

# HP LaserJet P2015 Printer Software Technical Reference





# HP LaserJet P2015 printer

## Software Technical Reference



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# 1 Purpose and scope

## Introduction

This Software Technical Reference (STR) provides information about and troubleshooting tips for the printing-system software for the HP LaserJet P2015 printers.

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

 **NOTE:** This STR describes software that is shipped on the software CD that comes with the HP LaserJet P2015 printer. This STR does *not* describe drivers that will become available on the Web.

The following information is included in this technical reference:

- Overview of software and platforms
- Procedures for installing and uninstalling software components
- Descriptions of problems that can arise while using the HP LaserJet P2015 printer, and known solutions to those problems

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

The following table describes the structure of this STR.

**Table 1-1 Software technical reference overview**

Chapter	Content
Chapter 1, Purpose and scope	<p>This chapter contains basic information about the HP LaserJet P2015 printer and its software:</p> <ul style="list-style-type: none"> <li>● Overview of the HP LaserJet P2015 printer</li> <li>● Printing-system software overview, including the following topics: <ul style="list-style-type: none"> <li>◦ System requirements</li> <li>◦ Operating-system support</li> <li>◦ Availability</li> </ul> </li> <li>● HP LaserJet software documentation</li> </ul>
Chapter 2, Software description	<p>This chapter provides an overview of the printing-system software installer and print drivers.</p>

**Table 1-1 Software technical reference overview (continued)**

Chapter	Content
	This chapter also contains general information about other software features, including the following topics: <ul style="list-style-type: none"><li>● Driver configuration for Microsoft® (MS) Windows®</li><li>● HP Embedded Web Server</li><li>● HP ToolboxFX</li><li>● HP Web Jetadmin</li></ul>
Chapter 3, Install MS Windows printing-system components	This chapter provides instructions for installing the HP LaserJet P2015 printer in MS Windows operating systems by using various installation methods.
Chapter 4, HP PCL 6, PCL 5, and PS emulation unidrivers for MS Windows	This chapter provides detailed descriptions of the HP PCL 6, PCL 5, and HP postscript level 3 emulation print unidrivers for Windows 2000, Windows XP, and Windows Server 2003.
Chapter 5, Macintosh	This chapter provides instructions for installing and uninstalling the HP LaserJet P2015 printer in Macintosh operating systems and for using Macintosh features.
Chapter 6, Engineering details	This chapter contains information about the following special topics: <ul style="list-style-type: none"><li>● Troubleshooting information</li><li>● File to E-mail utility</li><li>● Media attributes</li><li>● Remote firmware update</li><li>● HP LaserJet P2015 printing system Readme file</li></ul>

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

Additional detailed information about the HP LaserJet P2015 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](#)
- [Printing-system software](#)
- [HP LaserJet documentation](#)

## Device features

The following table contains descriptions of the HP LaserJet P2015 printer features that are discussed in this STR. Device configurations might vary among countries/regions.

**Table 1-2 Features of the HP LaserJet P2015 printer**

Feature	HP LaserJet P2015 printer
HP product number	Q7821A
Memory	<ul style="list-style-type: none"> <li>32 megabytes (MB) of synchronous random access memory (SDRAM)</li> <li>To allow for memory expansion, the printer has one DIMM slot that accepts 256 MB RAM (the printer can support up to 288 MB of memory)</li> </ul>
Speed	<ul style="list-style-type: none"> <li>Prints 26 pages per minute (ppm) on A4/letter sized media</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>A high-speed universal serial bus (USB) port</li> <li>10/100Base-T network Jetdirect port (HP LaserJet P2015n, HP LaserJet P2015dn. and HP LaserJet P2015x printers only)</li> </ul>
Paper handling	<ul style="list-style-type: none"> <li>Single sheet priority feed slot (tray 1)</li> <li>250-sheet universal tray (tray 2)</li> <li>Optional 250-sheet universal tray (optional tray 3, HP LaserJet P2015x printer only)</li> </ul>
Print	<ul style="list-style-type: none"> <li>ProRes 1200 provides fine-line detail at 1200 x 1200 dpi</li> <li>True 600x600 dpi text and graphics</li> <li>Adjustable settings to optimize print quality</li> <li>The HP UltraPrecise print cartridge has a finer toner formulation that provides sharper text and graphics</li> <li>Printer command language (PCL) 5e and 6 drivers</li> <li>HP postscript level 3 emulation</li> </ul>
Energy savings	The HP LaserJet P2015 printer automatically conserves electricity by substantially reducing power consumption when it is not in use. As an ENERGY STAR® partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR® guidelines for energy efficiency. ENERGY STAR® is a U.S. registered service mark of the United States Environmental Protection Agency.

# Printing-system software

The HP LaserJet P2015 printer includes the following software components and programs for Microsoft Windows operating systems.

**Table 1-3 Software components for Windows**

Components	Description
HP installer	Installs the HP LaserJet P2015 printing-system software based on the hardware it detects from the host computer.
Uninstaller	Removes files and folders that were installed when the HP LaserJet P2015 printing-system software was originally installed on the computer.
HP ToolboxFX	Provides a software interface to manage the HP LaserJet P2015 printer. Use the HP ToolboxFX to perform the following tasks: <ul style="list-style-type: none"><li>• Monitor the status of the product.</li><li>• Change the print settings for the product.</li><li>• Find troubleshooting information and instructions for performing basic tasks.</li><li>• Receive Status Alerts when certain events occur or conditions exist on the product.</li></ul>
Driver software	This software includes the following drivers: <ul style="list-style-type: none"><li>• The HP PCL 6 Unidriver. The HP PCL 6 Unidriver is installed by default in Windows 2000, Windows XP, and Windows Server 2003.</li><li>• The postscript (PS) print driver and PostScript® printer description (PPD) file for printing with HP postscript level 3 emulation. This driver is <i>not</i> installed by default. To install the PS 3 Emulation Unidriver or PS 3 Emulation Driver, use the Add Printer wizard.</li><li>• The HP PCL 5e Unidriver. This driver is <i>not</i> installed by default. To install the HP PCL 5e Unidriver, use the Add Printer wizard.</li></ul>
Online Help	Provides help for using the software for the HP LaserJet P2015 product.  The user documentation for these products is included on the installation CD as both .CHM (online help) files and Adobe® Acrobat® .PDF files. The software CD uses a version of Adobe Acrobat Reader that remains on the CD and does not need to be installed on the computer. However, you need a web browser installed on the computer in order to view the contents from any .CHM file.
Additional software	<ul style="list-style-type: none"><li>• <b>HP Software Update.</b> The HP Software Update utility checks the HP Web site for the latest software updates for the HP LaserJet P2015 printer.</li><li>• <b>HP Product Assistant.</b> The HP Product Assistant utility detects problems that occur with your HP product and can offer solutions. You can also view and search events that have been reported by your HP products in order to check for available solutions.</li></ul>

Topics included in this section:

- [System requirements](#)
- [Operating-system support](#)
- [Availability](#)

## System requirements

The following operating systems support the HP LaserJet P2015 printing-system software:

- [Windows](#)
- [Linux](#)
- [UNIX®](#)

### Windows

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 **NOTE:** For information about the HP LaserJet P2015 printing-system software for Macintosh operating systems, see [Macintosh on page 197](#).

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The HP LaserJet P2015 printing-system software has the following minimum system requirements.

- Windows 98 SE, Windows Millennium Edition, Windows 2000, Windows Server 2003, or Windows XP operating system
- Processor and RAM requirements:
  - For Windows 98 SE and Windows Me: a Pentium® II processor or greater, with 64 MB of RAM (for a driver-only installation)
  - For Windows 2000, Windows Server 2003, and Windows XP (32-bit Home and Professional editions): a Pentium II processor or greater (Pentium III or greater recommended), with 192 MB of RAM (for a full installation)
- 250 MB of available hard disk space
- A 2x or faster CD-ROM drive (required for installation)
- A direct connection to a computer for full product functionality requires a USB port.

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 **NOTE:** If the USB port has another device attached to it, such as an external storage device, the device must be disconnected or an additional USB port must be added. You can add an additional USB port by using a hub, or by installing an additional USB card.

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### Linux

You can also print to the HP LaserJet product from any operating system that complies with the PCL command language, such as OS/2, UNIX, or Linux systems.

Linux users should check for the availability of drivers at the following Web site:

[www.hp.com/go/linuxprinting](http://www.hp.com/go/linuxprinting)

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 **NOTE:** The Linux drivers are supported through the Linux community.

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### UNIX®

UNIX systems require a Model Script to set up the UNIX environment for printing. The HP LaserJet III model script, or any generic HP LaserJet printer Model Script, should work. These files are written and provided by the individual UNIX vendor. Users of HP-UX can check for availability of the Model Script and the support model at the following Web site:

[www.hp.com/go/unixmodelscripts](http://www.hp.com/go/unixmodelscripts)

Click the **Support & Drivers** link.

## Operating-system support

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 **NOTE:** For information about the HP LaserJet P2015 printing-system software for Macintosh operating systems, see [Macintosh on page 197](#).

**NOTE:** The HP LaserJet P2015 printer does *not* support the Windows NT® 4.0 or Windows 95 operating systems.

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

For more information about the HP LaserJet P2015 printer, go to the following Web site:

[www.hp.com/support/ljP2015](http://www.hp.com/support/ljP2015)

Topics:

- [Standalone drivers](#)
- [Print driver support in other operating systems](#)

## Standalone drivers

The following Windows operating systems fully support the HP LaserJet P2015 printer through the software installer, and drivers for these operating systems are available on the printing-system software CD that comes with the product.

- Microsoft Windows 2000 (requires Administrator privileges)
- Microsoft Windows XP (32-bit; requires Administrator privileges)

## Print driver support in other operating systems

The following operating systems support plug-and-play or add-printer-wizard installations.

- Windows 98 Second Edition (Windows 98 SE)
- Windows Millennium Edition (Windows Me)
- Windows XP Intel 64-bit (driver available only on the Web; requires Administration privileges)
- Windows Server 2003 (uses the Win2000\_XP driver on the HP LaserJet P2015 software CD and is also available on the Web)
- Itanium Architecture (IA) 64-bit (driver available only on the Web)

Use a plug-and-play installation or the Add Printer Wizard to install the print driver for these operating systems. The print driver for these operating systems is available at the following HP support Web site:

[www.hp.com/support/ljP2015](http://www.hp.com/support/ljP2015)

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 **NOTE:** The HP LaserJet P2015 printer does not support Windows 98 First Edition.

**NOTE:** For information and printer drivers for Linux, go to the following Web site:

[www.hp.com/go/linux](http://www.hp.com/go/linux)

**NOTE:** For information and printer drivers for UNIX, go to the following Web site:

[www.hp.com/go/unixmodelscripts](http://www.hp.com/go/unixmodelscripts)

## Availability

The following table lists the availability of the HP LaserJet P2015 printing-system software components by operating system.

**Table 1-4 Software component availability for the HP LaserJet P2015 printer**

Component	Windows 98 SE and Windows Me	Windows 2000 and Windows XP – 32-bit	Windows XP – X64-bit and IA – 64-bit <sup>4</sup>	Windows Server 2003 <sup>4</sup>	UNIX	Linux
<b>Drivers</b>						
HP Traditional PCL 5e Driver	X <sup>1</sup>					
HP Traditional PCL 6 Driver	X <sup>1</sup>					
PS 3 Emulation Driver	X <sup>1</sup>					
HP traditional PPD	X <sup>1</sup>					
HP PCL 5e Unidriver		X	X <sup>1</sup>	X <sup>1</sup>		
HP PCL 6 Unidriver		X	X <sup>1</sup>	X <sup>1</sup>		
PS 3 Emulation Unidriver		X <sup>1</sup>	X <sup>1</sup>	X <sup>1</sup>		
UNIX Model Script					X <sup>2</sup>	
Linux print drivers and model script						X <sup>3</sup>
<b>Installers</b>						
Common Windows Installer		X				
CD Browser		X				
.INF File (Add Printer)	X	X	X <sup>4, 1</sup>	X <sup>4, 1</sup>		
<b>Remote management and status</b>						
Applet for HP WebJet Admin <sup>5</sup>	X	X				
HP ToolboxFX		X				
<b>Online Documentation</b>						
<i>HP LaserJet P2015 Series User Guide</i>	X	X				
<i>Hewlett-Packard LaserJet P2015 Printing-System Install Notes<sup>6</sup></i>	X	X				
Screen fonts		X				

**Table 1-4 Software component availability for the HP LaserJet P2015 printer (continued)**

Component	Windows 98 SE and Windows Me	Windows 2000 and Windows XP – 32-bit	Windows XP – X64-bit and IA – 64-bit <sup>4</sup>	Windows Server 2003 <sup>4</sup>	UNIX	Linux
Help systems	X	X	X	X		

<sup>1</sup> This driver is installed through the Add Printer Wizard only.

<sup>2</sup> This component is available at the following Web site: [www.hp.com/go/unixmodelscripts](http://www.hp.com/go/unixmodelscripts)

<sup>3</sup> This component is available at the following Web site: [www.hp.com/go/linuxprinting](http://www.hp.com/go/linuxprinting)

<sup>4</sup> This component is available only at the following Web site: [www.hp.com/support/ljP2015](http://www.hp.com/support/ljP2015)

<sup>5</sup> This component is available at the following Web site: [www.hp.com/go/webjetadmin](http://www.hp.com/go/webjetadmin)

<sup>6</sup> This document is also available at the following Web site: [www.hp.com/support/ljP2015](http://www.hp.com/support/ljP2015)

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 LaserJet P2015 printing-system software is available for download at the following Web site:

[www.hp.com/go/ljP2015\\_software](http://www.hp.com/go/ljP2015_software)

 **NOTE:** Only 32-bit print drivers are available on the printing-system software CD. If the computer is running a 64-bit operating system, install a 64-bit print driver. The 64-bit print drivers for Windows XP and Windows Server 2003 are available at the following Web site:

[www.hp.com/go/ljP2015\\_software](http://www.hp.com/go/ljP2015_software)

To order the HP LaserJet P2015 printing-system software if the CD is damaged or missing, contact HP Support at the following Web site. To request the software CD by phone, see the following Web site for the correct contact number for your country/region:

[www.hp.com/go/ljP2015\\_software](http://www.hp.com/go/ljP2015_software)

 **NOTE:** If you need a replacement CD or newer version of the software than what was shipped with the product, go to the following Web site:

[www.hp.com/support/ljP2015](http://www.hp.com/support/ljP2015)

Click **CD-ROM Order Page** to order, or click **Download drivers and software** to get the software update.

## In-box printing-system software CDs

The software CD for the HP LaserJet P2015 printer contains a variety of files for installing the printing-system software on the computer.

The HP LaserJet P2015 printing-system software CD is divided into two partitions, one for each of the following operating systems:

- MS Windows
- Macintosh

Each partition includes documentation files 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, and the following directories and support files:

- Apps
- Language directories (containing documentation)
- Drivers
- Fonts
- Setup
- Util

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

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To view the files, insert the HP LaserJet P2015 printing-system software CD, right-click **Start**, click **Explore**, and then select the CD-ROM drive.

### CD versions

The following table presents the part numbers and language groups on the software CDs for the HP LaserJet P2015 printers.

**Table 1-5 CD part numbers for the HP LaserJet P2015 printing-system software**

Part number	Description	Languages included on CD
Need part number	Windows software CD for the HP LaserJet P2015 printer	<ul style="list-style-type: none"><li>• English</li><li>• Catalan</li><li>• Italian</li><li>• Spanish</li><li>• Dutch</li><li>• French</li><li>• German</li><li>• Greek</li><li>• Portuguese</li></ul>
Need part number	Windows software CD for the HP LaserJet P2015 printer	<ul style="list-style-type: none"><li>• English</li><li>• Danish</li><li>• Swedish</li><li>• Finnish</li><li>• Norwegian</li><li>• Hebrew</li><li>• Estonian</li><li>• Lithuanian</li><li>• Latvian</li></ul>
Need part number	Windows software CD for the HP LaserJet P2015 printer	<ul style="list-style-type: none"><li>• English</li><li>• French</li><li>• Bulgarian</li><li>• Croatian</li><li>• Czech</li><li>• Hungarian</li><li>• Kazakh</li><li>• Polish</li><li>• Romanian</li><li>• Russian</li><li>• Serbian</li><li>• Slovak</li><li>• Slovenian</li><li>• Turkish</li></ul>

**Table 1-5 CD part numbers for the HP LaserJet P2015 printing-system software (continued)**

Part number	Description	Languages included on CD
		<ul style="list-style-type: none"> <li>Ukrainian</li> <li>Arabic</li> </ul>
Need part number	Windows software CD for the HP LaserJet P2015 printer	<ul style="list-style-type: none"> <li>English</li> <li>Bahasa Indonesian</li> <li>Korean</li> <li>Simplified Chinese</li> <li>Traditional Chinese</li> <li>Thai</li> </ul>

The following table provides localization information about the software components for the HP LaserJet P2015 printer.

 **NOTE:** A language key follows each table.

**Table 1-6 Software component localization by language, A-H**

Component <sup>1</sup>	Operating system	AR	CA	CS	DA	DE	EL	EN	ES	FI	FR	HE	HU
HP ToolboxFX	2000, XP	X		X	X	X	x	X	X	X	X	X	X
HP Traditional PCL 6 Driver and PS 3 Emulation Driver	98 SE, Me	X		X	X	X		X	X	X	X	X	X
HP PCL 6 Unidriver and PS 3 Emulation Unidriver	2000, XP	X	X	X	X	X	X	X	X	X	X	X	X
Common Windows Installer	2000, XP			X	X	X		X	X	X	X		X
Online manuals (.PDF and .CHM)	2000, XP	X	X	X	X	X	x	X	X	X	X	X	X

<sup>1</sup> Components that are not available in a specific language are supported in English.

Language key for [Table 1-6 Software component localization by language, A-H on page 11](#):

- AR = Arabic
- CA = Catalan
- CS = Czech
- DA = Danish
- DE = German

- EL = Greek
- EN = English
- ES = Spanish
- FI = Finnish
- FR = French
- HE = Hebrew
- HU = Hungarian

**Table 1-7 Software component localization by language I-Z**

Component <sup>1</sup>	Operating system	ID	IT	KO	NL	NO	PL	PT	RU	SV	TH	TR	ZH CN	ZH TW
HP ToolboxFX	2000, XP	x	X	X	X	X	X	X	X	X	X	X	X	X
HP Traditional PCL 6 Driver and PS 3 Emulation Driver	98 SE, Me		X	X	X	X	X	X	X	X	X	X	X	X
HP PCL 6 Unidriver and PS 3 Emulation Unidriver	2000, XP		X	X	X	X	X	X	X	X	X	X	X	X
Common Windows Installer	2000, XP		X	X	X	X	X	X	X	X		X	X	X
Online manuals (.PDF and .CHM)	2000, XP	X	X	X	X	X	X	X	X	X	X	X	X	X

<sup>1</sup> Components that are not available in a specific language are supported in English.

Language key for [Table 1-7 Software component localization by language I-Z on page 12](#):

- ID = Indonesian
- IT = Italian
- KO = Korean
- NL = Dutch
- NO = Norwegian
- PL = Polish
- PT = Portuguese
- RU = Russian
- SV = Swedish
- TH = Thai
- TR = Turkish

- ZHCN = Simplified Chinese
- ZHTW = Traditional Chinese

# HP LaserJet documentation

The documentation in the following table is available for the HP LaserJet P2015 printer.

**Table 1-8 User documentation availability and localization**

Document name	Languages	Part number	Location
<i>HP LaserJet P2015 Series User Guide</i>	English	CB366-90911	The <i>HP LaserJet P2015 Series User Guide</i> is available in electronic format on the HP LaserJet P2015 printing-system software CD.
	Arabic	?	
	Catalan	CB366-90917	
	Chinese (Simplified)	?	
	Chinese (Traditional)	?	
	Czech	?	
	Danish	?	
	Dutch	CB366-90918	
	Finnish	?	
	French	CB366-90912	
	German	CB366-90913	
	Hebrew	?	
	Hungarian	?	
	Indonesian (Bahasa)	?	
	Italian	CB366-90914	
	Korean	?	
	Norwegian	?	
	Portuguese (Brazilian)	CB366-90921	
	Polish	?	
	Russian	?	
Spanish	CB366-90915		
Swedish	?		
Thai	?		
Turkish	?		
<i>Getting Started Guide</i>	<ul style="list-style-type: none"> <li>● Catalan</li> <li>● Dutch</li> <li>● English</li> <li>● French</li> <li>● German</li> <li>● Hebrew</li> </ul>	?	The <i>Getting Started Guide</i> is available in hard copy and comes in the box with the HP LaserJet P2015 printer.

**Table 1-8 User documentation availability and localization (continued)**

Document name	Languages	Part number	Location
	<ul style="list-style-type: none"> <li>• Italian</li> <li>• Portuguese (Brazilian)</li> <li>• Spanish</li> </ul>		
	<ul style="list-style-type: none"> <li>• Danish</li> <li>• English</li> <li>• Estonian</li> <li>• Finnish</li> <li>• Hebrew</li> <li>• Latvian</li> <li>• Lithuanian</li> <li>• Norwegian</li> <li>• Swedish</li> </ul>	?	
	<ul style="list-style-type: none"> <li>• Arabic</li> <li>• Bulgarian</li> <li>• English</li> <li>• Greek</li> <li>• Kazakh</li> <li>• Latvian</li> <li>• Lithuanian</li> <li>• Russian</li> <li>• Turkish</li> <li>• Ukrainian</li> </ul>	?	
	<ul style="list-style-type: none"> <li>• English</li> <li>• Indonesian</li> <li>• Korean</li> <li>• Simplified Chinese</li> <li>• Thai</li> <li>• Traditional Chinese</li> </ul>	?	

**Table 1-8 User documentation availability and localization (continued)**

Document name	Languages	Part number	Location
	<ul style="list-style-type: none"><li>• Croatian</li><li>• Czech</li><li>• English</li><li>• Hungarian</li><li>• Polish</li><li>• Romanian</li><li>• Serbian</li><li>• Slovak</li><li>• Slovenian</li></ul>	?	

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## 2 Software description

### Introduction

The HP LaserJet P2015 printer comes with software and installers for MS Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX systems also support the HP LaserJet P2015, 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](#)
- [HP Extended Capabilities](#)
- [HP ToolboxFX](#)
- [HP Embedded Web Server](#)
- [HP Web Jetadmin](#)

# MS Windows printing-system software

Topics:

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

## Printing system and installer

Topics:

- [HP LaserJet P2015 printing-system software CD for MS Windows systems](#)

## HP LaserJet P2015 printing-system software CD for MS Windows systems

In the MS Windows environment (Windows 2000 and Windows XP), insert the HP LaserJet P2015 printing-system software CD in the CD-ROM drive to open an interactive CD browser. Use the CD browser to install the print drivers and related components, and to gain access to online user documentation, a customization utility, and Adobe Acrobat Reader software.

The following figure shows the main screen of the HP LaserJet P2015 printing-system software CD.

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.

**Figure 2-1** Installation software CD browser



 **NOTE:** The options on devices might differ from the illustration.

**Install Printer Software.** The installation wizard guides users through the HP LaserJet P2015 printing-system software installation. Select a Basic Installation, a Full Installation, 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.

**View User Guide.** Use this option to view the *HP LaserJet P2015 Series User Guide*.

 **NOTE:** If Adobe Acrobat Reader 4.0 or later is not installed, clicking the user guide link opens it in a version of Adobe Acrobat Reader that runs from the HP LaserJet P2015 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](http://www.adobe.com)

## HP LaserJet print drivers

All of the MS Windows drivers are supported in Microsoft 32-bit operating systems. Separate versions of the HP PCL 6, PCL 5e, and HP postscript level 3 emulation unidrivers are available for Windows XP and Windows Server 2003 64-bit operating systems. These 64-bit drivers are not included on the printing-system software CD, but they can be downloaded from the following HP Web site: [www.hp.com/go/ljP2015\\_software](http://www.hp.com/go/ljP2015_software)

The following drivers are available on the HP LaserJet P2015 printing-system software CD:

- The HP PCL 6 Unidriver for Windows 2000 and Windows XP
- HP PCL 5e Unidriver for Windows 2000 and Windows XP
- The HP Postscript Level 3 Emulation Unidriver (the PS 3 Emulation Unidriver) for Windows 2000 and Windows XP
- The HP Traditional PCL 6 Driver for Windows 98 and Windows Me
- The HP Traditional PCL 5e Driver for Windows 98 and Windows Me
- The HP Traditional Postscript Level 3 Emulation driver (the PS 3 Emulation Driver) for Windows 98 and Windows Me

## HP Extended Capabilities

When installing the HP LaserJet P2015 printing-system software, you have the option of participating in HP's voluntary program for communication between your system and HP. This feature, available through software that is included on the printing-system software CD, helps HP monitor toner usage.

