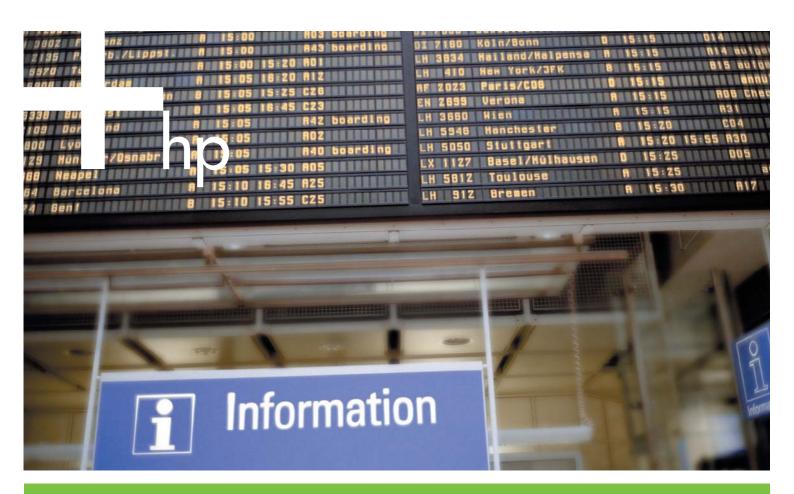
HP Color LaserJet CP4005 Printer Software Technical Reference





HP Color LaserJet CP4005 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 HP Color LaserJet CP4005 printing-system software.

This STR is prepared in an electronic format to serve as a quick-reference tool for Customer Care Center (CCC) agents, support engineers, system administrators, management information systems (MIS) personnel, and HP Color LaserJet CP4005 printer end users, as appropriate.

The following information is included in this STR:

- Descriptions of drivers and platforms, with system modifications
- Procedures for installing and uninstalling software components
- Descriptions of various topics that are associated with the HP Color LaserJet CP4005 printer, including engineering details

The following table describes the structure of this STR.

Table 1-1 Software technical reference overview

Chapter	Content
Chapter 1, Purpose and scope	This chapter contains basic information about the HP Color LaserJet CP4005 printer and its software:
	Overview of the HP Color LaserJet CP4005 printer
	Printing-system software overview, including the following topics:
	System requirements
	Operating-system support
	Availability
	HP Color LaserJet CP4005 printer software documentation
Chapter 2, Software description	This chapter provides an overview of the printing-system software installer and print drivers.
	This chapter also contains general information about other software features, including the following topics:
	Driver configuration for Microsoft® (MS) Windows®
	HP Driver Diagnostic Printer Check Tool
	HP Easy Printer Care

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 Table 1-1
 Software technical reference overview (continued)

Chapter	Content
	HP Embedded Web Server
	HP Web Jetadmin
Chapter 3, Install MS Windows printing- system components	This chapter provides instructions for installing the HP Color LaserJet CP4005 printing-system software in MS Windows operating systems by using various installation methods. These methods and additional topics include the following:
	Font support
	Print-driver installation instructions:
	Installing from printing-system CD
	Installing from a network or from downloaded files
	Modifying a pre-existing installation
	Installing through a USB port
	Installing using the Add Printer Wizard
	Installing using the Installer Customization Wizard
	Setting a default printer
Chapter 4, HP PCL 6, PCL 5, and PS emulation drivers for MS Windows	This chapter provides detailed descriptions of the HP PCL 6, PCL 5, and PS emulation drivers for Windows 2000, Windows XP, and Windows Server 2003.
Chapter 5, Universal Print Driver (UPD)	This chapter provides a brief description of the Universal Print Driver (UPD), and links for more information.
Chapter 6, Macintosh	This chapter provides instructions for installing and uninstalling the HP Color LaserJet CP4005 printing-system software in Macintosh operating systems and for using Macintosh features.
Chapter 7, Engineering details	This chapter contains information about the following special topics:
	Remote Firmware Updates
	Printing print-ready documents
	Media attributes
	Creating an output file

For information about 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 CP4005 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
- Descriptions of known software issues and solutions

Topics:

Device features

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- Printing-system software
- HP Color LaserJet CP4005 printer documentation

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Device features

The following table contains descriptions of the HP Color LaserJet CP4005 printer features that are discussed in this STR. Device configurations might vary among countries/regions.

Table 1-2 HP Color LaserJet CP4005 printer features

Models	HP Color LaserJet CP4005 printer
	 HP Color LaserJet CP4005n printer (part number CB503A)
	 HP Color LaserJet CP4005dn printer (part number CB504A)
Memory	 HP Color LaserJet CP4005n printer: Standard 128 megabytes (MB) random-access memory (RAM);
	HP Color LaserJet CP4005dn printer: Standard 256 MB RAM.
	 Expandable to a maximum of 512 MB RAM
User interface	Four-line back-lit graphical display on control panel
	Enhanced Help with graphics
	 Embedded Web server to gain access to support and order supplies (network-connected devices)
Supported printer personalities	HP PCL 6
	HP PCL 5
	 PostScript® (PS) 3 emulation
	 Portable-document format (PDF)
Job-storage features	Full job-storage features:
	 Proof and hold
	Private jobs
	Quick Copy
	Stored Job
	Mopier mode
	 Personal-identification number (PIN) printing
	 Fonts and forms
Environmental features	Sleep-mode setting
	 High content of recyclable components and materials
	 Energy Star® compliant
	 Restrictions of Hazardous Substances (RoHS) Directive compliant
	Blue Angel

Table 1-2 HP Color LaserJet CP4005 printer features (continued)

	• WEE
	508 Compliance
Accessories	HP printer stand (Q7501A)
	 HP 500-sheet paper input (tray 3) (Q7499A)
	 HP Color LaserJet Black Print Cartridge (CB400A)
	 HP Color LaserJet Cyan Print Cartridge (CB401A)
	HP Color LaserJet Magenta Print Cartridge (CB403A)
	 HP Color LaserJet Yellow Print Cartridge (CB402A)
	 HP USB 2.0 printer cable a-b, 2 meter (6 feet) (C6518A)
	 128-MB DDR 200-pin SDRAM (Q7721A)
	 256-MB DDR 200-pin SDRAM (Q7722A)
	 512-MB DDR 200-pin SDRAM (Q7723A)
Connectivity	 HP Jetdirect en3700 Fast Ethernet external print server (USB 2.0)
	 HP Jetdirect ew2400 802.11g Wireless and Fast Ethernet external print server (USB 2.0)
	HP Jetdirect inside—Fast Ethernet 10/100Base-T
	 Device and host universal serial bus (USB) 2.0 connections
	FIH Connector

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Printing-system software

Topics:

- System requirements
- Operating-system support
- Availability

System requirements

The following operating systems support the HP Color LaserJet CP4005 printing-system software:

- Windows
- Macintosh
- Linux
- UNIX

Windows

System requirements for 32-bit operating systems

- Pentium® or compatible processor
- Windows 2000: 333-MHz processor with 64 MB RAM
- Windows XP: 333-MHz processor with 128 MB RAM
- Windows Server 2003: 550-MHz processor with 128 MB RAM (Standard Edition) and 220 MB of available hard-disk space
- 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
- 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

Macintosh

The Macintosh system requirements are as follows. See Macintosh on page 187 for more information.

System requirements for Macintosh operating systems

- PowerPC G3, G4, G5 or Intel Core processor
- 256 MB RAM
- 32 MB of available hard-disk space
- CD-ROM or Internet connection
- Mac OS X v10.2.8, v10.3, or v10.4 and later are supported



NOTE Mac OS 9 and Mac OS X classic are not supported.

Linux

For information about Linux support for the printer, see the following HP Linux Web site:

www.hp.com/go/linuxprinting

UNIX

For information about UNIX® support for the printer, see the following Web sites:

www.hp.com/go/unixmodelscripts

Operating-system support

MS Windows operating systems provide full-featured support for the HP Color LaserJet CP4005 printer. Operating systems that are not described in this document provide varying levels of functionality.

Throughout this document, MS Windows XP is used to denote Windows XP Home Edition, Windows XP Professional, and Windows Server 2003 unless noted otherwise.

Information relating to networking functions is specific to devices that have network capabilities.

The HP Color LaserJet CP4005 printer software has *not* been tested with and is *not* supported in the following operating systems:

- MS Windows 3.1x
- MS Windows 95
- MS Windows 98
- MS Windows Millennium Edition (Me)
- MS Windows NT® 4.0
- IA-64-bit operating systems

These MS Windows operating systems do *not* support the HP Color LaserJet CP4005 printer. Print drivers for the printer are not included on the printing-system software CD and are not available on the Web. Other drivers might work on the printer, but some print-driver features and functions might not be available.

For more information about the HP Color LaserJet CP4005 printer, go to the following Web site:

www.hp.com/support/ljcp4005

Topics:

- Standalone drivers
- Print driver support in other operating systems

Standalone drivers

The following operating systems support the HP Color LaserJet CP4005 printing-system software, including the HP PCL 6, PCL 5, and PS emulation drivers:

- Windows 2000
- Windows XP Home Edition (32-bit)
- Windows XP Professional (32-bit and 64-bit)
- Windows Server 2003 (32-bit and 64-bit)

Print driver support in other operating systems

The HP Color LaserJet CP4005 printer is also supported in the following operating environments:

- Mac OS X (V10.2.8 or later). See the <u>Macintosh on page 187</u> chapter of this STR for more information.
- MS Windows Terminal Server
- Citrix Terminal Server. For more information, go to the following Web site:

h20000.ww2.hp.com/bizsupport/TechSupport/Document.jsp

Alternatively, go to the HP.com Web site and search for "c00213455".

MS Windows Cluster Server 8

http://h2000.www2.hp.com/bizsupport/TechSupport/Document.jsp

HP OpenVMS. For more information, go to the following Web site:

h71000.www7.hp.com/openvms/print/

Tru64 UNIX printing. For more information, go to the following Web site:

h30097.www3.hp.com/printing/

• SAP printing. For more information, go to the following Web site:

www.hp.com/go/sap/print

HP Install Network Printer Wizard (INPW). Available only on the Web at the following Web site:

www.hp.com/go/inpw software

Availability

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 CP4005 printing-system software components by operating system.

Table 1-3 Software component availability for the HP Color LaserJet CP4005 printer

Component	Windows 2000, Windows Server 2003,	Windows XP and Windows Server 2003	
	and Windows XP (32-bit)	(64-bit)	
Drivers			
HP PCL 6 and PCL 5 drivers	х	х	
PS Emulation driver	х	х	
HP PCL 5 Universal print driver (web only)	х		
HP PS Emulation Universal driver (web only)	х		
Installer			
Common MS Windows Installer	х	х	
Installer Customization Wizard	х	х	
CD Browser	Х	х	
Add Printer Wizard install	х	х	
Other software			
Web Registration			
HP Driver Preconfiguration	х	х	
Easy Printer Care Software (web only)	х		
Enterprise Autoconfiguration	х		

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 CP4005 printing-system software is available for download at the following Web sites:

www.hp.com/support/ljcp4005

In-box printing-system software CDs

The software CD for the HP Color LaserJet CP4005 printer contains a variety of files for installing the printing-system software on the computer.

The HP Color LaserJet CP4005 printing-system software CD is divided into two partitions, one for each of the following operating systems:

- MS Windows
- Macintosh

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

Topics:

- Windows partition
- CD versions

Windows partition

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

- Autorun
- Drivers
- Fonts
- Manuals
- Port Monitor
- Temp

The printing-system files for each language reside in the following directories:

- Drivers
- Manuals



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

To view the files, insert the HP Color LaserJet CP4005 printing-system software CD, right-click **Start**, click **Explore**, and then select the CD-ROM drive.

CD versions

The HP Color LaserJet CP4005 printing-system software CD is available in two versions, each of which contains printing-system software in various languages:

- CD WE_AM Americas and Western Europe (part number CB503-60101):
 - CA = Catalan (Català)
 - DA = Danish (Dansk)

- DE = German (Deutsch)
- EN = English
- ES = Spanish (Español)
- FR = French (Français)
- HE = Hebrew
- IT = Italian (Italiano)
- NL = Dutch (Nederland)
- NO = Norwegian (Norsk)
- PT = Brazilian Portuguese (Português)
- FI = Finnish (Suomi)
- SV = Swedish (Svenska)

CD EE_AP – Eastern Europe and Asia Pacific (part number CB503-60102):

- AR = Arabic
- ID = Indonesia (Bahasa)
- CS = Czech (Cesky)
- ZHCN = Simplified Chinese
- ZHTW = Traditional Chinese
- EN = English
- FR = French (Français)
- EL = Greek
- JA = Japanese
- KO = Korean
- HU = Hungarian (Magyar)
- PL = Polish (Polski)
- RU = Russian (Russ)
- TH = Thai
- TR = Turkish (Turkçe)

Each of the following tables lists one of the software CD versions, along with the printing-system software components that are supported in each language.

Table 1-4 CD WE_AM – Western Europe and Americas—CB503-60101 (1 of 2)

Component	CA	DA	DE	EN	ES	FR	HE
HP PCL 6 driver: 32- bit, 64-bit	х	х	x	х	х	х	х
HP PCL 5 driver: 32-bit, 64-bit	x	X	x	х	х	х	х
PS Emulation driver: 32-bit, 64-bit	x	X	x	х	х	х	х
HP PCL 5 Universal print driver		X	x	х	х	х	х
HP PS Emulation Universal driver		X	x	х	х	х	х
Common MS Windows Installer		х	х	х	х	х	х
Add Printer Wizard Installer		х	х	х	х	х	х
Installer Customization Wizard		Х	х	х	х	х	х
CD Browser		х	х	х	х	х	х
Fonts		х	х	х	х	х	х
HP Web Registration		х	х	х	х	х	х
HP Color LaserJet CP4 005 Printer User Guide (.PDF file)	х	х	х	х	х	х	х
HP Color LaserJet CP4 005 Printer User Guide (.CHM file)		х	х	х	х	х	
HP Jetdirect Administrator's Guide		х	х	х	х	х	
Hewlett-Packard Color LaserJet CP4005 Seri es Printing-System Install Notes		Х	х	х	x	х	х
HP Embedded Web Server User Guide		х	х	х	х	х	х

Table 1-5 CD WE_AM – Western Europe and Americas—CB503-60101 (2 of 2)

Component	IT	NL	NO	PT	FI	sv
HP PCL 6 driver: 32-bit, 64-bit	x	х	х	х	х	Х
HP PCL 5 driver: 32-bit, 64-bit	х	х	Х	х	х	Х
PS Emulation driver: 32-bit, 64-bit	х	х	Х	х	х	Х

Table 1-5 CD WE_AM – Western Europe and Americas—CB503-60101 (2 of 2) (continued)

TUDIO TO OB WE_7W		rope and rane	02000	OBOUG COTOT (2 of 2) (continued)		
Component	IT	NL	NO	PT	FI	SV
HP PCL 5 Universal print driver	х	х	х	х	х	х
HP PS Emulation Universal driver	х	х	х	x	x	х
Common MS Windows Installer	х	х	Х	х	х	х
Add Printer Wizard Installer	х	х	Х	х	х	х
Installer Customization Wizard	х	х	Х	Х	х	х
CD Browser	х	х	х	х	Х	х
Fonts	х	х	х	Х	х	Х
HP Web Registration	x	X	х	Х	х	х
HP Color LaserJet CP400 5 Printer User Guide (.PDF file)	X	x	x	х	х	X
HP Color LaserJet CP400 5 Printer User Guide (.CHM file)	х	х	х	Х	Х	Х
HP Jetdirect Administrator's Guide	х	х	х	х	х	Х
Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes	x	x	x	х	х	х
HP Embedded Web Server User Guide	х	х	Х	Х	х	Х

Table 1-6 CD EE_AP — Eastern Europe and Asia Pacific—CB503-60102 (1 of 3)

Component	AR	ID	CS	ZHCN	ZHTW
HP PCL 6 driver: 32-bit, 64-bit	х		х	х	х
HP PCL 5 driver: 32-bit, 64-bit	Х		х		
PS Emulation driver: 32-bit, 64-bit	X		х	х	x
HP PCL 5 Universal print driver	х		х	х	Х
HP PS Emulation Universal driver	х		х	х	х
Common MS Windows Installer	Х		х	х	х
Add Printer Wizard Installer	Х		х	х	х

Table 1-6 CD EE_AP — Eastern Europe and Asia Pacific—CB503-60102 (1 of 3) (continued)

Component	AR	ID	CS	ZHCN	ZHTW
Installer Customization Wizard	х		х	х	х
CD Browser	х		х	х	х
Fonts	Х		Х	Х	Х
HP Web Registration	Х		х	х	х
HP Color LaserJet CP4005 Pr inter User Guide (.PDF file)	х	х	х	х	x
HP Color LaserJet CP4005 Pr inter User Guide (.CHM file)		х	х	х	х
HP Jetdirect Administrator's Guide			х	Х	х
Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes	х		х	х	х
HP Embedded Web Server User Guide			х	х	х

Table 1-7 CD EE_AP – Eastern Europe and Asia Pacific—CB503-60102 (2 of 3)

Component	EN	FR	EL	JA	ко
HP PCL 6 driver: 32-bit, 64-bit	х	х	х	х	х
HP PCL 5 driver: 32-bit, 64-bit	Х	х	х		
PS Emulation driver: 32-bit, 64-bit	х	х	х	Х	х
HP PCL 5 Universal print driver	х	х	х	х	х
HP PS Emulation Universal driver	х	х	х	Х	х
Common MS Windows Installer	х	х	х	Х	х
Add Printer Wizard Installer	Х	х	х	х	х
Installer Customization Wizard	х	х	х	х	х
CD Browser	Х	х	х	х	х
Fonts	Х	х	х	х	х
HP Web Registration	Х	х	х	х	х
HP Color LaserJet CP4005 Pr inter User Guide (.PDF file)	х	х	х	х	х
HP Color LaserJet CP4005 Pr inter User Guide (.CHM file)	х	х	х	х	х

Table 1-7 CD EE_AP – Eastern Europe and Asia Pacific—CB503-60102 (2 of 3) (continued)

Component	EN	FR	EL	JA	ко
HP Jetdirect Administrator's Guide	х	х	x	X	х
Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes	х	х	х	х	х
HP Embedded Web Server User Guide	х	х		х	Х

Table 1-8 CD EE_AP – Eastern Europe and Asia Pacific—CB503-60102 (3 of 3)

Component	HU	PL	RU	тн	TR
HP PCL 6 driver: 32-bit, 64-bit	х	х	х	х	х
HP PCL 5 driver: 32-bit, 64-bit	Х	Х	х		Х
PS Emulation driver: 32-bit, 64-bit	x	X	х	х	x
HP PCL 5 Universal print driver	х	Х	х	х	х
HP PS Emulation Universal driver	х	Х	х	х	х
Common MS Windows Installer	х	х	х	х	х
Add Printer Wizard Installer	х	х	х	х	Х
Installer Customization Wizard	Х	Х	х	х	x
CD Browser	х	Х	х	х	Х
Fonts	Х	Х	X	X	х
HP Web Registration	X	X	X	X	х
HP Color LaserJet CP4005 Pr inter User Guide (.PDF file)	X	X	x	x	x
HP Color LaserJet CP4005 Pr inter User Guide (.CHM file)	х	х	х	х	Х
HP Jetdirect Administrator's Guide	х	х	х		Х
Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes	х	х	х	х	х
HP Embedded Web Server User Guide	х	х	х	х	х

HP Color LaserJet CP4005 printer documentation

On the main screen of the printing-system software CD Browser, click **User Documentation** to open the HP Color LaserJet CP4005 printing-system software documentation screen, as shown in the following figure.

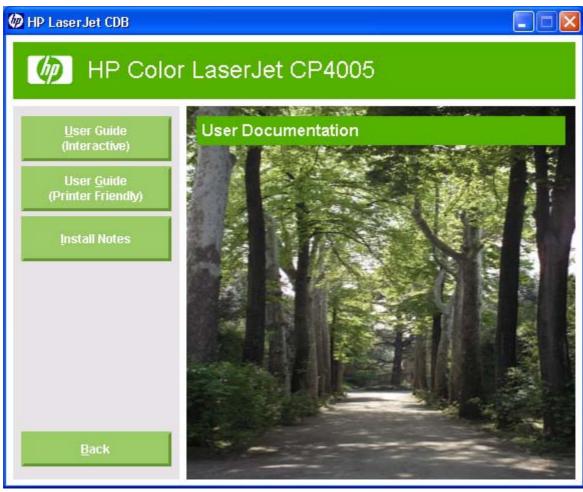


Figure 1-1 Installation software CD documentation screen

The following table lists the HP Color LaserJet CP4005 printer documents that are available for each operating system.

Table 1-9 Documentation availability

Document	Windows 2000/XP/ Server 2003	Macintosh
HP Color LaserJet CP4005 Printer User Guide (.PDF)	х	х
HP Color LaserJet CP4005 Printer User Guide (.CHM)	х	
Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes	х	
HP Embedded Web Server User Guide	х	х
HP Driver Preconfiguration Support Guide	х	

Table 1-9 Documentation availability (continued)

Document	Windows 2000/XP/ Server 2003	Macintosh
HP Jetdirect Administrator's Guide (.CHM and .PDF)	х	х
HP Device Installer Customization Wizard	х	

Access to the HP Color LaserJet CP4005 printer documents depends on the type of document and its location:

- Some documents can be opened from the CD Browser.
- Some documents appear on the software CD and can be opened by navigating to the folder where they reside.
- Some documents are available on the Web through links in the CD Browser or CD folders.

Documents are available in the following file formats:

- **Portable document Format (.PDF).** The HP Color LaserJet CP4005 printing-system software CD includes Adobe® Acrobat® Reader for viewing online documentation.
- **Compiled HTML (.CHM).** When you click a documentation link to a .CHM document, a Microsoft HTML Viewer opens the file on the computer screen.
- **Hypertext markup (.HTM).** When you click a documentation link to an .HTM document, a Web browser opens the file on the computer screen.

The following documents are available:

- HP Color LaserJet CP4005 Printer User Guide
- Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes
- HP Embedded Web Server User Guide
- HP Jetdirect Administrator's Guide
- HP Driver Preconfiguration Support Guide
- HP Device Installer Customization Wizard Readme

HP Color LaserJet CP4005 Printer User Guide

The HP Color LaserJet CP4005 Printer User Guide describes the basic printer features.

View this guide from the software CD by following these steps:

- 1. In the main screen of the CD browser, click **Documentation**.
- Click User Guide (Interactive).

The guide opens as an MS Windows Help file (.CHM file). This readable, onscreen version of the guide is provided in accordance with the Americans with Disabilities Act (ADA).

Gain access to the file by following these steps:

- Insert the software CD into the CD-ROM drive.
- Navigate to the Manuals\<language> folder.
- **3.** Open the file that has the appropriate file name:

CP4005 USE XXWW.CHM



NOTE The "XX" in the file name corresponds to the language. For instance, the file name for the French version of the guide is CP4005_USE_FRWW.CHM.

The *HP Color LaserJet CP4005 Printer User Guide* is also provided as a printable .PDF file. To print the guide, follow these steps:

- In the CD Browser, click **Documentation**.
- 2. Click User Guide (Printer Friendly). The guide opens.
- Print the guide.

Gain access to the file by following these steps:

- 1. Insert the software CD into the CD-ROM drive.
- 2. Navigate to the Manuals\<language> folder.
- 3. Open the file that has the appropriate file name:

CP4005 USE XXWW.PDF



NOTE The "XX" in the file name corresponds to the language. For instance, the file name for the French version of the guide is CP4005_USE_FRWW.PDF.

When the file is open, click **File** and then click **Save As** to save a copy of the file to another location.

Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes

The *Hewlett-Packard Color LaserJet CP4005 Series Printing-System Install Notes* (in .HTM format) contains important information about printer features, instructions for installing the printing-system software, and technical assistance.

Gain access to the file by following these steps:

- 1. Insert the software CD into the CD-ROM drive.
- 2. Navigate to the Manuals\<language> folder.
- 3. Open the file that has the appropriate file name:

CP4005 INSTALL-NOTE XXWW.HTM



NOTE The "XX" in the file name corresponds to the language. For instance, the file name for the French version of the document is CP4005 INSTALL-NOTE FRWW.HTM.

HP Embedded Web Server User Guide

The *HP Embedded Web Server User Guide* (in .PDF format) provides information about printer status, settings, and networking for the HP Color LaserJet CP4005 printer.

View this guide from the software CD by following these steps:

- 1. In the main screen of the CD browser, click **Documentation**.
- 2. Click Embedded Web Server Guide.

Gain access to the file by following these steps:

- Insert the software CD into the CD-ROM drive.
- Navigate to the Manuals\<language> folder.
- 3. Open the file that has the appropriate file name:

CP4005 EWS XXWW.PDF



NOTE The "XX" in the file name corresponds to the language. In French, the file name is CP4005_EWS_FRWW.PDF.

When the file is open, click **File** and then click **Save As** to save a copy of the file to another location.

HP Jetdirect Administrator's Guide

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

View this guide from the software CD by following these steps:

- 1. In the main screen of the CD browser, click **Documentation**.
- 2. Click HP Jetdirect Guide.

The guide opens in .PDF format.

Gain access to the .PDF file by following these steps:

- 1. Insert the software CD into the CD-ROM drive.
- 2. Navigate to the **Manuals\<language>** folder.
- **3.** Open the file that has the appropriate file name:

HPJDIAG XXWW.PDF



NOTE The "XX" in the file name corresponds to the language. In French, the file name is HPJDIAG FRWW.PDF.

When the file is open, click **File** and then click **Save As** to save a copy of the file to another location.

The guide can also be accessed as an MS Windows Help file (.CHM file). This readable, onscreen version of the guide is provided in accordance with the Americans with Disabilities Act (ADA).

Gain access to the .CHM file by following these steps:

- Insert the software CD into the CD-ROM drive.
- Navigate to the Manuals\<language> folder.
- 3. Open the file that has the appropriate file name:

HPJDIAG XXWW.CHM



NOTE The "XX" in the file name corresponds to the language. For instance, the file name for the French version of the guide is HPJDIAG FRWW.CHM.

HP Driver Preconfiguration Support Guide

The *HP Driver Preconfiguration Support Guide* contains important information about preconfiguring printing-system drivers before installation in network environments.

Gain access to the file by following these steps:

- Insert the software CD into the CD-ROM drive.
- Navigate to the Manuals\<language> folder.
- 3. Open the file that has the appropriate file name:

PRECONFIG SUPPORT XXWW.PDF



NOTE The "XX" in the file name corresponds to the language. In French, the file name is PRECONFIG_SUPPORT_FRWW.PDF.

When the file is open, click File and then click Save As to save a copy of the file to another location.

HP Device Installer Customization Wizard Readme

The *Installer Customization Wizard Readme* contains important information about features and installation using the Installer Customization Wizard.

Gain access to the file by following these steps:

- 1. Insert the software CD into the CD-ROM drive.
- Navigate to the Manuals\<language> folder.
- Open the file that has the appropriate file name:

CUSTOMIZATION_README_XXWW.RTF



NOTE The "XX" in the file name corresponds to the language. In French, the file name is CUSTOMIZATION_README_FRWW.RTF.

When the file is open, click **File** and then click **Save As** to save a copy of the file to another location.

2 Software description

Introduction

The HP Color LaserJet CP4005 printer comes with software and installers for MS Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX systems also support the HP Color LaserJet CP4005 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.

Topics:

- MS Windows printing-system software
- MS Windows driver configuration
- HP Driver Diagnostic Printer Check Tool
- International Color Consortium profiles
- PANTONE color profiles
- HP Easy Printer Care
- HP Embedded Web Server
- HP Web Jetadmin

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MS Windows printing-system software

Topics:

- Printing system and installer
- HP Color LaserJet CP4005 printer drivers

Printing system and installer

Topics:

- HP Color LaserJet CP4005 printing-system software CD for MS Windows systems
- Installer features

HP Color LaserJet CP4005 printing-system software CD for MS Windows systems

In the MS Windows environment (Windows 2000, Windows XP, and Windows Server 2003), insert the HP Color LaserJet CP4005 printing-system software CD in the CD-ROM drive to open an interactive 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 CP4005 printing-system software CD.

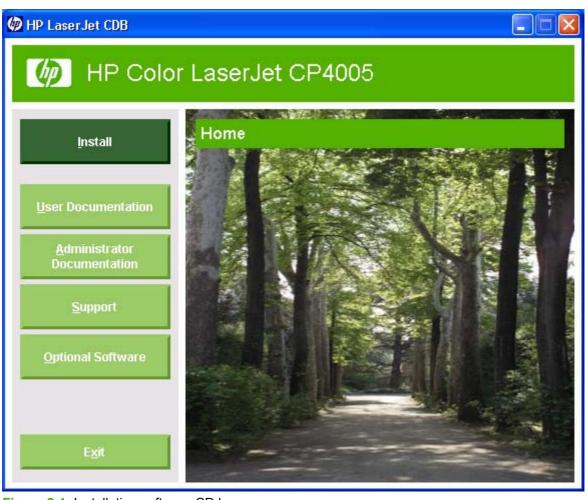


Figure 2-1 Installation software CD browser

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 **SETUP.EXE** file to start the installer.

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 device might differ from those in the figure.

Install. The installation wizard guides the HP Color LaserJet CP4005 printing-system software installation. Select a Basic Installation, Full, or a Custom Installation. If you select Basic Installation, only the necessary software is installed. If you select Custom Installation, select the components that you want to install.

User Documentation. Use this option to view the HP Color LaserJet CP4005 printer user documentation. The following document options are available:

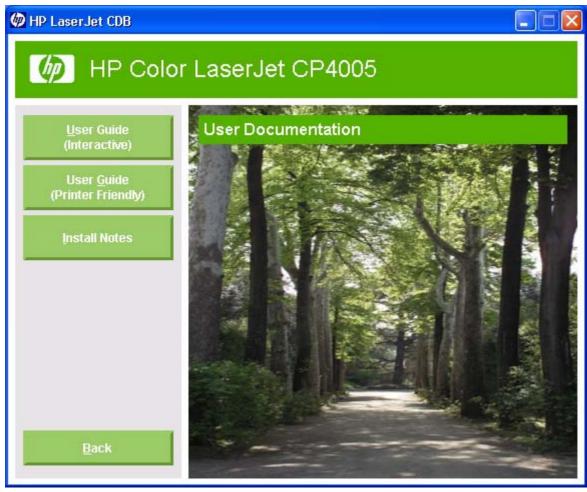


Figure 2-2 User Documentation screen

- User Guide (Interactive)
- User Guide (Printer Friendly)
- Install Notes

Click Back to return to the main CD browser screen.



NOTE If Adobe Acrobat Reader 4.0 or later is not installed, click any of the links to a portable document format (.PDF) document to open it in a version of Adobe Acrobat Reader that runs from the HP Color LaserJet CP4005 printing-system software CD. The CD browser version of Acrobat Reader is in English only, but can be used to open localized versions of .PDF documents. The Adobe Acrobat Reader software is *not* installed on the computer and can only run while the printing-system software CD is in the CD-ROM drive. Adobe Acrobat Reader is also available at the following Web site:

www.adobe.com

Administrator Documentation. Use this option to view the HP Color LaserJet CP4005 printer administrator documentation. The following documentation options are available.

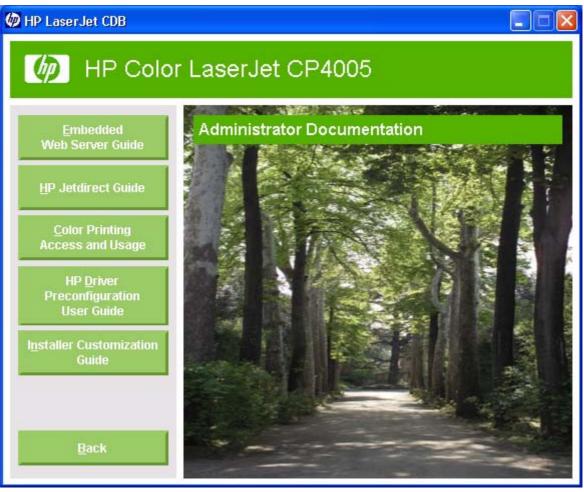


Figure 2-3 Administrator Documentation screen

- Embedded Web Server Guide
- HP Jetdirect Guide
- Color Printing Access and Usage
- HP Driver Preconfiguration User Guide
- Installer Customization Guide

Click **Back** to return to the main CD browser screen.

Support. Click the following links to find support information for the HP Color LaserJet CP4005 printer on the following HP Web sites:

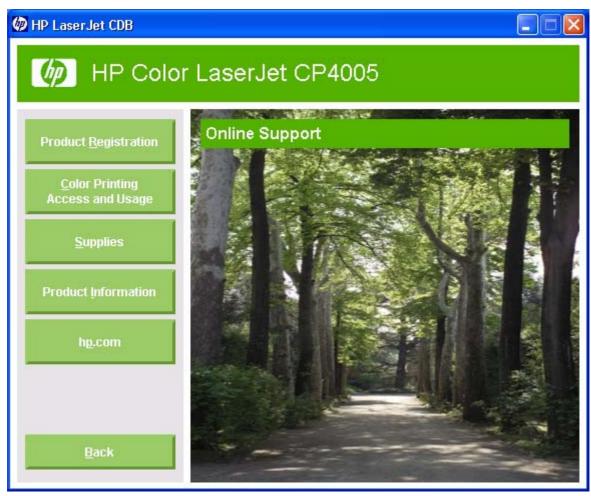


Figure 2-4 Online Support screen

- Click Product Registration to register the printer online.
- Click Color Printing Access and Usage for information about the color features and options of the printer.
- Click Supplies for information about ordering printer supplies.
- Click Product Information to open the HP Instant Support Web page for support information and updates for the printer.
- Click hp.com to go to the HP home Web page for information about products and services, support, drivers, and HP online stores.

Optional Software. The following optional software programs are available for the HP Color LaserJet CP4005 printer:

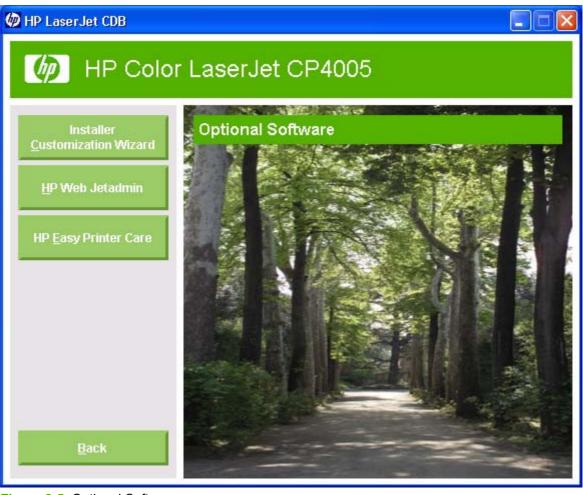


Figure 2-5 Optional Software screen

- Installer Customization Wizard. Use this wizard to customize the HP Color LaserJet CP4005
 installer by presetting the installation options in a response file. The resulting customized installer
 can then be used for silent, unattended installation.
- HP Web Jetadmin. Use this option to download HP Web Jetadmin software from the Web for a Web browser-based network-management tool.
- HP Easy Printer Care Software. Use this option to install HP Easy Printer Care from a
 downloadable installation file from the Web. This maintenance tool helps track and maintain the
 devices by providing information about status, alert notifications, usage, and supplies for one or
 more devices.

Installer features

The common installer is designed to provide a simple and consistent installation method for the printer. The common installer is available for the Windows 2000, Windows XP, and Windows Server 2003 operating systems.

The common installer offers the following features:

- The HP Color LaserJet CP4005 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 selection dialog box sets the operating-system language as the default language. You can use
 the installer to select any of the languages on the HP Color LaserJet CP4005 printing-system
 software CD.

The HP Color LaserJet CP4005 printing-system software CD also includes the following features:

- The HP LaserJet Uninstaller Utility
- The HP Customization Utility for custom installations

All of the MS Windows system components are installed by using the HP Color LaserJet CP4005 printing-system installer. The installer automatically detects the language of choice and the operating system. Select from the following types of installation:

- Basic Installation
- Custom Installation

HP Color LaserJet CP4005 printer drivers

HP Color LaserJet CP4005 printer 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:

- Windows 2000, Windows XP (32-bit and 64-bit), and Windows Server 2003 (32-bit and 64-bit)
 - MS Windows 64-bit drivers for Windows XP and Windows Server 2003 are available for the following systems:
 - AMD Athlon 64, AMD Opteron, Intel Xeon, or Pentium 4 with EMT64
- Apple Mac OS X (V10.2.8 or later)



NOTE For the latest information about the printing-system software components, see the readme files on the CD. For additional information about installing the printing-system software, see the Hewlett-Packard Color LaserJet CP4005 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
- HP PCL 6 driver
- HP PCL 5 driver
- PS Emulation driver
- HP universal print driver
- HP LaserJet printing system

Complete LaserJet printing system

Use the printing-system software CD to install the full set of drivers and other software for the HP Color LaserJet CP4005 printer.

HP PCL 6 driver

Overall, the HP PCL 6 driver 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 driver may not be fully compatible with third party and custom solutions that are based on PCL 5.

HP PCL 5 driver

The HP PCL 5 driver is recommended for general office monochrome printing in MS Windows environments. The driver is compatible with previous version of PCL and legacy HP LaserJet printers.

The HP PCL 5 driver is the best choice for:

- Any third-party or home-grown custom solutions that use forms, fonts, and SAP programs.
- Any environment with mixed operating-systems (such as UNIX, Linux, and mainframe)

PS Emulation driver

The PS Emulation driver is recommended for printing with Adobe or other graphics-rich software programs. The driver is compatible with postscript level-3 and supports postscript font DIMMs.

Use the PS Emulation driver in primarily postcript-specific software programs such as Adobe and Corel.

HP universal print driver

The HP PCL 5 and HP PS emulation universal print drivers are designed for corporate or IT-managed MS Windows environments. These drivers provide a single PCL 5 or PS emulation driver 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.

- Provides a single PCL 5 or PostScript 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

HP LaserJet printing system

Use this for the complete set of drivers, installer software and other administrative tools that are found on the printer's software CD.

