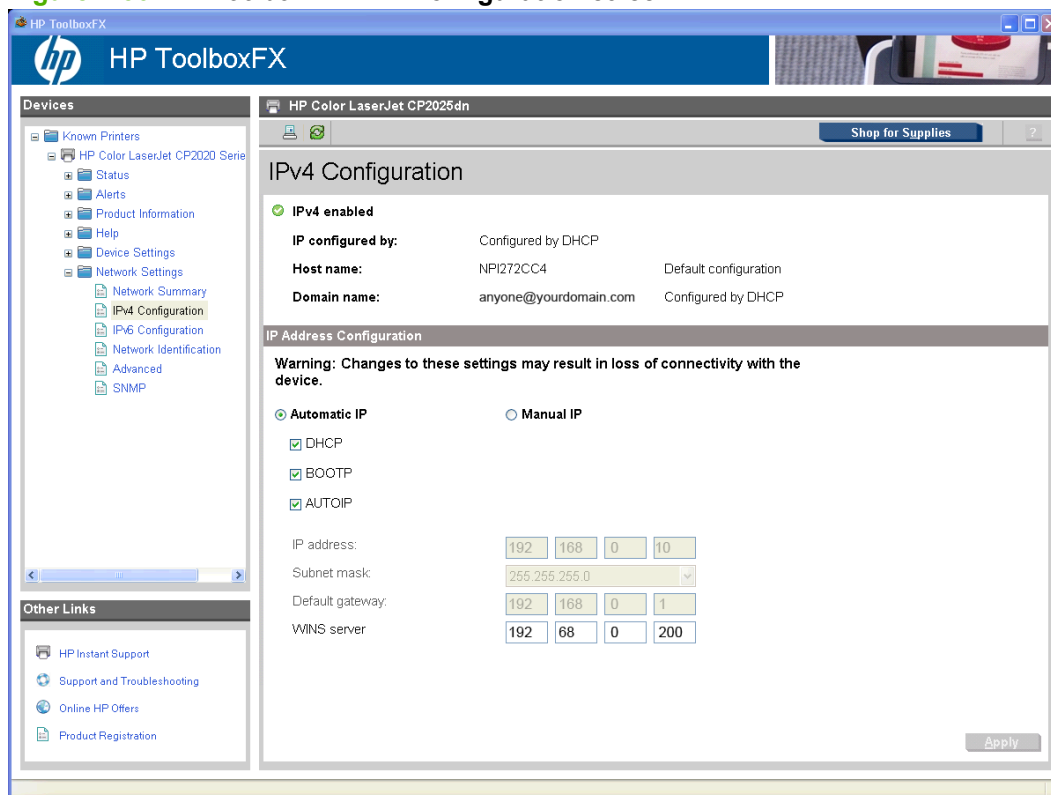
Use the **IPv4 Configuration** screen to modify settings for basic TCP/IPv4 Network configuration.

If **Automatic IP** is configured, the **Manual IP** Address configuration settings are disabled, but the values for these settings are still displayed if they have been set.

If the configuration is switched from **Automatic IP** to **Manual IP**, the **IP Address** fields are cleared, and you must enter the IP address before continuing.

Click **Apply** to keep changes. When **Apply** is clicked, a confirmation dialog box appears for confirmation. Click **Yes** to continue.

Figure 2-36 HP ToolboxFX IPv4 Configuration screen

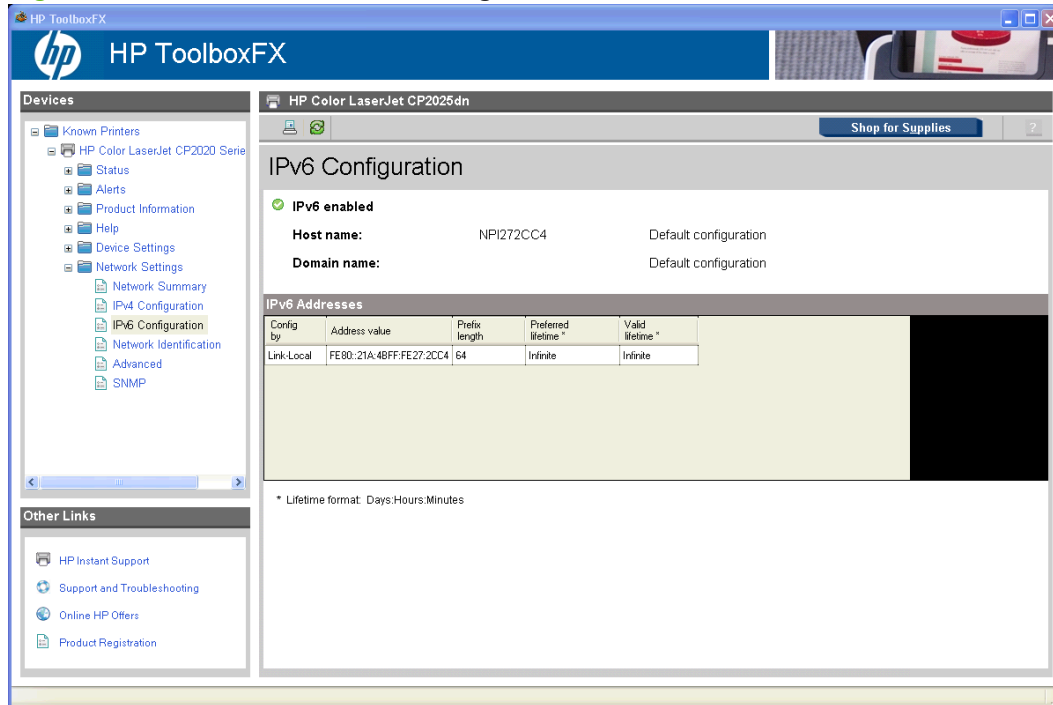


IPv6 Configuration

The **IPv6 Configuration** screen shows the status of the IPv6 Network configuration settings. This screen is read-only and no settings can be modified here.

Up to seven IPv6 addresses can be shown on this screen, depending upon the automatic configuration of the networking firmware. All available IPv6 addresses are shown.

Figure 2-37 HP ToolboxFX IPv6 Configuration screen



Network Identification

Use the **Network Identification** screen to configure the host name and domain name(s) used to identify the product on the network.

The values for host name and domain names are retrieved from the firmware and displayed on this screen. The networking firmware determines the host name and domain name(s) to use. This information cannot be modified.

The text entries are disabled under certain circumstances. The following table defines when the entities are disabled:

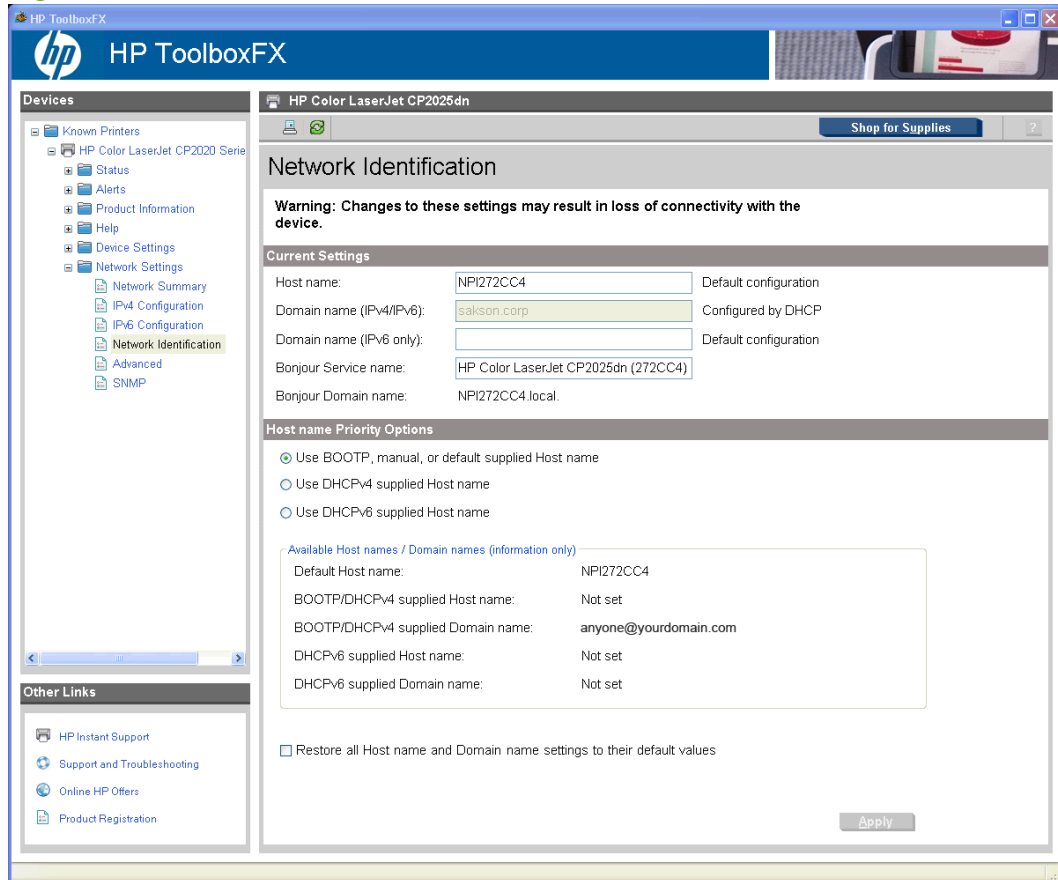
Table 2-9 Network Identification screen – Text entries

Text entry	Disabled status
Host name	Disabled if configured by BOOTP
Domain name (IPv4/IPv6)	Disabled if configured by BOOTP, DHCPv4, or DHCPv6

Table 2-9 Network Identification screen – Text entries (continued)

Text entry	Disabled status
Domain name (IPv6)	Disabled if configured by DHCPv6
Bonjour Service name	Disabled if Bonjour is disabled

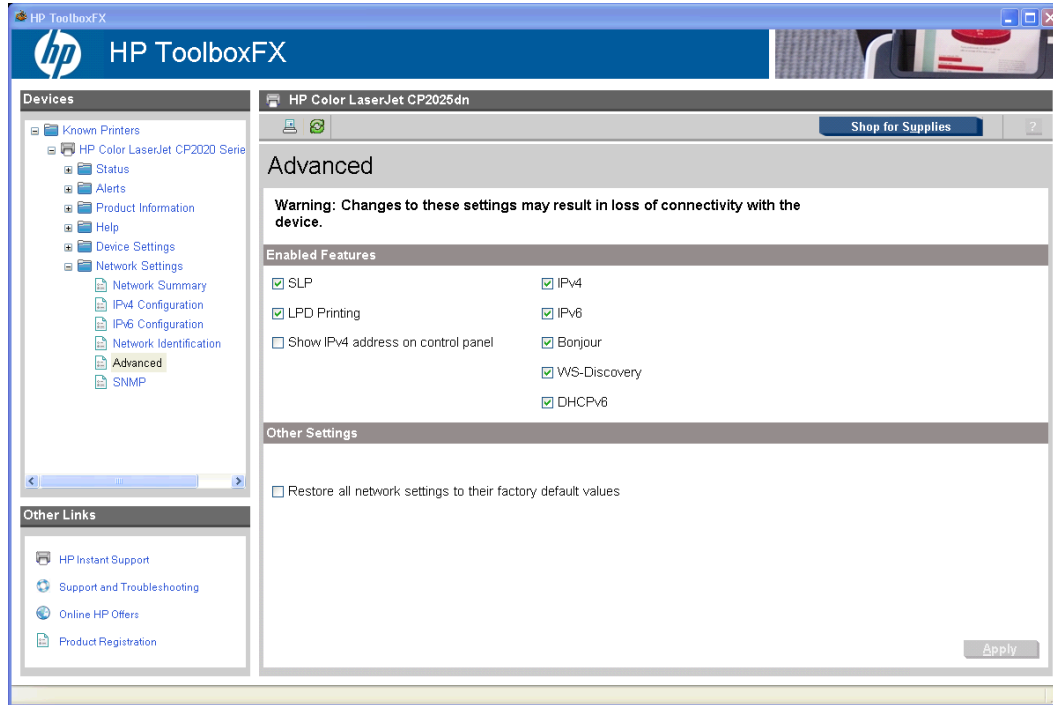
Figure 2-38 HP ToolboxFX Network Identification screen



Advanced

Use the **Advanced** screen to configure the enabled settings and other settings, such as link speed, for the printer.


Figure 2-39 HP ToolboxFX **Advanced** screen



The following table shows the options and settings that are available for the **Advanced** screen.

Table 2-10 Advanced Network Settings options and settings

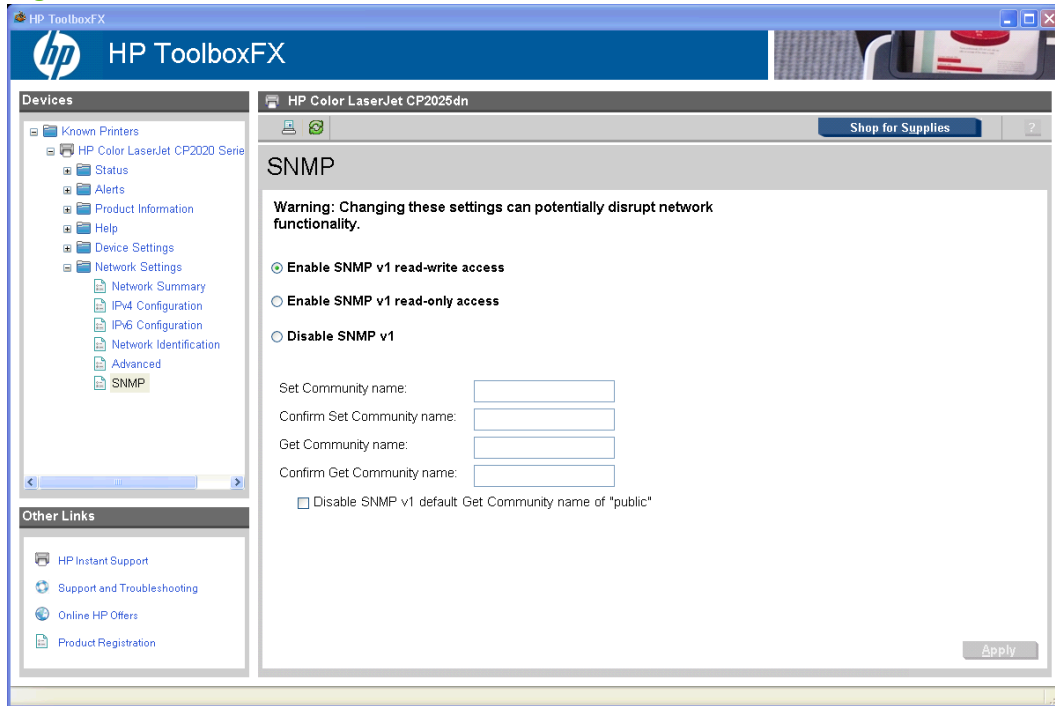
Option	Settings
Enabled Features	<ul style="list-style-type: none">● SLP (enabled by default)● LPD Printing (enabled by default)● Show IPv4 address on control panel● IPv4● IPv6● Bonjour● WS-Discovery● DHCPv6 <p>NOTE: All of these features are enabled by default except for Show IPv4 address on control panel.</p>
Other Settings	Restore all network settings to their factory default values.

 **NOTE:** Click **Apply** to make the changes take effect.

SNMP

Use this screen to configure the SNMP networking settings for the printer.

Figure 2-40 HP ToolboxFX **SNMP** screen



The following options are available on the **SNMP** screen.

Table 2-11 SNMP options and settings

Options	Description
Enable SNMP v1 read-write access	Select this option to enable SNMP v1 agents on the printer. Custom community names can be configured to control management access to the HP Color LaserJet CP2020 Series printer. These community name settings appear on the lower half of the screen.
Set Community name:	Type the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
Confirm Set Community name:	Retype the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
Get Community name:	Type the SNMP Get Community Name (password) to allow SNMP information to be read from the printer.
Confirm Get Community name:	Retype the SNMP Get Community Name (password) to allow SNMP information to be read from the printer.
Disable SNMP v1 default Get Community name of "public"	Select this option to disable the default Get community name "public". After selecting this option, type the values in the Get Community name and Confirm Get Community name fields.

Table 2-11 SNMP options and settings (continued)

Enable SNMP v1 read-only access (uses “public” for the Get Community value)	Select this option to enable the SNMP v1 agents on the HP Color LaserJet CP2020 Series printer, but limit access to read-only. Write-access is disabled. The default Get Community name "public" is automatically enabled.
Set Community name:	Type the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
Configure Get Community name:	
Disable SNMP v1 default Get Community name of “public”:	Select this option to disable the default Get community name "public". After selecting this option, type the values in the Get Community name and Confirm Get Community name fields.
Disable SNMP v1	Select this option to disable the SNMP v1 agents on the HP Color LaserJet CP2020 Series printer, which is recommended for secure environments. If SNMP v1 is disabled, some port monitors or discovery utilities might not operate properly.
Apply	Click Apply to make the changes take effect.

Other screens

The following table lists screens that are also available through HP ToolboxFX.

Table 2-12 HP ToolboxFX – Other screens

Screen	Access
About HP ToolboxFX screen	Click the HP logo that appears in the upper-left corner of the HP ToolboxFX screens.
HP Instant Support screen	Click the HP Instant Support link in the Other Links box that appears on all HP ToolboxFX and HP EWS screens.
Support and Troubleshooting screen	Click the Support and Troubleshooting link in the Other Links box that appears on all HP ToolboxFX and HP EWS screens.
Product Registration screen	Click the Product Registration link in the Other Links box that appears on all HP ToolboxFX and HP EWS screens.
Shop for Supplies screen	Click the Shop for Supplies link in the upper-right corner of the HP ToolboxFX screens.

About HP ToolboxFX dialog box

Click the HP logo in the HP ToolboxFX heading banner on any HP ToolboxFX screen to gain access to the **About HP ToolboxFX** dialog box. This dialog box shows the software version number and a

copyright notice. This dialog box also shows the version number for each HP ToolboxFX product that is installed.

Figure 2-41 About HP ToolboxFX screen



HP Instant Support

Click **HP Instant Support** to gain access to self-help based on information sent from the product to the HP Web site. The help includes recommendations for troubleshooting, firmware upgrades, and reference documentation that is customized to respond to the most recent events that have occurred on the HP Color LaserJet CP2020 Series printer.

Support and Troubleshooting

Select **Support and Troubleshooting** to get to a Web page with links to online support for the HP Color LaserJet CP2020 Series printer.

Product Registration

The **Product Registration** link connects to a Web page to register the printer.

Shop for Supplies

The **Shop for Supplies** link connects to a Web page that can be used to order supplies online. The supplies do not come from HP, but from a choice of resellers. The HP Color LaserJet CP2020 Series printer supplies are preselected. Use the options on this screen to change quantities or order additional items. The selected items are dropped into the shopping cart, ready for checkout. This process ensures that the correct supplies are ordered through the selected reseller.

HP Embedded Web Server

The HP Embedded Web Server (HP EWS) is a Web server in the product that allows users to control settings on the HP Color LaserJet CP2020 Series printer through the Web browser. The HP EWS is available only if the HP Color LaserJet CP2020 Series printer is installed through a network rather than a USB connection.

To gain access to the HP EWS, open a Web browser and type the printer IP address in the address bar.

The printer IP address is documented on a configuration page. Print a configuration page by following these steps on the product control panel:

1. Press **OK** to open the menus.
2. Press the **Left arrow** or **Right arrow** to navigate to **Main menu/Reports**. Press **OK**.
3. Press the **Left arrow** or **Right arrow** to navigate to **Reports/Config report**. Press **OK**.
4. Find the IP address on the printed sheet beneath the **Product Settings** heading.

The following tabs are available in the HP EWS:

- [Status tab](#)
- [Settings tab](#)
- [Networking tab](#)

Status tab

Use the **Status** tab to gain access to and print detailed information regarding product and supply status, product configuration, network configuration, and usage.

The **Status** tab contains the following screens:

- [Device Status](#)
- [Supplies Status](#)
- [Device Configuration](#)
- [Network Summary](#)
- [Print Info Pages](#)
- [Color Usage Job Log](#)
- [Event Log](#)

Device Status

The **Device Status** screen shows status messages from the product. The **Device Status** screen also contains some pertinent printer information and product settings.

Figure 2-42 HP EWS **Device Status** screen

HP Color LaserJet CP2025dn 192.168.0.10

hp HP Color LaserJet CP2025dn

Home

Status Settings Networking

Device Status

Shop for Supplies Support

Device Status

Status: PowerSave on

Supplies Summary

Supply	Level	Order HP Part:	Approximate Pages Remaining
Black Cartridge	94%	CC530A	Gathering Data
Cyan Cartridge	72%	CC531A	398
Magenta Cartridge	74%	CC533A	442
Yellow Cartridge	65%	CC532A	293

Supplies Detail

Supplies Status

The **Supplies Status** screen provides detailed information about the cyan, magenta, yellow, and black print cartridges. This information is not available if a non-HP cartridge is installed in the product.

Figure 2-43 HP EWS **Supplies Status** screen

HP Color LaserJet CP2025dn 192.168.0.10

Supplies Status

Ordering Information:
Hewlett-Packard supplies can be ordered on the Internet, on-line through your printer software or by calling an authorized reseller. Refer to your printer User Guide for instructions.

Black Cartridge 94%
Order HP Part: CC530A

Approximate Pages Remaining: Gathering Data
(Available after 25% of use)

Low Reached: No
Serial Number: 551749121
Pages Printed With This Supply: 186
First Install Date: Not Available
Last Used Date: 20080320

Cyan Cartridge 72%
Order HP Part: CC531A

Approximate Pages Remaining: 402
(Pages remaining will vary depending on the types of documents printed.)

Low Reached: No
Serial Number: 546833921
Pages Printed With This Supply: 160
First Install Date: 20070924
Last Used Date: 20080320

Magenta Cartridge 74%
Order HP Part: CC533A

Approximate Pages Remaining: 446
(Pages remaining will vary depending on the types of documents printed.)

Low Reached: No
Serial Number: 547816962
Pages Printed With This Supply: 160
First Install Date: 20070924
Last Used Date: 20080320

Yellow Cartridge 65%
Order HP Part: CC532A

Approximate Pages Remaining: 296
(Pages remaining will vary depending on the types of documents printed.)

Low Reached: No
Serial Number: 554567170
Pages Printed With This Supply: 160
First Install Date: 20070924
Last Used Date: 20080320

Return & Recycling
Please return your genuine HP supplies for recycling to Hewlett-Packard. For more information, please visit us at <http://www.hp.com/go/recycle>

Device Configuration

The **Device Configuration** screen shows the values for all of the settings available for the product and other configuration items, such as installed DIMMs, personalities, and page counts. The contents of this screen are consistent with the configuration page that the firmware generates.

Figure 2-44 HP EWS Device Configuration screen (1 of 2)

The screenshot displays the HP EWS interface for an HP Color LaserJet CP2025dn printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists navigation options such as 'Device Status', 'Supplies Status', 'Device Configuration', 'Network Summary', 'Print Info Pages', 'Color Usage Job Log', and 'Event Log'. The main content area is titled 'Device Configuration' and features a 'Shop for Supplies' and 'Support' button. The configuration is organized into several sections:

- Product Information:** Lists details such as Product Name (HP Color LaserJet CP2025dn), Formatter Number (MB0012H), Product Serial Number (XXXXXXXXXX), Service ID (17240), Firmware Datecode (20080220), Location (15), Max Monochrome Print Quality (600x8), Max Color Print Quality (ImageREt 3600), Controller Number (8), Device Description (HP Color LaserJet CP2025dn), Language (English), Asset Number, Company Name, Contact Person, Password (Not Specified), Hardware Address (00:1a:4b:27:2c:c4), Host Name (NPI272CC4), IPv4 Address (192.168.0.10), Show IPv4 Address on Control Panel (Disabled), IPv6 Address (FE80::21A:4BFF:FE27:2CC4), Total Memory (128 MBytes), and Available Memory (109.35 MBytes).
- Installed Personalities and Options:** Lists PCL5, PostScript, PCLXL, and DIMM Slot 1 (Empty).
- Page Counts:** Shows Total Pages Printed (1048), Color Pages Printed (932), Duplex Pages Printed (12), Pages Mispicked in Printer (9), Pages Jammed in Printer (0), PCL6 Pages Printed (27), PS Pages Printed (0), and PCL Pages Printed (0).
- Paper Settings:** Lists Paper Size (Letter), Paper Type (Plain), Tray 1 Size (Any size), Tray 1 Type (Any Type), Tray 2 Size (Any size), Tray 2 Type (Any Type), Paper Out Action (Wait Forever), Manual Feed (Off), Duplex (Off), Bind (Long Edge), Plain (Normal), HP Matte 90g (Heavy), HP Matte 105g (Heavy), HP Matte 120g (Extra Heavy), HP Matte 160g (Card stock), HP Matte 200g (Card stock), HP Glossy 130g (Light Glossy), and HP Glossy 160g (Glossy).

Software Description

Figure 2-45 HP EWS Device Configuration screen (2 of 2)

HP Tri Glossy 160g:	Glossy			
HP Glossy 220g:	Heavy Glossy			
Light 60-74g:	Light			
Mid-Weight 96-110g:	Heavy			
Heavy 111-130g:	Extra Heavy			
Extra Heavy 131-175g:	Card stock			
Heavy Glossy111-130g:	Light Glossy			
X-HvyGlossy 131-175g:	Glossy			
Card Glossy 176-220g:	Heavy Glossy			
Transparency:	Transparency			
Labels:	Label			
Letterhead:	Normal			
Envelope:	Envelope			
Heavy Envelope:	Heavy Envelope			
Preprinted:	Normal			
Prepunched:	Normal			
Colored:	Normal			
Bond:	Heavy			
Recycled:	Normal			
Rough:	Heavy			
Heavy Rough:	Card stock			
HP Tough Paper:	Tough Paper			
Print Settings				
Auto Continue:	Off			
Copies:	1			
Courier Font:	Regular			
Orientation:	P (Portrait)			
Wide A4:	No			
Connection Timeout (I/O):	120 Seconds			
Jam Recovery:	Auto			
Font Source:	I (Internal)			
Font Number:	23			
Pitch:	10.00			
Point Size:	12.00			
Symbol Set:	PC-8			
Form:	60 Lines			
Append CR to LF:	No			
Print PS Errors:	Off			
Supply out override enabled.:	No			
Mono print (color out):	No			
Low Threshold:	6			
Restrict Color:	Color Enabled			
PowerSave Time:	15 Minutes			
Print Density				
	C	M	Y	K
Contrasts:	0	0	0	0
Highlights:	0	0	0	0
Midtones:	0	0	0	0
Shadows:	0	0	0	0

Network Summary

The **Network Summary** screen shows the values for all of the network settings that are available for the product. The contents of this screen are consistent with the configuration page that the firmware generates.

Figure 2-46 HP EWS **Network Summary** screen – **Status** tab (1 of 2)

HP Color LaserJet CP2025dn 192.168.0.10

HP Color LaserJet CP2025dn

HP Color LaserJet CP2025dn 192.168.0.10

Network Summary

Shop for Supplies Support

TCP/IP(v4)

Status: Ready

IPv4 Address: 192.168.0.10
 Subnet Mask: 255.255.255.0
 Default Gateway: 192.168.0.1
 IP Configured By: DHCP
 DHCP/BOOTP Server: 192.68.0.201
 DHCP Expiration Time: 01:19:15 (Days:Hours:Minutes)
 WINS Server: 192.68.0.200

TCP/IP(v6)

Status: Ready

Link-Local Address: FE80::21A:4BFF:FE27:2CC4
 Stateless (from Router): Not Configured
 Stateful (from DHCPv6): Not Configured

Network Identification

Host Name: NPI272CC4
 Domain Name (IPv4/IPv6): anyone@yourdomain.com
 Domain Name (IPv6 only):
 Bonjour Service Name: HP Color LaserJet CP2025dn (272CC4)
 Bonjour Domain Name: NPI272CC4.local.

Network Hardware Configuration

Hardware Address: XXXXXXXXXXXXXXXX
 Firmware Datecode: 20080220
 Link Speed and Duplex Negotiation: Automatic
 Link Speed: 100 Mbps
 Duplex: Full
 Automatic Crossover: Enabled
 Connection Timeout (I/O): 120 Seconds
 WS-Print Users: 0

SNMP

Status: Read-Write Access Enabled

SNMP Version: v1
 Set Community Name: Not Specified (Defaults to 'public')
 Get Community Name: Not Specified (Defaults to 'public')

Network Statistics

Total Packets Received: 2109165
 Unicast Packets Received: 58777
 Bad Packets Received: 0
 Framing Errors Received: 0
 Total Packets Transmitted: 103812
 Unsendable Packets: 0
 Transmit Collisions: 0
 Transmit Late Collisions: 0

Figure 2-47 HP EWS **Network Summary** screen – **Status** tab (2 of 2)

Enabled Features	
IPv4:	Enabled
IPv6:	Enabled
DHCPv6:	Enabled
LPD Printing:	Enabled
Bonjour:	Enabled
SLP:	Enabled
WS-Discovery:	Enabled
SNMP:	Enabled
Show IPv4 Address on Control Panel:	Disabled

Print Info Pages

Use the **Print Info Pages** screen to print the internal special pages that the product generates. The content of these reports is generated by the product firmware. Click **Print** next to the name of the page to be printed.

Figure 2-48 HP EWS **Print Info Pages** screen

HP Color LaserJet CP2025dn 192.168.0.10

Print Information Pages

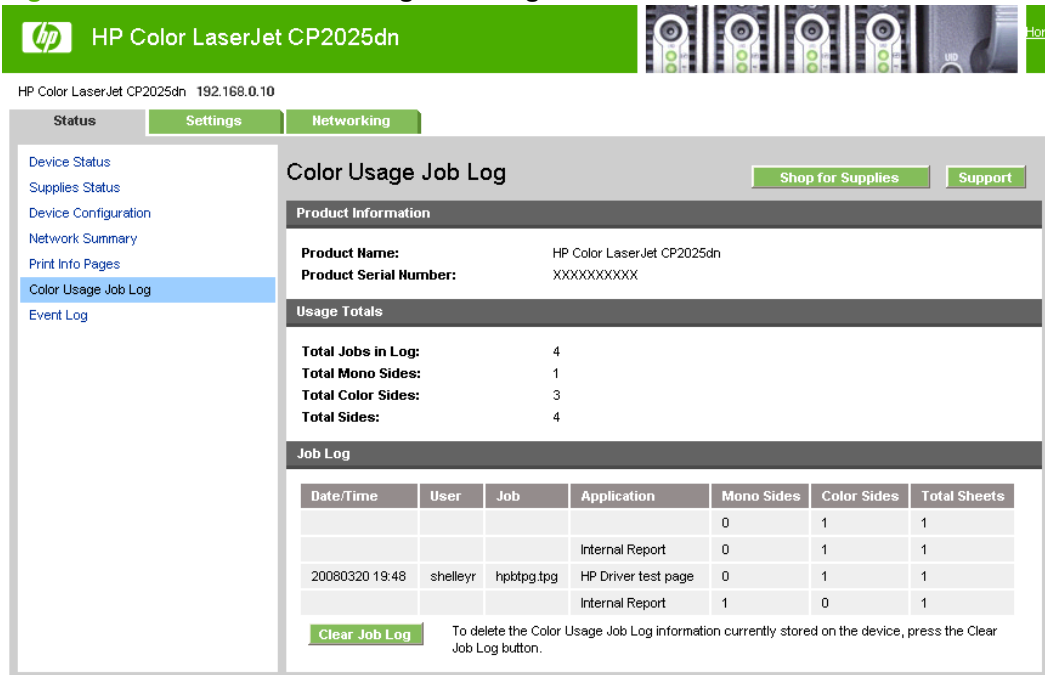
Print PCL Font List	Print
Print PCL6 Font List	Print
Print PS Font List	Print
Print Supplies Page	Print

Color Usage Job Log

Use the **Color Usage Job Log** screen to complete the following tasks:

- Find the printer's serial number, which is listed under the **Product Information** subheading.
- Check the number of print jobs stored, which is listed under the **Usage Totals** subheading. The log also includes information about how much color the printer has used.
- Delete the currently stored Color Usage Job Log information by selecting the **Clear Job Log** option.

Figure 2-49 HP EWS **Color Usage Job Log** screen



HP Color LaserJet CP2025dn 192.168.0.10

HP Color LaserJet CP2025dn

Settings Networking

Device Status
Supplies Status
Device Configuration
Network Summary
Print Info Pages
Color Usage Job Log
Event Log

Color Usage Job Log

Shop for Supplies Support

Product Information

Product Name: HP Color LaserJet CP2025dn
Product Serial Number: XXXXXXXXXX

Usage Totals

Total Jobs in Log: 4
Total Mono Sides: 1
Total Color Sides: 3
Total Sides: 4

Job Log

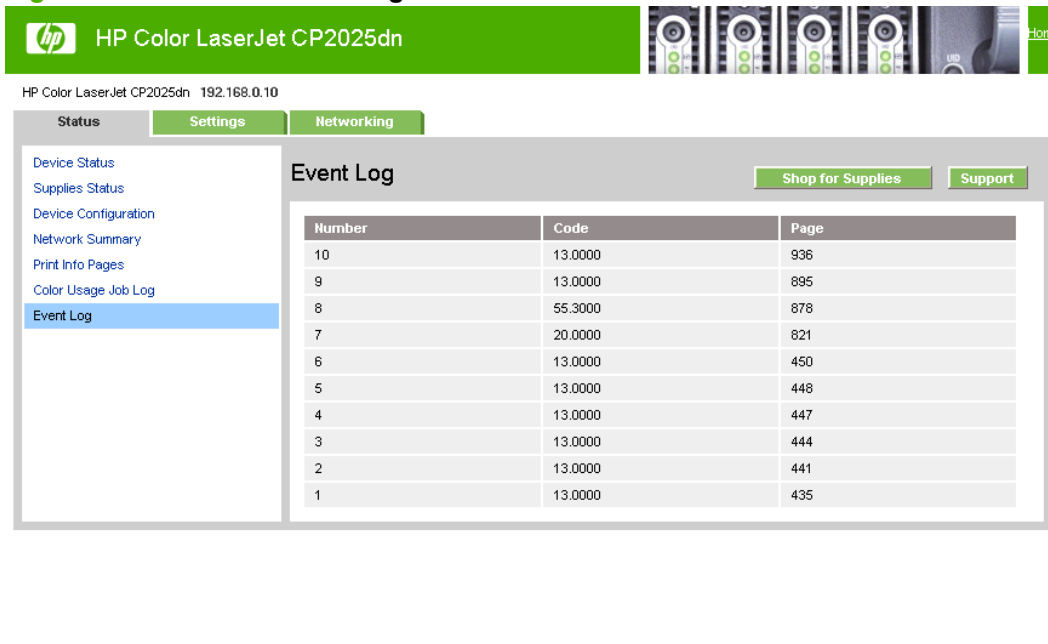
Date/Time	User	Job	Application	Mono Sides	Color Sides	Total Sheets
			Internal Report	0	1	1
			Internal Report	0	1	1
20080320 19:48	shelleyr	hpbtpg.tpg	HP Driver test page	0	1	1
			Internal Report	1	0	1

Clear Job Log To delete the Color Usage Job Log information currently stored on the device, press the Clear Job Log button.

Event Log

Use the **Event Log** screen to monitor events for the HP Color LaserJet CP2020 Series printer. Up to 10 events can appear on this screen. If this screen is empty, no events have occurred on the printer.

Figure 2-50 HP EWS **Event Log** screen



HP Color LaserJet CP2025dn 192.168.0.10

Settings

Event Log

Number	Code	Page
10	13.0000	936
9	13.0000	895
8	55.3000	878
7	20.0000	821
6	13.0000	450
5	13.0000	448
4	13.0000	447
3	13.0000	444
2	13.0000	441
1	13.0000	435

Shop for Supplies Support

Settings tab

Use the **Settings** tab to view and change settings for the following features:

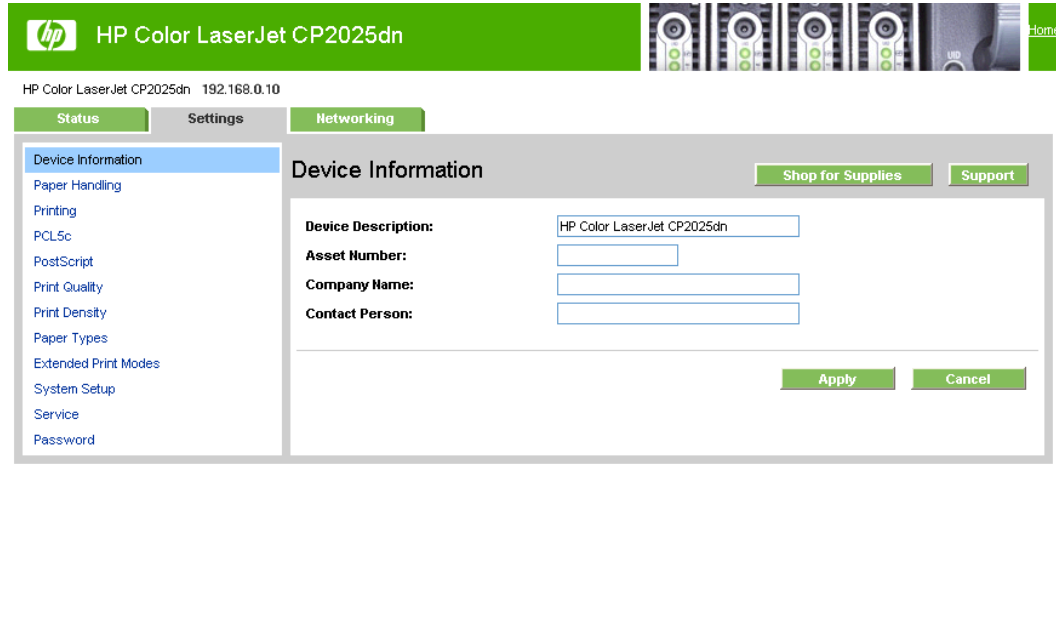
- [Device Information](#)
- [Paper Handling](#)
- [Printing](#)
- [PCL5c](#)
- [PostScript](#)
- [Print Quality](#)
- [Print Density](#)
- [Paper Types](#)
- [Extended Print Modes](#)
- [System Setup](#)
- [Service](#)
- [Password](#)

Device Information

The **Device Information** screen contains identifying information about the printer.

- **Device Description.** This field shows the version of the HP Color LaserJet CP2020 Series printer that is installed.
- **Asset Number.** Use this field to assign an identifying asset control number to the printer.
- **Company Name.**
- **Contact Person.**

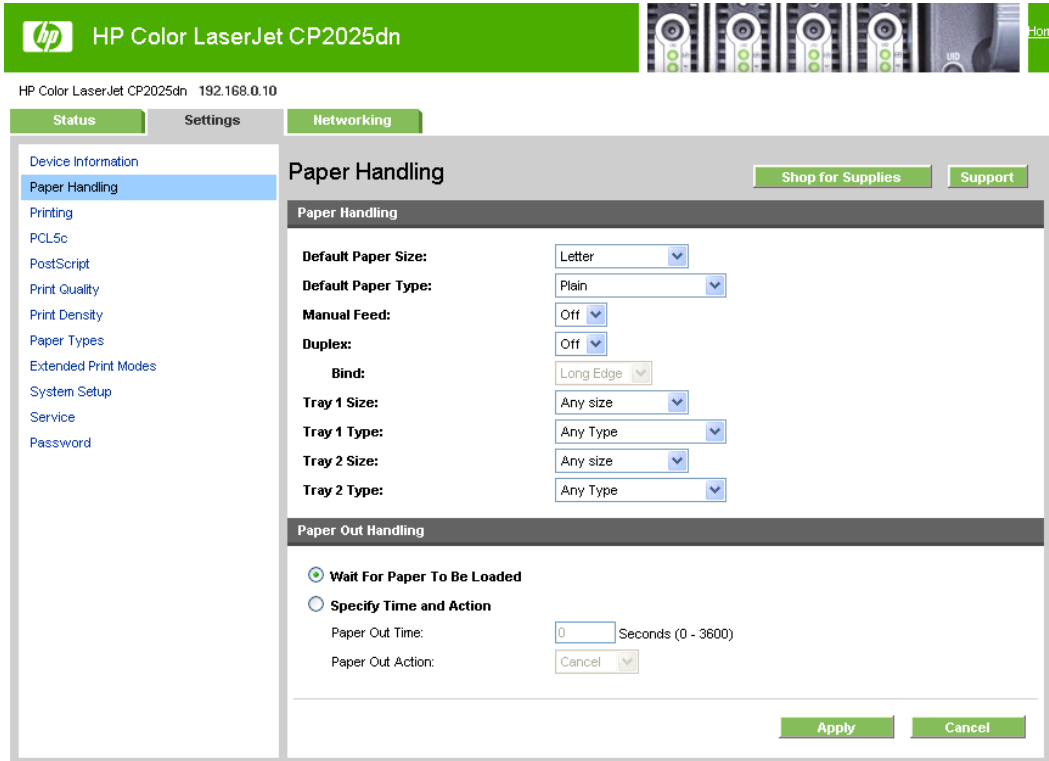
Figure 2-51 HP EWS **Device Information** screen



Paper Handling

Use this screen to configure the paper-handling defaults for the printer. Change the default settings by clicking the blue arrow next to each option and highlighting the selection. Click **Apply** to save the new settings.


Figure 2-52 HP EWS Paper Handling screen



The following options are available.

- **Default paper size.** This drop-down menu lists all of the supported paper sizes.

Because paper-size settings in most software programs override driver settings, use the driver to set paper size only when printing from software programs that do not include a paper-size setting, such as NotePad, or when 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 printer, a control-panel message prompts you to load the paper size or select another tray.

- **Default paper type.** This drop-down menu shows a selection of the paper types that the HP Color LaserJet CP2020 Series printer supports. When you use the default setting, **Unspecified**, the printer uses the default paper type, which is usually **Plain**. For more information about paper types, see [Paper type: on page 192](#).

- **Duplex.** The duplexing unit in the HP Color LaserJet CP2020 Series product prints on two sides of a sheet of paper when the **Print on Both Sides** option is specified in the print job. The HP Color LaserJet CP2020 Series product comes with a duplexing unit installed in the following models:
 - HP Color LaserJet CP2025dn
 - HP Color LaserJet CP2025x

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

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

- Prepunched
- Preprinted
- Letterhead

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

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

For more information about the duplex feature, see [Finishing tab features on page 206](#) .