If you select the option to participate, you receive an invitation about two weeks later. It contains full disclosure of the information to be communicated. Participation is entirely voluntary, and the impact on processing and connecting speed is negligible. Personal information is never sent to HP without permission. Network addresses are used only to enable the connection and for security purposes.

If you decline the invitation, the dialog box does not appear again later, and no data is gathered.

# HP ToolboxFX

This section provides information about the following topics:

- [Overview of the HP ToolboxFX](#)
- [System requirements](#)
- [Key features](#)
- [The HP ToolboxFX folders](#)
- [Other screens](#)
- [Summary of HP ToolboxFX known issues](#)

## Overview of the HP ToolboxFX

 **NOTE:** The HP ToolboxFX is available for Windows 2000 and Windows XP operating systems only.

HP ToolboxFX allows end users to easily communicate with and manage their HP LaserJet P2015 printer. The HP ToolboxFX provides the following capabilities:

- Provides a view of the current status of the product
- Provides a view of the current status of the product consumables
- Provides Device Alert functionality, notifying the end user when particular events or conditions occur at the device.
- Provides access to troubleshooting information
- Provides access to some of the product settings, as an alternative to using the product control panel

## Starting the HP ToolboxFX

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

- Double-click the **HP ToolboxFX** icon in the Windows system tray.
- Click **Start**, click **Programs**, click **HP**, click **HP LaserJet P2015 series**, and then click **HP ToolboxFX**.
- Click **Utilities** or click **Settings**, and then click **Status** in the HP Solution Center.

## Structure

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

- **Heading banner.** Each page that appears in the HP ToolboxFX has a heading banner at the top that includes the HP logo.
- **Devices pane.** The Devices Pane is always visible on the left-hand side of the HP ToolboxFX window. The Devices pane lists the HP products that are available to the host computer system and folders for the types of information available about each product.
- **Main content area.** Click any of the devices or folders listed in the Devices pane to see information about the product in the main content area.

- **Toolbar.** A toolbar appears at the top of the Main content area. The toolbar contains controls for printing, refreshing the page, ordering supplies, and getting help.
- **Other Links pane.** The Other Links pane is always visible in the lower-left corner of the HP ToolboxFX window. The Other Links pane contains links to the HP Instant Support, Product Support, and Product Registration pages on the HP Web site.

## Opening screen

The opening screen that appears in the HP ToolboxFX section depends on the installed configuration of the HP ToolboxFX. If the HP ToolboxFX is installed for a single HP LaserJet product, the Device Status page for that HP LaserJet product appears when you open the toolbox. If the HP ToolboxFX is installed for multiple products, a product summary page appears that contains a brief summary of each product available to the HP ToolboxFX. Double-click any of the products listed to go to the Device Status page for that product.

## System requirements

HP ToolboxFX is currently supported on the following operating systems:

- Windows 2000
- Windows XP Professional
- Windows XP Home

HP ToolboxFX also requires the Microsoft .NET Framework 1.1 on the client machine, which happens automatically during installation of the HP LaserJet P2015 printing-system software.

## Key features

This section provides information about the device alert features.

### Receive Alert messages for device events

Through HP ToolboxFX, the appropriate person can be alerted when certain events occur at the HP LaserJet P2015 printers. Receive pop-up dialogs (Status Alerts) or automatically generated e-mail messages (E-mail Alerts) for certain events. Alerts can also appear as a taskbar icon or as a desktop message. To see a list of the events that generate alerts in HP ToolboxFX, see the [Set up Status Alerts on page 32](#) section.

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

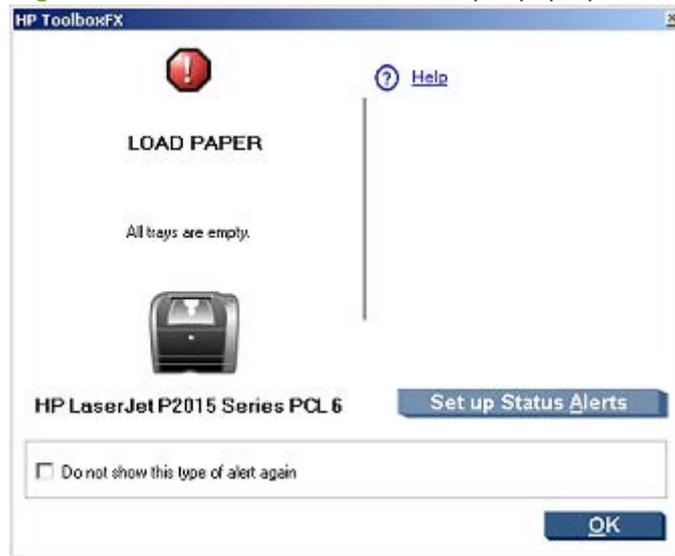
The following alert messages are available:

- [HP Device pop-up alert messages](#)
- [System-tray icon alert](#)
- [Desktop alert](#)
- [E-mail alert](#)

## HP Device pop-up alert messages

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

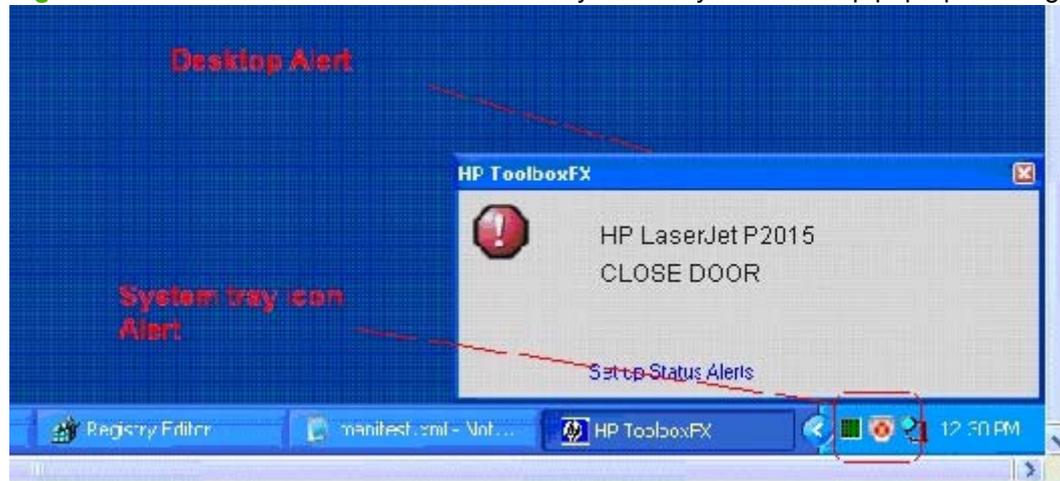
**Figure 2-2** HP Device Alert – Load Paper pop-up message



## System-tray icon alert

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

**Figure 2-3** HP Device Alert – CLOSE DOOR System Tray and Desktop pop-up message



## Desktop alert

Desktop alert messages notify you immediately when an error or print-cartridge warning occurs in the device. Desktop alerts only appear for a few seconds, and then automatically disappear. This feature is turned *off* by default.

## E-mail alert

E-mail alert messages notify up to two users when a specific alert condition occurs in the device. The alert condition can be a specific error alert or print-cartridge warning. This feature can be used to alert administrators or service providers that the device requires attention. For instance, when the toner low alert occurs, the person in charge of ordering print cartridges can be notified by e-mail.

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

## The HP ToolboxFX folders

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

### Status folder

The **Status** folder contains the following sub-folders:

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

## Device Status

The **Device Status** screen shows device status messages from the product.

**Figure 2-4** Device Status screen



The screenshot displays the HP ToolboxFX interface for an HP LaserJet P2015 Series printer. The main content area is titled "Device Status" and shows the printer's status as "Ready". Below this, there is a "Supplies Status" section with a vertical gauge indicating the toner level at approximately 60%. The "Supplies Information" section contains a table with the following data:

Supply Name	Estimated Status*	Pages Remaining**	HP Part Number
HP Black Print Cartridge	59%	2268	Q7553A

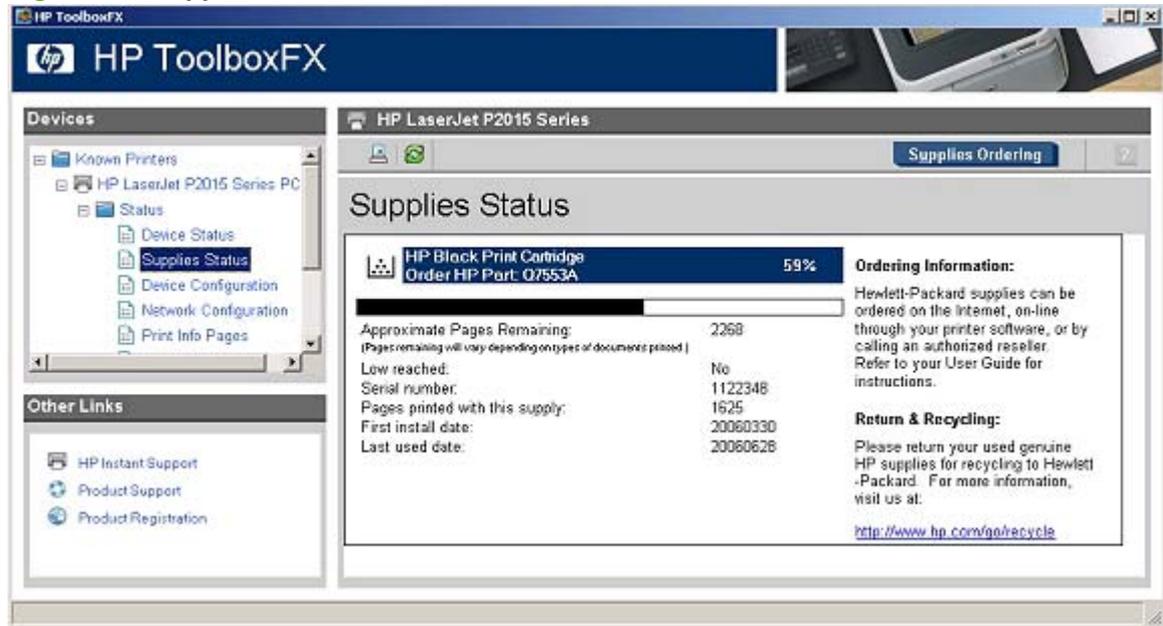
\*Estimate only. Actual supplies level may vary.  
\*\*Approximate only. Pages remaining will vary depending on types of documents printed.

**NOTE:** The HP LaserJet P2015 printers include a Supplies Status section and a Supplies Information section on the **Device Status** screen, which provide information about the estimated toner level, the approximate pages remaining based on the estimated toner level, and the HP part number for easy reference when ordering new consumables.

## Supplies Status

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

**Figure 2-5** Supplies Status screen



## Device Configuration

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

**Figure 2-6** Device Configuration screen

The screenshot shows the HP ToolboxFX interface for an HP LaserJet P2015 Series printer. The main content area is titled "Device Configuration" and is divided into three sections:

- Product Information:** A table listing various product details.
- Installed Personalities and Options:** A list of installed personalities and options.
- Page Counts:** A table showing the number of pages printed for different categories.

Product Information	
Product name:	HP LaserJet P2015 Series
Formatter number:	ODYSSEYA472
Product serial number:	CNCFG12345
Service ID:	18185
Firmware datecode:	0517_01:38:41 Phoenix Firmware
Maximum print quality:	ProRes 1200
Controller number:	8
Device Description:	HP LaserJet P2015 Series
Device language:	English
Asset Number:	
Company Name:	
Contact Person:	
Hardware address:	00:14:38:9e:b2:4a
IP address:	10.10.48.115
Total memory:	32 MB
Available memory:	17.64 MB

Installed Personalities and Options	
PCL5e	
PostScript	
PCLXL	
DIMM Slot 1:	Empty

Page Counts	
Total pages printed:	24
Duplexer page counts:	0
Pages mispicked in printer:	0
Pages jammed in printer:	0
PCL6 pages printed:	24
PS pages printed:	0
PCL pages printed:	0

## Network Configuration

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

**Figure 2-7** Network Configuration screen

The screenshot shows the HP ToolboxFX interface for an HP LaserJet P2015 Series printer. The main content area is titled "Network Configuration" and is divided into three sections:

- Network Hardware Configuration:**

Status:	Ready
Hardware address:	00:14:38:9e:b2:4a
Firmware datecode:	0517_01:38:41 Phoenix Firmware
Link speed and duplex negotiation:	Automatic
Link speed:	100 Mbps
Duplex:	Full
Automatic Crossover:	On
Connection time-out (I/O):	300
- Enabled Features:**

Password:	Disabled
DHCP:	Enabled
BOOTP:	Enabled
AUTOIP:	Enabled
LPD Printing:	Enabled
Bonjour:	Enabled
HP SLP:	Enabled
SNMP:	Enabled
- TCP/IP:**

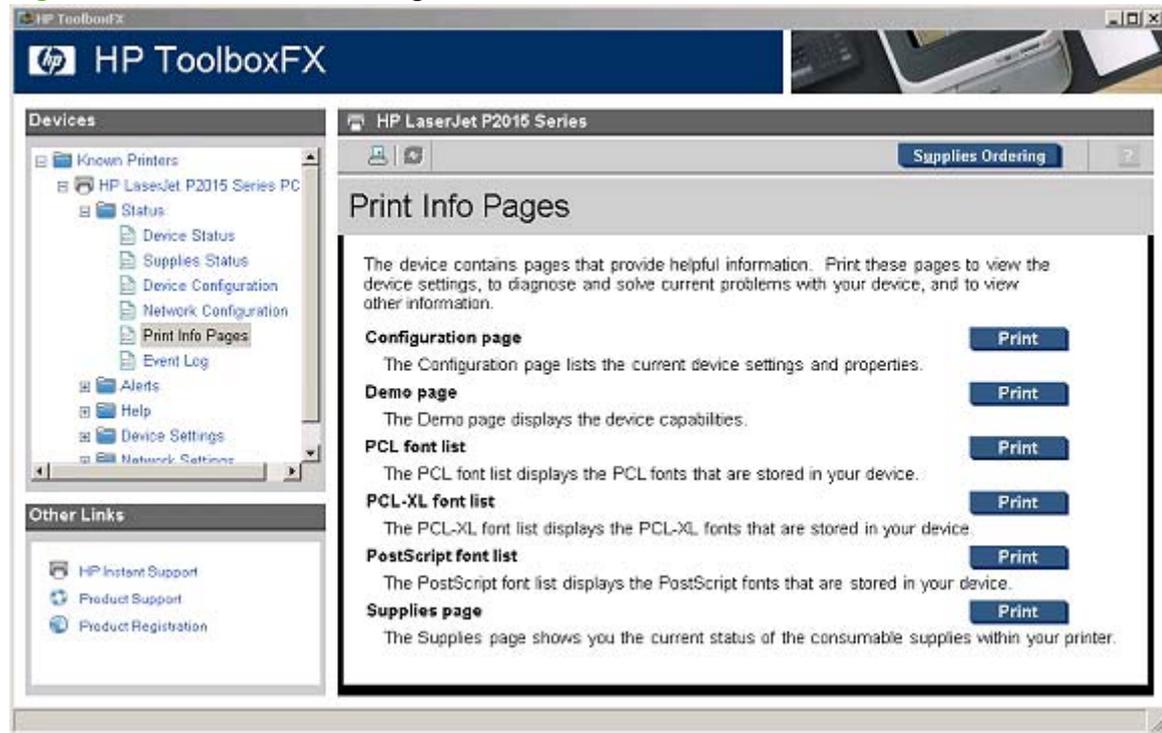
Host name:	NPI9EB24A
Domain Name:	HP
Bonjour printer name:	HP LaserJet P2015 Series (9EB24A)
IP address:	10.10.10.10
Subnet mask:	255.255.255.0
Default gateway:	10.10.10.10
IP Configured by:	DHCP
DHCP Expiration Time (days:hours:minutes):	03:00:00

The left sidebar contains a "Devices" section with a tree view showing "Known Printers" and "HP LaserJet P2015 Series PCL 6". Under "Status", "Network Configuration" is selected. Below this are "Alerts", "Help", "Device Settings", and "Network Settings". The "Other Links" section at the bottom left includes "HP Instant Support", "Product Support", and "Product Registration".

## Print Info Pages

Use the **Print Info Pages** screen to print out the internal special pages that the product generates. Click **Print** next to the name of the page that you want to print.

**Figure 2-8** Print Information Pages screen

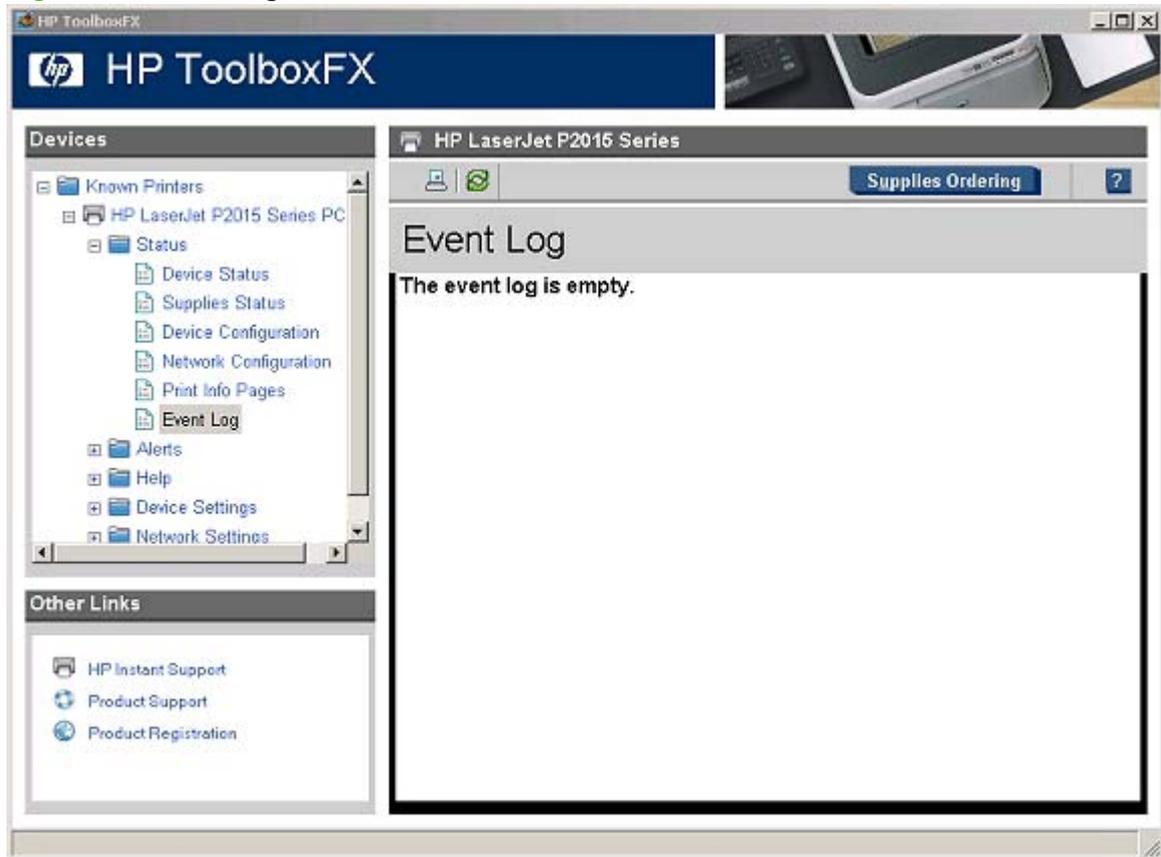


The contents of these reports are generated by the product firmware, *not* by the HP ToolboxFX.

## Event Log

Use the **Event Log** screen to monitor events for the HP LaserJet P2015 printer. Up to ten events can appear on this screen. If this screen is empty, no events have occurred on the printer.

**Figure 2-9** Event Log screen



## Alerts folder

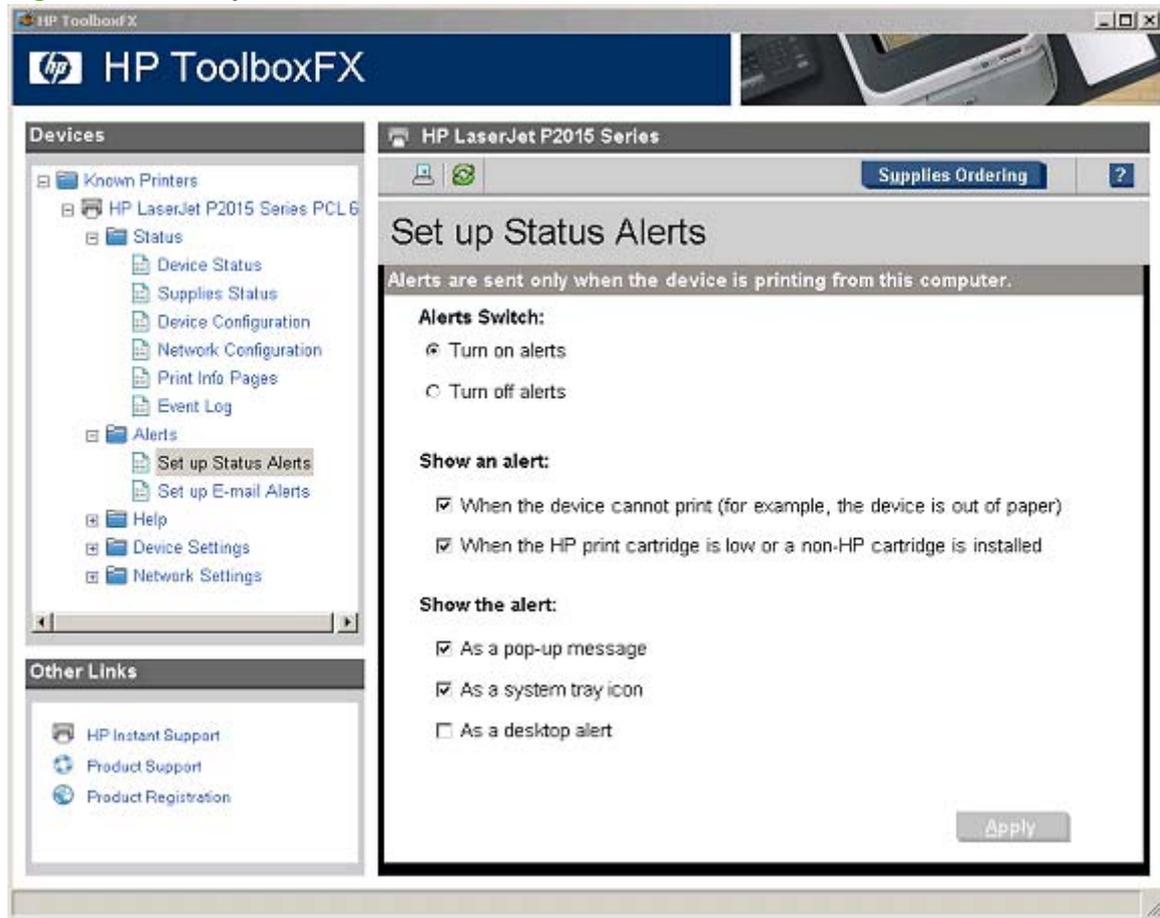
The **Alerts** folder contains the following sub-folders:

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

## Set up Status Alerts

Use the **Set up Status Alerts** screen to set up status alerts on the for the HP LaserJet P2015 printer. Select the **Turn on alerts** option and then click **Apply** to turn on alerts.