HP print drivers

The following drivers are available on the HP Color LaserJet CP4005 printing-system software CD:

- HP PCL 6 driver for Windows 2000, Windows XP, and Windows Server 2003
- HP PCL 5 driver for Windows 2000, Windows XP, and Windows Server 2003
- The HP Postscript 3 Emulation driver (PS Emulation driver) for Windows 2000, Windows XP, and Windows Server 2003



NOTE During a Basic, Full, or Custom Installation of the printing-system software, the HP PCL 6 driver is installed by default for Windows 2000, Windows XP, and Windows Server 2003.

Table 2-1 Drivers included with the HP Color LaserJet CP4005 printing-system software

Operating System	HP PCL 6 driver	HP PCL 5 driver	PS Emulation driver
Windows 2000	X	Х	Х
Windows XP	X	Х	Х
Windows Server 2003	Х	Х	Х
Macintosh OS			Х

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 CP4005 printer is installed.



NOTE For a list of HP Color LaserJet CP4005 printer drivers, updated HP printing-system software, and product-support information, go to:

www.hp.com/support/ljcp4005

The Windows 2000, Windows XP, and Windows Server 2003 operating systems support the HP PCL 6, PCL 5, and PS emulation drivers. If you are using an HP driver in a Windows 2000, Windows XP, or Windows Server 2003 environment, follow these steps to find driver-version information:

- 1. Click Start.
- Select Settings.

- Click Printers and Faxes (in Windows XP and Windows Server 2003) or Printers (in Windows 2000).
- 4. Right-click the printer icon.
- 5. Click Properties.
- Click the About tab.

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.

MS Windows driver configuration

The HP PCL 6, PCL 5, and PS emulation drivers feature bidirectional communication technology which, in environments that support the drivers, provide automatic discovery and driver configuration for printer accessories at the time of installation.

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

Topics:

- Driver autoconfiguration
- Bidirectional communication
- Enterprise AutoConfiguration
- Update Now
- HP Driver Preconfiguration

Driver autoconfiguration



NOTE The 64-bit operating systems do not support driver autoconfiguration.

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

- When a print driver is installed by using Enterprise AutoConfiguration (EAC)
- When using the Update Now feature for a driver that is already installed

However, as shown in the following table, driver autoconfiguration and EAC are *not* available in Windows 2000, Windows XP, or Windows Server 2003 (32-bit) operating systems over a direct connection when the HP Color LaserJet CP4005 printer is installed by using the Add Printer Wizard.

Table 2-2 Availability of automatic discovery and driver configuration through bidirectional communication in Windows 2000, Windows XP, or Windows Server 2003

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

Bidirectional communication

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

Bidirectional communication is the capability of the printer to respond to data inquiries from the computer and report information back, such as what type of print media is available or what accessories are connected to the printer. Bidirectional communication depends on the network operating system and on the type of connection that exists between the computer and the HP Color LaserJet CP4005 printer. If the connection does not have this capability (that is, if it has no bidirectional mode), it can only accept commands from the host and cannot report information back to the host computer.

Enterprise AutoConfiguration

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

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

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

If the HP Color LaserJet CP4005 printer configuration changes after installation, the driver can be automatically updated with the new configuration in environments that support bidirectional communication by using the Update Now feature.

Update Now

If the HP Color LaserJet CP4005 printer configuration has been modified since installation, the driver can be automatically updated with the new configuration in environments that support bidirectional communication. Use the **Update Now** feature to automatically reflect the new configuration in the driver.

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

The feature automatically updates the registry and changes the configuration information that appears on the **Device Settings** tab of the HP PCL 6, PCL 5, and PS emulation drivers.

To activate the **Update Now** feature for these drivers, follow these steps:

- Click Start.
- Select Settings.
- Click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Windows Server 2003) or Printers and Other Hardware Devices (Windows XP Home).
- Right-click the printer name.
- 5. Click Printing Preferences.
- Click Device Settings.
- 7. If necessary, click **Installable Options** to expand it and show the options.
- 8. In the Automatic Configuration drop-down menu, select Update Now.
- 9. Click **OK** to save the setting.

HP Driver Preconfiguration

HP Driver Preconfiguration is a software architecture and set of tools for customizing and distributing HP printing-system software in managed corporate printing environments. Using HP Driver

Preconfiguration, information technology (IT) administrators in corporate and enterprise environments can preconfigure the printing and printer defaults for HP print drivers before installing the drivers in the network environment.

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

- Device settings
- Printing-preferences settings

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

The preconfiguration process consists of three basic steps:

- Driver acquisition
- Driver preconfiguration
- Driver installation and deployment

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

The configuration process for driver preconfiguration is supported through three distinct tools. All three are designed with the same basic user-interface (UI) controls for interacting with the .CFG file, but are packaged differently, either to support established printer installation workflows or to allow the user to deploy and install the driver. The following tools support driver preconfiguration:

• HP Driver Configuration Editor. The HP Driver Configuration Editor is a small standalone MS Windows software program that administrators can use to open the .CFG file that is associated with a particular driver and make modifications that are applied when that driver is installed on the target computer. Use it in environments that have an established process for deploying drivers. It is used in the same way as any ordinary MS Windows software program.

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

www.hp.com/go/hpdpc

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

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

www.hp.com/bizsupport/wja/live/manual/8.0/html/wjacomp_winnt.html

Customization Utility. The Customization Utility enables an IT administrator to preconfigure the
printer drivers as part of customizing the printing system software installation preparing for a silent
install.

For detailed information about customizing print drivers within the Customization Utility, download the *HP Preconfiguration Utility User Guide* from the following Web site:

www.hp.com/go/hpdpc

The HP Driver Preconfiguration Support Guide is included in the download.

Topics:

- Lockable features
- Continuous export

Lockable features

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

- Print on Both Sides (duplex). The options are True or False.
- Print in Grayscale. The options are Disable or Enabled.
- **Media Type.** The options include all the media types that the HP Color LaserJet CP4005 supports.
- Paper Source. The options are Printer Auto Select, Manual Feed (Tray 1), Tray 1, Tray 2, or Tray 3.

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

Continuous export

The term "continuous export" refers to the ability of the driver to copy the latest driver settings back to the working copy of the preconfiguration file. Using this feature, the exported values can be transferred when a compatible version of the driver is used to upgrade the print driver. For instance, if the orientation is set to **Landscape** in a driver that was originally installed in Windows 2000, then the orientation setting automatically remains **Landscape** when the operating system is upgraded to Windows XP or Windows Server 2003. The continuous-export feature functions transparently from the user's perspective and works only between drivers of identical printer models.



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

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 CP4005 printer is in use. Two methods are available to gain access to the HP Driver Diagnostic Printer Check Tool:

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

www.hp.com/go/drivercheck

Alternatively:

- 1. Open an Internet browser.
- 2. Go to the HP Business Support Center (BSC) at the following Web site:

www.hp.com/go/bsc

- 3. Click the **self-help resources** link on the left navigation bar.
- 4. Click automatic driver checker to run the HP Driver Diagnostic Printer Check Tool.

When the HP Driver Diagnostic Printer Check Tool runs, the devices that are currently installed on the computer appear in a list. The tool gathers information about the printer, 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 device 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.

International Color Consortium profiles

HP provides cyan-magenta-yellow-black (CMYK) (HP4005C.ICM) and standard red-green-blue (sRGB) (HP4005R.ICM) International Color Consortium (ICC) profiles with the HP Color LaserJet CP4005 printer. The CMYK profile can only be used with a postscript driver; the sRGB profile can be used with any of the HP Color LaserJet CP4005 drivers. The profiles are available at the following HP Web site:

www.hp.com/support/ljcp4005

The ICC profiles describe the way color will be interpreted in the default CMYK and RGB modes. These profiles can be used for color conversions in a color-managed workflow. The sRGB profile matches the default RGB mode (sRGB), which is enabled with the **Default (sRGB)** or **Color** setting in either a PCL or postscript driver. The printer interprets CMYK data according to the Specifications for Web Offset Publications (SWOP) simulation when **Default CMYK+** is the selected **CMYK Color** setting in the postscript driver, and a more accurate SWOP rendering can be produced by selecting the **SWOP** setting. This standard defines how a particular set of CMYK ink colors should behave. Emulation for Dainippon Press (DIC) and Euro-standard CMYK inks used in Asia and Europe are also available and can be selected from the printer driver.

PANTONE color profiles

Most software programs that support the use of PANTONE* colors for graphic objects will include the PANTONE* name in the postscript output along with the color values that are assigned to the object. For best results, select an application that uses PANTONE* palette in a CMYK workspace and print with the Postscript driver with the SWOP inkset emulation selected.

PS Emulation driver in Windows 2000, Windows XP, and Windows Server 2003

When **SWOP** is selected as the **CMYK Color** setting, these CMYK values provides a good reproduction of the PANTONE* 4C spot-color simulations.

PANTONE* provides device- and software-specific palettes for some HP Color LaserJet products. Using the custom colors in these palettes can provide an alternative match to the 4C spot-color simulation. However, files that use these palettes are not portable to other devices.

PANTONE* Application Palettes are available at the following Web site:

www.hp.com/support/ljcp4005

Vector graphics, such as company logos that are created in PANTONE* Application Palettes, can be imported into Microsoft Word, PowerPoint, or other Microsoft Office software programs. For importation, the color program must create an encapsulated postscript (.EPS) file of the image. By using the **Insert file** function, you can then import the file into the Office document.



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

HP Easy Printer Care

HP Easy Printer Care software is designed for end users and for those who keep devices up and running in small and large business groups. View the status of up to 15 supported HP LaserJet devices, set up alerts, generate usage reports, and reorder supplies from HP or select resellers.

The HP Easy Printer Care Software is available through a link in the printing-system software CD, or on the Web at the following Web site:

www.hp.com/go/easyprintercare

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HP Embedded Web Server

The HP Embedded Web Server (HP EWS) is a standard feature on all HP Color LaserJet CP4005 printer models that are connected through a network.

The HP EWS provides a simple, easy-to-use solution for one-to-one device management. Instead of installing management software, such as HP Web Jetadmin, use HP EWS for remote management in offices that have a limited number of devices. The management console must have a supported Web browser.

In environments that have a larger number of devices, in which one-to-one management is impractical, the HP Embedded Web Server and HP Web Jetadmin work together to provide scalable remote device management. Use HP Web Jetadmin to consolidate management tasks and perform operations on a selected set of devices. For such environments, HP provides hooks between the HP EWS and HP Web Jetadmin so that HP EWS features can be configured on multiple devices in one operation. For example, you can set the security password for the HP EWS simultaneously on a cluster of devices.

The *HP Embedded Web Server User Guide* is available on the printing-system software CD. Or, for additional information and a copy of the *HP Embedded Web Server User Guide*, go to:

www.hp.com/support/ljcp4005

Topics:

- Access to the HP EWS
- The HP EWS frame
- Information tab
- Links to off-product solutions
- Device Status screen
- Configuration Page screen
- Settings tab
- Configure Device screen
- Alerts
- Security
- Networking tab

Access to the HP EWS

To open the HP EWS and view information about the HP Color LaserJet CP4005 printer, open a supported Web browser and type the printer transmission control protocol/internet protocol (TCP/IP) address or host name in the address field.

To find the printer TCP/IP address, look for **IP Address** on the printer configuration page (the Embedded Jetdirect page), which can be printed from the printer control-panel display. Follow these steps to print an Embedded Jetdirect page:

- Press
 ✓ (the Select button).
- 2. Press ▲ (the up button) and ▼ (the down) buttons to scroll to INFORMATION, and then press ✓.
- 3. Press ▲ and ▼ to scroll to PRINT CONFIGURATION.
- Press
 ✓ to print the configuration page.

The HP EWS frame

Each screen in the HP EWS is a frame that contains a top banner, three category tabs, a left-aligned navigation menu bar, and a main-content area. Selecting one of the category tabs causes the corresponding left-aligned navigation bar to appear, where a menu includes links to content for that tab. The main-content area shows information and opens options in response to navigation-tab selections and menu-bar selections.



NOTE When the HP EWS screens are opened immediately after the printer is turned on, the HP EWS screens may change as you browse. Complete information becomes available when the printer enters the **Ready** state.

Information tab

The following information is available on the HP EWS **Information** tab. Click the menu items on the left side of the HP EWS **Information** tab to view the information on each screen.



NOTE If an HP EWS password has been set, the **Information** tab is the only available tab until the user logs in. See <u>Security on page 49</u> for more information.

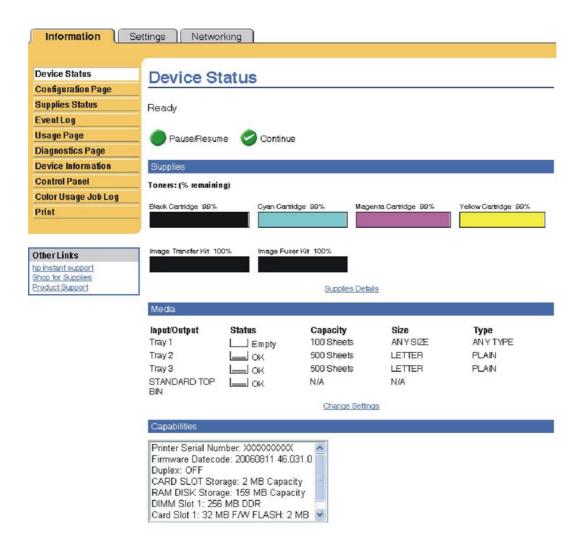


Figure 2-6 HP EWS — Information tab

- **Device Status.** Provides current status information about the printer.
- Configuration Page. Provides information about the printer configuration.
- **Supplies Status.** Provides information about the print cartridge.
- Event log. Provides information about reported printer errors.
- **Usage page.** Provides a page count for each size of media that has passed through the printer, as well as the number of duplexed pages that have been printed.
- **Device Information.** Shows printer information, such as the printer TCP/IP address and serial number.
- Control Panel. Shows the printer control panel.
- Color Usage Job Log. Provides basic printer information and tracks printer usage.
- Print. Includes options to print documents that are print-ready .PCL documents, .PS documents, .PDF files, text (.TXT) files, and files that are generated by a "print to file" driver option.

Not all of the screens on the tab appear in this document. For more information, see the *HP Embedded Web Server User Guide*.

Links to off-product solutions

Links on the HP EWS screens provide an easy way to locate information or complete tasks.

- **hp instant support.** Connects to a set of dynamic Web resources that help solve specific problems and determine additional services that might be available for the printer. Specific status and configuration information about the printer is retained and directed to the "Solve a Problem" Web site, which offers targeted support content and messages.
- **Shop for Supplies.** Connects to an HP product supplies screen where you can order genuine HP supplies for the printer.
- Product Support. Connects to an HP product-support screen where you can search for information, contact the HP customer-care home page, or find additional resources for the printer.

Device Status screen

Status information, such as whether the printer is online or the toner is low, is available through a Web browser on a computer that is linked directly to the printer. View this information without going to the printer to identify the status.



NOTE For more information, see the HP Embedded Web Server User Guide.

The following figure shows how this information is presented on the printer Web page.

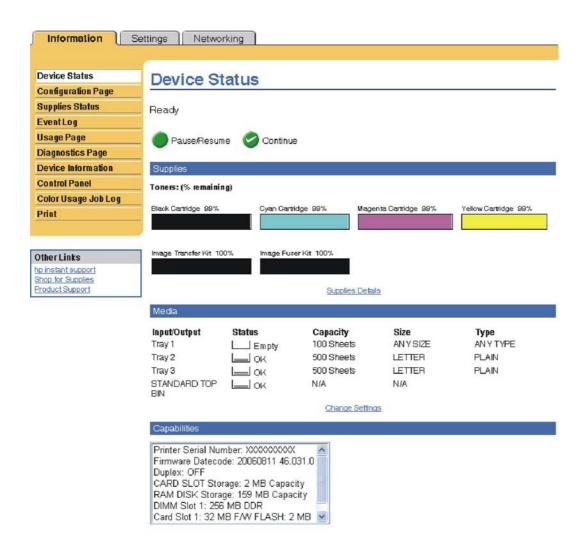


Figure 2-7 HP EWS Information tab – Device Status screen

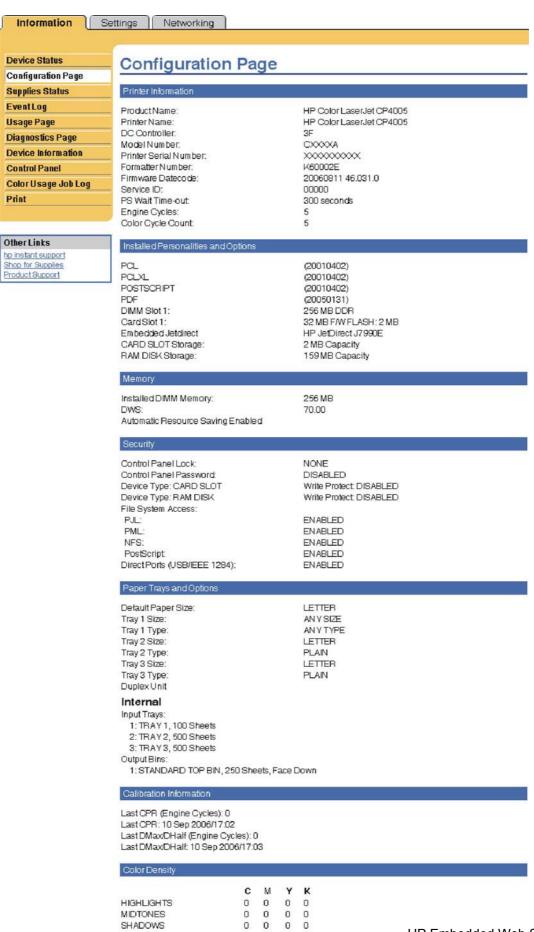
Configuration Page screen

Gain access to the HP Color LaserJet CP4005 printer configuration page remotely through the HP EWS. The HP EWS **Configuration Page** screen provides configuration information about the printer in the same way as the configuration page that is printed from the printer.



NOTE For more information, see the *HP Embedded Web Server User Guide*.

The following figures show an example of a configuration page viewed remotely through the HP EWS.



ENWW

Settings tab

The following information is available on the HP EWS **Settings** tab. Click the menu items on the left side of the HP EWS **Settings** tab to view the information.



Figure 2-9 HP EWS — Settings tab

- **Configure Device.** Use the **Configure Device** screen to print printer information pages and configure the printer remotely.
- E-mail Server. Use the E-mail Server screen to configure e-mail settings for outgoing e-mail.
- Alerts. IT administrators can use the Alerts screen to configure the printer to send alerts in e-mail messages to anyone.
- AutoSend. Use the AutoSend screen to send printer-configuration and supplies-usage information periodically to your service provider.
- Security. Use the Security screen to manage security for the printer.
- Edit Other Links. Use the Edit Other Links screen to add or customize up to five links to the Web sites of your choice.
- Device Information. Use the Device Information screen to provide a name of your choice for the
 printer, assign an asset number, and configure the company name, the person to contact about
 the printer, and the physical location of the printer.
- Language. Use the Language screen to select the language in which the HP EWS screens appear.
- Date & Time. Use the Date & Time screen to set the correct date and time for the printer.
- Wake Time. IT administrators can use the Wake Time screen to schedule the printer to turn on at a certain time on a daily basis.
- Restrict Color. Use the Restrict Color screen to restrict color printing for all users or for specific
 users and/or applications.

Not all of the screens on the tab appear in this document. For more information, see the *HP Embedded Web Server User Guide*.

Configure Device screen

You can obtain printer configuration information through a Web browser by opening the HP EWS screen and changing the basic configuration information on the **Settings** tab. Security and password controls give management information systems (MIS) managers the level of control that they require within their network environments.



IOTE For more information, see the HP Embedded Web Server User Guide.

The following figure shows an example of printer options that can be configured remotely.



Figure 2-10 HP EWS Settings tab – Configure Device screen

Alerts

The printer can automatically send e-mail alerts about printing problems or job status to specified e-mail addresses. For example, if toner is low, the printer can notify the person who is responsible for ordering or changing the print cartridge. If a printer failure occurs, the printer can send an e-mail alert directly to the person who is responsible for fixing the problem.

These e-mail alerts can be configured to be sent to any printer that can accept e-mail, such as digital phones, pagers, and personal digital assistants (PDAs). In large environments, administrators can route e-mail addresses to list-servers or uniform resource locators (URLs) for expanded notification.



NOTE For more information, see the *HP Embedded Web Server User Guide*.

The following figures show examples of the Alerts settings that can be configured remotely.

nfigure Device	Alerts - setup					
mail Server	Alerts - Setup					
erts						
toSend	Step 1: Type the alert destination	Step 1: Type the alert destination				
curity	Type the alert destination in any of the follow	Type the alert destination in any of the following forms:				
vice Information	An e-mail address (e.g., your-name@your-	An e-mail address (e.g., your-name@your-company.com)				
nguage		A mobile device (e.g., 208-555-5555@mobile~company.net)				
te & Time	A posting to a website (e.g., <http: td="" www.you<=""><td>ir~server.com>)</td><td></td></http:>	ir~server.com>)				
ike Time	Alert Destination:		7			
strict Color						
	Step 2: Select Alerts					
er Links	Select the alerts that you would like the aler	t destination to receive. The	most common alerts are listed here.			
nstant support	Alert Name	Selected	Threshold			
p for Supplies	Order Cartridge		13 (0-100) percent			
duct Support	Replace Cartridge	_				
	New UR Consolidate Head					
	Non-HP Supply Installed					
	Remove Paper Jam					
	Close Drawers, Doors And Covers					
	Tray Open					
	Tray Empty (Load)	П				
		-				
			*C hanges to threshold values apply all destinations for this device.			
	Additional Alerts					
	To view all of the alerts for this product, click the Show All Alerts button,					
	Note: Clicking this button saves your current changes and opens the page that lists all of the alerts options.					
	Show All Alerts					
	Step 3: Select Control Panel Messages to Suppress					
	Select the message(s) below that you do not want to show on the device control panel. The option is available only if the					
	select the message(s) below that you do not want to show on the device control panel. The option is available only if the corresponding e-mail alert has been selected in the previous step.					
	☐ Order and Replace Cartridge					
	Step 4: Select e-mail attachments (optional)					
	Select the attachments that you want to include with each e-mail alert message. Go to the Information tab to see example of these pages.					
	Supplies Status Page					
	☐ Usage Page					
	☐ Configuration Page					
	☐ Event Log Page					
	Select this option if the alert destination you	have chosen to receive ale	rts is an automated computer system.			
	☐ XML Data	nave chosen to receive are				

Figure 2-11 HP EWS Settings tab – Alerts screen

Security

The HP EWS screens that appear, and the settings on them, vary according to the specific HP EWS. Three modes of user access are possible:

- General user
- IT administrator
- Service provider

To control access to the HP EWS screens, set a password on the **Security** page.

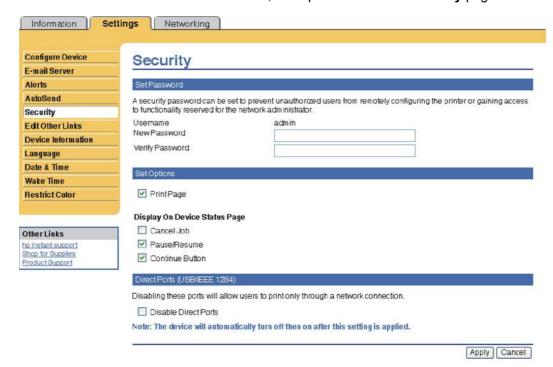


Figure 2-12 HP EWS Settings tab - Security screen

In a password-protected HP EWS, only the **Information** tab is available to users who do not log in by using the password. If no password is set (which is the default configuration), all of the tabs are available.

If a password has been set, log on as an IT administrator or a service provider to gain access to the protected HP EWS tabs (**Settings** and **Networking**).



NOTE For more information, see the HP Embedded Web Server User Guide.

Networking tab

The HP EWS **Networking** tab provides access to HP Jetdirect network configuration parameters and status for the printer.

An example of the HP EWS **Networking** tab is shown in the following figure.

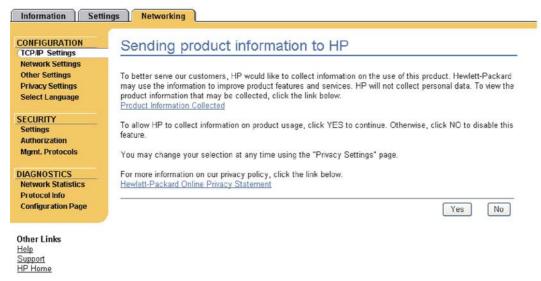


Figure 2-13 HP EWS Networking tab – Network Settings screen

For more information, see the HP Jetdirect Administrator's Guide.

HP Web Jetadmin

Use the HP Web Jetadmin and a browser to manage HP Jetdirect-connected devices within an intranet. HP Web Jetadmin is a browser-based management tool that should be installed only on a single network-administration server.

To download a current version of HP Web Jetadmin, and for the latest list of host systems that support HP Web Jetadmin, go to the following Web site:

www.hp.com/go/webjetadmin

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3 Install MS Windows printing-system components

Introduction

The HP Color LaserJet CP4005 printer comes with software and installers for MS Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX systems support the HP Color LaserJet CP4005 printer, and software is available on the Web. This document provides procedures for installing and removing the HP Color LaserJet CP4005 printing-system software for MS Windows operating systems.

Topics:

- Font support
- Print-driver installation instructions

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Font support

The following sections list the fonts that are included with MS Windows software, and the fonts that are available on the CD that came with the printer.

Topics:

- Basic fonts
- Default fonts

Basic fonts

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

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

Default fonts

The following default fonts are installed through a Full Installation of the HP Color LaserJet CP4005 printing-system software.

Table 3-1 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

Table 3-1 Default fonts (continued)

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Font name	Font style	File name
CG Omega	Regular	CGOR45W.TTF
CG Omega	Bold	CGOR65W.TTF
CG Omega	Bold Italic	CGOR66W.TTF
CG Omega	Italic	CGOR46W.TTF
CG Times	Regular	CGTR45W.TTF
CG Times	Bold	CGTR65W.TTF
CG Times	Bold Italic	CGTR66W.TTF
CG Times	Italic	CGTR46W.TTF
Clarendon Condensed	Bold	CLAR67W.TTF
Coronet	Regular	CORONET.TTF
CourierPS	Regular	CPSR45W.TTF
CourierPS	Bold	CPSR65W.TTF
CourierPS	Bold Oblique	CPSR66W.TTF
CourierPS	Oblique	CPSR46W.TTF
Garamond	Antiqua	GARR45W.TTF
Garamond	Halbfett	GARR65W.TTF
Garamond	Kursiv	GARR46W.TTF
Garamond	Kursiv Halbfett	GARR66W.TTF
Helvetica®	Regular	HELR45W.TTF
Helvetica	Bold	HELR65W.TTF
Helvetica	Bold Oblique	HELR66W.TTF
Helvetica	Oblique	HELR46W.TTF
Helvetica Narrow	Regular	HELR47W.TTF
Helvetica Narrow	Bold	HELR67W.TTF
Helvetica Narrow	Bold Oblique	HELR68W.TTF
Helvetica Narrow	Oblique	HELR48W.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

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Table 3-1 Default fonts (continued)

Font name	Font style	File name
ITC Zapf Chancery	Medium Italic	CHANCTTF
ITC Zapf Dingbats	Regular	DINGSTTF
Letter Gothic	Regular	LETR45W.TTF
Letter Gothic	Bold	LETR65W.TTF
Letter Gothic	Italic	LETR46W.TTF
Marigold	Regular	MARIGOLD.TTF
New Century Schoolbook	Bold	NCSR75W.TTF
New Century Schoolbook	Bold Italic	NCSR76W.TTF
New Century Schoolbook	Italic	NCSR56W.TTF
New Century Schoolbook	Roman	NCSR55W.TTF
Palatino	Bold	PALR65W.TTF
Palatino	Bold Italic	PALR66W.TTF
Palatino	Italic	PALR46W.TTF
Palatino	Roman	PALR45W.TTF
SymbolPS	Regular	SYMPSTTF
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	Medium	UNVR55W.TTF
Univers	Medium Italic	UNVR56W.TTF
Univers Condensed	Bold	UNVR67W.TTF
Univers Condensed	Bold Italic	UNVR68W.TTF
Univers Condensed	Medium	UNVR57W.TTF
Univers Condensed	Medium Italic	UNVR58W.TTF

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

Table 3-2 Additional PS emulation fonts

Font name	Font style	File name
Albertus MT	Regular	PS_12639.TTF
Albertus MT	Italic	PS_12640.TTF

Table 3-2 Additional PS emulation fonts (continued)

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

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Table 3-2 Additional PS emulation fonts (continued)

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

Table 3-2 Additional PS emulation fonts (continued)

Font name	Font style	File name
Optima	Bold Italic	PS_12511.TTF
Optima	Italic	PS_12507.TTF
Oxford	Italic	PS_14072.TTF
StempelGaramond Roman	Italic	PS_11546.TTF
StempelGaramond Roman	Regular	PS_11545.TTF
StempelGaramond Roman	Bold	PS_11547.TTF
StempelGaramond Roman	Bold Italic	PS_11548.TTF
Taffy	Regular	PS_14507.TTF
Univers 45 Light	Regular	PS_13501.TTF
Univers 45 Light	Bold	PS_14023.TTF
Univers 45 Light	Bold Italic	PS_14024.TTF
Univers 45 Light	Italic	PS_13502.TTF
Univers 47 CondensedLight	Bold	PS_14030.TTF
Univers 47 CondensedLight	Bold Italic	PS_14040.TTF
Univers 55	Regular	PS_14021.TTF
Univers 55	Italic	PS_14022.TTF
Univers 57 Condensed	Regular	PS_14029.TTF
Univers 57 Condensed	Italic	PS_14039.TTF
Univers ExtendedPS	Bold	PS_13548.TTF
Univers ExtendedPS	Regular	PS_13547.TTF
Univers ExtendedPS	Bold Italic	PS_14481.TTF
Univers ExtendedPS	Italic	PS_14480.TTF

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Print-driver installation instructions

Topics:

- General MS Windows installation instructions
- Detailed MS Windows installation instructions
- Set a default printer

General MS Windows installation instructions

Installation is similar for the Windows 2000 and Windows XP operating systems.

If the HP Color LaserJet CP4005 printer is connected through a file or print server, the printing-system software must be installed on the server before installation on any client systems. If the HP LaserJet printing-system software is not first installed on the server, then bidirectional communication and some driver autoconfiguration methods are not available to the client systems.

For Windows 2000 and Windows XP, the person installing the software must have administrator rights on the system.

When the HP Color LaserJet CP4005 printing-system installer runs, the HP LaserJet uninstaller is added to the system.

Topics:

- Install from the printing-system CD
- Install from a network or from downloaded files

Install from the printing-system CD

Follow these instructions to install the HP Color LaserJet CP4005 printing-system software from the CD that came with the printer.

- Quit all unnecessary software programs.
- 2. Insert the CD in the CD-ROM drive.



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

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

Install from a network or from downloaded files

Follow these instructions when installing printing-system files downloaded from the Web, or when installing files from a network. See your network administrator for the location of the printing-system software file.

- Browse to the location of the SETUP.EXE file.
- 2. Double-click the SETUP.EXE file.
- 3. Click **Install Printer** and continue to follow the instructions until the printer is installed. For detailed installation instructions, see Detailed MS Windows installation instructions on page 61.

Detailed MS Windows installation instructions

A series of dialog boxes appear during installation of the HP Color LaserJet CP4005 printing-system software in MS Windows environments.

Topics:

- Help, Back, Next, and Cancel buttons
- Direct-connect installation through a USB port
- Unsupported operating system dialog box
- Installation dialog-box sequence
- Modify a pre-existing installation
- Install drivers by using Add Printer
- Installer Customization Wizard for Windows
- Point and Print installation for Windows 2000, Windows XP, and Windows Server 2003

Help, Back, Next, and Cancel buttons

Click the **Help** button on any screen where it appears to find suggestions for and explanations about the installation process.

Click the **Back** button in any installation dialog box to return to the previous dialog box. The specific dialog box depends on previous selections.

Select any options on a given screen and click the **Next** button to proceed to the next step in the installation sequence.

To exit the installation sequence without installing the printer, follow these steps from any dialog box where the **Cancel** button appears.

1. Click **Cancel**. A dialog box opens that prompts you with this question: "Are you sure you want to cancel the installation?"



Figure 3-1 Are you sure you want to cancel the installation? dialog box

Click Yes. The Cancel dialog box opens, stating that the setup was interrupted.

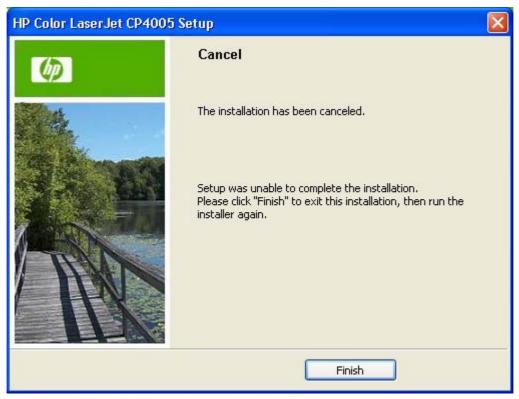


Figure 3-2 Cancel dialog box

3. Click Finish to close the installation screens.

Direct-connect installation through a USB port

The printing-system software should be installed *before* the HP Color LaserJet CP4005 printer is connected to the computer through a USB connection and turned on. During the installation process, the software generates a prompt to connect the printer.

Unsupported operating system dialog box

The MS Windows NT 4.0 and MS Windows 98 operating systems do not support the HP Color LaserJet CP4005 printer. When attempting to install the software in these environments, an **Unsupported Operating System** dialog box appears.

An example of an Unsupported Operating System dialog box is shown in the following figure.



Figure 3-3 Setup Error – Unsupported Operating System, MS Windows NT 4.0

Installation dialog-box sequence



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

Select the **Install Printer** option from the HP Color LaserJet CP4005 printing-system software CD. The **Language Selection** dialog box appears.



Figure 3-4 Language Selection dialog box



NOTE The **Language Selection** dialog box lists only the languages that are available on the HP Color LaserJet CP4005 printing-system software CD.

The installer automatically detects the language that the computer system uses and presents this selection as the default.

Select any other language that is available on the CD by clicking the down arrow on the drop-down menu.

Click **OK** to initiate the printing-system setup. The **Welcome** dialog box appears.

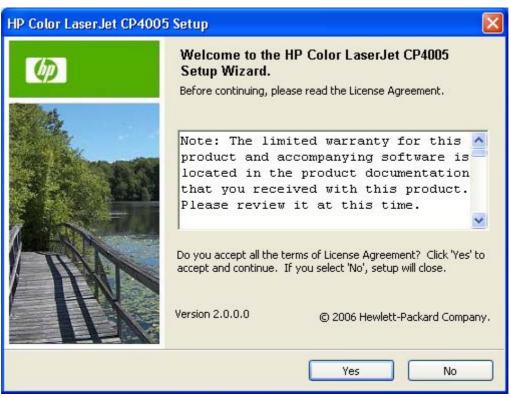


Figure 3-5 Welcome to the HP Color LaserJet CP4005 Setup Wizard dialog box

Read the software-license agreement, and then click **Yes** to proceed with the installation.

The **Printer Connection** dialog box opens, as shown in the following figure.

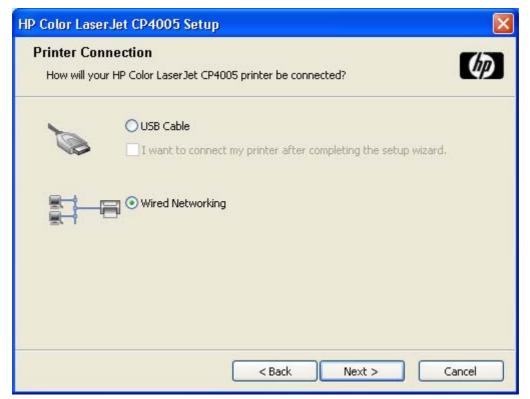


Figure 3-6 Printer Connection dialog box

Two options are available in the **Printer Connection** dialog box:

USB Cable.

The I want to connect my printer after completing the setup wizard check box is unchecked by default. Select this check box to install the software now but connect to your printer at a later time.

Wired Networking.



NOTE The HP Color LaserJet CP4005 printer does not support infrared connections or connections over a parallel port.

NOTE The printing-system software should be installed *before* the HP Color LaserJet CP4005 printer is connected to the computer through a USB connection and turned on. During the installation process, the software generates a prompt to connect the printer.

Click **USB Cable** (a "direct connection" using a USB 2.0 cable) and then click **Next**. The **Installation Type** dialog box opens. This is the default option.



NOTE When plugged into an individual unit, a USB port is created during the driver installation. As a result, plugging in five different units results in five new copies of the driver and five new USB ports created. The extra copies can be removed, but the extra ports cannot be deleted unless the extra copies of the driver are deleted with the USB still connected.

If the USB is disconnected, the extra driver copies can be removed, but the extra USB ports cannot be removed.

To continue with the default installation sequence (using a "direct connection"), see <u>Figure 3-19</u> Installation Type dialog box on page 78.

When installing the HP Color LaserJet CP4005 printer over the network, click **Wired Networking** in the **Printer Connection** dialog box.

For a network installation, connect the HP Color LaserJet CP4005 printer to the network and turn it on before installing the printing-system software.



NOTE Wired networking refers to the printer being connected to the network by a network cable. For wireless installation instructions using an HP Jetdirect ew2400 802.11g wireless print server or an HP Direct 380x802.11B wireless print server, consult the documentation that comes with the print server.

Click Next to continue. The Searching dialog box opens, as shown in the following figure.