- **Bind.** Binding occurs along either the left edge or the top edge of the page. 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.

For more information about binding, see [Finishing tab features on page 206](#) .

- **Tray size and type.** Network administrators can use this feature 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 tab set. This constraint prevents (or reduces the likelihood of) tying up the printer with paper-mount messages that occur when users request sizes or types that are not available.

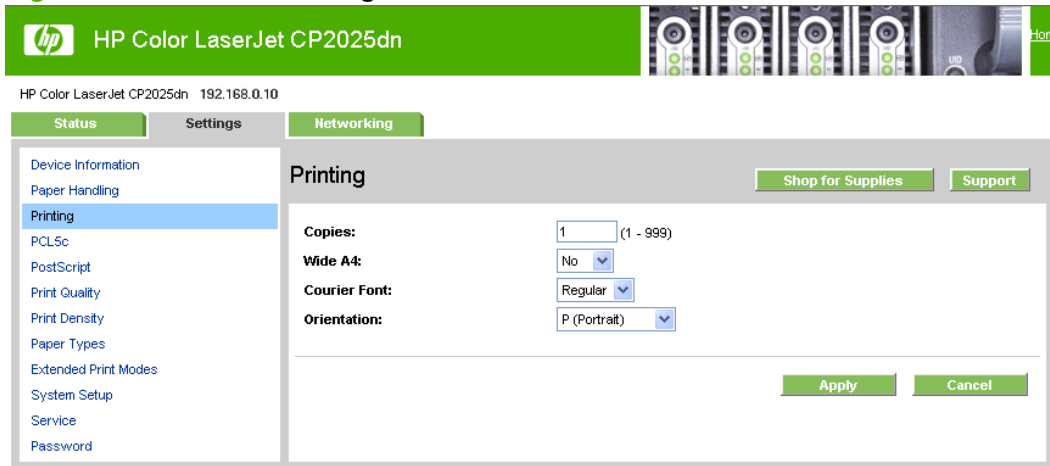
The trays listed on this screen include standard trays and optional accessory trays. Generally, items that are installed separately have a separate **Installable Options** setting.

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

Printing

Use the **Printing** screen to change the printing defaults for the printer.

Figure 2-53 HP EWS **Printing** screen



- **Copies.** This setting 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 requested number of copies appears in the **Copies** option. Select the number by typing in the box or by using the up and down arrows on the right side of the text box. For the HP Color LaserJet CP2020 Series printer, 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.

Invalid entries into the edit box (such as non-numerical input, numbers less than 1, or numbers greater than 9999) change to the last valid value that appeared in the box. The default number of copies is 1.

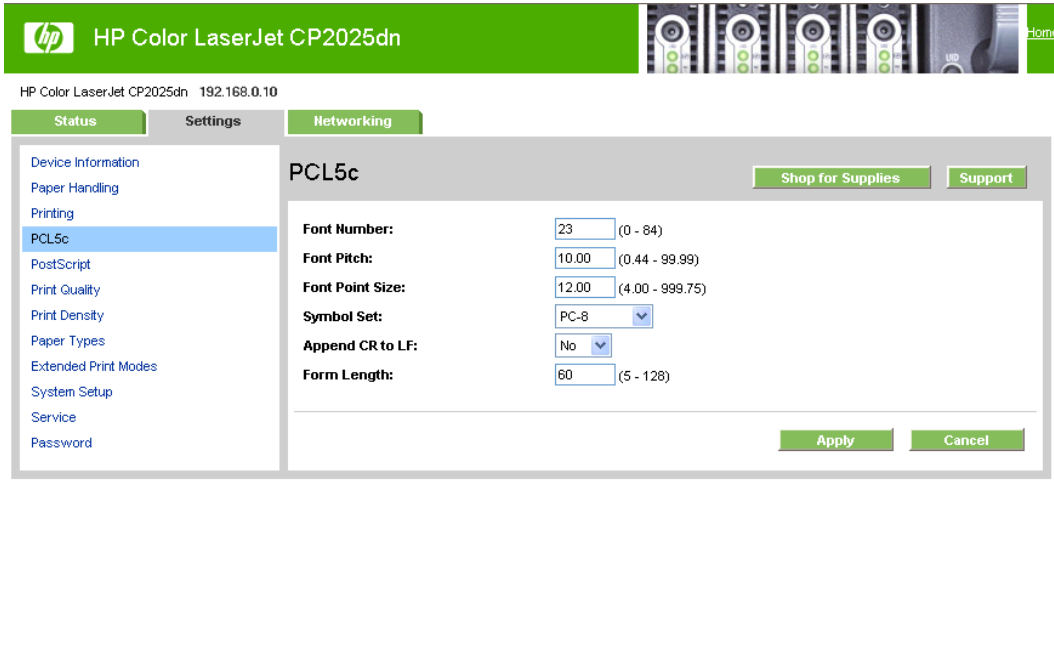
Problems can develop when a software program and the driver it is running on both allow the user to set the number of copies to print. In most cases, the software program and the driver communicate, so that the number of copies set in one location (such as the program) appears in the other (such as the driver). For some software programs, this communication does not take place, and the copies values are treated independently. For example, setting 10 copies in the program and then setting 10 copies in the driver might result in the printer making 100 copies (10 x 10). Set the number of copies in the software program, whenever possible.

- **Orientation.** Use this feature to choose the direction of the print job.
 - **Portrait.** The top edge of the document is the shorter edge of the paper. This is the default setting.
 - **Landscape.** The top edge of the document is the longer edge of the paper.

PCL5c

Use the **PCL5c** screen to change font information and form length.

Figure 2-54 HP EWS **PCL5c** screen



PostScript

Use the **PostScript** screen to turn postscript error printing on or off.

Figure 2-55 HP EWS **PostScript** screen

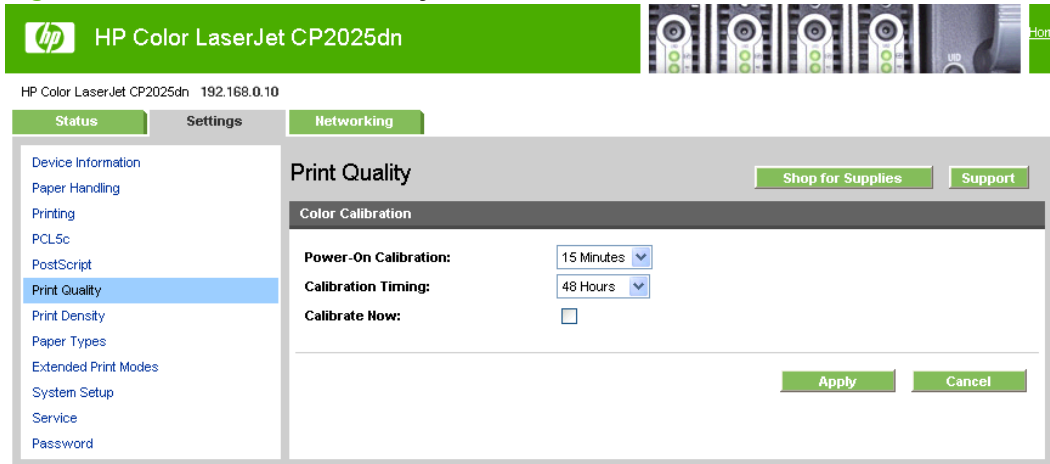


The **Print PostScript errors** setting specifies whether a PS error-handler message is sent. To get the printer to print an error page when an error occurs in the print job, click **On**.

Print Quality

Use the **Print Quality** screen to change when and how often the printer calibrates. You can also use the **Calibrate Now** button on this screen to cause the printer to calibrate.

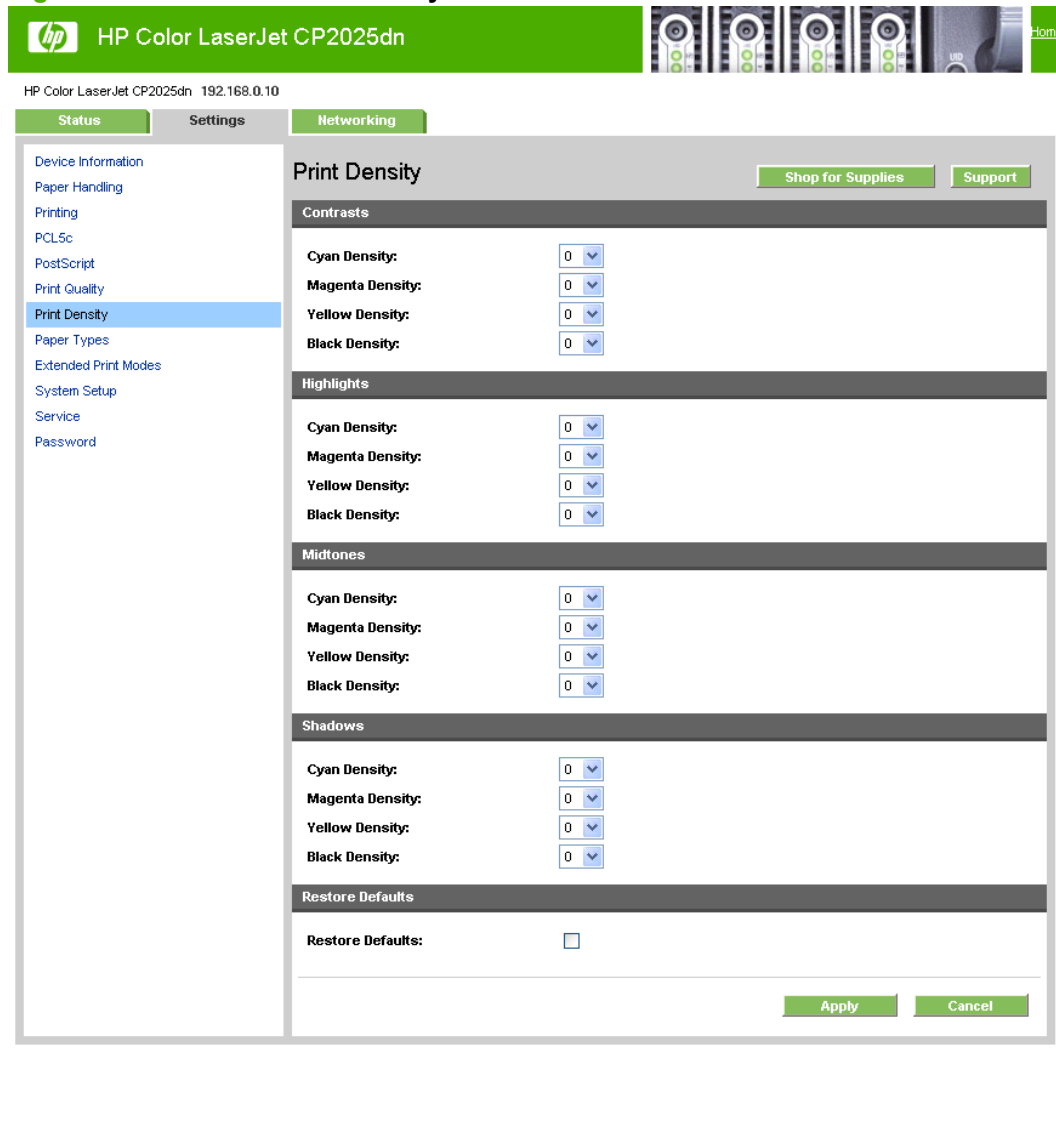
Figure 2-56 HP EWS **Print Quality** screen



Print Density

Use the settings on the **Print Density** screen to adjust the amount toner the printer uses for images, pages, and documents.

Figure 2-57 HP EWS **Print Density** screen

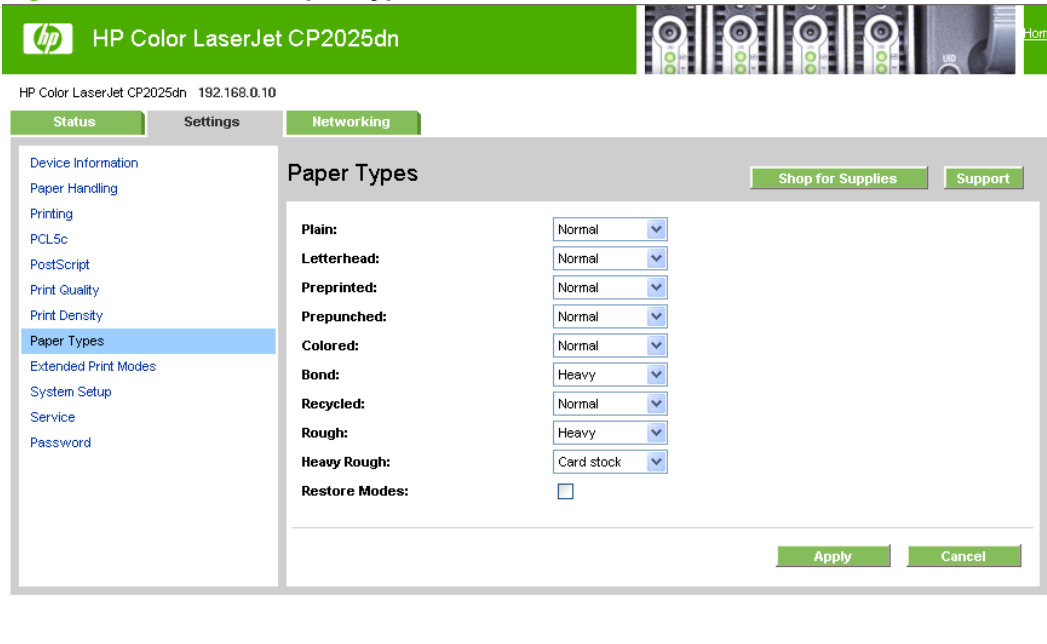


Paper Types

Use the **Paper Types** screen to map the print modes that the printer will use for each paper type.

For more information about Paper Types settings, see [Paper type: on page 192](#).

Figure 2-58 HP EWS Paper Types screen



Extended Print Modes

Use the **Extended Print Modes** screen to adjust the printing process to optimize print quality for various paper types and sizes.

For more information about Extended Print Mode settings, see [Extended Print Modes screen on page 69](#).

Figure 2-59 HP EWS **Extended Print Modes** screen (1 of 2)

HP Color LaserJet CP2025dn 192.168.0.10

Status Settings **Networking**

Device Information
 Paper Handling
 Printing
 PCL5c
 PostScript
 Print Quality
 Print Density
 Paper Types
Extended Print Modes
 System Setup
 Service
 Password

Extended Print Modes [Shop for Supplies](#) [Support](#)

Media Type	Fusing	Transfer	Duplex Transfer	Toner
Plain:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Matte 90g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Matte 105g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Matte 120g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Matte 160g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Matte 200g:	More Fusing (+1)	No Adjustment	No Adjustment	No Adjustment
HP Glossy 130g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Glossy 160g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Tri Glossy 160g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
HP Glossy 220g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Light 60-74g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Mid-Weight 96-110g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Heavy 111-130g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Extra Heavy 131-175g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Heavy Glossy111-130g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
X-HvyGlossy 131-175g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Card Glossy 176-220g:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Transparency:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Labels:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Letterhead:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Envelope:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Heavy Envelope:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Preprinted:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Prepunched:	No Adjustment	No Adjustment	No Adjustment	No Adjustment
Colored:	No Adjustment	No Adjustment	No Adjustment	No Adjustment

Figure 2-60 HP EWS Extended Print Modes screen (2 of 2)

Bond: No Adjustment No Adjustment No Adjustment No Adjustment

Recycled: No Adjustment No Adjustment No Adjustment No Adjustment

Rough: No Adjustment Rough Paper Rough Paper No Adjustment

Heavy Rough: No Adjustment Rough Paper Rough Paper No Adjustment

HP Tough Paper: No Adjustment No Adjustment No Adjustment No Adjustment

Restore Modes:

Optimize

Background Toner: Off

Background Toner 2: Off

Extra Drum Cleaning: Off

Drum Banding: Off

Registration: Off

Tray 1: Off

Re-Transfer: Off

Jam Reduction: Off

Heavy Media Optimization: Off

Transfer Belt Cleaning: No Adjustment

Transfer Belt Cleaning Voltage: No Adjustment

Transfer Belt Voltage - Y: No Adjustment

Transfer Belt Voltage - M: No Adjustment

Transfer Belt Voltage - C: No Adjustment

Transfer Belt Voltage - K: No Adjustment

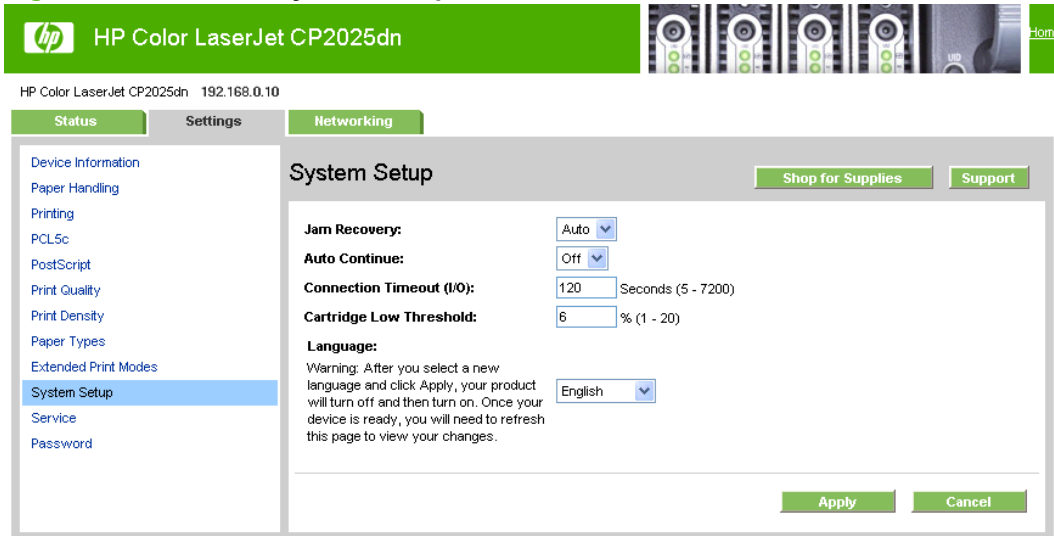
Apply Cancel

For more information regarding the Optimize menu options, see [Table 2-8 Optimize modes on page 71](#).

System Setup

Use the **System Setup** screen to change settings on the printer such as Jam Recovery and Auto Continue.

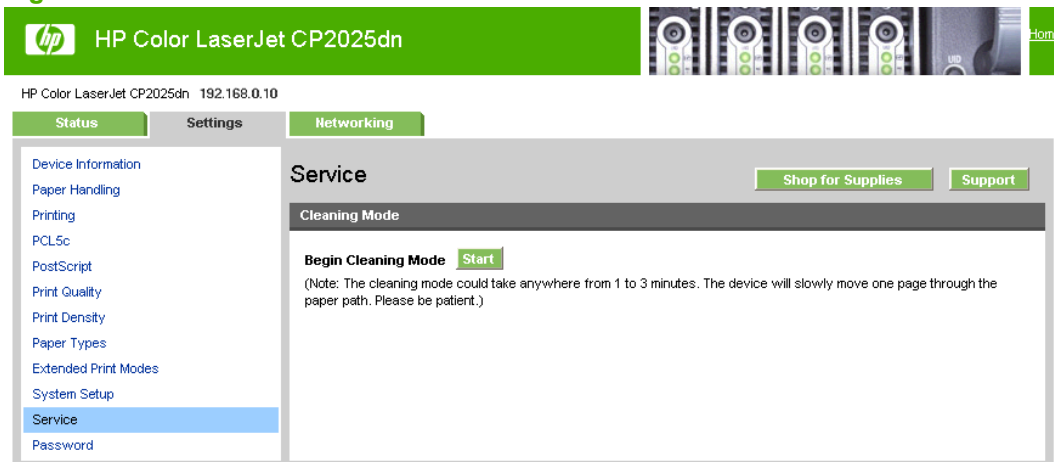
Figure 2-61 HP EWS **System Setup** screen



Service

Use the **Service** screen to start the cleaning mode procedure on the printer. Follow the instructions on the product control panel to complete the cleaning procedure.

Figure 2-62 HP EWS **Service** screen

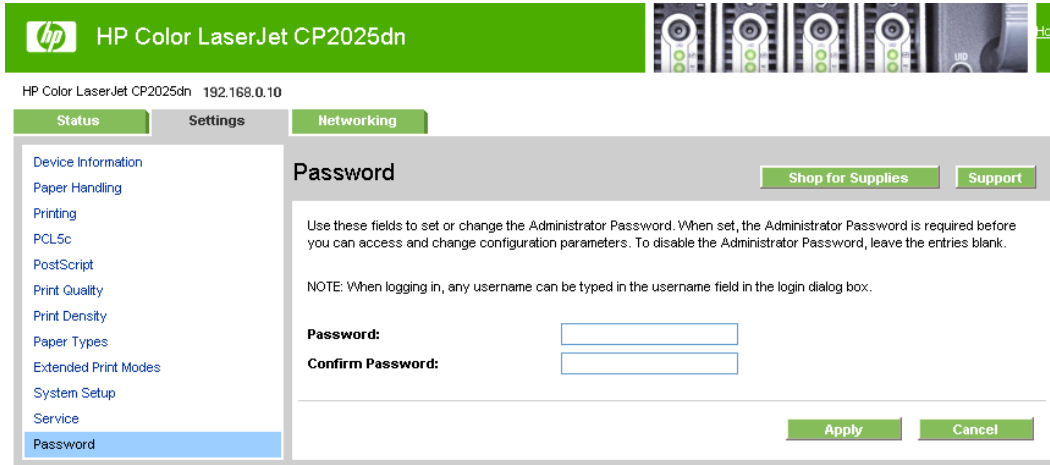


Password

Use this screen to set or change the Administrator password.

 **NOTE:** Setting a password on this screen also sets the password for HP ToolboxFX.

Figure 2-63 HP EWS Password screen



Networking tab

Use the **Networking** tab to view and change settings for the network connection and communication with the printer. The following screens are available:

- [Network Summary](#)
- [IPv4 Configuration](#)
- [IPv6 Configuration](#)
- [Network Identification](#)
- [Advanced](#)
- [SNMP](#)

Network Summary

The **Network Summary** screen that appears on the Networking tab is the same screen that appears on the Status tab. See the [Network Summary on page 91](#) in the Status tab section for more information about this screen.

IPv4 Configuration

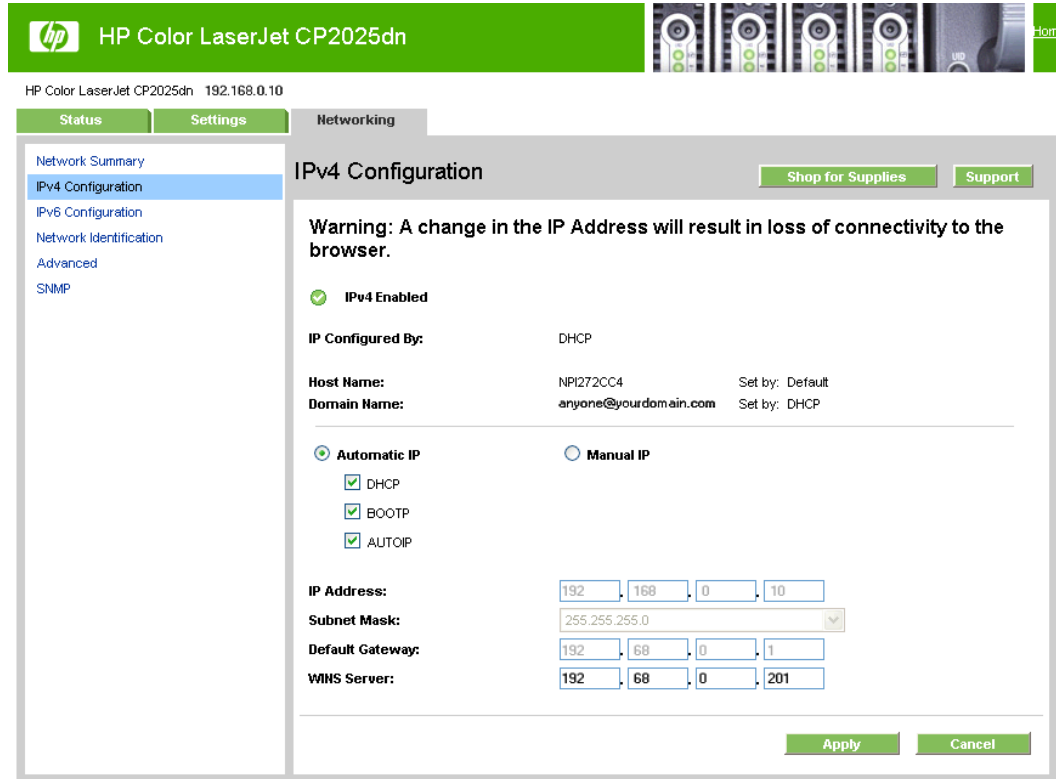
Use the **IPv4 Configuration** screen to modify settings for basic TCP/IPv4 Network configuration.

If **Automatic IP** is configured, the **Manual IP** Address configuration settings are disabled, but the values for these settings are still displayed if they have been set.

If the configuration is switched from **Automatic IP** to **Manual IP**, the IP Address fields are cleared, and the desired IP Address must be entered before continuing.

Click **Apply** to keep changes. When **Apply** is clicked, a confirmation dialog asks for confirmation. Click **Yes** to continue.

Figure 2-64 HP EWS IPv4 Configuration screen

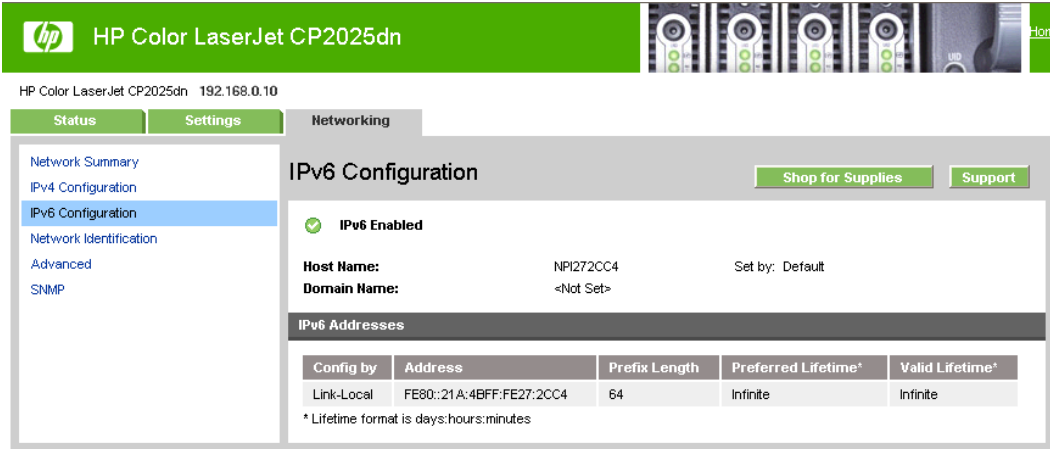


IPv6 Configuration

The **IPv6 Configuration** screen shows the status of the IPv6 Network configuration settings. This screen is read-only and no settings can be modified here.

Up to seven IPv6 addresses can be shown on this screen, depending upon the automatic configuration of the networking firmware. All available IPv6 addresses are shown.

Figure 2-65 HP EWS IPv6 Configuration screen



Network Identification

Use the **Network Identification** screen to configure the host name and domain name(s) used to identify the product on the network.

The values for host name and domain names are retrieved from the firmware and displayed on this screen. The networking firmware determines what host name and domain name(s) to use and cannot be modified.

The text entries are disabled under certain circumstances. The following table defines when the entities are disabled.

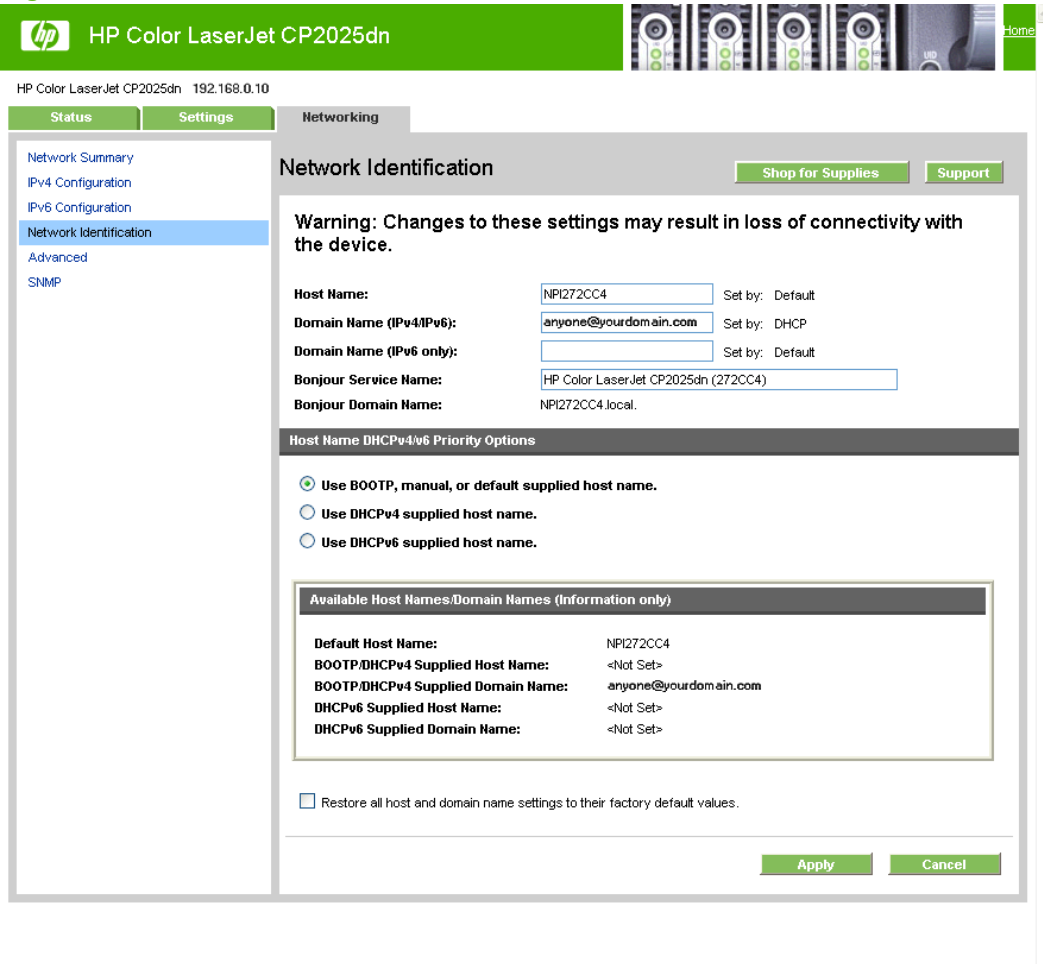
Table 2-13 Network Identification screen – Text entries

Text entry	Disabled status
Host name	Disabled if configured by BOOTP
Domain name (IPv4/IPv6)	Disabled if configured by BOOTP, DHCPv4, or DHCPv6

Table 2-13 Network Identification screen – Text entries (continued)

Text entry	Disabled status
Domain name (IPv6)	Disabled if configured by DHCPv6
Bonjour Service name	Disabled if Bonjour is disabled

Figure 2-66 HP EWS Network Identification screen



Advanced

Use the **Advanced** screen to configure the enabled settings and other settings, such as link speed, for the printer.

Figure 2-67 HP EWS **Advanced** screen

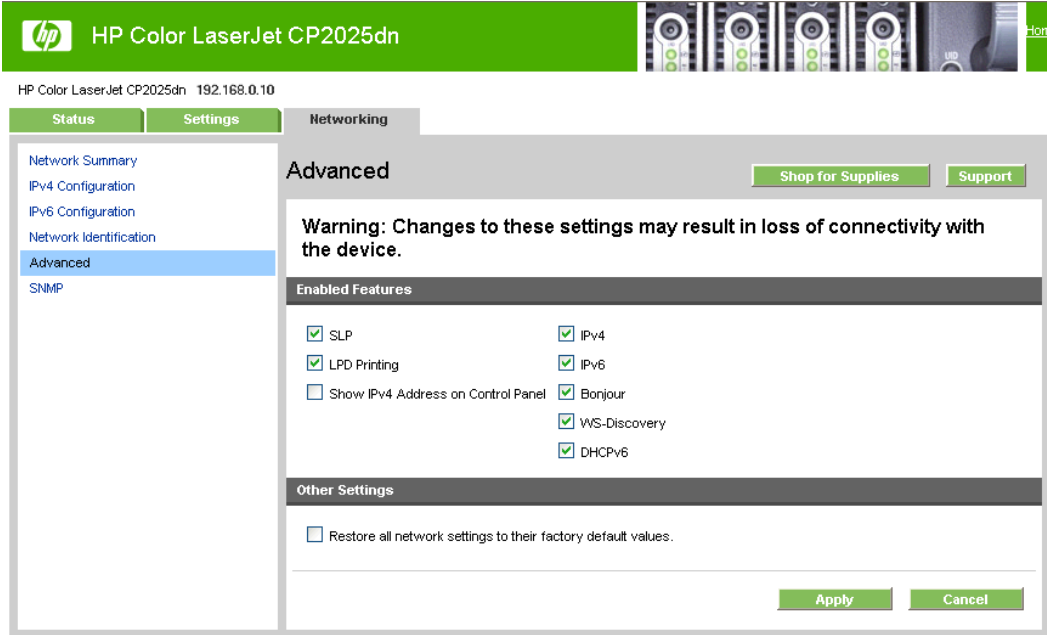



Table 2-14 Advanced Network Settings options and settings

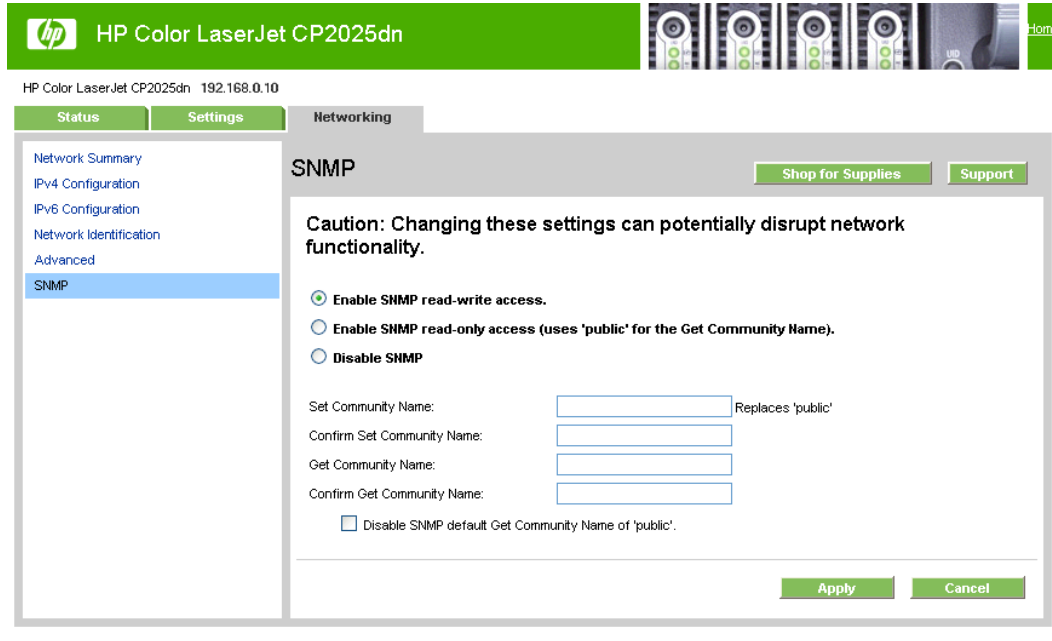
Option	Settings
Enabled Features	<ul style="list-style-type: none"> • HP SLP Discovery (enabled by default) • LPD Printing (enabled by default) • Show IPv4 address on control panel • IPv4 • IPv6 • Bonjour • WS-Discovery • DHCPv6
Other Settings	Restore all network settings to their factory default values.

 **NOTE:** Click **Apply** to make the changes take effect.

SNMP

Use this screen to configure the SNMP networking settings for the printer.

Figure 2-68 HP EWS **SNMP** screen



The following options are available on the **SNMP** screen:

Options	Description
Enable SNMP v1 read-write access	Select this option to enable SNMP v1 agents on the printer. Custom community names can be configured to control management access to the HP Color LaserJet CP2020 Series printer. These community name settings appear on the lower half of the screen.
Set Community name:	Type the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
Confirm Set Community name:	Retype the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
Get Community name:	Type the SNMP Get Community Name (password) to allow SNMP information to be read from the printer.
ui.element>Confirm Get Community name:	Retype the SNMP Get Community Name (password) to allow SNMP information to be read from the printer.
Disable SNMP v1 default Get Community name of "public"	Select this option to disable the default Get community name "public". After selecting this option, type the values in the Get Community name and Confirm Get Community name fields.

Enable SNMP v1 read-only access (uses “public” for the Get Community value)	Select this option to enable the SNMP v1 agents on the HP Color LaserJet CP2020 Series printer, but limit access to read-only. Write-access is disabled. The default Get Community name "public" is automatically enabled.
Set Community name:	Type the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
Configure Get Community name:	
Disable SNMP v1 default Get Community name of “public”:	Select this option to disable the default Get community name "public". After selecting this option, type the values in the Get Community name and Confirm Get Community name fields.
Disable SNMP v1	Select this option to disable the SNMP v1 agents on the HP Color LaserJet CP2020 Series printer, which is recommended for secure environments. If SNMP v1 is disabled, some port monitors or discovery utilities might not operate properly.
Apply	Click Apply to make the changes take effect.

HP Customer Participation Program

The HP Customer Participation Program is HP's voluntary program for communication between the computer and HP to help HP monitor toner usage. HP Customer Participation Program is installed automatically by selecting the **Recommended Install** method of the HP Color LaserJet CP2020 Series printing-system software installation.

About two weeks after installation, an option appears on the computer screen allowing users to accept participation in the program. The message contains full disclosure of the information that is communicated. Participation is entirely voluntary, and the impact on processing and connecting speed is negligible. Personal information is never sent without permission. TCP/IP addresses are used only to enable the connection and for security purposes.

This option cannot be uninstalled separately using Add/Remove Programs.

Optional software

The following options are available on the **Install More Software** window on the CD browser after the printing-system software is installed.

Universal Print Driver

Click the **Universal Print Driver** option to go to the following HP Web site to download the universal print driver.

www.hp.com/go/upd

Go to the following web site to download a Universal Print Driver specific to your product.

www.hp.com/support/ljcp2020series

Basic Color Match


HP Basic Color Match software allows you to adjust spot color in your printed output. For example, you can match the color of your company logo on your printed output. You can save and use the new color schemes for specific documents or all printed documents, or you can create multiple color schemes that you can choose from later.

Click the **Basic Color Match** option to go to the following HP Web site to download the HP Basic Color Match software.

www.hp.com/go/basiccolormatch

HP Easy Printer Care

With HP Easy Printer Care software, you can manage and monitor up to 15 printers from your desktop. HP Easy Printer Care software allows you to view the printer status, create printer usage reports, reorder supplies, and troubleshoot and repair printers via HP Proactive Support.

 **NOTE:** The HP Easy Printer Care Software will be available for the HP Color LaserJet CP2020 Series printer in early 2009.

Click the **HP Easy Printer Care** option to go to the HP Easy Printer Care free software download page.

www.hp.com/go/easyprintercare

HP Smart Web Printing

Click the **HP Smart Web Printing** option to go to the HP Smart Web Printing free download page.

www.hp.com/go/smartwebprinting

HP Smart Web Printing software enhances the browsing experience by fixing problems that are encountered when printing Web pages.

Supported operating systems

- Microsoft Windows 2000
- Microsoft Windows XP
- Microsoft Vista

Requirements

- Internet Explorer 6.0 and higher
- 16 MB of hard disk space
- 800 x 600 monitor with 16-bit or higher color depth

Features

- Automatically scales output to fix right-edge clipping and eliminate wasteful prints containing clipped pages or a few lines of useless text
- Provides a preview with automatic fixes and more control over printed output
- Allows users to select text and graphics easily from any Web site and save a handy list of clips
- Provides a Clip Book pane that can be hidden (similar to IE Favorites, Search, and History panes)
- Provides a Print Clip window to compose and modify clips before printing

Font support

The following sections list the fonts that are included with Microsoft Windows software, and the fonts that 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 an installation of the HP Color LaserJet CP2020 Series printing-system software.

Table 2-15 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
CG Omega	Bold	CGOR65W.TTF
CG Omega	Bold Italic	CGOR66W.TTF

Table 2-15 Default fonts (continued)

Font name	Font style	File name
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
ITC Bookman Demi	Italic	BOKR76W.TTF
ITC Zapf Chancery	Medium Italic	CHANC____.TTF
ITC Zapf Dingbats	Regular	DINGS____.TTF
Letter Gothic	Regular	LETR45W.TTF

Table 2-15 Default fonts (continued)

Font name	Font style	File name
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	SYMP5__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 postscript emulation fonts are also available on the CD.

Table 2-16 Additional postscript 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

Table 2-16 Additional postscript emulation fonts (continued)

Font name	Font style	File name
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
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

Table 2-16 Additional postscript emulation fonts (continued)

Font name	Font style	File name
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
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

Table 2-16 Additional postscript emulation fonts (continued)

Font name	Font style	File name
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

3 Install Windows printing-system components

Introduction

The HP Color LaserJet CP2020 Series printer comes with software and installers for MS Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX systems support the HP Color LaserJet CP2020 Series printer, and software is available on the Web. This document provides procedures for installing and removing the HP Color LaserJet CP2020 Series printing-system software for MS Windows operating systems.

- [Supported operating systems for Windows](#)
- [Installation overview](#)
- [Detailed Microsoft Windows installation instructions](#)
- [Install optional software](#)
- [User uninstall software](#)

Supported operating systems for Windows

The product uses the HP PCL 6 driver and the HP PostScript (PS) Universal Print Driver.

Table 3-1 Supported operating systems for Windows

Supported Windows operating systems	Recommended install	Express install	Add printer ¹
Windows XP, 32-bit	X	X	X
Windows XP, 64-bit		X	X ²
Windows Vista, 32-bit	X	X	X
Windows Vista, 64-bit	X	X	X ²
Windows 2000		X	X
Windows Server 2003, 32-bit		X	X
Windows Server 2003, 64-bit	Not supported		

¹ Express Installs are recommended instead of installing using the Microsoft Add-Printer Wizard.