**Figure 2-10** Set up Status Alerts screen



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

**Table 2-1** Event alerts for HP ToolboxFX

Pop-up alerts, system-tray icon alerts, Event and desktop alerts		
Supplies warnings	Order Cartridge	
Supplies errors	<ul style="list-style-type: none"> <li>• Black Incorrect</li> <li>• Black Missing</li> <li>• Non-HP Black Cartridge</li> <li>• Unauthorized Black Cartridge</li> <li>• Replace Black</li> <li>• Black E-label Error</li> </ul>	
Printer errors	<ul style="list-style-type: none"> <li>• Load Paper [TYPE] [SIZE]</li> <li>• Tray 1 Paper Out</li> </ul>	<ul style="list-style-type: none"> <li>• High Fuser Error</li> <li>• Fuser Driver Error</li> </ul>

**Table 2-1 Event alerts for HP ToolboxFX (continued)**

<ul style="list-style-type: none"> <li>● Tray 2 Paper Out</li> <li>● Insufficient Memory</li> <li>● Door Cover Open</li> <li>● Close Cover</li> <li>● Manual Feed</li> <li>● Tray 1 Jam</li> <li>● Tray 2 Jam</li> <li>● Tray 3 Jam</li> <li>● Jam In Print Paper Path</li> <li>● Jam In Cartridge Area</li> <li>● Jam In Output Bin</li> <li>● Printer Mispick</li> <li>● Invalid Driver</li> <li>● Fuser Error</li> <li>● Low Fuser Error</li> <li>● Slow Fuser Error</li> </ul>	<ul style="list-style-type: none"> <li>● Beam Error</li> <li>● Fan Error</li> <li>● Page Punt</li> <li>● Engine Comm Error</li> <li>● Tray 1 Unexpected Size [SIZE]</li> <li>● Tray 2 Unexpected Size [SIZE]</li> <li>● Misprint</li> <li>● Top Detect Error</li> <li>● Top Sensor Error</li> <li>● DC Controller Error</li> <li>● 59.4 Error</li> </ul>
--	--

E-mail alerts	Event
	<ul style="list-style-type: none"> <li>● Cartridge Low</li> <li>● Replace Cartridge</li> <li>● Close doors/covers</li> <li>● Insufficient memory</li> <li>● Manual feed</li> <li>● Non-HP print cartridge installed</li> <li>● Unauthorized supply installed</li> <li>● Paper out</li> <li>● Printer mispick</li> <li>● Remove paper jam</li> <li>● Unexpected paper size</li> </ul>

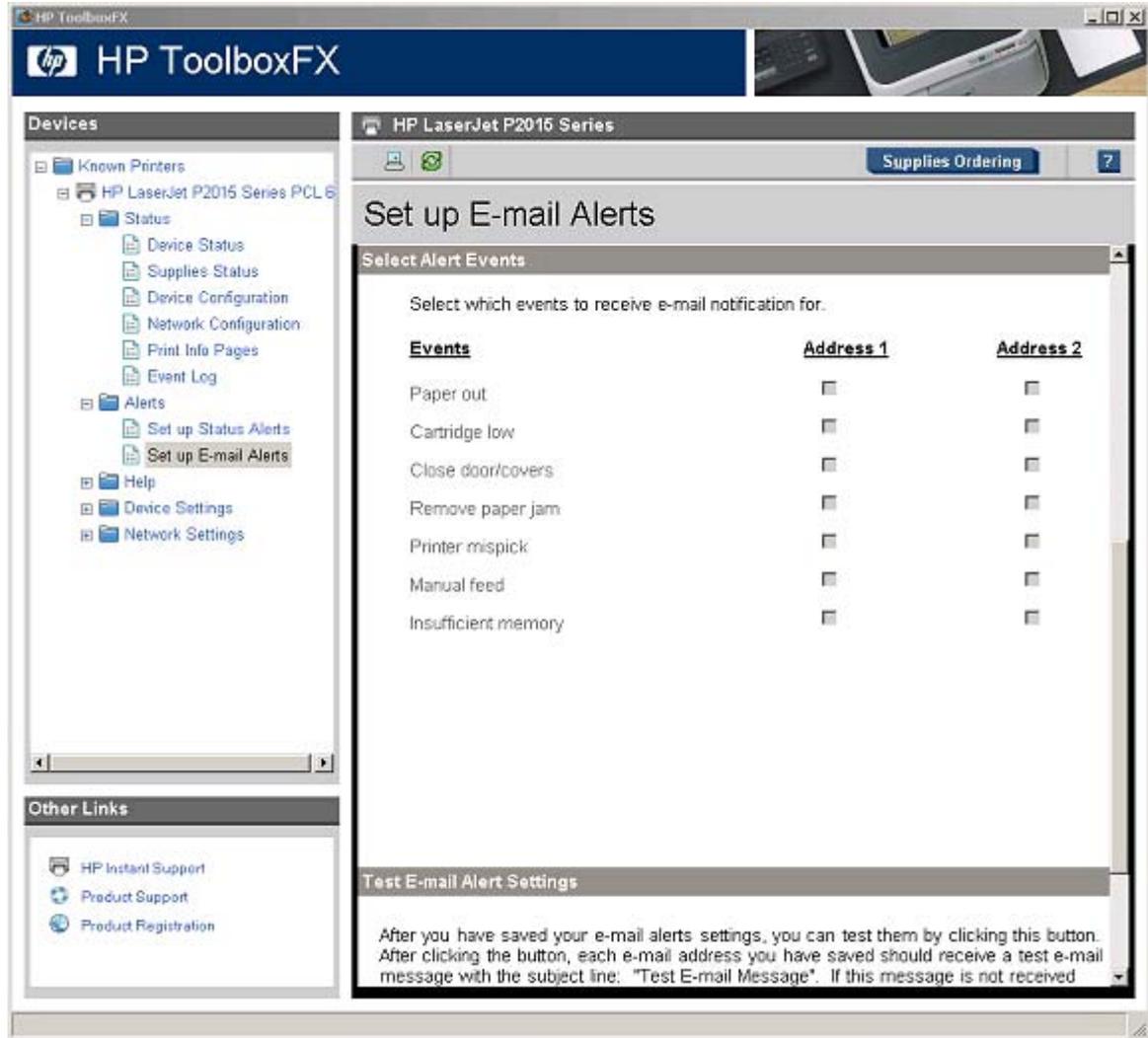
Select one or more formats for the alert under **Show the alert:**

- Pop-up message
- System tray icon
- Desktop alert

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



Figure 2-12 Set up E-mail Alerts screen – 2 of 2



E-mail messages can be sent when certain events occur at the product. Select the specific events for which you want notification.

To use this feature, use a valid e-mail address, select the events for which you want notification, configure the SNMP e-mail server that will be used to send the e-mail message, and then click **Apply** to save the settings.

Up to two e-mail addresses can be configured to receive separate e-mail messages for separate events.

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

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

## Help folder

The **Help** folder contains the following sub-folders:

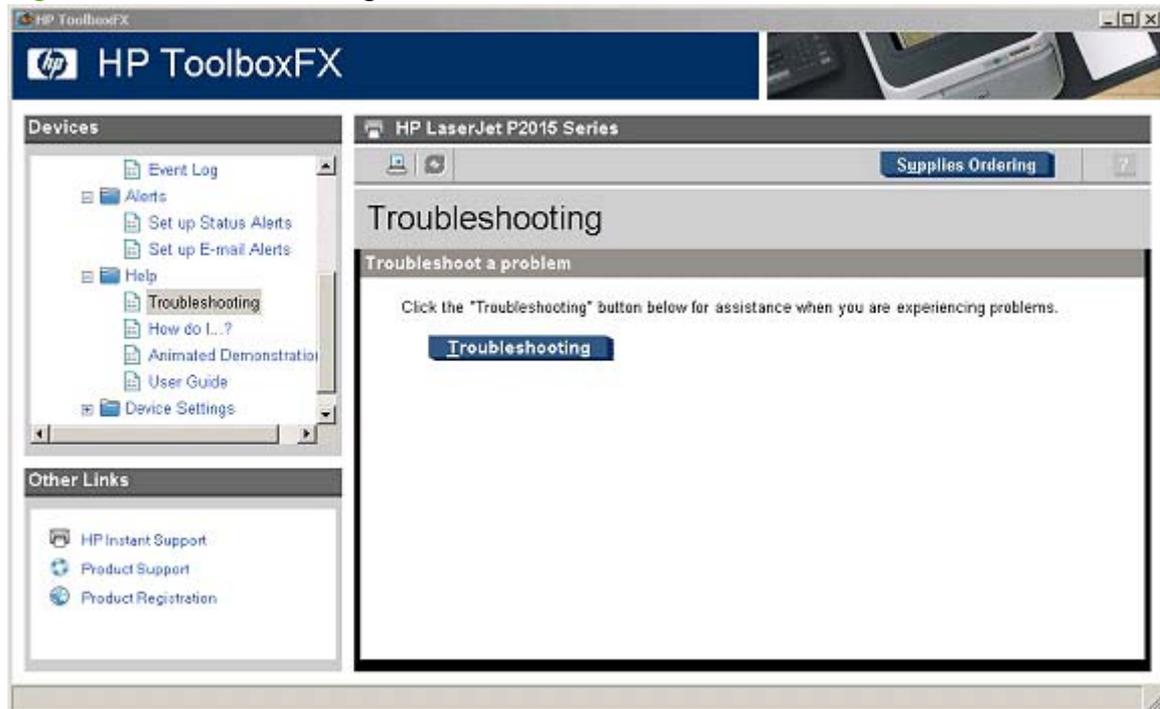
- [Troubleshooting](#)
- [How do I...?](#)

- [Animated Demonstrations](#)
- [User Guide](#)

All of the content in the **Help** folder is static HTML content, except for the animated demonstrations. This content contains hyperlinks, and **Next** and **Previous** buttons that can be used to navigate through the various sections of the Help content.

## Troubleshooting

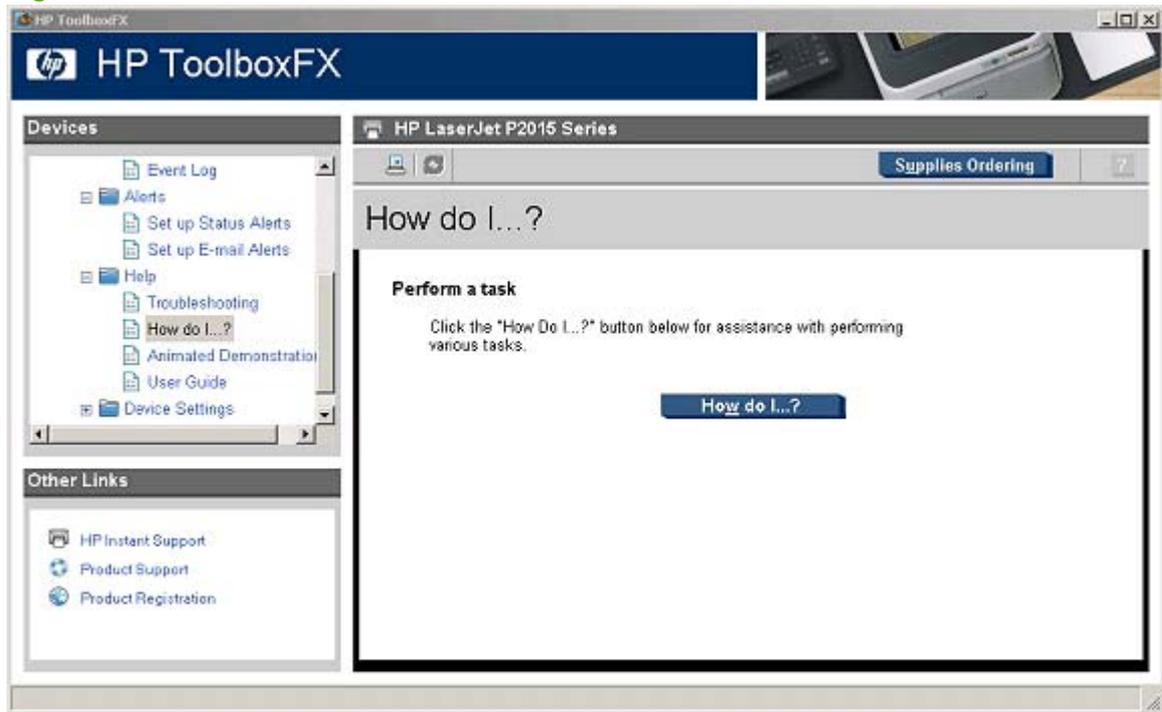
**Figure 2-13** Troubleshooting sub-folder



Click **Troubleshooting** on the Troubleshooting screen to gain access to the Troubleshooting chapter of the *HP LaserJet P2015 Series User Guide*.

## How do I...?

Figure 2-14 How do I...? sub-folder

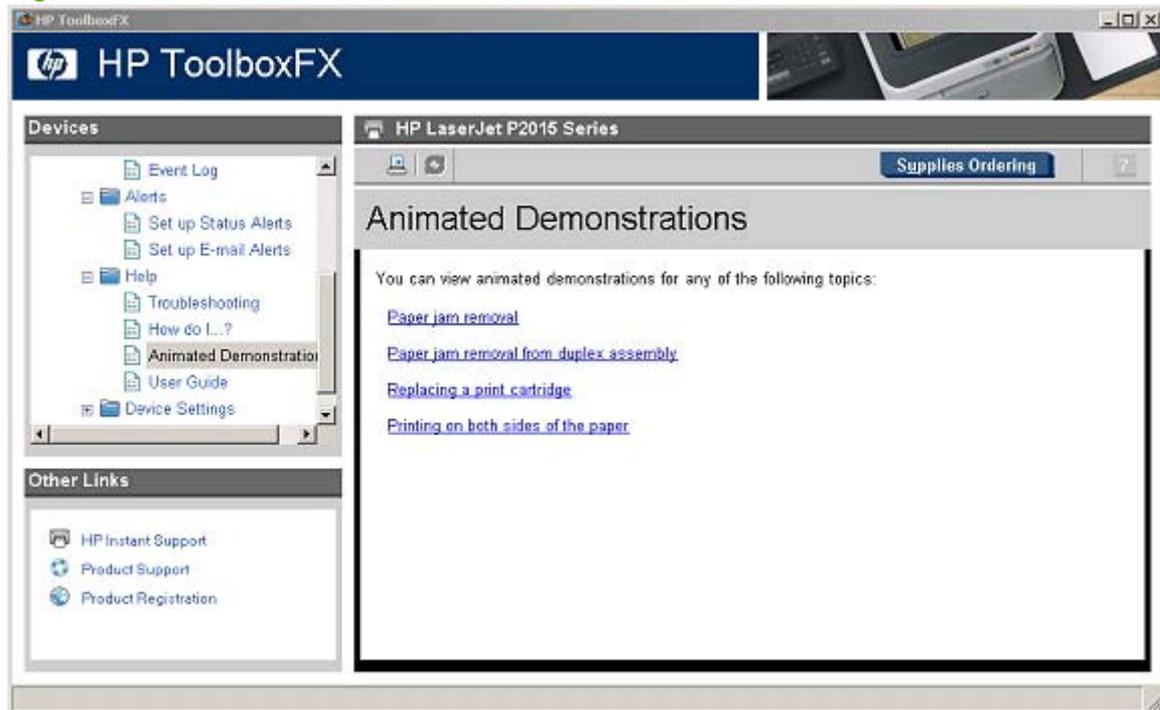


Click **How do I... ?** on the How do I... ? screen to gain access to the How do I... ? chapter of the *HP LaserJet P2015 Series User Guide*.

Each of the How do I...? screens (Print, Network, Add Memory, and Other), contains a set of links. Each link corresponds to a particular task. Click these links to open a new window that provides content about the task.

## Animated Demonstrations

Figure 2-15 Animated Demonstrations screen



Click the links on the **Animated Demonstrations** screen to view the following animated demonstrations:

- **Paper jam removal**
- **Paper jam removal from duplex assembly**
- **Replacing a print cartridge**
- **Printing on both sides of the paper**

## User Guide

Figure 2-16 HP LaserJet P2015 Series User Guide



Use the **User Guide** screen to gain access to the *HP LaserJet P2015 Series User Guide*.

## Device Settings folder

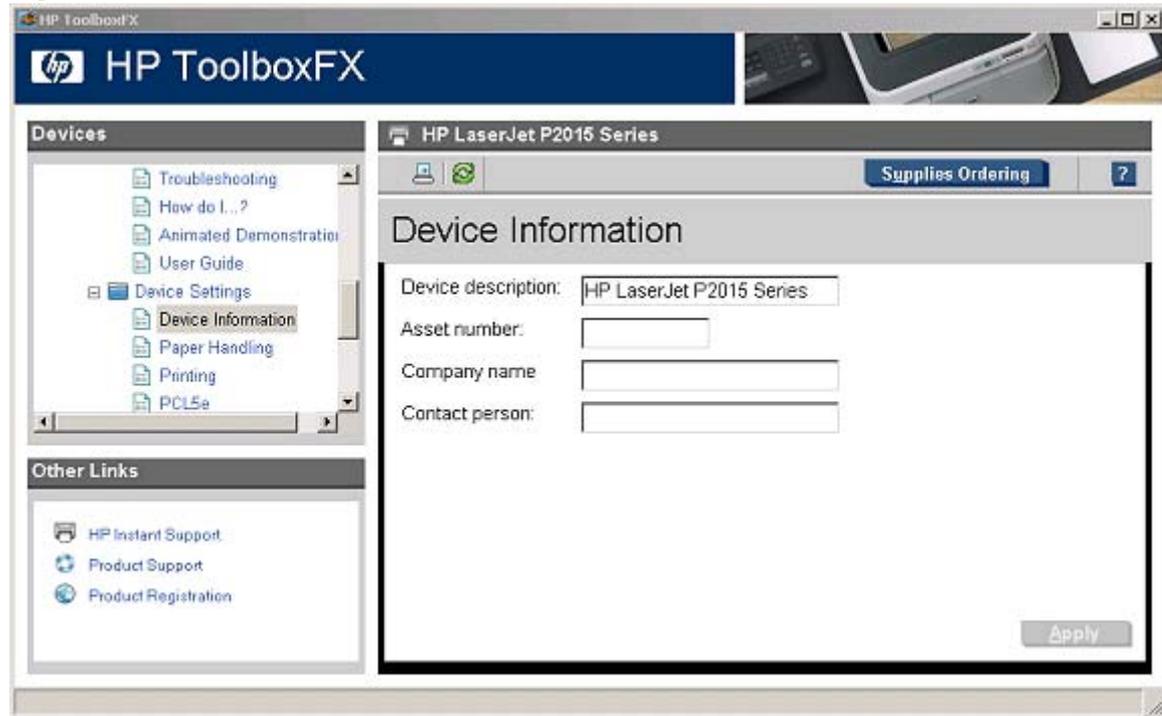
The **Device Settings** folder contains the following sub-folders:

- [Device Information](#)
- [Paper Handling](#)
- [Printing](#)
- [PCL5e](#)
- [PostScript](#)
- [Print Quality](#)
- [Paper Types](#)
- [System Setup](#)
- [Service](#)

## Device Information

Use the **Device Information** screen to add or change information about the HP LaserJet P2015 printer.

**Figure 2-17** Device Information screen

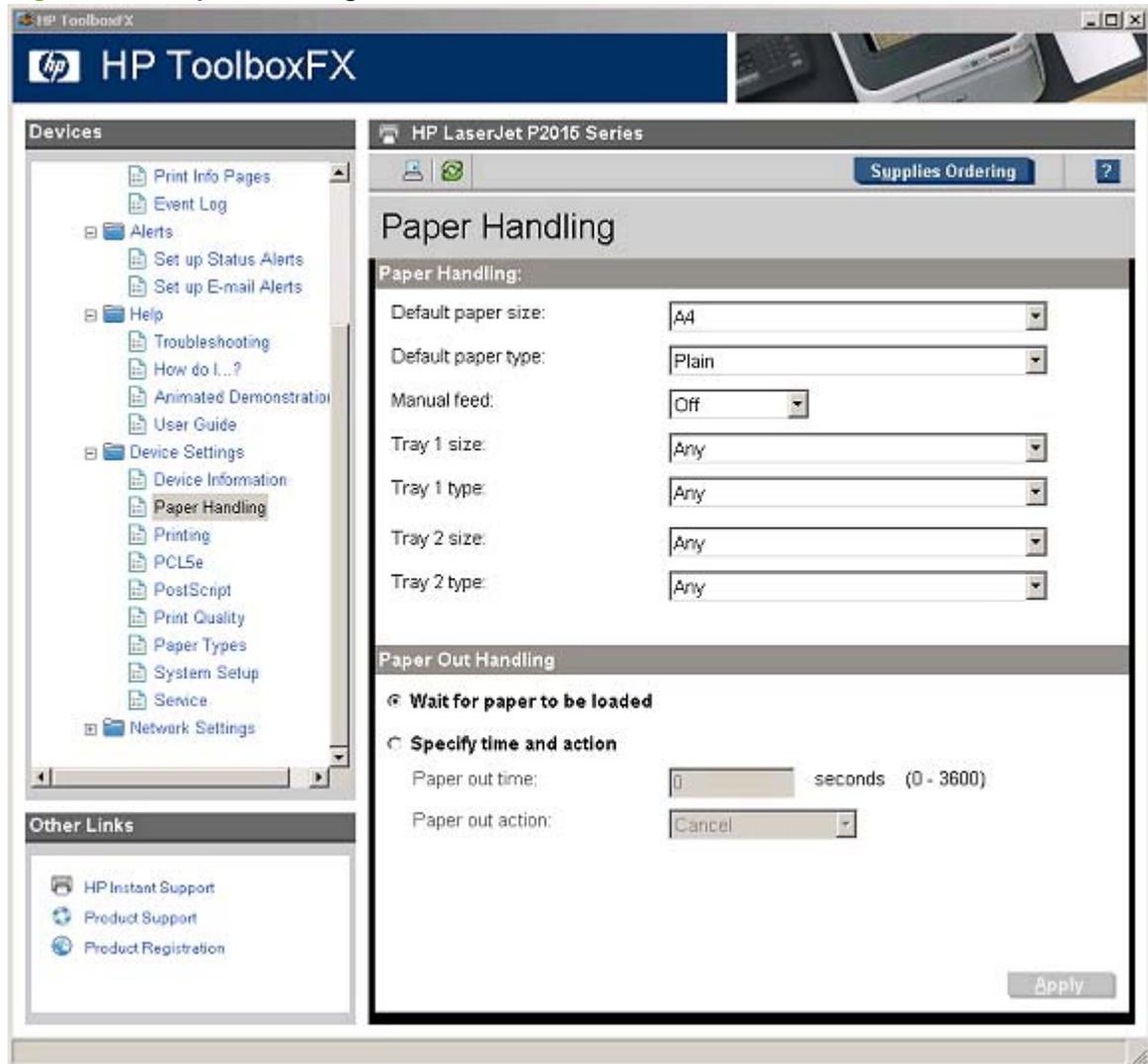


 **NOTE:** Click **Apply** to make the changes take effect.

## Paper Handling

Use the **Paper Handling** screen to change the paper-handling defaults for the HP LaserJet P2015 printer.

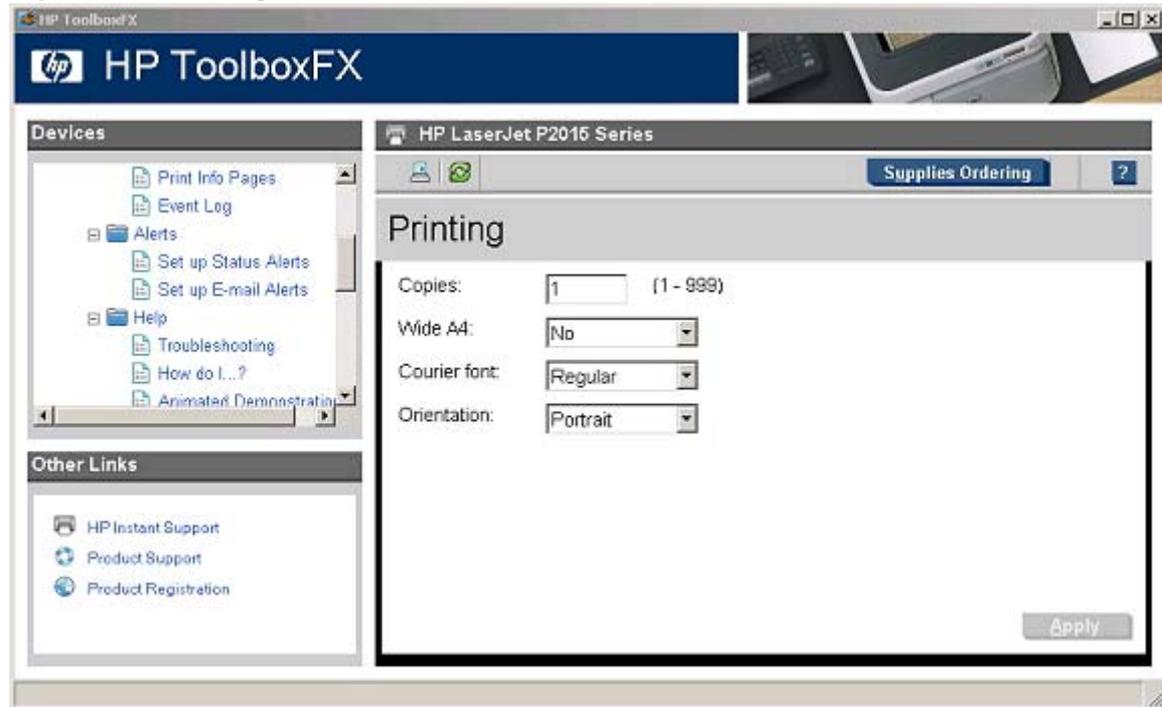
**Figure 2-18** Paper Handling screen



## Printing

Use the **Printing** screen to change the printing defaults for the HP LaserJet P2015 printer.