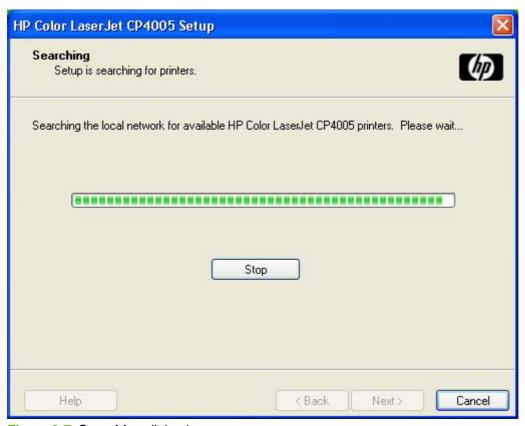


Figure 3-7 Searching dialog box



NOTE When installing the printer over a network, allow the search for the first subnet in the network to finish in order to find all available devices. After the first subnet is scanned for available HP Color LaserJet CP4005 printer, the results appear in the **Printers Found** dialog box. However, the installer continues to search the network for additional devices. The results of the first search usually takes place within about 20 seconds. Subsequently, the search of the other subnets for the full list of devices occurs. The results appear in the **Printers Found** dialog box (see Figure 3-10 Printers Found dialog box on page 69).

NOTE If the printer does not appear, the installation process includes the option of using the TCP/IP address for the HP Color LaserJet CP4005 printer, which might be preferable to waiting for the installer to finish the search.

If the network has a firewall that is blocking the installation, the **Firewall Detected** dialog box appears, as shown in the following figure.

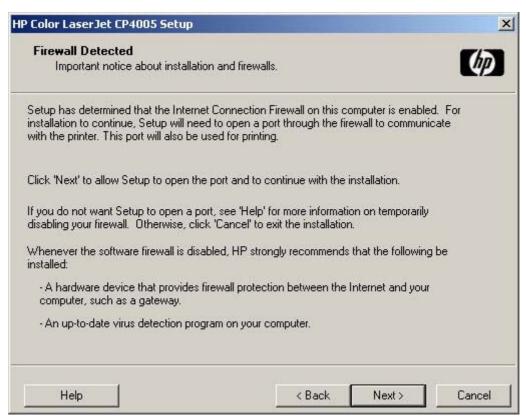


Figure 3-8 Firewall Detected dialog box

If no printer is found during a network installation, the **Printer Not Found** dialog box appears, as shown in the following figure.

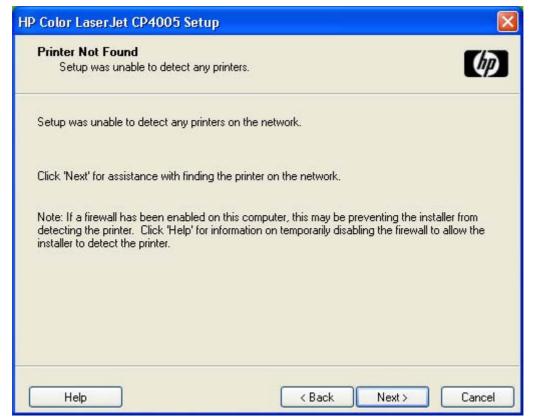


Figure 3-9 Printer Not Found dialog box

If this dialog box appears, the printer might not be connected to the network. Ensure that the printer is connected and turned on. If a firewall is blocking the installation and you want the installer to open a port through the firewall, click **Next**.

The Searching dialog box appears (see Figure 3-7 Searching dialog box on page 66).

If the software finds devices, the **Printers Found** dialog box appears, containing a list of matching devices that have been found on the network, as shown in the following example figure.

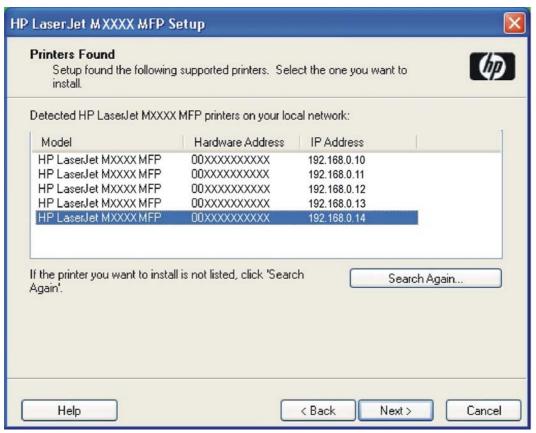


Figure 3-10 Printers Found dialog box

Select the printer to install and click **Next**. The **Confirm Network Settings** dialog box opens (see <u>Figure 3-12 Confirm Network Settings dialog box on page 71</u>).

If the printer to install is not listed and you want the installer to continue searching network subnet masks, select a search option and click **Next** to perform another search.

If the printer to install is not listed and you know its TCP/IP address, click **Search Again...** The **Check Printer Connection** screen appears (see <u>Figure 3-15 Check Printer Connection dialog box on page 74</u>).

If a single printer is found, the **Printer Found** dialog box appears, containing a list of matching printers on the network. The **Printer Found** dialog box is shown in the following figure.

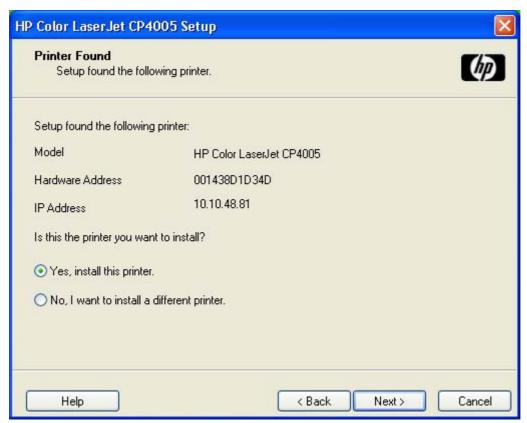


Figure 3-11 Printer Found dialog box

To install a different printer, click **No, I want to install a different printer** and then click **Next**. The **Check Printer Connection** dialog box opens, advising you to make sure the cable is properly connected, and giving you the option of searching again for a network printer or specifying a printer by address (see Figure 3-15 Check Printer Connection dialog box on page 74).

To install the printer listed, click **Yes, install this printer** and then click **Next**. The **Confirm Network Settings** dialog box opens, as shown in the following figure.

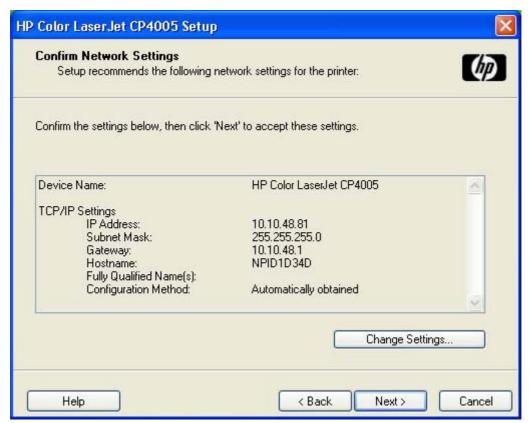


Figure 3-12 Confirm Network Settings dialog box

In the **Confirm Network Settings** dialog box, click **Next** to continue the installation. The **Installation Type** dialog box opens (see <u>Figure 3-19 Installation Type dialog box on page 78</u>).

If you click **Change Settings...**, the **Confirm Change Setting** dialog box opens, as shown in the following figure.



WARNING! When the TCP/IP configuration is changed by using the **Change Settings** button, the actual settings in the printer change. Make changes to these settings only with the advice of the network administrator.

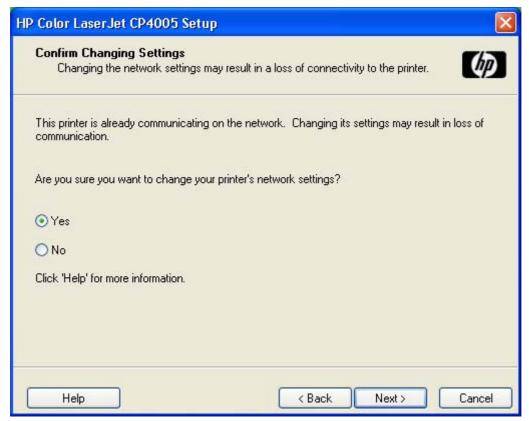


Figure 3-13 Confirm Changing Setting dialog box

If you click **No** in the **Confirm Changing Settings** dialog, the **Installation Type** dialog box opens (see <u>Figure 3-19 Installation Type dialog box on page 78</u>).

If you click **Yes**, the **Change TCP/IP Settings** dialog box opens (see <u>Figure 3-14 Change TCP/IP Settings dialog box on page 73</u>).

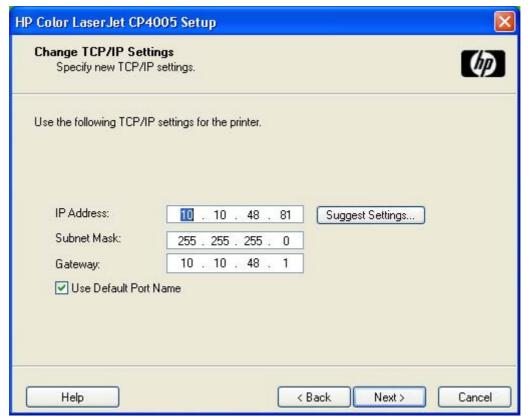


Figure 3-14 Change TCP/IP Settings dialog box

If information in the **IP Address:**, **Subnet Mask:**, or **Gateway:** fields change, click **Suggest Settings...**. The fields refresh with information that was found by the installer and reported in the **Printer Found** screen.

Type a different **IP Address:**, **Subnet Mask:**, or **Gateway:** address and then click **Next** to open the **Confirm Network Settings** dialog box (see <u>Figure 3-12 Confirm Network Settings dialog box on page 71</u>).

If you clear the **Use Default Port Name** check box and click **Next**, the **Set Port Name** dialog box opens (see Figure 3-18 Set Port Name dialog box on page 77).

The Check Printer Connection dialog box, which appears when No, I want to install a different printer is selected in the Printer Found dialog box or if the system failed to detect the printer over the network, is shown in the following figure.

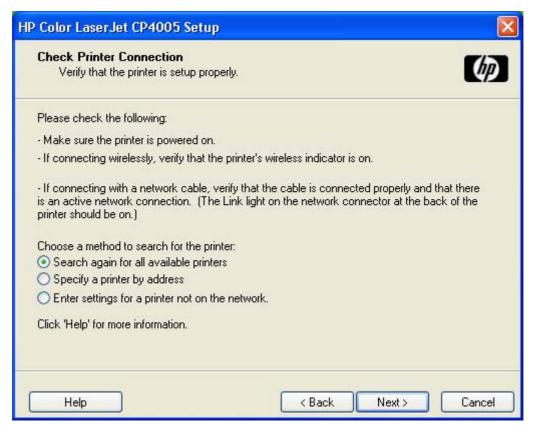


Figure 3-15 Check Printer Connection dialog box

If you click **Search again for all available printers** and then click **Next**, the **Searching** dialog box opens (see Figure 3-7 Searching dialog box on page 66).

If you click **Specify Printer by address** and then click **Next**, the **Specify Printer** dialog box opens. The **Specify Printer** dialog box is shown in the following figure.

If you click **Enter settings for a printer not on the network** and then click **Next**, the **Printer Settings** dialog box opens (see <u>Figure 3-17 Printer Settings dialog box on page 76</u>).

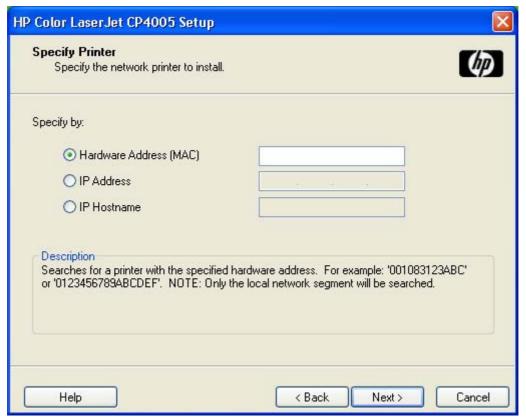


Figure 3-16 Specify Printer dialog box

Specify a printer by clicking one of the following options and typing in the required information:

- Hardware Address (MAC)
- IP Address
- IP Hostname

When you click **Next**, the **Searching** dialog box opens. When the search is finished, the **Printer Found** dialog box opens (see <u>Figure 3-11 Printer Found dialog box on page 70</u>).

If you click **Enter settings for a printer not on the network** in the **Check Printer Connection** dialog box and then click **Next**, the **Printer Settings** dialog box opens, as shown in the following figure.

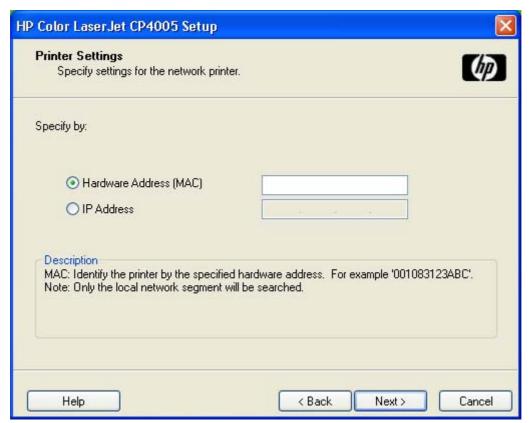


Figure 3-17 Printer Settings dialog box

To install the printer by using the hardware address, click **Hardware Address (MAC)**, type the printer hardware address in the field, and then click **Next** to continue the installation. The **Set Port Name** dialog box opens, as shown in the following figure.

To install the printer using the TCP/IP address, click **IP Address**, type the printer TCP/IP address in the field, and then click **Next** to continue the installation. The **Set Port Name** dialog box opens, as shown in the following figure.

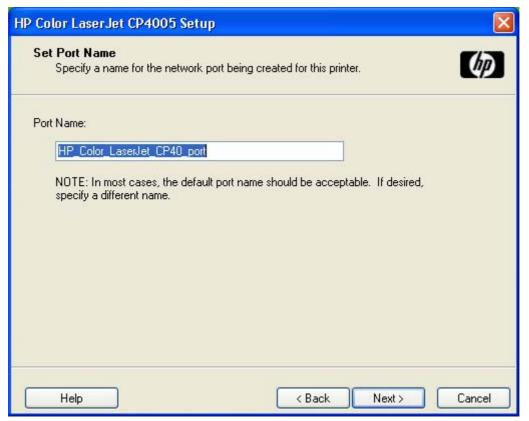


Figure 3-18 Set Port Name dialog box

Type a port name in the **Port Name:** field and click **Next** to open the **Installation Type** dialog box (see <u>Figure 3-19 Installation Type dialog box on page 78</u>).

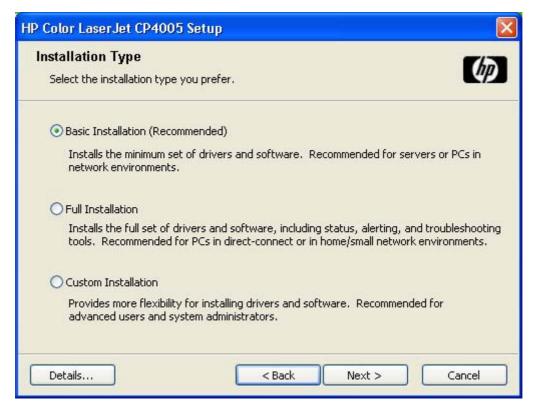


Figure 3-19 Installation Type dialog box

Click **Basic Installation** to install only the HP PCL 6 driver and screen fonts. If you click **Basic Installation** and then click **Next**, the **Ready to Install** dialog box opens (see <u>Figure 3-22 Ready to Install dialog box on page 81</u>).

If you select **Full Installation** and then click **Next**, the **Ready to Install** dialog box opens (see <u>Figure 3-22 Ready to Install dialog box on page 81</u>).

If you select **Custom Installation** and then click **Next**, the **Feature Selection** dialog box opens, as shown in the following figure.



NOTE Select **Custom Installation** to install the HP PCL 5 and PS emulation drivers, as appropriate.

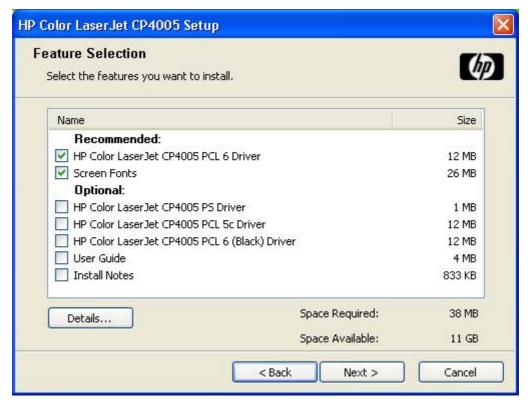


Figure 3-20 Feature Selection dialog box

An empty check box indicates that the feature is not installed. A check mark appears next to any driver or document that is to be installed.

Information about the space required and the space available on the hard drive appears in the dialog box.

Any combination of features can be selected for the installer. It is possible to create a custom installer that installs features without including a print driver. Select the drivers and support documents to install.

To view details about the features, click **Details...**. The **Details** dialog box appears, as shown in the following figure.

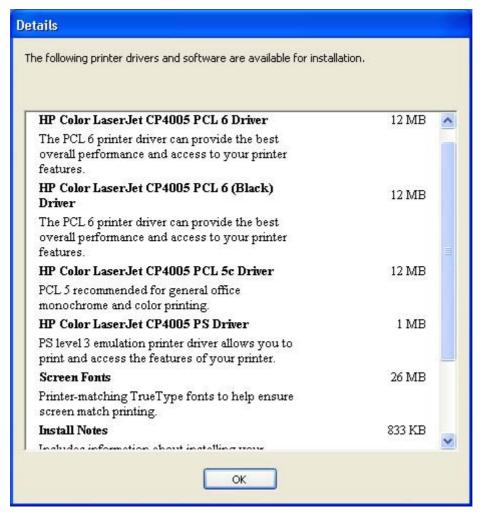


Figure 3-21 Details dialog box

Click **OK** to return to the **Feature Selection** dialog box.

In the Feature Selection dialog box, click Next to continue the installation.

The **Ready to Install** dialog box appears, as shown in the following figure.

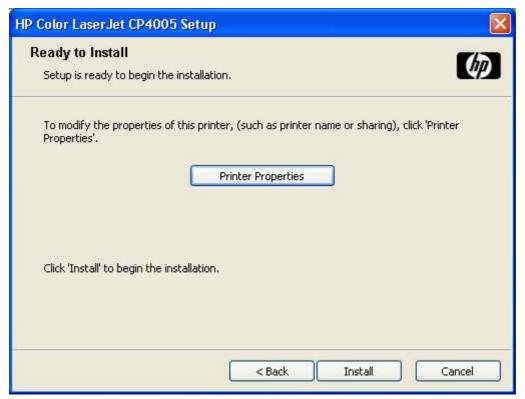


Figure 3-22 Ready to Install dialog box

Click **Install** to start the installation process.

Click **Printer Properties** to open the **Printer Properties** dialog box. The **Printer Properties** dialog box is shown in the following figure.



Figure 3-23 Printer Properties General tab

On the **General** tab, the printer name can be changed by typing a new name in the **Printer Name** field.

Use the **Location**: and **Comment**: fields to describe the printer, as appropriate.

To use the HP Color LaserJet CP4005 printer as the default printer, select the **Use this as the default printer** and select **Yes** in the drop-down menu. **No** is selected by default.

If the device is being installed on a network and it will be shared among users, select **Shared** and then click **Yes** in the drop-down menu. The printer is not shared by default.

Click **OK** to return to the **Ready to Install** dialog box.



NOTE If you share the printer on Windows 2000, Windows XP, or Windows Server 2003 operating systems, type a name. Additional print driver support for other operating systems is also available.

If the printer is not shared, additional driver support is not available.

In the **Ready to Install** dialog box, click **Next** to begin the process of copying and installing the printing-system software folders and files. The **Installation Status** dialog box is shown in the following figure.

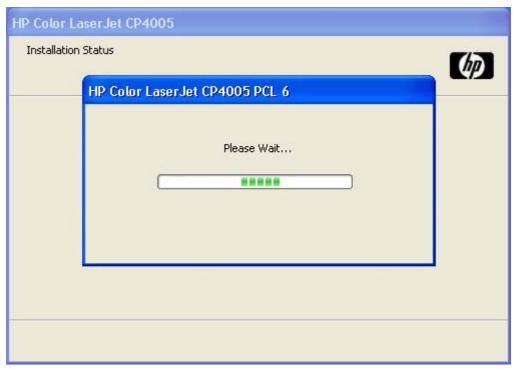


Figure 3-24 Installation Status dialog box

This dialog box remains on the screen until installation is complete.

When the installation is complete, the **Finish** dialog box appears, as shown in the following figure.

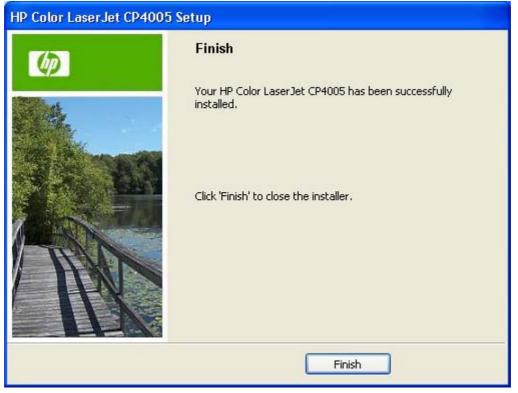


Figure 3-25 Finish dialog box

Click Finish to close the Finish dialog box and exit the installer.



NOTE Depending on the type of installation and selected options, additional steps might appear after you click **Finish**.

The HP Color LaserJet CP4005 Next Steps dialog box appears, as shown in the following figure.

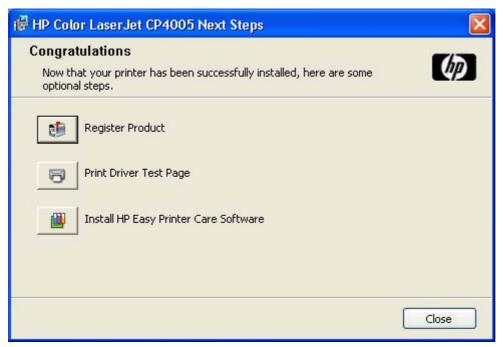


Figure 3-26 HP Color LaserJet CP4005 Next Steps — Congratulations dialog box

To verify that the printer is connected, click **Print Driver Test Page**.

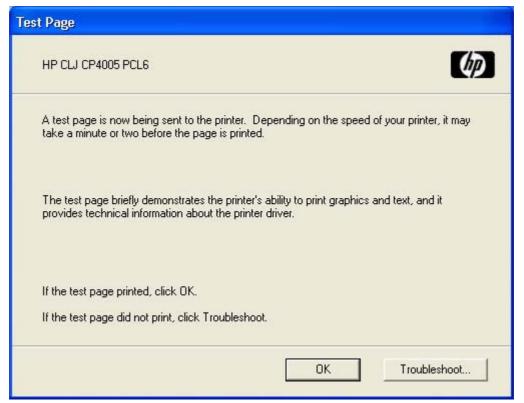


Figure 3-27 Test Page dialog box

If the test page prints correctly, click **OK** to continue. If it does not print, open the **Printer Properties** tab and try to print another test page, or click **Troubleshoot**.

If connected to the Internet, register the printer online. In the **Congratulations** dialog box, click **Register Product** to open the HP Registration Web site, as shown in the following figure.

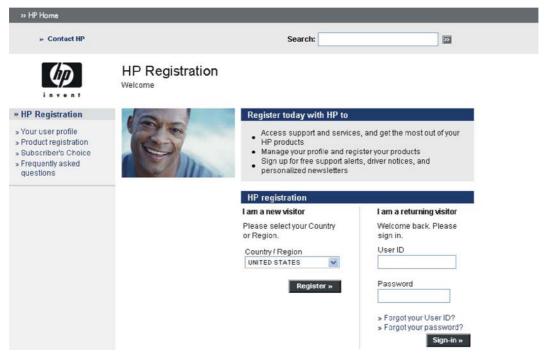


Figure 3-28 HP Registration screen

If connected to the Internet, install the HP Easy Printer Care Software, as appropriate. In the **Congratulations** dialog box, click **Install HP Printer Care Software**.

For more information, go to the HP Printer Care Web site:

www.hp.com/go/easyprintercare

Modify a pre-existing installation

If an HP Color LaserJet CP4005 printer has been previously installed, the appearance of the main installation screen changes on the CD Browser, and the install-printer setting changes to **Modify Installation**. A pre-existing installation also changes the sequence of installation screens appear.

When you click modify installation on the main CD Browser screen, the **Setup Maintenance** dialog box appears, as shown in the following figure.

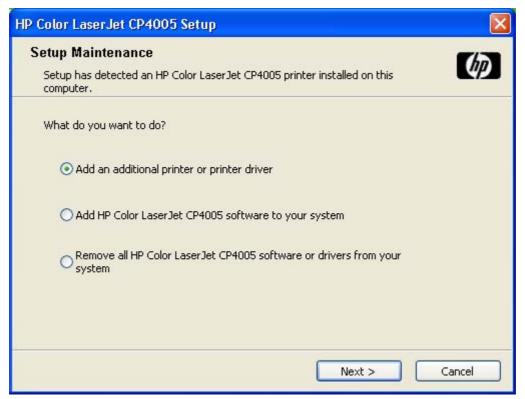


Figure 3-29 Setup Maintenance dialog box

Select the **Add an additional printer or printer driver** option to add a print driver other than the one that was added during the previous installation. When you select this option, the installer discovers a list of available printers upon which to install the software, and a list appears from which to choose the installation type.

Select **Add HP Color LaserJet CP4005 software to your system** to add additional software, or to upgrade drivers you have previously installed on the system. When you select this option, the installer does *not* perform discovery of the previous installation. The options that appear are the same as those that appear when you performed the original installation (see <u>Figure 3-21 Details dialog box on page 80</u>).

Install drivers by using Add Printer

Use the following steps to install the drivers by using the MS Windows Add Printer tool:

- Insert the CD in the CD-ROM drive.
- Go to the Add a printer feature in MS Windows.

In Windows XP, click **Start** on the desktop, click **Settings**, and then click **Printers and Faxes**. The **Printers and Faxes** window appears. Click **Add Printer**. The **Add Printer Wizard** screen appears.

In Windows 2000, click **Start** on the desktop, click **Settings**, click **Printers**, and then click **Add Printer**. The **Add Printer Wizard** screen appears.

Use the Add Printer Wizard to find and connect to the printer. The drivers are loaded as a part of this process. If the computer is running a 64-bit MS Windows operating system, you must install the corresponding 64-bit driver. The 64-bit drivers are included on the software CD-ROM. Use the following steps to install a driver by using the **Add Printer Wizard**.

- 1. Insert the CD in the CD-ROM drive.
- Click Start on the desktop, click Settings, click Printers and Faxes, and then click Add Printer.
 The Add Printer Wizard screen appears.
- Use the Add Printer Wizard to find and connect to the printer. The drivers are loaded as a part of this process.
- 4. Select the Have disk option and navigate to one of the driver files on the software CD in Windows 2000, Windows XP, or Windows Server 2003:
 - To install the HP PCL 6 driver, select the following file:
 - 32-bit: \Drivers\<operating system>\PCL6\hpc4005c.inf
 - 64-bit: \Drivers\<operating system>\PCL6\hpc4005n.inf
 - To install the HP PCL 6 (Black) driver, select the following file:
 - 32-bit: \Drivers\<operating system>\PCL6\hpc400bc.inf
 - 64-bit: \Drivers\<operating system>\PCL6\hpc400bu.inf
 - To install the HP PCL 5 driver, select the following file:
 - 32-bit: \Drivers\operating system>\PCL5\hpc4005b.inf
 - 64-bit: \Drivers\<operating system>\PCL5\hpc4005t.inf
 - To install the PS Emulation driver, select the following file:
 - 32-bit: \Drivers\<operating system>\PS\hpc4005d.inf
 - 64-bit: \Drivers\operating system>\PS\hpc4005v.inf
- Complete the wizard steps. The driver is installed as part of the wizard process.

Installer Customization Wizard for Windows

Administrators can use the **Installer Customization Wizard** option to customize the HP Color LaserJet CP4005 printer installer by preconfiguring the installation options in a response file. To start the utility, click **Installer Customization Wizard** on the main menu of the software CD browser. Using this option, administrators can create a silent (unattended) installer that is customized with any of the following selections:

- Language
- Operating system
- Print drivers
- Components



NOTE For detailed information about the Installer Customization Wizard, see the *HP Device Installer Customization Wizard Readme*. (See <u>HP Device Installer Customization Wizard Readme on page 20</u>.)

Topics:

- Run the Installer Customization Wizard
- Dialog boxes
- Distribution

Run the Installer Customization Wizard

The Installer Customization Wizard runs from the CD. It can be started from the CD browser, depending on printer-specific installation. It runs separately from the common Microsoft Installer (MSI), and has its own interface.

Running the Installer Customization Wizard produces one installation package and a response file (RESPONSE.INI) for a single-system installation. The installation package might work for multiple systems that have the same response information, or the RESPONSE.INI file can be directly edited for system-configuration differences.

For the exact text with which to replace entries in the RESPONSE.INI file, see the *HP Device Installer Customization Wizard Readme*. (See <u>HP Device Installer Customization Wizard Readme</u> on page 20.)

To run the Installer Customization Wizard

- Insert the HP Color LaserJet CP4005 printing-system software CD in the CD-ROM drive.
- In the CD browser main screen, click Optional Software.
- 3. Click Installer Customization Wizard.
- **4.** Follow the instructions in the dialog boxes to complete the installation.

Dialog boxes

The Language Selection dialog box appears, as shown in the following figure.



Figure 3-30 Language Selection dialog box

The language selected in this dialog box is the language in which the Customization Wizard will run during configuration. (This is not necessarily the language in which the customization package will be installed. The customization package language is selected later in the installation.)

Select a language and click **OK**.

The **Welcome** dialog box appears, as shown in the following figure.



Figure 3-31 Welcome to the HP Color LaserJet CP4005 Installation Customization Wizard screen

Click Next in the Welcome to the HP Color LaserJet CP4005 Installation Customization Wizard dialog box.

The **Software License Agreement** dialog box appears, as shown in the following figure.

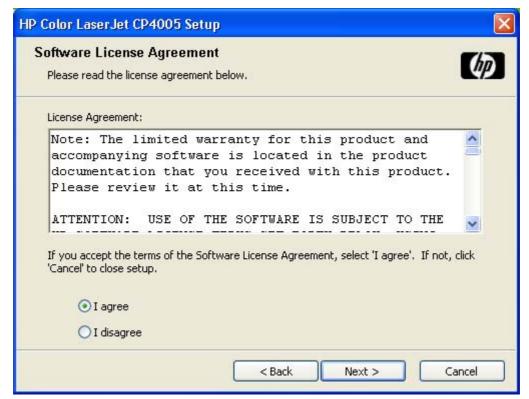


Figure 3-32 Software License Agreement dialog box

To cancel the installation, click **Cancel** on this or any other screen where it appears (see <u>Help, Back, Next, and Cancel buttons on page 61</u>).

Read the software-license agreement, click **I agree**, and then click **Next** to open the **Language** dialog box.

The Language dialog box is shown in the following figure.

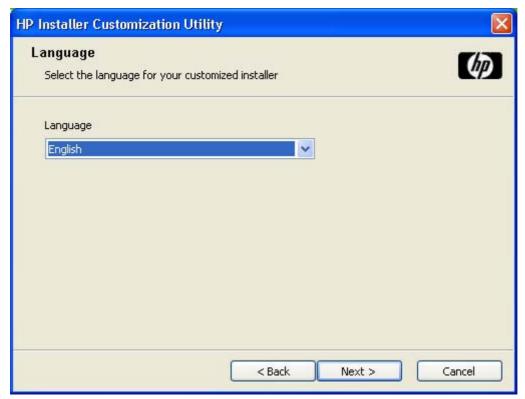


Figure 3-33 Language dialog box

This is the language in which the customization package will be installed. The language selected is installed on the computer regardless of the language of the text in the dialog boxes (as specified in the **Language Selection** dialog box earlier).

The **Language** dialog box defaults to the language that was selected in the **Language Selection** dialog box, but any language that is available on the CD can be selected for the customized installer. The language selection is recorded in the response file.



NOTE After installation, the language used in the driver is limited to the one that was selected in the Language dialog box during installation. Maintenance mode does *not* provide options for changing the language.

To change the language on a system that used an Installer Customization Wizard installation, uninstall the software, and then install a new printer in order to restore the option to install other languages.

Click **Next** to open the **Printer Port** dialog box. The **Printer Port** dialog box is shown in the following figure.

Click **Back** on this or any screen where it appears to return to a previous screen.

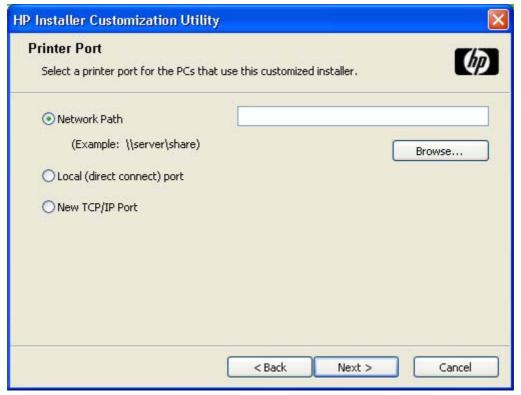


Figure 3-34 Printer Port dialog box

Click **Network Path** to make the text field available for a queue-name entry. If you click **Network Path** and click **Browse**. The **Browse for Printer** dialog box opens, as shown in the following figure.



Figure 3-35 Browse for Printer dialog box

Navigate to a printer and click **OK** to record the path in the **Network Path** field in the **Printer Port** dialog box. Click **Cancel** to close the **Browse for Printer** dialog box.

In the **Printer Port** dialog box, click **Local (direct connect) port** and then click **Next** to open the **Drivers** dialog box (see <u>Figure 3-39 Drivers dialog box on page 96</u>).

In the **Printer Port** dialog box, click **New TCP/IP Port** and then click **Next** to open the **Specify TCP/IP Port** dialog box.

The **Printer Port** dialog box includes all custom network ports that are available on the local system. To use any custom network port for the customized installer, the port must be created identically on the system where it will be used.

The **Printer Port** is shown in the following figure.

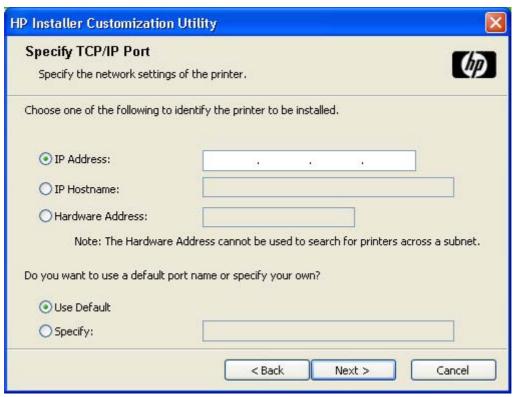


Figure 3-36 Specify TCP/IP Port dialog box

Click **IP Address** to make the field available for typing the TCP/IP address for the printer. Only numerals are allowed in this field. If this option is selected, type at least one digit in the **IP Address** field to prevent an error message from appearing and prompting for a valid IP address.

Click **IP Hostname** to make the field available for typing the IP hostname for the printer. Any characters are allowed in this field, but an error message appears if spaces are included in the field. If this option is selected, type at least one character in the **IP Hostname** field to prevent an error message from appearing and prompting for a valid IP hostname.

Click **Hardware Address** to make the field available for typing the hardware address of the printer. Any characters are allowed in this field, but the entry is limited to 12 characters. If this option is selected, type at least one character in the **Hardware Address** field to prevent an error message from appearing and prompting for a valid hardware address.

After selecting any of the options, type the appropriate name or address and then click **Next**. The **Drivers** dialog box opens. (See Figure 3-39 Drivers dialog box on page 96.)

For each of the options in the **Specify TCP/IP Port** dialog box, either use the default port name (as specified in each of the three options) or specify a different name.

To use the default port name, select **Use Default** and click **Next**. To specify a different name, click **Specify**, type a port name of your choice, and click **Next**. The **Port Creation Options** dialog box appears, as shown in the following figure.

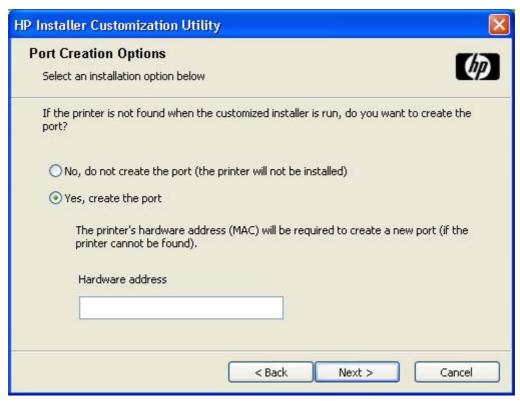


Figure 3-37 Port Creation Options dialog box

Click No, do no create the port (the printer will not be installed) if you do not want to create a port.

If you click **Next** without typing a hardware address, a network setup error message appears, as shown in the following figure.



Figure 3-38 Please enter a Hardware address — Network Setup Error dialog box



NOTE To print a configuration page to see the hardware address, see <u>Print the configuration page on page 251</u>.

If you click **Yes, create the port**, type the printer hardware address in the **Hardware Address** field and then click **Next** to open the **Drivers** dialog box.

The **Drivers** dialog box is shown in the following figure.

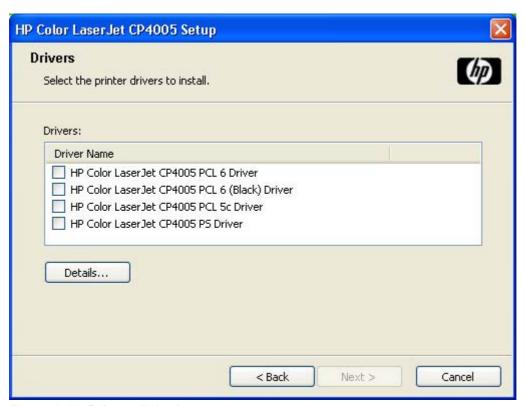


Figure 3-39 Drivers dialog box

Any combination of features can be selected for the installer, and none depends on any other selection. It is possible to create a custom installer that installs features without including a print driver. Select the drivers to install.