² The 64-bit HP PCL6 driver can be found on the root of the HP Color LaserJet CP2020 Series printing-system software CD.

The HP Color LaserJet CP2020 Series printer does not support Microsoft Windows NT 4.0, Windows 98, and Windows Me operating systems. When attempting to install the software in these environments, an **Unsupported Operating System** dialog box appears and the installation is cancelled.

Windows operating system requirements

System requirements for 32-bit operating systems

- Pentium or compatible processor
- Windows Vista: 800 MHz processor with 512 MB RAM, 15 GB available hard drive space
- Microsoft Windows XP: 333 MHz processor with 128 MB RAM
- Microsoft Windows Server 2003: 550 MHz processor with 128 MB RAM (Standard Edition) and 220 MB of available hard drive space
- Microsoft Windows 2000: 333 MHz processor with 64 MB RAM
- Minimum 16-color/grayscale display with 640 x 480 pixel resolution (video graphics array [VGA])
- USB port (USB 1.1 or 2.0), or network connection
- CD-ROM drive or Internet connection


System requirements for 64-bit operating systems

- Pentium or compatible processor (Itanium not supported)
- Windows Vista: 800 MHz processor with 512 MB RAM, 15 GB available hard drive space
- 256 MB RAM or higher
- 1.5 GB of available hard drive space

- CD-ROM or DVD drive
- Super VGA (800 x 600) or higher-resolution video adapter and monitor

Installation overview

The printing system includes software for end users and network administrators, and print drivers for access to the product features and communication with the computer.

 **NOTE:** For a list of print drivers and updated HP product software, go to www.hp.com/go/ljcp2020series_software.

The following drivers are not included on the CD, but are available from www.hp.com/go/ljcp2020series_software.

- HP PostScript (PS) Universal Print Driver
- Linux drivers
- UNIX

Installation is similar for all supported Windows operating systems.

For Windows systems, the person installing the software must have administrator rights on the system.

When the HP Color LaserJet CP2020 Series printing-system installer runs, the HP LaserJet uninstaller is added to the system.

- [Product configurations](#)
- [Software installation types for Windows](#)
- [Install drivers using a CD](#)

Product configurations

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

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

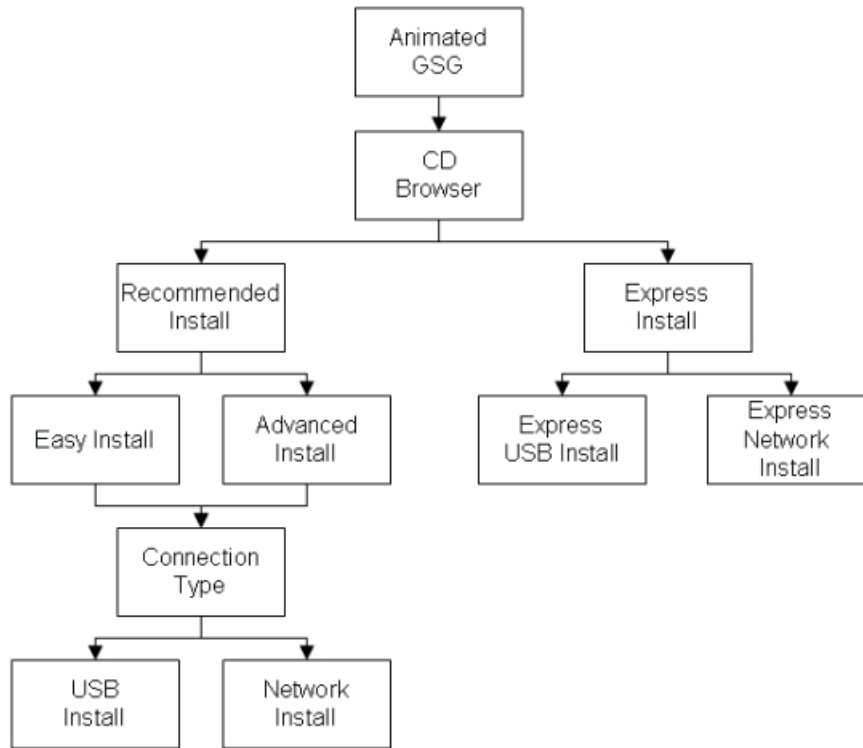
The installer incorporates each of these configuration choices in the installation sequence the user chooses from the software CD.

If the HP Color LaserJet CP2020 Series printer is connected through a file or print server, the printing-system software must be installed on the server before it is installed on any client systems. If the printing-system software is not first installed on the server, bidirectional communication is not available to the client systems.

Software installation types for Windows

The following printing-system software installation types are available:

Figure 3-1 HP Color LaserJet CP2020 Series Software Installation Types



- **Recommended Install.** Installs all the software components for the product, including the *HP Color LaserJet CP2020 Series Printer User Guide*.

The **Recommended Install** installation type includes the following options:

- **Easy Install (recommended).** Selecting this installation type indicates the acceptance of the installation agreements and default settings.
 - **Advanced Install.** Selecting this installation type allows you to review all of the installation agreements and default settings.
- **Express Install.** Installs the HP PCL 6 print driver and SNP Alerts. The **Express Install** includes the following options:
 - **Express USB Install.** Installs the minimum software components for a product that uses a direct USB connection. Clicking this button indicates acceptance of HP's Software License terms.
 - **Express Network Install.** Installs the minimum software components for a product that is connected to a network. Clicking this button indicates acceptance of HP's Software License terms.

The following table indicates the components that are installed for each installation method.

Table 3-2 Printing-system software components installed for each installation method

Components installed	Recommended Install	Express Installs	Add Printer
HP PCL 6 print driver	X	X	
HP PS Universal Print Driver			X ¹
ToolboxFX w/Alerts	X		
SNP Alerts		X	X
Screen fonts	X		
Shop for HP Supplies (desktop shortcut)	X		
Customer Participation Program 9.0	X		
HP Update	X		
Warranty Reminder (timed pop-up)	X		


¹ This driver is available for download from the HP.com Web site. A link to the Web site is provided on the product software CD. An internet connection is required.

For all supported operating systems, each installation type presents a series of dialog boxes that guides the installation. You are prompted to provide information about the host computer environment. The installer guides the installation, whether you are configuring a directly-connected or a network-connected product.

The installer detects hardware and network connections, and helps guide the installation. For example, if the installer detects an HP Color LaserJet CP2020 Series printer, it automatically configures most software features for the connection to that product. This saves several steps. If the installer detects a network, it also guides setting up those features.

Install drivers using a CD

Use the following instructions to install the print driver only.

 **NOTE:** Add Printer installs are not recommended unless the print port already exists. If the print port does not exist, use the Express Install method from the CD instead.

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

For Windows 2000: Select **Settings**, and then click **Printers**.

-or-

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

-or-

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

-or-


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

2. Double-click **Add Printer**, and then click **Next**.

3. When asked if the product is a local or network product, select local, and then click **Next**.
4. You might need to first select the product from the list or type a TCP/IP address. If the print driver is not available, the **Add Printer Wizard** dialog box appears. Click **Have Disk** on the wizard screen.
5. Insert the printing-system software CD into the CD-ROM drive.
6. To install the PCL 6 print driver, navigate to the root folder of the CD (where X is the letter of the CD-ROM drive) and click **OK**. The **Install Printer Software** dialog box appears. Select the print driver for the product and click **OK**.
7. Complete the installation. When prompted, print a test page to ensure that the print driver is installed correctly.


Detailed Microsoft Windows installation instructions

The following section shows the dialog box options that appear during the HP Color LaserJet CP2020 Series printing-system software Recommended installation on Microsoft Windows Vista and Windows XP operating systems.

 **NOTE:** HP recommends installing the software before connecting the HP Color LaserJet CP2020 Series printer to the computer (software-first installation). These instructions are for a software-first installation.

Use these instructions the first time the HP Color LaserJet CP2020 Series printing-system software is installed.

Start the installation after closing out of all other programs. Insert the printing-system software CD into the CD-ROM drive.

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

Installation begins with the Animated Getting Started Guide. Follow the onscreen instructions to complete the animated Getting Started Guide, or click **Install Software**, to continue to the CD browser Welcome window.

Animated Getting Started Guide (GSG)

The printing-system software CD includes an animated Getting Started Guide. This guide includes instructions for preparing the product for use and the initial software install.

- [Setup and installation instructions](#)
- [Animated GSG dialog boxes](#)

Setup and installation instructions

The following includes instructions for setup of the printer and steps towards installing the driver software from the CD.

1. Close all programs.
2. Insert the printing-system software CD into the CD-ROM drive.
3. The **Welcome** screen of the animated install guide opens. Click **Begin Setup**.
4. The **Choose your connection type** screen opens. The options are: **LAN Connection** or **USB Connection**. Click **USB Connection**.
5. The **Caution! Do not connect USB now. Wait until the software prompts you.** screen opens. Click **Continue**.
6. Click **Install Product Software**.
7. The CD browser window opens. Select the desired install method: **Recommended Install** or **Express Install**.
8. Follow the onscreen instructions.

Animated GSG dialog boxes

The Animated GSG dialog boxes are presented in the following order.

Figure 3-2 Animated GSG – Welcome screen

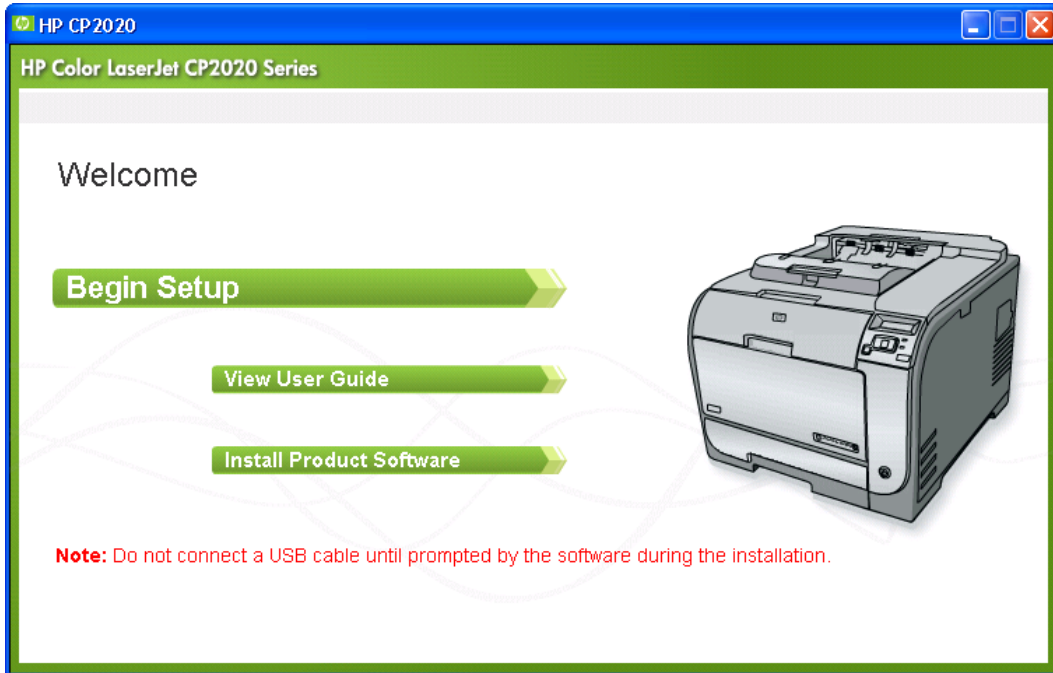
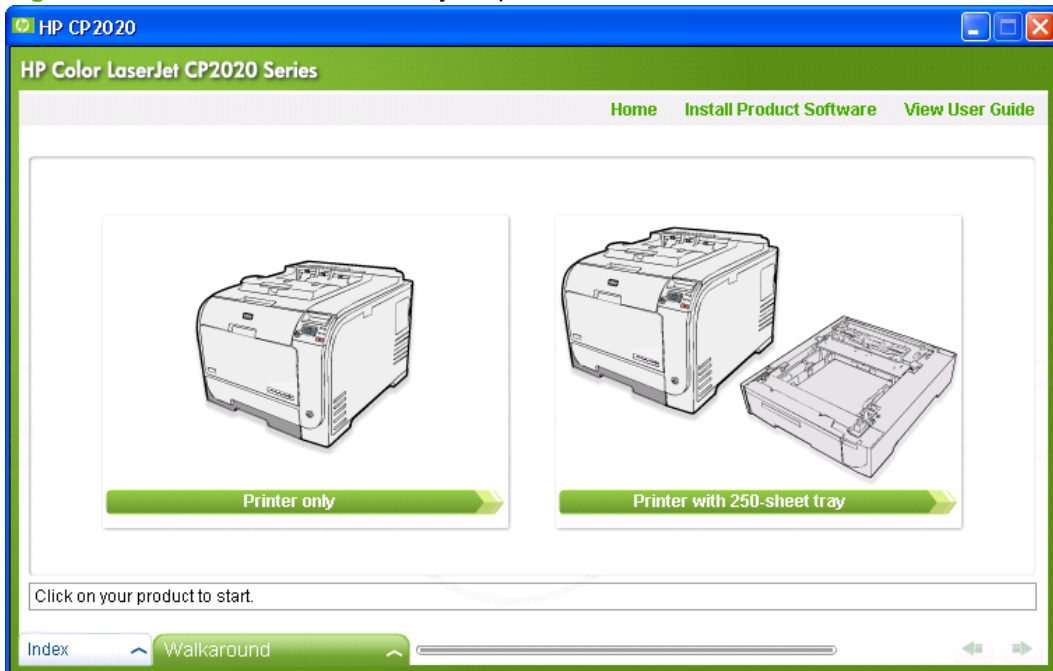
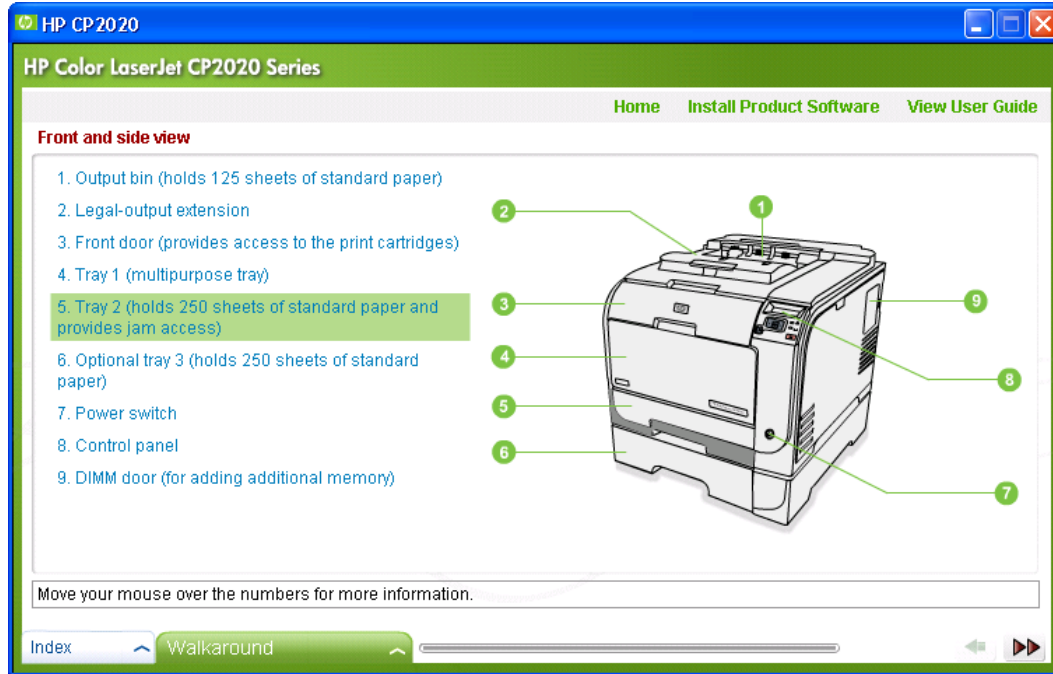


Figure 3-3 Animated GSG – Select your product screen



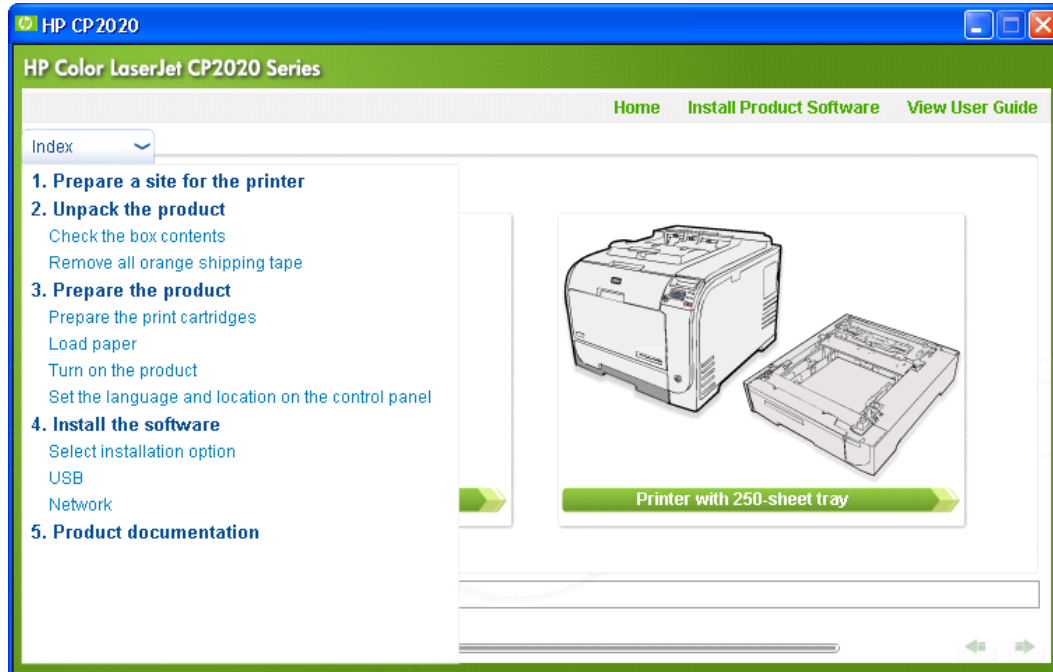
Click the **Walkaround** tab to see details about the parts of the printer.

Figure 3-4 Animated GSG – Walkaround screen



Click the **Index** tab to see a list of available topics in the Animated GSG.

Figure 3-5 Animated GSG – Index screen



Click the top-level topic to go back to the first screen in the Animated GSG sequence, **Prepare a site for the printer**.

Figure 3-6 Animated GSG – Prepare a site for the printer



Click **Product dimensions** to see the height and width of the product.

Figure 3-7 Animated GSG – Product dimensions screen



Click the **Next** button to go to the **Unpack the product** screen.

Figure 3-8 Animated GSG – Unpack the product screen



Click the **Next** button to go to the **Install the 250-sheet tray** screen.

Figure 3-9 Animated GSG – Install the 250-sheet tray



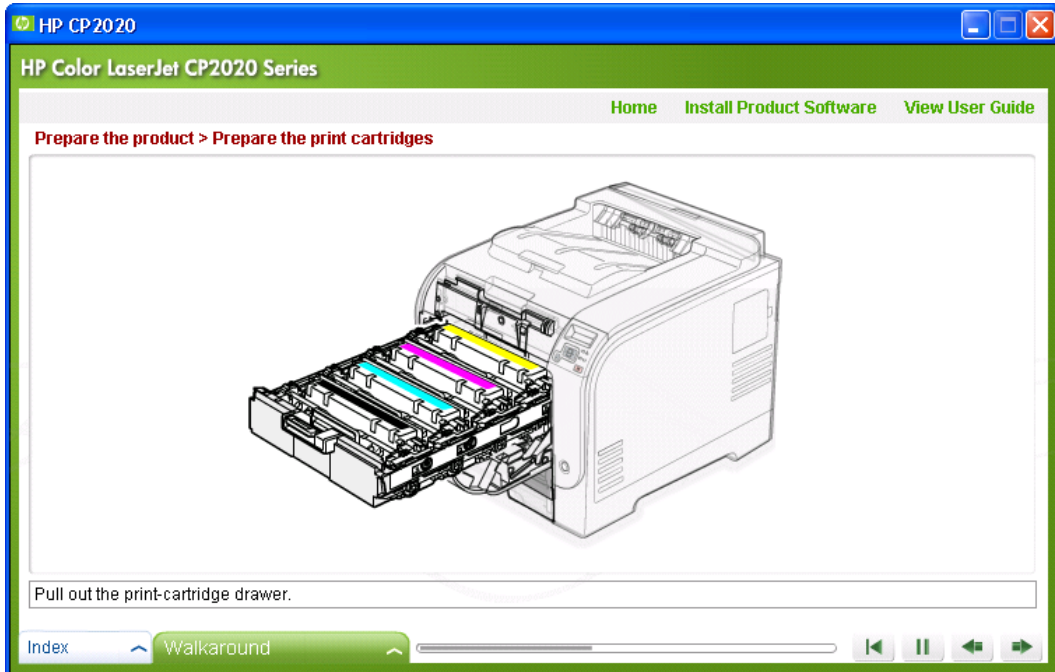
Click the **Next** button to go to the **Remove all orange shipping tapes** screen.

Figure 3-10 Animated GSG – Remove all orange shipping tapes screen



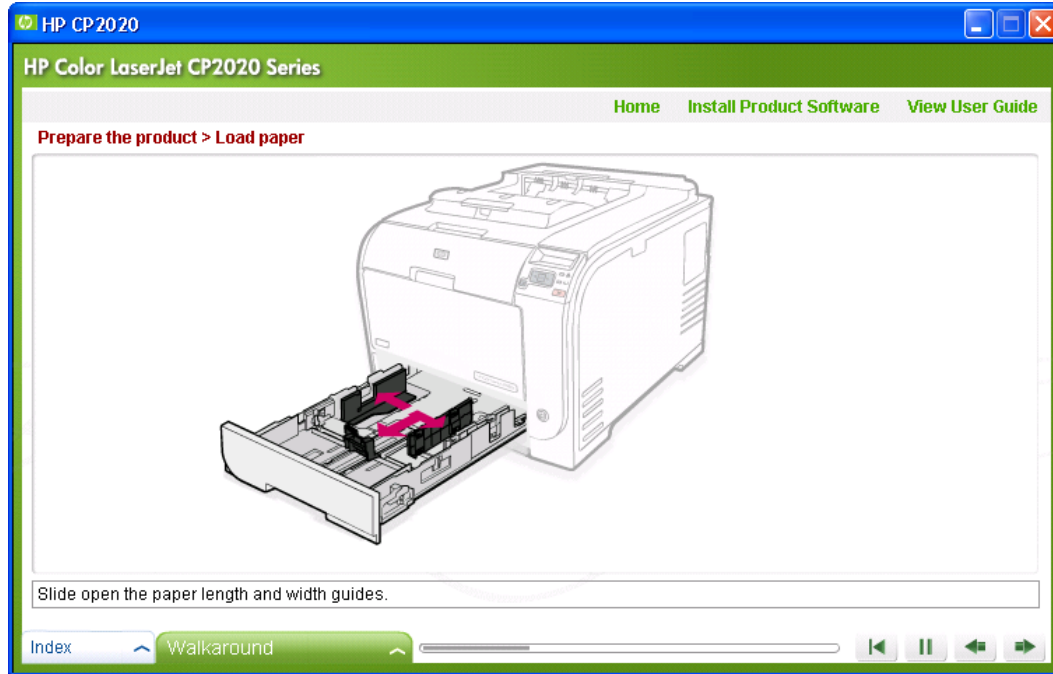
Click the **Next** button to go to the **Prepare the print cartridges** screen.

Figure 3-11 Animated GSG – Prepare the print cartridges



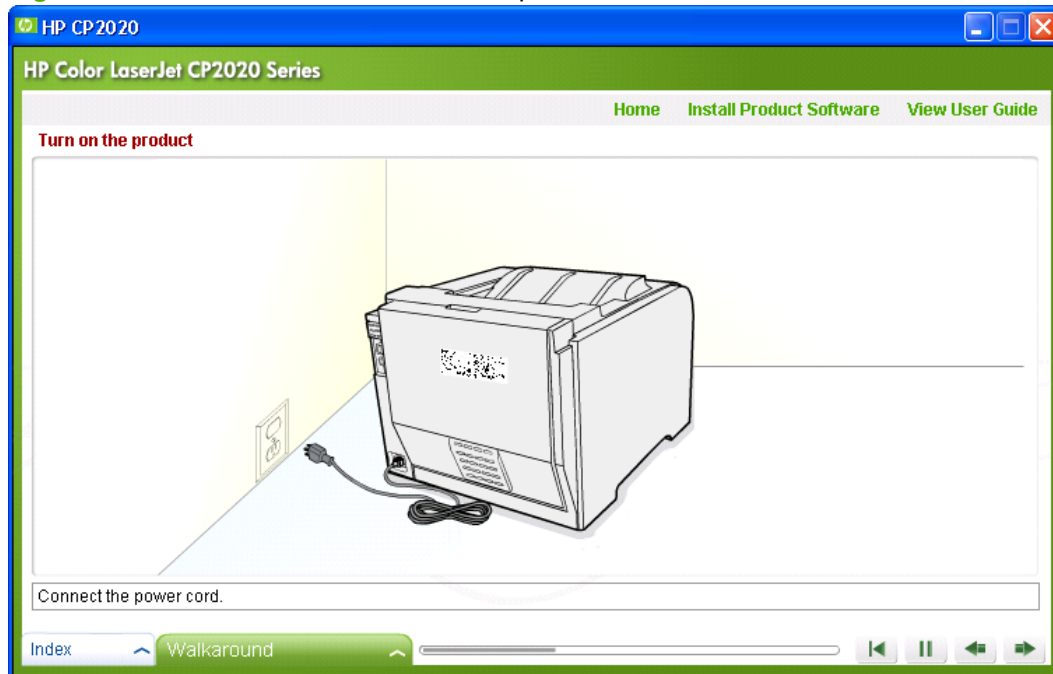
Click the **Next** button to go to the **Load paper** screen.

Figure 3-12 Animated GSG – Load paper screen



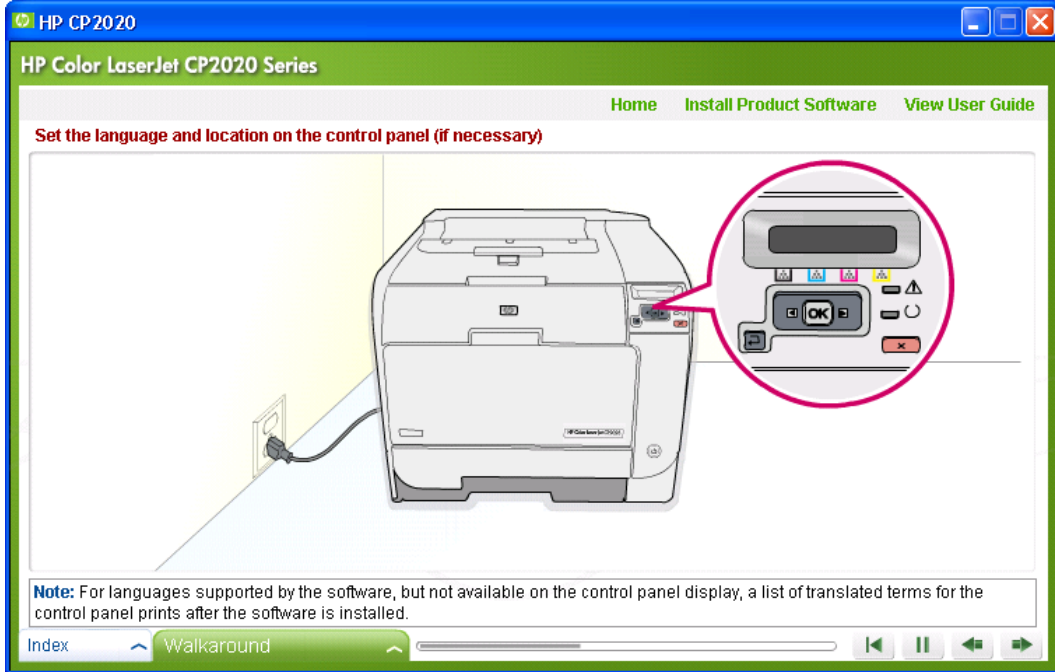
Click the **Next** button to go to the **Turn on the product** screen.

Figure 3-13 Animated GSG – Turn on the product screen



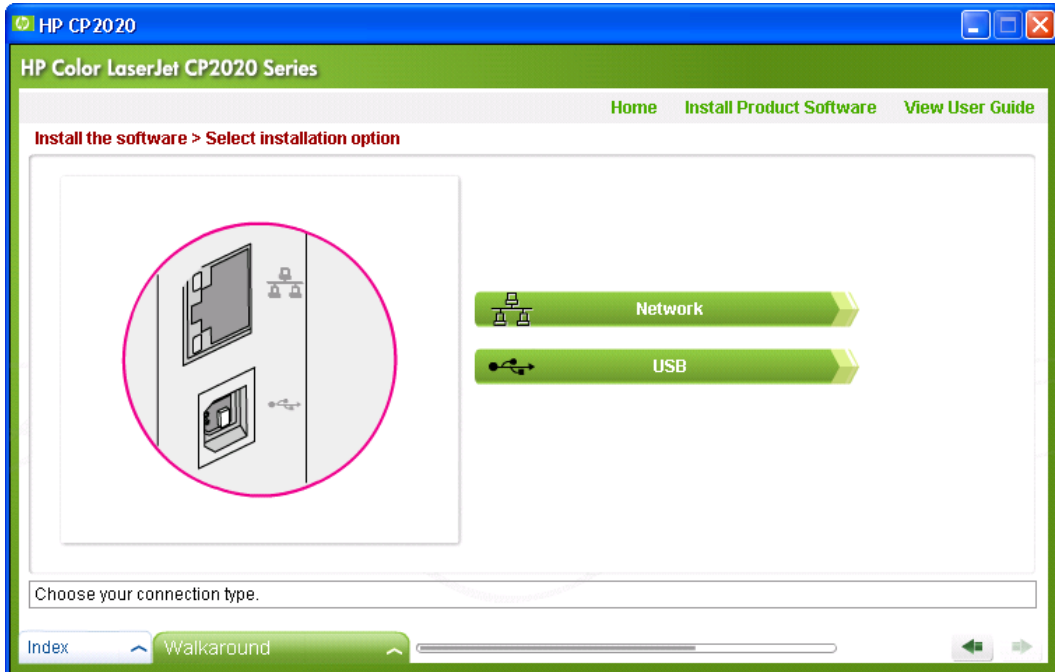
Click the **Next** button to go to the **Set language (if necessary)** screen.

Figure 3-14 Animated GSG – Set language (if necessary) screen



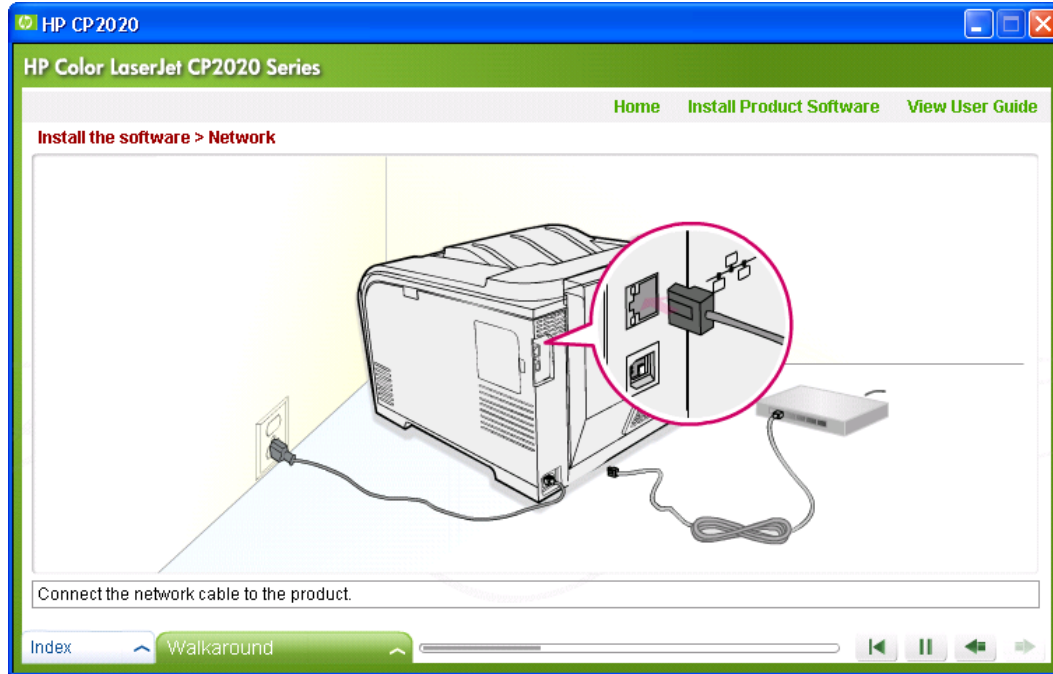
Click the **Next** button to go to the **Select installation option** screen.

Figure 3-15 Animated GSG – Select installation option screen



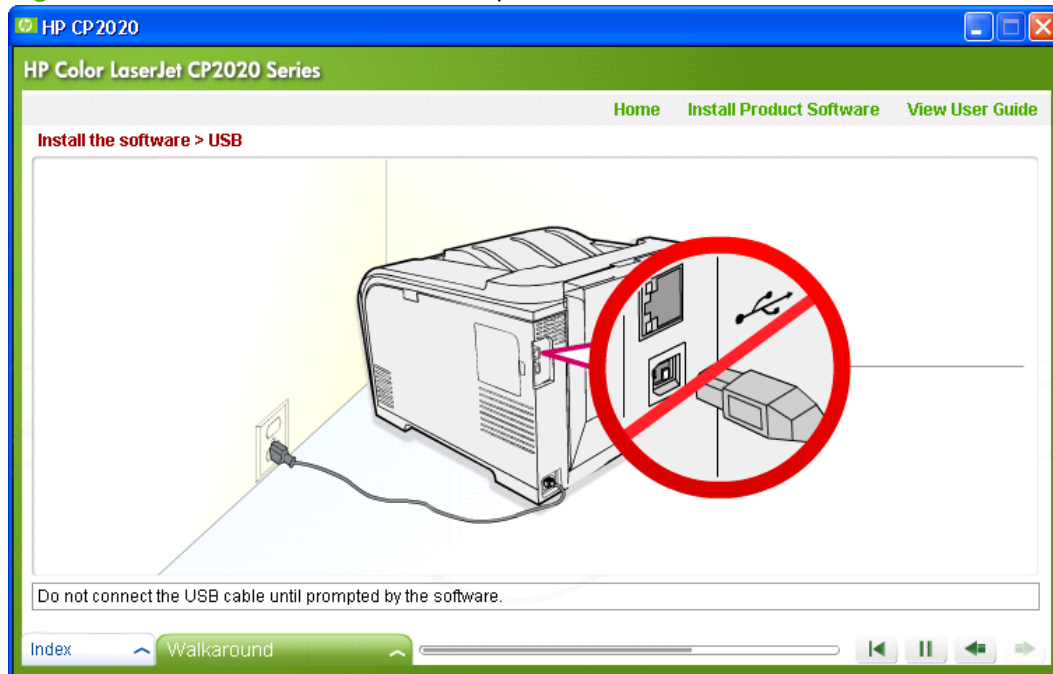
Click the **Network** button to go to the **Install the product software – Network** screen.

Figure 3-16 Animated GSG – Install the product software – Network screen



The product software installation begins and the Animated GSG closes.

Figure 3-17 Animated GSG – Install the product software – USB screen

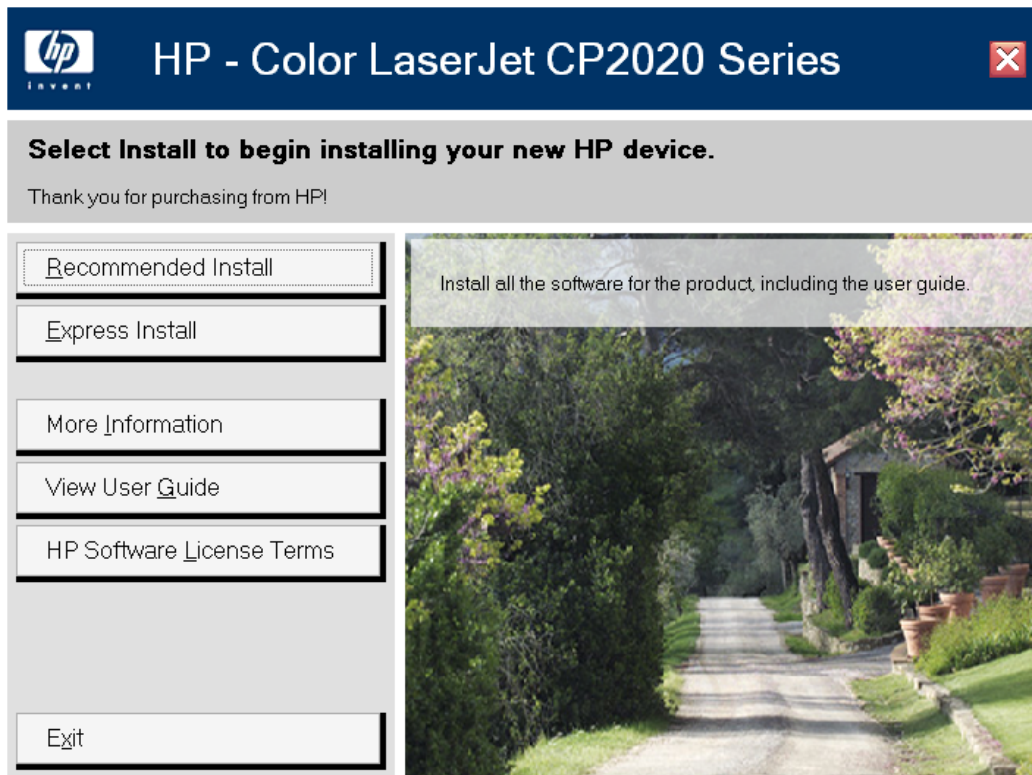


The product software installation begins. Do not connect the USB cable between the product and the computer until you are prompted to do so.

Printing-system software installation for Microsoft Windows

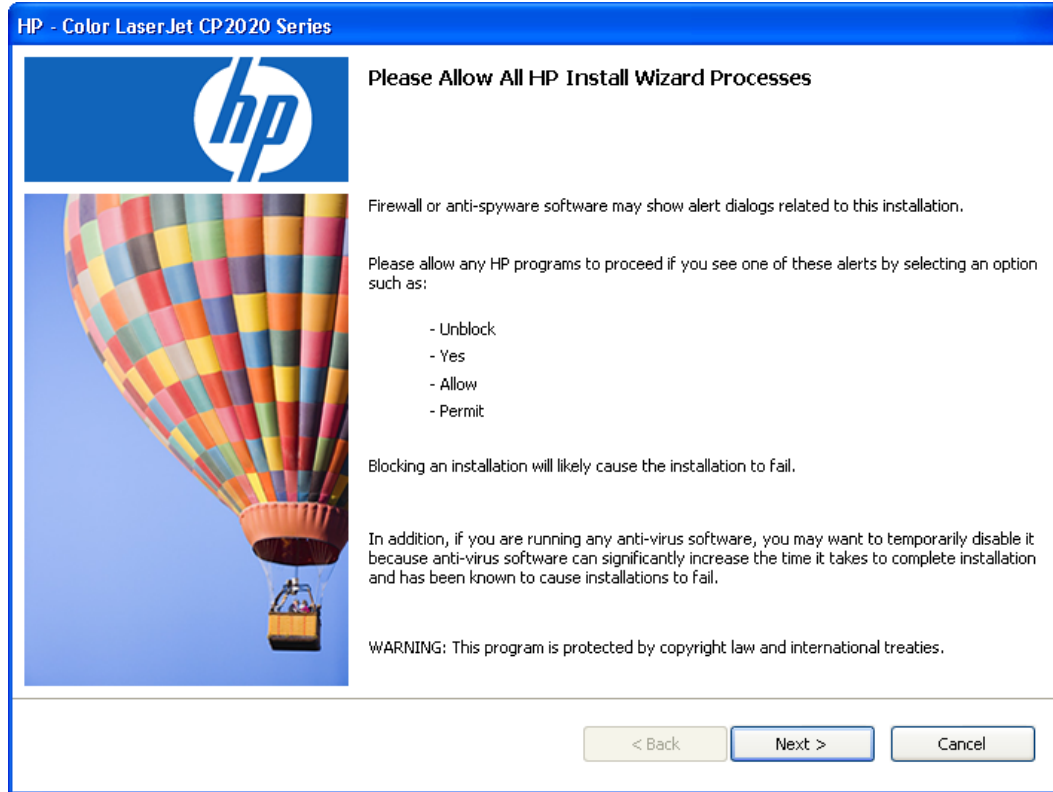
After the Animated Getting Started Guide runs, the CD browser **Welcome – Select Install** window opens.