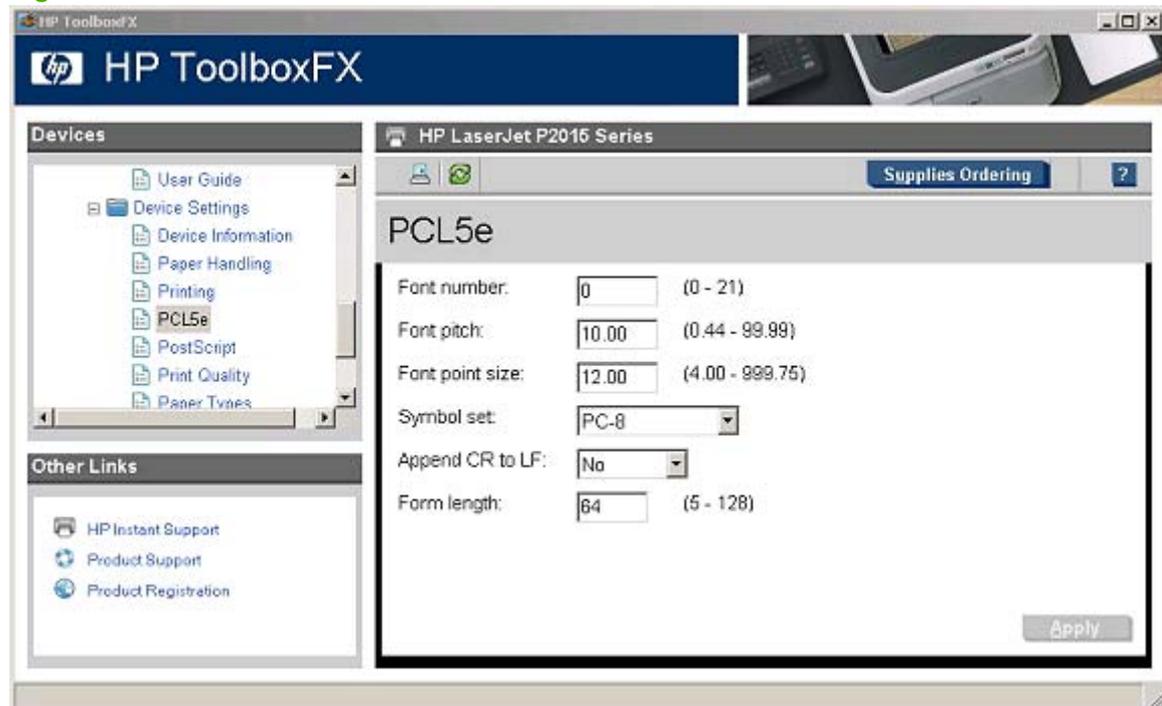
**Figure 2-19** Printing screen



## PCL5e

Use the **PCL5e** screen to change the PCL defaults for the HP LaserJet P2015 printer.

**Figure 2-20** PCL5e screen

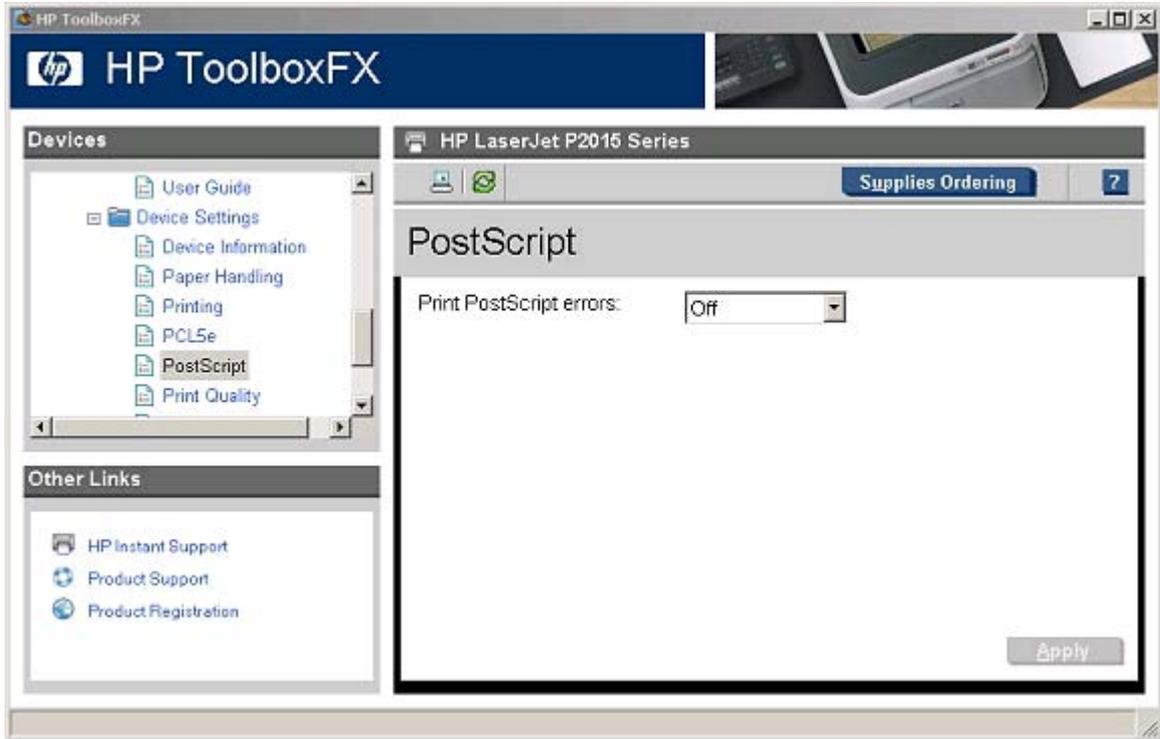


 **NOTE:** Click **Apply** to make the changes take effect.

## PostScript

Use the **PostScript** screen to change the PostScript defaults for the HP LaserJet P2015 printer.

**Figure 2-21** PostScript screen



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

## Print Quality

Use the **Print Quality** screen to change the print-quality defaults for the HP LaserJet P2015 printer.

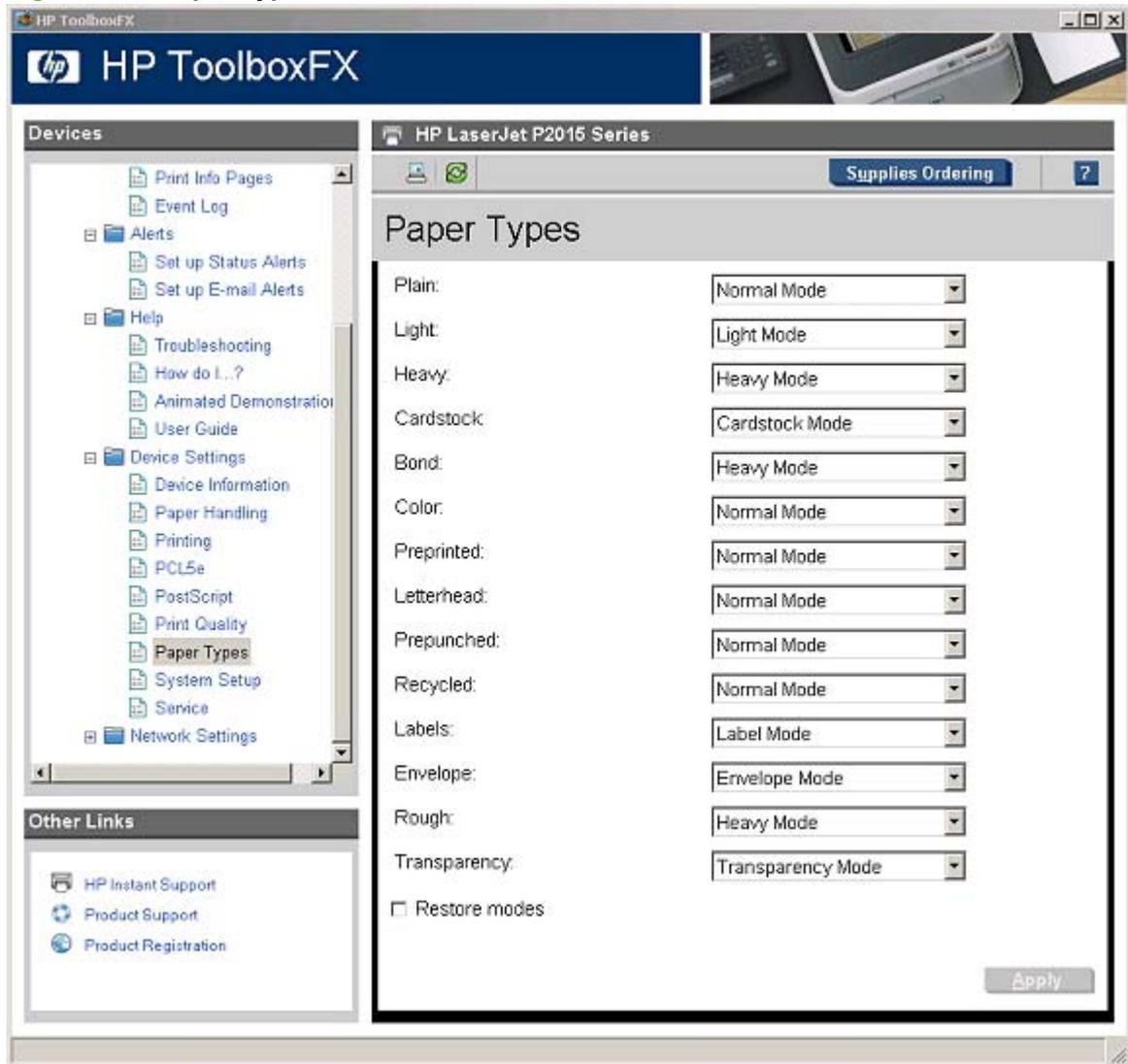
**Figure 2-22** Print Quality screen



## Paper Types

Use the **Paper Types** screen to configure the standard print modes that correspond to the various paper types.

**Figure 2-23** Paper Types screen



A print mode is a special setting that controls the print speed and the fuser temperature of the printer. The product speed and fuser temperature are adjusted to match the selected print mode, which can result in better print quality when printing on certain media types.

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

The following table shows the paper types that the HP LaserJet P2015 printer supports and the default fuser mode for each type.

**Table 2-2** Standard print modes

Standard print modes	Extended print modes	Sensor correlation prefix	Default paper types
Normal Mode	None	PlainFull	Plain, Color, Preprinted,

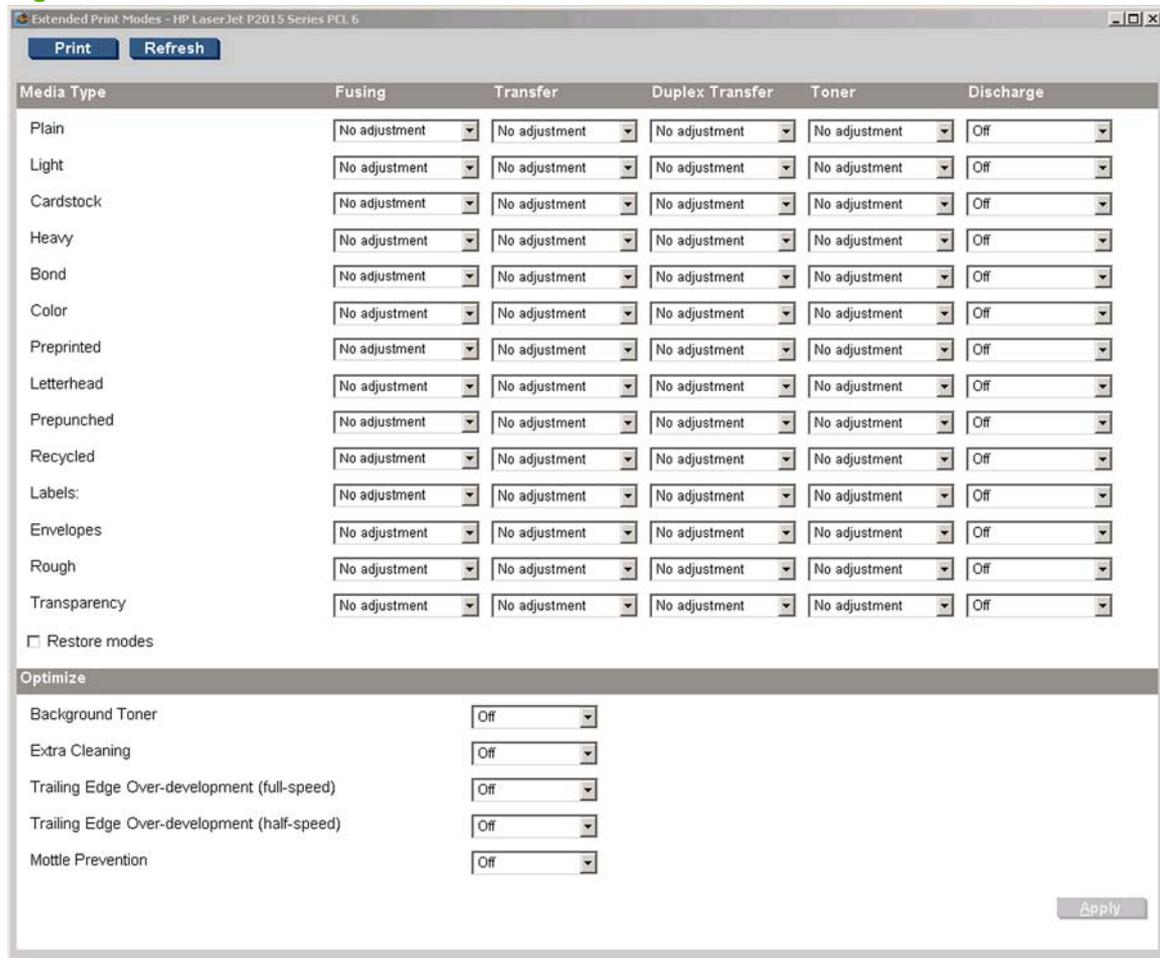
**Table 2-2 Standard print modes (continued)**

Standard print modes	Extended print modes	Sensor correlation prefix	Default paper types
			Prepunched, Recycled, Letterhead
Heavy Mode	None	PlainHalf	Heavy, Bond
Cardstock Mode	None	PlainHalf	Cardstock
Light Mode	None	PlainFull	Light
Glossy Mode	None	Glossy	Heavy Glossy
Transparency Mode	None	Glossy	Transparency
Label Mode	None	PlainHalf	Labels

**Print Modes screen**

The **Print Modes** screen is available to control the extended print modes for the HP LaserJet P2015 printer. To gain access to this screen, Press **Ctrl + Alt + Shift** on the computer keyboard, and then click the printer name in the **Devices** pane of the HP ToolboxFX. The following screen appears:

**Figure 2-24 Print Modes screen**



Clicking **Restore Modes** and then clicking **Apply** causes the HP LaserJet P2015 printer to set all of the print modes to the original factory defaults.

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

The **Print Modes** screen contains the following sections:

### Media Type section

The **Media Type** section of the **Print Modes** screen contains options to modify the engine print mode separately for each media type in the driver. Only one selection can be made for each control. The following controls are available:

- **Fuser.** The fuser temperature control in the engine is a complex algorithm that is based on the print mode and print duty cycle. An “increase” or “decrease” in fuser temperature means that the fuser control algorithm increases or decreases the current temperature target by some amount which depends on media type and other factors.

The following settings are available for the **Fuser** control:

- **Paper curl .** This setting decreases fuser temperature. The instant-on fuser applies heat mostly on the image side. This causes asymmetric drying of the paper. When the paper reabsorbs moisture after printing, the difference between the front and back surfaces causes curl (heavy toner coverage also causes curl). Decreasing the heating of the paper and toner tends to reduce curl (watch out for “cold” offset). Paper curl is increased on lighter papers and in higher humidity.
- **Heavy coverage.** This setting increases fuser temperature. The first option is to pick a heavier media type in the driver. The defect in this case is “cold” toner offset in the fuser. The toner does not melt sufficiently to adhere to the paper, so large patches stick to the fuser sleeve and offset 55 mm (2.17 inches) down the page.
- **Toner offset.** This setting decreases fuser temperature. The first option is to pick a lighter media type in the driver. The defect is “hot” toner offset in the fuser. The toner next to the fuser sleeve gets too hot and partially separates from the toner that sticks to the paper. Offset also occurs at 55 mm (2.17 inches) down the page, but it looks more like faint ghosting.
- **Less/More fusing (-2, -1, +1, +2).** These settings provide two levels of decreased fuser temperature and two levels of increased fuser temperature if the other adjustments are insufficient. Increment this control to find the best setting.
- **Transfer.** The transfer bias voltage control in the engine is a complex algorithm that is based on the print mode, toner cartridge and humidity. An “increase” or “decrease” in transfer bias means that the transfer control algorithm increases or decreases the transfer bias by some amount, which depends on media type and other factors. The following settings are available for the **Transfer** control.

The following settings are available for the **Transfer** control.

- **Dry paper.** This setting increases transfer bias. Some papers (notably Chinese papers) become highly resistive in dry environments. To improve transfer, increase the transfer bias voltage. The range of paper resistivity in low humidity is so wide that a single, standard engine print mode cannot cover all the cases.
- **Humid paper.** This setting decreases transfer bias. All papers absorb water at higher humidity and become electrically less resistive, resulting in transfer defects. The engine has a humidity sensor and also checks the conductivity of the ETB in order to estimate the humidity of the media, but this can be inadequate in more extreme cases.

- **Rough paper.** This setting increases transfer current. The texture in the surface of rough papers, such as cotton bond papers, carries a large portion of the surface area away from contact with the OPC drum. In this case, more transfer current is required.
- **Less/More transfer (-2, -1, +1, +2).** These settings provide two levels of decreased transfer bias voltage and two levels of increased transfer bias voltage if the other adjustments are insufficient. Increment this control to find the best setting. In extreme case (very dry or very wet), low transfer current defects and high transfer current defects can overlap; that is, a defect-free setting might be impossible. These adjustments can help find the best operating point.
- **Duplex Transfer.** Paper that has passed through the fuser before being printed on the second side is much drier and has higher resistivity than when the first side is printed. Therefore, the engine uses different transfer bias settings for the second side. It is common for the second side to show a transfer defect while the first side does not. These adjustments allow second-side defects to be improved without affecting transfer performance on the first side (or vice versa).

The following settings are available for the **Duplex Transfer** control.

- **Dry paper.** This setting increases transfer bias. Some papers (notably Chinese papers) become highly resistive in dry environments. To improve transfer, increase the transfer bias voltage. The range of paper resistivity in low humidity is so wide that a single, standard engine print mode cannot cover all the cases.
- **Humid paper.** This setting decreases transfer bias. All papers absorb water at higher humidities and become electrically less resistive, resulting in transfer defects. The engine has a humidity sensor and also checks the conductivity of the ETB in order to estimate the humidity of the media, but this can be inadequate in more extreme cases.
- **Rough paper.** This setting increases transfer current. The texture on the surface of rough papers, such as cotton bond papers, carries a large portion of the surface area away from contact with the OPC drum. In this case, more transfer current is required.
- **Less/More transfer (-2, -1, +1, +2) .** These settings provide two levels of decreased transfer bias voltage and two levels of increased transfer bias voltage if the other adjustments are insufficient. Increment this control to find the best setting. In extreme case (very dry or very wet), low transfer current defects and high transfer current defects can overlap; that is, a defect-free setting might be impossible. These adjustments can help find the best operating point.
- **Toner.** This adjustment is applied by the formatter.

The following settings are available for the **Toner** control.

- **Less toner (-1, -2, -3) .** These settings decrease the maximum primary toner amount from 100% to 95%, 90%, and 85%, respectively. This is useful for fixing toner scatter on high-resistivity papers in low humidity environments.
- **Discharge.** The following settings are available for the **Discharge** control.
  - **On/Off.** The HP LaserJet P2015 printer has an electrostatic discharge brush where the paper separates from the ETB (before the fuser). This prevents toner scatter after a sudden paper discharge. Because the brush can sometimes make scatter worse, this setting is provided to turn the discharge brush off.

## Optimize section

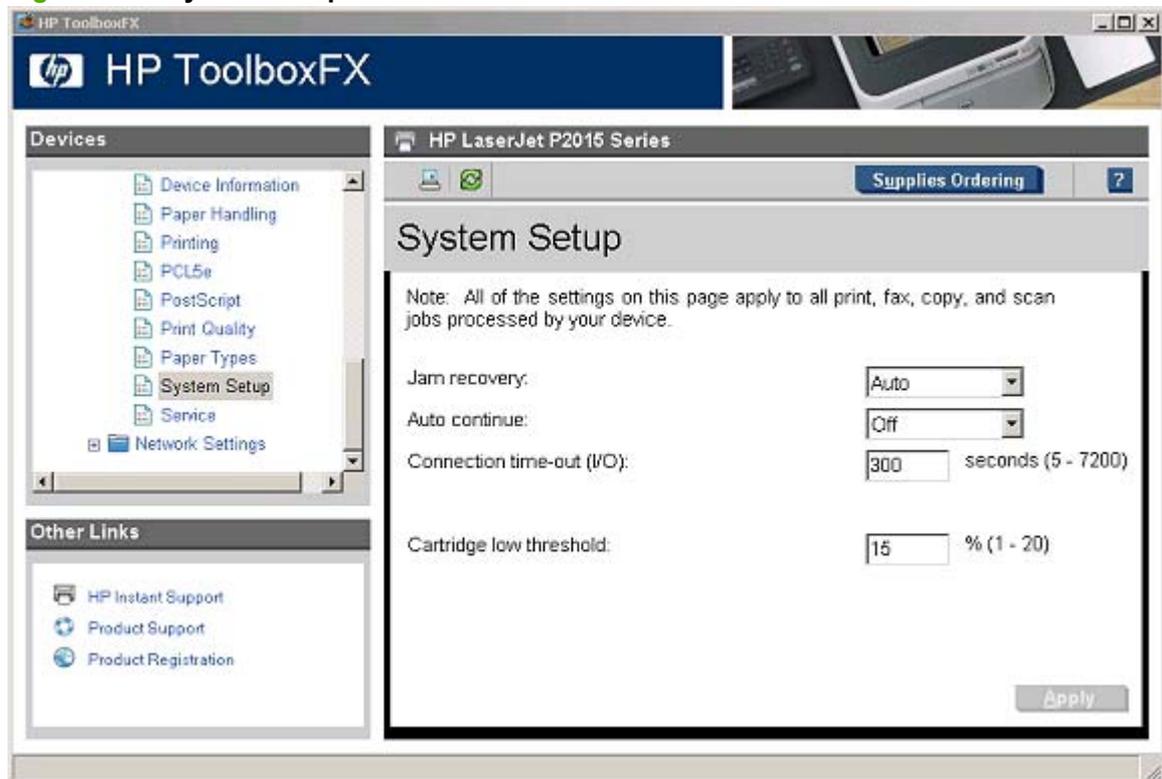
The **Optimize** settings are applied to all media printed depending on the engine's internal tables. The following controls are available:

- **Background Toner.** The **On** setting selects optimized EP process parameters for reducing background on glossy paper.
- **Extra Cleaning.** High acid content or “talc” papers tend to leave a conductive residue on the OPC drums. The **On** setting turns on increased OPC/ETB cleaning rotations before and after pages are printed to help rub off this residue.
- **Trailing Edge Over-development (full-speed).** The **On** setting selects optimized EP process parameters for decreasing trailing edge over-development in full speed (Light and Plain media types). Trailing edge over-development is a jump-gap developer defect which causes excess toner at trailing edges of halftoned or solid areas.
- **Trailing Edge Over-development (half-speed).** The **On** setting selects optimized EP process parameters for decreasing trailing edge over-development in half speed (heavy and glossy media types). Trailing edge over-development is a jump-gap developer defect which causes excess toner at trailing edges of halftoned or solid areas.
- **Mottle Prevention.** The **On** setting selects optimized EP process parameters for decreasing developer mottle. This problem has largely been eliminated by cartridge and toner design changes.