To view details about the drivers, click **Details...**. The driver **Details** dialog box appears, as shown in the following figure.

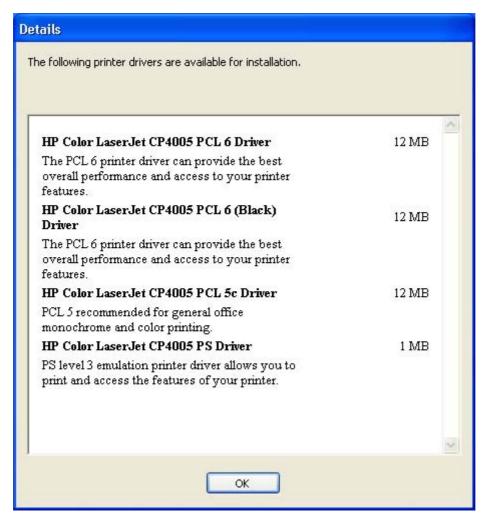


Figure 3-40 Driver Details dialog box

All the drivers that are available on the **Drivers** dialog box are described in the **Details** dialog box. Click **OK** to return to the **Drivers** dialog box.

On the **Drivers** dialog box, select one or more drivers, and click **Next** to continue the installation.

The **Driver Configuration** dialog box appears, as shown in the following figure.

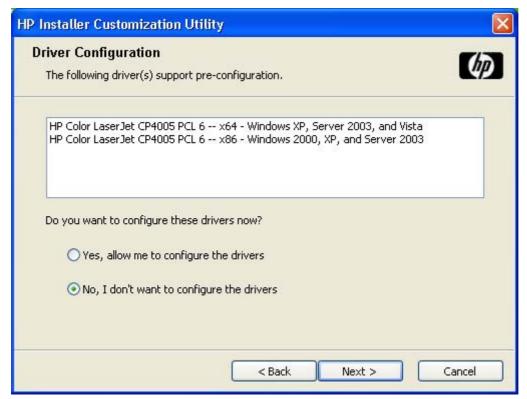


Figure 3-41 Driver Configuration dialog box

To preconfigure the driver settings, select **Yes, allow me to configure the drivers**, and click **Next**. The **Driver Configuration** dialog box changes to show two tabs:

- Printing Preferences
- Device Settings

These tabs are shown in the following figures.

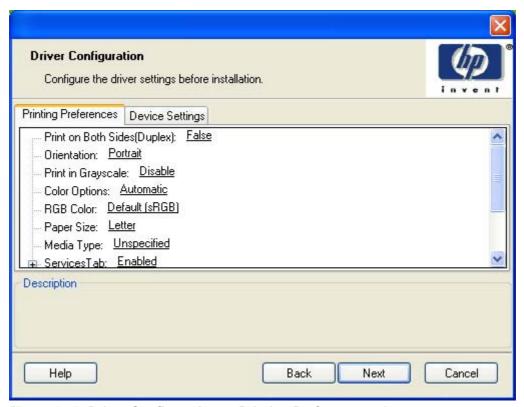


Figure 3-42 Driver Configuration — Printing Preferences tab

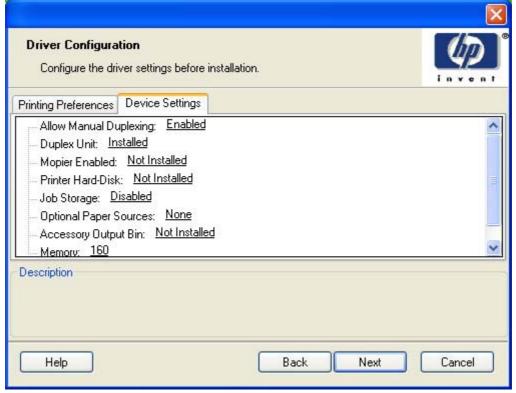


Figure 3-43 Driver Configuration — Device Settings tab

Select the settings on each tab. For each setting, a drop-down menu appears that lists the options. If the setting can be locked, a Lock check box appears beside the drop-down arrow. For example, the **Print on Both Sides (Duplex)** setting can be locked to ensure that users use double-sided printing.

In some instances, an **Invalid Selection** message might appear. For example, when **Left Edge Binding** is selected for the **Booklet Printing** option, an error message appears, as shown in the following figure.



Figure 3-44 Invalid Selection dialog box

When the settings have been selected, click **Next** to continue the installation.

The Additional Software dialog appears, as shown in the following figure.

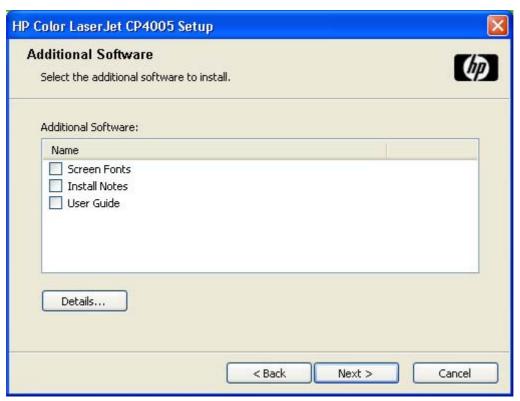


Figure 3-45 Additional Software dialog box

To view details about the additional software, click **Details**. The additional software **Details** dialog box appears, as shown in the following figure.

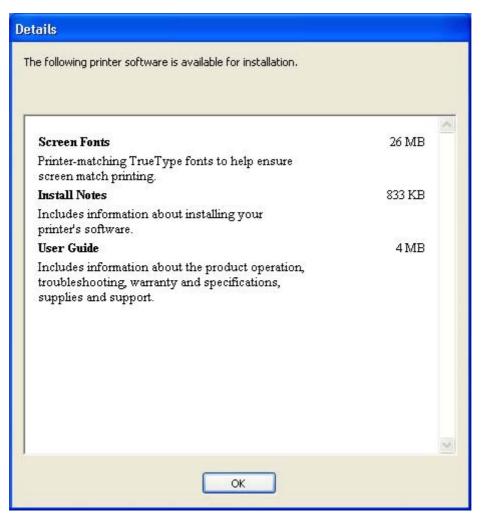


Figure 3-46 Additional software **Details** dialog box

All the software selected in the **Additional Software** dialog box is described in the **Details** dialog box. Click **OK** to return to the **Additional Software** dialog box.

In the Additional Software dialog box, click Next to open the Custom Installer Location dialog box, which is shown in the following figure.

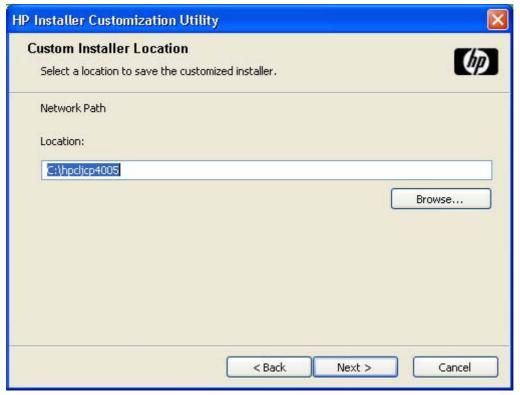


Figure 3-47 Custom Installer Location dialog box

Use the **Location:** text field to type a description of the physical location of the printer. The field is large, but is limited as to the number of characters that it can accommodate.

To change the physical location of the printer, click **Browse...**, navigate to the appropriate folder, and click **OK** to return to the **Custom Installer Location** dialog box.

Click Next to open the Ready to Create Installer dialog box, which is shown in the following figure.

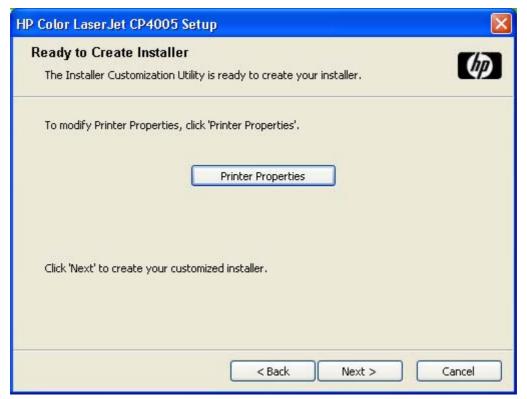


Figure 3-48 Ready to Create Installer dialog box



The location for the installer package defaults to c:\<name of printer>.



NOTE During installation, several files, including system files, are placed at the root of the directory that appears in the Location field. Be sure that enough space is available on the directory before continuing.

Click Printer Properties to open the Printer Properties dialog box, which is shown in the following figure.

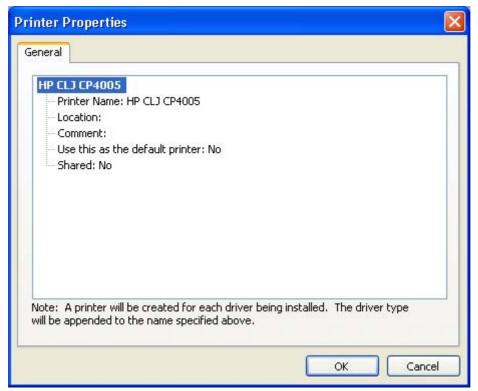


Figure 3-49 Printer Properties General tab

On the **General** tab, change the printer name by typing a new name in the **Printer Name** field, as appropriate.

Use the **Location** and **Comment** fields to describe the printer, or leave these fields blank.

If you want to use the HP Color LaserJet CP4005 printer as your default printer, select **Yes** in the **Use this as the default printer** drop-down menu.

To share the printer over a network, select **Yes** in the **Shared** drop-down menu. The default setting is **No**.

Click **OK** to return to the **Ready to Create Installer** dialog box.

In the **Ready to Create Installer** dialog box, click **Next** to begin the process of copying and installing the printing-system software folders and files. The **Installing** dialog box is shown in the following figure.



Figure 3-50 Installing dialog box

This dialog box remains on the screen until the status bar fills.

Click Cancel to close the Installer Customization Wizard without creating the customized printingsystem software package.

When the creation is complete, the **Finish** dialog box appears, as shown in the following figure.

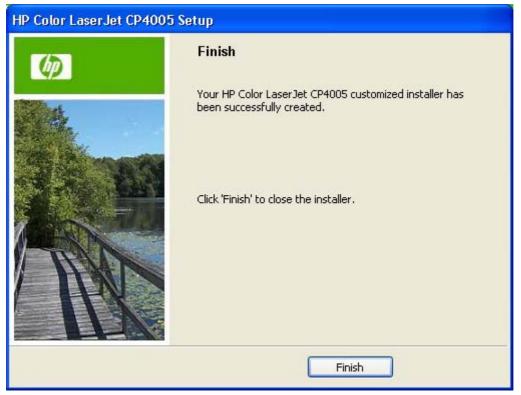


Figure 3-51 Finish dialog box

Click Finish to close the Finish dialog box and exit the Installer Customization Wizard.

Distribution

The installation package is now ready for distribution. It is the same as the package on the CD, except that it is limited to one language, and it contains the selected features and options. The installation package is run silently so that it requires no user interaction. This installation method is useful when using the default selections that the installer provides or when running the installation without being prompted.

You can perform the silent installation in two ways:

- Customized silent installer
- Command-line silent installer

The response file can be renamed, but it must be in the root directory of the installer package. The name cannot contain spaces, because spaces prevent the SETUP.EXE file from passing to the installer package.

The end-user cannot customize the command-line silent installer. It installs the printing-system components specified during package creation.

For more information (including the exact content for replacing entries in the RESPONSE.INI file), see the *HP Device Installer Customization Wizard Readme*. (See <u>HP Device Installer Customization Wizard Readme</u>.)

Point and Print installation for Windows 2000, Windows XP, and Windows Server 2003

Use the following information to install a print driver through the Microsoft Point-and-Print function when you do not connect directly to the printer on the network.

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

This section outlines the procedures for installing print drivers by using Point and Print. If these procedures are not successful, contact Microsoft.

Hewlett-Packard provides drivers that are compatible with the Point and Print feature, but this is a function of the MS Windows operating systems, not of HP print drivers.

Administrator privileges are necessary to install the print driver on a Windows 2000, Windows XP, or Windows Server 2003 operating system.

In a homogenous operating system environment (one in which all of the clients and servers are running in the same operating system), the same print driver version that is vended from the server to the clients in a Point and Print environment also runs and controls the print queue configuration on the server.

However, in a mixed operating system environment (one in which servers and clients might run on different operating systems), conflicts can occur when client computers run a version of the print driver that is different from the one on the print server.

In an effort to increase operating system stability, Microsoft determined that, starting with Windows 2000 and continuing with all future operating systems, print drivers would run as user-mode processes. Usermode drivers run in a protected part of the operating system, as do all of the normal end-user processes and software programs. A user-mode print driver that functions incorrectly can terminate (or "crash") only the process in which it is running—not the whole operating system. Because access to critical system resources is restricted, overall operating system stability is increased.

www.techweb.boi.hp.com

Set a default printer

This section applies to the Windows 2000, Windows XP, and Windows Server 2003 operating systems.

- In Windows 2000, click Start, click Settings, and then click Printers.
 - In Windows XP and Windows Server 2003, click Start, click Control Panel, and then click Printers and Faxes (Windows XP Professional) or Printers and other hardware devices (Windows XP Home).
- 2. Right-click the printer to set as the default printer.
- Click **Set As Default**. A check mark appears next to the menu option.

4 HP PCL 6, PCL 5, and PS Emulation drivers for MS Windows

Introduction

This document describes the features of the HP PCL 6 driver, the HP PCL 5 driver, and the HP Postscript 3 Emulation driver (PS Emulation driver) for Windows 2000, Windows XP (32-bit and 64-bit), and Windows Server 2003 (32-bit and 64-bit).

Control print jobs from:

- Device control panel
- Software-program print-dialog box
- Driver user interface

Generally, for features that are duplicated in more than one location, settings that are established in the software program take precedence over print-driver settings. Print-driver settings, in turn, override printer control-panel settings.

When installing the print-system software in Windows 2000, Windows XP, and Windows Server 2003, the HP PCL 6 driver is installed by default. The HP PCL 5 and PS emulation drivers can be installed by performing a Custom Installation.

The following sections describe the options that are available on each tab of the HP PCL 6, PCL 5, and PS emulation drivers.

This document also describes differences between the HP PCL 6, PCL 5, and PS emulation drivers. Unless otherwise noted, features described here apply to all three.

Topics:

- Access to print drivers in Windows 2000, Windows XP, and Windows Server 2003
- Help system
- Advanced tab features
- Paper/Quality tab features
- Effects tab features
- Finishing tab features
- Job Storage tab features

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- Color tab features
- Services tab features
- Device Settings tab features
- About tab features

Access to print drivers in Windows 2000, Windows XP, and Windows Server 2003

Depending on the operating system on which the print drivers are installed, access to the print drivers and different print-driver interfaces is available in several ways:

- Device control panel
- Software-program print-dialog box
- Print-driver user interface

Device control panel

For information about controlling print jobs from the printer control panel, see the HP Color LaserJet CP4005 Printer User Guide that came with the printer, or download it from following Web site:

www.hp.com/support/ljcp4005

Software-program print-dialog box

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

- Click File.
- 2. Click Print.
- Click Properties.

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

Print-driver user interface

Control the drivers directly from the **Printers** folder for access to two sets of driver tabs: the **Printing** Preferences tabs and the Properties tabs. The settings on the Printing Preferences driver tabs control the driver default settings for each user's profile. Configure installable options on the Properties driver tabs.

Printing Preferences driver tabs

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

- Click Start. 1.
- 2. Select Settings.
- Click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Windows Server 2003) or Printers and Other Hardware Devices (Windows XP Home).
- Right-click the printer name.
- Click Printing Preferences.

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

- Advanced
- Paper/Quality
- Effects
- Finishing
- Job Storage
- Color
- Services

All of these tabs are printer-specific.

The **Job Storage** tab is available only when the **Job Storage** setting is **Enabled** on the tab. To make the settings take effect, click **OK** on the **Device Settings** tab.

Properties driver tabs

This set of tabs controls the driver behavior and driver connections. To gain access to the **Properties** tabs, follow these steps:

- 1. Click Start.
- 2. Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the printer name.
- Click Properties.

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

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

Only printer-specific HP driver tabs are described in this document; the other driver tabs are part of the operating system. The following **Properties** driver tabs are described in this document:

- Device Settings
- About

Help system

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

What's this? Help

Windows 2000, Windows XP, and Windows Server 2003 support What's this? Help. Gain access to **What's this?** Help messages in any of the following ways:

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

Context-sensitive Help

When you click the **Help** button on a driver tab or in a dialog box, a context-sensitive Help message appears.

Incompatible Print Settings messages

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



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

In Windows 2000, Windows XP, and Windows Server 2003 operating environments, some technically invalid print-driver configurations result in warning messages when trying to save the conflicting settings in the driver. Duplexing, for example, is not possible when the Transparency media type is selected. The following figure shows an example of an **Incompatible Print Settings** message.

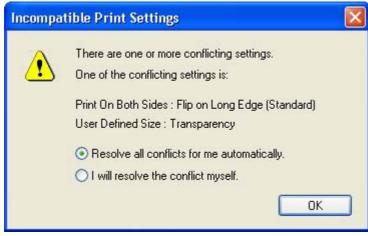


Figure 4-1 An Incompatible Print Settings message

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To accept the change that was just made, click the **Resolve all conflicts for me automatically** option and then click **OK**. The driver resets the conflicting control to a setting that is compatible with the new value.

To keep the conflicting setting, click I will resolve the conflict myself and then click OK.



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

Advanced tab features

To gain access to the **Advanced** tab, follow these steps:

- 1. Click Start.
- Select Settings.
- Click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Windows Server 2003) or Printers and Other Hardware Devices (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Printing Preferences.
- 6. Click the Advanced tab.

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

The following figure shows the **Advanced** tab.

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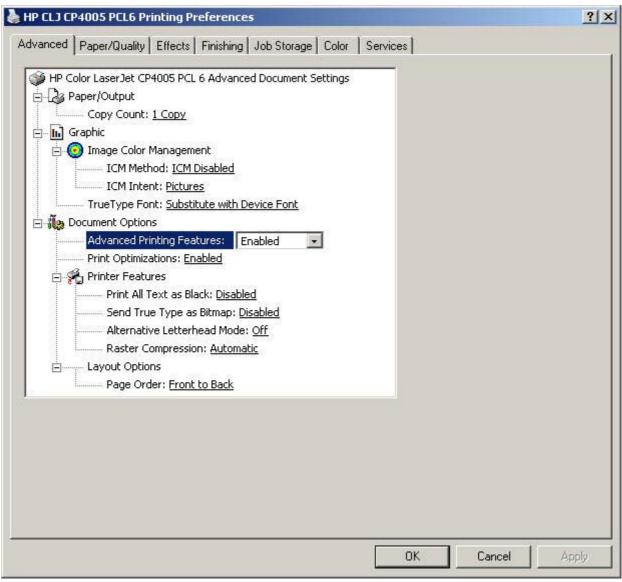


Figure 4-2 The default appearance of the Advanced tab

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

- Paper/Output
- Graphic
- Document Options

Paper/Output

The **Paper/Output** settings contain the following controls:

- Copy Count setting
- Collated check box (appears when you select Copy Count)

Copy Count

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

The 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 to the right of the text box. Valid entries are numbers from 1 to 9999. The copies value will not advance from the maximum number (9999) to 1 when the up arrow is used, or change from 1 to the maximum number (9999) when the down arrow is used.

When you click another group box or leave the **Advanced** tab, invalid entries into the edit box (such as non-numerical input, numbers less than 1, or numbers greater than the maximum allowed) are changed to the last valid value that appeared in the box. The default number of copies is 1.

Because the number of copies can be set in some software programs, conflicts between the software program and the driver can arise. In most cases, the software program and the driver communicate so that the number of copies set in one location (such as the software 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 results in 100 copies (10×10) being printed. Set the number of copies in the software program, wherever possible.

Collated

The **Collated** check box is visible when the **Copy Count** setting is selected. The check box becomes available and can be changed when the **Copy Count** setting is greater than 1.

When collated, pages print consecutively for each copy of the document. When not collated, copies of each page print together.

This setting is *not* synchronized with the collate setting in the software program **Print** dialog box. Settings in the software program override settings in the print driver. For instance, when using Microsoft Word, the **Collate** check box in the **Print** dialog box is selected by default. However, in the print driver, the **Collated** check box on the **Advanced** tab is *not* selected by default. The software program setting takes precedence over the driver setting, and the printed output is collated by default. Therefore, if the **Collated** check box is selected in the driver, but the **Collate** setting is not enabled in the software program, the printed output is uncollated.

To obtain uncollated printed output, clear the **Collate** setting in *both* the driver and the software program.

Graphic

The **Graphic** setting contains the following control.

- Image Color Management settings
- True Type Font settings

Image Color Management

This control lists the available Image Color Management (ICM) options used for printing color graphics. ICM, a set of calculations for color matching, makes it possible for programs to adjust colors before

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printing so that the color of images on the screen more closely match the color of those images when they are printed. The following options are available:

- ICM Method. Specifies how to print color graphics.
 - ICM Disabled. Disables Image Color Management.
 - **ICM Handled by Host System.** The host computer performs calculations for color matching before it sends the document to the product.
 - **ICM Handled by Printer.** The printer performs calculations for color matching. In this case, a set of rules for mapping the colors is created and downloaded to the printer. The printer uses these rules to adjust colors in the document.
- **ICM Intent.** Specifies how color images are created to produce the image that looks best on the printed page.
 - Graphics. For images requiring fully saturated, bright colors (such as, charts).
 - Pictures. To maximize the contrast for photographs or pictures where the colors blend together.
 - Proof. For documents in which a specific color of ink must be matched exactly.
 - Match. To preview the color settings from another product.

True Type Font

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

Document Options

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

- Advanced Printing Features
- Print Optimizations
- PostScript Options (PS emulation driver only)
- Printer Features
- Layout Options

Advanced Printing Features

When the **Advanced Printing Features** setting is **Enabled**, metafile spooling is turned on and **Finishing** tab options such as **Page Order**, **Booklet Layout**, and **Pages per Sheet** are available, depending on the printer. 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. Selecting an advanced printing feature in the print driver that has been disabled on the **Advanced** tab automatically makes the feature available.

Print Optimizations



NOTE Print Optimization settings are available only in the HP PCL 6 and PCL 5 drivers. They are not available in the PS Emulation driver.

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

PostScript Options (PS emulation driver only)



NOTE PostScript Options settings are available only in the PS Emulation driver. They are not available in the HP PCL 6 and PCL 5 drivers.

Select one of the following settings in the **PostScript Output Options** drop-down menu:

- Optimize for Speed. This is the default setting.
- **Optimize for Portability.** Use this setting to create a file that conforms to the Adobe Document Structuring Conventions (ADSC). Each page of the document is a self-contained object. For example, this option is for creating a postscript file and printing it on a different printer.
- **Encapsulated PostScript (EPS).** Use this setting to include the file as an image in another document that is to be printed from another program.
- Archive format. Use this option to create a postscript file that you can use later.

Select one of the following settings in the **TrueType Font Download Options** drop-down menu:

- Automatic. This is the default setting.
- Outline. Select this option if you want to download the TrueType font as a scalable outline font.
- **Bitmap.** Select this option to download the TrueType font as a bitmap font.
- **Native TrueType.** If the printer is a TrueType rasterizer printer; select this option to download the TrueType font as an outline font.

Select one of the following settings in the **PostScript Language Level** drop-down menu:

- 3
- 2
- 1

The default setting is **3**. It is usually better to select the highest number available, because it provides more features. In some instances, lower numbers might be necessary. For example, if you are printing a file to disk and that file is to be printed by someone who has a level-1 printer, select **1**.

Select one of the following settings in the **Send PostScript Error Handler** drop-down menu:

- **Yes.** This is the default setting. When an error occurs in the print job, an error page is sent to the printer.
- No. Select this setting if you do not want an error page to be printed when an error occurs.

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Printer Features

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

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.

Send TrueType as Bitmap. (Available only in the HP PCL 6 and PCL 5 drivers.)

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

Alternative Letterhead Mode. (Available only when an automatic duplexing unit is installed.)

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.

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

- Letterhead
- Preprinted
- Raster Compression. (Available only in the PCL 6 driver.)



NOTE The **Raster Compression** option is available only in the HP PCL 6 driver. It is not available in the HP PCL 5 driver or the PS Emulation driver.

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

- Automatic. The software determines the best compression method to use.
- **Best Quality.** This option forces the software to use a compression method that ensures no data is lost during compression.)
- Maximum Compression. Where applicable, this option requires the software to always use a compression method in which some data might be lost.
- Graphics Mode. (available only in the HP PCL 5 driver)

Use the **Graphics Mode** feature to select one of the following settings:

- **Send Graphics as Vector.** Select this setting to send graphics to the printer as a combination of HP Graphics Language, version 2 (HP-GL/2), and raster images. This setting might produce higher-quality output. It is the default setting.
- **Send Graphics as Raster.** Select this setting to send all graphics to the printer as images composed of individual dots. This setting might improve printing speed in some cases.

Layout Options

The Layout Options setting contains the Page Order setting.

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



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

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Paper/Quality tab features

To gain access to the Paper/Quality tab, follow these steps:

- 1. Click Start.
- Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the printer name.
- Click Printing Preferences.
- Click the Paper/Quality tab.

Use the **Paper/Quality** tab to specify the size, type, and source of the media. Also use this tab to specify different media selections for the front cover, first page, other pages, last page, and back cover of the document.

The following figure shows the Paper/Quality tab.

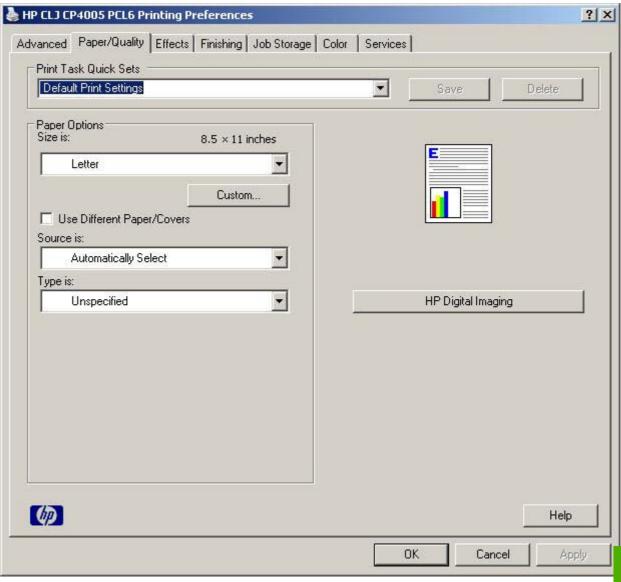


Figure 4-3 Paper/Quality tab

The Paper/Quality tab contains the following control sets:

- **Print Task Quick Sets**
- **Paper Options**
- **Use Different Paper/Covers**
- **Document preview image**
- **HP Digital Imaging**

Print Task Quick Sets

The first group box in the upper portion of the Paper/Quality tab is Print Task Quick Sets. Because they are all the same control, any change to the Print Task Quick Sets group box that is made on

the **Paper/Quality** tab affects all the **Printing Preferences** driver tabs that have the **Print Task Quick Sets** setting:

- Paper/Quality
- Effects
- Finishing
- Job Storage
- Color

Use the **Print Task Quick Sets** setting to store the current combination of driver settings that appear on all of the other print driver tabs (except the **Advanced** tab, where the setting is not available). **Print Task Quick Sets** are either preset by network-administrator settings or user-defined printing specifications (such as media size, pages per sheet, and so on). The **Print Task Quick Sets** control does *not* appear on the driver **Properties** tabs.



NOTE Administrators can predefine Print Task Quick Sets for their users. These administrator Print Task Quick Sets are defined on the server and are available to users, but usually cannot be modified by users. Users can also define Print Task Quick Sets for their own use.

The following selections are available in the Print Task Quick Sets drop-down menu:

- Default Print Settings
- User Guide Print Settings

Default Print Settings

By default, the **Print Task Quick Sets** menu is set to **Default Print Settings**. To change any of the default settings on any of the **Printing Preferences** driver tabs and save the configuration as a Print Task Quick Set, highlight the words **Default Print Settings**, type the name for the new Print Task Quick Set, and then click **Save**. Print Task Quick Sets are saved in the system registry. To delete a Print Task Quick Set, select it from the drop-down menu and click **Delete**.

When you select **Default Print Settings**, nearly all of the settings are restored to the combination that existed after the driver was installed (the original settings). However, if the attribute combinations that are associated with watermark definitions, custom media sizes, or the other quick sets have been changed or deleted, the original settings for those items are *not* restored.

Type a new Quick Set name here appears in the **Print Task Quick Sets** menu automatically if no other driver settings have been changed since the driver was installed, or if all of the driver settings match the original settings. Otherwise, the setting in the **Print Task Quick Sets** menu is the same label that appeared when a computer user last closed the printing **Properties** dialog box by clicking **OK**.



NOTE Administrators can predefine Print Task Quick Sets for their users. These administrator Print Task Quick Sets are defined on the server and are available to users, but usually cannot be modified by users. Users can also define Print Task Quick Sets for their own use.

A maximum of 25 Print Task Quick Sets can be stored on a particular system. If you attempt to save more, a message box appears: There are too many Print Task Quick Sets defined. Please delete some before adding new ones.

The following table shows the default settings for **Print Task Quick Sets**.

Table 4-1 Print Task Quick Set default values for the HP Color LaserJet CP4005 printer

Driver feature	Feature setting location	Default values for U.S. English Print Task Quick Sets	Preconfigurable ¹
Print on Both Sides	Finishing tab, Document Options group box	Available, not selected	Yes
Flip Pages Up	Finishing tab, Document Options group box	Unavailable, not selected	Yes
Booklet Layout	Finishing tab, Document Options group box	Unavailable, Off	Yes
Pages per Sheet	Finishing tab, Document Options group box	1 page per sheet	Yes
Print Page Borders	Finishing tab, Document Options group box	Unavailable	Yes
Page Order	Finishing tab, Document Options group box	Unavailable	Yes
Orientation	Finishing tab, Orientation group box	Portrait	Yes
Rotate by 180 degrees	Finishing tab, Orientation group box	Available, not selected	Yes
Resizing Options	Effects tab, Resizing Options group box	Actual Size	Yes
Print document on	Effects tab, Resizing Options group box	Available, not selected	Yes
Size to print on	Effects tab, Resizing Options group box	Actual Size	Yes
Scale to Fit	Effects tab, Resizing Options group box	Unavailable, selected	Yes
% of Normal Size	Effects tab, Resizing Options group box	Available, not selected	Yes
Watermarks	Effects tab	(none)	Yes
Watermarks First Page Only	Effects tab, Watermark Details dialog box	Unavailable, not selected	Yes
Current watermarks	Effects tab, Watermark Details dialog box (Click Edit for Watermark Details.)	(none)	Yes
Watermark Message	Effects tab, Watermark Details dialog box (Click Edit for Watermark Details.)	(none)	Yes
Message Angle (watermark)	Effects tab, Watermark Details dialog box (Click Edit for Watermark Details.)	Diagonal	Yes
Watermark message angle (angle)	Effects tab, Watermark Details dialog box (Click Edit for Watermark Details.)	Unavailable unless the Angle option is selected, 52 degrees	Yes
Name (watermark font)	Effects tab, Watermark Details dialog box, Font Attributes group box	Arial	Yes
Color (watermark font)	Effects tab, Watermark Details dialog box, Font Attributes group box	Gray	Yes
Shading (watermark font)	Effects tab, Watermark Details dialog box, Font Attributes group box	Very Light	Yes
Size (watermark font)	Effects tab, Watermark Details dialog box, Font Attributes group box	80	No

Table 4-1 Print Task Quick Set default values for the HP Color LaserJet CP4005 printer (continued)

Driver feature	Feature setting location	Default values for U.S. English Print Task Quick Sets	Preconfigurable ¹
Style (watermark font)	Effects tab, Watermark Details dialog box, Font Attributes group box	Regular	Yes
Size is:	Paper/Quality tab, Paper Options group box	Letter	Yes
Use Different Paper	Paper/Quality tab, Paper Options group box	Available, not selected	No
Source is:	Paper/Quality tab, Paper Options group box	Automatically Select	Yes
Type is:	Paper/Quality tab, Paper Options group box	Unspecified	Yes
Unlabeled group box	Job Storage tab	Status message: for example, Your job will be printed but not stored on the printer	No
Job Storage Mode	Job Storage tab, Job Storage Mode group box	Off is selected	No
Proof and Hold	Job Storage tab, Job Storage Mode group box	Available, not selected	No
Private Job	Job Storage tab, Job Storage Mode group box	Available, not selected	No
Quick Copy	Job Storage tab, Job Storage Mode group box	Available, not selected	No
Stored Job	Job Storage tab, Job Storage Mode group box	Available, not selected	No
Require PIN to Print	Job Storage tab, Job Storage Mode group box	Unavailable, not selected	No
MS Windows User Name	Job Storage tab, User Name group box	Unavailable, selected (Windows User Name appears in field)	No
PIN to Print	Job Storage tab, Require PIN group box	Unavailable, not selected	No
Display Job ID when printing	Job Storage tab, Job Notification Options group box	Unavailable, selected	No
Job Name	Job Storage tab, Job Name group box	Unavailable, Automatically selected	No

These features can be preconfigured by using one of the HP driver preconfiguration tools. For more information, see <u>HP Driver Preconfiguration on page 33</u> or go to: www.hp.com/go/hpdpc.

User Guide Print Settings

The **User Guide Print Settings** option provides a Print Task Quick Set for optimal printing of the *HP Color LaserJet CP4005 Printer User Guide*.

When you select User Guide Print Settings, all of the settings are restored to the default settings, except for the following settings:

- On the Paper/Quality tab, Type Is: is set to Unspecified.
- On the **Finishing** tab, the **Print on Both Sides** check box is selected.
- On the **Finishing** tab, the **Flip Pages Up** check box is selected.
- On the Finishing tab, Pages per Sheet is set to 2 pages per sheet.
- On the Finishing tab, Page Order is set to Right then Down.

Paper Options

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

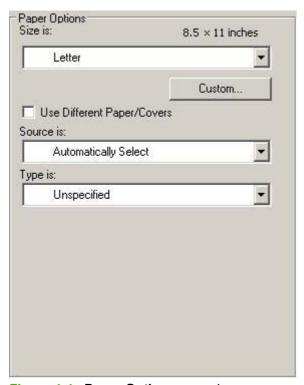


Figure 4-4 Paper Options group box

The appearance of the Paper Options group box changes when the Use Different Paper/Covers check box is selected. The settings in the **Paper Options** group box are described in the following order:

- Size is: on page 128
- Custom Paper Size on page 128
- Source is: on page 130
- Type is: on page 130
- Use Different Paper/Covers on page 131

Size is:

The Size is: setting is a drop-down menu that lists all of the supported media 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 media-size settings in most software programs override driver settings, it is generally best to use the driver to set media size only when printing from software programs that do not include a media-size setting, such as NotePad, or when producing a book or a booklet that does not require different media sizes.



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

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

When the **Use Different Paper/Covers** check box is selected and different options are configured, the **Size is:**, **Source is:**, and **Type is:** menus change, offering a variety of options.

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.

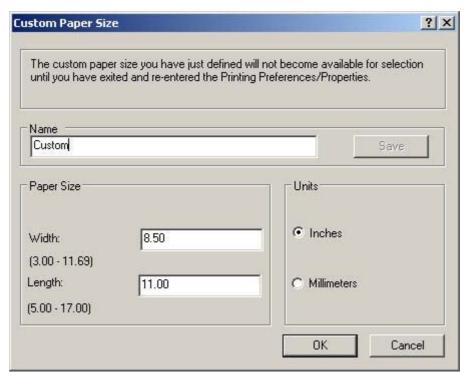


Figure 4-5 Custom Paper Size dialog box

Name

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

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

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

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

Paper size

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

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

The resolution of each control is 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 media size for the HP Color LaserJet CP4005 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 table summarizes media size limits for each media-handling printer.

Table 4-2 HP Color LaserJet CP4005 printer — PCL 6 custom media sizes

Tray	Dimensions	Minimum	Maximum
Tray 1 (100-sheet	Width	76.2 mm (3.0 inches)	215 mm (8.5 inches)
multipurpose)	Height	127.0 mm (5.0 inches)	355.6 mm (14.0 inches)
Tray 2 (500-sheet)	Width	148.0 mm (5.83 inches)	215.9 mm (8.5 inches)
	Height	210.0 mm (8.26 inches)	355.6 mm (14.0 inches)
Tray 3 (500-sheet)	Width	148.0 mm (5.83 inches)	215.9 mm (8.5 inches)
	Height	210.0 mm (8.26 inches)	355.6 mm (14.0 inches)

Table 4-2 HP Color LaserJet CP4005 printer — PCL 6 custom media sizes (continued)

Tray	Dimensions	Minimum	Maximum
Duplexing unit	Width	148.0 mm (5.83 inches)	215.9 mm (8.5 inches)
	Height	210.0 mm (8.26 inches)	355.6 mm (14.0 inches)

Source is:

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

The **Source is:** drop-down menu can contain the following options, depending on what has been installed on the printer:

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

The default setting is **Automatically Select**. When this setting is selected, the HP Color LaserJet CP4005 printer uses the source tray that supports the selected media size. If you select a source tray other than **Automatically select**, make sure the correct media size is loaded in the source tray. For information about media sources, see <u>Media attributes on page 268</u>.

Type is:

The **Type is:** drop-down menu shows all of the media types that the HP Color LaserJet CP4005 printer supports. When you use the default setting, **Unspecified**, the printer uses the default media type, which is usually **Plain**.

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

The following standard types appear in the list:

- Unspecified
- Plain
- Preprinted
- Letterhead
- Transparency

- Prepunched
- Labels
- **Bond**
- Recycled
- Color
- Light (60-75 g/m2)
- Intermediate (90-104 g/m2)
- Heavy (105-120 g/m2)
- Extra Heavy (120-163 g/m2)
- Cardstock (164-220 g/m2)
- Rough (90-105 g/m2)
- Glossy (75-120 g/m2)
- Heavy Glossy (120-160 g/m2)
- Extra Heavy Glossy (160-220 g/m2)
- **Tough Paper**
- **Envelope**

The default setting is **Unspecified**, and the program selects the media type. Before selecting a different setting, make sure that the correct media type is loaded in the tray that is specified in the Source is: setting.