Figure 3-18 Welcome! – Select Install to begin installing your new HP device (launch pad)



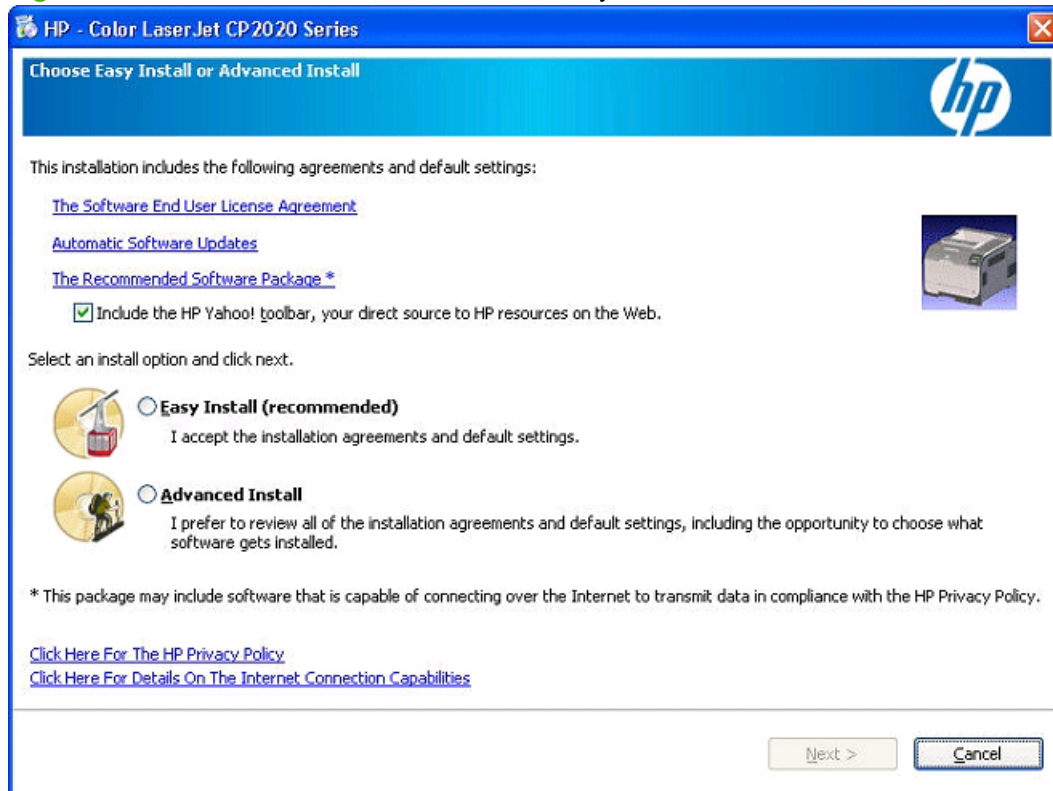
When you click **Recommended Install**, the **Please Allow All HP Install Wizard Processes** window opens.

Figure 3-19 Recommended Install – Please Allow All HP Install Wizard Processes



Click **Next**. The **Choose Easy Install or Advanced Install** window opens.

Figure 3-20 Recommended Install – Choose Easy Install or Advanced Install window



In the **Choose Easy Install or Advanced Install** window:

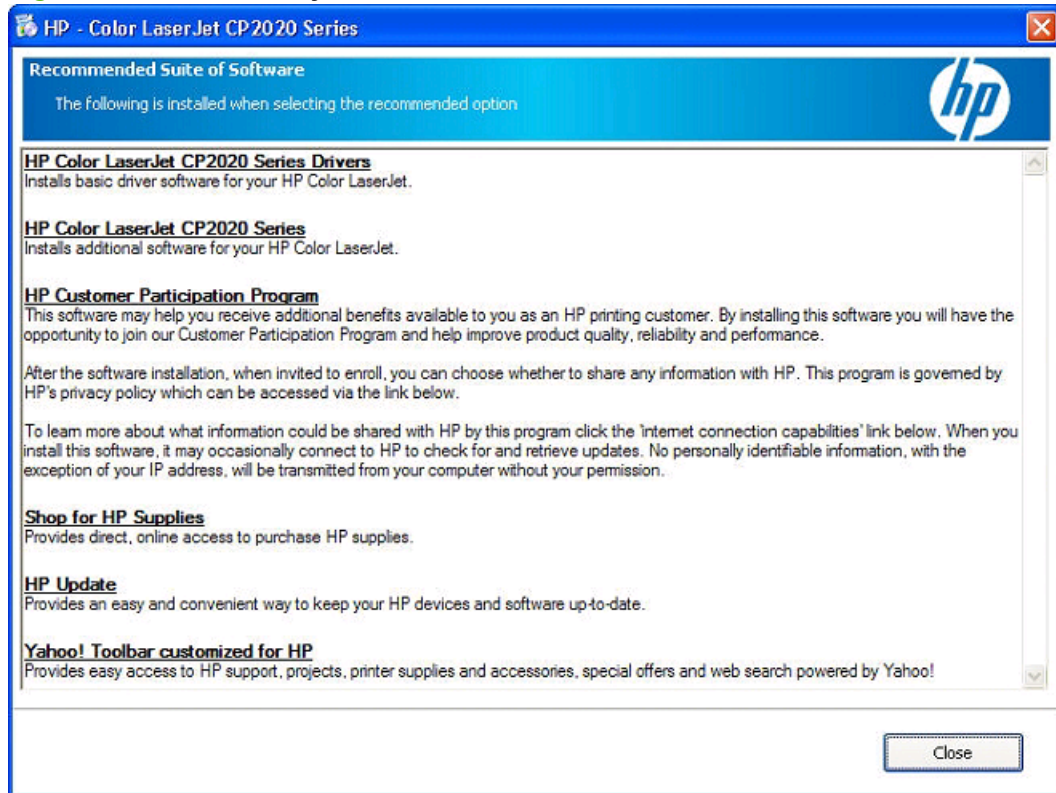
- Select **Easy Install** and then click **Next**. The **Connection Type** window opens. (See [Figure 3-28 Connection Type window on page 146](#) to continue.)
- Select **Advanced Install** and then click **Next**. The **Automatically check for updates** window opens. (See [Figure 3-25 Recommended Install \(Advanced\) – Automatically Check for Updates window on page 144](#).)

The links in **Choose Easy Install or Advanced Install** open the following windows:

- **Software End User License Agreement**
- **Automatic Software Updates FAQ**
- **Recommended Software Package**
- **Yahoo Toolbar option (if not already installed)**
- **HP Privacy Policy**
- **Details on the Internet Connection Capabilities**

The **Software End User License Agreement** window opens as part of the Advanced Install process. The following are those that can only be accessed via the **Choose Easy Install or Advanced Install** window.

Figure 3-21 Choose Easy Install or Advanced Install window – Recommended Software Package



Install Windows printing-system components

Figure 3-22 Choose Easy Install or Advanced Install window – Automatic Software Updates FAQ

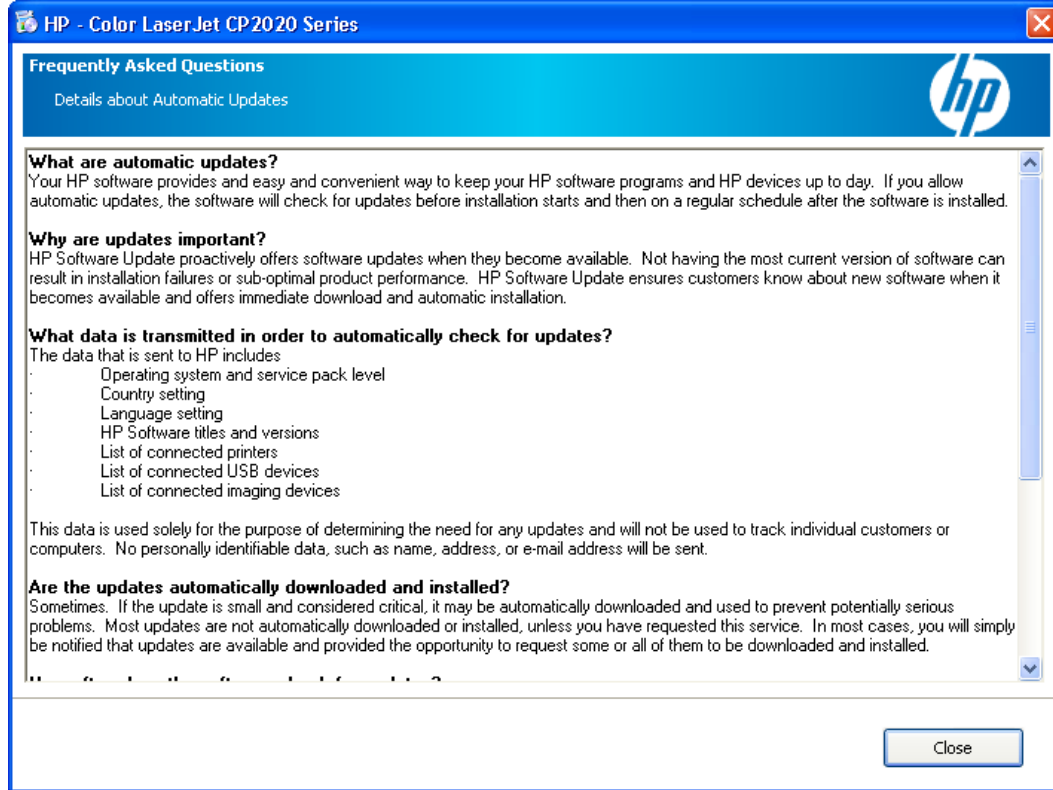
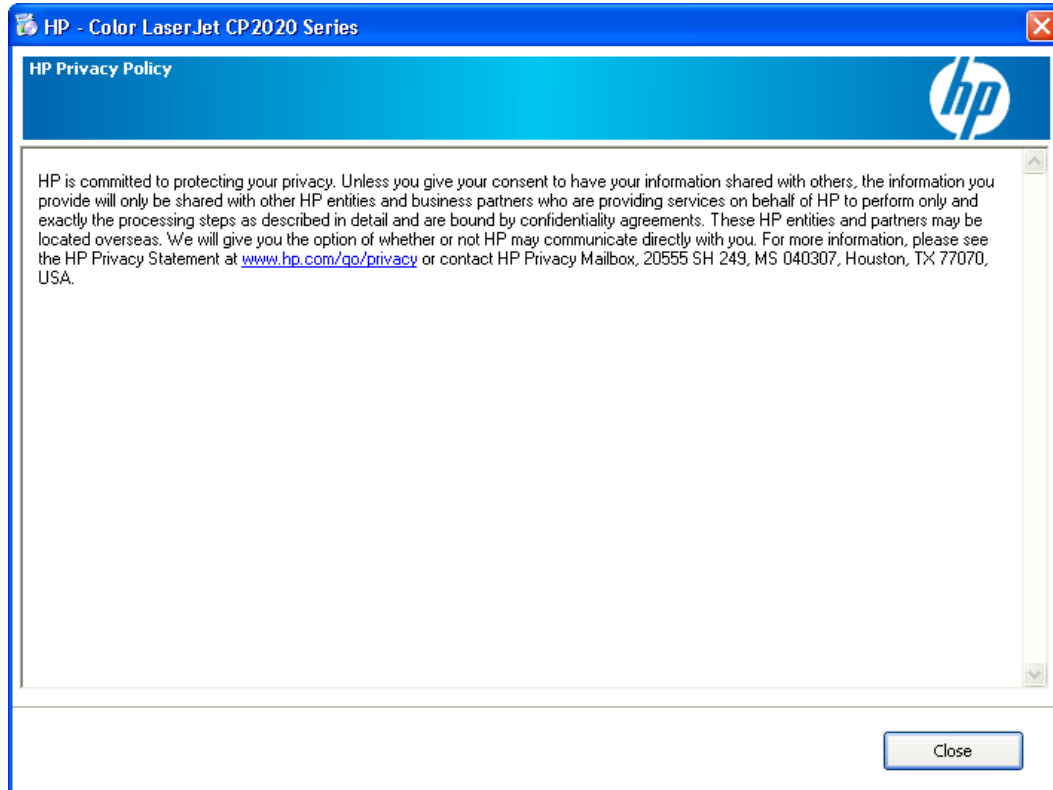
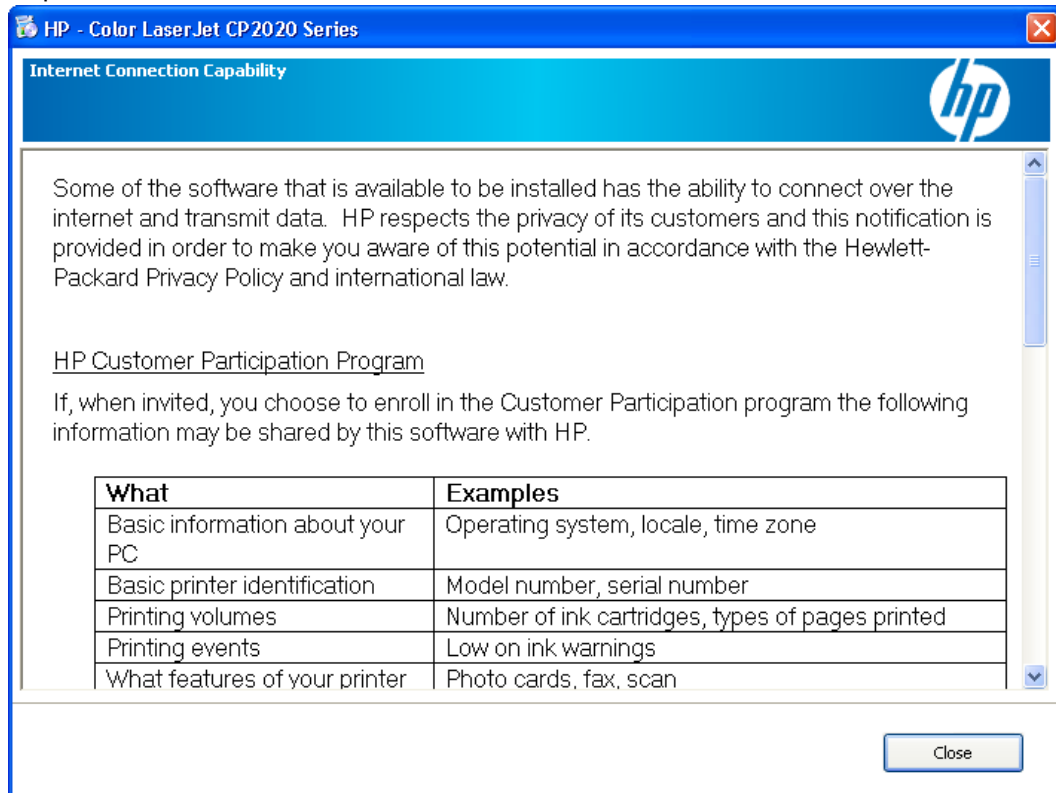


Figure 3-23 Choose Easy Install or Advanced Install window – HP Privacy Policy



Install Windows printing-system components

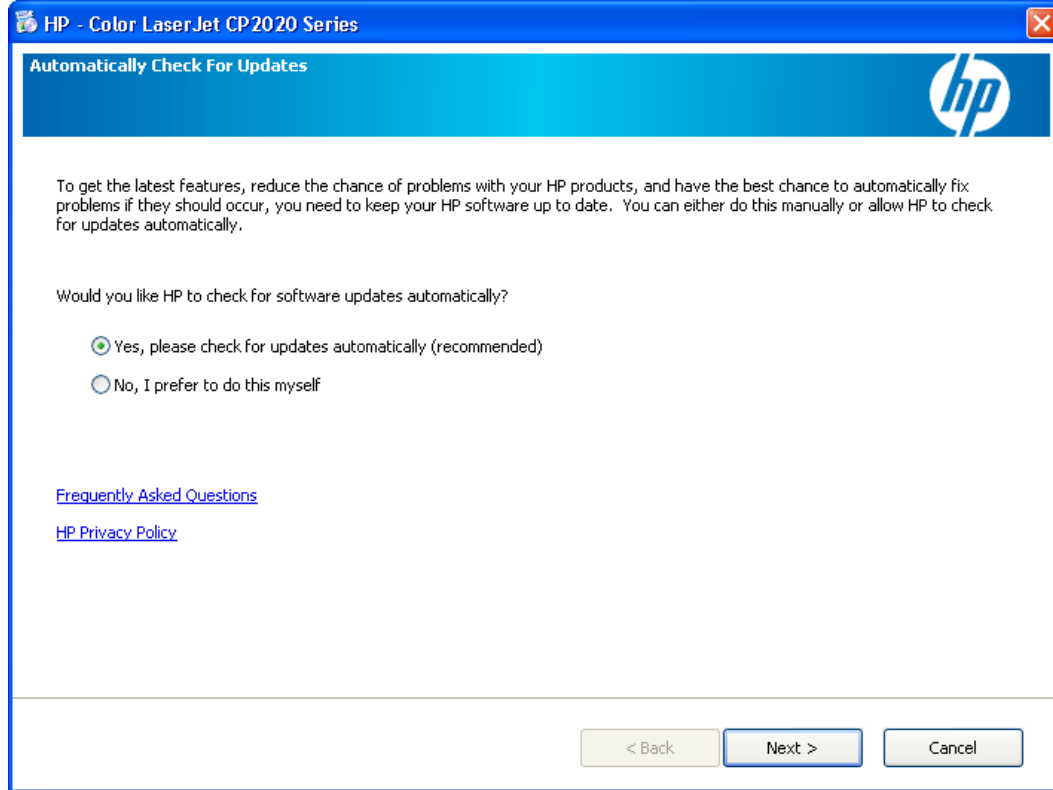
Figure 3-24 Choose Easy Install or Advanced Install window – Details on the Internet Connection Capabilities



The **Automatically Check for Updates** window opens.

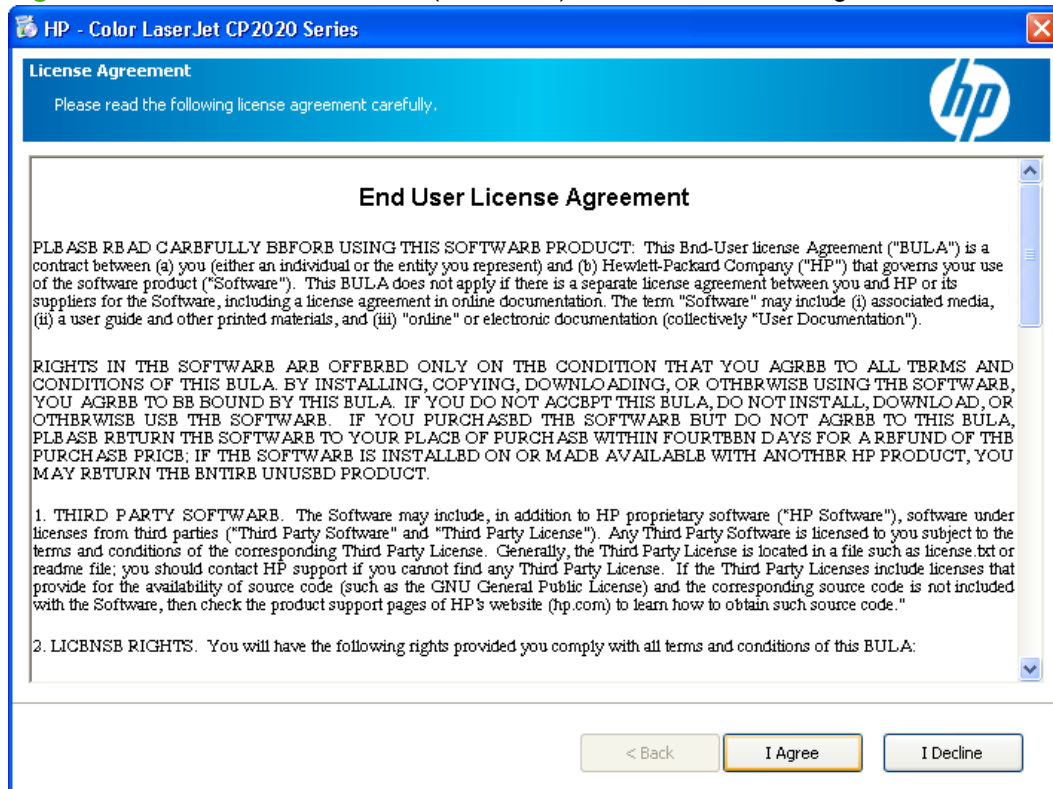
Click **Yes, please check for updates automatically (recommended)** or **No, I prefer to do this myself**. Then, click **Next**.

Figure 3-25 Recommended Install (Advanced) – Automatically Check for Updates window



The **End User License Agreement** window opens.

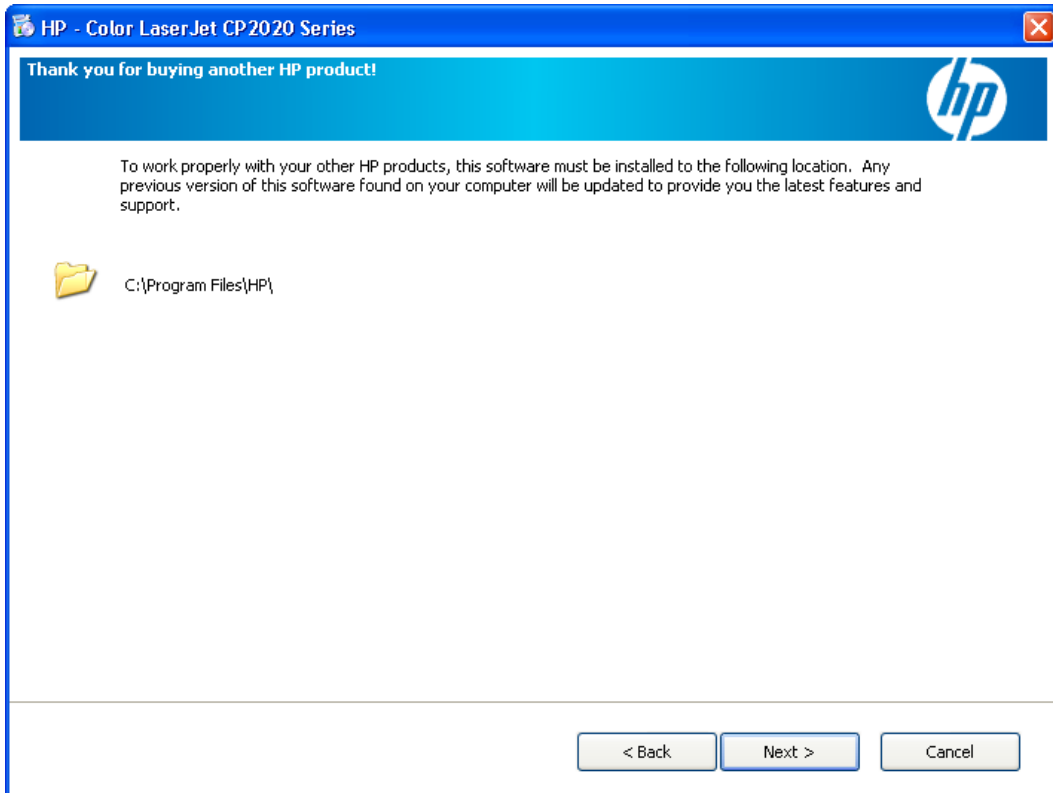
Figure 3-26 Recommended Install (Advanced) – End User License Agreement window



Click **I Agree** to continue the installation, or click **I Decline** to cancel the installation.

If software from a previous HP product has already been installed on the system, the **Thank you for buying another HP product** window opens indicating where the software files will be installed on the computer.

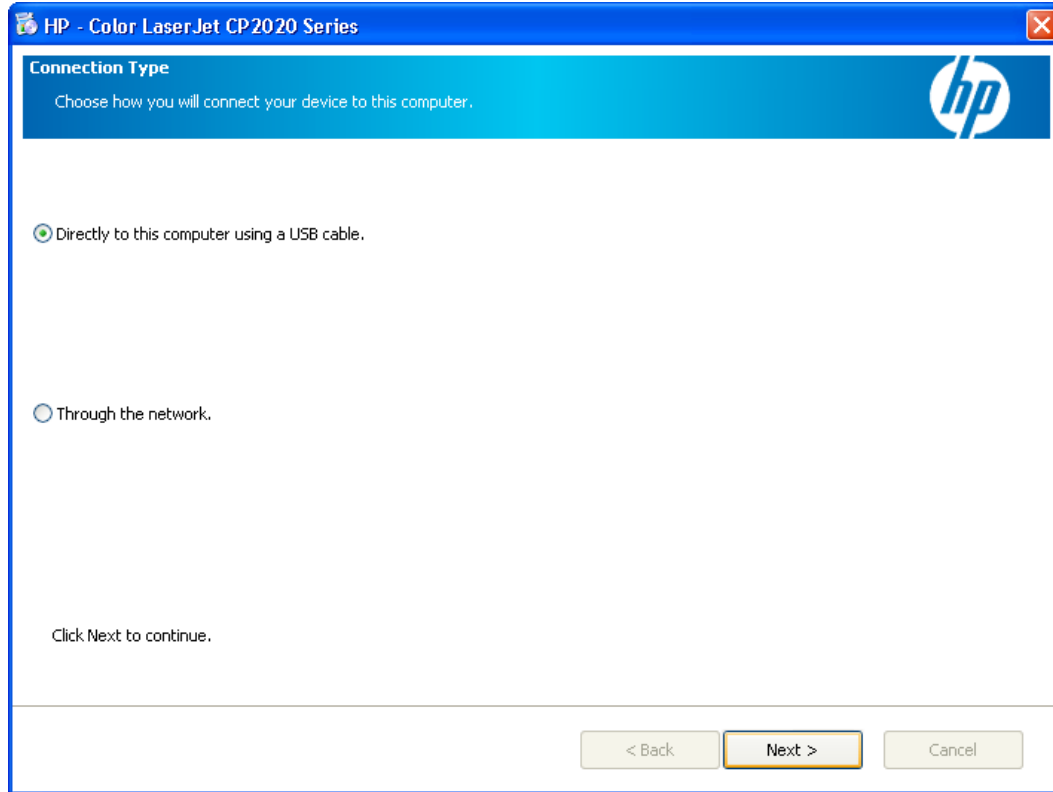
Figure 3-27 Recommended Install (Advanced) – Thank you for buying another HP product window



Click **Next** to continue to the **Connection Type** window.


The **Connection Type** window opens.

Figure 3-28 Connection Type window



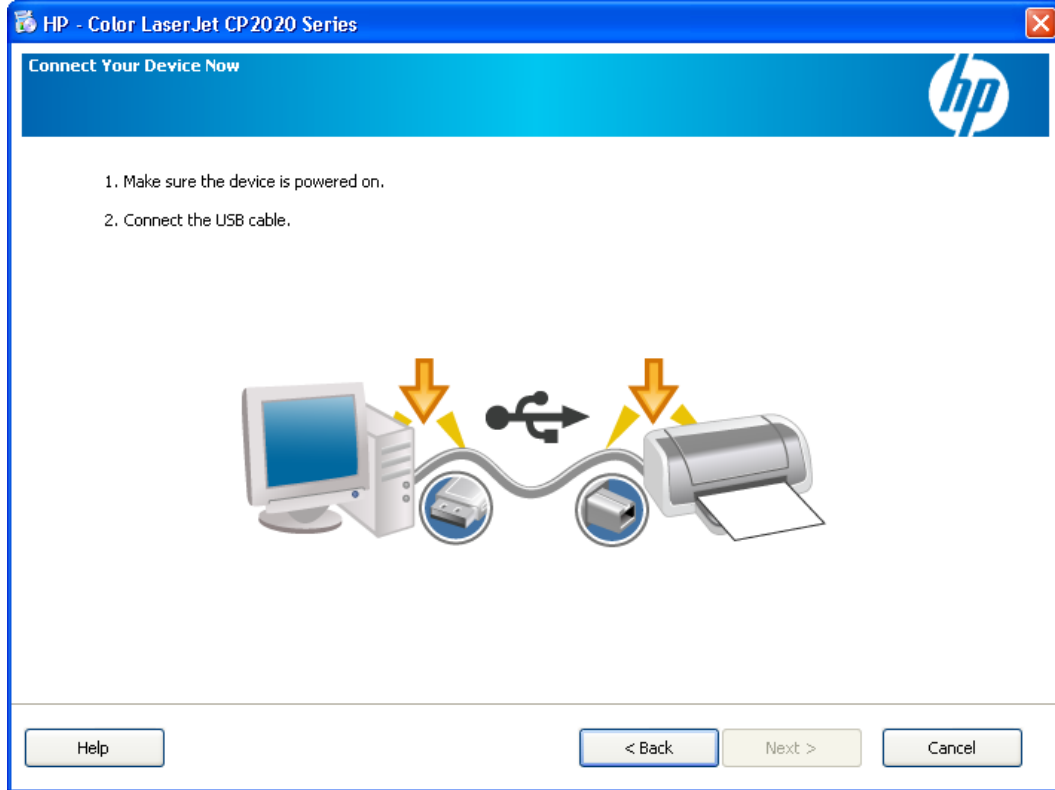
On the **Connection Type** window, click **Directly to this computer using a USB cable** or **Through the network**; and then, click **Next**.

If you clicked **Through the network**, continue to the **Identify a printer** window. (See [Figure 3-30 Identify a printer window on page 148.](#))

 **NOTE:** On a network connection in which non-Windows firewall software is used, a **Firewall Notice** window opens. Click **Next** to continue.

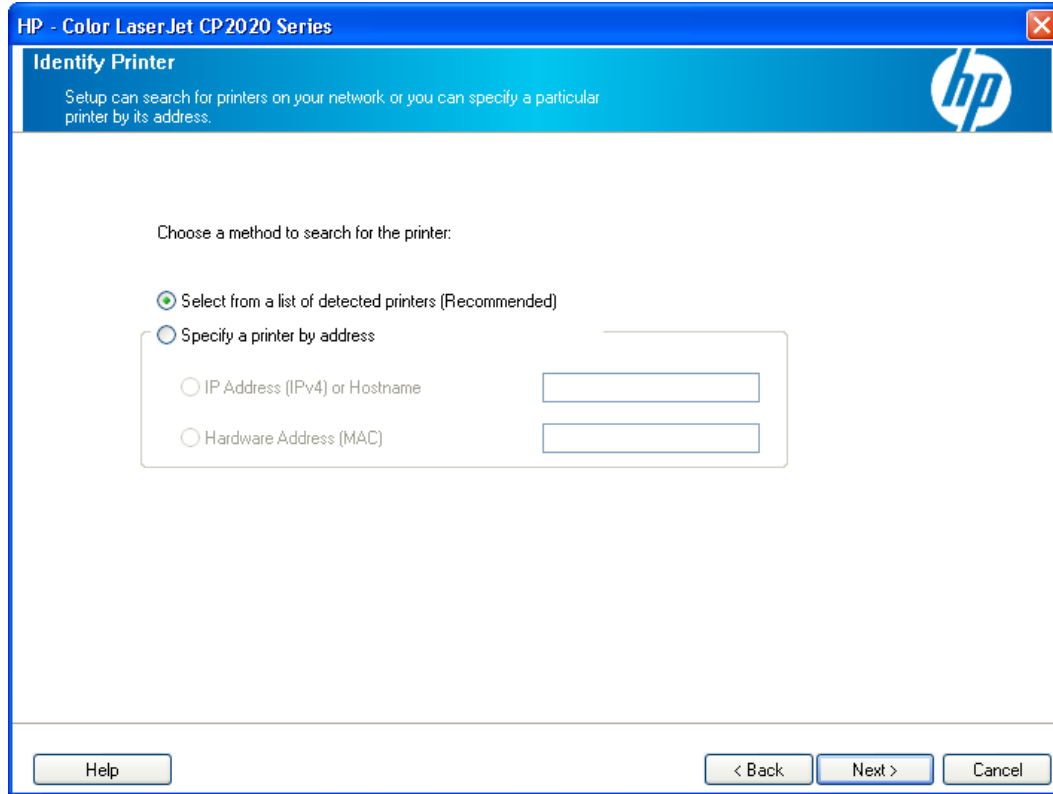
If you clicked **Directly to this computer using a USB cable** and click **Next**, the **Connect your device now** window opens.

Figure 3-29 Connect your device now window



Once the USB cable is connected from the computer to the product, the install continues automatically. The **Congratulations!** window opens indicating the install is complete. Continue to the **Congratulations!** window. (See the [Figure 3-36 Congratulations! Software Installation is complete window \(Resting Pad\) on page 153.](#))

Figure 3-30 Identify a printer window



On the **Identify a printer** window, click **Select from a list of detected printers (Recommended)** or **Specify a printer by address** and type the printer address in the field provided. Then, click **Next**.

The **Firewall Notice** window opens.

Click **Next** to continue.


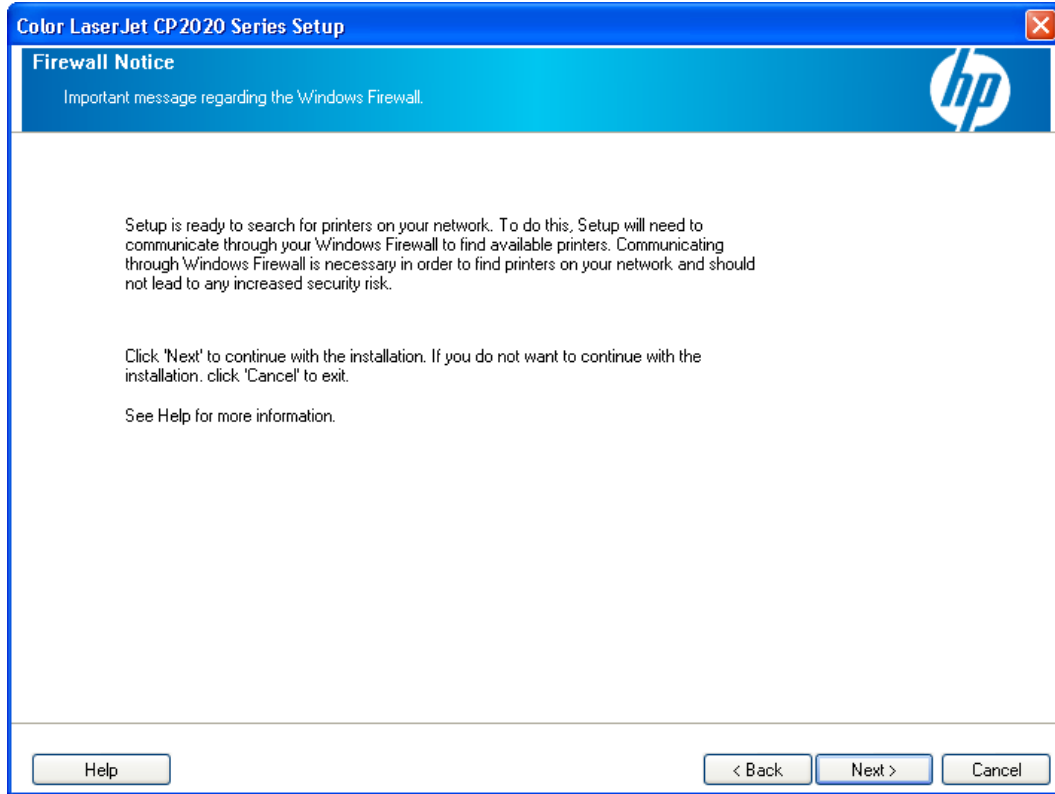
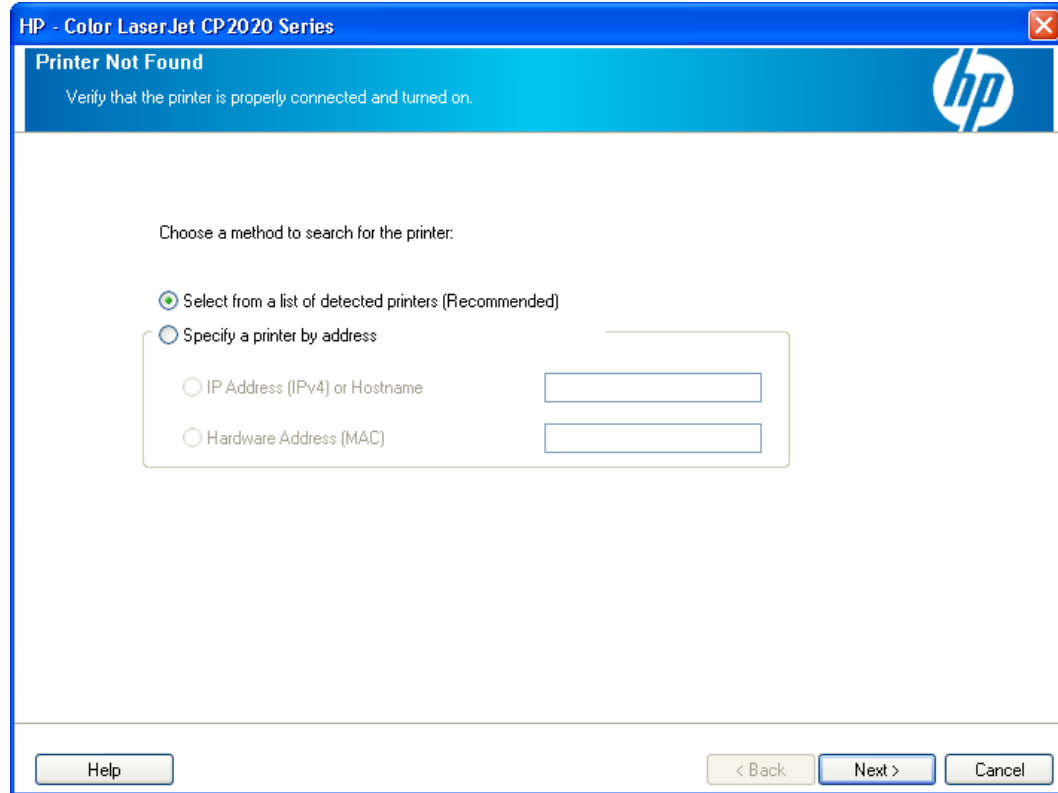
 **NOTE:** The following window opens when using a Windows Firewall. If a non-Windows Firewall is used, the **Printers Found** window opens.

Figure 3-31 Firewall Notice window



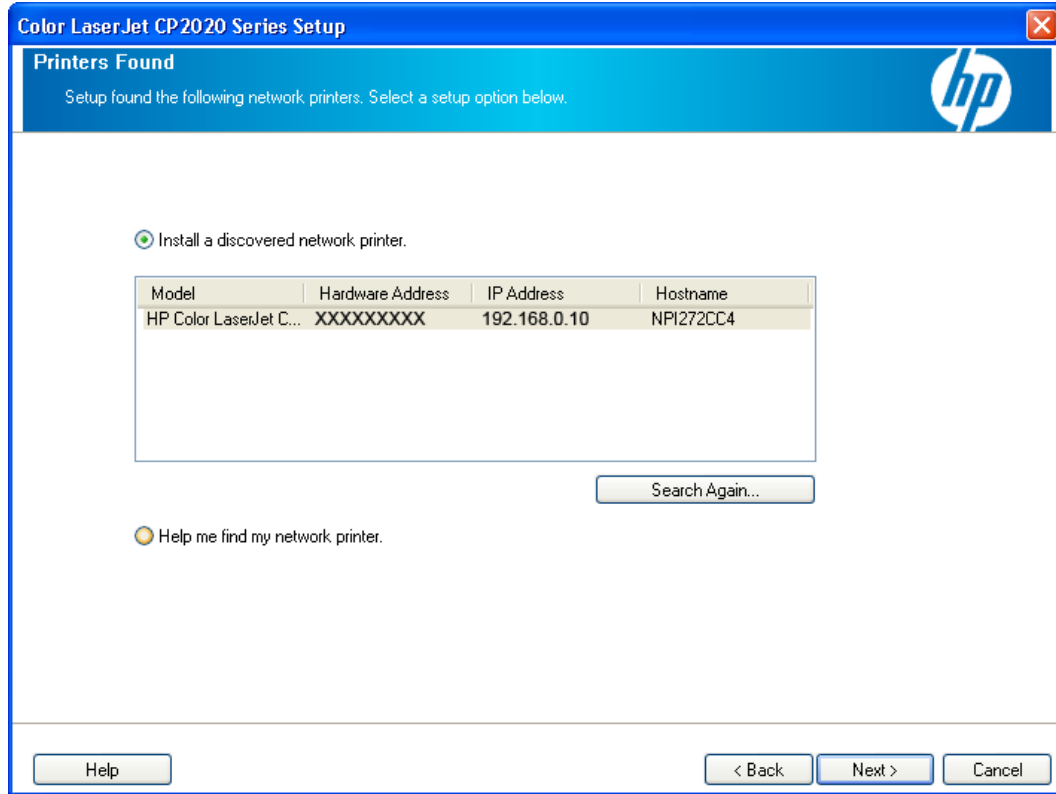
- If the **Printer Not Found** dialog opens, do one of the following:
 - Click **Select from a list of detected printers (Recommended)**.
 - Select **Help me find my network printer**, type the IP Address (IPv4) or Hostname, or type the Hardware Address, and click **Next**.

Figure 3-32 Printer Not Found dialog



The **Printers Found** window opens.

Figure 3-33 Printers Found window

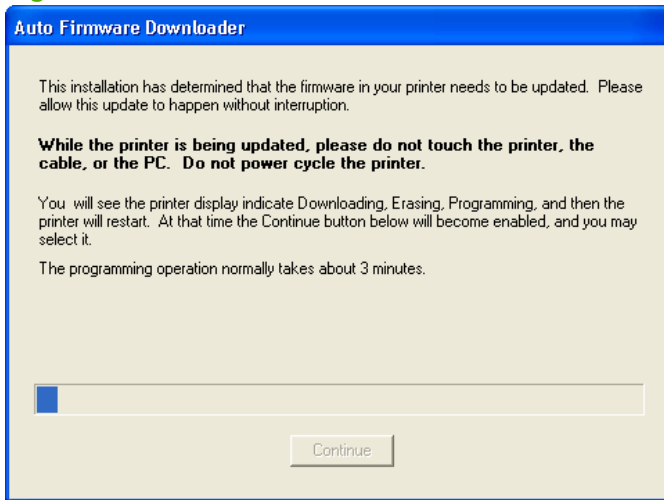


Do one of the following, depending on the results in the **Printers Found** window:

- If the product was found, select **Install a discovered network printer** and click **Next**. The **Congratulations!** window opens.
- If the product was not found, click **Search Again**.
- If the product was still not found, select **Help me find my network printer** and click **Next**. The **Identify a printer** window opens. (See [Figure 3-30 Identify a printer window on page 148](#) to continue.)