## System Setup

Use the **System Setup** screen to change the system defaults for the HP LaserJet P2015 printer.

**Figure 2-25** System Setup screen



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

- Auto (default)
- On
- Off

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

- On
- Off (default)

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

The following **Fast first page out** settings are available:

- On (default)
- Off

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

---

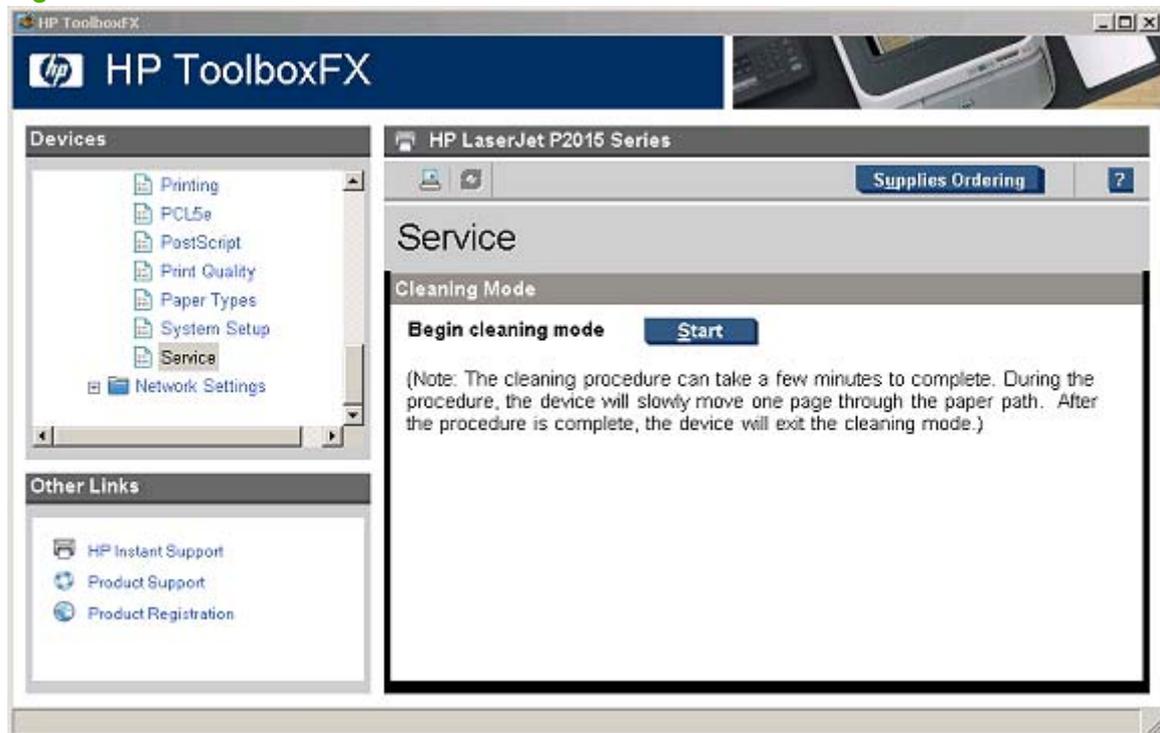
 **NOTE:** Click **Apply** to make the changes take effect.

---

## Service

Use the **Service** screen to start the cleaning mode procedure on the HP LaserJet P2015 printer.

**Figure 2-26** Service screen



During the printing process, paper, toner, and dust particles accumulate inside the printer. Over time, this buildup can cause print-quality problems such as toner specks or smearing. Click **Start** to run the cleaning mode procedure on the HP LaserJet P2015 printer.

## Network Settings folder

The HP LaserJet P2015n, HP LaserJet P2015dn, and HP LaserJet P2015x printers contain onboard networking support. They do not require the use of an external Jetdirect box for network connectivity. Use the **Network Settings** options to configure the network settings for the HP LaserJet P2015 printer.

For network installations, the HP ToolboxFX communicates with the HP LaserJet P2015 printer by using the network settings that appear on the following **Network Settings** sub-folder screens:

- [IP Configuration](#)
- [Advanced](#)
- [SNMP](#)
- [Network Configuration](#)
- [Password](#)

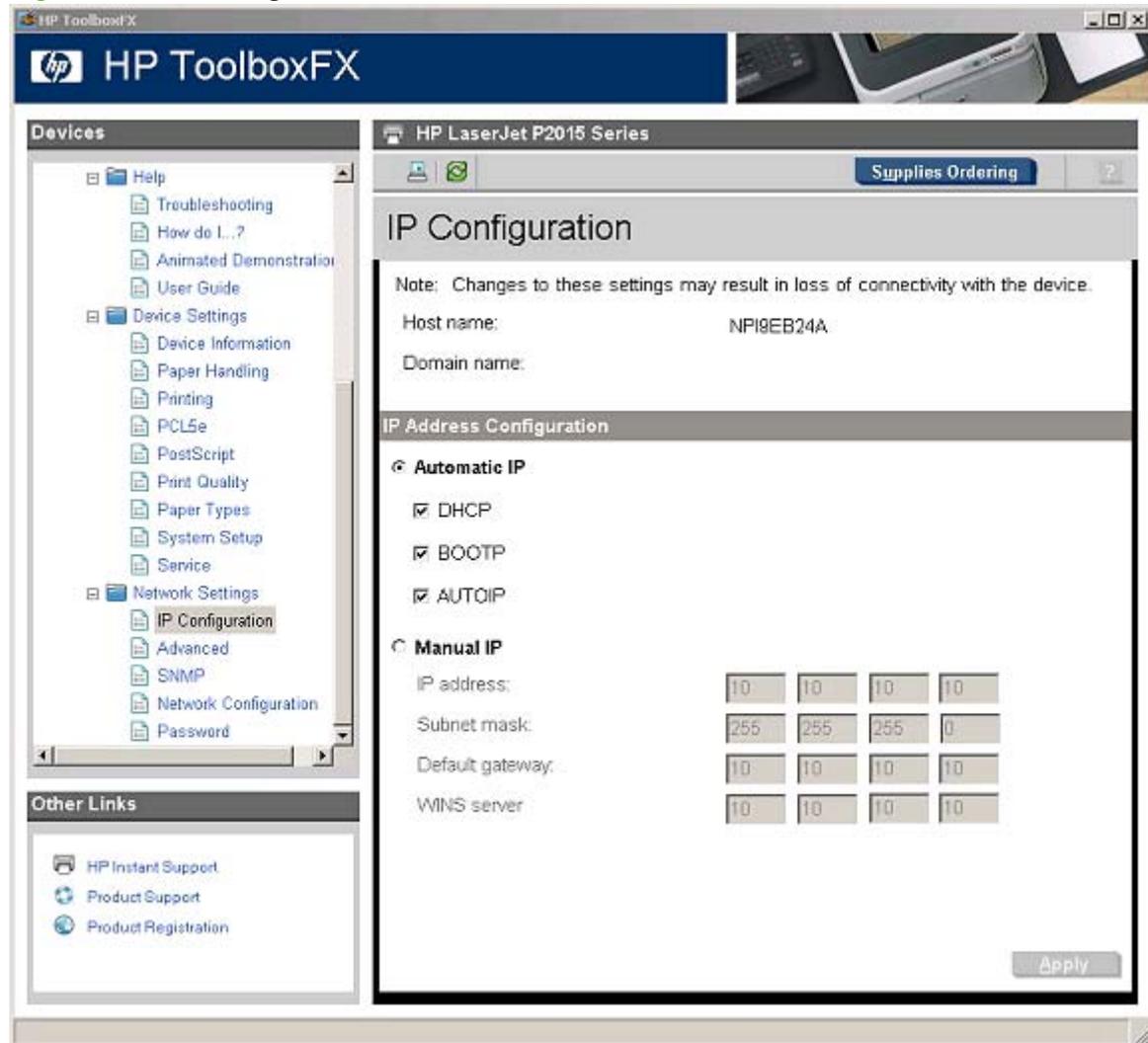
△ **CAUTION:** Changing network settings can cause communication problems between HP ToolboxFX and the product.

---

## IP Configuration

The **IP Configuration** screen shows the settings for basic Transmission Control Protocol/Internet Protocol (TCP/IP) network configuration. After changing these settings, click **Apply** to save the changes. The printer is restarted after the settings are changed.

**Figure 2-27** IP Configuration screen



The **IP Configuration** screen shows the host name and domain of the HP LaserJet P2015 printer. By default, the HP LaserJet P2015 printer uses automatic IP configuration and DNS server. Use this screen to configure the TCP/IP address and DNS server manually.

The following **IP Address Configuration** options are available:

- **Automatic IP.** This option is selected by default. It causes the printer to obtain a TCP/IP address from a Dynamic Host Configuration Protocol (DHCP) server, BOOTP server, or AUTOIP.
- **Manual IP.** Select Manual IP to manually specify an Internet Protocol (IP) address (also known as a static IP address). If you select this option, specify an IP address in the **IP address**, **Subnet mask**, and **Default gateway** fields.

The following **DNS Address Configuration** options are available:

- **Automatic DNS Server.** This option is selected by default. It causes the printer to automatically obtain network addresses for DNS servers from the network. If you select this option, a DHCP server provides this information.
- **Manual DNS Server.** Select this option to manually specify network addresses for DNS servers used by the computer. If you select this option, type the IP address for the DNS server in **Preferred DNS server** field. If you are not sure which IP address to use, contact your network administrator.

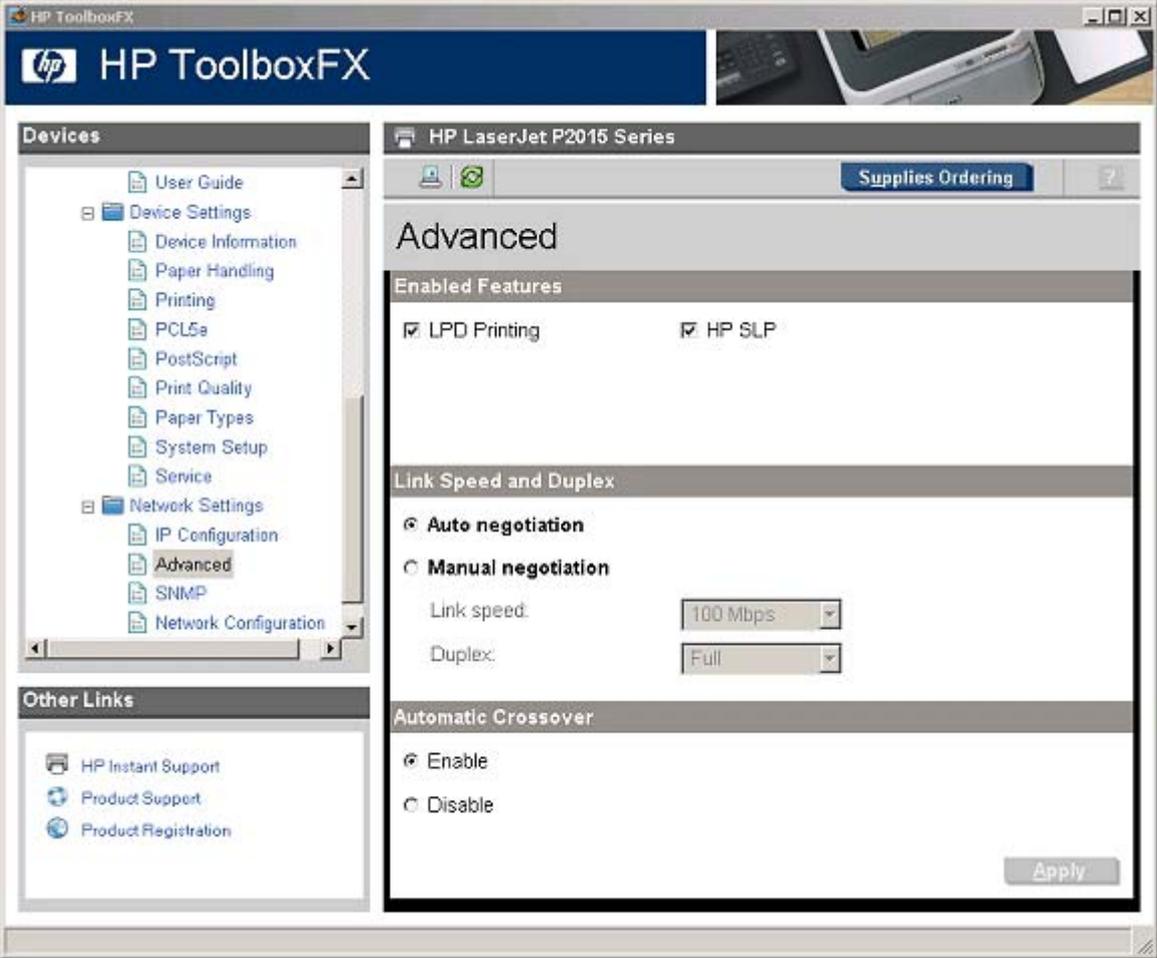
In the **Alternate DNS server** field, specify the IP address for the alternate or secondary DNS server for this computer. This server is used if the DNS server specified in **Preferred DNS server** is unavailable.

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

**Advanced**

Use the **Advanced** screen to set advanced networking features for the HP LaserJet P2015 printer.

**Figure 2-28** Advanced Network Settings screen



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

**Table 2-3 Advanced Network Settings options and settings**

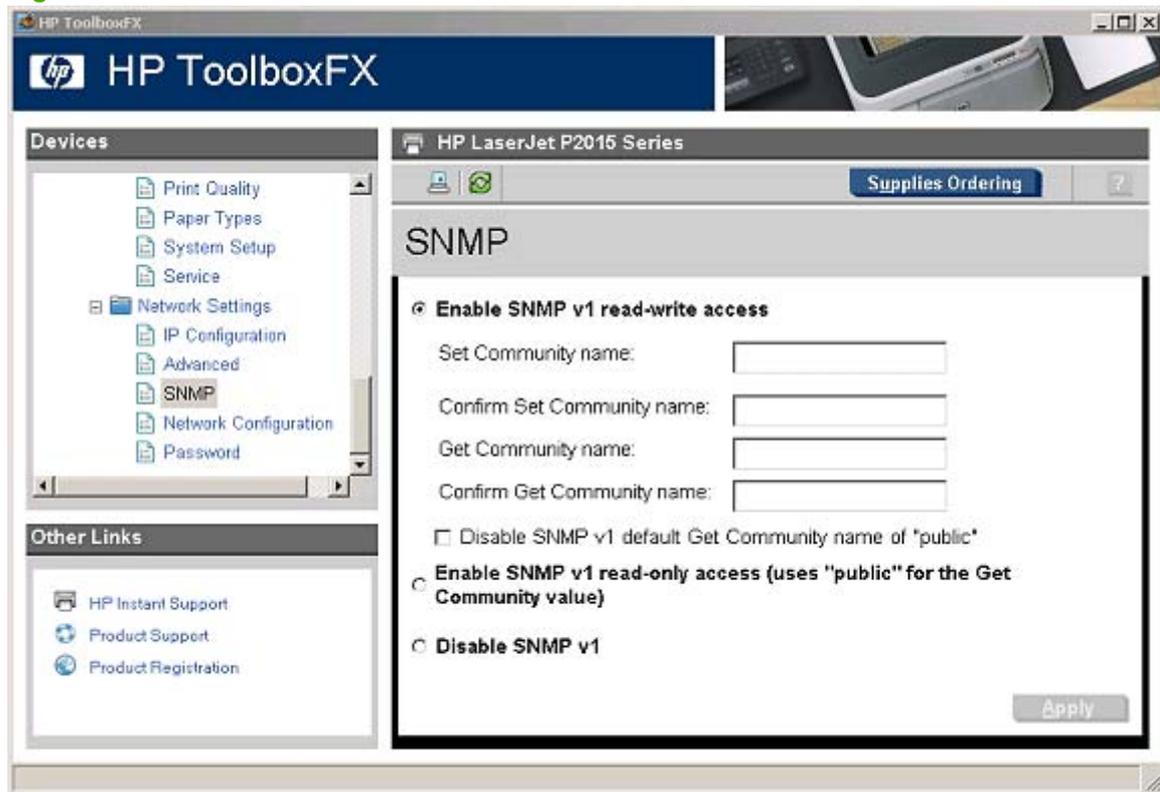
Option	Settings
Enabled Features	<ul style="list-style-type: none"> <li>● LPD Printing (enabled by default)</li> <li>● HP SLP Discovery (enabled by default)</li> </ul>
Link Speed and Duplex	<ul style="list-style-type: none"> <li>● Auto negotiation (default setting)</li> <li>● Manual negotiation                             <ul style="list-style-type: none"> <li>○ Link speed: 10 megabits per second (Mbps) or 100 Mbps</li> <li>○ Duplex: Full or Half</li> </ul> </li> </ul>
Automatic Crossover	<ul style="list-style-type: none"> <li>● Enable (default)</li> <li>● Disable</li> </ul>

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

## SNMP

Use the **SNMP** screen to set SNMP networking features for the HP LaserJet P2015 printer.

**Figure 2-29** SNMP screen



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

- **Enable SNMP v1 read-write access.** Select this option to enable SNMP V1 agents on the printer. Custom community names can be configured to control management access to the HP LaserJet P2015 printer.
  - **Set Community name:** Type the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
  - **Confirm Set Community name:** Retype the SNMP Set Community Name (password) to allow SNMP information to be configured (or written) on the printer.
  - **Get Community name:** Type the SNMP Get Community Name (password) to allow SNMP information to be read from the printer.
  - **Confirm Get Community name:** Retype the SNMP Get Community Name (password) to allow SNMP information to be read from the printer.
  - **Disable SNMP v1 default Get Community name of “public”.** Select this option to disable the default Get community name "public". If you select this option, type the appropriate values into the **Get Community name** and **Confirm Get Community name** fields.
- **Enable SNMP v1 read-only access (uses “public” for the Get Community value).** Select this option to enable the SNMP V1 agents on the HP LaserJet P2015 printer, but limit access to read-only. Write-access is disabled. The default **Get Community name** "public" is automatically enabled.
- **Disable SNMP v1.** Select this option to disable the SNMP V1 agents on the HP LaserJet P2015 printer, which is recommended for secure environments. If SNMP V1 is disabled, some port monitors or discovery utilities might not operate properly.

---

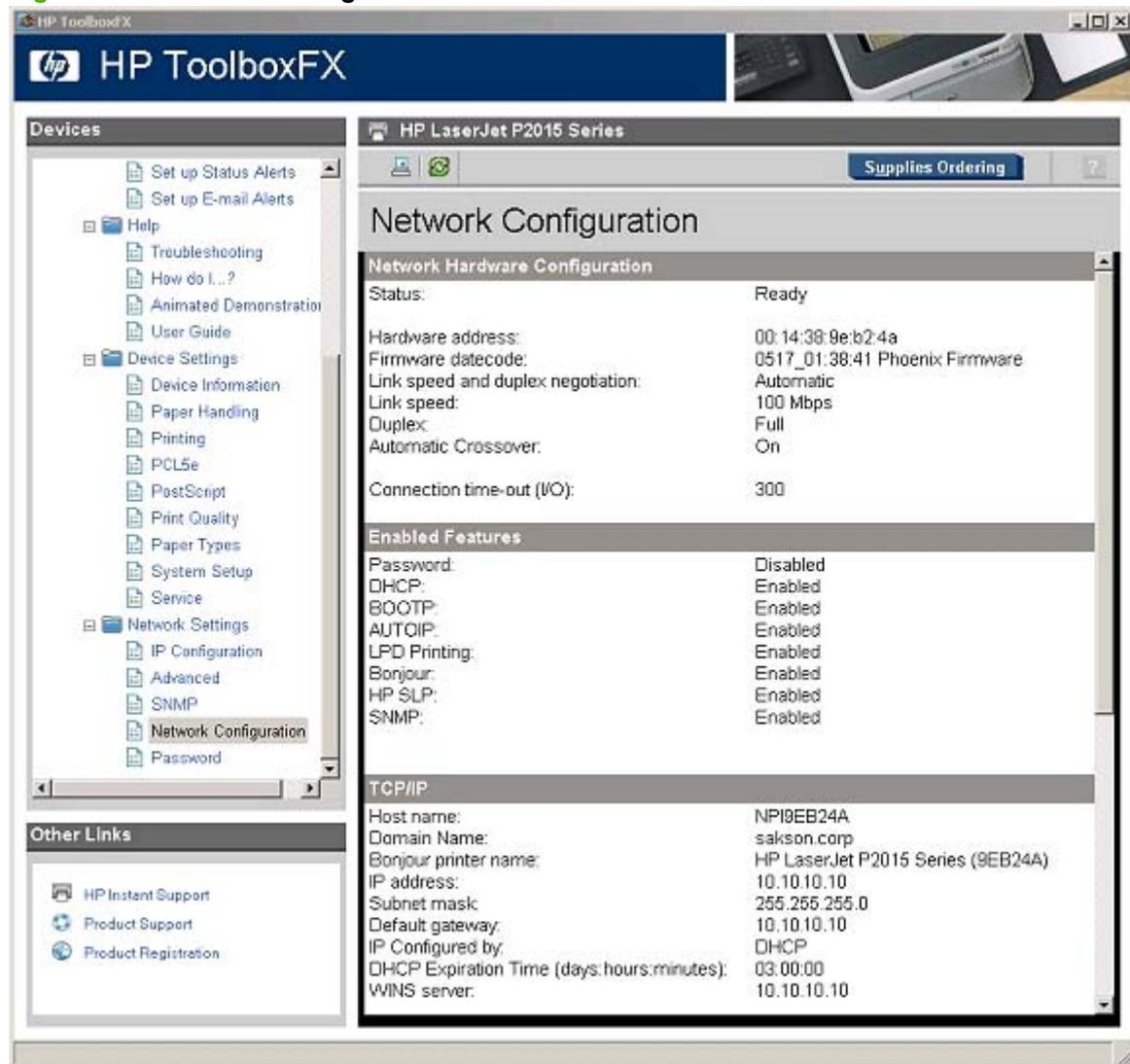
 **NOTE:** Click **Apply** to make the changes take effect.

---

## Network Configuration

The **Network Configuration** screen provides an overview of the network settings that are enabled for the HP LaserJet P2015 printer.