If the print-driver setting is changed to a media type that is not currently loaded in the printer, a controlpanel message appears that prompts you to load the media type or select another tray.

Use Different Paper/Covers

Print books that include different media types by using the **Use Different Paper/Covers** options.

When the Use Different Paper/Covers check box is selected, the following settings can appear in the group box, along with the associated options:

- **Front Cover**
- First Page
- **Other Pages**
- Last Page
- **Back Cover**



NOTE When you change the **Source Is** and **Type is** settings for any of the covers or pages, the settings remain configured until you close the software program from which you are printing. For example, if you select **First Page** and change the media source or type, and then select **Back Cover** to change the media source or type, the check mark remains beside **Front Cover** and the selected source and type settings remain in effect. The settings are cleared only when you close the software program.

Front Cover

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

The following figure shows the Front Cover setting and options.

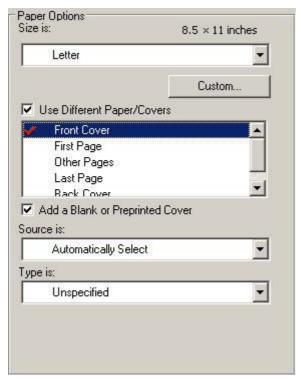


Figure 4-6 Front Cover options

The following are the **Front Cover** options:

- Size is: drop-down menu
- Add a Blank or Preprinted Cover check box
- Source is: drop-down menu
- Type is: drop-down menu

The **Size is:** setting specifies the media size to use for the entire print job. Changes made to the **Size** is: setting here overrides any previous **Size** is: settings in other **Use Different Paper/Covers** options.

When you select **Front Cover**, you must also select the **Add a Blank or Preprinted Cover** check box to enable the setting. When you select this check box, the **Source is:** and **Type is:** drop-down menus become available and a check mark appears next to the **Front Cover** option.

The **Source is:** setting specifies the source tray to use for adding a front cover to the document. The list of source trays depends on the printer accessories that are installed. Any optional trays that are installed through the **Device Settings** tab also appear here.

The **Type is:** drop-down menu shows all of the media types that the printer supports.



NOTE You must use the same size of media for the entire print job. All **Use Different Paper**/ Covers options use the last Size is: setting that you select in any one of the Use Different Paper/ Covers options.

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

First Page

Use the **First Page** options to select an alternative media type or source for the first page of a document. The following figure shows the appearance of the Paper Options group box when the Use Different Paper/Covers check box is selected.

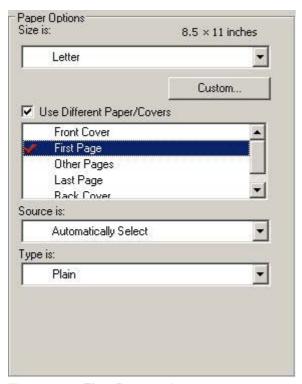


Figure 4-7 First Page options

The following are the **First Page** options:

- Size is: drop-down menu
- Source is: drop-down menu
- Type is: drop-down menu

The Size is: setting specifies the media size to use for the entire print job. Changes made to the Size is: setting here override any previous Size is: settings in other Use Different Paper/Covers options. The **Source is:** setting specifies the source tray to use for printing a document. The list of source trays depends on the printer accessories that are installed. Any optional trays that are installed through the **Device Settings** tab also appear here.

The **Type is:** drop-down menu shows all of the media types that the printer supports.



NOTE Use the same size of media for the entire print job. All **Use Different Paper/Covers** options use the last **Size is:** setting selected in *any one* of the **Use Different Paper/Covers** options.

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

Other Pages

Use the **Other Pages** options to select an alternative media type or source for the other pages of the document. The following figure shows the appearance of the Paper Options group box when the **Use Different Paper/Covers** check box is selected.

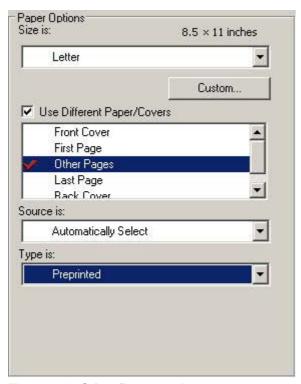


Figure 4-8 Other Pages options

The following are the **Other Pages** options:

- Size is: drop-down menu
- Source is: drop-down menu
- Type is: drop-down menu

The **Size is:** setting specifies the media size to use for the entire print job. Changes made to the **Size is:** setting here override any previous **Size is:** settings made in other **Use Different Paper/Covers** options.

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

The **Type is:** drop-down menu shows all of the media types that the printer supports.



Use the same size of media for the entire print job. All Use Different Paper/Covers options use the last Size is: setting selected in any one of the Use Different Paper/Covers options.

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

Last Page

Use the Last Page options to select an alternative media size, type, or source for the last page of a document. The following figure shows the appearance of the Paper Options group box when the Use **Different Paper/Covers** check box is selected.

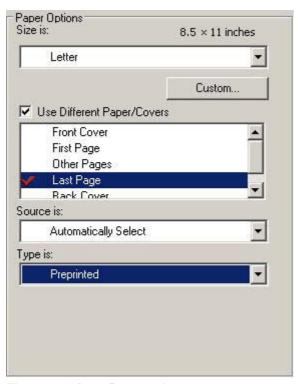


Figure 4-9 Last Page options

The following are the **Last Page** options:

- Size is: drop-down menu
- Source is: drop-down menu
- Type is: drop-down menu

The Size is: setting specifies the media size to use for the entire print job. Changes made to the Size is: setting here override any previous Size is: settings in other Use Different Paper/Covers options.

The **Type is:** drop-down menu shows all of the media types that the printer supports.



NOTE Use the same size of media for the entire print job. All **Use Different Paper/Covers** options use the last **Size is:** setting selected in *any one* of the **Use Different Paper/Covers** options.

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

Back Cover

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

The following figure shows the **Back Cover** setting and options.

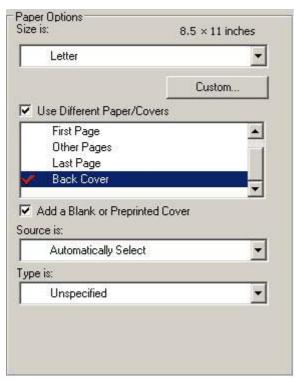


Figure 4-10 Back Cover options

The following are the **Back Cover** options:

- Size is: drop-down menu
- Add a Blank or Preprinted Cover check box (not selected by default)
- Source is: drop-down menu
- Type is: drop-down menu

The **Size is:** setting specifies the media size to use for the entire print job. Changes made to the **Size** is: setting here override any previous **Size is:** settings in other **Use Different Paper/Covers** options.

When you select **Back Cover**, also select the **Add a Blank or Preprinted Cover** check box to enable the setting. The **Source is:** and **Type is:** drop-down menus become available and a check mark appears next to the **Back Cover** option.



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.

The Source is: setting specifies the source tray to use for adding a back cover to the document. The list of source trays depends on the printer accessories that are installed. Any optional trays that are installed through the **Device Settings** tab also appear here.

The **Type is:** drop-down menu shows all of the media types that the printer supports.



NOTE Use the same size of media for the entire print job. All Use Different Paper/Covers options use the last Size is: setting selected in any one of the Use Different Paper/Covers options.

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

Document preview image

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

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 4-11 Document preview image

HP Digital Imaging

Click the HP Digital Imaging button to open the HP Digital Imaging Options dialog box.



NOTE The HP Digital Imaging settings should be used only on high-resolution images (600 dpi or higher) that are printed on photograph-quality paper. These settings are not recommended for text.

The **HP Digital Imaging Options** dialog box is shown in the following figure.

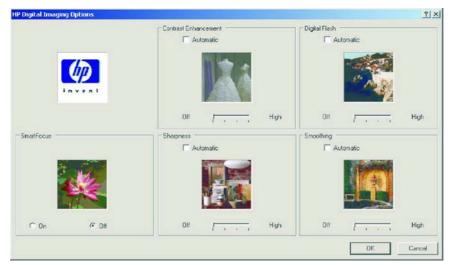


Figure 4-12 HP Digital Imaging Options dialog box

The following settings can be adjusted on the **HP Digital Imaging Options** dialog box:

Contrast Enhancement.

Use to increase image contrast for a more visually pleasing result. This filter is useful with flat images (images in which much of the image content is compressed into a small dynamic range of pixel values). Flat images may result from low lighting, environmental haze, or camera or scanner limitations.

Digital Flash.

Use to adjust lighting levels to reveal areas in shadow. The filter locates dark areas in an image and brings out detail without degrading other features in the image.

SmartFocus.

Use to increase the apparent resolution of lower resolution images. Many images that are downloaded from the Internet or from digital cameras can be compressed because of size restrictions, and might exhibit pixilation artifacts when printed. SmartFocus upscales the image to the printer resolution without accentuating these artifacts.

Sharpness.

Use to improve the sharpness of an image by increasing edge detail to make the edges more prominent. The filter detects regions that contain significant variations in pixel value along a number of different vectors (which denotes edges) and then applies a filter to enhance detail.

Smoothing.

Used to decreases noise artifacts that are often created by digital cameras or scanners. The filter locates areas that contain abrupt changes in pixel value compared to surrounding pixels (which denotes noise) and then applies a filter to smooth the output.

Effects tab features

To gain access to the **Effects** tab, follow these steps:

- 1. Click Start.
- 2. Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Printing Preferences.
- 6. Click the Effects tab.

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

The following figure shows the **Effects** tab.

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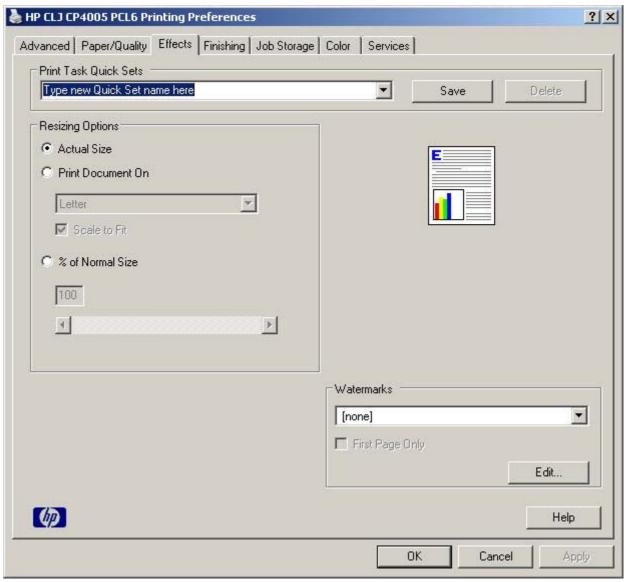


Figure 4-13 Effects tab

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

- Print Task Quick Sets
- Resizing Options
- Document preview image
- Watermarks

Print Task Quick Sets

Use the **Print Task Quick Sets** control to store the current combination of driver settings that appear on all other **Printing Preferences** driver tabs. Print task quick sets are either preset or user-defined printing specifications, such as media size and pages per sheet.

Resizing Options

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

- Actual Size (default)
- Print Document On setting
- Scale to Fit option
- % of Normal Size setting

Actual Size

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

Print Document On

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

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

- The % of Normal 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 media sizes on which you can print. The list contains all of the standard media sizes that the selected media source supports 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 media.

Scale to Fit

The **Scale to Fit** option box specifies whether each formatted document page image is scaled to fit the target media 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 media. If the document size is larger than the target media size, then the document image is clipped. If it is smaller, then it is centered within the target media. The following figure shows preview images for a document formatted for Legal-size media with the **Print Document On** check box selected and the target size specified as **Letter**.

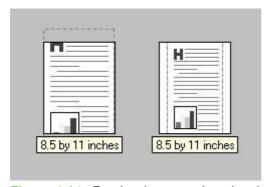


Figure 4-14 Preview images – Legal on Letter; Scale to Fit off (left) and on (right)

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

% of Normal Size

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

The limits of the range are from 25% 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 upperleft corner of the preview.

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

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

The following settings disable % of Normal Size:

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

Document preview image

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

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 4-15 Document preview image

Watermarks

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

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

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

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

Click **Edit**, and the **Watermark Details** dialog box appears.

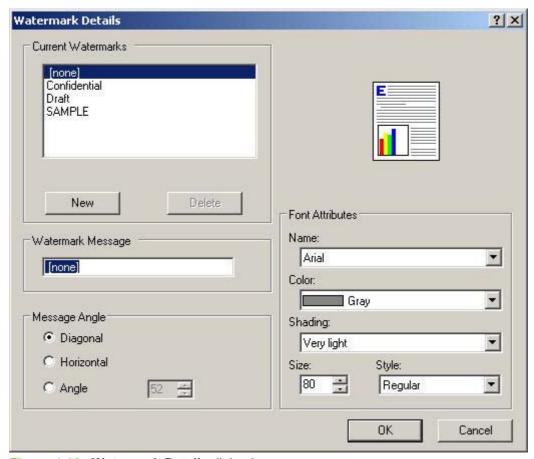


Figure 4-16 Watermark Details dialog box

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

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

Current watermarks

The **Current Watermarks** group box contains a list of available watermarks, both the predefined watermarks that are available in the driver and any new watermarks that have been created.

To create a new watermark, click **New**. The new watermark appears in the **Current Watermarks** list and in the **Watermark Message** edit box as "**Untitled**" until you name it. The name typed in the **Watermark Message** field appears in the **Current Watermarks** group box in the **Watermark Details** dialog box and in the **Watermarks** group box on the **Effects** tab.

To name the new watermark, type the selected watermark text in the **Watermark Message** edit box.

To delete a watermark, select the watermark in the **Current Watermarks** list and click **Delete**. A warning appears asking whether you are sure you want to delete the selected item. Click **Cancel** if you want to keep the watermark. Click **OK** to delete the selected watermark.



NOTE No more that 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.

To edit an existing watermark, select the watermark in the **Current Watermarks** list. Changing the **Watermark Message** for that watermark, in effect, creates a new watermark.

Watermark Message

The **Watermark Message** is also the name that identifies the watermark in the **Current Watermarks** list, except when more than one watermark has the same message. For example, you might want several different watermarks 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. All settings center the watermark string within the page; the selection of a particular setting affects only the angle of the string placement. The following settings are available:

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

Font Attributes

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

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

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

The following settings are available:

- Gray (default)
- Red
- Yellow
- Green
- Cyan
- Blue
- Magenta
- Shading. The default Shading setting is Very Light.

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

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

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

- **Size.** Font sizes from 1 to 999 points are available from the **Size** menu. The default point size is language-dependent.
- Style. The following settings are available:
 - Regular (default)
 - Bold
 - Italic
 - Bold Italic

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Default watermark settings

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

Table 4-3 Font Attribute settings for new and preset watermarks

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

Click **OK** to accept all of the changes that have been made in the **Watermark Details** dialog box.

Clicking **Cancel** does not cancel all of the changes. If you make changes to a watermark and then select a different watermark or click **New**, all of the changes are saved, and only the current, unsaved changes can be canceled.

Finishing tab features



CAUTION Disabling **Mopier Mode** disrupts functionality for the **Finishing** tab features.

To gain access to the **Finishing** tab, follow these steps:

- Click Start.
- 2. Select Settings.
- 3. Click **Printers** (Windows XP) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Printing Preferences.
- Click the Finishing tab.

Use the **Finishing** tab to print booklets and control the media output.

The following figure shows the **Finishing** tab.

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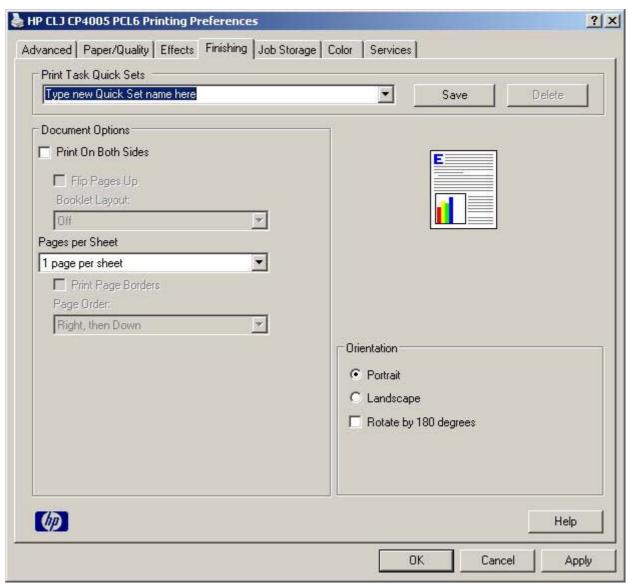


Figure 4-17 Finishing tab

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

- Print Task Quick Sets
- <u>Document options</u>
- Document preview image
- Orientation

Print Task Quick Sets

Use the **Print Task Quick Sets** control to store the current combination of driver settings that appear on all other **Printing Preferences** driver tabs. Print task quick sets are either preset or user-defined printing specifications, such as media size and pages per sheet.

Document options

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

- Print on Both Sides
- Flip Pages Up
- Booklet layout
- Pages per Sheet
- Print Page Borders
- Page Order

Print on Both Sides

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

- Type is: on the Paper/Quality tab is set to any media type except for the following types:
 - Labels
 - Transparency
 - Envelope
 - Tough Paper
- Size is: is set to any media size except for the following sizes:
 - Envelope #10
 - Envelope DL
 - Envelope C5
 - Envelope B5
 - Envelope Monarch

Topics:

- Automatically print on both sides
- Manually print on both sides

Automatically print on both sides

The duplexing unit in the printer prints on two sides of a sheet of paper when the **Print on Both Sides** option is specified in the print job.

Models with a duplexer installed 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 media types support the smart duplexing feature, except for media types that cannot be printed on both sides (such as labels, transparencies, and envelopes) and the following media types:

- Prepunched
- Preprinted
- Letterhead

When the media 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 printer makes adjustments to its print modes. Selecting a media type, in effect instructs the printer to use a group of settings (such as fuser temperature and print speed) to create an image that has the best possible quality for that media. This group of settings is known as print mode. A different print mode is used with each media type. Print-mode adjustments for the second side of a duplexed page are automatic.

Manually print on both sides

Select the **Print on Both Sides (Manually)** check box to print on the second side of the media for the HP Color LaserJet CP4005 printer models that do not have a duplexing unit installed. Use this setting on all HP Color LaserJet CP4005 printer models for media types that the automatic duplexing unit does not support, such as thick media.

Manually printing on the second side of a page is available in the HP PCL 6, PCL 5, or PS emulation drivers. If a duplexing unit is installed and manual duplexing is enabled in the driver, the printer automatically prints on both sides of media types that are supported for automatic duplexing (Letter, A4, Legal, and 8.5 x 13 only), and forces manual printing on both sides for media types that are not supported.

To make the **Print on Both Sides (Manually)** check box available in the document options, select the **Allow Manual Duplexing** option on the **Device Settings** tab the **Properties** print-driver tabs.

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

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

- Plain
- Preprinted
- Letterhead
- Prepunched
- Bond
- Recycled
- Color
- Rough

Cardstock media can be manually printed on the second side, but no change occurs to the print mode. Transparencies and labels should not be manually printed on the second side.

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

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

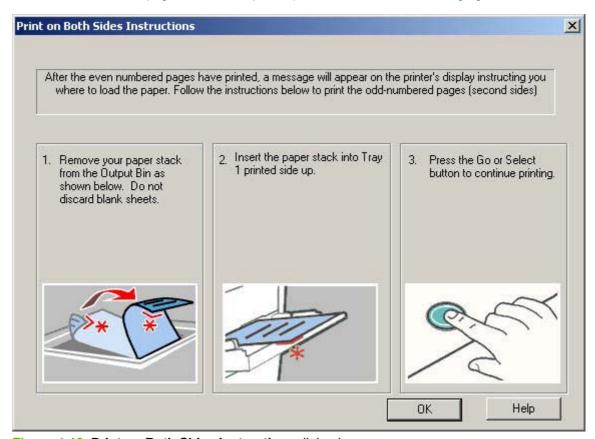


Figure 4-18 Print on Both Sides Instructions dialog box

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

Flip Pages Up

Use the Flip Pages Up check box to specify the duplex-binding option. By default, the Flip Pages Up check box is available only when **Print on Both Sides** is selected.

The following table demonstrates the results of selecting this check box, depending on the media orientation selected on the **Finishing** tab.

Table 4-4 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

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

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

Booklet layout

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

- Left Edge Binding
- Right Edge Binding

Selecting **Left Edge Binding** or **Right Edge Binding** changes the document preview image 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**. Changing the **Pages per Sheet** setting manually to 4, 6, 9, or 16 pages per sheet disables the booklet setting.

Topics:

- Book and Booklet Printing
- Print a booklet

Book and Booklet Printing

The HP Color LaserJet CP4005 printer supports book and booklet printing.

A book is a print job that consists of at least two pages. It can have a different media type for the front cover, first page, other pages, last page, or back cover. Use the settings on the **Paper/Quality** tab (available when you select the **Use Different Paper/Covers** check box) to select the following printing options for the book:

- Front Cover
- First Page
- Other Pages
- Last Page
- Back Cover

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

Print a booklet

Complete the following steps to print a booklet in most software programs.

- Click File.
- 2. Click Print.
- 3. Click Properties.
- 4. Click the **Finishing** tab.
- 5. Select the **Print on Both Sides** check box.
- 6. In the **Booklet Layout** drop-down menu, select the type of booklet printing that you want (for example, **Right Edge Binding**).
- 7. Click **OK** in the print driver.
- 8. Click **OK** in the print dialog box to print.

Pages per Sheet

Use the Pages per Sheet option to select the number of pages to print on a single sheet of media.

If you print more than one page per sheet, the pages appear smaller and are arranged on the sheet in the order that they would otherwise be printed. The **Pages per Sheet** drop-down menu provides six settings:

- 1 page per sheet (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 page per sheet makes booklet printing unavailable.

Print Page Borders

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

The **Page Order** drop-down menu contains four selections:

- Right, then Down
- Down, then Right

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- Left, then Down
- Down, then Left

The preview document image changes to reflect alterations in these settings. The following figure shows examples of each setting respectively: 2 pages per sheet, 4 pages per sheet, 6 pages per sheet, 9 pages per sheet, and 16 pages per sheet.

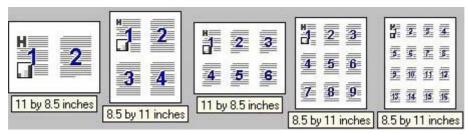


Figure 4-19 Page-order preview images

Document preview image

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

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 4-20 Document preview image

Orientation

Orientation refers to the layout of the image on the page, and does not affect the way media feeds into the printer.



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

The **Orientation** group box contains two options:

- **Portrait.** The top edge of the document is the shorter edge of the media. This is the default orientation.
- Landscape. The top edge of the document is the longer edge of the media.

In addition to the **Portrait** and **Landscape** orientation options, you can select the **Rotate by 180 degrees** check box. This creates a landscape or portrait orientation in which the image is rotated 180°. This setting is useful for printing prepunched media.

Toggle orientation between portrait and landscape by clicking the document preview image. Selecting the **Rotate by 180 degrees** check box does not change the document preview image.

Job Storage tab features

To gain access to the Job Storage tab, follow these steps:

- Click Start.
- Select Settings.
- Click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Windows Server 2003) or Printers and Other Hardware Devices (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Printing Preferences.
- Click the Job Storage tab.

Use the job-storage feature to store print jobs in the HP Color LaserJet CP4005 printer memory for printing at a later time. These job-storage features are described in the following sections.

The **Job Storage** tab appears among the driver tabs only if job-storage feature is enabled, and a hard disk is installed and configured.

To disable the job-storage feature, follow these steps:

- Click Start.
- 2. Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- Right-click the printer name.
- Click Properties.
- 6. Click the **Device Settings** tab.
- 7. Select Job Storage.
- 8. Select **Disabled** in the **Change 'Job Storage' Setting** dialog box that appears.



NOTE When the job-storage feature is disabled, the **Job Storage** driver tab is not visible.

If the job-storage feature is enabled, the **Job Storage Mode** settings are available on the **Job Storage** tab:

- Off
- Proof and Hold
- Private Job

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

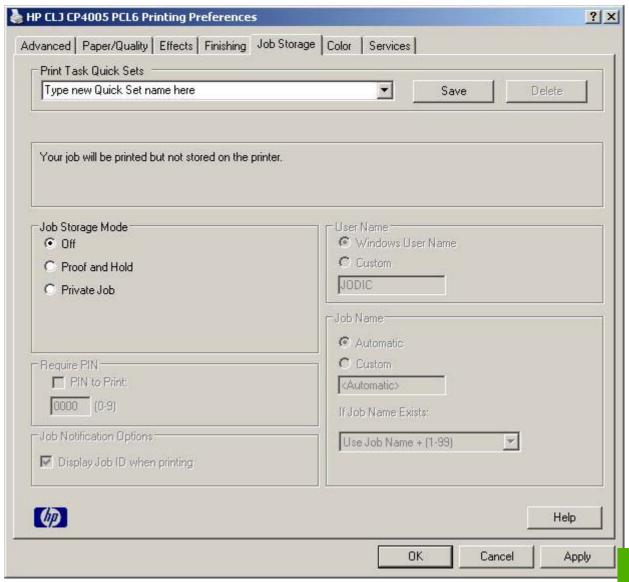


Figure 4-21 Job Storage tab

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

- **Print Task Quick Sets**
- Status group box
- Job Storage Mode
- Require PIN
- **Job Notification Options**
- **User Name**
- Job Name
- Using Job Storage features when printing

Print Task Quick Sets

Use the **Print Task Quick Sets** control to store the current combination of driver settings that appear on all other **Printing Preferences** driver tabs. Print task quick sets are either preset or user-defined printing specifications, such as media size and pages per sheet.

Status group box

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

Job Storage Mode

Use the **Job Storage Mode** options on the HP Color LaserJet CP4005 printer to store documents at the printer and then control their printing at the printer control panel.

The HP Color LaserJet CP4005 printer offers the following **Job Storage Mode** options:

- Off
- Proof and Hold
- Private Job

Off

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

Proof and Hold

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

When selected, this option stores the print job in memory and prints only the first copy of the job, allowing you to check the first copy. If the document prints correctly, print the remaining copies of the print job at the control panel. Set the number of proof-and-hold print jobs that can be stored in the printer at the control panel.

After it is released for printing, the proof-and-hold job is immediately deleted from the printer. If more copies are needed, reprint the job from the software program. Sending a second proof-and-hold job that has the same user name and job name as an existing proof-and-hold job (when the original job has not been released for printing), overwrites the existing job. Proof-and-hold jobs are deleted when the printer is turned off.

The device configuration holds a maximum of 500 proof-and-hold jobs. The number is set at the printer control panel in the **CONFIGURATION** menu, and the default is 32.

When this preset limit is reached, the new document overwrites the oldest held document. Also, sending a document that has the same user name and job name as one that is already stored on the printer memory overwrites the existing document.

To set the number of print-and-hold jobs:

- Press \(\text{(the select button)}.
- 2. Press ▲ (the up button) and ▼ (the down button) to scroll to Configure Device, and then press
- Press ▲ and ▼ to scroll to **System Setup**, and then press ✓. 3.
- Press ▲ and ▼ to scroll to **Job Storage Limit**, and then press ✓.
- Press ▲ and ▼ until the desired number is reached (the default is 32). Press ✓. 5.
- Press \(\subseteq \). A message appears: **Setting Saved**.

Private Job

To use the **Private Job** option, the Job Storage feature must be enabled.

When **Private Job** is selected, the print job is sent to the printer but is not printed until a selection is made on the printer control panel. Selecting Private Job activates the PIN group box. The print job can be printed only after the correct PIN is typed at the printer control panel. After the job is printed, the job is immediately deleted from the printer. This feature is useful when printing sensitive or confidential documents that should not remain in an output bin after printing.

The Private Job/PIN coupling has a PIN restriction of four ASCII numeric characters (0 though 9). Any non-numeric characters are removed immediately. When more than four characters are typed, the characters past the fourth are truncated. The field temporarily accepts fewer than four digits in the string, but when the edit field loses focus, zeroes pad the left end until the PIN contains exactly four digits. The default initialized value for the PIN is 0000 for Private Job.

If more copies are needed, reprint the job from the software program. Sending a second private job that has the same user name and job name as an existing private job (when the original job has not been released for printing) overwrites the existing job, regardless of the PIN. Private jobs are deleted when the printer is turned off.

Require PIN

Require PIN is available when Private Job is selected.

The **PIN** to **Print** box is selected, but not available. Type a four-digit PIN number in the box provided. The stored job is sent to the printer, where the user must type the four-digit PIN on the control panel to retrieve the stored job.

Job Notification Options

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

User Name

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

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

Job Name

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

- <Automatic>. This option, which is the default selection, automatically generates the job name that is associated with the stored print job. The file name of the print job is used if it is available to the print driver. Otherwise, the software program name or a time stamp is used for the job name. The file name of the print job is used if it is available to the print driver. Otherwise, the software program name or a time stamp is used for the job name.
- Custom. Use this to type a custom job name for the stored print job. When you click the Custom, the text field below the option becomes available. In those languages for which <Automatic> cannot be translated without the use of invalid characters, the driver uses a string of three dashes. The acceptable characters for job name and user name vary for each operating system. The string must be of a length and type that can appear on the printer control-panel display.

The **Job Name** field can contain no more than 16 characters, and is limited to A through Z (uppercase or lowercase) and 0 through 9 so that the name can appear on the printer control-panel display. Any typed character in an ASCII code of fewer than 32 or more than 126 characters is removed from the edit field, along with all of the characters that follow it. Any character beyond 16 is truncated.

When the dialog box is closed, or as soon as the focus is removed from the control (that is, when the TAB key is pressed or another control is selected), an empty string is replaced with **<Automatic>**.

If Job Name Exists. When storing a print job, create a print-job name or allow the printer software to assign one automatically. If a print job that has the same name already exists, the new print job overwrites the existing print job. To eliminate the chances of a new print job overwriting an old print job because both have the same name, select **Use Job Name + (1-99)**. When the print-job name exists, the printer software assigns a number between 1 and 99 to the end of the print job name to make it unique. Select **Replace Existing File** to always have the printer software overwrite an existing print job that has the same print job name.

Using Job Storage features when printing

Clicking the print icon in the software program toolbar prints the job without using Job Storage features.

To use Job Storage features when printing, follow these steps:

- Click **File** and then click **Print** from the software program. The **Print** dialog box appears.
- Click **Properties**. The **Properties** dialog box appears. 2.
- Click the **Job Storage** tab. 3.
- Select the Job Storage options by clicking the appropriate option button, and then complete any required fields.
- Click OK. 5.
- Releasing a Job Storage print job
- Deleting a Job Storage print job

Releasing a Job Storage print job

After you send a print job that uses the **Job Storage** feature, you can release the job to print from the printer control panel.

- Press ✓ (the select button).
- Press ▲ (the up button) and ▼ (the down button) to scroll to RETRIEVE JOB, and then press
- Press ▲ and ▼ to scroll to your User Name, and then press ✓.
- Press ▲ and ▼ to scroll to the Job Name, and then press ✓. 4.
- Press ▲ and ▼ to scroll to **PRINT**, and then press ✓.
- 6. Press V.
- If a PIN number is assigned to the job, press ▲ and ▼ to select the first digit of the PIN, and then press \checkmark . The number in the product control-panel display changes to an asterisk. Repeat this step for each of the remaining three digits of the PIN number.

If no PIN number is assigned to the job, continue with the next step.

- Press ▲ and ▼ to select the number of copies to print.
- Press \(\sqrt{} \) to print the job.

Deleting a Job Storage print job

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

- 1. Press \(\square \) (the select button).
- Press ▲ (the up button) and ▼ (the down button) to scroll to RETRIEVE JOB, and then press
- 3. Press V.
- Press ▲ and ▼ to scroll to your User Name, and then press ✓. 4.
- Press ▲ and ▼ to scroll to the Job Name, and then press ✓.

- Press ▲ and ▼ to scroll to DELETE, and then press ✓.
- 7. Press ✓.
- 8. If a PIN number is assigned to the job, press ▲ and ▼ to select the first digit of the PIN, and then press ✓. The number in the product control-panel display changes to an asterisk. Repeat this step for each of the remaining three digits of the PIN number.
 - If no PIN number is assigned to the job, continue with the next step.
- Press ✓ to delete the job.

The stored print job is deleted and the product returns to the **READY** state.

Color tab features

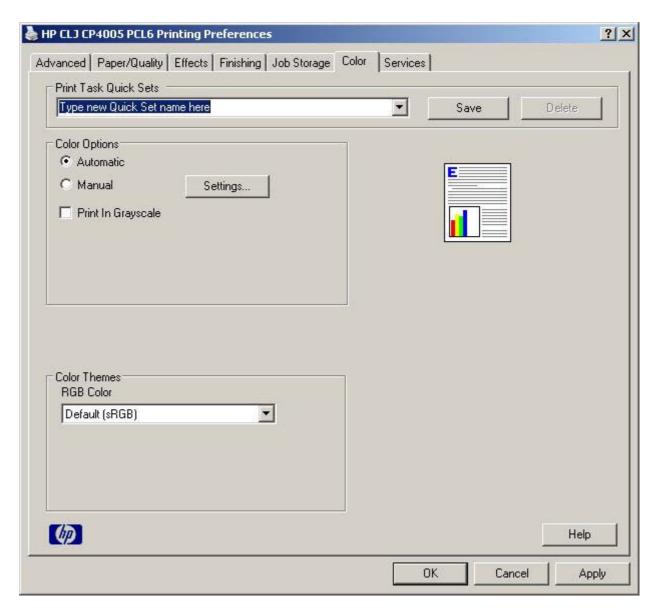
To gain access to the **Color** tab, follow these steps:

- 1. Click Start.
- 2. Select Settings.
- Click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Windows Server 2003) or Printers and Other Hardware Devices (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Printing Preferences.
- 6. Click the Color tab.

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.

ENWW Color tab features 163



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

- Print Task Quick Sets
- Color Options
- Color Themes
- <u>Document preview image</u>

Print Task Quick Sets

Use the **Print Task Quick Sets** control to store the current combination of driver settings that appear on all other **Printing Preferences** driver tabs. Print task quick sets are either preset or user-defined printing specifications, such as media size and pages per sheet.

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

Automatic

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

Manual

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

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

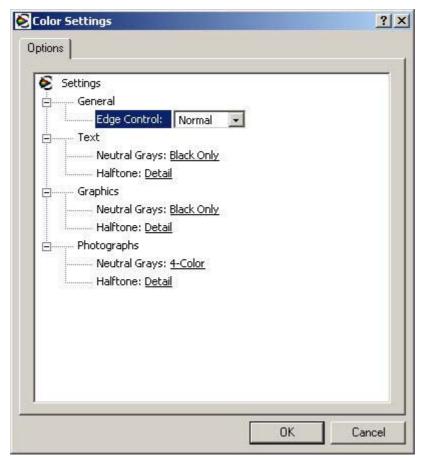


Figure 4-22 Color Settings dialog box

ENWW Color tab features 165

The Color Settings dialog box contains the following controls:

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

General

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

Edge Control determines how edges are rendered. **Edge Control** consists of three components: Adaptive Halftoning, Trapping, and Color Resolution Enhancement technology (C-REt). Adaptive Halftoning increases the edge sharpness. Trapping reduces the effect of color plane misregistration by slightly overlapping the edges of adjacent objects. C-REt increases the apparent resolution by placing each dot for the smoothest edges.

The Edge Control option offers four settings:

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

Neutral Grays

The **Neutral Grays** drop-down menu controls the selection of a printer-dependent color table that is embedded in the product firmware. The options are **Black Only** or **4-Color**. You can adjust the **Neutral Grays** setting independently for text, graphics, or photographs.

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

Halftone

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

The following Halftone options are available:

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

Color Themes

The Color Themes group box contains the following settings:

- Default (sRGB)
- Image Optimization (sRGB)
- Adobe RGB (1998)
- None
- Custom Profile

Default (sRGB)

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

Image Optimization (sRGB)

Select **Image optimization (sRGB)** to enhance documents in which the content is mainly bitmap images, such as .GIF or .JPG files. This setting instructs the printer to use the best color matching for rendering sRGB bitmap images. This setting affects only raster data; it has no effect on text or vector-

ENWW Color tab features 167

based graphics. Using glossy media in combination with this setting provides the maximum enhancement.

Adobe RGB (1998)

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

None

Select **None** to instruct the printer to print RGB data in raw printer mode. To render documents correctly when this option is selected, you must manage color within the software program or 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.

Custom Profile

Custom Profile. Select **Custom Profile** when you want to duplicate the printed output from other printers or for using special effects, such as sepia tones. This setting instructs the printer to use a custom input profile to more accurately predict and control color output.

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

You can download custom profiles from the following Web site:

www.hp.com/support/licp4005

Document preview image

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

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 4-23 Document preview image

Services tab features

To gain access to the **Services** tab, follow these steps:

- 1. Click Start.
- 2. Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- Right-click the printer name.
- 5. Click Printing Preferences.
- 6. Click the Services tab.