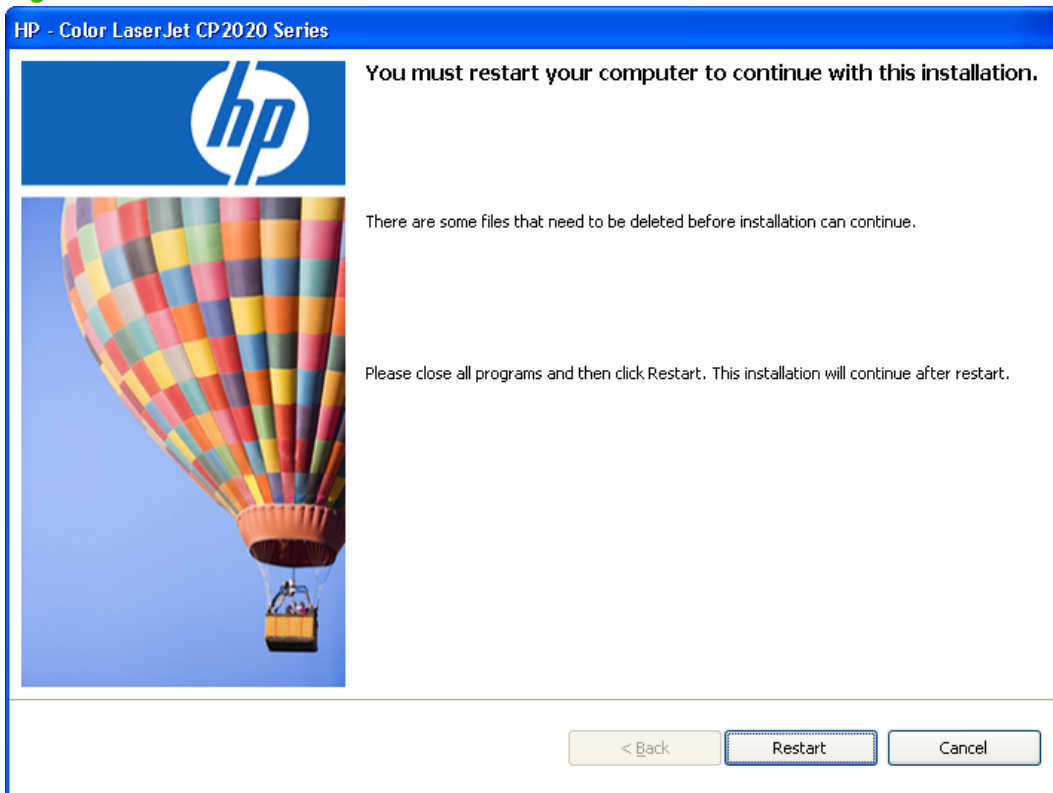
- The installer automatically performs a firmware check on the product you have designated. If the firmware is out of date, the **Auto Firmware Downloader** screen appears and automatically updates the product firmware.

Figure 3-34 Auto Firmware Downloader window



The next screen that appears informs you that the computer needs to be restarted to continue the installation. Click **Restart**.

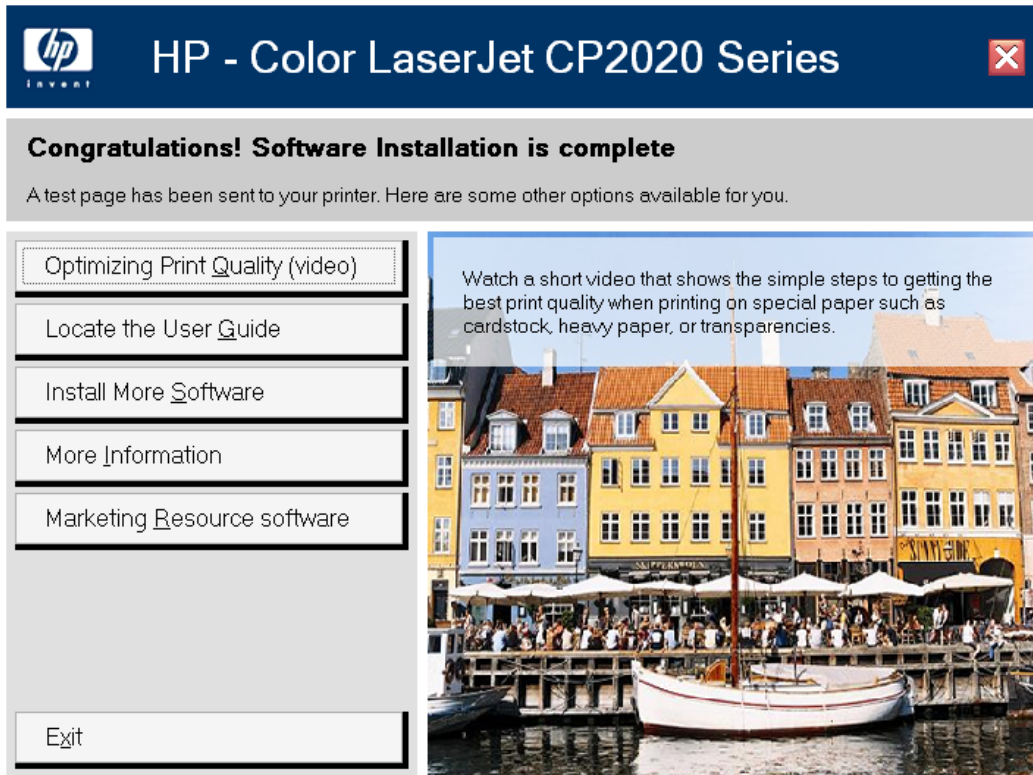
Figure 3-35 Restart window



When the computer restarts, the installer completes the installation process and the **Congratulations! Install Finished** screen appears.

The **Congratulations! Software Installation is complete (Resting Pad)** window opens.

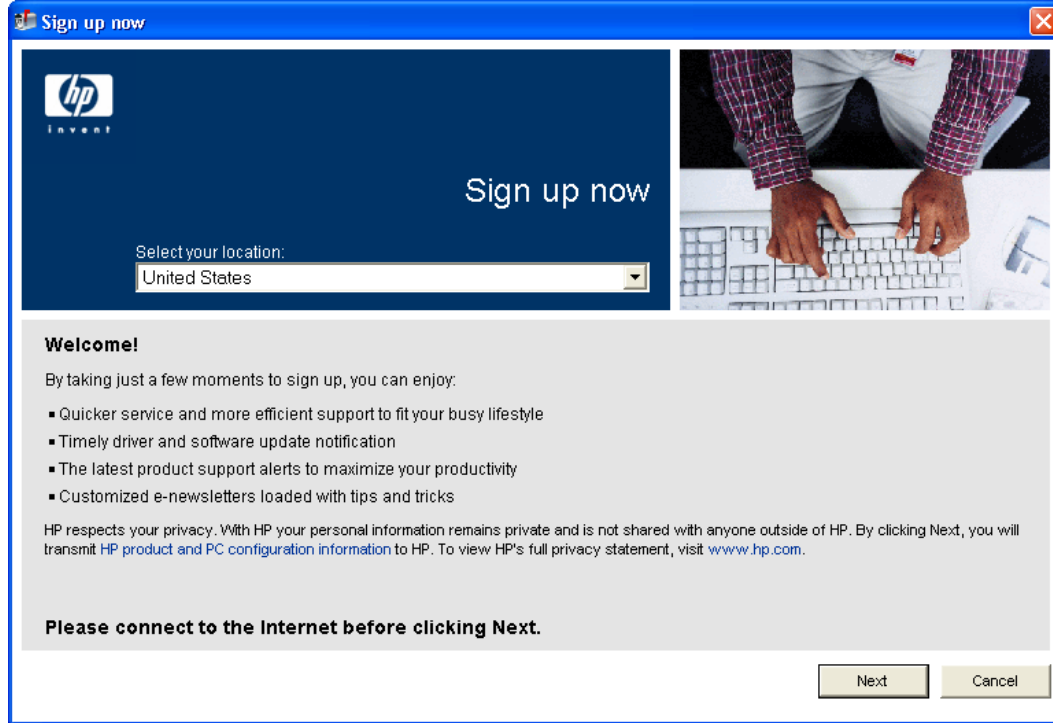
Figure 3-36 Congratulations! Software Installation is complete window (Resting Pad)



On the **Congratulations! (Resting Pad)** window, browse through the various CD browser features or click **Exit** to close the CD browser.

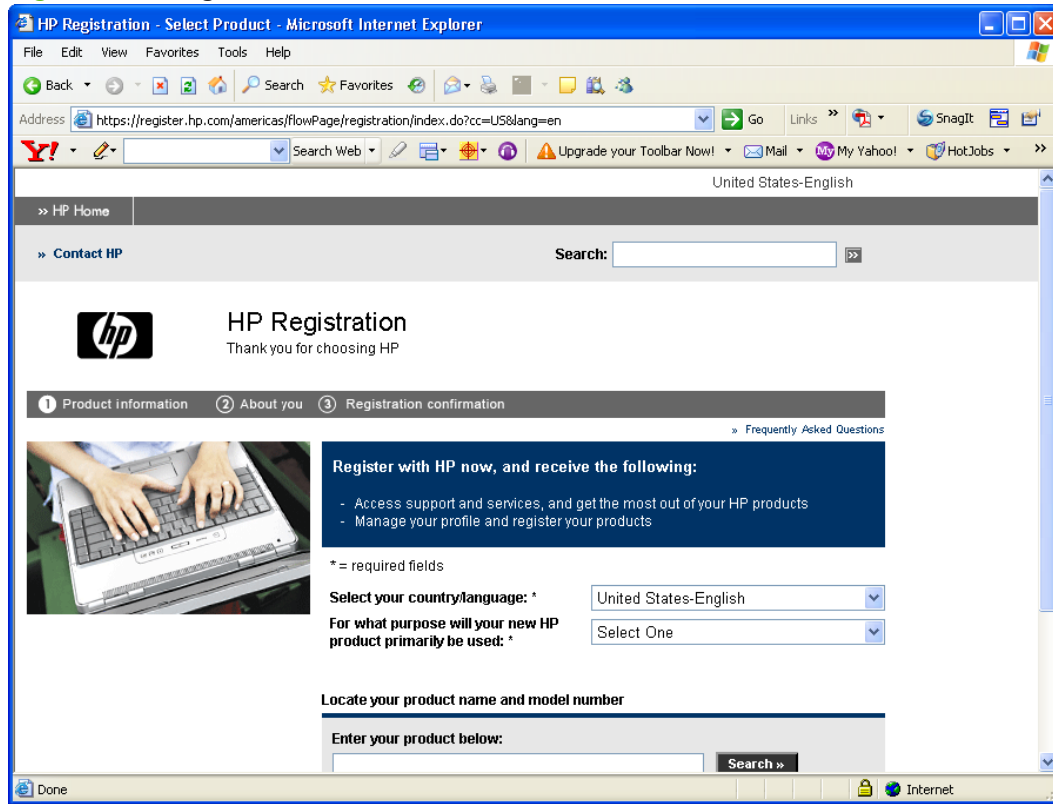
The **Sign up now** window opens. Click **Next** to sign up and register the product.

Figure 3-37 Sign up now



The HP Registration window opens. Fill in the appropriate fields, and follow the onscreen instructions.

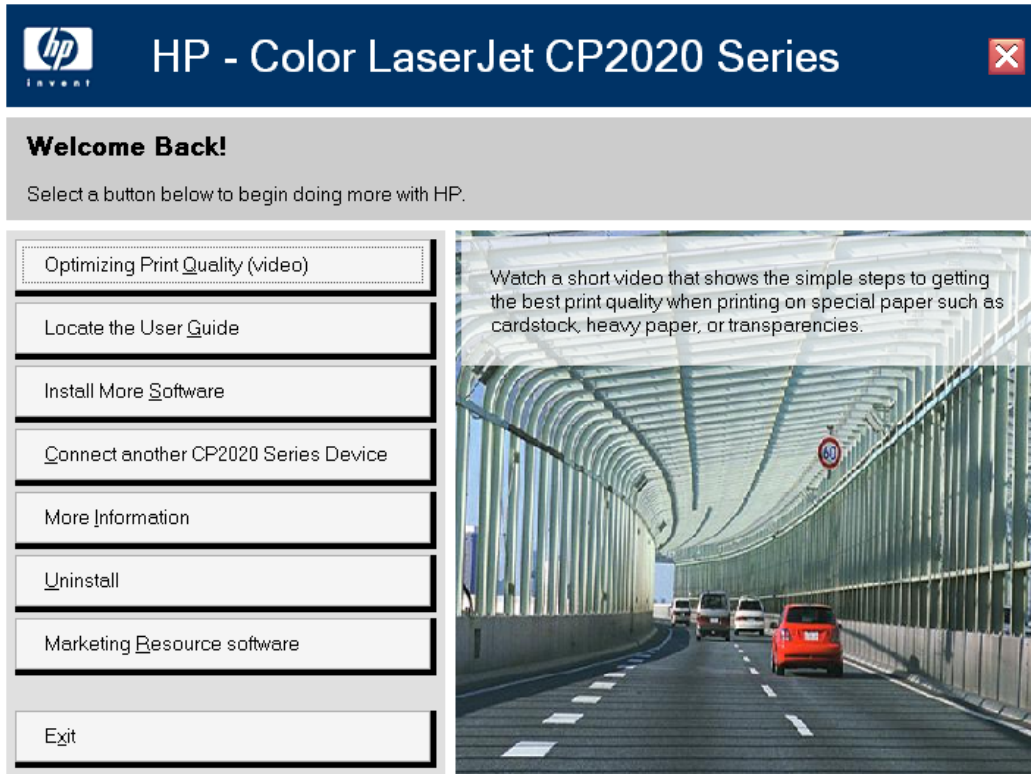
Figure 3-38 Register Now



Install optional software

To install additional software, insert the HP Color LaserJet CP2020 Series printing-system CD. If the driver software has already been installed, the **Welcome Back!** window opens. Click **Install More Software** or **Marketing Resource Software** to install additional software.

Figure 3-39 Welcome Back! window



The following options are available from this screen.

- **Optimizing Print Quality (video).** Select this option to view a short video that shows simple steps for getting the best print quality when printing on special paper such as cardstock, heavy paper, or transparencies.
- **Locate the User Guide.** Select this option to open either an online or printable version of the product user guide.
- **Connect another CP2020 Series Device.** Select this option to add a print driver other than the one that was added during the previous installation. The installer provides an option to direct connect or connect via the network.
- **More Information.** Select this option to open a screen that offers links to information such as the product Readme, the product support Web site, and the HP Sure Supply Web site.
- **Uninstall.** Select this option to uninstall the drivers or software from your computer.

The following two options in the **Welcome Back!** window include additional software options available for download from a Web site or install from the CD browser.

- **Install More Software.** Get the most from your HP products by selecting additional software to install.
- **Marketing Resource software.** Tools, templates, classes and more, to enable you to create marketing materials in-house, to grow your business while saving money.

Install More Software

The **Install More Software** window contains the following options, depending upon which installation method used:

- **Universal Print Driver**
- **Basic Color Match**
- **HP Easy Printer Care**
- **HP Smart Web Printing**

Figure 3-40 Install More Software window



The content below provides detailed information about the **Install More Software** option.

Recommended Install

The options available in the **Install More Software** vary depending on the installation method used to install the printing-system software.

If the printing-system software was installed using the Express Install method, the **Install More Software** window contains a **Recommended Install** option.

Use this option to change the installed version of printing-system software from an Express Install to a Recommended Install. All additional components included in a **Recommended Install** will be installed.

Universal Print Driver

Get a universal print driver. Click this button to go to the HP Web site to download a universal print driver for your product.

Basic Color Match

HP Basic Color Match software allows you to adjust spot color in your printed output. For example, you can match the color of your company logo on your printed output. You can save and use the new color schemes for specific documents or all printed documents, or you can create multiple color schemes that you can choose from later. Click this button to go to the HP Web site to download the HP Basic Color Match software.

HP Easy Printer Care

With HP Easy Printer Care software, manage and monitor up to 15 products from your desktop. HP Easy Printer Care software allows you to view the printer status, create print usage reports, reorder supplies, and troubleshoot and repair products via HP Proactive Support. Click this button to go to the HP Easy Printer Care free software download page.

HP Smart Web Printing

Click this button to go to the HP Web Smart Printing free download page.

HP Smart Web Printing lets you select, store and organize text and graphics from multiple web pages and then edit and print exactly what you see onscreen. It gives you the control you need to print meaningful information while minimizing waste.

Supported operating systems

- Microsoft Windows 2000
- Microsoft Windows XP
- Microsoft Vista

Requirements

- Internet Explorer 6.0 and higher
- 16 MB of hard disk space
- 800x600 monitor with 16-bit or higher color depth

Features

- Automatically scales output to fix right-edge clipping and eliminate wasteful prints containing clipped pages or a few lines of useless text
- Provides a preview with automatic fixes and more control over printed output
- Allows users to select text and graphics easily from any Web site and save a handy list of clips

- Provides a Clip Book pane that can be hidden (similar to IE Favorites, Search, and History panes)
- Provides a Print Clip window to compose and modify clip before printing

Marketing Resource software

Clicking **Marketing Resource Software** in the **Welcome Back!** window opens a Web browser. The **HP Marketing Resources Software** Web site opens. The software can be downloaded from this site.

The HP Marketing Resources Software is a suite of templates and tools, including HP Print Preview, that you can use to produce professional-quality marketing material using the HP Color LaserJet CP2020 Series product.

User uninstall software


- [Uninstall instructions for Windows](#)

Uninstall instructions for Windows

The uninstall procedures vary according to the type of installation that you used.

- [Uninstall a Recommended or Express installation](#)
- [Uninstall a print-driver only installation](#)


Uninstall a Recommended or Express installation

 **NOTE:** If you uninstall the software for troubleshooting purposes, try uninstalling only a specific product. The shared software programs might not uninstall successfully, and are unlikely to be the cause of product-specific problems. These shared software programs should not need to be uninstalled, especially if they are being used by another HP product.

- [Use the product software Uninstall component \(recommended\)](#)
- [Use the Windows Add or Remove Programs component](#)
- [Use the printing-system software CD](#)

Use the product software Uninstall component (recommended)


Follow these steps to uninstall the printing-system software by using the **Uninstall** component.

 **NOTE:** To uninstall the software you must have administrator privileges.

1. Quit all open programs.
2. Click **Start**, select **Programs** or **All Programs**, select **HP**, select **HP Color LaserJet CP2020 Series**, and then click **Uninstall**.
3. The **Important Uninstall Information** dialog box appears. Click **Continue**.
4. The **Cleanup progress** dialog box appears. The progress bar reflects the status of the uninstall process.
5. When the uninstall process is completed, the **Restart** dialog box appears. Click **Restart** to restart the computer and finish the uninstall process.

Use the Windows Add or Remove Programs component

Follow these steps to uninstall the printing-system software by using the Windows **Add/Remove programs** component.

 **NOTE:** To uninstall the software in Windows operating systems, you must have administrator privileges.

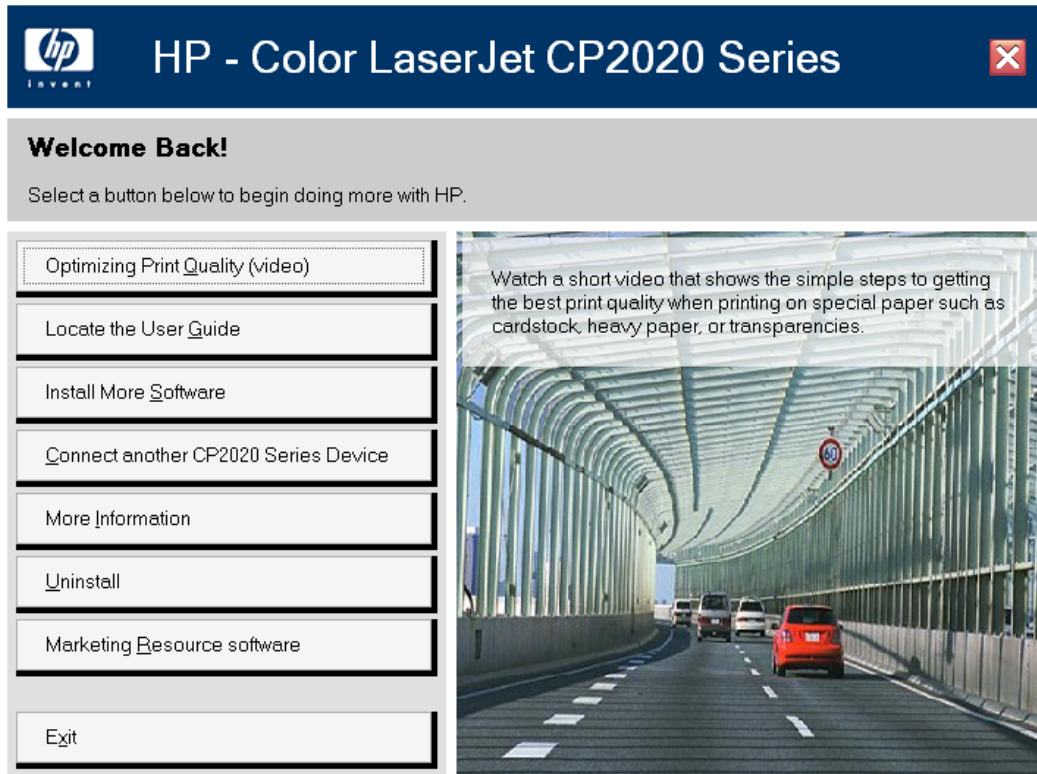
1. Quit all open programs.
2. Click **Start**, click **Control Panel**, double-click **Add or Remove Programs**.
3. Click **Change or Remove programs** on the left side of the window, and then click the name of the product. Click **Remove**.

4. The **Important Uninstall Information** dialog box appears. Click **Continue**.
5. The **Cleanup progress** dialog box appears. The progress bar reflects the status of the uninstall process.
6. When the uninstall process is completed, the **Restart** dialog box appears. Click **Restart** to restart your computer and finish the uninstall process.

Use the printing-system software CD


1. Quit all open programs.
2. Insert the printing-system software CD into the CD-ROM drive. After the system is checked, the **Welcome back!** dialog box appears.

Figure 3-41 Welcome back!



3. Click **Uninstall** and then follow the onscreen prompts..

Uninstall a print-driver only installation

 **NOTE:** To uninstall the software, you must have administrator privileges.

1. Click **Start**, click **Settings**, and then click **Printers**.

 **NOTE:** For Windows XP and Windows Vista, click **Start**, and then click **Printers and Faxes**.

2. Right-click the icon for the product and then click **Delete**. This removes the icon for the product only, but it does not remove the associated files.
3. To remove the associated files, click **File** from inside the **Printers** folder, and then click **Server Properties**.

4. Click the **Driver** tab, click the name of the product, and then click **Remove**. When you are prompted to confirm the deletion, click **Yes**.
5. Click **Close** to close the **Server Properties** dialog box, and then close the **Printers** folder.

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

Introduction

The HP Color LaserJet CP2020 Series printer supports the following drivers: the HP PCL 6 print driver and the HP PS Universal Print Driver.

- [Change the print driver settings for Windows](#)
- [Help system](#)
- [Advanced tab features](#)
- [Printing Shortcuts tab](#)
- [Paper/Quality tab features](#)
- [Effects tab features](#)
- [Finishing tab features](#)
- [Color tab features](#)
- [Services tab features](#)
- [Device Settings tab features](#)
- [About tab features](#)

Change the print driver settings for Windows

Operating System	To change the settings for all print jobs until the software program is closed	To change the default settings for all print jobs	To change the device configuration settings
Windows 2000, XP, Server 2003, and Vista	<ol style="list-style-type: none">1. On the File menu in the software program, click Print.2. Select the driver, and then click Properties or Preferences. <p>The steps can vary; this procedure is most common.</p>	<ol style="list-style-type: none">1. Click Start, click Settings, and then click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Server 2003) or Printers and Other Hardware Devices (Windows XP Home). For Windows Vista, click Start, click Control Panel, and then click Printer.2. Right-click the driver icon, and then select Printing Preferences.	<ol style="list-style-type: none">1. Click Start, click Settings, and then click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Server 2003) or Printers and Other Hardware Devices (Windows XP Home). For Windows Vista, click Start, click Control Panel, and then click Printer.2. Right-click the driver icon, and then select Properties.3. Click the Device Settings tab.

Printing Preferences driver tabs

The **Printing Preferences** driver tabs change the default settings that are used across all software programs. Follow these instructions to access the **Printing Preferences** tabs.

1. In Windows Vista, click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

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

-or-

In Windows XP Home, click **Start**, click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

-or-

For Windows 2000: Select **Settings**, and then click **Printers**.

2. Right-click the product icon.
3. Click **Printing Preferences**.

The following **Printing Preferences** tabs are available:

- **Advanced**
- **Printing Shortcuts**
- **Paper/Quality**
- **Effects**

- **Finishing**
- **Color**
- **Services**

Properties driver tabs

The **Properties** driver tabs control the driver behavior and driver connections. Follow these instructions to access the **Properties** tabs.

1. In Windows Vista, click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

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

-or-

In Windows XP Home, click **Start**, click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

-or-

For Windows 2000: Select **Settings**, and then click **Printers**.

2. Right-click the product icon.
3. Click **Properties**.

The following **Properties** tabs are available:

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

The **Device Settings** and **About** tabs are HP driver tabs and are described in this guide. The other **Properties** tabs are Microsoft Windows tabs. For information about those tabs, see the documentation that came with the computer.

Help system

The HP PCL 6 print driver and HP PS Universal Print Driver include a full-featured Help system to provide assistance with printing and configuration options. The following Help options are available.

- [“What's this?” Help](#)
- [Constraint messages](#)

“What's this?” Help

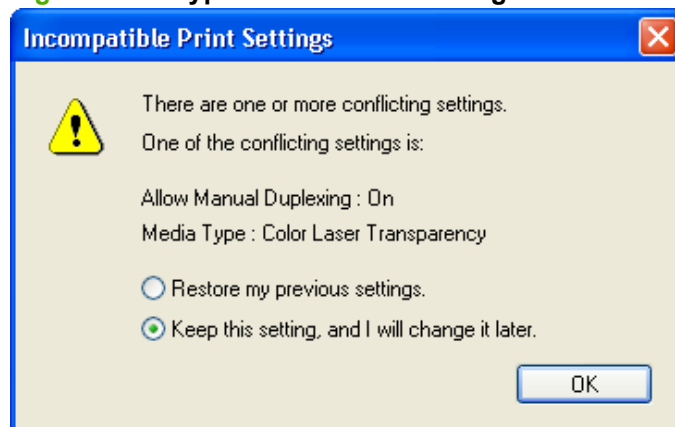
“What's this?” Help is supported in Microsoft Windows 2000 and Windows XP. Access the “What's this?” Help messages in any of the following ways:

- Right-click a control button on a screen. For example, on the **Properties** tab screen, right-click either the **Printing Preferences** control or the **Print Test Page** control. A small **What's this?** box appears. Right-click on the **What's this?** box and a pop-up Help window appears.
- Click the ? button in the upper-right corner of the screen frame, next to the X, to change the cursor to an arrow with a question mark. Use this special cursor to select a control, and the pop-up Help window for that feature appears.
- Press the **F1** key, and the Help window for the currently selected control appears.

Constraint messages

Constraint messages are unsolicited messages that appear in response to specific actions that are illogical or impossible given the capabilities of the product or the current settings of other controls. For example, if you click **Print on Both Sides** and then change the paper type to **Transparency**, a message appears with options on how to resolve this conflict.

Figure 4-1 A typical constraint message



Whenever a constraint message appears with **Restore my previous settings** or **Keep this setting, and I will change it later** buttons, the action of the buttons is as follows:

- To reject the change that was just made, returning the control to its previous value, click **Restore my previous settings** and then click **OK**.
- To accept the change that was just made, click **Keep this setting, and I will change it later** and then click **OK**. This brings back the driver settings where the user can resolve the conflict.

Advanced tab features

Use the **Advanced** tab to change the layout of printed pages, to configure special controls that are not commonly used, and to change other settings such as the paper size and number of copies. Many software programs also enable control of some **Advanced** tab features when accessed through the print dialog box or page settings.

Figure 4-2 Advanced tab – PCL 6

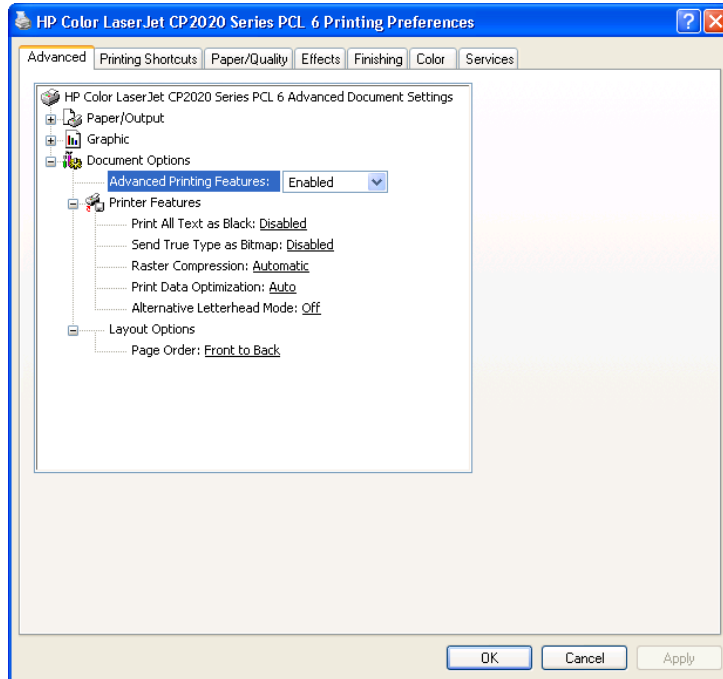
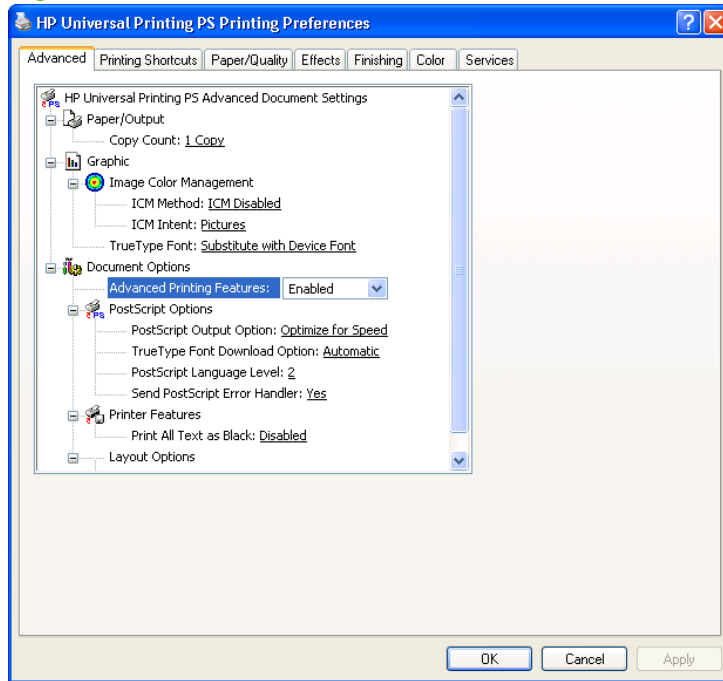


Figure 4-3 Advanced tab – HP PS Universal Print Driver



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

- **Paper/Output** settings
- **Graphic** settings
- **Document Options** settings

Paper/Output settings

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

Copy Count setting

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 requested number of copies appears in the **Copy Count** option. Select the number by typing in the box or by using the up and down arrows on the right side of the text box. For the HP Color LaserJet CP2020 Series printer, 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 edit box (such as non-numerical input, numbers less than 1, or numbers greater than 9999) change to the last valid value that appeared in the box. The default number of copies is 1.

Problems can develop when a software program and the driver it is running on both allow the user to set the number of copies to print. In most cases, the software program and the driver communicate, so that the number of copies set in one location (such as the program) appears in the other (such as the driver). For some software programs, this communication does not take place, and the copies values are treated independently. For example, setting 10 copies in the program and then setting 10 copies in the driver might result in the product making 100 copies (10 x 10). Set the number of copies in the software program, whenever possible.

Graphic settings

The **Graphic** settings contain the following controls.

- **Image Color Management** settings
- **TrueType Font** settings

Image Color Management settings

Image Color Management (ICM) options are used for printing color graphics. The ICM options make it possible for programs to adjust colors before printing so that the color of images on the screen more closely matches the color of printed images. The following options are available:

- **ICM Method.** The ICM Method setting specifies how to print color graphics. The default setting for **ICM Method** is **ICM Disabled**. Additional options on the **ICM Method** drop-down menu include:
 - **ICM Handled by Host System.** Click this option to perform calculations for color matching on the host computer before sending the document to the product.
 - **ICM Handled by Printer.** Click this option to perform calculations for color matching on the product. A set of rules for mapping the colors is created and downloaded to the product (which must be PostScript language level 2 or higher). The product uses these rules to adjust colors in the document.
- **ICM Intent.** The ICM Intent setting specifies how color images are created to produce the best-looking image on the printed page.
 - If printing a chart or using fully saturated, bright colors, click **Graphics** to achieve the best quality.
 - For photographs or pictures where the colors blend together, click **Pictures** to maximize the contrast.
 - If the document uses a color that you need to match exactly, and you are sending the document to a product that has that specific color of ink, click **Proof**.
 - To preview the color settings from another product, click **Match**.

TrueType Font settings

This option specifies the TrueType Font settings. The following settings are available:

- **Substitute with Device Font.** This setting causes the product to use equivalent fonts for printing documents that contain TrueType fonts. This permits faster printing; however, special characters that the printer font does not support might be lost. This is the default setting.
- **Download as Softfont.** This setting causes TrueType fonts to be downloaded and used for printing, instead of the fonts installed through the product.

Document Options

The **Document Options** settings contain the following controls:

- [Advanced Printing Features](#)
- [PostScript Options \(HP PS Universal Print Driver only\)](#)
- [Printer Features](#)
- [Layout Options](#)

Advanced Printing Features

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

depending on the product. For normal printing, leave the **Advanced Printing Features** setting at the default (**Enabled**). If compatibility problems occur, disable the feature. However, some advanced printing features might still be available in the print driver, even if 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 turned on again.

PostScript Options (HP PS Universal Print Driver only)

The following PostScript options appear in the HP PS Universal Print Driver:

- **PostScript Output Option**
- **TrueType Font Download Option**
- **PostScript Language Level**
- **Send PostScript Error Handler**

PostScript Output option

The **PostScript Output Option** specifies the output format for PS files. Generally, use the default setting, **Optimize for Speed**, to print the documents.

To create a file that conforms to the Adobe Document Structuring Conventions (ADSC), click **Optimize for Portability**. Each page of the document will be a self-contained object. This is useful when creating a PS file and printing it on a different product. To include the file as an image in another document that is printed from a different software program, click **Encapsulated PostScript (EPS)**. The **Archive Format** creates a PS file that can be used later.

TrueType Font Download option

The **TrueType Font Download Option** specifies how TrueType fonts are downloaded. The default setting of **Automatic** allows the HP PS Universal Print Driver to decide which format is best.

- To download the TrueType font as a scalable outline font, click **Outline**.
- To download the TrueType font as a bitmap font, click **Bitmap**.
- If the product is a TrueType rasterizer printer, click **Native TrueType** to download the TrueType font as an outline font.

PostScript Language Level

The **PostScript Language Level** option specifies which PS language level to use, from 1 to 3. The highest level supported by the HP Color LaserJet CP2020 Series printer is 3, and this is the default setting. Some products support multiple levels.

It is usually best to select the highest number available, because a higher language level provides more features. In some instances level 1 should be used, such as when printing a file to disk, and that file will be printed by someone who uses a level-1 product.

Send PostScript Error Handler

The **Send PostScript Error Handler** setting specifies whether a PS error-handler message is sent. To get the product to print an error page when an error occurs in the print job, click **Yes**. The default setting is **Yes**.

Printer Features

The following **Printer Features** are available:

- [Print All Text as Black](#)
- [Send TrueType as Bitmap \(PCL 6 only\)](#)
- [Raster Compression \(PCL 6 only\)](#)
- [Print Data Optimization \(PCL 6 only\)](#)
- [Alternative Letterhead Mode \(PCL 6 only\)](#)

Print All Text as Black

The **Print All Text as Black** 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. **Print All Text as Black** remains enabled only for the current print job. When the current print job is completed, **Print All Text as Black** is automatically disabled.

Send TrueType as Bitmap (PCL 6 only)

Send TrueType as Bitmap provides an alternative for those software programs that encounter problems when TrueType fonts are used for special graphic purposes such as shading, rotation, or slanting. The setting is **Disabled** (off) by default. The TrueType fonts are first 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 (PCL 6 only)

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

- **Automatic.** The software determines the best compression method to use.
- **Best Quality.** Forces the software to use a lossless compression method. (Lossless means that no data is lost during compression.)
- **Maximum Compression.** Where applicable, requires the software to always use a lossy compression method (some data is lost). Choosing this option increases the print speed performance, but does decrease print image quality.

Print Data Optimization (PCL 6 only)

The HP Color LaserJet CP2020 Series printer is the first to offer Print Data Optimization (also known as hybrid printing). Implementation of this feature required changes to both the software (print driver) and the printer's firmware. The benefit of this feature is that files will print faster without any degradation of print quality. Print Data Optimization is a combination of the best of Page Description Language (PDL) printing with the best of host-based printing.

Print Data Optimization printing is possible only with the HP PCL 6 print driver. The Print Data Optimization feature allows the print job to use the host memory to ensure quick and high-quality printing. The print driver can be set to print like a host-based printer all the time (**Optimize for Raster**), a standard PCL printer all the time (**Optimize for Text and Vector**), or a mixture of both (**Auto**) depending upon the application you are printing from. By default, the feature is set to **Auto**. This sends data to the printer like a host-based print driver using the **Optimize for Raster** path for the list of applications below and

the **Optimize for Text and Vector** path for all other applications. The feature is set in the **Advanced** tab of the Printing Preferences of the HP PCL 6 print driver.

Applications that cause use of the Raster path

- AutoCad (ACAD.EXE)
- Adobe Acrobat (ACROBAT.EXE)
- Adobe Reader (ACRORD32.EXE)
- CorelDRAW® (CORELDRW.EXE)
- Adobe Illustrator (ILLUSTRATOR.EXE)
- Adobe PhotoShop® (PHOTOSHP.exe or PHOTOSHOP.EXE)
- Microsoft PowerPoint (POWERPOINT.EXE)
- Quark Express (QUARKXPRESS.EXE)

Print Data Optimization is a feature that is only available in Windows printing. When the product is installed in the Windows environment, Print Data Optimization printing is automatically enabled. The Print Data Optimization feature is not available for Mac, Linux, or other operating systems.

The following Print Data Optimization options are available; Auto is selected by default.

- **Auto.** The default mode. In this mode, the driver behaves like a host-based printer only for the applications listed above and behaves like a standard PCL6 print driver for all other applications.
- **Optimize for Raster.** In this mode, the print driver always sends data like a host-based print driver.
- **Optimize for Text and Vector.** In this mode, the print driver always sends data like a standard PCL6 print driver.

The Print Data Optimization feature can be changed from **Auto** to **Optimize for Raster** or **Optimize for Text and Vector**.

Selecting **Optimize for Raster** causes the driver to always use the Raster path when printing; and, selecting **Optimize or Text and Vector** causes the driver to always use the PDL path.

Alternative Letterhead Mode (PCL 6 only)

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

Layout Options

The **Layout Options** setting offers different ways of setting up the **Page Order**.

- **Front to Back.** Prints the document so that page 1 prints first.
- **Back to Front.** Prints the document so that page 1 prints last; useful to achieve output in the correct order when printing to a face-up page output bin.

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

Printing Shortcuts tab

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

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

Figure 4-4 Printing Shortcuts tab – PCL 6

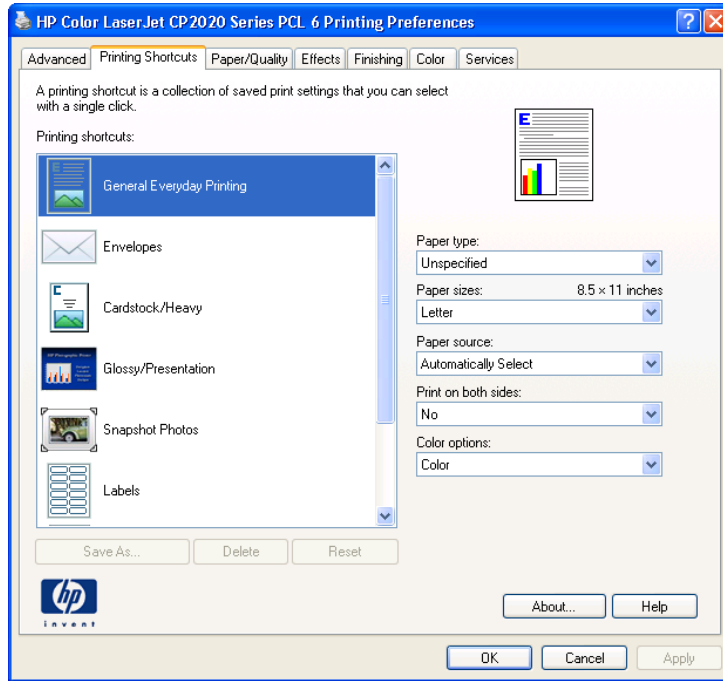
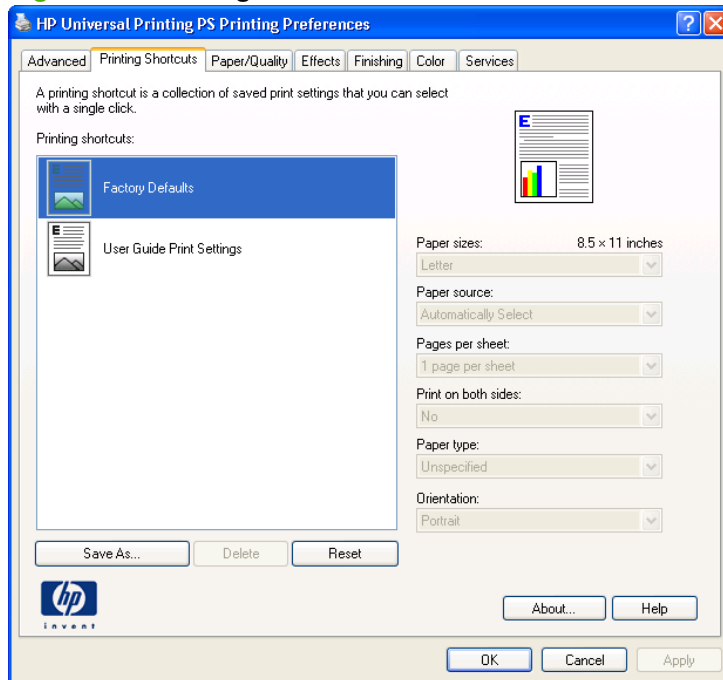


Figure 4-5 Printing Shortcuts tab – HP PS Universal Print Driver



The **Printing Shortcuts** tab is a new tab that appears on the HP PCL 6 print driver and the HP PS Universal 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.