**Figure 2-30** Network Configuration screen



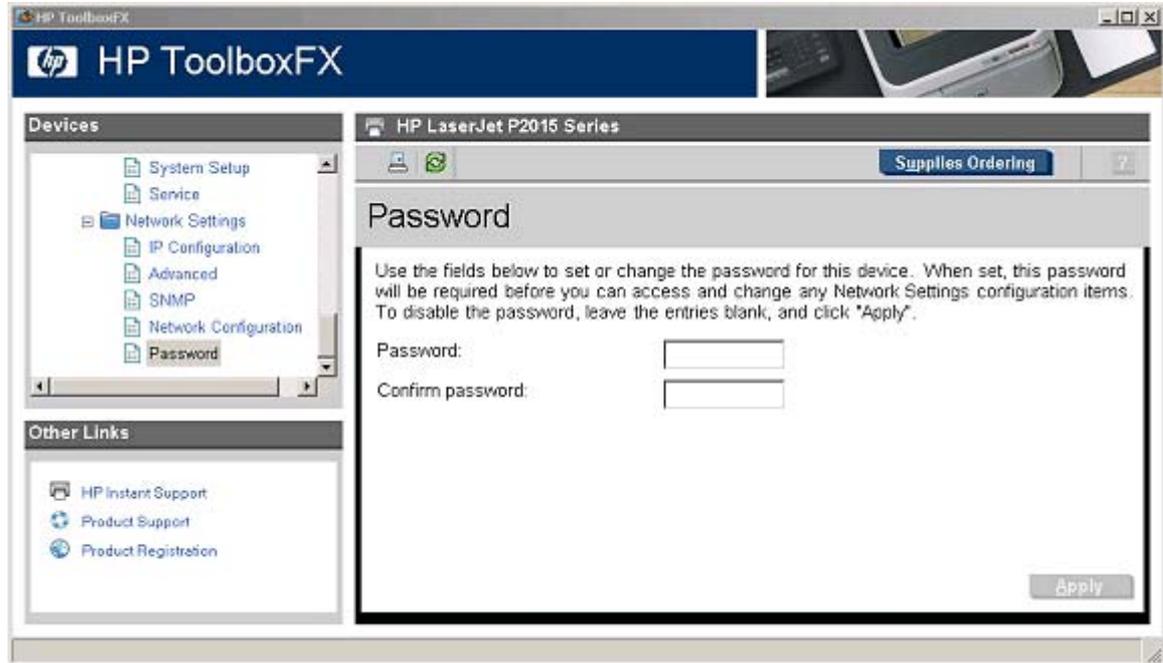
The settings appear under the following headings:

- Network Hardware Configuration
- Enabled Features
- TCP/IP
- SNMP
- Network Statistics

## Password

Use the **Password** screen to set a password for the HP LaserJet P2015 printer.

**Figure 2-31 Password screen**



Network administrators can set user passwords to protect network settings. After a password is set, only users who know the password have access to the **Network Settings** folder. If a password has been set, users are prompted to type the password. If the typed-in password matches the password stored in the printer, users can navigate through the **Network Settings** screens and make changes to the settings. Users who do not type the correct password within three attempts are not allowed access to the **Network Settings** screens.

If the password is lost or forgotten, the factory settings for the HP LaserJet P2015 printer must be restored and a new password assigned.

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

## Other screens

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

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

## About HP ToolboxFX dialog box

Click the HP logo in the HP ToolboxFX heading banner on any HP ToolboxFX screen to gain access to the **About HP ToolboxFX** dialog box. This dialog box shows the software version number and a copyright notice. This dialog box also shows the version number for each HP ToolboxFX product that is installed.

**Figure 2-32** HP ToolboxFX dialog box



## HP Instant Support

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

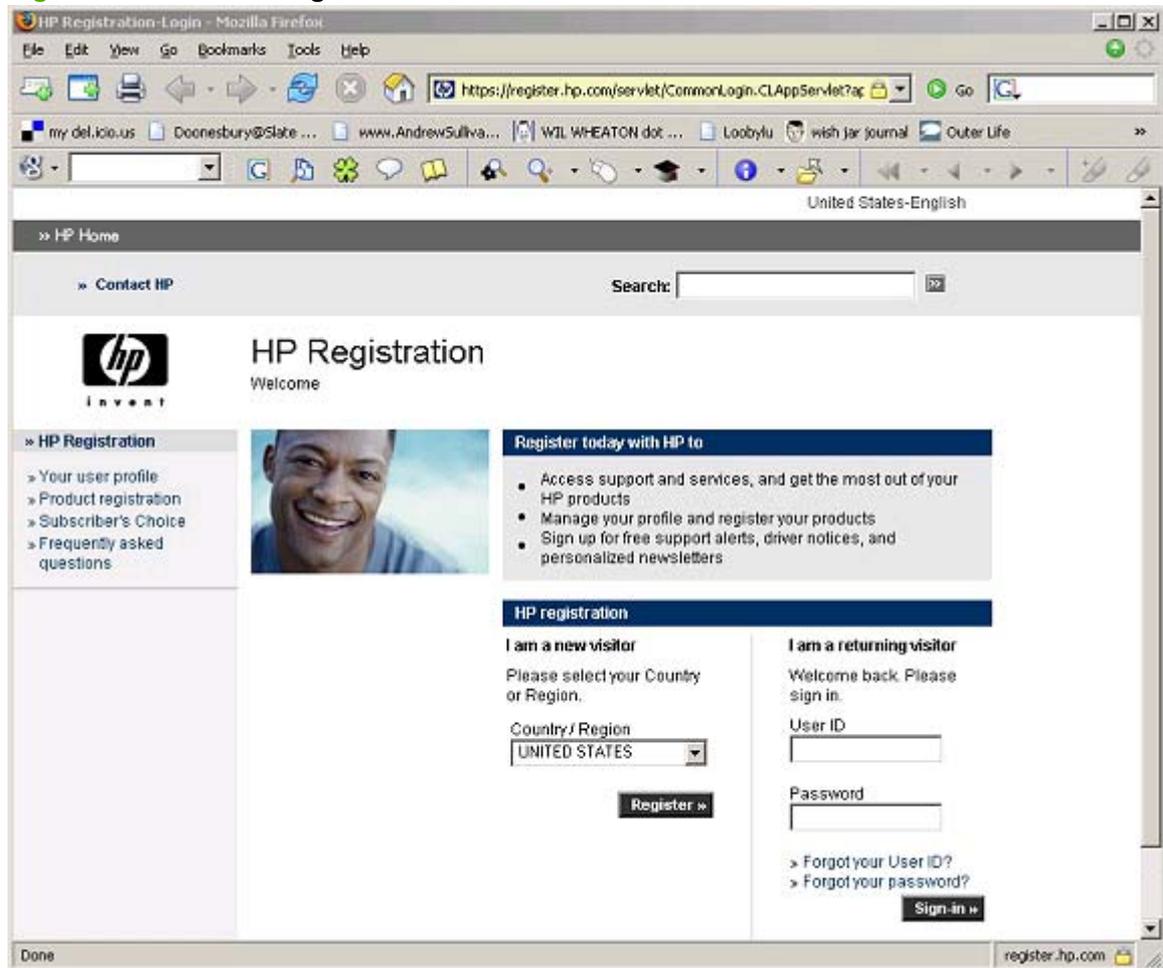
## Product Support

The **Product Support** link connects you to a Web page that contains links to online support for the HP LaserJet P2015 printer.

## Product Registration

The **Product Registration** link connects you to a Web page where you can register the HP LaserJet P2015 printer.

**Figure 2-33** Product Registration screen



## Supplies Ordering

The **Supplies Ordering** link connects to a Web page that helps you order supplies online from a reseller of your choice. The HP LaserJet P2015 printer supplies are pre-selected. Change quantities or select additional items. The items are dropped into the shopping cart, ready for checkout, ensuring that the correct supplies are ordered through the selected reseller.

## Summary of HP ToolboxFX known issues

This section summarizes issues that are known to affect the version of HP ToolboxFX released with the HP LaserJet P2015 printer. The following topics are included:

- [.NET Framework dependencies](#)
- [Device communication](#)
- [Obtaining debugging information from HP ToolboxFX](#)

- [USB drivers are unsigned](#)
- [Enable or disable HP ToolboxFX](#)

## .NET Framework dependencies

Because the HP ToolboxFX is implemented using .NET technologies, the Microsoft .NET Framework must be installed on the users' system. When the HP ToolboxFX software installer runs, it silently installs Microsoft .NET Framework 1.1 (no service pack). However, some known issues with .NET Framework 1.1 (no service pack) might impact users.

---

 **NOTE:** If the .NET Framework 1.1 is already installed on the users' system at the time of the HP ToolboxFX software installation, the framework is not installed.

---

The optimal system configuration for HP ToolboxFX includes all of the following items:

- Microsoft .NET Framework 1.1 (no service pack) as installed by the HP ToolboxFX software installer or by some other means
- Microsoft .NET Framework 1.1 Service Pack 1, available through Microsoft Windows Update
- Microsoft Windows Update, to download and install all critical updates

---

 **NOTE:** Continue to run Windows Update until a message appears that says no further critical updates are needed.

---

If the optimal system configuration is not set up on the users' system, before or after the HP ToolboxFX software is installed, the user might experience errors in HP ToolboxFX as a result of defects in various portions of the Microsoft code. Specifically, HP ToolboxFX might intermittently report that it cannot connect to the device, with the following error message:

**Figure 2-34** HP ToolboxFX – sample error dialog



These communication errors might be resolved by rebooting the computer, but the only way to address this problem permanently is to have the optimal system configuration.

Another problem has been observed when Microsoft .NET Framework 2.0 is already installed on your system. The HP ToolboxFX software installs the .NET Framework 1.1, because HP ToolboxFX cannot use the .NET 2.0 Framework. After the installation, a Microsoft Windows update will not recognize that the .NET 1.1 framework requires .NET 1.1 Service Pack 1. Therefore, not all of the necessary security

updates are installed. Again, in these cases, the user might experience the intermittent **Cannot connect to the device.** error. The best recourse in this situation is to uninstall the Microsoft .NET Framework 2.0, run Windows update to install the .NET 1.1 Service Pack 1 and all of the subsequent critical security updates, and then run the Windows update and reinstall the .NET Framework 2.0, which is available as an optional update.

Alternatively, if uninstalling the .NET 2.0 Framework is unacceptable, search the Internet for and then install the following Microsoft files:

- NDP1.1sp1-KB867460-X86.exe
- NDP1.1sp1-KB886903-X86.exe

These files do not appear as necessary options to the .NET 1.1 Framework if the .NET 2.0 Framework is installed. The related Knowledge base article numbers are KB867460 and KB886903, which discuss Service Pack 1 for the .NET Framework and the current security patch.

## Device communication

The majority of problems observed with HP ToolboxFX involve broken communication with the device. In these cases, always check to make sure that the cables are plugged in and that the device is turned on. Also, see the preceding section about .NET Framework dependencies. If communication problems are observed, particularly over a USB connection, the .NET Framework and Windows configuration should be checked and updated as necessary.

Communication with the device can also be impacted if the IP address or hostname is changed on a network connected device. The HP ToolboxFX uses the properties that the print driver stores in order to determine the device address. If communication errors are observed, print a test page to the device from the computer. If you cannot print a test page, the address or port for the print driver might not be configured correctly. Turn the computer off and then on again after reconfiguring the print driver in order for HP ToolboxFX to resume communication with the device.

## Obtaining debugging information from HP ToolboxFX

Although it is very unlikely, HP ToolboxFX can encounter fatal errors that cause it to crash. If this occurs, the following dialog box appears:

**Figure 2-35** HP ToolboxFX – sample error dialog



You likely did nothing to cause this error, and nothing can be done to recover from the internal issues that caused the error. The only recourse is to turn the computer off and then on again, or to restart HP ToolboxFX from the Program Group.

The error log contains information that might be helpful for CPE and R&D engineers to assist in diagnosing the problem. All fatal errors, and some other events, are logged to an error log file. When reporting problems to CPE or R&D, please include this error log. Often, no other debugging information is needed for fatal errors.

The error log file is located at:

C:\Documents and Settings\All Users\Application Data\Hewlett-Packard\ToolboxFX\ToolboxFXErrorlog.txt

Follow these instructions to obtain detailed debugging information from HP ToolboxFX:

1. Shut down HP ToolboxFX by executing HPTLBXFX.exe shutdown. See [Enable or disable HP ToolboxFX on page 63](#).
2. Use Notepad or Wordpad to edit the C:\Program Files\HP\ToolBoxFX\defaults\manifest.xml file as follows:

Change these values:

```
<DebugDefaults>
    <!-- <!-- Values of OFF, Window, Console, or File
    <<Debug>OFF</Debug>
    <<DebugLevel>3</DebugLevel>
</DebugDefaults>
```

Replace them with the following values:

```
<DebugDefaults>
    <!-- <!-- Values of OFF, Window, Console, or File
    <<Debug>File</Debug>
    <<DebugLevel>4</DebugLevel>
</DebugDefaults>
```

3. Run HP ToolboxFX From the Program Group and reproduce the problem that you are debugging.
4. A debug file called ToolboxFXDebugLog.txt is written to the following location:  
C:\Documents and Settings\All Users\Application Data\Hewlett-Packard\ToolboxFX\Logs

## USB drivers are unsigned

HP ToolboxFX for the HP LaserJet P2015 communicates over USB connections by using a new, composite USB I/O instead of DOT4. However, this new I/O path requires that USB host controllers use signed USB drivers. Use the Windows Device Manager to select a signed driver. If the host controller driver is not signed, obtain an updated Microsoft driver.

## Enable or disable HP ToolboxFX

Some users might not use any of the HP ToolboxFX features and might want to disable the utility in order to free memory and processing resources. To disable the HP ToolboxFX, follow these steps:

1. Use the Windows Search feature to find the `hptlbxfx.exe` application. Typically, this executable file is found in the following location:  
C:\Program Files\HP\ToolboxFX\bin
2. Click **Start**.
3. Click **Run**.
4. Browse to the location of the program, or type the path. Do *not* click **OK**.

5. Add the disabling option by typing `-disable` at the end of the path so that the **Open** field appears as:

```
"C:\Program Files\HP\ToolboxFX\bin\hptlbxfx.exe -disable"
```

6. Click **OK**.

---

△ **CAUTION:** Disabling the HP ToolboxFX terminates all HP ToolboxFX functionality.

If multiple devices use the HP ToolboxFX, disabling it causes all the devices to lose HP ToolboxFX functionality, including status and e-mail alerts.

---

# HP Embedded Web Server

The HP Embedded Web Server (HP EWS) is a Web-based application that allows users to control settings on the HP LaserJet P2015 printer through the Web browser. To open the HP EWS, open a Web browser and type the printer IP address in the address bar. The printer IP address appears on the Network Configuration screen in HP ToolboxFX.

 **NOTE:** If the HP LaserJet P2015 printer is connected to the computer through the USB port, you do not have access to the HP EWS interface. However, most of the information that appears in HP EWS can be viewed by using the HP ToolboxFX interface. For more information, see [HP ToolboxFX on page 22](#).

The following tabs are available in the HP EWS:

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

## Status tab

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

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

- [Device Status](#)
- [Supplies Status page](#)
- [Device Configuration page](#)
- [Network Configuration page](#)
- [Print Info Pages](#)
- [Event Log page](#)

## Device Status

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

**Figure 2-36** HP EWS – **Device Status** page

The screenshot shows the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes the HP logo, the printer model name, and the IP address 10.10.48.115. Below this, there are tabs for Status, Settings, and Networking. The left sidebar lists navigation options: Device Status (selected), Supplies Status, Device Configuration, Network Configuration, Print Info Pages, and Event Log. The main content area is titled 'Device Status' and features buttons for 'Order Supplies' and 'Support'. The status is displayed as 'Ready' with a green refresh icon. Below this is a 'Supplies Summary' section containing a table with the following data:

Supply	Level	Order HP Part:	Approximate Pages Remaining
Black Cartridge	 59%	Q7553A	2282

A 'Supplies Detail' button is located below the table.

## Supplies Status page

The **Supplies Status** page shows the status of all of the printer supplies, including the print cartridges.

**Figure 2-37** HP EWS – **Supplies Status** page

The screenshot shows the HP EWS interface for an HP LaserJet P2015 Series printer, specifically the 'Supplies Status' page. The top navigation bar and left sidebar are identical to Figure 2-36, but the 'Supplies Status' option is selected in the sidebar. The main content area is titled 'Supplies Status' and features buttons for 'Order Supplies' and 'Support'. Under the heading 'Ordering Information', it states: 'Hewlett-Packard supplies can be ordered on the Internet, on-line through your printer software or by calling an authorized reseller. Refer to your printer User Guide for instructions.' Below this is a detailed view for the 'Black Cartridge' (Order HP Part: Q7553A) with a 59% level indicator. A progress bar shows the 'Approximate Pages Remaining' as 2282. Other details include: 'Low Reached: No', 'Serial number: 1122348', 'Pages Printed With This Supply: 1809', 'First Install Date: 20060330', and 'Last Used Date: 20060621'. At the bottom, there is a 'Return & Recycling' section with the text: 'Please return your genuine HP supplies for recycling to Hewlett-Packard. For more information, please visit us at <http://www.hp.com/go/recycle>'.

## Device Configuration page

The **Device Configuration** page shows the values of all of the settings that are available in the printer. The contents of this page are consistent with the configuration page that the firmware generates.

**Figure 2-38** HP EWS – Device Configuration page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The page is titled "Device Configuration" and includes a navigation menu on the left with options like "Device Status", "Supplies Status", "Device Configuration", "Network Configuration", "Print Info Pages", and "Event Log". The main content area is divided into several sections:

- Product Information:** Lists details such as Product Name (HP LaserJet P2015 Series), Formatter Number (ODYSSEYA472), Product Serial Number (CNCFG12345), Service ID (16165), Firmware Datecode (0517\_01:38:41 Phoenix Firmware), Max print quality (ProRes 1200), Controller Number (8), Device Description (HP LaserJet P2015 Series), Language (English), Asset Number, Company Name, Contact Person, Hardware Address (00:14:38:9e:b2:4e), IP Address (10.10.48.115), Total Memory (32 MBytes), and Available Memory (17.64 MBytes).
- Installed Personalities and Options:** Lists PCL5e, PostScript, and PCLXL. DIMM Slot 1 is listed as Empty.
- Page Counts:** Shows statistics for Total pages printed (8), Pages mispicked in printer (0), Pages jammed in printer (0), PCL6 pages printed (8), PS pages printed (0), and PCL pages printed (0).
- Paper Settings:** Lists Paper size (A4), Paper type (Plain), Tray 1 size (Any size), Tray 1 type (Any type), and Tray 2 size (Any size).

Buttons for "Order Supplies" and "Support" are visible in the top right corner of the configuration area.

## Network Configuration page

The **Network Configuration** page contains information about the network and its enabled features.

**Figure 2-39** HP EWS – Network Configuration page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various configuration options, with 'Network Configuration' selected. The main content area is titled 'Network Configuration' and contains three sections: 'Network Hardware Configuration', 'Enabled Features', and 'TCP/IP'.

Network Hardware Configuration	
Status:	Ready
Hardware Address:	00:14:38:9e:b2:4a
Firmware Datecode:	0517_01:38:41 Phoenix Firmware
Link Speed and Duplex Negotiations:	Automatic
Link speed:	100 Mbps
Duplex:	Full
Automatic Crossover:	Enabled
Connection Timeout (I/O):	300 seconds

Enabled Features	
Password:	Not Specified
DHCP:	Enabled
BOOTP:	Enabled
AUTOIP:	Enabled
LPD Printing:	Enabled
Bonjour:	Enabled
HP SLP:	Enabled
SNMP:	Enabled

TCP/IP	
Host Name:	NP9EB24A
Domain Name:	sakson.corp
Bonjour printer name:	HP LaserJet P2015 Series (9EB24A)
IP Address:	10.10.48.115
Subnet Mask:	255.255.255.0
Default Gateway:	10.10.48.1
IP Configured By:	DHCP
DHCP/BOOTP Server:	10.10.48.15
DHCP Expiration Time:	03:00:00 (days:hours:minutes)
WINS server:	10.10.48.15

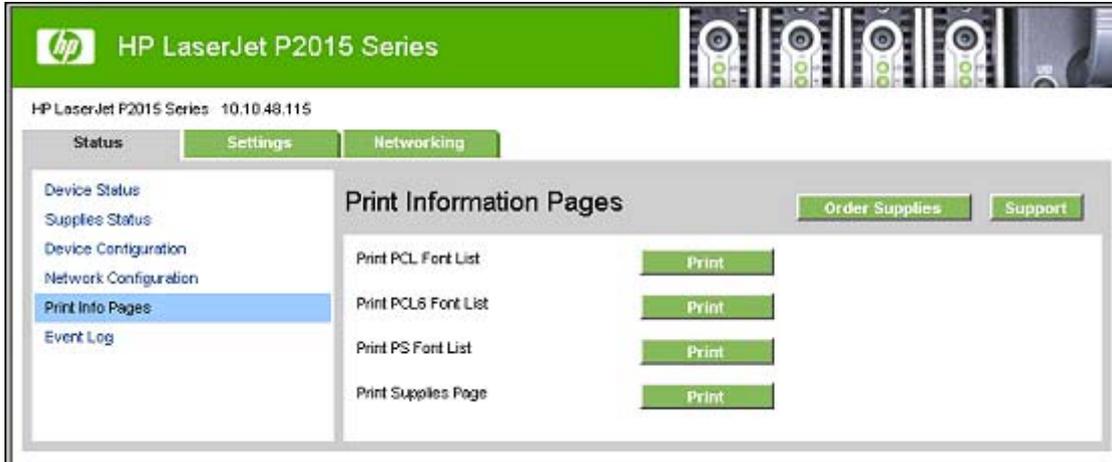
SNMP	
Status:	Read-Write Access Enabled

## Print Info Pages

Use the **Print Info Pages** page to print the internal special pages that the device generates. The following information pages are available:

- PCL Font List
- PCL6 Font List
- PS Font List
- Supplies Page

Figure 2-40 HP EWS – Print Info Pages page



## Event Log page

Use the **Event Log** page to track the events that occur on the HP LaserJet P2015 printer.

Figure 2-41 HP EWS – Event Log page



## Settings tab

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

- [Device Information page](#)
- [Paper Handling page](#)
- [Printing page](#)
- [PCL5e page](#)
- [PostScript page](#)
- [Print Quality page](#)
- [Paper Types page](#)
- [System Setup page](#)
- [Service page](#)

## Device Information page

The **Device Information** page contains identifying information about the HP LaserJet P2015 printer.

**Figure 2-42** HP EWS – **Device Information** page

The screenshot shows the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various settings categories, with 'Device Information' selected. The main content area is titled 'Device Information' and contains the following fields:

- Device Description:** HP LaserJet P2015 Series
- Asset Number:** [Empty text box]
- Company Name:** [Empty text box]
- Contact Person:** [Empty text box]

Buttons for 'Order Supplies', 'Support', 'Apply', and 'Cancel' are visible.

## Paper Handling page

Use this page to configure the paper-handling settings for the HP LaserJet P2015 printer.

**Figure 2-43** HP EWS – **Paper Handling** page

The screenshot shows the HP EWS interface for an HP LaserJet P2015 Series printer, specifically the 'Paper Handling' page. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various settings categories, with 'Paper Handling' selected. The main content area is titled 'Paper Handling' and contains the following settings:

- Default Paper Size:** A4
- Default Paper Type:** Plain
- Manual Feed:** Off
- Tray 1 size:** Any size
- Tray 1 type:** Any type
- Tray 2 size:** Any size
- Tray 2 type:** Any type

**Paper Out Handling**

- Wait For Paper To Be Loaded
- Specify Time and Action
  - Paper out time:** 0 seconds (0 - 3600)
  - Paper out action:** Cancel

Buttons for 'Order Supplies', 'Support', 'Apply', and 'Cancel' are visible.

## Printing page

Use this page to change the printing defaults for the HP LaserJet P2015 printer.

Figure 2-44 HP EWS – Printing page

The screenshot shows the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various settings categories, with 'Printing' selected. The main content area is titled 'Printing' and contains the following settings:

Copies:	<input type="text" value="1"/> (1 - 999)
Wide A4:	<input type="text" value="No"/>
Courier Font:	<input type="text" value="Regular"/>
Orientation:	<input type="text" value="P (Portrait)"/>

Buttons for 'Order Supplies', 'Support', 'Apply', and 'Cancel' are visible at the bottom of the settings area.

## PCL5e page

Use the **PCL5e** page to change font information and form length.

Figure 2-45 HP EWS – PCL5e page

The screenshot shows the HP EWS interface for an HP LaserJet P2015 Series printer, specifically the PCL5e settings page. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various settings categories, with 'PCL5e' selected. The main content area is titled 'PCL5e' and contains the following settings:

Font number:	<input type="text" value="0"/> (0 - 21)
Font Pitch:	<input type="text" value="10.00"/> (0.44 - 99.99)
Font Point Size:	<input type="text" value="12.00"/> (4.00 - 999.75)
Symbol set:	<input type="text" value="PC-8"/>
Append CR to LF:	<input type="text" value="No"/>
Form Length:	<input type="text" value="64"/> (5 - 128)

Buttons for 'Order Supplies', 'Support', 'Apply', and 'Cancel' are visible at the bottom of the settings area.