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

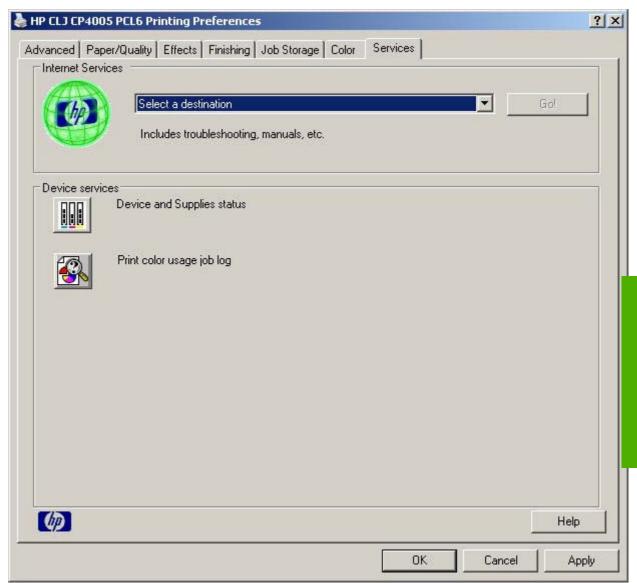


Figure 4-24 Services tab

ENWW Services tab features 169

The **Services** tab contains the following features:

- Internet Services
- Device services

Internet Services

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

- Online diagnostic tools. Opens the HP Instant Support Web site, which contains interactive tools and contacts for troubleshooting.
- 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 CP4005 printer manuals.
- Check for driver updates. Checks the print drivers to see whether the correct and most up-todate print drivers are installed.
- Color printing access/usage. Opens the Color Access Control (CAC) page, which provides tools
 and information to facilitate printing in color. Information on the CAC page include the following:
 - Maximize color value.
 - Monitor color printing by user or application.
 - Easily control who as access to color printing.
 - Bill internal departments for color printing. (using third-party applications)
- Order supplies. Opens the HP SureSupply Web page and shop online for HP Color LaserJet CP4005 printer supplies.
- **Show me how.** Connects to a Web page that provides step-by-step instructions for performing specific tasks. The following information is available:
 - Clear jams
 - Load trays
 - Load special media
 - Print both sides
 - Supported paper
 - More Help

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

Device services

The **Device services** section provides two click-able icons:

- Device and Supplies status. Opens the Device Status screen of the HP EWS.
- Print color usage and job log. Prints the Color Usage Job Log for the printer, which includes
 printer information, usage totals, and the printer job log.

ENWW Services tab features 171

Device Settings tab features

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. Click Start.
- 2. Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Properties.
- Click the **Device Settings** tab.

The **Device Settings** tab contains controls for media-handling devices and controls for managing the HP Color LaserJet CP4005 printer.

Available options depend on the driver and the particular feature.

The following figure shows the **Device Settings** tab for the HP PCL 6 driver.

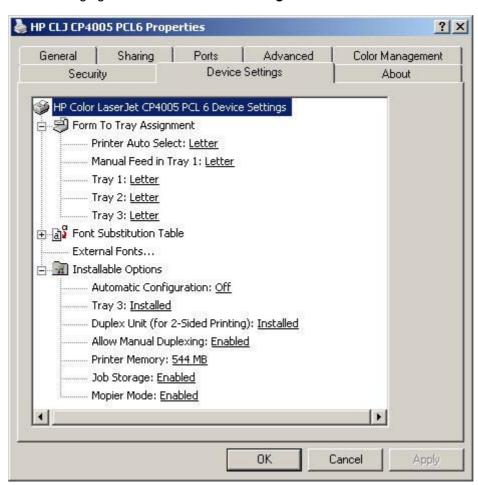


Figure 4-25 HP PCL 6 driver Device Settings tab

b HP CLJ CP4005 PS Properties ? × Advanced General Sharing Ports Color Management **Device Settings** Security About MP Color LaserJet CP4005 PS Device Settings 🚊 🎒 Form To Tray Assignment Printer Auto Select: Letter . Manual Feed in Tray 1: Letter Tray 1: Letter Tray 2: Letter Tray 3: Letter ⊕ 👸 Font Substitution Table Available PostScript Memory: 6144 KB Output Protocol: ASCII Send CTRL-D Before Each Job: No Send CTRL-D After Each Job: Yes Convert Gray Text to PostScript Gray: No Convert Gray Graphics to PostScript Gray: No.

OK

Cancel

The following figures shows the **Device Settings** tab for the PS Emulation driver.

Figure 4-26 PS Emulation driver Device Settings tab, 1 of 2

Add Euro Currency Symbol to PostScript Fonts: Yes

Job Timeout: 0 seconds Wait Timeout: 300 seconds

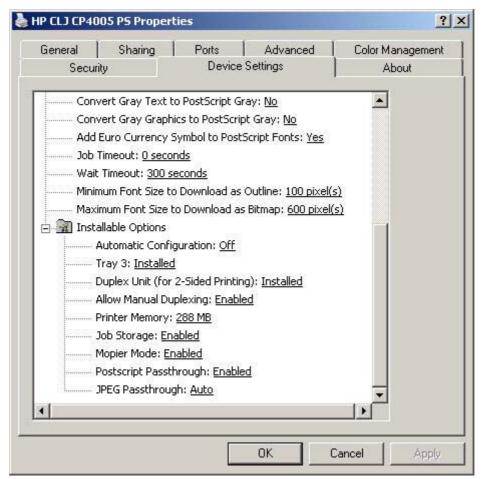


Figure 4-27 PS emulation driver Device Settings tab, 2 of 2

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

- Form to Tray Assignment
- Font Substitution Table
- External Fonts
- Installable Options
- PS Emulation driver Device Settings

Form to Tray Assignment

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

Network administrators can use the **Form to Tray Assignment** setting to specify, in the driver, the media size that is loaded into each available input tray. The use of forms constrains the choices that are available in the media-size list on the **Paper/Quality** tab in the **Printing Preferences** driver tabs. This constraint prevents (or reduces the likelihood of) tying up the printer with media-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 media sources on the Paper/Quality tab.

Configuring the trays

- Select the appropriate tray in the Form to Tray Assignment list.
- Use the drop-down menu to select the media size (or form) that is loaded in that tray.
- Repeat steps 1 and 2 for the remaining trays.
- 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 printer. 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-printer font mappings.

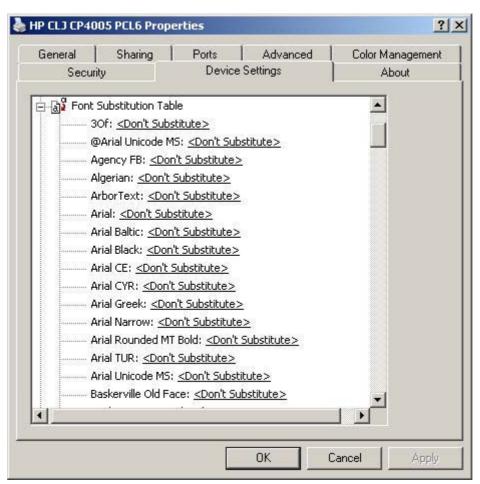


Figure 4-28 Font Substitution Table

External Fonts



NOTE The External Fonts option is available only in the HP PCL 6 and PCL 5 drivers. It is not available in the PS Emulation driver.

Use the **External Fonts** option to install and remove external fonts for the printer. 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.

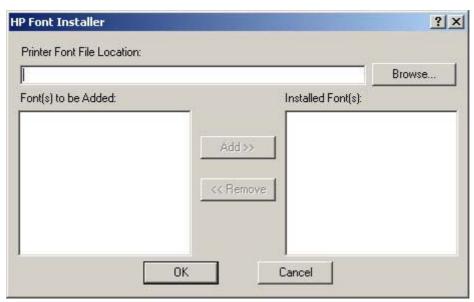


Figure 4-29 HP Font Installer dialog box

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** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the name of the printer.
- 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.

- 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.
- Click Printers (Windows 2000) or Printers and Faxes (Windows XP Professional and Windows Server 2003) or Printers and Other Hardware Devices (Windows XP Home).
- Right-click the name of the printer.
- Click Properties. 5.
- Click the **Device Settings** tab. 6.
- Click the **External Fonts** option. The **Properties** button appears. 7.
- Click **Properties**. The **HP Font Installer** dialog box appears. The external fonts that are installed appear in the Installed Fonts window.
- 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

Topics:

- **Automatic Configuration**
- Tray 3
- Duplex Unit (for 2-Sided Printing)
- **Allow Manual Duplexing**
- **Printer Memory**
- Job Storage
- Mopier Mode
- Mopier mode and collation

Automatic Configuration

Use the **Device Settings** tab to tell the driver about the hardware configuration of the printer. If bidirectional communication is enabled in a supported environment, set up this tab by selecting the Update Now setting in the Automatic Configuration setting. The default setting is Off. After an automatic configuration, the setting returns to Off after the changes are made.

If the computer environment does not support bidirectional communication, the **Update Now** setting is unavailable, the options on this tab must be manually configured.

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

Tray 3

This control specifies whether tray 3 is installed on the printer. The default setting is **Not Installed**.

Duplex Unit (for 2-Sided Printing)

The HP Color LaserJet CP4005dn printer comes with a duplex unit installed. This setting is enabled (**Installed**) by default.

The HP Color LaserJet CP4005dn printer supports smart duplexing. The printer uses the smart duplexing feature to detect information on both sides of the print job pages and only runs the pages through the duplexing unit if printable information appears on the second side of the page.

Allow Manual Duplexing

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

This setting is enabled by default.

Printer Memory

This option matches the setting to the amount of memory that is installed in the printer. The driver generates ranges of memory that can be selected, up to the maximum that the printer can accept. The driver can use this information to manage how the print driver uses the printer memory.

Job Storage

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

Mopier Mode



CAUTION Disabling **Mopier Mode** disrupts functionality for the **Finishing** tab features.

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

The HP Color LaserJet CP4005 printer supports the transmit-once mopying feature when the **Mopier Mode:** setting on the **Device Settings** tab is **Enabled**.

Use the HP PCL 6, PCL 5, or PS emulation driver to perform mopying in one of two ways: either through the software or through the printer hardware. When the mopier is enabled, mopying takes place through the printer hardware by default. One copy of a multiple-page print job is transmitted once through the

network to the printer, together with a printer job language (PJL) command directing the printer to make the specified number of copies.

When the mopier is disabled, mopying is not necessarily disabled. The driver can perform through the software rather than the printer hardware (the mopying path that is disabled when you change the Mopy Mode setting to Disabled). However, sending a multiple-copy print job when the mopier is disabled eliminates the advantage of transmitting the print job once, because the job is sent through the network for each copy.

Mopier mode and collation



CAUTION Disabling **Mopier Mode** disrupts functionality for the **Finishing** tab features.

Mopying and collating print jobs are independent but closely related functions. The print driver performs mopying, sending original print jobs to the printer. The print driver or the document software program control collation. The mopying mode is selected by default in the driver, and can be disabled by changing the Mopier Mode setting on the Device Settings tab to Disabled.

Control collation through the print driver by selecting or clearing the Collated check box on the Advanced tab. Clear the check box, which is available only when the Copy Count option is set to more than 1 copy, to allow the software program to control collation.

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

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

Table 4-5 Driver mopier mode and collation settings

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

PS Emulation driver Device Settings

The following controls are available and appear only in the PS Emulation driver **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 Outline
- 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 printer'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 printer control panel, follow these steps:

- Press ✓ (the select button).
- Press ▲ (the up button) and ▼ (the down button) to scroll to INFORMATION, and then press the ✓.
- Press ▲ and ▼ to scroll to PRINT CONFIGURATION.
- **4.** Press **✓** to print the configuration page.

Output Protocol

This control specifies the protocol that the printer 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 printer is reset at the beginning of every postscript document. The default setting is No. Pressing Ctrl-D resets the printer 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 printer is connected through a network. If the document fails to print when sent to a printer connected through serial ports, change No to Yes.

Send Ctrl-D After Each Job

This control specifies whether the printer is reset at the end of every postscript document. The default setting is Yes. Pressing Ctrl-D resets the printer 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 printer is connected through a network. If the document fails to print when sent to a network printer, 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 printer before the printer stops trying to print the document. If you specify **0 seconds**, the printer 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 printer waits to get more postscript information from the computer. After the specified time passes, the printer 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 printer 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 Outline

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 printer connection type is automatically detected. For network (TCP/IP) connections, JPEG passthrough is disabled. For DOT4 and USB connections, JPEG passthrough is enabled.

About tab features

The **About** tab is in the **Properties** for the print driver.

To gain access to the **About** tab, follow these steps:

- 1. Click Start.
- Select Settings.
- 3. Click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).
- 4. Right-click the printer name.
- 5. Click Properties.
- 6. 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 CP4005 model number, driver, date, and versions. The **About** tab is shown in the following figure.

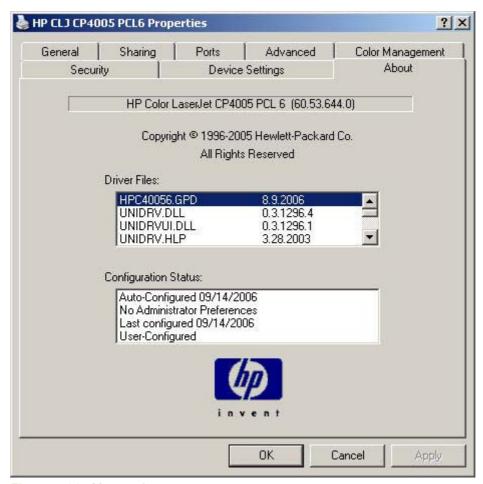


Figure 4-30 About tab

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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 Universal Print Driver for Windows

The Universal Print Driver (UPD) for Windows virtually eliminates the need for IT staff to manage individual print drivers and makes printing easy for users by providing one driver and one interface for all networked HP printers. There is no need to install separate drivers for each print devices, so access is easy and productivity improves.

For more information, see www.hp.com/go/upd.

Improve security and control by using the UPD with the HP Managed Print Administrator to create Managed Print Policies (MPPs). MPPs allow your IT staff to limit end-user network access to certain printers or features (such as color). HP's intuitive setup tools make it easy to implement MPPs and customize the print environment. When enabled, MPPs can prevent users from overriding or circumventing settings by downloading a new version of the driver.

For more information, see www.hp.com/go/mpa.

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6 Macintosh

Introduction

The HP Color LaserJet CP4005 printer comes with printing software and installers for Apple Computer, Inc., Macintosh operating systems.

Topics:

- Macintosh printing-system software
- Macintosh install and uninstall instructions
- Macintosh HP Printer Utility
- HP Embedded Web Server (EWS)

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Macintosh printing-system software

The HP Color LaserJet CP4005 printing system 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 printer's embedded Web server (EWS) to allow for additional configuration and printer 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 LaserJet CP4005 PPD
- HP LaserJet CP4005 PDE
- HP USB EWS Gateway
- HP Device Configuration Utility
- HP Uninstaller for the HP Device Configuration Utility and HP USB EWS Gateway

Topics:

- Hardware requirements
- Operating-system support
- Availability

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

Operating-system support

- Mac OS X v10.2.8, v10.3, v10.4 and later are supported.
- Mac OS 9 and Mac OS X classic are not supported.

Availability

This document provides information about the availability of the HP Color LaserJet CP4005 printingsystem 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
- Software component availability

Printing-system software

The HP Color LaserJet CP4005 printing-system software is available for download at the following Web

www.hp.com/support/ljcp4005

Software component availability

The following HP LaserJet software components are installed:

- HP LaserJet CP4005 PPD
- HP LaserJet CP4005 PDE
- **HP USB EWS Gateway**
- **HP Device Configuration Utility**
- HP Uninstaller for the HP Device Configuration Utility and HP USB EWS Gateway

In-box printing-system software CDs

The software CD for the HP Color LaserJet CP4005 printer contains the files for installing the printingsystem software on the computer.

Topics:

- **Macintosh partition**
- **CD** versions

Macintosh partition

The HP Color LaserJet CP4005 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 CP4005 printer contains the files for installing the printingsystem software on the computer.

The HP Color LaserJet CP4005 printing-system software CD is available in two versions, each of which contains printing-system documentation in various languages, as follows:

- CD WE_AM Americas and Western Europe (part number CB503-60101):
 - CA = Catalan (Català)
 - DA = Danish (Dansk)
 - DE = German (Deutsch)
 - EN = English
 - ES = Spanish (Español)
 - FR = French (Français)
 - HE = Hebrew
 - IT = Italian (Italiano)
 - NL = Dutch (Nederland)
 - NO = Norwegian (Norsk)
 - PT = Brazilian Portuguese (Português)
 - FI = Finnish (Suomi)
 - SV = Swedish (Svenska)
- CD EE AP Eastern Europe and Asia Pacific (part number CB503-60102):
 - AR = Arabic
 - ID = Indonesia (Bahasa)
 - CS = Czech (Cesky)
 - ZHCN = Simplified Chinese
 - ZHTW = Traditional Chinese

- EN = English
- FR = French (Français)
- EL = Greek
- JA = Japanese
- KO = Korean
- HU = Hungarian (Magyar)
- PL = Polish (Polski)
- RU = Russian (Russ)
- TH = Thai
- TR = Turkish (Turkçe)

Macintosh install and uninstall instructions

The HP Color LaserJet CP4005 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 CP4005 printing-system software for Macintosh operating systems.

Topics:

- Macintosh component descriptions
- Install the Macintosh printing system
- Uninstall the Macintosh printing system

Macintosh component descriptions

The printer includes the following software for Macintosh computers:

- HP LaserJet CP4005 PPD
- HP LaserJet CP4005 PDE
- HP USB EWS Gateway
- HP Device Configuration Utility
- HP Printer Utility
- HP Uninstaller for the HP Device Configuration Utility and HP USB EWS Gateway

Topics:

- HP LaserJet PPDs
- PDEs
- HP Embedded Web Server
- Install notes (Readme file)
- Online help

HP LaserJet PPDs

In Mac OS X V10.2.8 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 printer 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 6-1 Adding a printer in Macintosh operating systems on page 194.

PDEs

Printer Dialog Extensions (PDEs) are code plug-ins (for Mac OS X V10.2.8 or later only) that provide access to printer features, such as number of copies, duplexing, and quality settings.

HP Embedded Web Server

Mac OS X supports the HP Embedded Web Server (HP EWS). Use the HP EWS to perform the following tasks:

- View the printer status and change device settings.
- View and change network settings for the printer.
- Print information pages for the printer.
- View the printer event log.

The HP EWS is accessed by using a Web browser such as Safari. The HP USB EWS Gateway software allows the Web browser access to the printer if the printer is connected using a USB cable. The HP EWS can also by opened by choosing the **Utility** button in the Macintosh Print Center or Printer Setup Utility. or through the HP Device Configuration utility.

Install notes (Readme file)

This text file contains information about basic printer installation and OS support.

Online help

The help system is in English only, and can be viewed through a browser or in the Macintosh OS Help

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 printer. 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

- If you are connecting the printer to a network, connect the network cable to the printer network port. If you are connecting the printer to a computer using the USB cable, install the software before connecting the USB cable.
- 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 LaserJet CD-ROM icon on the desktop to open the CD-ROM window.

Double-click the **HP LaserJet 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 printer varies by operating system. The following table shows the print setup tools that are available.

Table 6-1 Adding a printer in Macintosh operating systems

Operating System	Print Center	Printer Setup Utility	Print & Fax
Mac OS X V10.2.8	х		
Mac OS X V10.3		х	х
Mac OS X V10.4		х	х

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 for the Easy Install (the typical installation option).



NOTE If you are installing the printer using a network connection, you can connect the printer to the network before installing the software, but if you are installing the printer using a USB connection, install the software *before* connecting the USB cable.

Insert the HP Color LaserJet CP4005 printing-system software CD in the CD-ROM drive.

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



Figure 6-1 HP LJ CD-ROM icon

The hp LaserJet dialog opens.



Figure 6-2 hp LaserJet Software screen

In the HP LaserJet Software screen, double-click the HP LaserJet.app icon. This begins the install process.



Figure 6-3 HP LaserJet.app icon

The **Authenticate** dialog appears.



Figure 6-4 Authenticate dialog

Type the correct "admin" name and password and click **OK** to continue. The installer startup screen appears.

Click **Cancel** to exit the installation.



Figure 6-5 HP LaserJet for Macintosh installer startup-screen

Click **Go Back** to return to the previous screen.

Click Continue. The Read Me dialog appears, as shown in the following figure.



Figure 6-6 HP LaserJet Installer Read Me dialog

Click **Print...** to open the **Page Setup** dialog for the default printer and print a copy of the readme.

Click **Save...** to open the system **Save** dialog and save the readme to disk.

Click **Continue** to continue the installation. The **License** dialog appears.



Figure 6-7 License dialog

Click **Print...** to open the **Page Setup** dialog for the default printer and print a copy of the license agreement.

Click **Save...** to open the system **Save** dialog and save the license agreement to disk.

Read the software-license agreement and then click **Continue** to continue the installation. A dialog appears, asking you to accept the license agreement, as shown in the following figure.



Figure 6-8 Agree dialog

Click **Disagree** to decline the agreement, end the installation process, and close the installer.

Click **Agree** to accept the agreement. The **Easy Install** dialog appears, as shown in the following figure.



Figure 6-9 Easy Install dialog

The default option in the drop-down menu at the top of the screen is Easy Install. You can also choose **Custom Install** in the same menu, as shown in the following figure.



Figure 6-10 HP LaserJet Installer dialog (custom install)

The Custom Install screen displays all of the options that are available on the printing-system software CD. Use the check boxes on the list to install the components that you want to install.

The Configuration installation option installs the HP EWS Configuration Utility, which is used to access the HP EWS program. For more information, see HP Embedded Web Server (EWS) on page 223.

The **Print** installation option installs the print-system files. The printing-system files are installed in the System\Library folder on the Macintosh hard drive.

Click Go Back to return to the previous screen.

Click the ? icon to the right of each item in the list to open a screen that describes the component.

Click **Install** to start the installation on the selected disk. The **Installing** screen appears, as shown in the following figure. If installed, the HP Device Configuration Utility is installed under the Application directory in a directory labeled HP EWS Device Configuration. An uninstaller utility for the HP Device Configuration Utility is also installed in this directory.



Figure 6-11 Installing dialog

The **Installing** dialog shows installation progress. No action is required unless you want to stop the installation.

Click **Stop** to interrupt the install file copy process.

The **Finish Up** dialog appears, stating that the installation was successful, as shown in the following figure.



Figure 6-12 Finish Up dialog

Click Quit to exit the installer.

Click Continue to return to the HP LaserJet Installer.

Printer setup

After installing the printing-system software in Macintosh operating systems, the printer must be set up.

Topics:

- Set up a printer with Mac OS X V10.4 or later)
- Set up a printer with Mac OS X V10.3
- Set up a printer with Mac OS X V10.2.8
- Troubleshooting the printer setup

Set up a printer with Mac OS X V10.4 or later)

Carry out these steps after the software installation is complete.

1. If you are installing the printer using a USB connection, connect the USB cable between the HP Color LaserJet CP4005 printer and the computer. Turn on the printer. If you are installing using a network connection, verify that the network cable is connected to the printer and the printer is on.

In the Applications folder, open the Utilities folder, and then run the Printer Setup Utility. The **Printer List** appears. It looks similar to the one shown in the following figure.



Figure 6-13 Printer list screen

You can also configure the printer using the Print & Fax pane of System Preferences (from the Apple menu, choose System Preferences..., then choose Print & Fax).

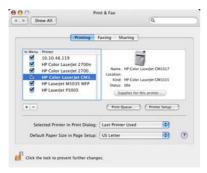


Figure 6-14 Print & Fax dialog

If you are installing the printer using a USB connection, verify that the printer appears on the printer list. The Kind column in the printer list, or the Kind field in the Print & Fax screen, should display HP Color LaserJet CP4005. If this is the case, the setup is complete.

If the device does not appear, or if the correct information does not appear in the Kind field, see Troubleshooting the printer setup on page 208.

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

- Click Add in the Printer List (or the + button in the Print & Fax utility) to open the Printer Browser screen.
- You can use either Bonjour or IP Printing for the network connection.



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

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

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

Click the Default Browser tab.



Figure 6-15 Default Browser tab

b. Select the HP Color LaserJet CP4005 printer from the list. The software verifies that the printer is connected to the network and the **Print Using** field is automatically populated with the correct PPD for the device.



NOTE If you are on a network that has more than one HP Color LaserJet CP4005, print a configuration page and match the Bonjour Printer Name to the name on the list to identify the printer you are installing. (See Print the configuration page on page 251.)

NOTE If the HP Color LaserJet CP4005 printer does not appear in the list, verify that the printer is on and connected to the network, then try turning the printer off and then on again. If the **HP Color LaserJet CP4005** PPD does not appear in the **Print Using** pull-down list, turn the computer off and then on again, then restart the setup process. For more troubleshooting information, see <u>Troubleshooting the printer</u> setup on page 208.

If you want to use the IP Printing method, carry out the following steps:

a. Click the IP Printer tab.



Figure 6-16 Printer Browser – IP Printer tab

- **b.** Choose **HP Jet Direct Socket** from the **Protocol** pull-down menu. This is the recommended setting for HP printer.
- c. Print the configuration pages.

To print a configuration page, follow these instructions.

- i. Press \(\square \) (the select button).
- ii. Press ▲ (the up button) and ▼ (the down button) to scroll to INFORMATION, and then press V.
- iii. Press ▲ and ▼ to scroll to PRINT CONFIGURATION.
- iv. Press \(\sqrt{} \) to print the configuration page.
- On the first configuration page, under IPv4, find the IP Address. Type this address into the **Address** field on the add printer screen.
- The Name, Location, and Print Using information will automatically be filled in. If the HP Color LaserJet CP4005 Series PPD does not appear in the Print Using field, turn the computer off and then on again and restart the setup process.
- Click **Add**. The **Installable Options** screen appears.



Figure 6-17 Installable Options screen

- If the printer has tray 3, change the appropriate tray setting from Not Installed to Installed. 7.
- If the printer has a duplex unit, select the **Duplex Unit** check box. (Duplexing is standard on the HP Color LaserJet CP4005dn printer.)
- After selecting the installable options, click Continue. The printer name appears in the Printer List and the setup is complete.



Figure 6-18 Printer List screen

Set up a printer with Mac OS X V10.3

If you are installing the printer using a USB connection, connect the USB cable between the HP Color LaserJet CP4005 printer and the computer. Turn on the printer. If you are installing using a network connection, verify that the network cable is connected to the printer and the printer is on.

2. In the Applications folder, open the Utilities folder, and then run the Printer Setup Utility.

You can also configure the printer using the **Print & Fax** pane of **System Preferences** (from the Apple menu, choose **System Preferences...**, then choose **Print & Fax**).

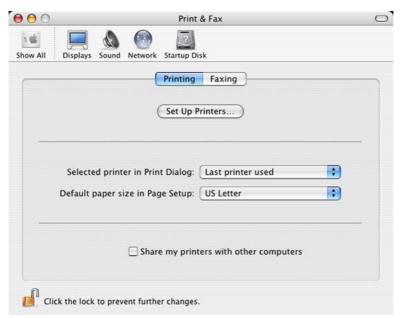


Figure 6-19 Print & Fax screen

3. If you are installing the printer using a USB connection, verify that the printer appears on the printer list. (In the Print & Fax screen, click the Set Up Printers... button to see the printer list.) The Kind column in the printer list same change as before should display HP Color LaserJet CP4005. If this is the case, the setup is complete.

If the printer does not appear, or if the correct information does not appear in the **Kind** field, see <u>Troubleshooting the printer setup on page 208</u>.

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

Click Add (or the Set Up Printers... button in the Print & Fax screen, and then Add) to open the add printer screen.

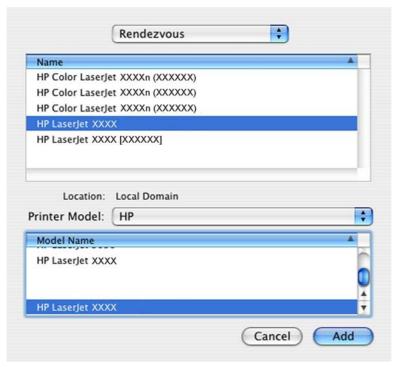


Figure 6-20 Add printer screen

Select the network connection protocol in the top pull-down menu. The two supported protocols are Rendezvous and IP Printing.



NOTE Rendezvous is the easiest method and is the best method to use if the printer is installed on your local network.

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

If you are using Rendezvous, carry out the following step:

Select the HP Color LaserJet CP4005 printer in the Name list. The Printer Model and Model **Name** are selected automatically.



NOTE If you are on a network that has more than one HP Color LaserJet CP4005 printer, print a configuration page and match the Rendezvous Printer Name to the name on the list to identify the printer you are installing. (See Print the configuration page on page 251.)



NOTE If the HP Color LaserJet CP4005 printer does not appear in the list, verify that the printer is on and connected to the network. If it still does not appear, try turning the printer off and then on again. Finally, turn the computer off and then on again, then restart the setup process. For more troubleshooting information, see <u>Troubleshooting the printer setup</u> on page 208.



NOTE If the automatic selection fails, or if you want to manually select a .PPD file, click the **Printer Model** pull-down menu, select **HP**, and then select the .PPD file that you want to add. If the **HP Color LaserJet CP4005 Series** PPD does not appear in the **Model Name** list, turn the computer off and then on again and restart the setup process.

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

- **a.** Choose **Socket/HP Jet Direct** from the **Printer Type** pull-down menu. This is the recommended setting for HP devices.
- **b.** Print out the printer configuration pages.

To print a configuration page, follow these instructions.

- i. Press ✓ (the select button).
- ii. Press ▲ (the up button) and ▼ (the down button) to scroll to INFORMATION, and press
- iii. Press ▲ and ▼ to scroll to PRINT CONFIGURATION.
- iv. Press ✓ to print the configuration page.
- **c.** On the first configuration page, under **Product Settings**, find the IP Address. Type this address into the **Printer Address** field on the add printer screen.
- **d.** Select the **Printer Model** and select HP Color LaserJet CP4005 in the **Model Name** list. If the **HP Color LaserJet CP4005 Series** PPD does not appear in the **Model Name** list, turn the computer off and then on again and restart the setup process.
- 6. Click **Add**. The HP Color LaserJet CP4005 appears in the **Printer List**.
- 7. To configure installable options such as a duplexing unit or optional paper tray, click **Show Info?** on the printer list and choose **Installable Options** in the pull-down menu.
- 8. In the **Collation in Printer** drop-down menu, select one of the following options, depending on the printer configuration:
 - Yes Total RAM > 96 MB or Hard Disk
 - No Total RAM < 96 MB and No Hard Disk
- 9. If the printer has the optional 500-sheet tray 3, select the appropriate tray.
- 10. If the printer has a duplex unit, select the **Duplex Unit** check box.
- 11. Click Apply Changes, and then close the Printer List dialog.

Set up a printer with Mac OS X V10.2.8

 If you are installing the printer using a USB connection, connect the USB cable between the HP Color LaserJet CP4005 printer and the computer. Turn on the printer. If you are installing using a network connection, verify that the network cable is connected to the printer and the printer is on. In the Applications folder, open the Utilities folder, and then run the Print Center. The Printer List screen appears.



Figure 6-21 Printer List screen

If you are installing the printer using a USB connection, verify that the printer appears on the device list. The Kind column in the printer list should display HP Color LaserJet CP4005. If this is the case, the setup is complete.



NOTE If the Kind column does not appear in the printer list, go to the View menu, and choose Columns and then Kind.

If the printer does not appear, or if the correct information does not appear in the Kind column, see Troubleshooting the printer setup on page 208.

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

Click Add to open the add printer screen.

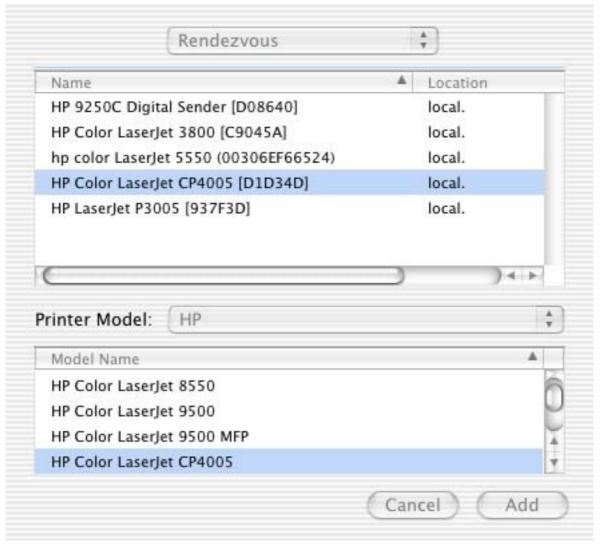


Figure 6-22 Add printer screen

5. Choose the network connection protocol in the top drop-down menu. The two supported protocols are **Rendezvous** and **IP Printing**.

If you are using Rendezvous, carry out the following step:



NOTE Rendezvous is the easiest method and is the best method to use if the printer is installed on your local network.

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

If you are using Rendezvous, carry out the following step:

Select the HP Color LaserJet CP4005 printer in the **Name** list. The **Printer Model** and **Model Name** are selected automatically.



NOTE If you are on a network that has more than one HP Color LaserJet CP4005 printer, print a configuration page and match the Rendezvous Printer Name to the name on the list to identify the printer you are installing. (See Print the configuration page on page 251.)

NOTE If the HP Color LaserJet CP4005 printer does not appear in the list, verify that the printer is on and connected to the network. If it still does not appear, try turning the printer off and then on again. Finally, turn the computer off and then on again, then restart the setup process. For more troubleshooting information, see Troubleshooting the printer setup on page 208.



NOTE If the automatic selection fails, or if you want to manually select a PPD file, click the Printer Model drop-down menu, choose HP, and then choose the PPD file that you want to add. If the HP Color LaserJet CP4005 PPD does not appear in the Model Name list, turn the computer off and then on again and restart the setup process.

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

Print out the printer configuration pages.

To print a configuration page, follow these instructions.

- i. Press \(\square \) (the select button).
- ii. Press ▲ (the up button) and ▼ (the down button) to scroll to INFORMATION, and then press V.
- iii. Press ▲ and ▼ to scroll to PRINT CONFIGURATION.
- iv. Press ✓ to print a configuration page.

The printer prints the configuration page.

- On the second configuration page, under IPv4, find the IP Address. Type this address into the Printer's Address field.
- Choose Printer Model and then choose the HP Color LaserJet CP4005 printer in the Model Name list.
- Click Add. The HP Color LaserJet CP4005 printer appears in the Printer List.

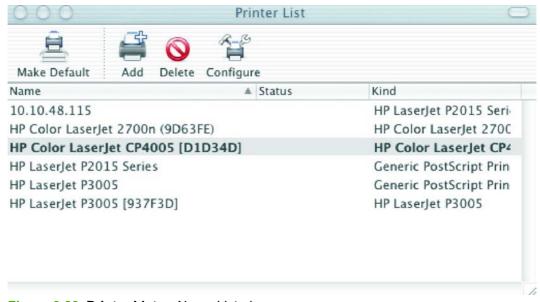


Figure 6-23 Printer List — Name Listed

- 7. Select the HP Color LaserJet CP4005 printer, go to the **Printers** menu, and choose **Show Info**.
- 8. Choose **Installable Options** from the top drop-down menu.



Figure 6-24 Printer Info — Installable Options dialog (sample)

- 9. In the **Collation in Printer** drop-down menu, choose one of the following options, depending on the printer configuration:
 - Yes Total RAM = 192 MB or Hard Disk
 - No Total RAM < 192 MB and No Hard Disk
- 10. If the printer has tray 3, choose **Tray 3**.
- **11.** If the printer has a duplex unit, select the **Duplex Unit** check box. (Duplexing is standard on the HP Color LaserJet CP4005dn printer.)
- 12. Click Apply Changes, and then close the Printer List dialog.

Troubleshooting the printer setup

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

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

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

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

- Unplug USB cable.
- 2. Delete the print queue with the incorrect type (for example, Generic PostScript Printer).
- Reinstall the printer software.
- 4. Turn the computer off and then on again.
- Reconnect the USB cable from the computer to the printer.

If these steps do not resolve the problem, delete the incorrect print gueue, click Add, choose the printer from the list, and then browse manually for the HP Color LaserJet CP4005 PPD.

Uninstall the Macintosh printing system

Follow these instructions to uninstall the Macintosh Printing System.

- Browse to the folder containing the PPDs. In Mac OS X V10.2.8 or later, the PPDs are installed in System/Library/Printers/PPDs/Contents/Resources:<lang>.lproj, where <lang> is the appropriate language.
- Choose the **HP Color LaserJet cp4005.gz** file and drag it to **Trash**.
- Empty the Trash.
- To uninstall the HP Device Configuration application and supporting files, go to /Applications/HP EWS Device Configuration and run the HP Uninstaller application.

Macintosh HP Printer Utility

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

The HP Printer Utility is available only in Mac OS X V10.2.8 or later. The HP Printer Utility does not work when it is installed by using the AppleTalk protocol. Use IP, Bonjour, Rendezvous, or USB to enable the HP Printer Utility.

Topics:

- Access to the HP Printer Utility
- Supplies Status
- Device Information
- HP Support
- File Upload
- Update Firmware
- Duplex mode
- Trays Configuration
- Lock Resources
- Stored Jobs
- E-mail Alerts
- Network Settings
- Bonjour Settings
- Additional Settings

Access to the HP Printer Utility

In Mac OS X V10.3, follow these steps to gain access to the HP Printer Utility:

- 1. Switch to Finder.
- 2. Find and double-click **Printers**. The **Select Printer** screen appears.

In Mac OS X V10.4, follow these steps to gain access to the HP Printer Utility:

- 1. Click Go.
- Click Utilities.
- 3. Double-click **HP Printer Selector**. The **Select Printer** screen appears.



Figure 6-25 Select Printer screen – printer not selected

To open the HP Printer Utility directly, select the printer and click Launch Utility.

If the printer does not appear, click **More Printers...**. The **Connection Type** screen appears, as shown in the following figure.



Figure 6-26 Connection Type screen

Choose the connection type (**USB**, **TCP/IP**, or **AppleTalk**). The printer name appears under **Model Name**, as shown in the preceding figure.

On the **Connection Type** screen, click **Add**. The **Select Printer** screen appears, showing printer information.



Figure 6-27 Select Printer screen – printer selected

On the **Select Printer** screen, click **Settings...** to open the **Device Status** screen in the HP EWS.

To open the HP Printer Utility, select the printer and click Launch Utility.



If the HP Printer Utility software detects a condition that might need attention, the **Printer Status** screen appears.