Printing Shortcuts contains the following:

- [General Everyday Printing \(PCL 6 only\)](#)
- [Envelopes \(PCL 6 only\)](#)
- [Cardstock/Heavy \(PCL 6 only\)](#)
- [Glossy/Presentation \(PCL 6 only\)](#)
- [Snapshot Photos \(PCL 6 only\)](#)
- [Labels \(PCL 6 only\)](#)
- [Transparencies \(PCL 6 only\)](#)
- [Factory Defaults](#)
- [User Guide Print Settings \(HP PS Universal Print Driver only\)](#)
- [Document preview image](#)

General Everyday Printing (PCL 6 only)

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 restore the default settings.

Table 4-1 General Everyday printing options

Category	Option
Paper type:	<p>The following options are available:</p> <ul style="list-style-type: none"> ● 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 Presentation Glossy 130g ● HP Professional Laser Glossy 130g

Table 4-1 General Everyday printing options (continued)

Category	Option
	<ul style="list-style-type: none">● HP Tri-fold Color Laser Brochure 160g● HP Color Laser Brochure Glossy 160g● HP Superior Laser Glossy 160g● HP Color Laser Photo Glossy 220g● Light 60-74g● Mid-Weight 96-110g● Heavy 111-130g● Extra Heavy 131-175g● Heavy Glossy 111-130g● Extra Heavy Glossy 131-175g● Card Glossy 176-220g● Color Laser Transparency● Labels● Letterhead● Envelope● Heavy Envelope● Preprinted● Prepunched● Colored● Bond● Recycled● Rough● Heavy Rough● HP Tough Paper
Paper size:	The following options are available: <ul style="list-style-type: none">● Letter (default)● Legal● Executive● 8.5x13● 4x6● 10x15cm● 5x8● A4

Table 4-1 General Everyday printing options (continued)

Category	Option
	<ul style="list-style-type: none">• A5• A6• B4 (JIS)• B5 (JIS)• 8K 270x390 mm• 16K 195x270 mm• 16K 184xx260 mm• 8K 273x394 mm• 16K 197x273 mm• Postcard (JIS)• Double Postcard (JIS)• Envelope #10• Envelope Monarch• Envelope B5• Envelope C5• Envelope DL
Paper source:	<p>The following options are available:</p> <ul style="list-style-type: none">• Automatically Select (default)• Printer auto select• Manual Feed in Tray 1• Tray 1• Tray 2
Print on both sides:	<p>The following options are available:</p> <ul style="list-style-type: none">• No (default)• Yes, Flip Over• Yes, Flip Up
Color Options	<p>The following options are available:</p> <ul style="list-style-type: none">• Color (default)• Black and white

Envelopes (PCL 6 only)

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 restore the default settings.

Table 4-2 Envelopes printing options

Category	Options
Paper type:	<ul style="list-style-type: none">● Envelope (default)● Heavy Envelope
Paper sizes:	<ul style="list-style-type: none">● Envelope #10 (default)● Envelope Monarch● Envelope B5● Envelope C5● Envelope DL
Paper source:	<ul style="list-style-type: none">● Automatically Select (default)● Printer auto select● Manual Feed in Tray 1● Tray 1● Tray 2

Cardstock/Heavy (PCL 6 only)

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 restore the default settings.

Table 4-3 Cardstock/Heavy printing options

Category	Options
Paper type:	<ul style="list-style-type: none">● HP Cover Matte 200g (default)● Heavy 111-130g● Extra Heavy 131-175g● Heavy Glossy 111-130g● Extra Heavy Glossy 131-175g● Card Glossy 176-200g
Paper sizes:	The following options are available: <ul style="list-style-type: none">● Letter (default)● Legal

Table 4-3 Cardstock/Heavy printing options (continued)

Category	Options
	<ul style="list-style-type: none"> ● Executive ● 8.5x13 ● 4x6 ● 10x15cm ● 5x8 ● A4 ● A5 ● A6 ● B4 (JIS) ● B5 (JIS) ● 8K 270x390 mm ● 16K 195x270 mm ● 16K 184xx260 mm ● 8K 273x394 mm ● 16K 197x273 mm ● Postcard (JIS) ● Double Postcard (JIS) ● Envelope #10 ● Envelope Monarch ● Envelope B5 ● Envelope C5 ● Envelope DL
Paper source:	<ul style="list-style-type: none"> ● Automatically Select (default) ● Printer auto select ● Manual Feed in Tray 1 ● Tray 1 ● Tray 2
Print on both sides:	<ul style="list-style-type: none"> ● No (default) ● Yes, flip over ● Yes, flip up
Color options:	<ul style="list-style-type: none"> ● Color (default) ● Black & White

Glossy/Presentation (PCL 6 only)

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 restore the default settings.

Table 4-4 Glossy/Presentation printing options

Category	Options
Paper type:	<ul style="list-style-type: none">• 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 Presentation Glossy 130g• HP Professional Laser Glossy 130g• HP Color Laser Brochure Glossy 160g• HP Superior Laser Glossy 160g• HP Color Laser Photo Glossy 220g (default)• Mid-Weight Glossy 96-110g• Heavy Glossy 111-130g• Extra Heavy Glossy 131-175g• Card Glossy 176-220g• Bond• Rough• Heavy Rough• HP Tough Paper
Paper sizes:	<ul style="list-style-type: none">• Letter (default)• Legal• Executive• 8.5x13• A4• B4 (JIS)• B5 (JIS)

Table 4-4 Glossy/Presentation printing options (continued)

Category	Options
	<ul style="list-style-type: none"> 8K 273x394 mm 16K 197x273 mm
Paper source:	<ul style="list-style-type: none"> Automatically Select (default) Printer auto select Manual Feed in Tray 1 Tray 1 Tray 2
Print on both sides:	<ul style="list-style-type: none"> No (default) Yes, flip over Yes, flip up
Color theme:	<ul style="list-style-type: none"> Default (sRGB) (default) Vivid Photo Photo (Adobe RGB 1998) None

Snapshot Photos (PCL 6 only)

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 restore the default settings.

Table 4-5 Snapshot printing options

Category	Options
Paper type:	<ul style="list-style-type: none"> HP Cover Matte 200g HP Matte Photo 200g) HP Color Laser Photo Glossy 220g (default)
Paper sizes:	<ul style="list-style-type: none"> 4x6 (default) 10x15cm
Paper source:	<ul style="list-style-type: none"> Automatically Select (default) Printer auto select

Table 4-5 Snapshot printing options (continued)

Category	Options
	<ul style="list-style-type: none">● Manual Feed in Tray 1● Tray 1● Tray 2
Color theme:	<ul style="list-style-type: none">● Default (sRGB)● Vivid● Photo (default)● Photo (Adobe RGB 1998)● None

Labels (PCL 6 only)

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 restore the default settings.

Table 4-6 Labels printing options

Category	Options
Paper type:	Labels
Paper sizes:	<ul style="list-style-type: none">● Letter (default)● Legal● Executive● 8.5x13● A4● B4 (JIS)● B5 (JIS)● 8K 273x394 mm● 16K 197x273 mm

Table 4-6 Labels printing options (continued)

Category	Options
Paper source:	<ul style="list-style-type: none">Automatically Select (default)Printer auto selectManual Feed in Tray 1Tray 1Tray 2
Color options:	<ul style="list-style-type: none">Color (default)Black & White

Transparencies (PCL 6 only)

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 restore the default settings.

Table 4-7 Transparencies printing options

Category	Options
Paper type:	Color Laser Transparency
Paper sizes:	<ul style="list-style-type: none">Letter (default)LegalExecutive8.5x134x610x15cm5x8A4A5A6B4 (JIS)B5 (JIS)8K 270x390 mm8K 273x394 mm16K 195x270 mm16K 184x260 mm

Table 4-7 Transparencies printing options (continued)

Category	Options
	<ul style="list-style-type: none">● 16K 197x273 mm● Postcard (JIS)● Double Postcard (JIS)● Envelope #10● Envelope Monarch● Envelope B5● Envelope C5● Envelope DL
Paper source:	<ul style="list-style-type: none">● Automatically Select (default)● Printer auto select● Manual Feed in Tray 1● Tray 1● Tray 2
Color options:	<ul style="list-style-type: none">● Color (default)● Black & White

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 type: Unspecified
- Page size: Letter
- Paper source: Automatically select
- Print on both sides: No
- Color Options: Color

User Guide Print Settings (HP PS Universal Print Driver only)

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 restore the default settings.

Table 4-8 User Guide Print Settings – HP PS Universal Print Driver only

Category	Option
Paper size:	<p>The following options are available:</p> <ul style="list-style-type: none">● Letter (default)● Legal● Executive● Statement● 8.5x13● A4● A5● B5 (JIS)● B4 (JIS)● Executive (JIS)● Double Japan Postcard Rotated● 8K● 16K● Envelope #10● Envelope Monarch● Envelope B5● Envelope C5● Envelope DL● Envelope B5
Paper source:	<p>The following options are available:</p> <ul style="list-style-type: none">● Automatically Select (default)● Printer auto select● Manual Feed in Tray 1● Tray 1● Tray 2
Pages per sheet	<p>The following options are available:</p> <ul style="list-style-type: none">● 1 page per sheet● 2 pages per sheet● 4 pages per sheet● 6 pages per sheet● 9 pages per sheet● 16 pages per sheet

Table 4-8 User Guide Print Settings – HP PS Universal Print Driver only (continued)

Category	Option
Print on both sides:	The following options are available: <ul style="list-style-type: none">● No (default)● Yes, Flip Over● Yes, Flip Up
Paper type:	The following options are available: <ul style="list-style-type: none">● 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 Presentation Glossy 130g● HP Professional Laser Glossy 130g● HP Tri-fold Color Laser Brochure 160g● HP Color Laser Brochure Glossy 160g● HP Superior Laser Glossy 160g● HP Color Laser Photo Glossy 220g● Light 60-74g● Mid-Weight 96-110g● Heavy 111-130g● Extra Heavy 131-175g● Heavy Glossy 111-130g● Extra Heavy Glossy 131-175g● Card Glossy 176-220g● Color Laser Transparency● Labels● Letterhead● Envelope● Heavy Envelope● Preprinted

Table 4-8 User Guide Print Settings – HP PS Universal Print Driver only (continued)

Category	Option
	<ul style="list-style-type: none">• Prepunched• Colored• Bond• Recycled• Rough• Heavy Rough• HP Tough Paper
Orientation	The following options are available: <ul style="list-style-type: none">• Portrait• Landscape

Document preview image

The document preview image is a line-drawn image of a page that represents graphics and text. It is always oriented so that the contents of the page are right-side-up.

Move the cursor over the document preview image to change the cursor from an arrow to a gloved hand. Toggle between portrait and landscape page orientation by clicking the image.

Figure 4-6 Document preview image



Paper/Quality tab features

Use the **Paper/Quality** tab to specify the size, type, and source of the paper. 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 4-7 Paper/Quality tab – PCL 6

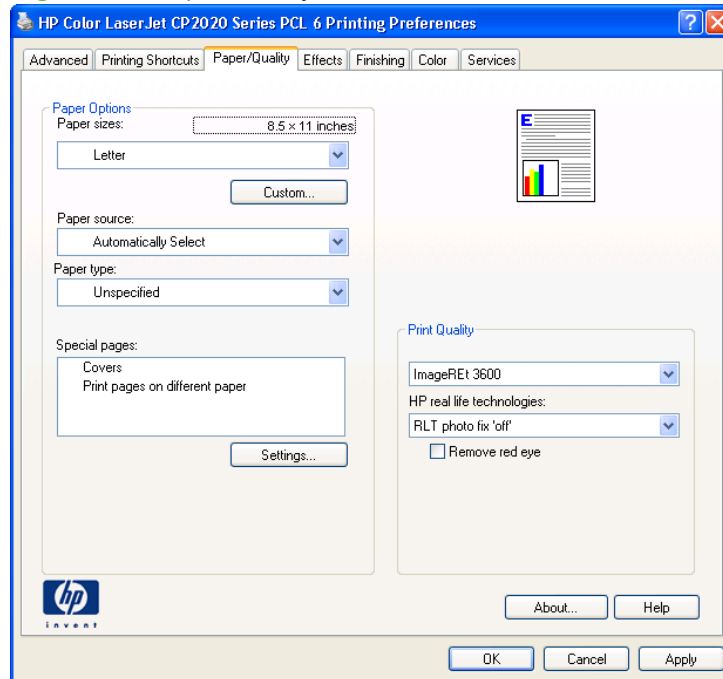
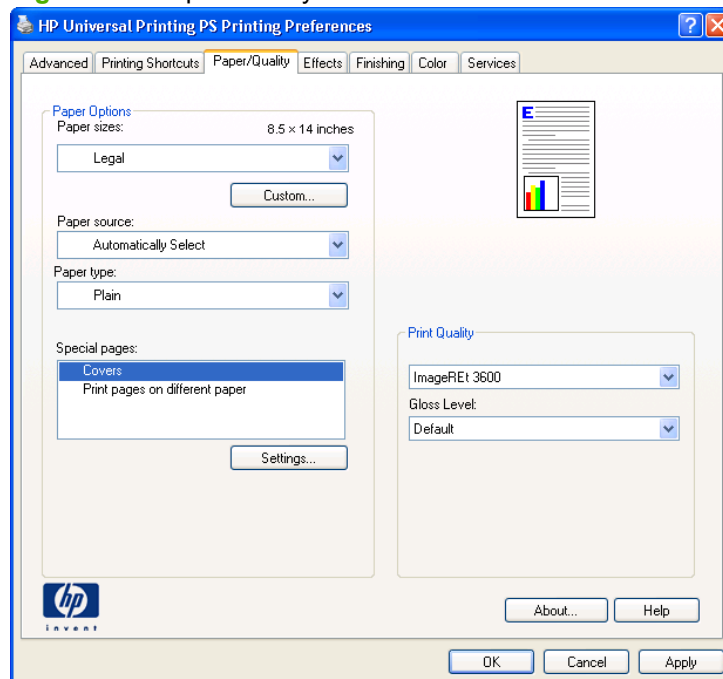


Figure 4-8 Paper/Quality tab – HP PS Universal Print Driver



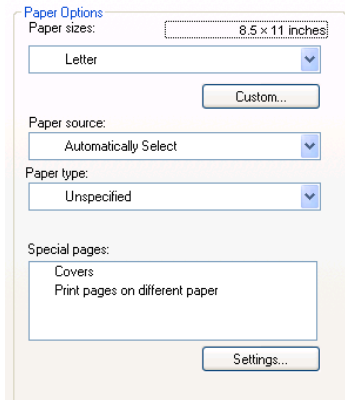
The **Paper/Quality** tab contains the following options:

- [Paper Options](#)
- [Document preview image](#)
- [Print Quality group box](#)

Paper Options

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

Figure 4-9 Paper Options group box



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


- [Paper size: on page 189](#)
- [Custom Paper Size on page 190](#)
- [Paper source: on page 192](#)
- [Paper type: on page 192](#)
- [Special pages on page 194](#)

Paper size:

Paper size: is a drop-down menu that lists all of the supported paper sizes.

Move the cursor over the dimensions label to change the cursor 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, use the driver to set paper size only when printing from software programs that do not include a paper-size setting, such as NotePad, or when producing a book or a booklet that does not require different paper sizes.

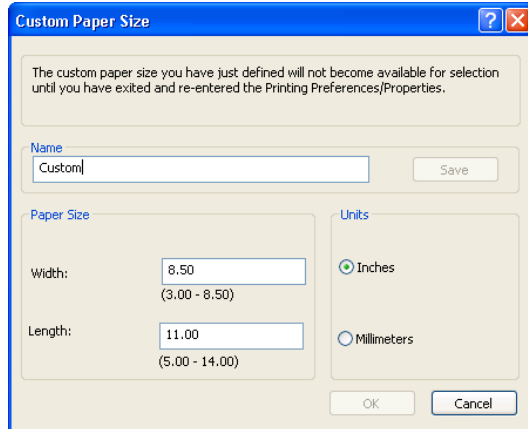
 **NOTE:** Certain software programs can override the size command and specify different paper sizes within a single document.

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

Custom Paper Size

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

Figure 4-10 Print/Quality tab – Custom Paper Size dialog box



Name

Use the **Name** text box to type a new name for a custom paper size.

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, 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, 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

Change the width and height values 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 edit box is rounded down to the maximum valid entry, while any entry that is smaller than the minimum limits of the width and height edit box 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 last valid entry. Width and height entries are validated when the focus has changed.

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

Units

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

Custom width and height control limits

The minimum paper size for the HP Color LaserJet CP2020 Series printer is 76.2 x 127 mm (3 x 5 inches) and the maximum is 215.9 x 355.6 mm (8.5 x 14 inches). The following tables summarizes paper size limits.

The following table identifies the paper types the HP Color LaserJet CP2020 Series printer supports in trays 1 and 2.

Table 4-9 Tray 1 and Tray 2 specifications

Tray 1 and Tray 2	Dimensions ¹	Weight	Capacity ²
Paper	Minimum: 76 x 127 mm (3 x 5 inches) Maximum: 216 x 356 mm (8.5 x 14 inches)	60 to 163 g/m ² (16 to 43 lb) Up to 176 g/m ² (47 lb) for postcards	Single sheet of 75 g/m ² (20 lb) paper for Tray 1 Up to 250 sheets for Tray 2
HP LaserJet glossy paper and HP LaserJet photo paper	Same as the preceding listed minimum and maximum sizes.	75 to 220 g/m ² (20 to 58 lb)	Single sheet of HP LaserJet glossy paper or HP LaserJet photo paper for Tray 1 Up to 25 mm (0.99 inch) stack height for Tray 2
HP Premium Cover Paper ⁴		200 g/m ² (53 lb) cover	Single sheet of HP Cover paper for Tray 1 Up to 25 mm (0.99 inch) stack height for Tray 2
Transparencies and opaque film		Thickness: 0.10 to 0.13 mm (3.9 to 5.1 mils)	Single sheet of transparency or opaque film for Tray 1 Up to 50 sheets for Tray 2
Labels ³		Thickness: up to 0.23 mm (up to 9 mils)	Single sheet of labels for Tray 1 Up to 25 mm (0.99 inch) stack height for Tray 2
Envelopes		Up to 90 g/m ² (up to 24 lb)	Single envelope for Tray 1 Up to ten envelopes for Tray 2

¹ The product supports a wide range of standard and custom sizes of paper. Check the print driver for supported sizes.

² Capacity can vary depending on paper weight and thickness, and environmental conditions.

³ Smoothness: 100 to 250 (Sheffield).

⁴ Hewlett-Packard does not guarantee results when printing with other types of heavy paper.

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:

- **Automatically Select**
- **Printer auto select**
- **Manual Feed in Tray 1**
- **Tray 1**
- **Tray 2**
- **Tray 3**

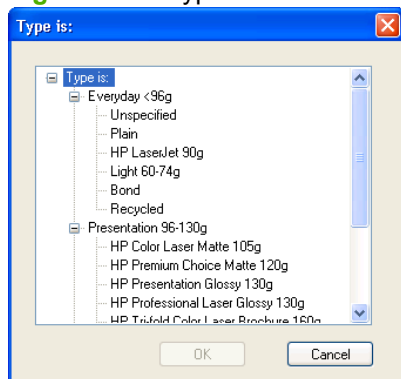
The default setting is **Automatically Select**. When this is selected, the HP Color LaserJet CP2020 Series printer uses the source tray that supports the selected paper size. For the other options, make sure the correct paper size is loaded in the source tray.

Paper type:

The **Paper type:** drop-down menu shows a selection of the paper types that the HP Color LaserJet CP2020 Series printer supports. When you use the default setting, **Unspecified**, the product uses the default paper type, which is usually **Plain**.

To view additional supported paper types, select **More** in the **Paper type:** drop-down menu. The **Type is:** box opens. Select one of the additional paper types and click **OK**. Now this option will be available in the **Paper type:** drop-down menu.

Figure 4-11 Type is: box



The additional supported paper type available via the **Type is:** box are included in the following table.

Table 4-10 Paper type: – Type is: supported paper types and associated engine speeds

Paper category	Paper type	Engine speed
Everyday < 96g	● Unspecified	● Full
	● Plain	● Full
	● HP LaserJet 90g	● 3/4 Speed (6 ppm)

Table 4-10 Paper type: – Type is: supported paper types and associated engine speeds (continued)

Paper category	Paper type	Engine speed
	<ul style="list-style-type: none"> Light 60-74g Bond Recycled 	<ul style="list-style-type: none"> Full 3/4 Speed (6 ppm) Full
Presentation 96-130g	<ul style="list-style-type: none"> HP Color Laser Matte 105g HP Premium Choice Matte 120g HP Presentation Glossy 130g HP Professional Laser Glossy 130g HP Tri-fold Color Laser Brochure 160g Mid-Weight 96-110g Heavy 111-130g Heavy Glossy 111-130g 	<ul style="list-style-type: none"> 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm)
Brochure 131-175g	<ul style="list-style-type: none"> HP Color Laser Brochure Matte 160g HP Superior Laser Matte 160g HP Professional Laser Glossy 130g HP Tri-fold Color Laser Brochure 160g HP Color Laser Brochure Glossy 160g HP Superior Laser Glossy 160g Extra Heavy 131-175g Extra Heavy Glossy 131-175g 	<ul style="list-style-type: none"> 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm)
Photo/Cover 176-200g	<ul style="list-style-type: none"> HP Cover Matte 200g HP Matte Photo 200g HP Color Laser Photo Glossy 200g Card Glossy 176-220g 	<ul style="list-style-type: none"> 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) 3/4 Speed (6 ppm)
Other	<ul style="list-style-type: none"> Color Laser Transparency Labels Letterhead Envelope Heavy Envelope Preprinted Prepunched Colored Rough 	<ul style="list-style-type: none"> 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) Full 3/4 Speed (6 ppm) 3/4 Speed (6 ppm) Full Full Full 3/4 Speed (6 ppm)

Table 4-10 Paper type: – Type is: supported paper types and associated engine speeds (continued)

Paper category	Paper type	Engine speed
	<ul style="list-style-type: none"> Heavy Rough 	<ul style="list-style-type: none"> 3/4 Speed (6 ppm)
	<ul style="list-style-type: none"> HP Tough Paper 	<ul style="list-style-type: none"> 3/4 Speed (6 ppm)

No mechanism exists for manually adding custom paper types through the driver.

The default setting is **Unspecified**. Before selecting a different setting, make sure that the correct paper type is loaded in the tray that is specified in the **Paper source:** setting.

If the print-driver setting is changed to a paper type that is not currently loaded in the product and the tray is configured for a specific paper type, a control-panel message prompts you to load the paper type or select another tray.

Caution symbols may appear next to some paper types in the selection list. This means that there is another setting that may be in conflict with the selected paper size. For example, if “print on both sides” is selected in the Finishing tab, then the Transparency paper type will have a Caution sign next to it because transparencies can only be printed on a single side.

Special pages

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

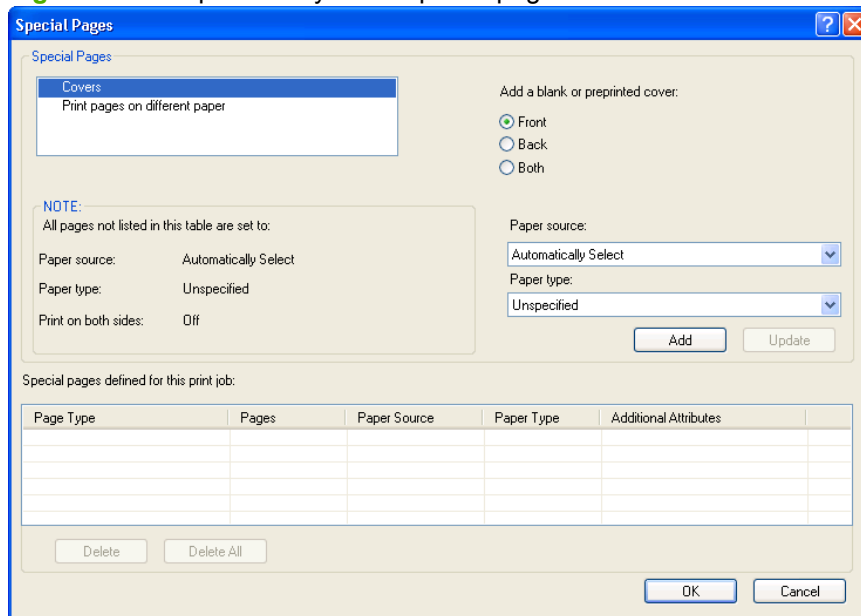
Covers

To use specify cover settings, click **Covers** on the **Special Pages** window.

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 figure shows the **Covers** setting and options.

Figure 4-12 Paper/Quality tab – Special pages – Covers



The following are the **Covers** options:

- **Cover type.** 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.
- **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 **Back Cover** options are not available when the **Booklet Printing Layout** setting is enabled on the **Finishing** tab. The back cover setting is unavailable, because this page would be printed in the middle of a booklet.

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

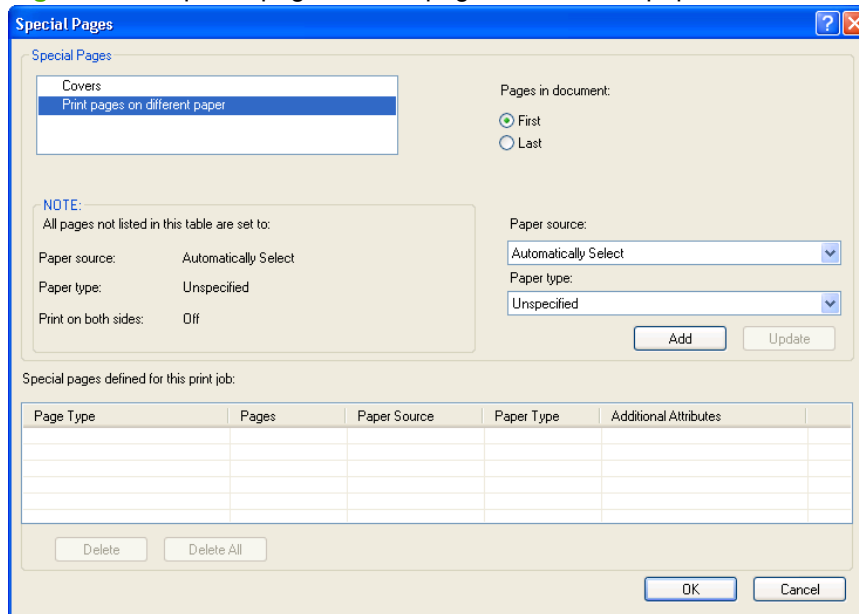
When you change the type and source of the paper and covers, the settings remain configured until you close the software program.

Print pages on different paper

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

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

Figure 4-13 Special pages – Print pages on different paper



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

- **Pages in document.** Select which pages are customized: the **First** page, or the **Last** page.
- **Paper source.** The **Paper source** setting specifies the source tray to use for printing a document.
- **Paper type.** The **Paper type** drop-down menu shows all of the paper types that the product 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.

Document preview image

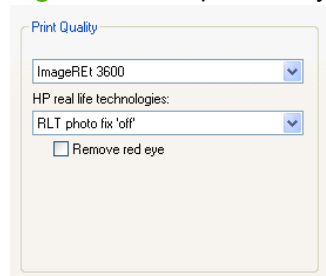
See [Document preview image on page 187](#) for information about this feature.

Print Quality group box

The **Print Quality** group box provides options that control resolution and digital imaging settings. The group box includes the following options:

- [Print Quality drop-down menu](#)
- [HP real life technologies \(PCL 6 only\)](#)
- [Remove red eye checkbox \(PCL 6 only\)](#)
- [Gloss Level \(HP PS Universal Print Driver only\)](#)

Figure 4-14 Paper/Quality tab – Print Quality group box



Print Quality drop-down menu

The **Print Quality** drop-down menu contains the **Image REt 3600** resolution option. This setting produces 3600 dpi color output quality through HP Image Resolution Enhancement Technology (Image REt) 3600. This setting is selected by default.

HP real life technologies (PCL 6 only)

The **HP real life technologies** drop-down contains the following options:

- **RLT photo fix 'off'**
- **'Basic' RLT photo fix**
- **'Full' RLT photo fix**

See the following table for more information about configuring this feature.

Table 4-11 HP real life technologies

	RLT photo fix 'off'	'Basic' RLT photo fix	'Full' RLT photo fix
Photo Brightening	Off	Off	Auto
Adaptive Lighting	Off	Off	Auto

Table 4-11 HP real life technologies (continued)

	RLT photo fix 'off'	'Basic' RLT photo fix	'Full' RLT photo fix
SmartFocus	Off	On	On
Sharpness	Off	Low	Auto
Smoothing	Off	Off	Off

Remove red eye checkbox (PCL 6 only)

The **Remove red eye** checkbox is deselected by default. Check this option to reduce or remove red eye from photographs.

Gloss Level (HP PS Universal Print Driver only)

The HP Color LaserJet CP2020 Series is capable of printing exceptionally high gloss levels on a wide range of paper types. However, on some paper types, the gloss level might noticeably decrease from page to page for a particular print job.

The following adjustments can be set by the user in order to maintain exceptionally high gloss level on all printed pages.

Gloss Level driver settings

For users who normally print general office documents where high gloss levels are not critical but need high gloss for particular print jobs. Users can select the appropriate gloss option for their document through the driver

On the **Paper/Quality** tab, the following **Gloss Level** settings are available:

- **Default.** Uses product settings for gloss.
- **Best.** High gloss on all pages.
- **Standard.** Uses the standard gloss setting. This setting provides the fastest print performance, but also produces some gloss variation over time.

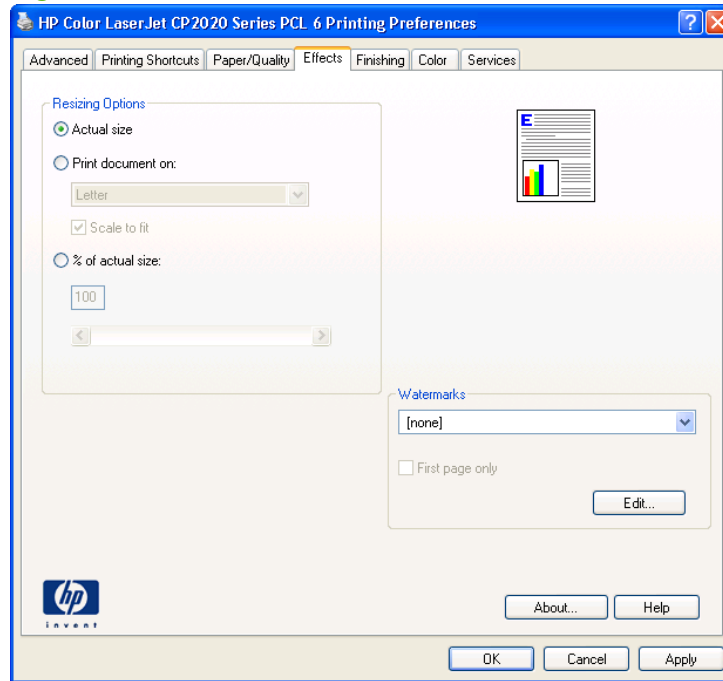
Select **Best** for glossy print jobs such as photos or brochures if the gloss finish decreases after the first page is printed. The **Best** setting reduces printing performance on the print job for which it was selected, but it does not impact product performance for other users.

See the *HP Color LaserJet CP2020 Series User Guide* for control panel options and further information about maintaining high gloss levels.

Effects tab features

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

Figure 4-15 Effects tab



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

- **Resizing Options** group box
- Document preview image
- **Watermarks** group box

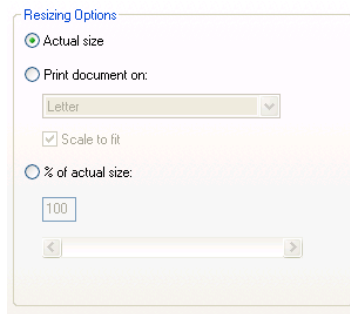
Resizing Options group box

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

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

- **Scale to Fit** option
- **% of actual size** setting

Figure 4-16 Effects tab – Resizing Options group box



Actual Size setting

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

Print Document On setting

Select the **Print Document On** option button 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.

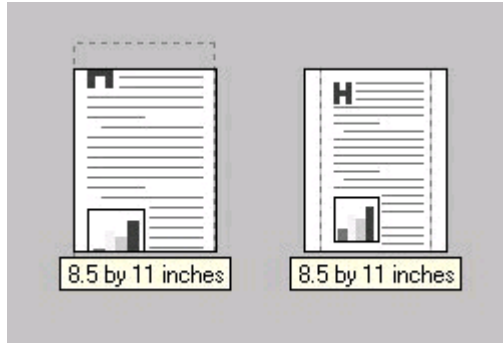
When **Print Document On** is selected, the drop-down menu shows the paper sizes on which you can print. The list contains all of the standard paper sizes that are supported by the selected paper source and any custom sizes that have been created. When **Print Document On** is selected, **Scale to Fit**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

Scale to Fit option

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

preview images for a document that is formatted for legal-size paper and where the **Print Document On** check box is selected and the target size is specified as **Letter**.

Figure 4-17 Preview images – Legal on Letter; Scale to Fit off (left) and on (right)



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

% of actual size option

The **% of actual size** option provides a slider bar to use for scaling the percentage setting. The default setting in the entry box is 100% of normal size. Normal 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 scroll bar indicator is dragged, and the preview image is updated to the new image scale. Each click on the scroll bar arrows increases or decreases the scale by 1%. Each click on the slider bar affects the scale by 10%.

An exact value is not achieved by dragging the scroll bar indicator at the default Microsoft Windows resolution; use the scroll bar indicator to approximate the appropriate value, and then use the scroll bar arrows to refine the value.

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

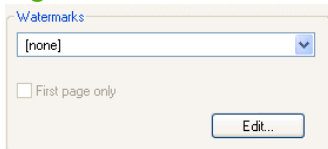
See [Document preview image on page 187](#) for information about this feature.

Watermarks group box

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

- **(none)**
- **Confidential**
- **Draft**
- **SAMPLE**

Figure 4-18 Effects tab – Watermarks group box



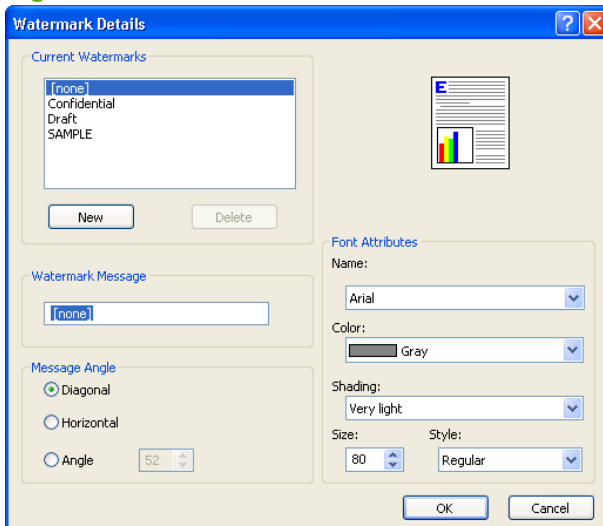
The drop-down menu shows alphabetically sorted watermarks that are currently available on the system plus the string "(none)", which indicates that no watermark is selected. This is the default setting. Any watermark selected from this list appears in the preview image.

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

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

Click **Edit**, and the **Watermark Details** dialog box appears.

Figure 4-19 Effects tab – Watermark Details box



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

Click **OK** to accept all of the changes that are made in the **Watermark Details** dialog box. However, clicking **Cancel** does not cancel all of the changes. If you make changes to a watermark and then select

a different watermark or click **New**, all of the changes made to the previous watermark are saved, and only the current, unsaved changes can be canceled.

Current watermarks

The **Current Watermarks** group box contains a list of available watermarks, both the predefined watermarks that are available in the driver and any new watermarks that have been created.

Creating a new watermark


1. Click **New**.

The new watermark appears in the **Current Watermarks** list and in the **Watermark Message** edit box as "Untitled" until it is named.

2. To name the new watermark, type the selected watermark text in the **Watermark Message** edit box.

The typed name in the **Watermark Message** field appears in the following locations:

- In the **Current Watermarks** group box in the **Watermark Details** dialog box
- In the **Watermarks** group box on the **Effects** tab

 **NOTE:** No more than 30 watermarks can exist in the **Current Watermarks** list at one time. When the limit of 30 watermarks is reached, the **New** button is disabled. The **(none)** setting is one of the 30 definable watermarks; the names for the other 29 watermarks can be customized.

To edit an existing watermark, select the watermark in the **Current Watermarks** list. Changing the **Watermark Message** for that watermark is, in effect, creates a new watermark.

Deleting a watermark

1. Select the watermark in the **Current Watermarks** list.
2. Click **Delete**.
3. A warning appears asking whether the intent is to delete the selected item.
 - Click **Cancel** to retain the watermark.
 - Click **OK** to delete the selected 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, several different watermarks can contain 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; 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.
- **Angle.** 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** drop-down menu
- **Color** drop-down menu
- **Shading** drop-down menu
- **Size** spin box
- **Style** drop-down menu

Name drop-down menu

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

Color drop-down menu

The **Color** drop-down menu provides a fixed, unalterable set of color choices, in palette/color name-pair form, for the watermark. The triplet values for these colors are shown in the following table.

Table 4-12 Watermark color values

Setting	Gray	Red	Yellow	Green	Cyan	Blue	Magenta
Lightest	255	255	255	232	232	232	255
	255	232	255	255	255	232	232
	255	232	232	232	255	255	255
Very Light	224	255	255	224	224	224	255
	224	224	255	255	255	224	224
	224	224	224	224	255	255	255
Light	192	255	255	192	192	192	255
	192	192	255	255	255	192	192

Table 4-12 Watermark color values (continued)

Setting	Gray	Red	Yellow	Green	Cyan	Blue	Magenta
	192	192	192	192	255	255	255
Med Light	160	255	255	160	160	160	255
	160	160	255	255	255	160	160
	160	160	160	160	255	255	255
Medium	128	255	255	128	128	128	255
	128	128	255	255	255	128	128
	128	128	128	128	255	255	255
Med Dark	96	255	255	96	96	96	255
	96	96	255	255	255	96	96
	96	96	96	96	255	255	255
Dark	64	255	255	64	64	64	255
	64	64	255	255	255	64	64
	64	64	64	64	255	255	255
Very Dark	32	255	255	32	32	32	255
	32	32	255	255	255	32	32
	32	32	32	32	255	255	255
Darkest	0	255	255	0	0	0	255
	0	0	255	255	255	0	0
	0	0	0	0	255	255	255

Shading drop-down menu

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. A choice of **Light** produces a lightly saturated gray watermark. A choice of **Lightest** produces the lightest shade of watermark; **Darkest** produces a black watermark.

Size spin box

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

Style drop-down menu

The **Style** drop-down menu has the following setting choices: **Regular**, **Bold**, **Italic**, and **Bold Italic**. The **Regular** setting is the default for new and preset watermarks.

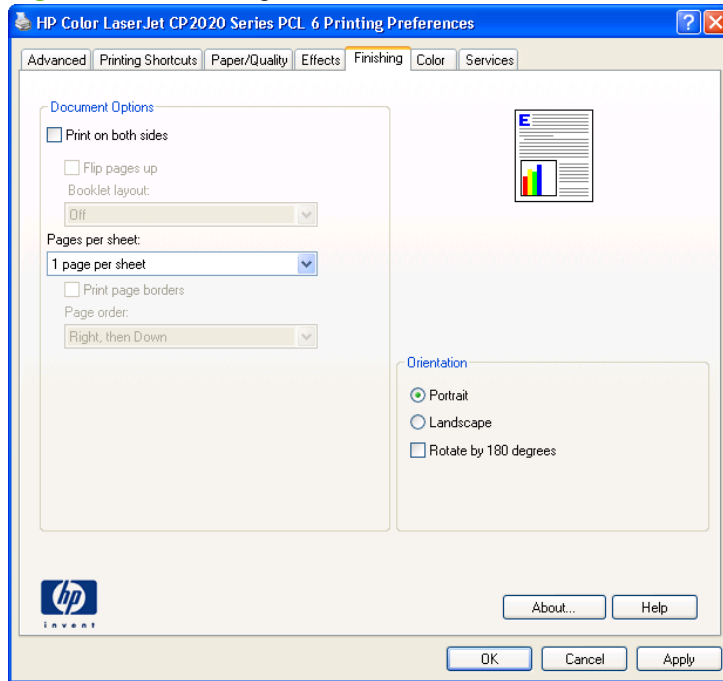
Default settings

The default settings for new watermarks are **Arial** font, **Gray** color, **Very Light** shading, **80** points, and **Regular** style. The default settings for preset watermarks are **Arial** font, **Very Light** shading, and **Bold** style. The default point size for preset watermarks is language-dependent, and varies.

Finishing tab features

Use the **Finishing** tab to print booklets and control the paper output.

Figure 4-20 Finishing tab



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

- [Document Options](#)
- [Document preview image](#)
- [Orientation group box](#)

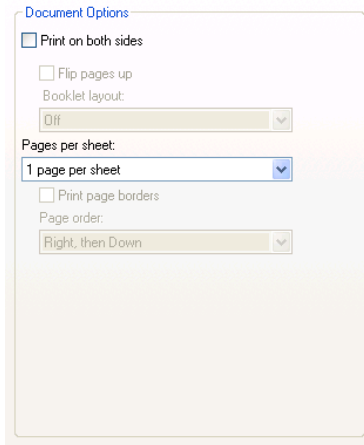
Document Options

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


- **Print on Both Sides** or **Print on Both Sides (Manually)** check box
- **Flip Pages Up** option
- **Booklet Layout** drop-down menu
- **Pages per Sheet** drop-down menu

- **Print Page Borders** check box
- **Page Order** drop-down menu

Figure 4-21 Finishing tab – Document Options group box



Print on Both Sides check box

 **NOTE:** This feature is called **Print on Both Sides (manually)** for the HP Color LaserJet CP2025n because this model does not include an automatic duplexing unit. For all other product models, this feature is called **Print on Both Sides**.

The **Print on Both Sides** option controls the manual duplexing function of the HP Color LaserJet CP2020 Series printer.