## PostScript page

Use the **PostScript** page to change the **Print PS Errors** option.

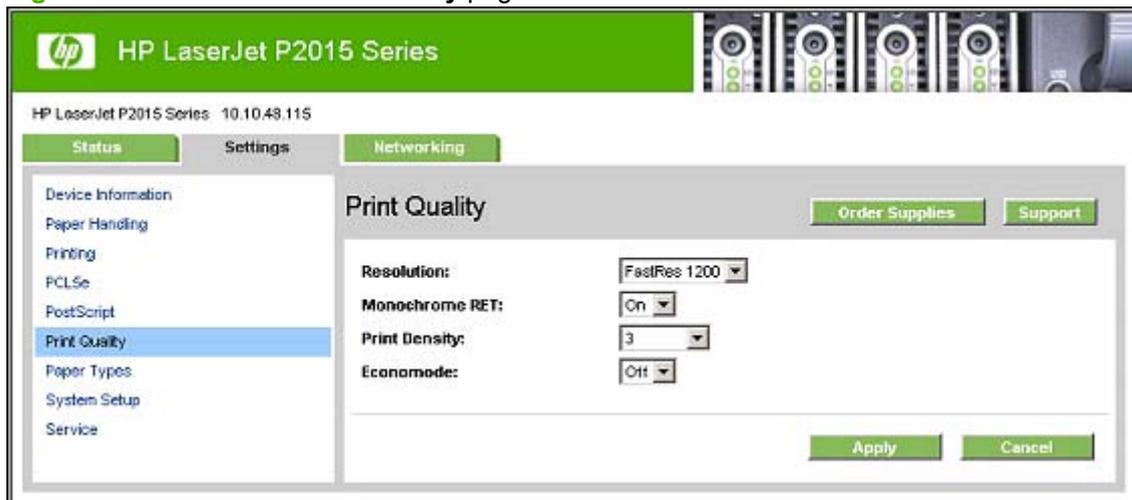
**Figure 2-46** HP EWS – **PostScript** page



## Print Quality page

Use the **Print Quality** page to change the print quality defaults for the HP LaserJet P2015 printer.

**Figure 2-47** HP EWS – **Print Quality** page



## Paper Types page

Use the **Paper Types** page to set the default paper type settings for the HP LaserJet P2015 printer.

**Figure 2-48** HP EWS – Paper Types page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The main heading is "HP LaserJet P2015 Series" with the IP address "10.10.48.115". The "Settings" tab is active, and the "Paper Types" page is selected in the left-hand navigation menu. The "Paper Types" section contains the following settings:

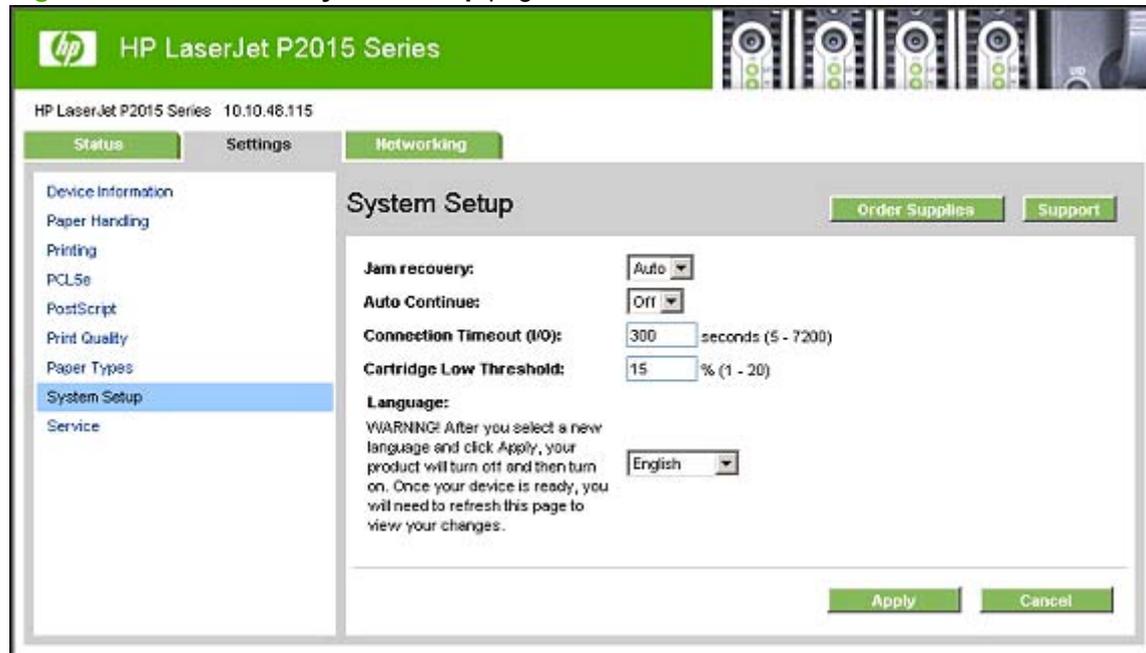
Setting	Value
Plain:	Normal
Light:	Light
Heavy:	Heavy
Card stock:	Card stock
Bond:	Heavy
Color:	Normal
Preprinted:	Normal
Letterhead:	Normal
Prepunched:	Normal
Recycled:	Normal
Labels:	Label
Envelope:	Envelope
Rough:	Heavy
Transparency:	Transparency
Restore Modes:	<input type="checkbox"/>

Buttons for "Apply" and "Cancel" are located at the bottom right of the settings area. Additionally, "Order Supplies" and "Support" buttons are visible at the top right of the settings section.

## System Setup page

Use the **System Setup** page to change settings on the HP LaserJet P2015 printer such as Jam Recovery and Auto Continue.

**Figure 2-49** HP EWS – **System Setup** page



## Service page

Use the **Service** page to initiate the cleaning mode on the HP LaserJet P2015 printer.

**Figure 2-50** HP EWS – **Service** page



## Networking tab

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

- [IP Configuration page](#)

- [Advanced page](#)
- [Bonjour page](#)
- [SNMP page](#)
- [Network Configuration page](#)
- [Password page](#)

## IP Configuration page

Use the **IP Configuration** page to configure the IP address and host and domain names for the HP LaserJet P2015 printer.

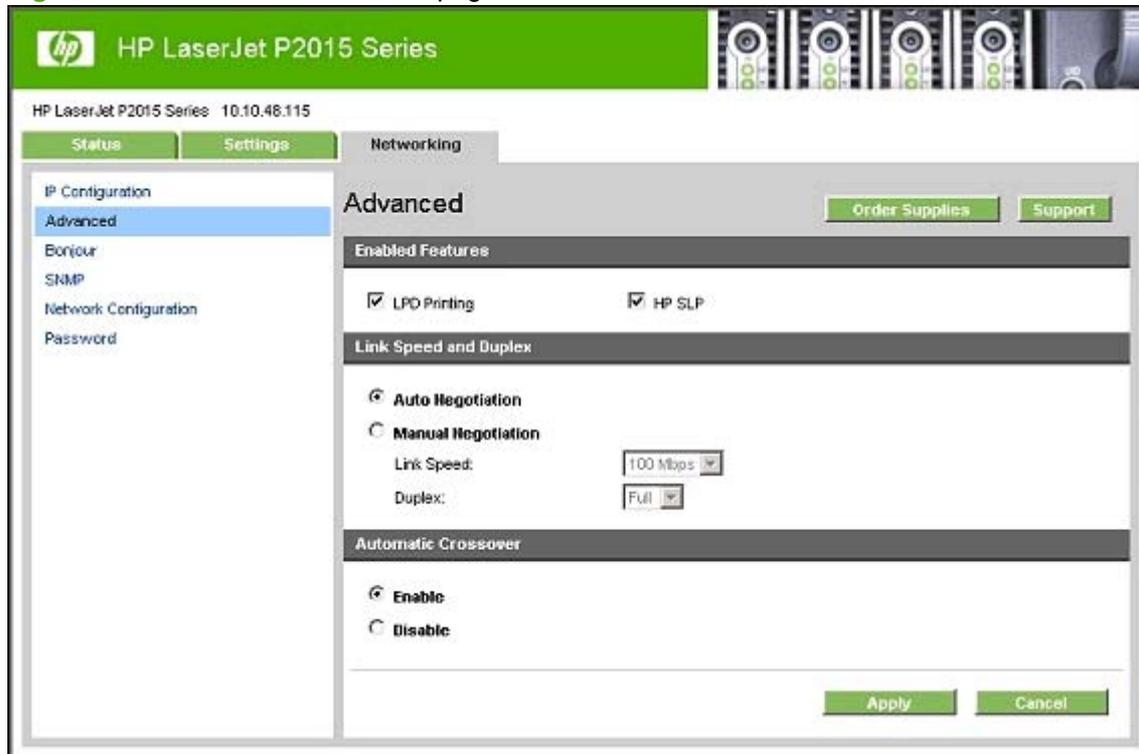
**Figure 2-51** HP EWS – IP Configuration page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status' and 'Settings' tabs, with 'Networking' selected. A sidebar on the left lists configuration options: IP Configuration (selected), Advanced, Bonjour, SNMP, Network Configuration, and Password. The main content area is titled 'IP Configuration' and features a warning: 'Warning: A change in the IP Address will result in loss of connectivity to the browser.' Below the warning, the 'IP Configured By' is set to 'DHCP'. The 'Host Name' is 'NP19EB24A' and the 'Domain Name' is 'sakison.com'. Under the 'Automatic IP' section, 'DHCP', 'BOOTP', and 'AUTOP' are all checked. The 'Manual IP' section is unselected. The 'IP Address' is set to 10.10.48.115, the 'Subnet Mask' is 255.255.255.0, and the 'Default Gateway' is 10.10.48.1. A 'WINS' section shows the 'WINS server' as 10.10.48.15. 'Apply' and 'Cancel' buttons are located at the bottom right.

## Advanced page

Use the **Advanced** page to configure the enabled settings and other settings, such as link speed, for the HP LaserJet P2015 printer.

Figure 2-52 HP EWS – **Advanced** page



## Bonjour page

Use the **Bonjour** page to enable or disable the Bonjour settings for the HP LaserJet P2015 printer.

Figure 2-53 HP EWS – **Bonjour** page



## SNMP page

Use this page to configure the SNMP settings for the HP LaserJet P2015 printer.

Figure 2-54 HP EWS – SNMP page

HP LaserJet P2015 Series

HP LaserJet P2015 Series 10.10.48.115

Status Settings **Networking**

IP Configuration  
Advanced  
Bonjour  
**SNMP**  
Network Configuration  
Password

SNMP Order Supplies Support

**Caution: Changing these settings can potentially disrupt network scanning, network faxing (if supported by your device), or other network functionality**

**Enable SNMP v1 read-write access**

Set Community Name:

Confirm Set Community Name:

Get Community Name:

Confirm Get Community Name:

Disable SNMP v1 default Get Community Name of 'public'

**Enable SNMP v1 read-only access (uses 'public' for the Get Community Name)**

**Disable SNMP v1**

Apply Cancel

## Network Configuration page

The **Network Configuration** page contains information about the network and its enabled features.

**Figure 2-55** HP EWS – Network Configuration page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various configuration options, with 'Network Configuration' selected. The main content area is titled 'Network Configuration' and includes buttons for 'Order Supplies' and 'Support'. It is divided into three sections: 'Network Hardware Configuration', 'Enabled Features', and 'TCP/IP'.

Network Hardware Configuration	
Status:	Ready
Hardware Address:	00:14:38:9e:b2:4a
Firmware Datecode:	0517_01:38:41 Phoenix Firmware
Link Speed and Duplex Negotiations:	Automatic
Link speed:	100 Mbps
Duplex:	Full
Automatic Crossover:	Enabled
Connection Timeout (I/O):	300 seconds

Enabled Features	
Password:	Not Specified
DHCP:	Enabled
BOOTP:	Enabled
AUTOIP:	Enabled
LPD Printing:	Enabled
Bonjour:	Enabled
HP SLP:	Enabled
SNMP:	Enabled

TCP/IP	
Host Name:	NP19EB24A
Domain Name:	sakson.corp
Bonjour printer name:	HP LaserJet P2015 Series (9EB24A)
IP Address:	10.10.48.115
Subnet Mask:	255.255.255.0
Default Gateway:	10.10.48.1
IP Configured By:	DHCP
DHCP/BOOTP Server:	10.10.48.15
DHCP Expiration Time:	03:00:00 (days:hours:minutes)
WINS server:	10.10.48.15

SNMP	
Status:	Read-Write Access Enabled

## Password page

Use this page to set or change the Administrator password.

Figure 2-56 HP EWS – Password page

HP LaserJet P2015 Series 10.10.48.115

Status Settings **Networking**

IP Configuration  
Advanced  
Bonjour  
SNMP  
Network Configuration  
**Password**

**Password** [Order Supplies](#) [Support](#)

Use these fields to set or change the Administrator Password. When set, the Administrator Password is required before you can access and change configuration parameters. To disable the Administrator Password, leave the entries blank.

NOTE: When logging in, any username can be typed in the username field in the login dialog box.

Password:

Confirm Password:

[Apply](#) [Cancel](#)

## 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](http://www.hp.com/go/webjetadmin)

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# 3 Install MS Windows printing-system components

## Introduction

The HP LaserJet P2015 printer comes with software and installers for MS Windows and Apple Computer, Inc., Macintosh systems. Linux and UNIX systems support the HP LaserJet P2015, and software is available on the Web. This document provides procedures for installing and removing the HP LaserJet P2015 printing-system software for MS Windows operating systems.

 **NOTE:** If the computer is running a 64-bit MS Windows operating system, install the corresponding 64-bit print driver. For instructions, see [Installing the print drivers by using Microsoft Windows Plug-and-Play or the add-printer wizard on page 84](#).

Topics:

- [Installation overview](#)
- [Installation options](#)
- [Installation dialog box options for Microsoft Windows 2000 and Microsoft Windows XP](#)

## Installation overview

The software for the HP LaserJet P2015 printer comes on one CD. The CD includes print drivers and all of the necessary software for the HP LaserJet P2015 printer.

The HP LaserJet P2015 includes a new installer that improves the software installation process and supports a software-first installation, which is the recommended installation method. A Minimum installation option is available, which consists of only the print drivers.

On computers running Microsoft Windows 2000 or Microsoft Windows XP the Setup program installs the HP LaserJet P2015 printing-system software from the CD onto the hard disk and updates Microsoft Windows files.

The Setup program is *not* supported for Microsoft Windows 98 SE, Microsoft Windows Me, or Microsoft Windows Server 2003. A plug-and-play or add-printer-wizard installation must be used for these operating systems. For more information, see [Installing the print drivers by using Microsoft Windows Plug-and-Play or the add-printer wizard on page 84](#).

For all of the supported platforms, each installation option presents a series of query dialog boxes that move through the installation process. Different dialog boxes are presented for a directly-connected or networked HP LaserJet P2015 printer.

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 **NOTE:** The HP LaserJet P2015 printing-system software uses Microsoft USB printing support (USB00X) rather than DOT4 printing support.

---

# Installation options

The HP LaserJet P2015 printing-system software can be used with the HP LaserJet P2015 printer in the following configurations:

- **Direct Connection.** Install the HP LaserJet P2015 printing-system software on a computer that is directly connected to the product through a USB port and running Microsoft Windows 2000 or Microsoft Windows XP.

In this configuration, the printer is not shared. A single user has complete physical control over the printer. In this configuration, access is available to all of the printer features.

- **Shared direct connection using Microsoft peer-to-peer networking.** Install the HP LaserJet P2015 printing-system software on a computer that is directly connected to the product through a USB port and running Microsoft Windows 2000, Microsoft Windows XP, or Microsoft Windows Server 2003 . Then share the HP LaserJet P2015 printer with other users on the network by using Microsoft Windows sharing.

When you use Microsoft Windows to share a local printer over the network, the operating system handles all of the networking issues. The product prints in this configuration, but only the local computer can use the HP ToolboxFX. Also, because Microsoft peer-to-peer networking is unidirectional, network users do not receive printer-status messages when they print to the product.

 **NOTE:** HP does not support vending drivers across operating systems that have different print-driver architectures, such as HP Traditional drivers and HP Unidrivers. To use a mix of operating systems, download and install an alternative print driver for the specific operating system.

- **Network connection using onboard networking.** Install the HP LaserJet P2015 printing-system software on a computer that is running Microsoft Windows 2000 or Microsoft Windows XP and that has access to a local area network (LAN) to which the HP LaserJet P2015 printer is also connected . The HP LaserJet P2015n, the HP LaserJet P2015dn, and the HP LaserJet P2015x printers have onboard networking that connects to a LAN through a 10/100Base-T (RJ-45) port.

The following elements are required for a networked HP LaserJet P2015 printer:

- An installed network that uses the TCP/IP network protocol
- A cable for your type of network connection (not included)

## Microsoft Windows installation for direct connections

Use the following instructions to install the product software on a computer that is running Microsoft Windows 2000 or Microsoft Windows XP.

 **NOTE:** Set up and turn on the HP LaserJet P2015 printer before installing the printing-system software. Do not connect the HP LaserJet P2015 printer to the computer until the software prompt appears.

**NOTE:** You must have Administrator privileges to install the printing-system software on Microsoft Windows 2000 or Microsoft Windows XP.

1. Quit all open programs.
2. Insert the HP LaserJet P2015 printing-system software CD into the CD-ROM drive.

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

3. Follow the onscreen prompts to install the software.
4. When the installation is nearly complete, the **Finish** dialog box appears and you can print a test page. Click the **Print a test page** check box, and then click **Finish** to finish the installation and print a test page.
5. If prompted to restart the computer, click **Yes**.

## Installing the print drivers by using Microsoft Windows Plug-and-Play or the add-printer wizard

The HP LaserJet P2015 printing-system software installer does *not* support Microsoft Windows 98 SE, Microsoft Windows Me, or Microsoft Windows Server 2003. To install the print drivers on computers running any of these operating systems, use a plug-and-play installation for direct USB printer connections, or an add-printer-wizard installation for network-connected printers.

During a plug-and-play or add-printer-wizard installation, the following drivers are installed:

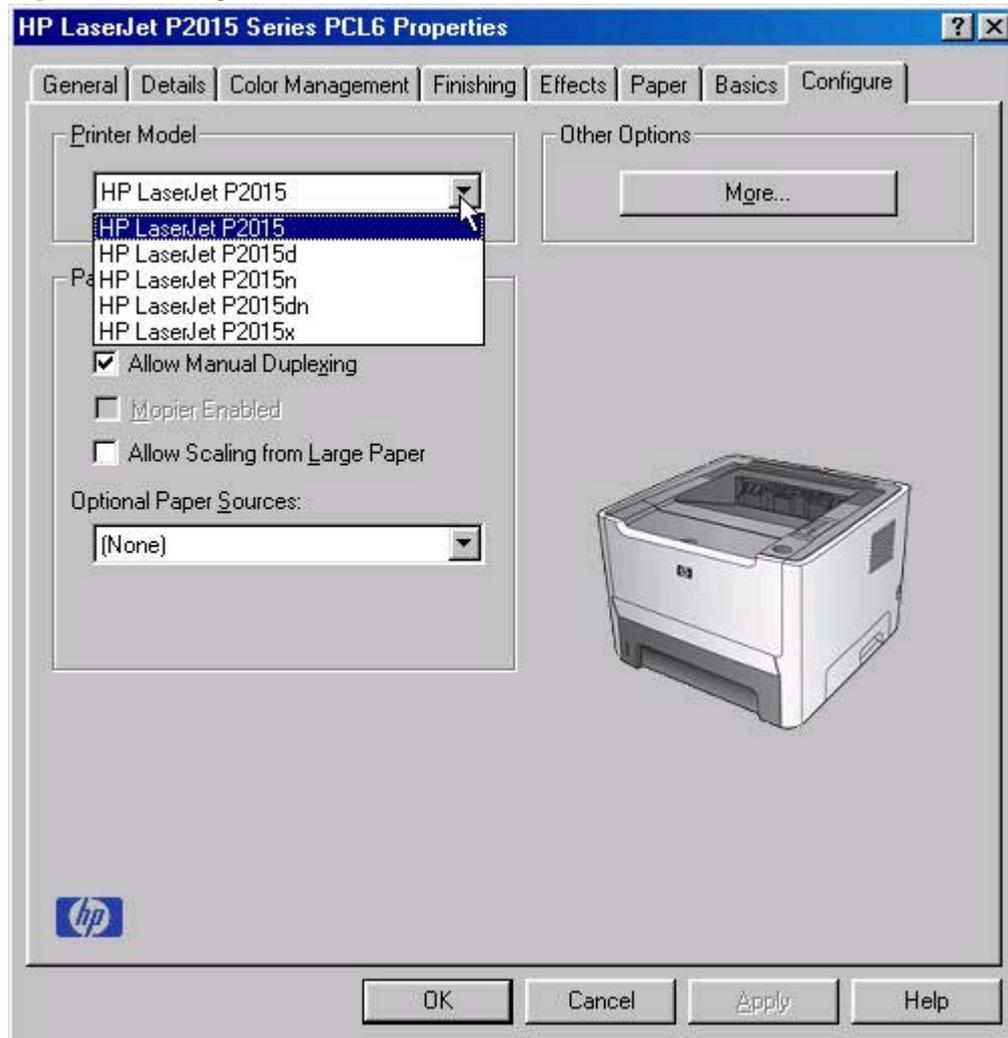
- Print driver
- USB driver (for plug-and-play installations only)
- EWS null driver (for the embedded Web server)

If your computer is running Windows 98 SE or Windows Me and you have an HP LaserJet P2015n, HP LaserJet P2015dn, or HP LaserJet P2015x printer, configure the driver to include the advanced features of these printer models after the HP LaserJet P2015 printing-system software is installed. Follow these steps to configure the driver:

1. Click **Start**, click **Settings**, and then click **Printers**.
2. Right-click the printer icon for the HP LaserJet P2015 printer, and then click **Properties**.

3. On the **Configure** tab, click the drop-down menu, select the printer model, and then click **OK**.

**Figure 3-1** Configure the driver



### Plug-and-play installation for direct USB connection in Microsoft Windows 98 SE

Up to five events might occur when you use Microsoft Windows Plug-and-Play to install the HP LaserJet P2015 print driver software on a computer running Microsoft Windows 98 SE.

**NOTE:** The SETUP.EXE program on the HP LaserJet P2015 printing-system CD is *not* supported in Windows 98 SE, Windows Me, or Windows Server 2003. For these operating systems, use Microsoft Plug-and-Play for direct USB connections or the add-printer-wizard installation for network connections to install the print drivers. If you run SETUP.EXE in these operating systems, an error message appears: **The operating system on this computer is not supported.**

Follow these steps to install the HP LaserJet P2015 printing-system software on a computer running Microsoft Windows 98 SE.

1. Verify that the HP LaserJet P2015 printer is turned on.
2. Quit all open programs.

3. Insert the HP LaserJet P2015 printing-system CD into the CD-ROM drive on the computer.

 **NOTE:** If a dialog box that contains an **Install** button appears, click **Exit** and continue with step 4.

4. Connect a USB cable between the printer and the computer.
5. When the **Add New Hardware Wizard USB Composite Device** dialog box appears, click **Next**.

**Figure 3-2** Add New Hardware Wizard USB Composite Device dialog box



- Click the **Search for the best driver for your device. (Recommended)** option button, and then click **Next**.

**Figure 3-3** Add New Hardware Wizard USB Composite Device - **Search for driver** dialog box



- Select the **CD-ROM** check box and clear all other check boxes. Click **Next** to continue.

**Figure 3-4** Add New Hardware Wizard USB Composite Device - **Specify a location** dialog box



- Click **Next** to accept the updated driver (USBHUB).

**Figure 3-5 Add New Hardware Wizard USB Composite Device - What do you want to install?** dialog box



- Click **Next** to install the driver for the HP LaserJet P2015 printer.

**Figure 3-6 Add New Hardware Wizard USB Composite Device - Ready to Install** dialog box



10. Click **Finish** to complete the installation of the HP LaserJet P2015 printer.

**Figure 3-7** Add New Hardware Wizard USB Composite Device - **Finish** dialog box



11. The remaining plug-and-play events for the HP Embedded Web Server, USB Printing Support, and HP LaserJet P2015 PCL 6 driver are automatic.
12. Click **Start**, click **Settings**, and then click **Printers** to confirm that the HP LaserJet P2015 PCL 6 driver is installed.