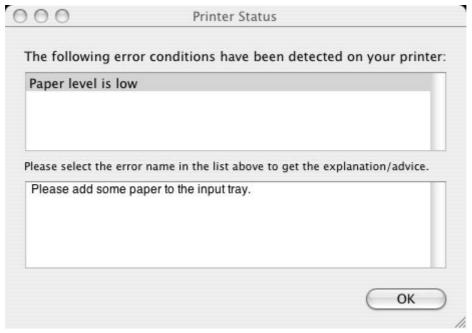


Figure 6-28 Printer Status screen

Address the condition and click **OK** to close the screen. The HP Printer Utility opens.

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

Supplies Status

The HP Printer Utility opens to the **Current Supplies Levels** screen.

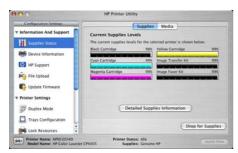


Figure 6-29 Current Supplies Levels screen

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



Figure 6-30 Supplies Information screen

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

If you have Internet access and click **Shop for Supplies** (see Figure 6-29 Current Supplies Levels screen on page 212), a screen appears that explains the ordering process and describes the kind of information that can be sent about your printer to facilitate the ordering of supplies.

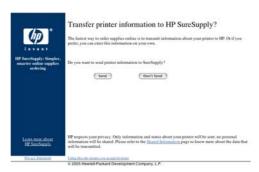


Figure 6-31 Transfer printer information to HP SureSupply? screen

After either option is selected (Send or Don't Send), the Welcome to HP SureSupply Web page opens, as shown in the following figure.



Figure 6-32 Welcome to HP SureSupply screen

On the Transfer printer information to HP SureSupply? page, click the Shared Information link to open a screen that shows the HP privacy statement, as shown in the following figure.

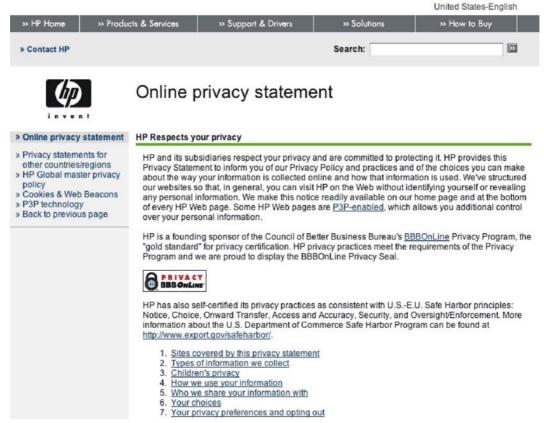


Figure 6-33 Online privacy statement screen

You can continue ordering supplies without sending printer information by clicking the **Don't Send** link.

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

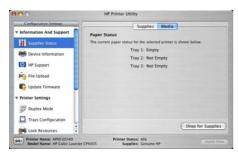


Figure 6-34 Paper Status screen

You can also order supplies from this screen by clicking **Shop for Supplies**.

Device Information

Click **Device Information** in the menu on the left to find the printer service ID (if assigned), the firmware version, and the serial number.

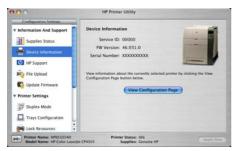


Figure 6-35 Device Information screen

The printer configuration page shows other settings; click View Configuration Page to see it.

Click the printer icon in the lower-left corner to see information about another installed printer. This action relaunches the HP Printer Utility so that you can select another printer (see <u>Figure 6-49 Device Status screen on page 224</u>).

HP Support

Click HP Support to open the HP Online Support screen.



Figure 6-36 HP Online Support screen

If you have Internet access, you can connect to HP support pages over the Web from this screen.

Click the **Instant Support** link to open the HP Instant Support Web page.



Figure 6-37 HP Instant Support link

Click the **Hewlett-Packard Online Privacy Statement** link to open a screen that shows the HP privacy statement.

Click the **Product Support** link if you do not want to send information to HP but would like to receive generic product support.

Click **Continue** to open a page where you can select the printer and find further information about product support.

Click Cancel to return to the HP Online Support screen in the HP Printer Utility.

Click **Shop for Supplies** to open the Order Supplies Web page (see <u>Figure 6-31 Transfer printer information to HP SureSupply? screen on page 213</u>).

Click Online Registration to open the HP Registration Web page and register the printer.

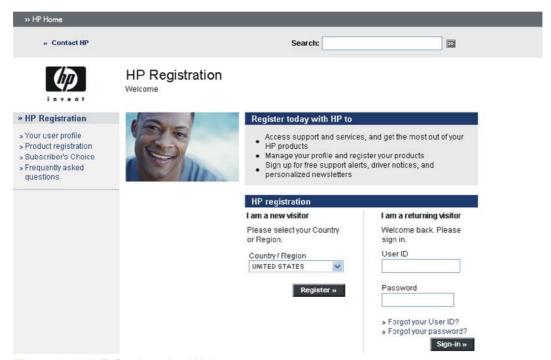


Figure 6-38 HP Registration Web page

File Upload

On the Configuration Settings menu, click File Upload to open the File Upload screen.



Figure 6-39 File Upload screen

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

Documents in the following file formats can be printed by using a command line. That is, they do not need to be opened in a software program that supports the file format (such as the Adobe Acrobat or

Acrobat Reader programs for .PDF files), but can be sent directly to the printer by using the **File Upload** command.

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

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

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

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

Update Firmware

Choose **Update Firmware** to locate a firmware upgrade file and install it on the printer. The **Update Firmware** screen is shown in the following figure.

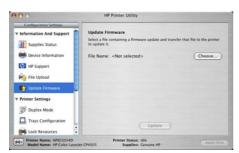


Figure 6-40 Update Firmware screen

Click **Choose** to open a navigation screen. Browse to the firmware file and click **Open**. The **Update Firmware** screen shows the file name. Click **Update**.

Duplex mode

If a duplex unit is installed (HP Color LaserJet CP4005dn printer), the **Configuration Settings** menu includes a **Duplex Mode** setting. Click this setting to open the **Duplex Mode** screen, as shown in the following figure.

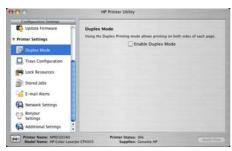


Figure 6-41 Duplex Mode screen

- Choose **Duplex Mode** to open the **Duplex Mode** screen. (Only available on the HP Color LaserJet CP4005dn printer.)
- 2. Select the **Enable Duplex Mode** check box. This box is clear by default.
- 3. Click **Apply Now** to enable printing on both sides of the page.

Trays Configuration

Under **Printer Settings**, choose **Trays Configuration** to open the **Trays Configuration** screen, as shown in the following figure.

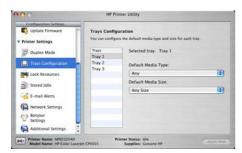


Figure 6-42 Trays Configuration screen

- Choose Trays Configuration to change media size and type for each of the trays installed on your printer.
- To change the media size, select a tray and then choose a different media size in the **Default** Media Size drop-down menu.
- To change the media type, select a tray and then choose a different media type in the **Default** Media Type drop-down menu.
- Click Apply Now to save the settings.

Lock Resources

Select **Lock Resources** to lock certain features of the HP Color LaserJet CP4005 printer. The **Lock Resources** screen is shown in the following figure.



Figure 6-43 Lock Resources screen

In Control Panel Access Level, choose one of the following settings:

- No Locking provides full control of the printer.
- Minimal Locking provides control over paper-handling features.
- Moderate Locking blocks changes in the printer configuration.
- Maximal Locking prevents users from changing printer control-panel settings.

In the lower pane, select the **Lock** check box for the mass-storage unit that you want to lock.



WARNING! Click **Initialize selected mass-storage unit** *only* if you want to erase all data that is currently stored on the hard drive. *You cannot undo this action*.

Stored Jobs

Choose **Stored Jobs** to change the **Enable Job Storing** setting. This setting is selected by default. Click to clear the check box to disable the job-storing feature.



Figure 6-44 Enable Job Storing screen

You can type a PIN for your job in the Enter Secure Job PIN field.

Select the number of copies in the Copies to Print field.

Select a stored job and click **Print** to print the job.

Select a stored job and click **Delete** to delete the job.

Job-storage print jobs can also be released or deleted at the printer control panel.

Topics:

- Releasing a job-storage print job
- Deleting a job-storage print job

Releasing a job-storage print job

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

- Press (the select button).
- 2. Press ▲ (the up button) and ▼ (the down button) to scroll to Retrieve Job, and then press ✓.
- 3. Press ▲ and ▼ to scroll to your User Name, and then press ✓.
- 4. Press ▲ and ▼ to scroll to the Job Name, and then press ✓.
- 5. Press ▲ and ▼ to scroll to Print, and then press ✓.
- Press ✓.

If a PIN number is assigned to the job, press ▲ and ▼ to select the first digit of the PIN, and then press ✓ . Repeat this step for each of the remaining three digits of the PIN number.

If not PIN number is assigned to the job, continue with the next step.

- 7. Press ▲ and ▼ to select the number of copies to print.
- 8. Press \(\sqrt{} \) to print the job.

Deleting a job-storage print job

Sometimes it is necessary to delete a print job from the printer memory. Do this from the printer control panel.

- Press
 ✓ (the select button).
- 2. Press ▲ (the up button) and ▼ (the down button) to scroll to Retrieve Job, and then press ✓.
- 3. Press ▲ and ▼ to scroll to your User Name, and then press ✓.
- 4. Press ▲ and ▼ to scroll to the Job Name, and then press ✓.
- 5. Press ▲ and ▼ to scroll to **Delete**, and then press ✓.
- Press ✓ .

If a PIN number is assigned to the job, press ▲ and ▼ to select the first digit of the PIN, and then press ✓ . Repeat this step for each of the remaining three digits of the PIN number.

If not PIN number is assigned to the job, continue with the next step.

Press ✓ to delete the job.

The stored print job is deleted and the printer returns to the **Ready** state.

E-mail Alerts

The **E-mail Alerts** screen is available if the HP Color LaserJet CP4005 printer is installed over a network connection. It is not available when the printer is installed over a USB connection.

Choose **E-mail Alerts** to configure the HP Color LaserJet CP4005 printer to send e-mail notifications to users.

If a user name and password have been set, you might need to obtain them from the IT administrator. For more information, see the *HP Embedded Web Server User Guide*.



Figure 6-45 E-mail Alerts screen

Click **Open E-mail Alerts Settings** to open the HP EWS. The HP EWS opens to the **Alerts** screen on the **Settings** tab, where you can set notifications to manage the HP Color LaserJet CP4005 printer.

Network Settings

Network Settings is available if the HP Color LaserJet CP4005 printer is installed over a network connection. It is not available when the printer is installed over a USB connection.



Figure 6-46 Networking screen

Choose one of the following options in the **Configuration** drop-down menu:

- DHCP
- BootP
- Manual

You can also use this screen to modify the following settings:

- Host Name
- IP Address
- Subnet Mask
- Default Gateway

To save new settings, click **Apply Now**.

To view and change other network settings, click **Additional Network Settings**. The HP EWS Networking screen opens.

If a user name and password have been set, you might need to obtain them from your IT administrator. For more information, see the *HP Embedded Web Server User Guide*.

The HP EWS opens to the **Network Settings** screen. For information about this screen, see <u>Networking</u> tab on page 49.

Bonjour Settings

The **Bonjour Settings** screen is available if the HP Color LaserJet CP4005 printer is installed over a network connection. It is not available when the printer is installed over a USB connection.

Choose Bonjour Settings to open the Bonjour Settings screen. Bonjour is enabled by default.



Figure 6-47 Bonjour Settings screen

To disable Bonjour, click to clear the **Enable Bonjour** check box and then click **Apply Now**.

The following options are available in the **The highest priority service** drop-down menu:

- Port 9100
- IPP
- LPD-RAW
- LPD-TEXT
- LPD-AUTO
- LPD-BINPS (default)

After you select a new setting, click **Apply Now** to save settings.

Additional Settings

Choose Additional Settings to gain access to the HP EWS.



Figure 6-48 Additional Settings screen

To open the HP EWS, click Open Embedded Web Server.

For information about HP EWS settings, see <u>HP Embedded Web Server on page 40</u> or consult the *HP Embedded Web Server User Guide*.

HP Embedded Web Server (EWS)

HP EWS is embedded in the printer firmware. It is a series of Web pages that provide access to additional printer status and configuration options.

Topics:

- Access to the HP EWS
- Information tab
- Settings tab
- Networking tab

Access to the HP EWS

Use any one of the following methods to gain access to the HP EWS:

Using the Mac OS Print Center, Printer Setup Utility, or Print & Fax screen:

- 1. In the **Applications** folder, open the **Utilities** folder, and then run the **Printer Setup Utility** or the **Print Center** utility. You can also access the HP EWS using the **Print & Fax** pane of **System Preferences** (from the Apple menu, choose **System Preferences...**, then choose **Print & Fax**).
- 2. Select the HP Color LaserJet CP4005 printer, and then click **Utility** (Mac OS X V10.3 or later). The Web browser opens and the **Device Status** screen appears. In the **Print & Fax** screen, select the HP Color LaserJet CP4005 printer, click the **Print Queue...** button, then click **Utility**.

Using a Web browser:



NOTE This method can only be used if the printer is using a network connection.

On the printer control panel, print a configuration page.

To print a configuration page, follow these instructions.

- **a.** Press ✓ (the select button).
- **b.** Press ▲ (the up button) and ▼ (the down button) to scroll to **INFORMATION**, and then press ✓ .
- c. Press ▲ and ▼ to scroll to PRINT CONFIGURATION.
- d. Press

 ✓ to print a configuration page.

The printer prints the configuration page.

On the first configuration page, under **Product Settings**, find the IP Address. Type this address into a Web browser such as Safari. The **Device Status** screen appears.

Using the HP Device Configuration application:

- 1. In the Applications folder, open the HP EWS Device Configuration folder. Run the HP Device Configuration application.
- 2. Choose the HP Color LaserJet CP4005 printer from the list of devices. The Web browser opens and the **Device Status** screen appears.

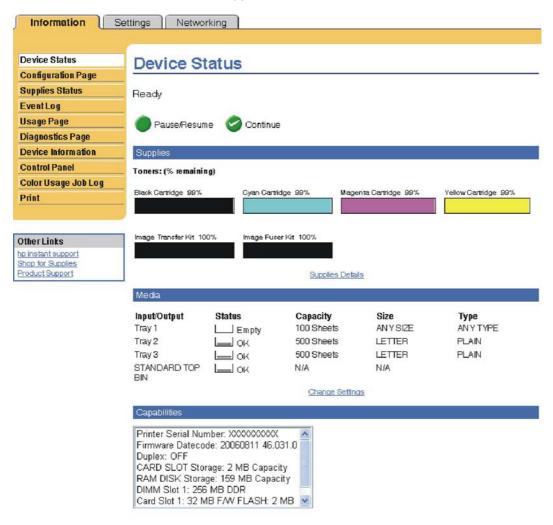


Figure 6-49 Device Status screen

Click the Supplies Status link to open the Supplies Status screen.

Click the Change Settings link to open the Configure Device screen on the Settings tab.

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

Information tab

The **Information** tab allows you to access and print out detailed information regarding printer and supply status, printer configuration, network configuration, and usage.

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

- **Device Status**
- Configuration page
- Supplies Status page
- **Event Log**
- **Usage Page**
- **Device Information**
- **Control Panel**
- Print

Device Status

The **Device Status** page shows printer status messages from the printer. The **Device Status** page also displays some pertinent printer information and printer settings.

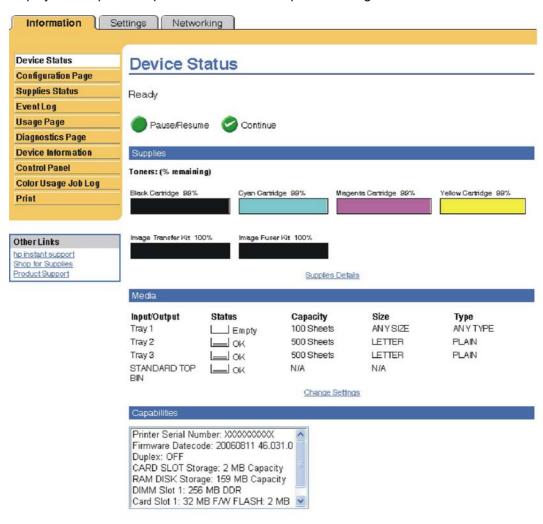
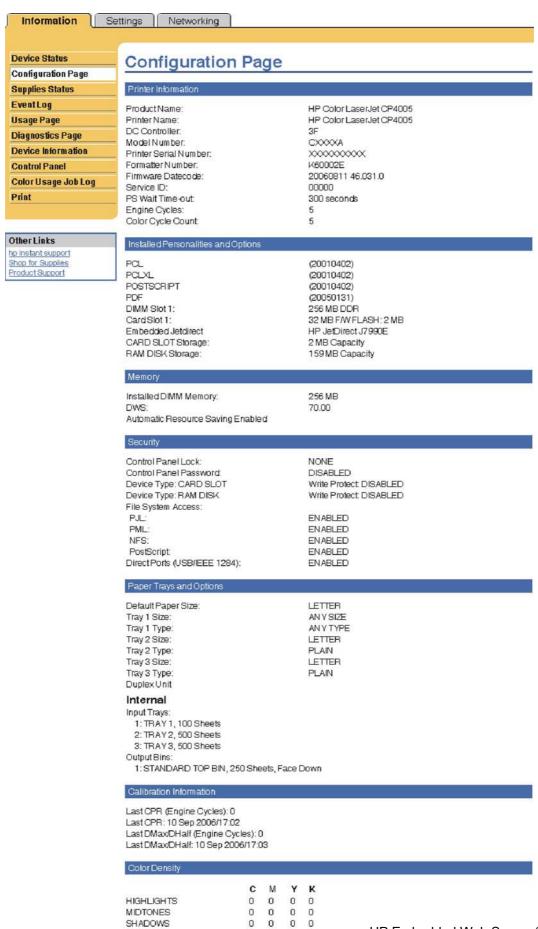


Figure 6-50 HP EWS – Device Status page

Configuration page

The **Configuration Page** displays the values of all of the settings available to be set in the printer. The contents of this screen are consistent with the configuration page generated by the firmware.



Supplies Status page

The **Supplies Status** page displays the status of all of the supplies used by the printer, including the black, cyan, magenta, and yellow print cartridges.

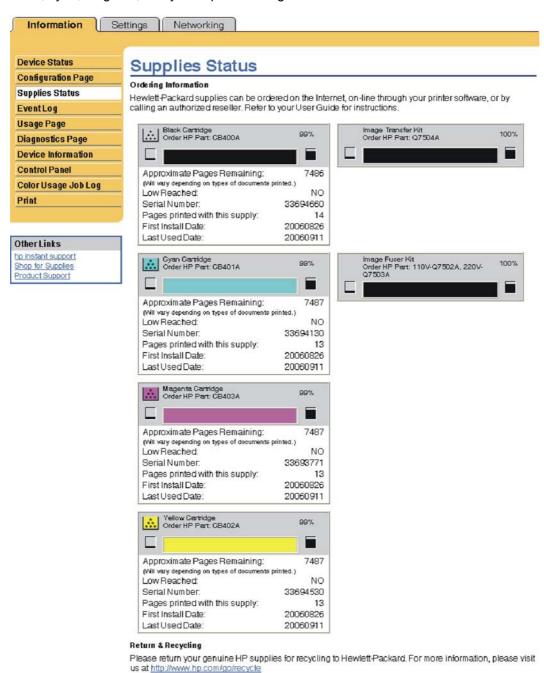


Figure 6-52 HP EWS – Supplies Status page

Event Log

Use the **Event Log** screen to track the events that occur on the HP Color LaserJet CP4005.

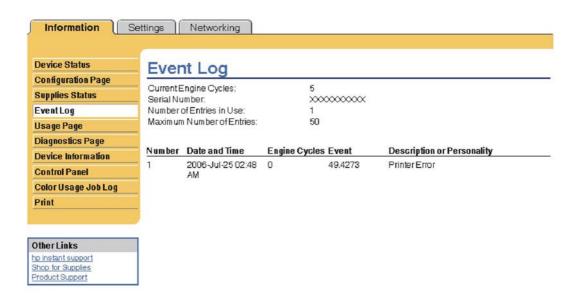
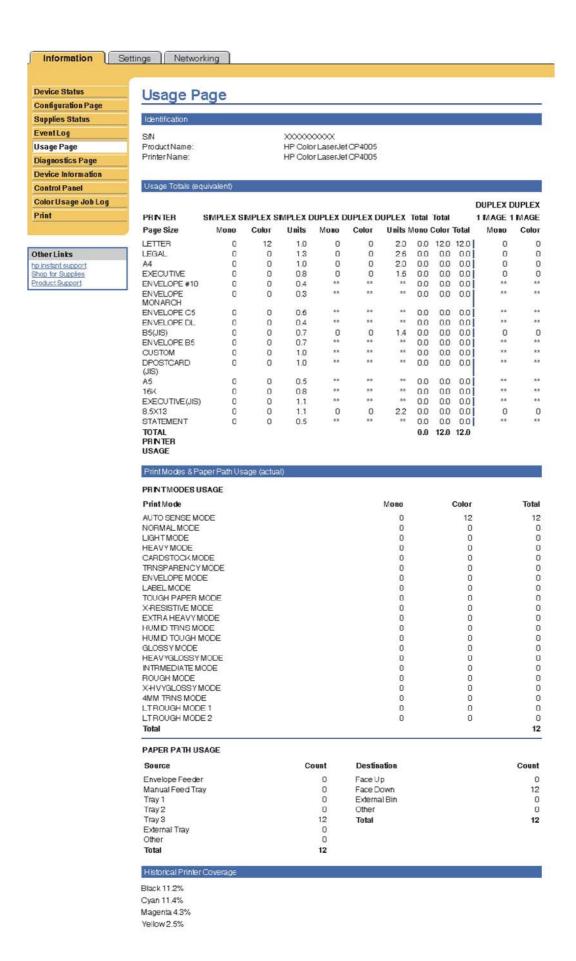


Figure 6-53 HP EWS – Event Log screen

Usage Page

The **Usage Page** screen gives a page count for each size of media that has passed through the product, as well as the number of duplexed pages. The total is calculated by multiplying the sum of the print count values by the Units value.

The information on this screen can be used to determine how much toner or paper to keep on hand. The **Usage Page** is shown in the following figures.



Device Information

The **Device Information** screen shows the following information:

- Device name
- Device location
- Asset number
- Company name
- Contact person
- Product name
- Device model
- Device serial number

The product name, printer model, and printer serial number are generated automatically. You can configure the other information on this screen from the **Device Information** screen on the **Settings** tab.



Figure 6-55 HP EWS – Device Information screen

Control Panel

The **Control Panel** screen shows the product control-panel display as if you were standing at the product. Because this view shows the product status, it can help you troubleshoot problems with the product.



NOTE The appearance of the screen might vary, depending on your product.

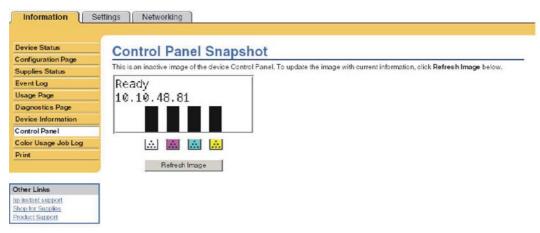


Figure 6-56 HP EWS - Control Panel Screen

Print



NOTE The **Print** screen (and the **Print** menu on the left) is available only if it has been configured to appear on the **Security** screen under the **Settings** tab. Use the **Security** screen to disable the **Print** screen if you do not want it to appear for security reasons. For more information, see **Security** on page 239.

Use the **Print** screen to print print-ready files or to update your product firmware remotely.

You can use the **Print** screen to print one file at a time from a product that supports the HP EWS. This feature is especially useful if you are a mobile user, because you do not have to install the product's print driver in order to print; you can print anywhere at any time.

You can print print-ready files, such as documents that have been generated by using a "print to file" driver option. Print-ready files commonly have file name extensions such as .PS (postscript), .PDF (Adobe Portable Document Format), and .PRN (Windows print-ready File).

You can also use the **Print** screen to update your product firmware. This feature is especially useful because you do not have to install additional software in order to update the product firmware. When updated firmware files are available for your product, you can download them your product support Web site:

www.hp.com/support/ljcp4005

The Print screen is shown in the following figure.

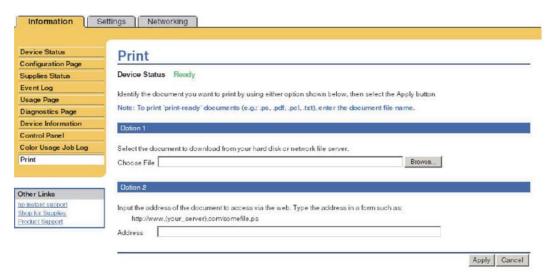


Figure 6-57 HP EWS – Print screen

Printing a file or updating firmware from the Print screen

Use the following procedure to print a file or update product firmware from the **Print** screen.

- 1. Select a file that resides on your machine or on your network by clicking **Browse** to browse to a file that you want to print.
- Click Apply.

Settings tab

The **Settings** tab allows you to view and change settings for the following features:

- Configure Device
- E-mail Server
- Alerts
- AutoSend
- Security
- Edit Other Links
- Device Information
- Language
- Date & Time
- Wake Time
- Restrict Colors

Configure Device

You can use the **Configure Device** screen to print device information pages and configure the printer remotely.

The menus on this screen are similar to the menus that are available at your printer control panel. Some of the printer control-panel menus are not available from the HP EWS. See the documentation that came with your printer for more information about the different menus that your printer supports.

The **Configure Device** screen is shown in the following figure.

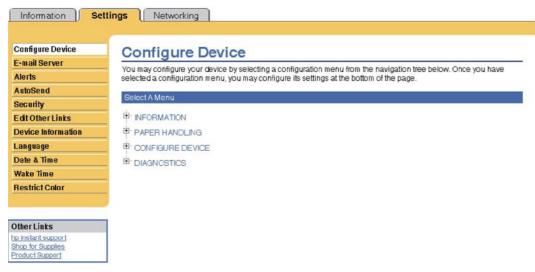


Figure 6-58 HP EWS - Configure Device screen

Using the menus on the Configure Device screen

The following procedure is provided only as an example. Similar procedures can be used to set other menu items.

Follow these steps to print a configuration page (example procedure).

- Click INFORMATION. 1.
- Select the check box for the information page that you want to view or print, and then click Apply.

E-mail Server

Use the **E-mail Server** screen to configure e-mail settings for outgoing e-mail. Use the settings on this screen to send and receive e-mail messages, including product alerts. The E-mail Server screen is shown in the following figure.

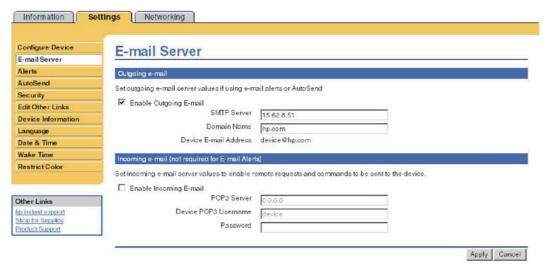


Figure 6-59 HP EWS - E-mail Server screen

Configuring outgoing e-mail

You must configure outgoing e-mail if you intend to use the Alerts or AutoSend features.

- 1. Gather the following information. (Your organization's network or e-mail administrator typically provides the information that is required to configure outgoing mail.)
 - The TCP/IP address of the simple mail transfer protocol (SMTP) mail server on your network.
 The EWS uses the SMTP server TCP/IP address to relay e-mail messages to other computers.
 - The e-mail domain name suffix that is used to address e-mail messages within your organization.
- Select the Enable Outgoing E-mail check box.
- 3. Type the SMTP server TCP/IP address in the **SMTP Server** text box.
- **4.** Type the domain name in the **Domain Name** text box.
- 5. Click **Apply** to save the changes.

Configuring the return e-mail address

When you configure the return e-mail address on the **E-mail Server** page, you are configuring the identity of the product. For example, if you type anyone in the **Username** field and your.company.com in the **Domain Name** field, all e-mails sent out by the product will come from anyone@your.company.com. In this example, anyone@your.company.com is the identity of the product.

Alerts

From the **Alerts** screen, IT administrators can set up the product to send problem and status alerts to anyone through e-mail messages. When this function is configured, alerts are automatically triggered about supplies, paper-path status, and other service and advisory information. More than one individual can receive alerts, with each person receiving only specific alerts. For example, an administrative assistant might be responsible for ordering print cartridges or fixing jams, and could receive advanced warning when toner is low or a jam occurs. Similarly, the long-life supplies might be handled by an

external service provider, who could receive alerts about performing product maintenance, loading the front or rear stapler, and similar needs.



NOTE A user can create up to four different destination lists, with up to 20 recipients on each list.

By selecting the Remove Control Panel Supplies Status Messages option (available on the Alerts - setup screen that appears when you press the New Destination List button), you can suppress the Cartridge low or Cartridge out supplies status messages on the control panel. The message is suppressed at the control panel only if one or both of these alerts has first been selected to be received.

The **Alerts** screen is shown in the following figure.



NOTE In order for alerts to function, outgoing e-mail must be enabled. To enable outgoing mail, see <u>Configuring outgoing e-mail on page 236</u>.

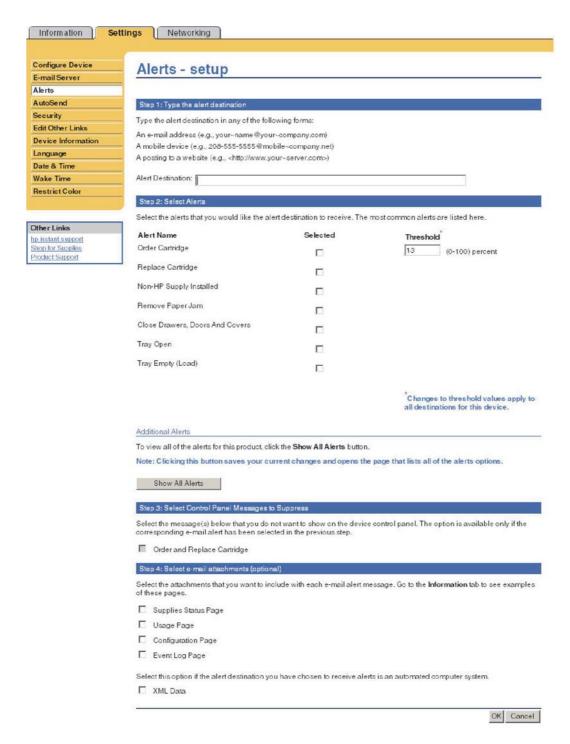


Figure 6-60 HP EWS - Alerts screen

For information about using the Alerts screen, see the HP Embedded Web Server User Guide.

AutoSend

Use the **AutoSend** screen to send product-configuration and supplies-usage information periodically to e-mail destinations of your choice, such as service providers. This feature establishes a relationship with Hewlett-Packard Company or another service provider to provide you with services that include, but are not limited to, print-cartridge replacement, pay-per-page contracts, support agreements, and

usage tracking. A user can add up to twenty AutoSend destinations. The AutoSend screen is shown in the following figure.

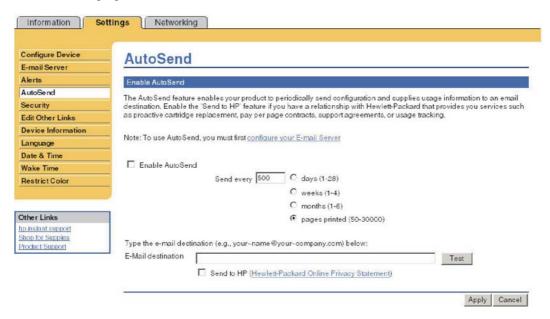


Figure 6-61 HP EWS – AutoSend screen

Turn on the AutoSend feature

Use the following procedure to make the AutoSend feature available.

- Make outgoing e-mail functions available by following the instructions that are listed in this chapter. (For more information, see E-mail Server on page 235.)
- 2. Select the Enable AutoSend check box.
- Click an option to specify the interval at which you want the product to send the productconfiguration and supplies-usage information to the e-mail recipients (determined in the next step), and then type the number of days, weeks, months, or pages printed.
- Configure up to 20 destinations using the format that appears on the screen. 4.
- To send printer configuration and supplies status information to HP, select the Send to HP check box.
- Click Apply.

Security

The Security screen is shown in the following figure.



Figure 6-62 HP EWS - Security screen

Edit Other Links

Use the **Edit Other Links** screen to add or customize up to five links to the Web sites of your choice (see the following note). These links appear throughout the HP EWS screens in the **Other Links** box beneath the left navigational bar. Three permanent links (**hp instant support**, **Shop for Supplies**, and **Product Support**) have already been established. The **Edit Other Links** screen is shown in the following figure.

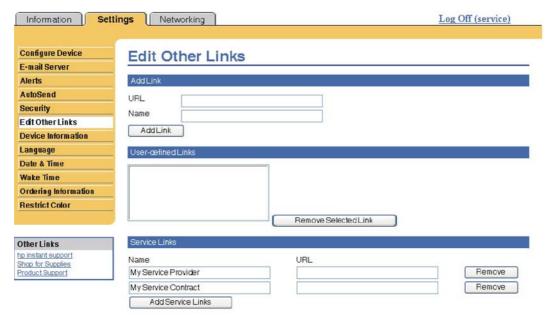


Figure 6-63 HP EWS – Edit Other Links screen

Adding a link

Use this procedure to add a link.

- Under Add Link, type the URL and the name of the link as you would like it to appear in the HP EWS.
- Click Add Link.

Removing a link

Use this procedure to remove a link.

- Under **User-defined Links**, select the link or links that you would like to remove.
- 2. Click Remove Selected Link.

Device Information

Use the **Device Information** screen to provide a name of your choice for the printer, assign an asset number, and configure the company name, the person to contact about the printer, and the physical location of the printer. The printer TCP/IP address, printer name, printer model, and serial number are also available on this screen.



Figure 6-64 HP EWS – Device Information screen

If you make any changes on the Device Information screen, click **Apply** to save the changes.

The information that is typed here appears on the Device Information screen that can be opened from the **Information** tab. It also appears in e-mail messages that are sent from the product. This might be useful if you need to locate the product to replace supplies or fix a problem.

Language

Use the Language screen to select the language in which the HP EWS screens appear. The Language screen is shown in the following figure.

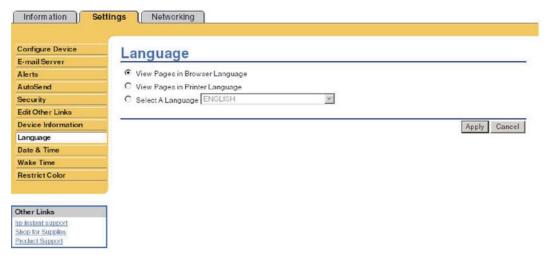


Figure 6-65 HP EWS – Language screen



CAUTION Selecting **View Pages in Device Language** or **Select A Language** changes the language for everyone who uses the HP EWS.

The default language is the language that the Web browser is currently using. If your browser and control panel both use a language that is not available for the HP EWS, English is selected as the default. If you make any changes on the Language screen, click **Apply** to save your changes.

Date & Time

Use the **Date & Time** screen to update the product time. The **Date & Time** screen is shown in the following figure.

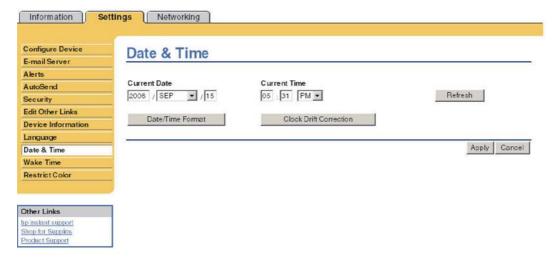


Figure 6-66 HP EWS – Date & Time screen

Date/Time Format

Use the **Date/Time Format** screen to select the formats you prefer for displaying the date (under **Date Format**) and time (under **Time Format**). The following figure shows the **Date/Time Format** screen.

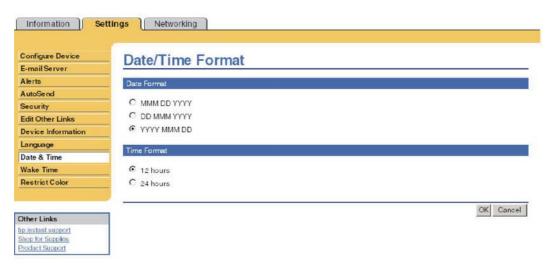


Figure 6-67 HP EWS – Date/Time Format screen

Clock Drift Correction

Use the **Date & Time - clock drift correction** screen to enable clock drift correction. The following figure shows the screen.

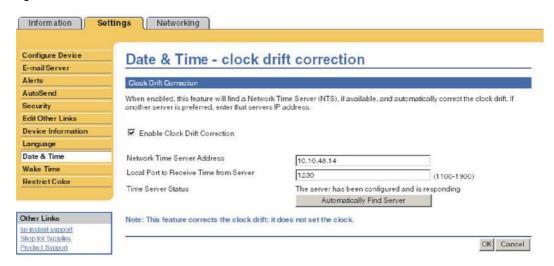


Figure 6-68 HP EWS – Date & Time - clock drift correction screen

To configure a network time server to correct the product clock drift, use the following procedure.



NOTE This process keeps the clock from drifting (losing or gaining time), but does **not** synchronize the clock with the network time server clock.

- Select the Enable Clock Drift Correction check box.
- In the Network Time Server Address field, type the TCP/IP address of the clock which you want to use for correction of the product clock drift.



NOTE Alternatively, you can click the **Automatically Find Server** button to find a time server on your network and automatically fill in this field.

- 3. In the Local Port to Receive Time from Server field, type the number of the appropriate port.
- 4. Click OK.



NOTE Use this screen only to configure the time server for clock drift correction, not to set the clock. To set the clock, use the main **Date & Time** screen. For further information, see <u>Date & Time on page 242</u>.