Print on both sides automatically

The duplexing unit in the HP Color LaserJet CP2020 Series product prints on two sides of a sheet of paper when the **Print on Both Sides** option is specified in the print job. The HP Color LaserJet CP2020 Series product comes with a duplexing unit installed in the following models:

- HP Color LaserJet CP2025dn
- HP Color LaserJet CP2025x

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

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

- Prepunched
- Preprinted
- Letterhead

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

To achieve the best print quality when printing on the second side of the page, the product needs to make adjustments to its print modes. When you select a paper type, you are, in effect, instructing the product to use a group of settings (such as fuser temperature and print speed) to print the paper with

the best possible quality. This group of settings is known as print mode. A different print mode is used with each paper type. Print-mode adjustments for the second side of a duplexed page are automatic.

Manually printing on both sides

Select the **Print on Both Sides (Manually)** check box to print on the second side of the paper for the HP Color LaserJet CP2025n printer. The HP Color LaserJet CP2025n printer does not have automatic duplexing capability. **Print on Both Sides (Manually)** will also be enabled for the HP Color LaserJet CP2025dn and the HP Color LaserJet CP2025x printers when a paper type is selected that cannot be auto-duplexed.

Make sure to select the correct paper type as selecting a paper type instructs the product to use a group of settings (such as fuser temperature and print speed) to print the paper with the best possible quality. This group of settings is known as print mode. To achieve the best print quality when printing on the second side of the page, the product makes adjustments to its print modes. A different print mode is used with each paper type. Print-mode adjustments for the second side of a duplexed page are automatic.

The following paper types cannot be manually duplexed using the **Print on both sides (Manually)** feature:

- **HP Color Laser Photo Glossy 220g**
- **Labels**
- **Envelope**
- **Heavy Envelope**
- **Color Laser Transparency**

A triangle enclosing an exclamation point icon appears next to the **Color Laser Transparency**, **Envelope**, **Heavy Envelope**, and **Labels** options. This icon indicates that duplex printing is not advised for these paper types.

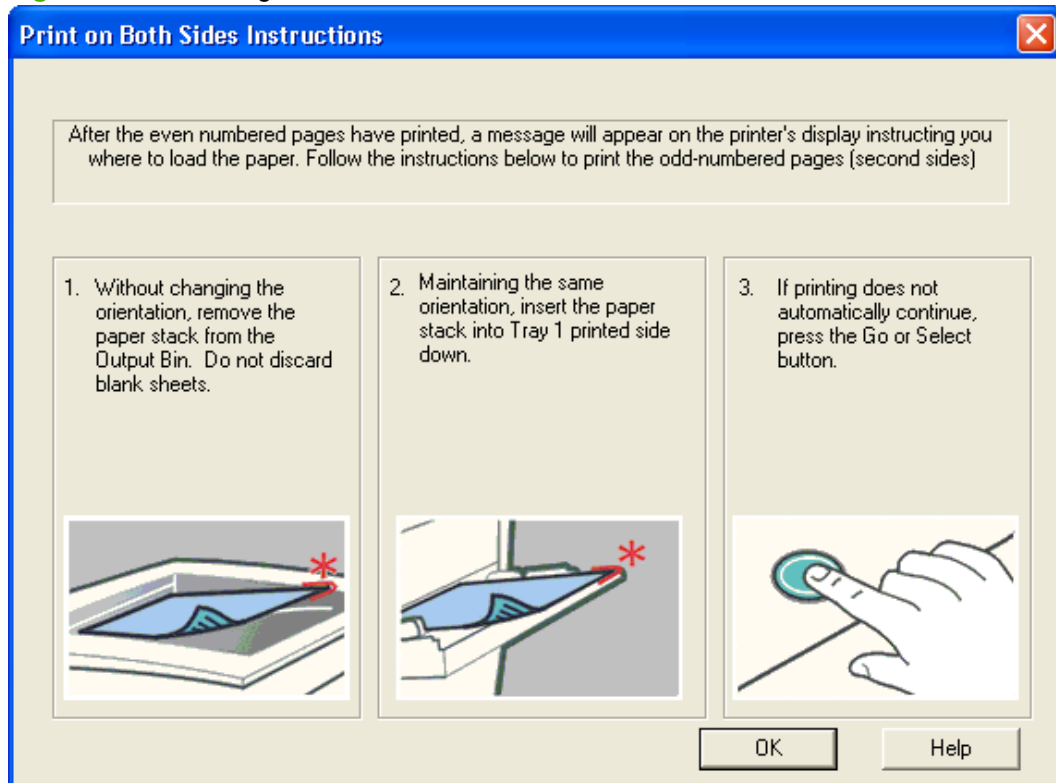
To make the **Print on Both Sides (Manually)** check box available in the document options, enable the **All Manual Duplexing** option on the **Device Settings** tab in the **Properties** print-driver tabs.

1. In Windows Vista, click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.
In Windows XP Professional and Windows Server 2003, click **Start**, click **Settings**, and then click **Printers and Faxes**.
-or-
In Windows XP Home, click **Start**, click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.
-or-
For Windows 2000: Select **Settings**, and then click **Printers**.
2. Right-click the product icon.
3. Click **Properties**.
4. Click **Device Settings** tab.
5. Look for the *Installable Options* section at the bottom of **Device Settings** screen. Select “Enabled” for the “Allow Manual Duplexing” option.

When the **Print on Both Sides (Manually)** check box is available on the **Document Options** section of the **Finishing** tab screen, follow these steps to make the HP Color LaserJet CP2020 Series printer manually print on both sides.

1. Select the **Print on Both Sides (Manually)** check box.
2. Click **OK**.
3. Click **Print**. The even-number pages of the document print.
4. Insert the stack of even-number pages that just printed when the control panel shows the **Manually Feed** message (or it shows the **Load Tray** message), insert the stack of paper (on which the even-numbered pages have been printed).

Figure 4-22 Finishing tab – Print on Both Sides instruction window



5. Click the **OK** button on the product control panel.
6. The odd numbered pages print on the second side (blank) of the stacked sheets.

Flip Pages Up option

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

Table 4-13 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 drop-down menu

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 Layout** drop-down menu is **Off**.

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

By selecting **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**. Manually changing the **Pages per Sheet** setting to 4, 6, 9, or 16 pages per sheet disables the booklet setting. See the [Printing a booklet on page 210](#) section of this chapter for more information.

Book and booklet printing

A book is a print job consisting of at least two pages that can have a different paper type for the front cover, first page, other pages, last page, or back cover. Use the **Front Cover**, **First Page**, **Other Pages**, **Last Page**, and **Back Cover** settings on the **Paper/Quality** tab (available by selecting the **Use Different Paper/Covers** check box) to select different paper for these pages.

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

Printing a booklet

Complete the following steps to print a booklet.

1. In the **Finishing** tab, select the **Print on Both Sides** check box.
2. In the **Booklet Layout** drop-down menu, select the preferred type of booklet printing (for example, **Right Edge Binding**).
3. Click **OK** in the print driver.
4. Click **OK** in the **Print** dialog box to print.

Printing a book

To print a book in which the front cover, first page, other pages, last page, and back cover are printed on different paper types, see the [Paper/Quality tab features on page 188](#) section of this chapter.

Pages per Sheet drop-down menu

On the **Finishing** tab, use the **Pages per Sheet** option to select the number of pages to print on a single sheet of paper. If more than one page per sheet is selected, 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:** Selecting an option other than **2 pages per sheet** makes booklet printing unavailable.

Print Page Borders check box

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

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

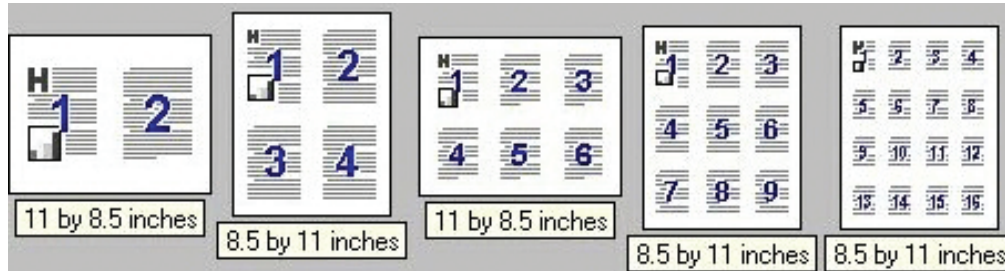
Page Order drop-down menu

The **Page Order** drop-down menu contains four selections:

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

The document preview image reflects any changes made in the **Page Order** settings. The following figure shows the different document preview configurations.

Figure 4-23 Page-order preview image



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

Document preview image

See [Document preview image on page 187](#) for information about this feature.

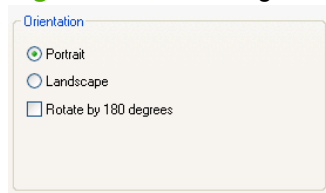
Orientation group box

Use the **Orientation** setting to establish different layouts of the image on the page. This setting does not affect the way that paper feeds into the product.

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

- [Portrait option button](#)
- [Landscape option button](#)
- [Rotate by 180 degrees check box](#)
- [Mirror Image check box \(HP PS Universal Print Driver only\)](#)

Figure 4-24 Finishing tab – Orientation group box



Portrait option button

Select this feature to print the document in **Portrait** orientation, which is when the top edge of the document is the shorter edge of the paper. This is the default setting.

Landscape option button

Select this feature to print the document in **Landscape** orientation, which is when the top edge of the document is the longer edge of the paper.

Rotate by 180 degrees check box

Select this feature to rotate the document image on the paper 180°. For example: If the return address on an envelope is smudged, select this setting and then feed the envelope into the product so the return address area goes in first.

Mirror Image check box (HP PS Universal Print Driver only)

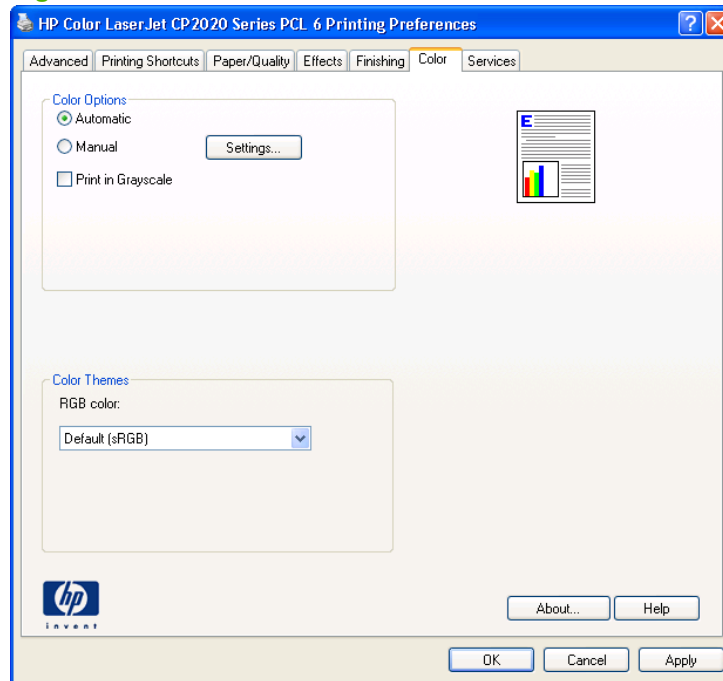
Click the **Mirror Image** check box to reverse the horizontal coordinates of the printed document.

Color tab features

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 4-25 Color tab



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

- [Color Options](#)
- [Color Themes](#)
- [Document preview image](#)

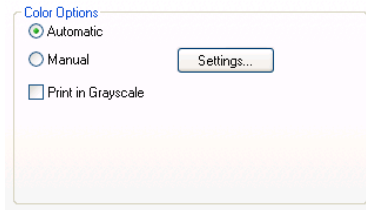
Color Options

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 (that opens the **Color Settings** dialog box)
- **Print in Grayscale** check box

Figure 4-26 Color tab – Color Options group box



Automatic

The **Automatic** color adjustment option optimizes the neutral-gray color treatment, halftones, and edge enhancements for each element in a document. For more information, see your print driver online Help.

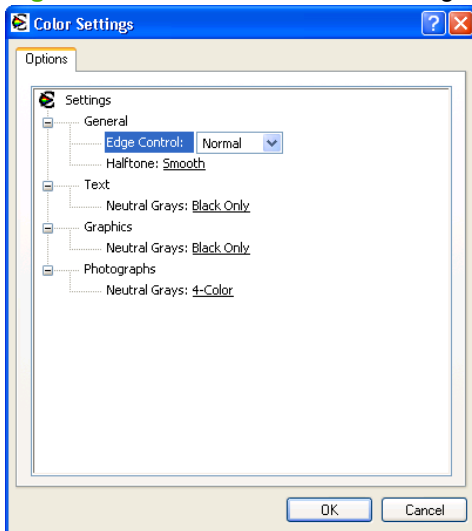
 **NOTE:** **Automatic** is the default setting and is recommended for printing all color documents.

Manual

Use the **Manual** color adjustment option to adjust the neutral-gray color treatment, halftones, and edge enhancements for text, graphics, and photographs. To gain access to the manual color options, from the **Color** tab, select **Manual**, and then select **Settings**.

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

Figure 4-27 Color tab – Color Settings dialog box



Use manual color options to adjust the **Neutral Grays**, **Halftone**, and **Edge Control** options for text, graphics, and photographs.

Table 4-14 Manual color options

Setting description	Setting options
<p>Halftone</p> <p>Halftone options affect the color output resolution and clarity.</p>	<ul style="list-style-type: none"> ● Smooth (2-bits/pixel) provides better results for large, solid-filled print areas and enhances photographs by smoothing color gradations. Select this option when uniform and smooth area fills are the top priority. <ul style="list-style-type: none"> ◦ Cyan – 155 lines per inch (lpi) ◦ Magenta – 155 lpi ◦ Yellow – 212 lpi ◦ Black – 155 lpi ● Detail is useful for text and graphics that require sharp distinctions among lines or colors, or images that contain a pattern or a high level of detail. Select this option when sharp edges and details are the top priority. <ul style="list-style-type: none"> ◦ Cyan – 190 lpi ◦ Magenta – 190 lpi ◦ Yellow – 200 lpi ◦ Black – 212 lpi
<p>Neutral Grays</p> <p>The Neutral Grays setting determines the method for creating gray colors used in text, graphics, and photographs.</p>	<ul style="list-style-type: none"> ● Black Only generates neutral colors (grays and black) by using only black toner. This guarantees neutral colors without a color cast. ● 4-Color generates neutral colors (grays and black) by combining all four toner colors. This method produces smoother gradients and transitions to other colors, and it produces the darkest black.
<p>Edge Control</p> <p>The Edge Control setting determines how edges are rendered. Edge control has two components: adaptive halftoning and trapping. Adaptive halftoning increases edge sharpness. Trapping reduces the effect of color-plane misregistration by overlapping the edges of adjacent objects slightly.</p>	<ul style="list-style-type: none"> ● Maximum is the most aggressive trapping setting. Adaptive halftoning is on. ● Normal sets trapping at a medium level. Adaptive halftoning is on. ● Light sets trapping at a minimal level, Adaptive halftoning is on. ● Off turns off both trapping and adaptive halftoning.

Print in Grayscale

The **Print in Grayscale** option converts all colors to gray and forces the product to use only the black print cartridge.

Color Themes

The **Color Themes** group box contains the **RGB color:** drop-down menu.

Figure 4-28 Color tab – Color Themes group box



Use color themes to adjust the **RGB Color** options for the entire page.

For information about Advanced Color settings, see [Advanced color use on page 27](#) and [HP Basic Color Match tool on page 30](#).

Setting description	Setting options
RGB Color	<ul style="list-style-type: none">• Default (sRGB) instructs the product to interpret RGB color as sRGB. The sRGB standard is the accepted standard of Microsoft and the World Wide Web Consortium (http://www.w3.org).• Vivid instructs the product to increase the color saturation in the midtones. Less colorful objects are rendered more colorfully. This setting is recommended for printing business graphics.• Photo interprets RGB color as if it were printed as a photograph using a digital mini-lab. It renders deeper, more saturated colors differently than Default (sRGB) mode. Use this setting for printing photos.• Photo (AdobeRGB 1998) is for digital photos that use the AdobeRGB color space rather than sRGB. When printing from a professional software program that uses AdobeRGB, it is important to turn off the color management in the software program and allow the product to manage the color space.• None sets the product to print RGB data in raw device mode. To render photographs correctly 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 the operating system; otherwise, color quality can be compromised.

Document preview image

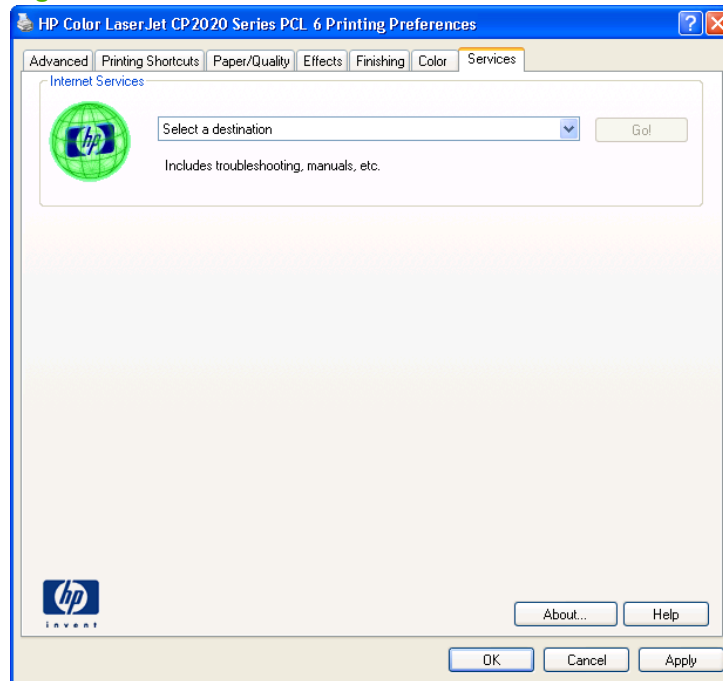
See [Document preview image on page 187](#) for information about this feature.

Services tab features

Use the **Services** tab to access basic service information for the HP Color LaserJet CP2020 Series printer. Connect to the Internet before selecting an option and clicking **Go**.

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

Figure 4-29 Services tab



The **Services** tab contains the following **Internet Services** feature.

Internet Services

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

- **Support and troubleshooting.** Opens the product page for the HP Business Center.
- **Product manuals.** Opens a Web page to view or download HP Color LaserJet CP2020 Series printer manuals.
- **Check for driver updates.** Checks the print drivers to see whether the correct and most up-to-date print drivers are installed.
- **Shop for supplies.** Opens the HP SureSupply Web page and shop online for HP Color LaserJet CP2020 Series printer supplies.

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

Device Settings tab features

On the Printer Properties tab set, only the **Device Settings** tab and **About** tab are unique to the product; all other tabs are part of the operating system.

The **Device Settings** tab is in the Properties window for the print driver. To gain access to the Device Settings tab, follow these steps:

1. In Windows Vista, click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

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

-or-

In Windows XP Home, click **Start**, click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

-or-

For Windows 2000: Select **Settings**, and then click **Printers**.

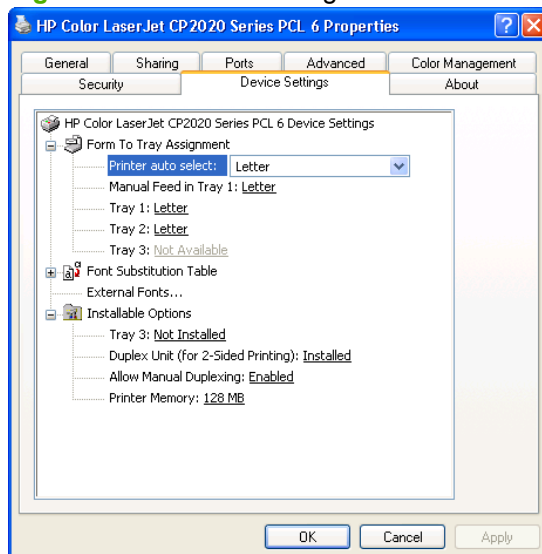
2. Right-click the product icon.
3. Click **Properties**.
4. Click the **Device Settings** tab.

The **Device Settings** tab contains controls for paper-handling products and controls for managing the HP Color LaserJet CP2020 Series printer.

Available options depend on the driver and the particular feature.

The following figure shows the **Device Settings** tab for the HP PCL 6.

Figure 4-30 Device Settings tab – PCL 6



The following figures shows the **Device Settings** tab for the HP PS Universal Print Driver.

Figure 4-31 Device Settings tab – HP PS Universal Print Driver(1 of 2)

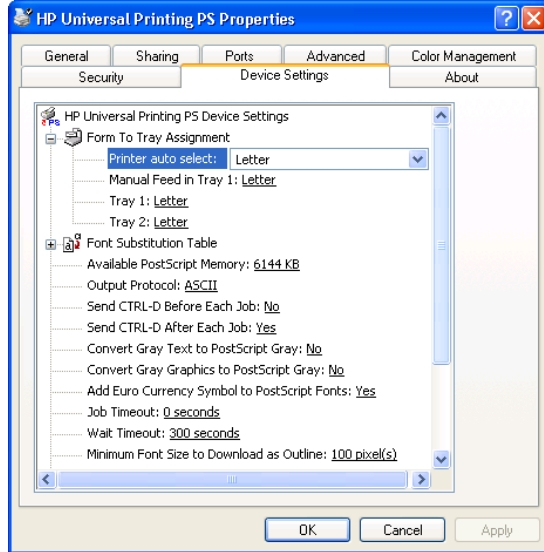
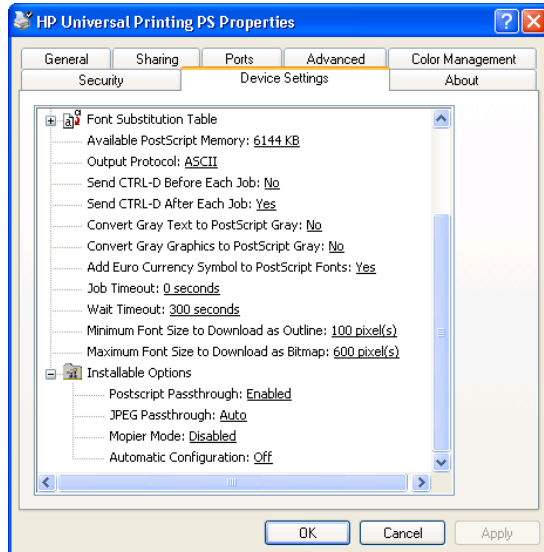


Figure 4-32 Device Settings tab – HP PS Universal Print Driver(2 of 2)



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

- [Form to Tray Assignment](#)
- [Font Substitution Table](#)
- [External Fonts](#)
- [Installable Options](#)
- [HP PS Universal Print Driver Device Settings](#)

Form to Tray Assignment

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

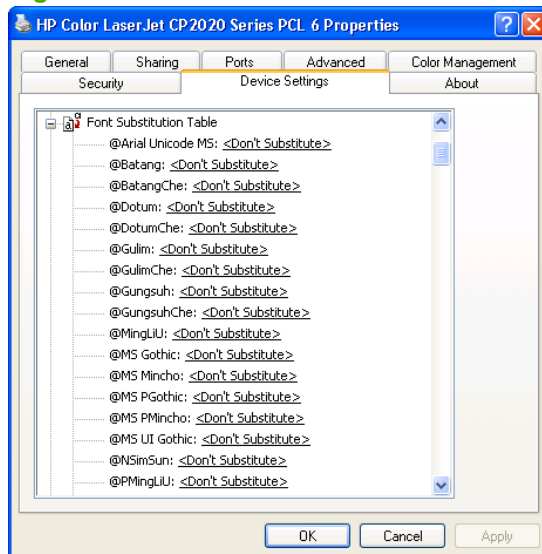
1. Select the appropriate tray in the **Form to Tray Assignment** list.
2. Use the drop-down menu to select the paper size (or form) that is loaded in that tray.
3. Repeat steps 1 and 2 for the remaining trays.
4. Click **OK** to enable the settings, or, if necessary, click **Cancel** to reconfigure 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 install and remove external fonts for the product. 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.

Figure 4-33 Font Substitution Table



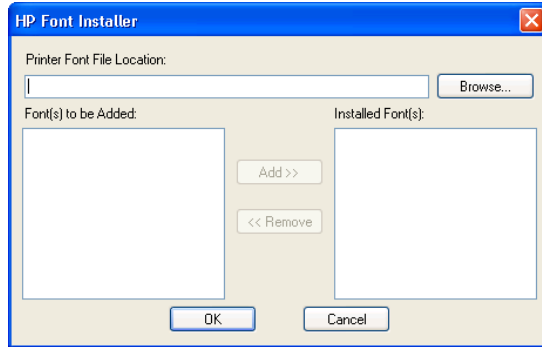
External Fonts

NOTE: The External Fonts option is available only in the HP PCL 6 print driver. It is not available in the HP PS Universal Print Driver.

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

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

Figure 4-34 HP Font Installer dialog box



Topics:

- [Installing external fonts](#)
- [Removing external fonts](#)

Installing external fonts

Follow these steps to install external fonts.

1. Click **Start**.
2. Select **Settings**.
3. Click **Printers** (Microsoft Windows 2000) or **Printers and Faxes** (Microsoft Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Microsoft Windows XP Home) or **Hardware and Sound** (Windows Vista).
4. Right-click the name of the product.
5. Click **Properties**.
6. Click the **Device Settings** tab.
7. Click the **External Fonts** option. The **Properties** button appears.
8. Click **Properties**. The **HP Font Installer** dialog box appears.
9. 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.
10. Select the fonts to add, and then click **Add**. The fonts are installed and the file names appear in the **Installed Font(s)** window.
11. Click **OK** to close the **HP Font Installer** dialog box.

Removing external fonts

1. Click **Start**.
2. Select **Settings**.

3. Click **Printers** (Microsoft Windows 2000) or **Printers and Faxes** (Microsoft Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Microsoft Windows XP Home) or **Hardware and Sound** (Windows Vista).
4. Right-click the name of the product.
5. Click **Properties**.
6. Click the **Device Settings** tab.
7. Click the **External Fonts** option. The **Properties** button appears.
8. Click **Properties**. The **HP Font Installer** dialog box appears. The external fonts that are installed appear in the **Installed Fonts** window.
9. Select the fonts to remove, and then click **Remove**. The fonts are removed.
10. Click **OK** to close the **HP Font Installer** dialog box.

Installable Options

- [Allow Manual Duplexing](#)
- [Printer Memory](#)

Allow Manual Duplexing

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

This setting is enabled by default. For more information about this feature, see [Manually printing on both sides on page 208](#).

Printer Memory

This option matches the setting to the amount of memory that is installed in the product. The driver generates ranges of memory that can be selected, up to the maximum that the product can accept. The driver can use this information to manage how the print driver uses the product memory.

HP PS Universal Print Driver Device Settings

The following controls are available and appear only in the PS Emulation **Device Settings** tab:

- [Available PostScript Memory](#)
- [Output Protocol](#)
- [Send Ctrl-D Before Each Job](#)
- [Send Ctrl-D After Each Job](#)
- [Convert Gray Text to PostScript Gray](#)
- [Convert Gray Graphics to PostScript Gray](#)
- [Add Euro Currency Symbol to PostScript Fonts](#)
- [Job Timeout](#)

- [Wait Timeout](#)
- [Minimum Font Size to Download as Outline](#)
- [Maximum Font Size to Download as Bitmap](#)
- [Postscript Passthrough](#)
- [JPEG Passthrough](#)

Available PostScript Memory

This control specifies the amount of available postscript memory and provides a spin box for changing this value. The available postscript memory is a subset of the product's total physical memory. It is usually best to set the postscript memory to match the total RAM that appears on the configuration page.

To print a configuration page from the product control panel, follow these steps:

1. Press **OK** to open the menus.
2. Press the **Left arrow** or **Right arrow** button to navigate to **Main menu/Reports**. Press **OK**.
3. Press the **Left arrow** or **Right arrow** button to navigate to **Reports/Config report**. Press **OK** to print the configuration report.

Output Protocol

This control specifies the protocol that the product uses for print jobs. The following options are available:

- **ASCII** (default)
- **TBCP**
- **Binary**

Click **ASCII** to send data in ASCII format (7-bit), which might take longer to print but can be sent through any I/O channel, such as a serial or network port.

Click **TBCP** (Tagged Binary Communications Protocol) to send all data except special control characters in binary (8-bit) format. The binary formats can be sent over serial communications ports and are faster than sending data in ASCII format.

Click **Binary** to send all data except special control characters in binary (8-bit) format. The binary formats can be sent over serial communications ports and are faster than sending data in ASCII format.

Send Ctrl-D Before Each Job

This control specifies whether the product is reset at the beginning of every postscript document. The default setting is **No**. Pressing **Ctrl-D** resets the product to its default setting to ensure that previous print jobs do not affect the current print job. Using **Ctrl-D** might cause a print job to fail if the product is connected through a network. If the document fails to print when sent to a product connected through serial ports, change **No** to **Yes**.

Send Ctrl-D After Each Job

This control specifies whether the product is reset at the end of every postscript document. The default setting is **Yes**. Pressing **Ctrl-D** resets the product to its default setting to ensure that future print jobs are

not affected by the current print job. Using **Ctrl-D** might cause a print job to fail if the product is connected through a network. If the document fails to print when sent to a network product, change **Yes** to **No**.

Convert Gray Text to PostScript Gray

This control specifies whether to convert the true gray value (RGB) in text to the gray that the driver provides. The following settings are available:

- **Yes**
- **No** (default)

Convert Gray Graphics to PostScript Gray

This control specifies whether to convert the true gray value (RGB) in graphics to the gray provided by the driver. The following settings are available:

- **Yes**
- **No** (default)

Add Euro Currency Symbol to PostScript Fonts

This control specifies whether to add the euro symbol to the printer fonts. The following settings are available:

- **Yes** (default)
- **No**

Job Timeout

This control specifies how long the document can take to get from the computer to the product before the product stops trying to print the document. If you specify **0 seconds**, the product continues trying to print indefinitely. The default setting is **0 seconds**. Use the spin box to change this value, up to a maximum of **32,767 seconds**.

Wait Timeout

This control specifies how long the product waits to get more postscript information from the computer. After the specified time passes, the product stops trying to print the document and prints an error message. When printing a very complicated document, increase this value. If you specify **0 seconds**, the product waits indefinitely. The default setting is **300 seconds**. Use the spin box to change this value, up to a maximum of **32,767 seconds**.

Minimum Font Size to Download as Outline

This control specifies the minimum font size (in pixels) for which the driver downloads TrueType fonts as outline (Type 1) fonts. Any font smaller than the minimum setting is downloaded as a bitmap (Type 3) font. Use this option to fine-tune the **Automatic** setting for the **TrueType Font Download** option on the **Advanced** tab in **Document Defaults**. The default setting is **100 pixel(s)**. Use the spin box to change this value, up to a maximum of **32,767** pixels.


Maximum Font Size to Download as Bitmap

This control specifies the maximum font size (in pixels) for which the driver will download TrueType fonts as bitmap (Type 3) fonts. Any font larger than the maximum setting will be downloaded as an outline

(Type 1) font. Use this option to fine-tune the **Automatic** setting or override the **Send TrueType as Bitmap** setting for the **TrueType Font Download** option on the **Advanced** tab in **Document Defaults**. The default setting is **600 pixel(s)**. Use the spin box to change this value, up to a maximum of **32,767** pixels.

Postscript Passthrough

Postscript Passthrough is enabled by default, and must be enabled for most print jobs. Postscript passthrough provides additional capabilities for some software programs when printing to a postscript driver. Options such as **Watermarks**, **Pages per sheet** and **Booklet Printing** might not print correctly from some software programs with **Postscript Passthrough** enabled, because such programs send postscript information that the driver cannot control. Other programs might print using these options without problems. Select **Disabled** and print the document again if you encounter problems.

 **NOTE:** In some cases, disabling **Postscript Passthrough** can cause unexpected results within a software program.

JPEG Passthrough

The JPEG Passthrough setting contains the following options:

- **Disable.** When this option is selected, images sent as JPEG are printed as bitmaps, resulting in faster printing.
- **Enable.** When this option is selected, images sent as JPEG are printed as JPEG (JPEG passthrough).
- **Auto.** (This is the default.) When this option is selected, the product connection type is automatically detected. For network (TCP/IP) connections, JPEG passthrough is disabled. For USB connections, JPEG passthrough is enabled.

About tab features

On the Print Properties tab set, only the **Device Settings** tab and **About** tab are unique to the product; all other tabs are part of the operating system.

The **About** tab is in the **Properties** for the print driver.

To gain access to the **About** tab, follow these steps:

1. In Windows Vista, click **Computer**, click **Control Panel**, and then click **Hardware and Sound**.

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

-or-

In Windows XP Home, click **Start**, click **Control Panel**, and then double-click the **Printers and Other Hardware** icon.

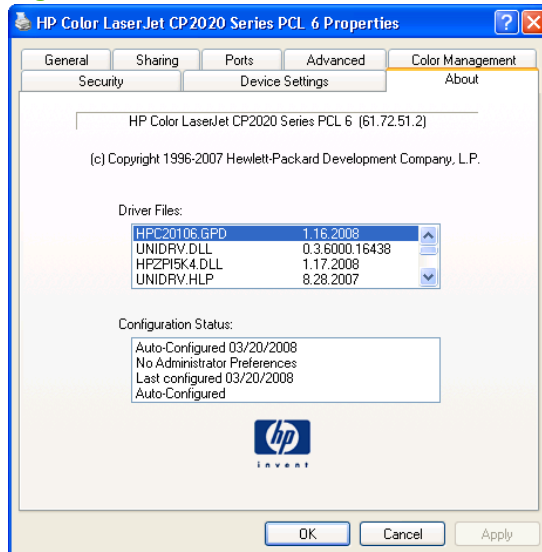
-or-

For Windows 2000: Select **Settings**, and then click **Printers**.

2. Right-click the product icon.
3. Click **Properties**.
4. Click the **About** tab.

The **About** tab provides detailed information about the driver. It contains an overall build number (in parentheses after the model name) together with specific information about each of the components. The information varies according to the HP Color LaserJet CP2020 Series printer model number, driver, date, and versions. The **About** tab is shown in the following figure.

Figure 4-35 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 default or user-defined.

To determine the latest version, compare the overall build number (in parenthesis after the model name) and the GPD number (in the Driver Files: field). If the overall build number has increased, this is the latest version of the driver.

If the overall build number is the same, check the version number of the GPD file. The driver that has the highest GPD version number is the latest driver.

5 Macintosh Software and Utilities

Introduction

The HP Color LaserJet CP2020 Series printer comes with printing software and installers for Apple Computer, Inc., Macintosh operating systems.

- [Supported operating systems for Macintosh](#)
- [Supported software components for Macintosh](#)
- [Software component availability for Macintosh](#)
- [Printing-system software](#)
- [Macintosh installation instructions](#)
- [Supported utilities for Macintosh](#)
- [Use features in the Macintosh printer driver](#)
- [Macintosh readme](#)

Supported operating systems for Macintosh

- Mac OS X v10.4 and v10.5 are supported.
- Mac OS 9 and Mac OS X classic are not supported.

Macintosh system requirements

Hardware requirements

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

Supported print drivers for Macintosh

The HP installer provides PostScript® Print Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP EWS Gateway which allows access to the product's embedded web server.

The PPDs, in combination with the Apple PostScript print drivers, provide access to product features.

Change print-driver settings for Macintosh

Follow these steps to change the print-driver settings for Macintosh.

Table 5-1 Change print-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
<ol style="list-style-type: none">1. On the File menu, click Print.2. Change the settings that you want on the various menus.	<ol style="list-style-type: none">1. On the File menu, click Print.2. Change the settings that you want on the various menus.3. On the Presets menu, click Save As and type a name for the preset. <p>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.</p>	<p>Mac OS X V10.4</p> <ol style="list-style-type: none">1. From the Apple menu, click System Preferences, and then click Print & Fax.2. Click Printer Setup.3. Click the Installable Options menu. <p>Mac OS X V10.5</p> <ol style="list-style-type: none">1. From the Apple menu, click System Preferences, and then click Print & Fax.2. Click Options & Supplies.3. Click the Driver menu.4. Select the driver from the list, and configure the installed options.

Supported software components for Macintosh

- [Software components for Macintosh](#)

Software components for Macintosh

Table 5-2 Software components for Macintosh

Component	Description
Installer software	Installs all of the printing-system software.
Driver software	Allows printing with the computer and the product. This software includes the following components: <ul style="list-style-type: none">• The PostScript Printer Description (PPD) file for printing through PostScript Level 3 emulation
HP EWS proxy Utility	Allows user to configure the product via a Web browser.
Documentation	The user documentation for this product is included on the installation CD in Adobe Acrobat .PDF format.

Software component availability for Macintosh

Table 5-3 Software component availability for Macintosh

Component	Macintosh
Drivers	
Mac PostScript Printer Description PPD	X
Installers	
Macintosh Installer for OS X	X
Documentation	
<i>HP Color LaserJet CP2020 Series Printer User Guide</i>	X
Other	
HP EWS Gateway	X

Printing-system software

The HP Color LaserJet CP2020 Series printing-system software for Macintosh is composed of an HP-created postscript printer definition file (PPD) and a printer dialog extension (PDE) file that work together with the Macintosh OS print system. These files are used by the Macintosh OS print system to determine default print settings and also allows the user to select between the various print options and settings and are installed by the provided HP LaserJet Installer. Additionally, an HP-supplied Macintosh printer configuration utility is provided, which allows the user to access the product's embedded Web server (EWS) to allow for additional configuration and product status monitoring. The following are provided on the installation CD:

- The HP LaserJet Installer for Macintosh
- Install notes (Readme file)

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

- HP Color LaserJet CP2025 PPD
- HP Color LaserJet CP2025 PDE
- HP EWS Gateway

Topics:

- [Availability](#)

Availability

This document provides information about the availability of the HP Color LaserJet CP2020 Series printing-system software and related software and firmware. Printing-system software on a CD is available from HP fulfillment centers.


Topics:

- [Printing-system software on the Web](#)
- [In-box printing-system software CDs](#)

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

Topics:

- [Printing-system software](#)

Printing-system software

The HP Color LaserJet CP2020 Series printer printing-system software is available for download at the following Web site:

www.hp.com/go/ljcp2020series_software

In-box printing-system software CDs

The software CD for the HP Color LaserJet CP2020 Series printer contains the files for installing the printing-system software on the computer.

Topics:

- [Macintosh partition](#)
- [CD versions](#)

Macintosh partition

The HP Color LaserJet CP2020 Series printing-system software CD is divided into two partitions, one for each of the following operating systems:

- MS Windows
- Macintosh

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

CD versions

The software CD for the HP Color LaserJet CP2020 Series printer contains the files for installing the printing-system software on the computer.

The HP Color LaserJet CP2020 Series printing-system software CD is available in three versions, each of which contains printing-system software in the following languages:

- English
- Danish
- Dutch
- Finnish
- French
- German
- Italian
- Japanese
- Norwegian
- Swedish
- Spanish
- Portuguese
- Russian

- Simplified Chinese
- Traditional Chinese
- Korean

Macintosh installation instructions

The HP Color LaserJet CP2020 Series printer comes with software and installers for MS Windows and Apple Computer, Inc., Macintosh systems. This document provides procedures for installing and removing the HP Color LaserJet CP2020 Series printing-system software for Macintosh operating systems.

Topics:

- [Macintosh component descriptions](#)
- [Install the Macintosh printing system](#)

Macintosh component descriptions

The HP Color LaserJet CP2020 Series printing-system software CD includes the following software for Macintosh computers:

- [HP LaserJet PPDs](#)
- [PDEs](#)
- [HP EWS Gateway](#)
- [Install notes \(Readme file\)](#)

HP LaserJet PPDs

In Mac OS X V10.3.9 or later, the PPDs are installed in **Library/Printers/PPDs/Contents/Resources:<lang>.lproj**, where **<lang>** is the appropriate localized folder.

The PPDs, in combination with the driver, provide access to the product configuration settings and installable options. These settings are usually configured during the installation process by using Apple Mac OS X tools such as Print Center, Printer Setup Utility, and Print & Fax. For more information, see [Table 5-4 Adding a printer in Macintosh operating systems on page 237](#).

PDEs

Printer Dialog Extensions (PDEs) are code plug-ins (for Mac OS X V10.3.9 or later only) that provide access to product features, such as number of copies, duplexing, and quality settings.

HP EWS Gateway

Mac OS X supports the HP Embedded Web Server (HP EWS). Use the HP EWS Gateway to open the HP EWS for the product. Use the HP EWS to perform the following tasks:

- View the product status and change product settings.
- View and change network settings for the product.
- Print information pages for the product.
- View the product event log.

The HP EWS is accessed by using a Web browser such as Safari. The HP EWS Gateway software allows the Web browser access to the product if the product is connected via USB or network. The HP EWS can also be opened by choosing the **Utility** button in the Macintosh Print Center or Printer Setup Utility.

Install notes (Readme file)

This .HTML file contains information about basic product installation and OS support.

Install the Macintosh printing system


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

Topics:


- [General installation for Macintosh operating systems](#)
- [Detailed Mac OS X installation](#)
- [Printer setup](#)

General installation for Macintosh operating systems


1. If you are connecting the product to a network, connect the network cable to the product network port. If you are connecting the product to a computer using the USB cable, install the software *before* connecting the USB cable.
2. Insert the Macintosh printing-system software CD into the CD-ROM drive.

 **NOTE:** If the CD screen does not open automatically, double-click the **HP Color LaserJet CP2020 Series** CD-ROM icon on the desktop to open the CD-ROM window.

3. Double-click the **hplj CP2020 Series v... app** icon.

 **NOTE:** The **Continue** button appears only after you type the "admin" password in the **Authenticate** dialog.

4. The main **Installer** dialog appears. Click **Install** and then follow the onscreen instructions to complete the software installation.

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

5. When software installation is complete, click **Quit**.
6. Continue with the steps for setting up a printer.

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

Table 5-4 Adding a printer in Macintosh operating systems

Operating System	Print Center	Printer Setup Utility	Print & Fax
Mac OS X V10.4		x	x
Mac OS X V10.5			x

Detailed Mac OS X installation

Topics:

- [Main Install dialog sequence](#)

Main Install dialog sequence

This section provides information about the Macintosh installation dialog-box sequence.

NOTE: If you are installing the product using a network connection, you can connect the product to the network before installing the software, but if you are installing the product using a USB connection, install the software *before* connecting the USB cable.

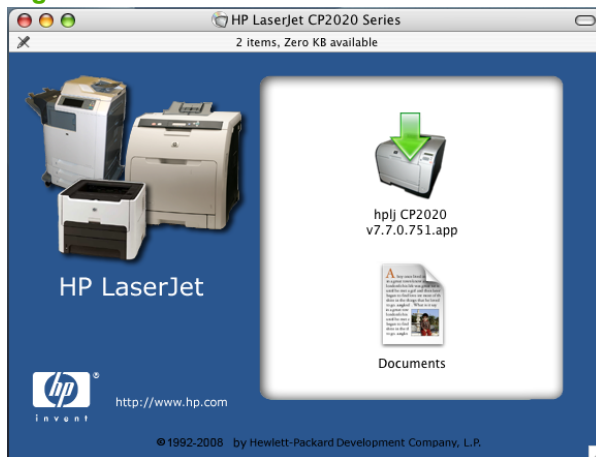
1. Insert the HP Color LaserJet CP2020 Series printing-system software CD in the CD-ROM drive.
2. If the CD screen does not open automatically when the CD is put into the CD-ROM drive, double-click the **HP LaserJet CP2020 Series** CD-ROM icon on the desktop to open the installer folder.

Figure 5-1 HP Color LaserJet CP2020 Series CD-ROM icon



The **HP Color LaserJet CP2020 Series** dialog opens.

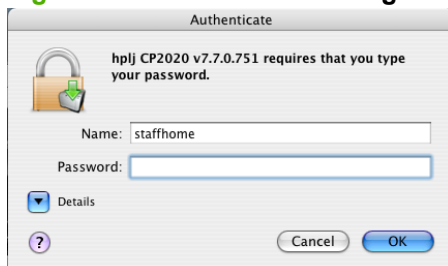
Figure 5-2 HP Color LaserJet CP2020 Series dialog



3. In the **HP Color LaserJet CP2020 Series** software screen, double-click the **hpLJ CP2020Series v... app** icon. This begins the install process.

The **Authenticate** dialog appears.

Figure 5-3 Authenticate dialog



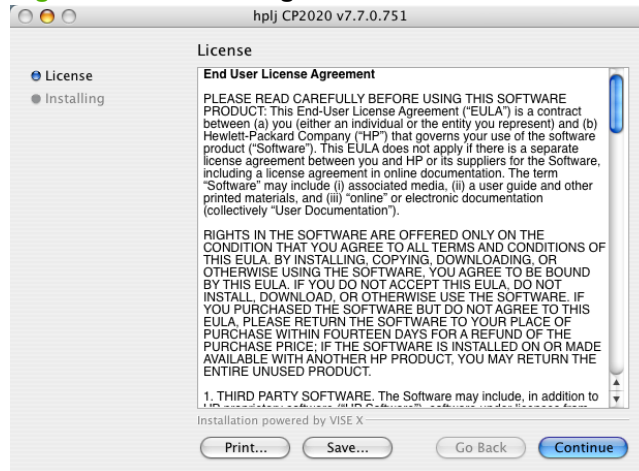
4. Type the correct “admin” name and password and click **OK** to continue.

 **NOTE:** Click **Cancel** to exit the installation.

5. The **License Agreement** dialog opens.

Click **Continue**.

Figure 5-4 License Agreement



6. The **Agree or Disagree** dialog opens.

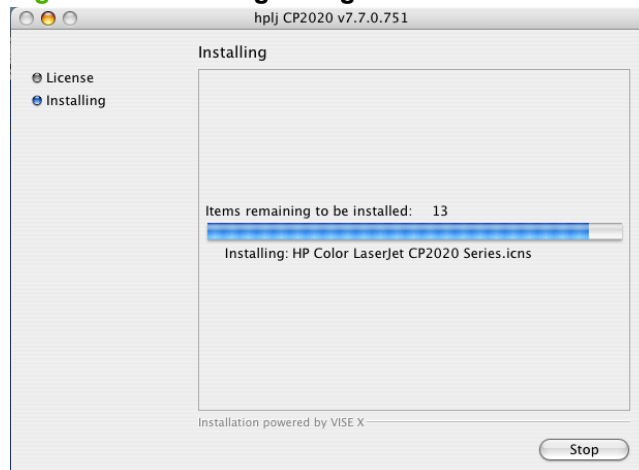
Click **Agree** to continue.

Figure 5-5 Agree or Disagree dialog



7. The **Installing** dialog opens indicating the progress of the install. Wait for the install to complete.

Figure 5-6 Installing dialog

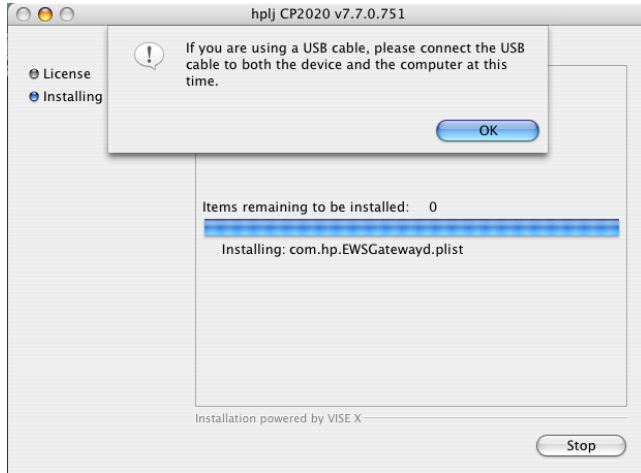


8. The **Connect USB now** dialog opens.

If you are installing the product via the network, click **OK** to continue.

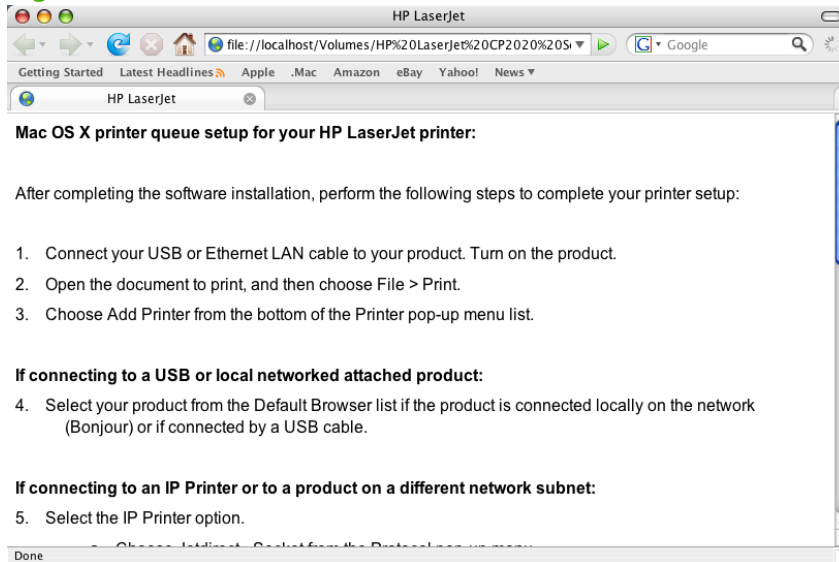
If you are installing the product via direct connect, connect the USB cable, then click **OK**.

Figure 5-7 Connect USB Now dialog



9. The **Hewlett-Packard Color LaserJet CP2020 Install Notes** dialog opens.

Figure 5-8 Hewlett-Packard Color LaserJet CP2020 Install Notes



The installation is complete. Continue to printer setup.

Printer setup

After installing the printing-system software in Macintosh operating systems, the product must be set up.

Topics:

- [Set up a printer with Mac OS X V10.4](#)
- [Troubleshooting Notes](#)

Set up a printer with Mac OS X V10.4

After the software installation, perform the following steps to complete your printer setup:

1. Connect your USB or Ethernet LAN cable to your product. Turn on the product.
2. Open a document to print, click File, and then click Print.
3. Choose Add Printer from the bottom of the Printer pop-up menu list.
4. If connecting to a USB or local networked attached product:
Select your product from the Default Browser list if the product is connected locally on the network (Bonjour) or if connected by a USB cable.
5. If connecting to an IP Printer or to a product on a different network subnet, select the IP Printer option.
 - a. Choose JetDirect – Socket from the Protocol pop-up menu.
 - b. Print a Configuration Report using the product control panel and locate the IP address.
 - c. Type the IP address for the printer in the Address field.
6. The correct print driver should automatically be selected.
7. Click ADD to create the Printer queue

Troubleshooting Notes

- **Problem:** "I do not see my printer in the Printer Browser list."
Solution: If the printer name does not display in the Printer List, try one or more of the following:
 - For the cable being used (USB or Network), check that it is properly connected to the printer and the connecting device (hub or computer).
 - Check that the product is powered on.
 - Restart the computer and/or the product.
 - The printer may reside on a different network subnet. If this is the case, you must setup the product using the IP Printer option. If more than one product of the same model type is connected to the local Network, select your product using the name that matches the Bonjour Service name found on the product's Network Report Page. Print a Network report page using the product's control panel display to verify.
- **Problem:** "The Generic Postscript Printer driver is automatically selected."
Solution: If the Generic Postscript Printer driver was automatically selected, try one or more of the following:
 1. If using USB, manually delete the product from the Printer list then power cycle the product. The product should be added automatically with the correct printer driver.
 2. Manually search for the correct printer driver for your product in the Print Using pull down menu in the Print Browser dialog.
 3. If your printer driver cannot be found in the pull down list, try rebooting your computer.

4. Re-install the printer software.
5. Open Disk Utility, select your Mac OS X startup volume, click First Aid, and then click Repair Disk Permissions.

Supported utilities for Macintosh

HP EWS Gateway

The HP Embedded Web Server (HP EWS) Gateway is a utility that gives users access to the HP EWS for the product. The HP EWS is a Web server utility that allows users to control settings on the HP Color LaserJet CP2020 Series printer through the Web browser.

For more information about the HP EWS, see [HP Embedded Web Server on page 86](#).

Use features in the Macintosh printer driver

Create and use printing presets in Macintosh

Use printing presets to save the current printer driver settings for reuse.

Create a printing preset

1. On the **File** menu, click **Print**.
2. Select the driver.
3. Select the print settings.
4. In the **Presets** box, click **Save As...**, and type a name for the preset.
5. Click **OK**.

Use printing presets

1. On the **File** menu, click **Print**.
2. Select the driver.
3. In the **Presets** box, select the printing preset that you want to use.



NOTE: To use printer-driver default settings, select **Factory Default**.

Resize documents or print on a custom paper size

You can scale a document to fit on a different size of paper.

1. On the **File** menu, click **Print**.
2. Open the **Paper Handling** menu.
3. In the area for **Destination Paper Size**, select **Scale to fit paper size**, and then select the size from the drop-down list.
4. If you want to use only paper that is smaller than the document, select **Scale down only**.

Use watermarks

A watermark is a notice, such as “Confidential,” that is printed in the background of each page of a document.

1. On the **File** menu, click **Print**.
2. Open the **Watermarks** menu.
3. Next to **Mode**, select the type of watermark to use. Select **Watermark** to print a semi-transparent message. Select **Overlay** to print a message that is not transparent.
4. Next to **Pages**, select whether to print the watermark on all pages or on the first page only.

5. Next to **Text**, select one of the standard messages, or select **Custom** and type a new message in the box.
6. Select options for the remaining settings.

Print multiple pages on one sheet of paper in Macintosh

You can print more than one page on a single sheet of paper. This feature provides a cost-effective way to print draft pages.

1. On the **File** menu, click **Print**.
2. Select the driver.
3. Open the **Layout** menu.
4. Next to **Pages per Sheet**, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
5. Next to **Layout Direction**, select the order and placement of the pages on the sheet.
6. Next to **Borders**, select the type of border to print around each page on the sheet.

Print on both sides of the page (duplex printing)

Use automatic duplex printing

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
 - For tray 1, load the letterhead paper face-up with the bottom edge feeding into the printer first.
 - For all other trays, load the letterhead paper face-down with the top edge at the back of the tray.
2. On the **File** menu, click **Print**.
3. Open the **Layout** menu.
4. Next to **Two-Sided**, select either **Long-Edge Binding** or **Short-Edge Binding**.
5. Click **Print**.

Print on both sides manually

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
 - For tray 1, load the letterhead paper face-up with the bottom edge feeding into the printer first.
 - For all other trays, load the letterhead paper face-down with the top edge at the back of the tray.

△ **CAUTION:** To avoid jams, do not load paper that is heavier than 105 g/m² (28-lb bond).

2. On the **File** menu, click **Print**.
3. On the **Finishing** menu, click the **Manual Duplex** tab.

4. Click the check box next to **Manual Duplex**.
5. Click **Print**. Follow the instructions in the pop-up window that appears on the computer screen before replacing the output stack in tray 1 for printing the second half.
6. Go to the printer, and remove any blank paper that is in tray 1.
7. Insert the printed stack face-up with the bottom edge feeding into the printer first in tray 1. You *must* print the second side from tray 1.
8. If prompted, press the appropriate control panel button to continue.

Use the Services menu

If the product is connected to a network, use the **Services** menu to obtain product and supply-status information.

1. On the **File** menu, click **Print**.
2. Open the **Services** menu.
3. To open the embedded Web server and perform a maintenance task, do the following:
 - a. Select **Device Maintenance**.
 - b. Select a task from the drop-down list.
 - c. Click **Launch**.
4. To go to various support Web sites for this device, do the following:
 - a. Select **Services on the Web**.
 - b. Select **Internet Services**, and select an option from the drop-down list.
 - c. Click **Go!**.

Macintosh readme

The Macintosh readme contains the following topics:

- [Mac OS X printer queue setup for your HP LaserJet printer](#)
- [Troubleshooting Notes](#)

Mac OS X printer queue setup for your HP LaserJet printer

After completing the software installation, perform the following steps to complete your printer setup:

1. Connect your USB or Ethernet LAN cable to your product. Turn on the product.
2. Open the document to print, and then choose File > Print.
3. Choose Add Printer from the bottom of the Printer pop-up menu list. If connecting to a USB or local networked attached product:
4. Select your product from the Default Browser list if the product is connected locally on the network (Bonjour) or if connected by a USB cable. If connecting to an IP Printer or to a product on a different network subnet:
5. Select the IP Printer option.
 - a. Choose Jetdirect - Socket from the Protocol pop-up menu.
 - b. Print a Configuration Report using the product's control panel display and locate the IP address.
 - c. Type the IP address for the printer in the Address field.
6. The correct print driver should automatically be selected.
7. Click Add to create the Printer queue.

Troubleshooting Notes

- **Problem:** "I do not see my printer in the Printer Browser list."

Solution: If the printer name does not display in the Printer List, try one or more of the following:

 - For the cable being used (USB or Network), check that it is properly connected to the printer and the connecting device (hub or computer).
 - Check that the product is powered on.
 - Restart the computer and/or the product.
 - The printer may reside on a different network subnet. If this is the case, you must setup the product using the IP Printer option. If more than one product of the same model type is connected to the local Network, select your product using the name that matches the Bonjour Service name found on the product's Network Report Page. Print a Network report page using the product's control panel display to verify.
- **Problem:** "The Generic Postscript Printer driver is automatically selected."

Solution: If the Generic Postscript Printer driver was automatically selected, try one or more of the following:

1. If using USB, manually delete the product from the Printer list then power cycle the product. The product should be added automatically with the correct printer driver.
2. Manually search for the correct printer driver for your product in the Print Using pull down menu in the Print Browser dialog.
3. If your printer driver cannot be found in the pull down list, try rebooting your computer.
4. Re-install the printer software.
5. Open Disk Utility, select your Mac OS X startup volume, click First Aid, and then click Repair Disk Permissions.

6 Engineering details

Introduction

- [Steps to Install HP Web Jetadmin 10.0](#)
- [Supported paper tables](#)
- [Special paper guidelines table](#)
- [Sizes \(min & max\) and supported paper by tray](#)
- [Media attributes and commands](#)
- [Hewlett-Packard Color LaserJet CP2020 Series Printer Install Notes](#)
- [Troubleshooting](#)

Steps to Install HP Web Jetadmin 10.0

To begin the installation, follow these steps:

1. Download the HP Web Jetadmin 10.0 software from the following Web site:
www.hp.com/go/webjetadmin
2. Run WJASETUP.EXE.
3. Follow the instructions as each page is displayed.
4. When the installation is complete, click **Close**.

Supported paper tables

This product supports a number of paper sizes, and it adapts to various paper.


 **NOTE:** To obtain best print results, select the appropriate paper size and type in your print driver before printing.

Table 6-1 Supported paper sizes

Size	Dimensions	Tray 1	Tray 2 or optional tray 3
Letter	216 x 279 mm (8.5 x 11 inches)	X	X
Legal	216 x 356 mm (8.5 x 14 inches)	X	X
A4	210 x 297 mm (8.27 x 11.69 inches)	X	X
Executive	184 x 267 mm (7.24 x 10.51 inches)	X	X
A3	297 x 420 mm (11.69 x 16.54 inches)		
A5	148 x 210 mm (5.83 x 8.27 inches)	X	X
A6	105 x 148 mm (4.13 x 5.83 inches)	X	X
B4 (JIS)	257 x 364 mm (10.12 x 14.33 inches)		
B5 (JIS)	182 x 257 mm (7.17 x 10.12 inches)	X	X
B5 (ISO)	176 x 250 mm (6.93 x 9.84 inches)		
B6 (ISO)	125 x 176 mm (4.92 x 6.93 inches)		
16k	184 x 260 mm (7.24 x 10.23 inches)		
	195 x 270 mm (7.68 x 10.62 inches)	X	X
	197 x 273 mm (7.75 x 10.75 inches)		
8.5 x 13	216 x 330 mm (8.5 x 13 inches)	X	X
4 x 6	107 x 152 mm (4 x 6 inches)	X	X
5 x 8	127 x 203 mm (5 x 8 inches)	X	X
10 x 15 cm	100 x 150 mm (3.9 x 5.9 inches)	X	X
Custom	(76 - 216) x (127 - 356) mm ((3 - 8.5) x (5 - 14) inches)	X	X

Table 6-2 Supported envelopes and postcards

Size	Dimensions	Tray 1	Tray 2
Envelope #10	105 x 241 mm (4.13 x 9.49 inches)	X	X
Envelope DL	110 x 220 mm (4.33 x 8.66 inches)	X	X
Envelope C5	162 x 229 mm (6.93 x 9.84 inches)	X	X
Envelope B5	176 x 250 mm (6.7 x 9.8 inches)	X	X
Envelope Monarch	98 x 191 mm (3.9 x 7.5 inches)	X	X

Table 6-2 Supported envelopes and postcards (continued)

Size	Dimensions	Tray 1	Tray 2
Postcard	100 x 148 mm (3.94 x 5.83 inches)	X	X
Double postcard	148 x 200 mm (5.83 x 7.87 inches)	X	X

Special paper guidelines table

This product supports printing on special paper. Use the following guidelines to obtain satisfactory results. When using special paper or paper, be sure to set the type and size in your print driver to obtain the best print results.

- △ **CAUTION:** HP LaserJet products use fusers to bond dry toner particles to the paper in very precise dots. HP laser paper is designed to withstand this extreme heat. Using inkjet paper not designed for this technology could damage your product.

Media type	Do	Do not
Envelopes	<ul style="list-style-type: none"> • Store envelopes flat. • Use envelopes where the seam extends all the way to the corner of the envelope. • Use peel-off adhesive strips that are approved for use in laser printers. 	<ul style="list-style-type: none"> • Do not use envelopes that are wrinkled, nicked, stuck together, or otherwise damaged. • Do not use envelopes that have clasps, snaps, windows, or coated linings. • Do not use self-stick adhesives or other synthetic materials.
Labels	<ul style="list-style-type: none"> • Use only labels that have no exposed backing between them. • Use Labels that lie flat. • Use only full sheets of labels. 	<ul style="list-style-type: none"> • Do not use labels that have wrinkles or bubbles, or are damaged. • Do not print partial sheets of labels.
Transparencies	<ul style="list-style-type: none"> • Use only transparencies that are approved for use in laser printers. • Place transparencies on a flat surface after removing them from the product. 	<ul style="list-style-type: none"> • Do not use transparencies not approved for laser printers.
Letterhead or preprinted forms	<ul style="list-style-type: none"> • Use only letterhead or forms approved for use in laser printers. 	<ul style="list-style-type: none"> • Do not use raised or metallic letterhead.
Heavy paper	<ul style="list-style-type: none"> • Use only heavy paper that is approved for use in laser printers and meets the weight specifications for this product. 	<ul style="list-style-type: none"> • Do not use paper that is heavier than the recommended paper specification for this product unless it is HP paper that has been approved for use in this product.
Glossy or coated paper	<ul style="list-style-type: none"> • Use only glossy or coated paper that is approved for use in laser printers. 	<ul style="list-style-type: none"> • Do not use glossy or coated paper designed for use in inkjet products.

Sizes (min & max) and supported paper by tray

Media type	Dimensions ¹	Weight	Capacity ²	Paper orientation
Paper, including the following types: <ul style="list-style-type: none"> • Plain • Letterhead • Color • Preprinted • Prepunched • Recycled 	Minimum: 76 x 127 mm (3 x 5 inches) Maximum: 216 x 356 mm (8.5 x 14 inches)	60 to 90 g/m ² (16 to 24 lb)	Tray 1: up to 50 sheets Trays 2 and 3: up to 250 sheets of 75 g/m ² (20 lb bond)	Side to be printed on face-up, with the top edge at the back of the tray
Thick paper	Same as for paper	Up to 200 g/m ² (53 lb)	Tray 1: single sheet only Trays 2 and 3: up to 25 mm (0.98 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Cover paper	Same as for paper	Up to 200 g/m ² (53 lb)	Tray 1: single sheet only Trays 2 and 3: up to 25 mm (.98 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Glossy paper Photo paper	Same as for paper	Up to 220 g/m ² (59 lb)	Tray 1: single sheet only Trays 2 and 3: up to 25 mm (.98 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Transparencies	A4 or Letter	Thickness: 0.12 to 0.13 mm (4.7 to 5.1 mils)	Tray 1: single sheet only Trays 2 and 3: up to 25 mm (.98 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Labels ³	A4 or Letter	Thickness: up to 0.23 mm (9 mils)	Tray 1: single sheet only Trays 2 and 3: up to 25 mm (.98 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Envelopes	<ul style="list-style-type: none"> • COM 10 • Monarch • DL • C5 • B5 	Up to 90 g/m ² (24 lb)	Tray 1: up to 10 envelopes Trays 2 and 3: up to 30 envelopes	Side to be printed on face-up, with the stamp-end at the back of the tray
Postcards or index cards	100 x 148 mm (3.9 x 5.8 inches)		Tray 1: single sheet only	Side to be printed on face-up, with the top edge at the back of the tray

Media type	Dimensions ¹	Weight	Capacity ²	Paper orientation
			Trays 2 and 3: up to 25 mm (.98 inch) stack height	

¹ The product supports a wide range of standard and custom sizes of paper. Check the print driver for supported sizes.

² Capacity can vary depending on paper weight and thickness, and environmental conditions.

³ Smoothness: 100 to 250 (Sheffield)

Media attributes and commands

This section includes the following information about paper attributes:

- [Media types and sizes](#)
- [Custom paper sizes](#)

Media types and sizes

The tables in this section provide information about paper features, paper attributes, and paper-handling constraints for the HP Color LaserJet CP2020 Series printer.


 **NOTE:** The following table lists the features and attributes of various paper listed under the **Size Is** drop-down menu on the **Paper/Quality** tab. The list order can vary, depending on the operating system. The list will contain all the sizes shown here, and might contain sizes from other drivers.

Table 6-3 Supported paper attributes

Paper sizes	Width	Height
Letter	216 mm	279 mm
	(8.5 inches)	(11.0 inches)
Legal	216 mm	355 mm
	(8.5 inches)	(14.0 inches)
A4	210 mm	297 mm
	(8.27 inches)	(11.69 inches)
Executive	185 mm	266 mm
	(7.25 inches)	(10.5 inches)
B5 (ISO)	176 mm	250 mm
	(6.93 inches)	(9.84 inches)
Envelope #10	105 mm	241 mm
	(4.13 inches)	(9.5 inches)
Envelope Monarch	99 mm	190 mm
	(3.88 inches)	(7.5 inches)
Envelope C5 (ISO)	162 mm	229 mm
	(6.38 inches)	(9.02 inches)
Envelope DL (ISO)	110 mm	220 mm
	(4.33 inches)	(8.66 inches)
Envelope B5 (ISO)	176 mm	250 mm
	(6.93 inches)	(9.84 inches)
Custom	Minimum:	Minimum:
	76 mm	127 mm

Table 6-3 Supported paper attributes (continued)

Paper sizes	Width	Height
	(3.0 inches)	(5.00 inches)
	Maximum:	Maximum:
	216 mm	356 mm
	(8.5 inches)	(14.0 inches)
B5 (JIS)	182 mm	257 mm
	(7.16 inches)	(10.12 inches)
Postcard (JIS)	100 mm	148 mm
	(3.94 inches)	(5.83 inches)
Double Postcard (JIS)	148 mm	200 mm
	(5.83 inches)	(7.87 inches)
A5	148 mm	210 mm
	(5.83 inches)	(8.27 inches)
8.5 x 13 (Foolscap)	216 mm	330 mm
	(8.5 inches)	(13 inches)
16K 7.75 x 10.75	197 mm	273 mm
	(7.75 inches)	(10.75 inches)
16K 184x260mm	184 mm	260 mm
	7.2 inches	10.2 inches
16K 195x270mm	195 mm	270 mm
	7.67 inches	10.6 inches

Custom paper sizes

The following table identifies the paper types the HP Color LaserJet CP2020 Series printer supports in trays 1 and 2.

Table 6-4 Tray 1 and Tray 2 specifications

Tray 1 and Tray 2	Dimensions ¹	Weight	Capacity ²
Paper	Minimum: 76 x 127 mm (3 x 5 inches) Maximum: 216 x 356 mm (8.5 x 14 inches)	60 to 163 g/m ² (16 to 43 lb) Up to 176 g/m ² (47 lb) for postcards	Single sheet of 75 g/m ² (20 lb) paper for Tray 1 Up to 250 sheets for Tray 2
HP LaserJet glossy paper and HP LaserJet photo paper	Same as the preceding listed minimum and maximum sizes.	75 to 220 g/m ² (20 to 58 lb)	Single sheet of HP LaserJet glossy paper or HP LaserJet photo paper for Tray 1 Up to 25 mm (0.99 inch) stack height for Tray 2
HP Premium Cover Paper ⁴		200 g/m ² (53 lb) cover	Single sheet of HP Cover paper for Tray 1 Up to 25 mm (0.99 inch) stack height for Tray 2
Transparencies and opaque film		Thickness: 0.10 to 0.13 mm (3.9 to 5.1 mils)	Single sheet of transparency or opaque film for Tray 1 Up to 50 sheets for Tray 2
Labels ³		Thickness: up to 0.23 mm (up to 9 mils)	Single sheet of labels for Tray 1 Up to 25 mm (0.99 inch) stack height for Tray 2
Envelopes		Up to 90 g/m ² (up to 24 lb)	Single envelope for Tray 1 Up to ten envelopes for Tray 2

¹ The product supports a wide range of standard and custom sizes of paper. Check the print driver for supported sizes.

² Capacity can vary depending on paper weight and thickness, and environmental conditions.

³ Smoothness: 100 to 250 (Sheffield).

⁴ Hewlett-Packard does not guarantee results when printing with other types of heavy paper.

Hewlett-Packard Color LaserJet CP2020 Series Printer Install Notes

Edition 1, 5/2008

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- [VI. LEGAL STATEMENTS](#)

I. INTRODUCTION

PURPOSE OF THIS DOCUMENT

This document provides specific installation instructions and other information you should know before you install and use the printing system. Installation instructions are provided in this document for the following operating systems:

- Windows 2000 (Express Install only)
- Windows 2003 Server (Express Install Only)
- Windows XP Home 32 bit
- Windows XP Professional 64 bit (Express Install only)
- Windows Vista™ 32-bit
- Windows Vista™ 64 bit
- Mac OS X V10.2.8, V10.3, V10.4 and later

NOTE: The HP Color LaserJet CP2020 Series does not support the following operating systems:

- Windows 98
- Windows Millennium Edition (Me)
- Windows NT 4.0
- Windows 3.1x
- Mac OS 9.x and earlier

The HP Color LaserJet CP2020 Series printer has the following features:

- 128-megabyte (MB) random-access memory (RAM)
- Full-color laser printing

- 600 x 600 x 8 bit dots-per-inch (dpi) text and graphics (ImageREt 3600)
- 50-sheet capacity (tray 1)
- 250-sheet capacity universal tray (tray 2)
- Prints 20 pages per minute (ppm) in color and 20 ppm in black & white (letter- and A4-size pages)
- Hi-Speed USB 2.0 port
- Built-in networking to connect to 10Base-T/100Base-TX networks (IPV4 and IPV6)

This file provides specific installation, compatibility, and troubleshooting information. For additional information about product features and driver features, see the product user guide and the online Help that is included with each software component.

WHO NEEDS THIS SOFTWARE?

All users require this printing-system software to operate the HP Color LaserJet CP2020 Series printer.

OVERVIEW OF THE PRINTING-SYSTEM COMPONENTS

The CD-ROM has software for IBM-compatible computer systems and Macintosh computer systems. For more information about a particular driver or software component, see its associated online Help. The Macintosh software is on a separate partition of the CD that is only viewable from a Macintosh computer.

End-user software components for Recommended installs (Easy and Advanced installs)

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 product includes the following Windows drivers:

- HP Color LaserJet CP2020 series PCL6 printer driver for Windows 2000, Server 2003, XP and Vista
- USB Printing Support
- HP Standard TCP/IP Port

Software programs

- HP Update
- Shop for HP Supplies
- HP ToolboxFX
- HP Customer Participation Program 10.0 (you can choose not to install this by using the Express USB or Express Network install)
- User Guide (Windows Help format)

HP ToolboxFX

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

- Check the product status.
- Configure the product settings.
- Configure pop-up alert messages.
- View troubleshooting information.
- View online documentation

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 Install to use HP ToolboxFX.

NOTE: HP ToolboxFX is not supported for Windows 2000, Server 2003, and XP 64 operating systems.

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

End-user software components for Express USB and Express Network installs

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 product includes the following Windows drivers:

- HP Color LaserJet CP2020 series PCL6 printer driver for Windows 2000, XP and Vista
- USB Printing Support
- HP Standard TCP/IP Port

Product documentation

To view the HP Color LaserJet CP2020 Series User Guide, insert the product CD into the CD-ROM drive. When the animated setup guide appears, select View User Guide at the top of the screen.

The HP Color LaserJet CP0220 Series Printer User Guide and Install Notes are on the HP Color LaserJet CP2020 Series CD at the following location:

- Document: HP Color LaserJet CP2020 Series Printer User Guide
File name: LJCP2020_use_<language code>.pdf
File name: LJCP2020_use_<language code>.chm
Path: <CD-ROM Drive>:\<Language>\MANUALS\LJCP2020_use_<language code>.pdf
Path: <CD-ROM Drive>:\<Language>\MANUALS\LJCP2020_use_<language code>.chm
- Document: HP Color LaserJet CP2020 Series Printer Install Notes
File name: LJCP2020_install-notes_<language code>.htm
Path: <CD-ROM Driver>:\<Language>\MANUALS\LJCP2020_install-notes_<language code>.htm

The latest version of Acrobat Reader is available on the Adobe website at www.adobe.com.

II. LATE-BREAKING INFORMATION

KNOWN ISSUES AND WORKAROUNDS

For an updated listing of known issues for the HP Color LaserJet CP2020 Series printing-system software, see the following URL (a connection to the public Internet is required): <http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c00849739>

General

- Some high-speed USB 2.0 cards might have 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 product and HP software. It is recommended that you always use a Microsoft WHQL Certified host-controller driver with your USB hardware.
- Plug and Play print-driver packages are available at the following URL: www.hp.com/support/ljcp2020series
- 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 your product is not recognized, check the following:
 - Verify that your cable is USB 2.0 high-speed 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 cannot be recognized if the power is off.
 - Make sure that the USB cable is not longer than 5 meters (16.4 feet).
 - Verify that the USB port is enabled. Some computers are sold with disabled USB ports.
- On a non-English system, some components might display English text.

Windows Sharing

The printer drivers for this product are supported only for Windows 2000, 2003 Server, XP and Windows Vista. The product cannot be shared with Windows clients that are running Windows 98, Me, NT 4.0, or earlier versions of the Windows operating system.

Shared Windows clients that are not directly connected to the product will not receive software-alert messages at the computer. Only the computer that is directly connected to the product will receive software-alert messages.

HP ToolboxFX

HP ToolboxFX utilizes Microsoft .Net Framework version 2.0. Depending on the configuration of your computer, you might need to update your system configuration after installation by using Windows Update. If you encounter problems with HP ToolboxFX, install all available critical updates from Windows Update.

Upgrading Windows

HP recommends that you uninstall HP products before upgrading to a newer supported version of Windows. For example, when upgrading from Windows XP to Windows Vista, uninstall your HP product by using the Uninstall option found in the HP Color LaserJet CP2020 Series program group, and then upgrade to the new operating system. After the operating system upgrade is complete, re-install your HP product by using the latest software available at the following URL: www.hp.com/support/ljcp2020series

III. INSTALLATION INSTRUCTIONS

For Windows operating systems, the CD-ROM setup or installation software detects the version and language of the operating system that you are using.

INSTALL SOFTWARE ON XP AND WINDOWS VISTA

NOTE: Administrator privileges are required to install the printing system.

Recommended installation from a CD-ROM (network and USB)

NOTE: For USB installations, do not connect the USB cable to the product or the computer until instructed.

1. Close all programs.
2. Insert the CD-ROM.
3. If the HP printing system installer program has not started after 30 seconds, complete these steps.
 - a. Select Run from the Start menu on your taskbar.
 - b. Browse to the root directory on the CD-ROM drive.
 - c. Select the AUTORUN.EXE file, click Open, and then click OK. When the animated installation guide appears, click Begin Setup for help setting up the product.
 - d. Watch the animated installation guide, and then click Install Software to start the software installation.
4. Select 'Recommended' when prompted.
5. Follow the on-screen instructions.

Express Install for Windows 2000, Server 2003, XP and Vista (installs only the printer driver and status-alert software)

NOTE: For USB installations do not connect the USB cable to the product or the computer until instructed.

1. Close all programs.
2. Insert the HP Color LaserJet CP2020 Series CD-ROM.
3. If the HP printing system installer has not started after 30 seconds, complete these steps.
 - a. Select Run from the Start menu on your taskbar.
 - b. Browse to the root directory on the CD-ROM drive.

- c. Select the SETUP.EXE file, click Open, and then click OK. When the animated installation guide appears, click Begin Setup for help setting up the product.
 - d. Watch the animated installation guide, and then click Install Software to start the software installation.
4. Select Express USB or Express Network when prompted.
 5. Follow the on-screen instructions.

CONFIGURE TRAY 3

To configure your print driver to use Tray 3

1. Open the "Printers and Faxes" folder. Typically this is done by clicking Start, and select Printers and Faxes. (In Windows Vista, Click Start, Control Panel, Hardware and Sound, Printers)
2. Right-click the printer name, and click Properties.
3. Click Device Settings, and select Installable Options.
4. Next to Tray 3, select Installed, and click OK.

CONFIGURE AUTOMATIC TWO-SIDED PRINTING

To configure your print driver to use the automatic two-sided printing (duplexer).

NOTE: Two-sided printing is supported on the HP Color LaserJet CP2020dn and HP Color LaserJet CP2020x products.

1. Open the "Printers and Faxes" folder. Typically this is done by clicking Start, and select Printers and Faxes. (In Windows Vista, Click Start, Control Panel, Hardware and Sound, Printers)
2. Right-click the printer name, and click Properties.
3. Click Device Settings, and select Installable Options.
4. Next to Duplex Unit (for 2-Sided Printing), select Installed, and click OK.

IV. UNINSTALLATION INSTRUCTIONS

WINDOWS UNINSTALLER

The uninstall link in the HP Color LaserJet CP2020 Series Program Group is available only if a Recommended Install has been completed. It removes all of the printing-system components.

1. From the Start menu, click HP.
2. Select the HP Color LaserJet CP2020 Series program group.
3. Click Uninstall.
4. Follow the on-screen instructions.

ADD/REMOVE PROGRAMS

Add/Remove Programs uninstall is available for Recommended or Express Installations.

1. Open the Microsoft Windows Control Panel.
2. Double-click Add/Remove Programs. The following items are installed by the HP Color LaserJet CP2020 Series Recommended install.
 - HP Color LaserJet CP2020 Series 1.0
 - HP Customer Participation Program 10.0. (used by multiple HP products)
 - HP Update (used by multiple HP products)
 - HPSSupply (used by multiple HP products)

The following items are installed by the HP Color LaserJet CP2020 Series Express Install

- HP Color LaserJet CP2020 Series 1.0
3. For each item you want to remove, highlight it in the list and then click Change/Remove. Follow the on-screen instructions.

V. TECHNICAL ASSISTANCE

For customer support information, see the product user guide or the in-box support flyer. Or, call your local authorized HP dealer.

You can also go to the following URL for online technical support: www.hp.com/support/ljCP2020series

VI. LEGAL STATEMENTS

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WARRANTY AND COPYRIGHT

Warranty

See the product user guide for complete warranty and support information.

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Troubleshooting

- [Port communication](#)
- [File to E-mail utility](#)
- [Manual scrubber](#)
- [E-mail](#)


Port communication

- [Overview](#)
- [USB port connections](#)
- [Device conflicts in Windows](#)

Overview

The HP Color LaserJet CP2025 Series printer has a USB port. The HP Color LaserJet CP2025n, dn, and x models include both a 10/100Base-T TCP/IP network port and a USB port.

The product can be connected with either the 10/100Base-T TCP/IP network port or the USB port. The product does *not* support connection over a parallel port.

 **NOTE:** Do not connect both the 10/100Base-T TCP/IP network port and the USB port at the same time.

USB port connections

Hi-speed USB is an input/output mode that both Windows and Macintosh computers support. A wide variety of consumer products, such as digital cameras and scanners, also support USB. Hi-speed USB is the current standard. HP LaserJet products are compatible with Hi-speed USB specifications.

A USB host is distinct from a USB product. HP LaserJet products are USB products. They can connect *only* to a USB host or a powered USB hub.

Device conflicts in Windows

When two-way communication cannot be established with the product, the Windows Device Manager might show a conflict. Conflicts should be resolved immediately, before continuing to troubleshoot two-way communication issues. The following sections contain a few guidelines for identifying and resolving these conflicts.

Open the Windows Device Manager

Follow these steps to open the Windows Device Manager:

1. In Windows 2000, click **Start**, select **Settings**, and then click **Control Panel**.

-or-

In Windows Server 2003, Windows XP, or Windows Vista, click **Start**, and then select **Settings**.

2. Click **Control Panel**.
3. In Windows 2000, Windows Server 2003, and Windows XP, click the **System** icon.

-or-

In Windows Vista, click **Hardware and Sound**.

4. In Windows 2000, Windows Server 2003, and Windows XP, click **Device Manager** on the **Hardware** tab.

-or-

In Windows Vista, click **Device Manager**.

Check for product conflicts

Follow these steps to check for product conflicts:

1. Look for products that appear on the list with a yellow exclamation mark (!) or a red X .
2. Identify port conflicts by double-clicking **Port** or by clicking the plus sign (+). Conflicts here usually interfere with two-way communication.
3. To check the status of a product, click the product name, and then click **Properties**. The **Device Status** appears in the middle of the dialog box.
4. To check the **Conflicting Device** list, click the product name, and then click **Properties**. Click the **Resources** tab, and look at the **Conflicting Device** list at the bottom of the dialog box.
5. Click the plus sign (+) to the left of **Open the Other Devices**. Misidentified or noncategorized products are placed here.

Guidelines for troubleshooting and resolving product conflicts

Follow these steps to resolve product conflicts:

1. If the conflicting product is no longer present in the list of products, click the product name, click **Remove**, and then click **Yes**. Click **Yes** to restart Windows.
2. If the conflicting product is a duplicate (and one of the duplicate listings does not show a conflict), click the name(s) of the product(s) that have a conflict, click **Remove**, and then click **Yes**. Click **Yes** to restart Windows.



NOTE: You might not need to restart the computer, depending on the type of port conflict you are resolving.

3. If a product has a conflict and you have the driver for that product, remove the product and then reinstall it. After removing the product, restart the computer. When Windows reinstalls products, it usually finds nonconflicting resources.

Installed product

Click the **View** menu to see more options:

- Products by Type
- Products by Connection
- Resources by Type
- Resources by connection
- Hidden Products

File to E-mail utility

The File to E-mail utility collects the data specified in an .INI file and then attaches the data files to an e-mail that can be sent to HP Customer Support to assist troubleshooting. The utility runs on the computer, but does not interact with the product.

The tool is included on the installer CD, but is *not* copied to the computer during the software installation. HP Customer Support can also send the utility by e-mail or by posting it to an HP Web site.

The tool is compatible with Windows 2000, Windows XP, and Windows Vista.

The File to E-mail utility runs with any MAPI-compliant e-mail applications. It does not run with Web-based e-mail services such as Yahoo, Hotmail, or AOL.

Depending on the speed of the computer, it might take a few minutes for the utility to gather the log files and attach them to an e-mail message.


The File to E-mail utility consists of two files that are located in the util folder on the product printing-system software CD:

- <CD-ROM drive>util\CCC\FiletoEmail\FileToEmail.exe
- <CD-ROM drive>util\CCC\FiletoEmail\FileToEmail.ini

To use the File to E-mail utility, copy these files to the desktop, navigate to them in Explorer, and double-click **FileToEmail.exe** to open the utility. The utility generates files, opens an e-mail message, and attaches the files so that you can send them to the system administrator.

If the File to E-mail utility is not successful for any reason (for instance, if you cancel the new message or you are using Web-based e-mail software), all the files are copied to a folder on the desktop that is named HpCCC, possibly with strings of zeros attached to the end. You can zip these files and e-mail them separately.

Manual scrubber

 **NOTE:** The scrubber runs automatically as part of the uninstall process. The scrubber can also be run manually.

If the installer fails and troubleshooting efforts have not solved the problem, use the scrubber utility to remove files.

The scrubber utility is located on the printing-system software CD in the following folder:

<CD-ROM drive>util\CCC

E-mail

If e-mail messages fail to be sent, try following these steps:

1. Open Windows Microsoft Explorer or Internet Explorer and navigate to the file.
2. Right-click the file, select **Send To**, and then click **Mail Recipient**.

If this method fails, check the MAPI mail setup. The MAPI setup is a third-party issue.

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