Wake Time

An IT administrator can use the **Wake Time** screen to schedule product wakeups on a daily basis. For example, the product can be set to wake up at 07:30, so the product has finished initializing and calibrating and is ready to use by 08:00. The administrator sets only one wakeup setting per day; however, each day can have a different wakeup setting. Additionally, to save energy, the sleep delay can be set to turn the product off after a specific period of inactivity.

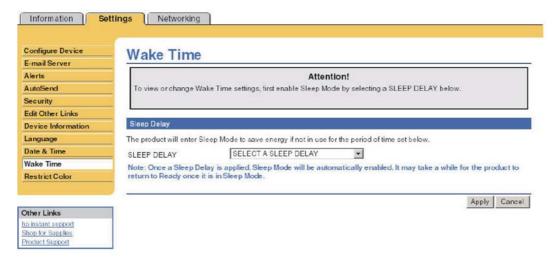


Figure 6-69 HP EWS - Wake Time screen

Restrict Colors

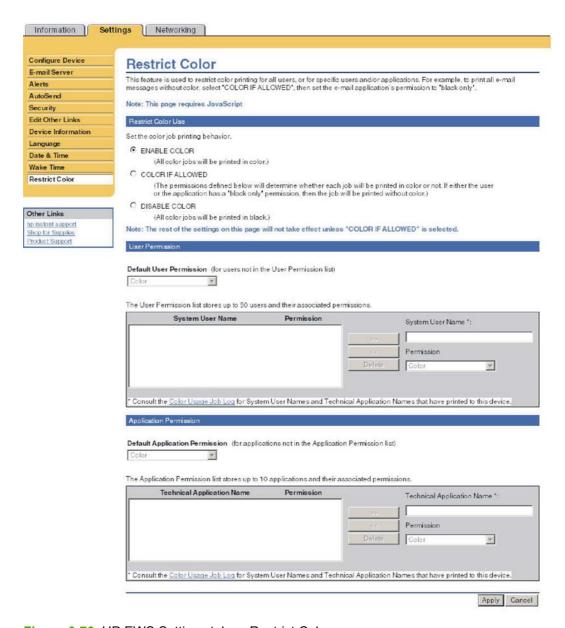


Figure 6-70 HP EWS Settings tab — Restrict Color screen

Networking tab

The HP EWS **Networking** tab is shown in the following figure.



NOTE Not all of the screens on the tab are shown in this document. For more information, see the HP Jetdirect Administrator's Guide.

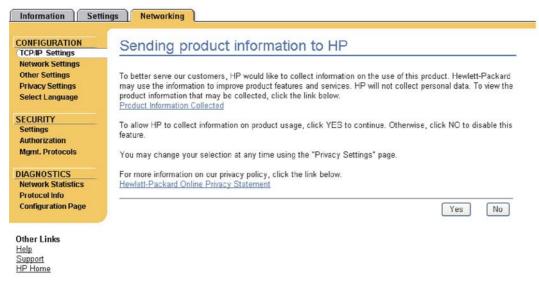


Figure 6-71 HP EWS Networking tab – Network Settings screen

The menu on the left side of the screen contains other networking options under three categories:

- Configuration
- Security section
- <u>Diagnostics section</u>

Configuration

- Network Setting. From the Networking screen, enable and configure the following network protocols:
 - TCP/IP settings
 - Network settings:
 - Internetwork packet exchange/Sequenced packet exchange (IPX/SPX)
 - AppleTalk
 - Data link control/logical link control (DLC/LLC)
 - Simple network management protocol (SNMP)
- Other Settings
- Privacy Settings
- Select Language

Security section

- Settings
- Authorization
- Mgmt. Protocols

- 802.1x authentication
- Firewall

Diagnostics section

- **Network Statistics**
- Protocol Info
- Configuration Page

Refer to the *HP Jetdirect Administrator's Guide* on the printing-system CD for more information.

7 Engineering Details

Introduction

Topics:

- Remote firmware updates
- Printing print-ready documents
- Media attributes
- Uninstall

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Remote firmware updates

The HP Color LaserJet CP4005 printer features remote firmware update (RFU) capability. The method for downloading remote firmware updates from the Web site is similar to that used to download the latest printing-system software and print drivers.

The process for remotely upgrading firmware involves three steps:

- 1. Print a configuration page to see what version of firmware is currently installed on the printer. (Also, print a menu map to see what user settings have been configured.)
- 2. Go to the HP Web site and download the latest firmware to the computer.
- 3. Download the new firmware to the printer. (Print a new menu map to compare user settings between the previous firmware and upgraded firmware.)

Table 7-1 Version Checking

Primary/Location	Version Checking
JetDirect inside (JDI)	Does version checking.
	Upgrades if the firmware version is newer; this means it will not rewrite or upgrade if the firmware is the same or older.
	This becomes an issue if the current firmware is corrupt. Because the firmware version may be the same even though it may be corrupt, the firmware will not rewrite because it is the same version.
	To update corrupt firmware with the same RFU version, use the nodebug bundle of firmware, then update using the correct firmware bundle.
Fax Modem	Does version checking.
	The firmware updates if the RFU is different from what is currently on the component. The firmware can be updated if the RFU is older or newer than the current firmware version.
	Will not upgrade if firmware version is the same. The same version does not rewrite because of speed.
	This becomes an issue if the current firmware is corrupt. Because the firmware version may be the same even though it may be corrupt, the firmware will not rewrite because it is the same version.
Formatter	No version checking.
	The formatter firmware updates if there is a formatter bundle on the RFU, and is not dependant on what version of firmware the formatter is currently using.
Copy control board (CPB)	No version checking.
Scan control board (SCB)	Does version checking.
	Upgrades if the firmware version is newer; this means it will not rewrite or upgrade if the firmware is the same or older.
	This becomes an issue if the current firmware is corrupt. Because the firmware version may be the same even though

Table 7-1 Version Checking (continued)	
	it may be corrupt, the firmware will not rewrite because it is the same version.
	To update corrupt firmware with the same RFU version, use the nodebug bundle of firmware, then update using the correct firmware bundle.
Jetlink protocol	No version checking.
(interface used to hook up output devices; external to printer)	
DC controller	Does version checking.
(internal to printer)	The firmware updates if the RFU is different from what is
• duplexer	currently on the component. The firmware can be updated if the RFU is older or newer than the current firmware version.
input external trays	Will not upgrade if firmware version is the same.
output external bins	This becomes an issue if the current firmware is corrupt. Because the firmware version may be the same even though it may be corrupt, the firmware will not rewrite because it is the same version.

Topics:

- Print the configuration page
- Downloading the new firmware from the HP Web site
- Downloading the new firmware to the printer
- Printer messages during the firmware update
- Remote firmware update by using FTP through a browser
- Remote firmware update by using FTP on a direct network connection
- Remote firmware update through an optional parallel port
- Remote firmware update through a MS Windows network
- Remote firmware update for UNIX systems
- Remote firmware update by using the HP Printer Utility
- Remote firmware update by using the LPR command
- Remote firmware update through HP Web Jetadmin

Print the configuration page

To determine the current level of firmware, view the configuration page.

To print a configuration page, follow these instructions.

- Press
 ✓ (the select button).
- 2. Press ▲ (the up button) and ▼ (the down button) to scroll to INFORMATION, and then press ✓.
- Press ▲ (the up button) and ▼ (the down button) to scroll to PRINT CONFIGURATION.
- **4.** Press **✓** to print a configuration page.

Print a menu map

Print a menu map before updating the firmware to see what user settings have been configured in the current firmware. This menu map can be compared with a menu map printed after the firmware update to determine what user settings have been added or changed in the new firmware.

To print a menu map from the printer control panel:

- 1. Press ✓ (the select button).
- 2. Press ▲ (the up button) and ▼ (the down button) to scroll to INFORMATION, and then press ✓.
- 3. Press ▲ (the up button) and ▼ (the down button) to scroll to PRINT MENU MAP.
- **4.** Press ✓ to print a menu map.

Downloading the new firmware from the HP Web site

The remote firmware update (.RFU) file and an associated readme file are packaged together as a self-extracting .EXE file. For detailed instructions about how to download the .EXE file, go to the following URL:

www.hp.com/go/ljcp4005_firmware

The .EXE file consists of a readme file and the .RFU file.

For UNIX systems, the remote firmware update file is a .TAR file.

For firmware upgrades on Macintosh systems, see Update Firmware on page 217.

Downloading the new firmware to the printer

For support information about downloading new firmware from the Web, go to the following URL:

www.hp.com/go/ljcp4005_firmware

The printer can receive an RFU update when in the **READY** state. The printer waits for all of the I/O channels to become idle before performing the update.



NOTE If the firmware update involves a change in the format of nonvolatile random-access memory (NVRAM), any menu settings that are changed from the default settings will return to default settings. The settings must be changed again if you want them to be different from the defaults. Examples of settings that are affected in this way are tray types, default symbol sets, and Web-access alerts.

The elapsed time for an update depends on the I/O transfer time, as well as the time that it takes for the printer to reinitialize. The I/O transfer time depends on a number of things, including the speed of the host computer that is sending the update and the I/O method (network). The reinitialization time depends on the specific hardware configuration of the printer, such as the number of EIO devices installed, the presence of external paper-handling devices, and the amount of memory that is installed.

Finally, any print jobs that are ahead of the RFU job in the queue are printed before the update is processed.

Use one of the methods described in this manual to update the printer firmware.

Printer messages during the firmware update

The following table lists the causes and results of possible interruptions to the firmware update.

Table 7-2 Troubleshooting a firmware update

Cause	Result
The job was cancelled from the control panel.	No update has occurred.
A break in the I/O stream occurred during send (for example, the network cable was removed).	No update has occurred.
A power cycle occurred during the RECEIVING UPGRADE process.	No update has occurred.
A power cycle occurred during the PERFORMING UPGRADE process.	No update has occurred. Resend the update through a USB port.
A power cycle occurred during the INITIALIZING process.	The update has been completed.

Print jobs that are sent to the printer while an update is in process do not interrupt the update.

All HP LaserJet printers leave the factory with the most recent firmware version installed. If a remote firmware update fails for the component, the .RFU file must be resent. The only component exception is the formatter. See <u>Table 7-3 Update messages on page 253</u> for information regarding a formatter update error.

Because a firmware update cannot be resent over a USB for Mac, contact an HP Customer Care Center if a remote update fails in a Macintosh operating system.

Three messages appear during a normal update process; others appear only if the update process does not succeed.

Table 7-3 Update messages

Device message	Explanatio	Explanation		
RECEIVING UPGRADE	an .RFU up the .RFU up NO firn cor app	ge appears from the time the printer recognizes the beginning of date until the time the printer has verified the validity and integrity of odate. TE If the remote firmware update process is interrupted before the nware is downloaded (while RECEIVING UPGRADE appears on the introl-panel display), the firmware file must be sent again. No message pears on the printer control panel to indicate that the update was errupted.		

Table 7-3 Update messages (continued)

Device message	Explanation		
PERFORMING UPGRADE	This message appears while the printer is actually reprogramming the firm NOTE If power is lost during the flash DIMM update (while PERFORMING UPGRADE appears on the control-panel display), update is interrupted and the message RESEND UPGRADE appear the control-panel display.		
INITIALIZING	This message appears from the time the printer has finished reprogramming the flash until the printer reinitializes.		
RESEND UPGRADE	This message appears (in English only) if the firmware update fails because the RFU process is interrupted. It can also occur if firmware for accessories (such as the duplex unit or an output printer becomes is corrupted. Perform another update by any means that is supported by the printer, regardless of the connection (network or USB).		
RFU LOAD ERROR SEND RFU UPGRADE ON USB PORT	This message appears (in English only) if the firmware update of the formatter fails because the print-engine firmware is corrupted. If this message appears, the update must now be sent only by a computer that attached to the USB port of the printer.		



NOTE To verify that the firmware update succeeded, print a new configuration page from the control panel and verify that the firmware date code on the configuration page has changed.

The following table lists possible reasons for the failure of a remote firmware update and the corrective action required for each situation.

Table 7-4 Troubleshooting a firmware update failure

Reason for firmware update failure	Corrective action	
The .RFU file is corrupted.	The printer recognizes that the file is corrupted and rejects the update. Download the file again and send the new file to the printer. Download the file from www.hp.com/go/ljcp4005_firmware .	
The wrong printer is contained in the .RFU file.	The printer recognizes the printer mismatch and rejects the update. Download the correct file and send it to the printer. Download the file from www.hp.com/go/ljcp4005_firmware .	
The upgrade was interrupted.	See Table 7-3 Update messages on page 253.	
A flash hardware failure occurred.	Although it is extremely unlikely, the printer might have a hardware failure. Call technical support to address the problem (see the flyer that came with the printer for a local telephone support list).	

Remote firmware update by using FTP through a browser

Complete the following steps to update the product firmware by using file transfer protocol (FTP) through a browser.



NOTE The following instructions can be used on Windows or Macintosh operating systems.

- Make note of the TCP/IP address on the EIO-Jetdirect page. The EIO-Jetdirect page is the second page of the configuration page printout. To print a configuration page, see <u>Print the configuration</u> <u>page on page 251</u>
- Open a browser window.
- 3. In the address line of the browser, type ftp://<IPADDRESS>, where <IPADDRESS> is the TCP/IP address of your product. For example, if the TCP/IP address is 192.168.0.90, type FTP://192.168.0.90
- Locate the downloaded .RFU file for the product.
- 5. Drag and drop the .RFU file onto the **PORT1** icon or onto any open space in the browser window.



NOTE If the **PORT1** icon does not appear as a folder name, you might have to enable folder viewing for FTP sites in your Web browser. In Microsoft Internet Explorer, use the following procedure to enable the folder view.

- a. Select **Tools**, then select **Internet Options**, and then select the**Advanced** tab.
- b. Select the Enable folder view for FTP sites.
- **c.** Click **OK** to save the setting.
- 6. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

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

Remote firmware update by using FTP on a direct network connection

If the HP Color LaserJet CP4005 uses a direct network connection, use file transfer protocol (FTP) to update the firmware. Complete the following steps for your operating system.

Windows operating systems

1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout. To print a configuration page, see Print the configuration page on page 251



NOTE Before connecting to the product, make sure that the product is not in Powersave mode. Also make sure that any error messages are cleared from the control-panel display.

2. Open a command window on your computer.

- 3. Type ftp <TCP/IP printer ADDRESS>. For example, if the TCP/IP address is 192.168.0.90, type ftp 192.168.0.90.
- 4. Press Enter on the keyboard.
- 5. When prompted for the user name, press Enter.
- 6. When prompted for the password, press Enter.
- 7. Type bin at the command prompt.
- 8. Press Enter. The message 200 Type set to I, Using binary mode to transfer files appears in the command window.
- 9. Type put <FILENAME>, where <FILENAME> is the name of the .RFU file that was downloaded from the Web, including the path. For example, type put C:\CLJ\CP4005FW.RFU, and then press Enter.



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type put "c:\My Documents\CLJ\CP4005fw.rfu".

The following series of messages appears in the command window:

200 PORT command successful

150 Opening BINARY mode data connection

226 Ready

226 Processing Job

226 Transfer complete

After these messages appear, a message containing transfer-speed information appears.

10. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

- **11.** Print a configuration page and verify that the firmware revision number matches the revision of the current update.
- **12.** At the command prompt, type bye to exit the FTP command.
- **13.** At the command prompt, type exit to return to the Windows interface.

Macintosh operating systems

- Make a note of the TCP/IP address on the EIO-Jetdirect page. The EIO-Jetdirect page is the second page of the configuration page printout. To print a configuration page, see Print the configuration page on page 251.
- Open a Terminal window on your Macintosh. You can find the Terminal program on the computer hard drive in the Applications/Utilities folder.
- Type FTP <TCP/IP printer ADDRESS> For example, if the TCP/IP address is 192.168.0.90, type FTP 192.168.0.90
- Press Enter on the keyboard.
- 5. When prompted for a user name and password, press Enter.
- Type put <path>, where <path> is the location where the .RFU file was downloaded from the Web, including the path. For example, type put /username/desktop/CP4005fw.rfu, and then press Enter.



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type put "/user name/desktop/CP4005FW.RFU".

To ensure that the entire path to the .RFU file is placed in the put command, type put and a space, and then drag and drop the .RFU file onto the terminal window. The complete path to the file is automatically placed after the put command.

The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

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

Remote firmware update through an optional parallel port

If the product is connected through a local port (parallel), then you can send the .RFU file directly to the product by using a COPY command from a command prompt or an MS-DOS window. At the command prompt, perform the following steps for your operating system.

Windows 2000. Windows XP. or Windows Server 2003

The .RFU file can be sent directly to the product by typing a copy command at a command prompt or in an MS-DOS window.

Windows NT 4.0 does not support the HP Color LaserJet CP4005 printer *drivers*, but it is possible to update the printer firmware in Windows NT 4.0.

1. At a command prompt, type <code>copy /b <FILENAME> <PORTNAME></code>, where <FILENAME> is the name of the .RFU file (including the path) and <PORTNAME> is the name of the appropriate printer port (such as LPT1). For example, type the following:

C:\>copy /b c:\CP4005fw.rfu lpt1



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type C:\>copy /b "c:\My Documents \CP4005fw.rfu" lpt1

- 2. Press Enter on the keyboard.
- 3. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

- **4.** Print a configuration page and verify that the firmware revision number matches the revision of the current update.
- 5. At the command prompt, type exit to close the command window.

Remote firmware update through a MS Windows network

If the product is shared on a Windows network, follow these instructions.

C:\>copy /b c:\CP4005fw.rfu \\your server\your computer



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type C:\>copy /b "c:\My Documents \CP4005fw.rfu" \\your_server\your_computer

- 2. Press Enter on the keyboard. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel. The message 1 file(s) copied appears on the computer screen.
- 3. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

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

Remote firmware update for UNIX systems

For UNIX systems, any command method that delivers the .TAR file to the product is acceptable, including the following:

- 1. At the command prompt, type cp /home/yourmachine/FILENAME /dev/parallel>, where </hd>

 </home/yourmachine/FILENAME> is the location of the .TAR file.
- 2. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

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

Remote firmware update by using the HP Printer Utility

Make sure that you have the tools and files that are necessary for the update. You will need the HP Printer Utility and the CP4005FW.RFU file, which is the firmware file for the product. The HP Printer Utility is a software program that is available only for Mac OS X V10.2 or later.

The HP Printer Utility can be found on the HP Color LaserJet CP4005 printing-system software CD-ROM that came with the product. If you do not have the CD-ROM, you can obtain the HP Printer Utility by downloading the latest product installer from www.hp.com/go/ljcp4005_software.

The firmware file (CP4005FW.RFU) can be downloaded from the following Web site: www.hp.com/go/licp4005 firmware

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

- 1. Open the HP Printer Utility.
- 2. Select **Update Firmware**, click **Choose** and browse to firmware upgrade file, and click **Open**.
- 3. On the **Update Firmware** screen, click **Update**.



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

4. The update process can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

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

Remote firmware update by using the LPR command



NOTE This remote firmware update method is for use in Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003.

Complete the following steps to update the firmware by using the LPR command.

1. From a command window, type <code>lpr -P <IPADDRESS> -S <IPADDRESS> -O l</code>
<code><FILENAME> -OR-lpr -S <IPADDRESS> -Pbinps <FILENAME>, where <IPADDRESS> can</code>
be either the TCP/IP address or the hostname of the product, and where <FILENAME> is the filename of the .RFU file.



NOTE The parameter (-o I) consists of a lowercase "O", not a zero, and a lowercase "L", not the numeral 1. This parameter sets the transport protocol to binary mode.

- 2. Press Enter on the keyboard. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.
- 3. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

- **4.** Print a configuration page and verify that the firmware revision number matches the revision of the current update.
- 5. Type exit at the command prompt to close the command window.

Remote firmware update through HP Web Jetadmin

This procedure requires that you install HP Web Jetadmin V7.8 or later on your computer. Complete the following steps to update a single product through HP Web Jetadmin after downloading the .RFU file from the HP Web site.

- 1. Start HP Web Jetadmin.
- Type the TCP/IP address or IP host name of the product in the Quick Device Find field, and then click Go. The product Status window opens.
- Open the **Device Management** folder in the drop-down list in the Navigation panel. Navigate to the Device Lists folder.
- Expand the **Device Lists** folder and select **All Devices**. Locate the product that you want to update in the list of products, and click to select it.
- Locate the drop-down box for **Device Tools** in the upper-right corner of the window. Select **Update** Printer Firmware from the choose action list.
- If the name of the .RFU file is not listed in the All Available Images dialog box, click Browse in the **Upload New Firmware Image** dialog box and navigate to the location of the .RFU file that you downloaded from the Web at the start of this procedure. If the filename is listed, select it.
- Click **Upload** to move the .RFU file from your hard drive to the HP Web Jetadmin server.
- 8. Refresh the browser.
- Select the .RFU file from the **Printer Firmware Update** drop-down menu. 9.
- 10. Click Update Firmware. HP Web Jetadmin sends the selected .RFU file to the product.
- 11. The download process begins and the firmware is updated on the product. This can take several minutes. Let the process finish without further interaction with the product or the computer. The messages described in the section Printer messages during the firmware update on page 253 appear on the control panel.



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

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

HP Web Jetadmin V7.8 and later can also be used to perform multiple or unattended installations. Complete the following steps for multiple or unattended installations.

- Start HP Web Jetadmin.
- 2. Create a printer group. A simple way to do this is to follow these steps:
 - a. Click Device Management, and then click All Devices.
 - -or-
 - b. Shift-click to select products that you want to be included in the group, and then click **OK**.
 - -or-
 - c. When prompted, type a name for the new printer group, and then click OK.
- To modify several products in a group, click the group name, and then click Open.
- The drop-down menu for **Device Group Tools** appears on the right side of the window. Scroll if necessary to view it.
- In the Device Group Tools drop-down box, select an action. Type the appropriate information. Click Return to Device Group when finished.

Printing print-ready documents

Several methods are available for printing documents independently of the original software program that was used to create the document. Normally, the document is printed by opening the original application and printing it to a file, or is printed by means of a distribution method such as Internet downloading. The following print-ready file formats can be sent directly to the HP Color LaserJet CP4005 printer without first opening the original software program:

- HP LaserJet Printer Control Language (.PCL)
- Portable Document Format (.PDF)
- Postscript (.PS)
- Text (.TXT)

Use one of the following methods to send print-ready files to your product.



NOTE The examples that are used in this section are for printing .PDF documents. However, any print-ready file type can be substituted.

Print-ready file printing by using FTP through a browser

Complete the following steps to print print-ready files directly by using FTP through a browser.



NOTE The following instructions can be used on Windows or Macintosh operating systems.

- 1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout. To print a configuration page, see Print the configuration page on page 251.
- Open a browser window.
- 3. In the address line of the browser, type ftp://<IPADDRESS>. For example, if the TCP/IP address of your product is 192.168.0.90, type the following:

```
FTP:// 192.168.0.90
```

- 4. Locate the print-ready file for the product.
- 5. Drag and drop the print-ready file onto the **PORT1** icon in the browser window.



NOTE If the **PORT1**icon does not appear as a folder name, you might have to enable folder viewing for FTP sites in your Web browser. In Microsoft Internet Explorer, use the following procedure to enable the folder view.

- 1. Select **Tools**, then select **Internet Options**, and then select the **Advanced** tab.
- 2. Select the **Enable folder view for FTP sites**.
- 3. Click **OK** to save the setting.

Print-ready file printing by using FTP on a direct network connection

If the HP Color LaserJet CP4005 printer uses a direct network connection, use file transfer protocol (FTP) to print a print-ready file. Complete the following steps for the operating system:

Windows operating systems

- 1. Take note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the Configuration page printout. To print a Configuration page, see Print the configuration page on page 251.
- 2. Open a command window on your computer.
- 3. Type ftp <TCP/IP printer ADDRESS>. For example, if the TCP/IP address is 192.168.0.90, type the following:

```
ftp 192.168.0.90
```

- 4. Press Enter on the keyboard.
- **5.** When prompted for the user name, press Enter.
- 6. When prompted for the password, press Enter.
- 7. Type bin at the command prompt.
- 8. Press Enter. The message **200 Types set to I, Using binary mode to transfer files** appears in the command window.
- **9.** Type put <FILENAME>, where <FILENAME> is the name of the print-ready file to be printed, including the path. For example, type the following:

```
put C:\LJ\4005FW.PDF
```



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type put "c:\My Documents\LJ\4005FW.PDF"

The following series of messages appears in the command window:

200 PORT command successful

150 Opening BINARY mode data connection

226 Ready

226 Processing Job

- Press Enter on the keyboard.
- 11. The print-ready file prints.
- **12.** At the command prompt, type bye to exit the FTP command.
- **13.** At the command prompt, type exit to return to the Windows interface.

Macintosh operating systems

- 1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout. To print a configuration page, see Print the configuration page on page 251.
- Open a Terminal window on your Macintosh. You can find the Terminal program on the computer hard drive in the following folder:

System/Applications/Utilities/Terminal

3. Type FTP <TCP/IP printer ADDRESS>. For example, if the TCP/IP address is 192.168.0.90, type the following:

FTP 192.168.0.90

- Press Enter on the keyboard.
- **5.** When prompted for a user name and password, press Enter.
- 6. You can drag and drop the firmware file into the Terminal folder (System/Applications/Utilities/ Terminal). Alternatively, you can type put <path>, where <path> is the location where the printready file was downloaded from the Web. For example, type the following:

put /username/desktop/4005FW.PDF



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type put "/user name/desktop/4005FW.PDF"

To ensure that the entire path to the print-ready file is placed in the \mathtt{put} command, type \mathtt{put} and a space, and then click and drag the print-ready file onto the terminal window. The complete path to the file is automatically placed after the \mathtt{put} command .

- **7.** Press Enter.
- 8. The download process begins and the firmware is updated on the product. This can take about five minutes. Let the process finish without further interaction with the product or computer.
- The product automatically turns off and on again to activate the update.

Print-ready printing by using a local Windows port

To print directly by using a local Windows port, follow the instructions in this section for your operating system.

Windows 2000, Windows XP, or Windows Server 2003

The print-ready file can be sent directly to the product by typing a copy command at a command prompt or in an MS-DOS window.

1. At a command prompt, type <code>copy</code> /b <FILENAME> <PORTNAME>, where <FILENAME> is the name of the print-ready file (including the path) and <PORTNAME> is the name of the appropriate printer port (such as LPT1). For example, type the following:

```
C:\>copy /b c:\4005FW.PDF lpt1
```

2. Press Enter on the keyboard.



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type $C:\polinimizer$: \My Documents \4005FW.PDF". The message **PROCESSING JOB** appears on the control panel, and the job prints.

3. At the command prompt, type exit to close the command window.

Print-ready file printing in a Windows network

If the product is shared on a Windows network, complete the following steps.

C:\>copy /b c:\4005FW.PDF \\your server\sharename



NOTE If the file name or path includes a space, you must enclose the file name or path in quotation marks. For example, type C:\>copy /b "c:\My Documents\4005FW.PDF" \\your_server\sharename

2. Press Enter on the keyboard. The message **PROCESSING JOB** appears on the control panel, and the job prints. The message **1 file(s) copied** appears on the computer screen.

Print-ready file printing in UNIX systems

For UNIX systems, any command method that delivers the print-ready file to the product is acceptable, including the following:

At the command prompt, type cp < home/yourmachine/FILENAME/ dev/parallel>, where </ home/yourmachine/FILENAME> is the location of the print-ready file.

Print-ready file printing by using the LPR command



NOTE This direct printing method is for use in Windows 2000, Windows XP, and Windows Server 2003.

Complete the following steps to print a print-ready file by using the LPR command.

- 1. Make note of the TCP/IP address on the Embedded Jetdirect page. The HP Embedded Jetdirect page is the second page of the configuration page printout. To print a configuration page, see Print the configuration page on page 251.
- 2. From a command window, type the following:

```
lpr -P IPADDRESS -S IPADDRESS -o l FILENAME lpr -S <IPADDRESS> -Pbinps
<FILENAME>
```

where IPADDRESS can be either the TCP/IP address or the host name of the product, and where FILENAME is the file name of the print-ready file.



NOTE The parameter (-o I) consists of a lowercase "O", not a zero, and a lowercase "L", not the numeral 1. This parameter sets the transport protocol to binary mode.

- **3.** The file prints, but no messages appear in the command prompt window.
- 4. Type exit at the command prompt to close the command window.

Media attributes

Topics:

- Media sources and destinations
- Media-source commands
- Driver-supported media sizes
- Driver-supported media types
- Custom paper sizes
- Media-type commands

Media sources and destinations

The following table indicates the standard and optional media sources and destinations for the HP Color LaserJet CP4005 printer.

Table 7-5 HP Color LaserJet CP4005 printer — Media sources and destinations

Media sources	100-sheet multipurpose tray (tray 1)	standard	
	500-sheet paper tray (tray 2)	standard	
	500-sheet paper tray (tray 3)	optional	
Media destinations	standard left bin	standard (not available when accessory output printer is attached)	

Media-source commands

The PCL 6 attribute for paper source is ubyte # MediaSource or ubyte_array "string" MediaSource. See the following table for values of #. For example, "ubyte 4 MediaSource" is the command for tray 2.

The PCL 5 escape sequence for media source is Esc&1#H (the "I" is a lowercase "L" rather than the numeral "1"). See the following table for values of #. For example, Esc&11H is the command for tray 2.

Table 7-6 HP Color LaserJet CP4005 printer — Media-source commands

Media source	PCL 6	PCL 5	PostScript
	ubyte # MediaSource or ubyte_array "string" MediaSource ¹	Esc&l#H	/MediaPosition # / ManualFeed true false or null
Manual feed in tray 1	2	2	3 true
Tray 1 (100-sheet)	3	4	3 false
Tray 2 (500-sheet)	4	1	0 false
Tray 3 (500-sheet)	5	5	1 false

 Table 7-6
 HP Color LaserJet CP4005 printer — Media-source commands (continued)

Media source	PCL 6	PCL 5	PostScript
	ubyte # MediaSource Or ubyte_array "string" MediaSource ¹	Esc&l#H	/MediaPosition # / ManualFeed true false or null
Printer Auto Select (HP unidrivers)	7	1	null false

For the string value, you must use include the quotation marks around the variable. For example, ubyte_array "TRAY2" MediaSource is the PCL 6 command for tray 2.

Driver-supported media sizes

The following table lists the features and attributes of various media listed under the **Size Is:** drop-down menu on the **Paper** tab. The list order can vary, depending on the device and operating system. The list contains all of the following sizes, and might contain sizes from other drivers.

Table 7-7 HP Color LaserJet CP4005 printer — Supported media sizes and attributes

Paper sizes ¹	Width	Height	PCL 6 ²
Letter	216 mm	279 mm	"LETTER"
	(8.5 inches)	(11.0 inches)	
Statement	215.9 mm	139.7 mm	"STATEMENT"
	(8.5 inches)	(5.5 inches)	
16K	197 mm	273 mm	"ROC16K"
	(7.75 inches)	(10.75 inches)	
8.5 x 13	216 mm	330 mm	"8.5x13"
	(8.5 inches)	(13 inches)	
A4	210 mm	297 mm	"A4"
	(8.27 inches)	(11.69 inches)	
A5	148 mm	210 mm	"A5"
	(5.83 inches)	(8.27 inches)	
B5 (JIS)	182 mm	257 mm	"JIS B5"
	(7.17 inches)	(10.12 inches)	
D Postscard (JIS)	100 mm	200 mm	"JPOSTD"
	(3.94 inches)	(7.87 inches)	
Double Japan Postscard Rotated	148 mm	200 mm	"Double Postcard (JIS)"
Rotated	(5.83 inches)	(7.87 inches)	
Envelope #10	105 mm	241 mm	"COM10"
	(4.13 inches)	(9.5 inches)	
Envelope B5	176 mm	250 mm	"B5 ENV"

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Table 7-7 HP Color LaserJet CP4005 printer — Supported media sizes and attributes (continued)

Paper sizes ¹	Width	Height	PCL 6 ²
	(6.93 inches)	(9.84 inches)	
Envelope C5	162 mm	229 mm	"C5"
	(6.38 inches)	(9.02 inches)	
Envelope DL	110 mm	220 mm	"DL"
	(4.33 inches)	(8.66 inches)	
Envelope Monarch	99 mm	190 mm	"MONARCH"
	(3.88 inches)	(7.5 inches)	
Executive	185 mm	266 mm	"EXEC"
	(7.25 inches)	(10.5 inches)	
Executive (JIS)	216 mm	330 mm	"JISEXEC"
	(8.5 inches)	(12.99 inches)	
Legal	216 mm	355 mm	"LEGAL"
	(8.5 inches)	(14.0 inches)	
Custom	Minimum:	Minimum:	4
	127 mm	76.2 mm	
	(5.0 inches)	(3.0 inches)	
	Maximum:	Maximum:	
	215.9 mm	355.6 mm	
	(8.5 inches)	(14.0 inches)	

For all paper sizes, the PCL 6 margins are 100 dots, at 600 dots per inch.

Driver-supported media types

The following table shows the media types that the HP Color LaserJet CP4005 print-drivers support.

Table 7-8 HP Color LaserJet CP4005 printer — Supported input media types

Media types (command string)	Tray 1	Trays 2, 3 (500-sheet)	Duplexing unit	Manual duplexing
Unspecified	Υ	Υ	Υ	Υ
Plain	Υ	Υ	Υ	Υ
Preprinted	Υ	Υ	Y	Υ
Letterhead	Υ	Υ	Υ	Υ
Transparency	Υ	Υ	N	N
Prepunched	Υ	Υ	Υ	Υ

² The PCL 6 command for paper size is ubyte_array "String" MediaSize. The values in this column are the values for "String."

⁴ For custom sizes, the PCL 6 Driver specifies actual dimensions, for example, for 8 by 9 inch custom size, "real32_xy 8.0 9.0 CustomMediaSize ubyte eInch CustomMediaSizeUnits."

Table 7-8 HP Color LaserJet CP4005 printer — Supported input media types (continued)

Media types (command string)	Tray 1	Trays 2, 3 (500-sheet)	Duplexing unit	Manual duplexing
Labels	Υ	Υ	N	N
Bond	Υ	Υ	Υ	Υ
Recycled	Υ	Υ	Υ	Υ
Color	Υ	Υ	Υ	Υ
Light (60–75 g/m ² , or 16.4 - 20.5 lb.)	Υ	Y	Υ	Υ
Intermediate (90 - 104 g/m², or 24.7 - 28.5 lb.)	Υ	Y	Y	Y
Heavy (105 - 120 g/m², or 28.8 - 32.9 lb.)	Υ	Υ	Y	Y
Extra Heavy (120 - 163 g/ m ² , or 32.9 - 44.7 lb.)	Υ	N	N	N
Cardstock (164 - 220 g/m², or 45 - 60.3 lb.)	Υ	N	N	Υ
Rough (90 - 105 g/m², or 24.7 - 28.8 lb.)	Υ	Υ	Υ	Υ
Glossy (75 - 120 g/m², or 20.5 - 32.9 lb.)²	Υ	Υ	Υ	Υ
Heavy Glossy (120 - 160 g/ m², or 32.9 - 43.9 lb.)²	Υ	N	N	Υ
Extra Heavy Glossy (160 - 220 g/m², or 43.9 - 58 lb.)²	Υ	N	N	Y
Tough Paper ²	Υ	Υ	N	N
Envelope	Υ	N	N	N

Staples a maximum of 30 pages weighing from 60 g/m² to 220 g/m² (16 lb to 58 lb) except where listed as N (no) or Y (other number).

Custom paper sizes

The following table shows custom paper sizes that are available for the HP Color LaserJet CP4005 printer.

Table 7-9 HP Color LaserJet CP4005 printer — PCL 6 custom media sizes

Tray	Dimensions	Minimum	Maximum
Tray 1 (100-sheet multipurpose)	Width	76.2 mm (3.0 inches)	215 mm (8.5 inches)
	Height	127.0 mm (5.0 inches)	355.6 mm (14.0 inches)
Tray 2 (500-sheet)	Width	148.0 mm (5.83 inches)	215.9 mm (8.5 inches)
	Height	210.0 mm (8.26 inches)	355.6 mm (14.0 inches)

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² Use only HP LaserJet glossy media. Using HP Inkjet glossy media can cause permanent damage to your printer.

Table 7-9 HP Color LaserJet CP4005 printer — PCL 6 custom media sizes (continued)

Tray	Dimensions	Minimum	Maximum
Tray 3 (500-sheet)	Width	148.0 mm (5.83 inches)	215.9 mm (8.5 inches)
	Height	210.0 mm (8.26 inches)	355.6 mm (14.0 inches)
Duplexing unit	Width	148.0 mm (5.83 inches)	215.9 mm (8.5 inches)
	Height	210.0 mm (8.26 inches)	355.6 mm (14.0 inches)

Media-type commands

The HP PCL 5 driver escape sequence for paper type is "Esc&n#Wdpapertype", where "n#" is the number of characters in the paper type plus 1. For example, in the sequence "Esc&n6WdPlain", "Plain" has 5 letters plus 1, for a total of 6.

Table 7-10 HP Color LaserJet CP4005 printer — Media-type commands

Esc&	n#	Wd	Paper type
Esc&	6	Wd	Plain
Esc&	11	Wd	Preprinted
Esc&	11	Wd	Letterhead
Esc&	13	Wd	Transparency ¹
Esc&	11	Wd	Prepunched
Esc&	7	Wd	Labels
Esc&	5	Wd	Bond
Esc&	9	Wd	Recycled
Esc&	6	Wd	Color
Esc&	6	Wd	Light
Esc&	13	Wd	Intermediate
Esc&	6	Wd	Heavy
Esc&	12	Wd	Extra Heavy
Esc&	11	Wd	Cardstock ²
Esc&	6	Wd	Rough
Esc&	7	Wd	Glossy
Esc&	13	Wd	Heavy Glossy
Esc&	19	Wd	Extra Heavy Glossy
Esc&	12	Wd	Tough Paper
Esc&	9	Wd	Envelope

You must spell out the word "Transparency" in the string, although it is abbreviated as TRNSPRNCY on the control panel.

² The correct command for cardstock is "Esc&n11WdCard Stock", with a space between the "d" and the "S", and with an uppercase "S".

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