## Plug-and-play installation for a direct USB connection in Microsoft Windows Me

Up to five events might occur when you use Microsoft Windows Plug-and-Play to install the HP LaserJet P2015 print driver software on a computer running Microsoft Windows Me.

 **NOTE:** The SETUP.EXE program on the HP LaserJet P2015 printing-system CD is *not* supported in Windows 98 SE, Windows Me, or Windows Server 2003. For these operating systems, use Microsoft Plug-and-Play for direct USB connections or the add-printer-wizard installation for network connections to install the print drivers. If you run SETUP.EXE in these operating systems, an error message appears: **The operating system on this computer is not supported.**

Follow these steps to install the HP LaserJet P2015 printing-system software on a computer running Microsoft Windows Me.

1. Verify that the HP LaserJet P2015 printer is turned on.
2. Quit all open programs.
3. Insert the HP LaserJet P2015 printing-system CD into the CD-ROM drive on the computer.

 **NOTE:** If a dialog box that contains an **Install** button appears, click **Exit** and continue with step 4.

4. Connect a USB cable between the printer and the computer.
5. When the **New Hardware Wizard** dialog box appears, click **Automatic search for a better driver. (Recommended)**, and then click **Next**.

**Figure 3-8** Add New Hardware Wizard Search for driver dialog box



6. Click **Finish** in the **USB Printing Support** dialog box.

**Figure 3-9** Add New Hardware Wizard USB Printing Support dialog box



7. In the **HP EWS** dialog box, click the **Automatic search for a better driver (Recommended)** option button and then click **Next** to continue the installation.

**Figure 3-10** Add New Hardware Wizard HP EWS dialog box



8. Click **Finish** to continue copying files to the computer. The remaining plug-and-play events for the HP LaserJet P2015 PCL 6 driver are automatic.

**Figure 3-11 Add New Hardware Wizard – Finish dialog box**



9. Click **Start**, click **Settings**, and then click **Printers** to confirm that the HP LaserJet P2015 driver is installed.

### Add-Printer Wizard installation for network connections in Windows Server 2003

The SETUP.EXE program on the HP LaserJet P2015 printing-system CD is not supported in Windows Server 2003. Use the Microsoft Add-Printer Wizard for network connections or using a plug-and-play installation for direct USB connections to install the printer driver.

Follow these steps to install the HP LaserJet P2015 printing-system software on a computer running Windows Server 2003.

1. Quit all open programs.
2. Insert the HP LaserJet P2015 printing-system CD into the CD-ROM drive on the computer.

 **NOTE:** If the CD starts automatically, click **Exit** to exit the installation program and continue with step 3.

3. Open **Printers and Faxes** and double-click **Add Printer**.
4. Click **Next** on the **Welcome** screen.
5. Follow the onscreen instructions.
6. When prompted for a location of the driver, browse to the following location on the HP LaserJet P2015 software CD:

<CD ROM drive>:\drivers\Win2000\_XP

 **NOTE:** Windows Server 2003 uses the same print driver as Windows 2000 and Windows XP.

7. If prompted to restart the computer, click **Yes**.

## Microsoft Windows installation for networked computers

Each networked computer that has the HP LaserJet P2015 printing-system software installed has access to all of the printer features over a network connection. This access is through on-board networking that comes standard on the HP LaserJet P2015n, HP LaserJet P2015dn, and HP LaserJet P2015x printers.

To install the HP LaserJet P2015 printing-system software on networked computers running Microsoft Windows 2000 or Microsoft Windows XP, follow these steps.

---

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

---

1. Quit all open programs.
2. Insert the HP LaserJet P2015 printing-system software CD into the CD-ROM drive.

---

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

---

3. Follow the onscreen prompts to install the software.
4. When the Installer software prompts you to select how the printer will be connected, select **Through the network**, and then click **Next**. Follow the onscreen instructions.
5. When the installation is completed, a setup dialog box appears that asks whether or not you want to print a test page. Click **Yes**.
6. If prompted to restart the computer, click **Yes**.

## Setting up Microsoft Windows Sharing (peer-to-peer networking)

This section contains instructions for using Microsoft Windows Sharing to make the product available to network users when the product is directly connected to a computer.

---

 **NOTE:** This document outlines the procedures for sharing a printer through Microsoft Windows Sharing (peer-to-peer networking). If these procedures are not successful, contact Microsoft at the following Web site: [www.microsoft.com](http://www.microsoft.com) Because it is a function of Microsoft operating systems and not of the HP printer drivers, HP does not support peer-to-peer networking.

---

In Windows-sharing, the person who uses the computer that is directly connected to the product can allow other users on the network to print to the HP LaserJet P2015 printer.

When the HP LaserJet P2015 printer is shared, install the printer drivers on all of the computers that need to print to the HP LaserJet P2015 printer.

## Setting up the Microsoft Windows 98 SE, Microsoft Windows Me, or Microsoft Windows 2000 host computer

At the computer that is directly connected to the HP LaserJet P2015 printer, perform the following steps.

1. Click **Start**, click **Settings**, and then click **Printers**.
2. In the printer list, right-click the icon for the HP LaserJet P2015 printer, and then click **Sharing**.

If **Sharing** does not appear on the menu, follow these steps to enable printer sharing for Microsoft Windows 98 SE or Microsoft Windows Me. :

- a. Click **Start**, click **Settings**, and then click **Control Panel**.
  - b. Double-click the **Network** icon.
  - c. On the **General** tab, click **File and Print Sharing**.
  - d. Click the **I want to be able to allow others to print to my printers** check box, and then click **OK**.
  - e. Click **OK** again, and then close the **Control Panel**. If you are prompted to restart the computer, click **Yes**.
  - f. Return to step 1.
3. On the **Sharing** tab, click the **Share As** option button, and then type a name for the product in the **Share Name** field. Click **OK**.

---

 **NOTE:** The **Share Name** must be a maximum of 8 characters.

---

## Setting up the Microsoft Windows XP or Microsoft Windows Server 2003 host computer

At the computer that is directly connected to the HP LaserJet P2015 printer, perform the following steps.

1. Click **Start** and then click **Printers and Faxes**.
2. In the printer list, right-click the icon for the HP LaserJet P2015 printer, and then click **Sharing**.
3. On the **Sharing** tab, click the **Share this printer** option button and type a name for the product in the **Share Name** field. Click **OK**.
4. Click the **Ports** tab. Click to clear the **Enable bidirectional support** check box, and then click **OK**.

## Setting up the client computers

After the host computer is set up to share the HP LaserJet P2015 printer, the client computers can be configured. Perform the following steps at all the other network computers that will use the HP LaserJet P2015 printer.

### Setting up Microsoft Windows 98 SE, Microsoft Windows Me, or Microsoft Windows 2000 client computers

1. Click **Start**, click **Settings**, and then click **Printers**.
2. Double-click the **Add Printer** icon to open the **Add Printer** wizard.
3. Click **Next** to start the wizard.
4. Click the **Network Printer** option button, and then click **Next**.

5. Type the path and share name of the HP LaserJet P2015 printer to connect to, or click **Browse** and navigate to the printer.
6. Click **Next**.
7. Click **Yes** or **No** when asked if you want to use this printer as the default printer for Microsoft Windows-based programs, and then click **Next**.
8. Click **Finish** to complete the installation and close the **Add Printer** wizard.

---

 **NOTE:** You might need the product software CD to complete the print–driver installations.

---

### **Setting up Microsoft Windows XP or Microsoft Windows Server 2003 client computers**

1. Click **Start** and then click **Printers and Faxes**.
2. In the column to the left, under **Printer Tasks**, click **Add a printer** to open the **Add Printer** wizard.
3. Click **Next** to start the wizard.
4. Click the **A network printer or a printer attached to another computer** option button, and then click **Next**.
5. Type the path and share name of the HP LaserJet P2015 printer to connect to  
- OR -  
Click **Browse** and navigate to find the HP LaserJet P2015 printer to connect to.
6. Click **Next**.
7. Click **Yes** or **No** when asked if you want to use this printer as the default printer for Microsoft Windows-based programs, and then click **Next**.
8. Click **Finish** to complete the installation and close the **Add Printer** wizard.

# Installation dialog box options for Microsoft Windows 2000 and Microsoft Windows XP

The following section shows the dialog box options that appear during the HP LaserJet P2015 printing-system software installation on Microsoft Windows 2000 and Microsoft Windows XP operating systems.

 **NOTE:** The HP LaserJet P2015 printing-system software installer does not support Microsoft Windows 98 SE, Microsoft Windows Me, or Windows Server 2003. To install the HP LaserJet P2015 printing-system software on a computer running Microsoft Windows 98 SE, Microsoft Windows Me, or Windows Server 2003, complete a Plug-and-Play installation. For more information, see [Installing the print drivers by using Microsoft Windows Plug-and-Play or the add-printer wizard on page 84](#).

**NOTE:** HP recommends installing the software before connecting the HP LaserJet P2015 printer to the computer (software-first installation). These instructions are for a software-first installation.

Use these instructions the first time you install the HP LaserJet P2015 printing-system software .

Topics:

- [Animated installation guide](#)
- [Printing-system software installation](#)

## Animated installation guide

When you insert the printing-system software CD into the CD-ROM drive, the animated installation guide starts automatically. The **Begin Setup** screen appears.

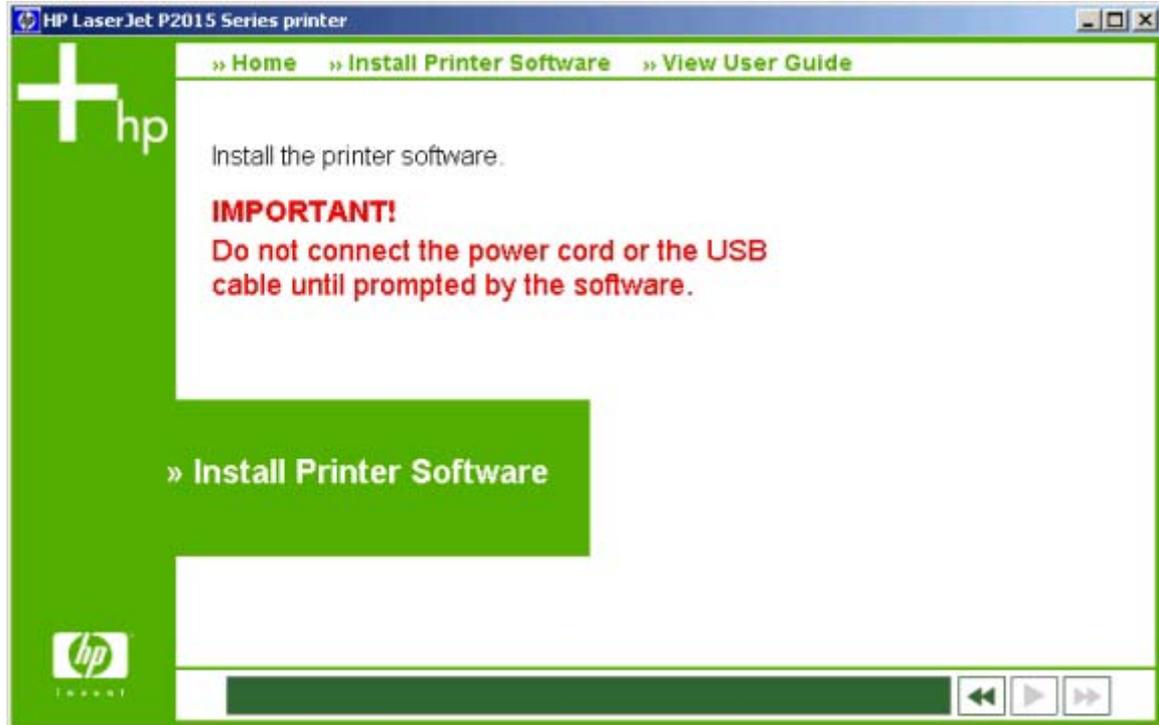
**Figure 3-12** Animated installation guide – Welcome screen



Click **Begin Setup** to initiate a series of screens that show how to prepare the HP LaserJet P2015 for software installation. Click the arrows in the lower-right corner of the screen to view animated illustrations of each step.

When setup is complete, the **Install Printer Software** screen appears.

**Figure 3-13** Install Printer Software screen



Click **Install Printer Software** to install the print drivers and other software features.

## Printing-system software installation

The following sections describe the dialog-box options that appear during the HP LaserJet P2015 software installation on Windows operating systems.

**Figure 3-14** HP LaserJet P2015 CD Browser screen



The first dialog box contains the following links:

**Install Printer Software.** This link takes you to the initial command for installing the software. Click this link to close the CD Browser and the initial installation wizard and open the **Welcome to the Install Wizard** screen. For information about installing the printing-system software over a USB connection, see [USB installation dialog-box options for Windows on page 99](#). For information about installing the printing-system software over a network connection, see [Network installation dialog box options for Windows on page 116](#)

**View User Guide.** Click this option to go to the *HP LaserJet P2015 Series User Guide*.

### USB installation dialog-box options for Windows

 **NOTE:** For USB installations, HP recommends installing the software before connecting the HP LaserJet P2015 to the computer (software-first installation). These instructions are for a software-first installation.

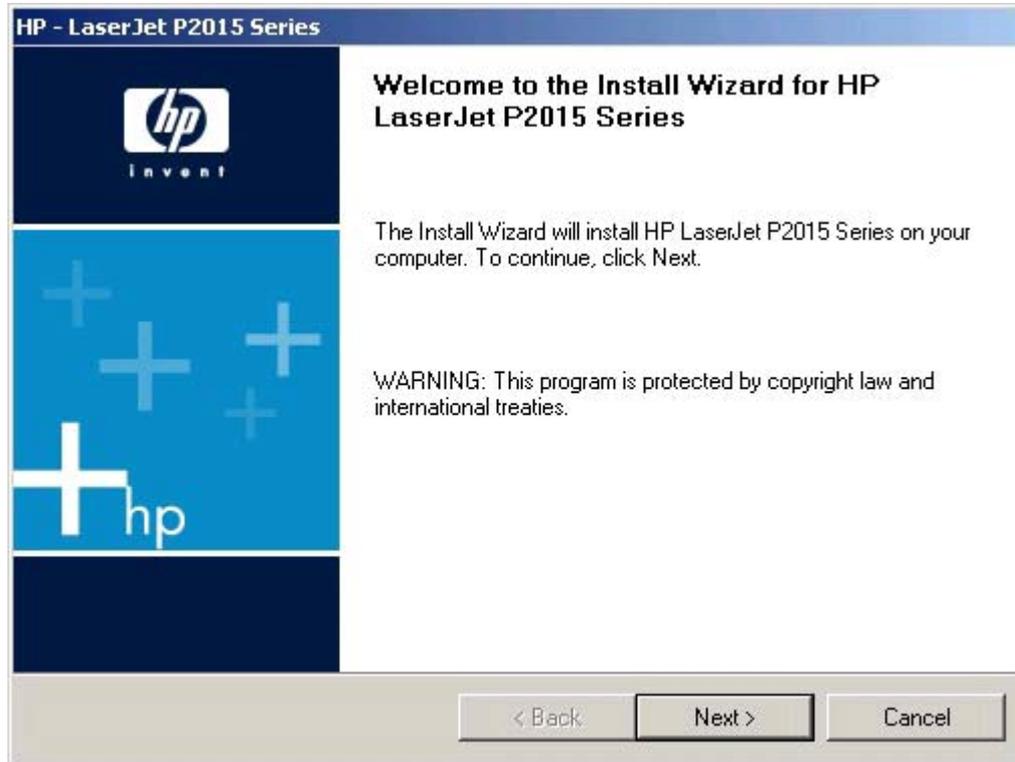
Use these instructions the first time you install the HP LaserJet P2015 software.

This section shows the dialog boxes that appear when installing the HP LaserJet P2015 over a direct connection (USB).

In any dialog box where it is available, click the **Back** button, to return to the previous dialog box, or click the **Cancel** button to cancel the installation.

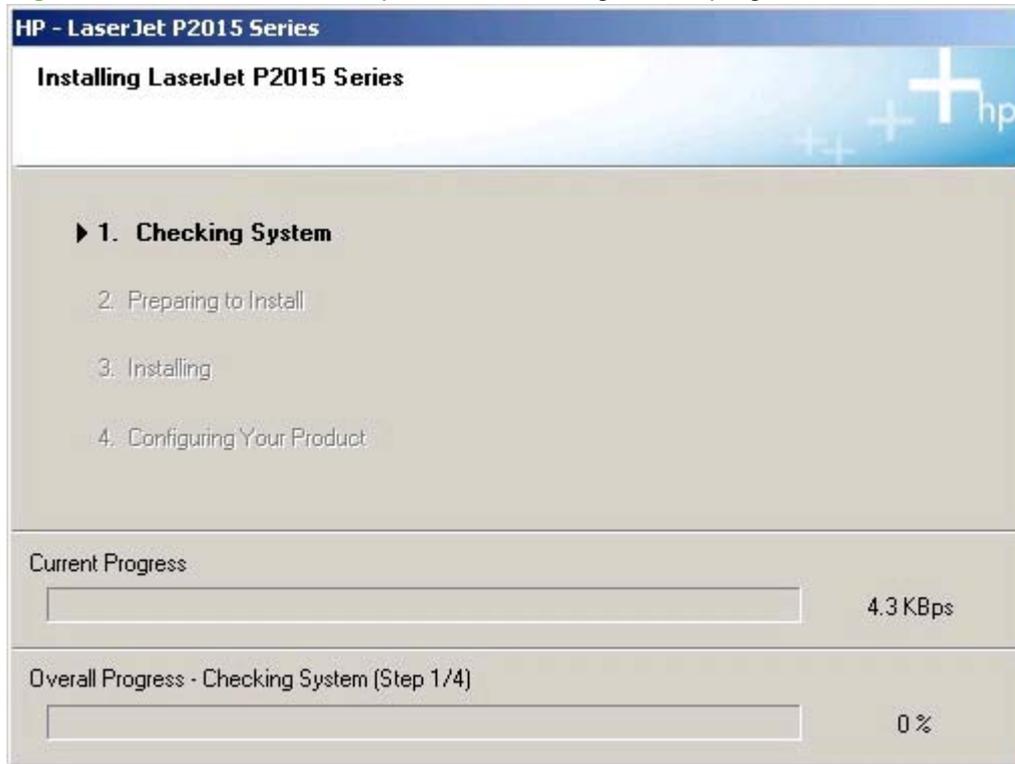
 **NOTE:** The sequence of dialog boxes might differ from what is shown here, depending on the product and the selected options.

**Figure 3-15** USB install – **Welcome to the Install Wizard** dialog box



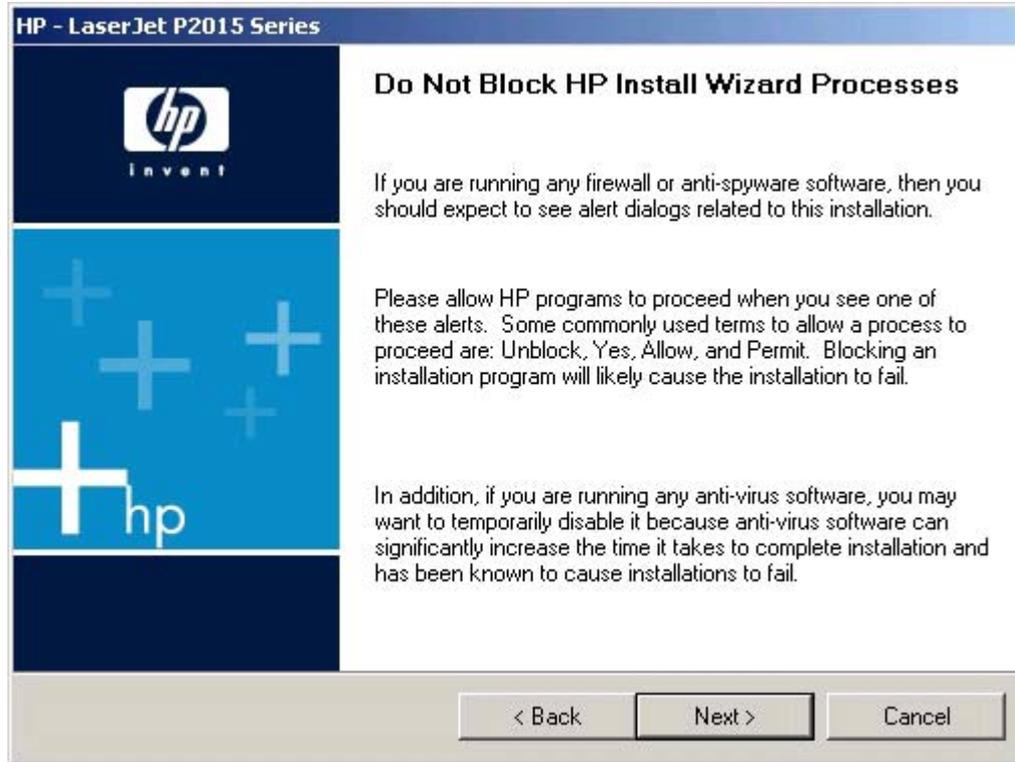
Click **Next** to continue. Between dialog boxes, a current-progress screen appears. This screen shows the progress of the installation and provides information about the number of subtasks that have been completed in each step. The current-progress screen appears throughout the installation, but is sometimes covered by a new dialog box that contains the next option in the installation sequence.

**Figure 3-16** USB install – Sample screen showing current progress



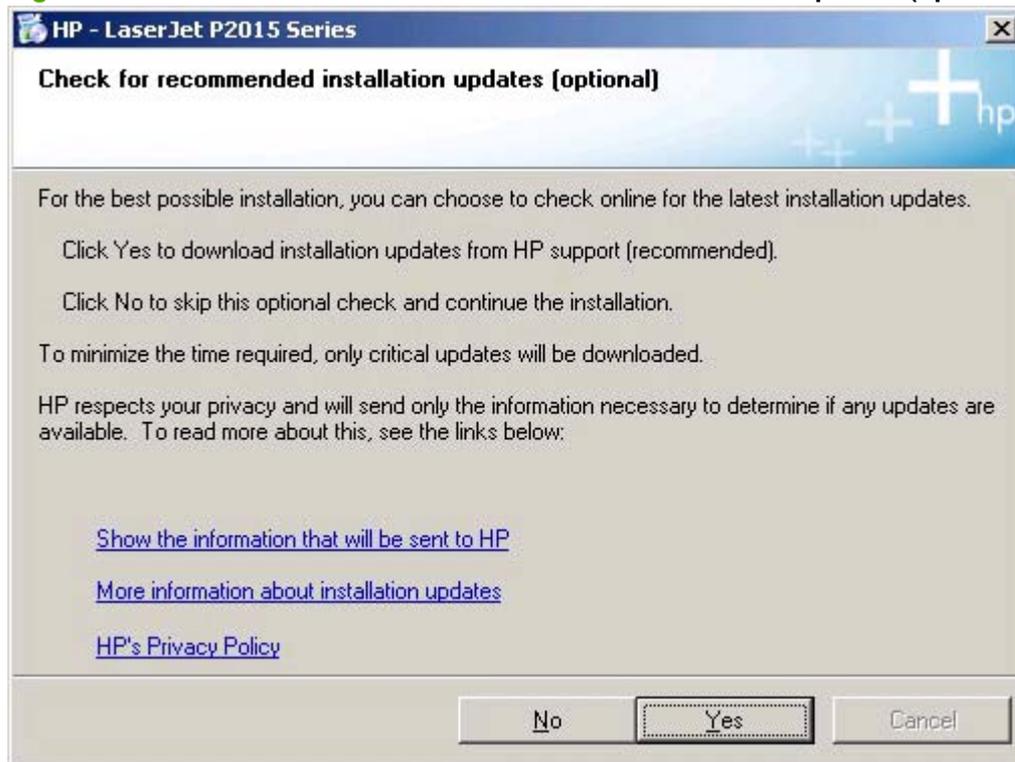
The **Do Not Block Install Wizard Processes** dialog box provides information about possible conflicts with firewall or anti-spyware software that might be running on your system. Read and follow the instructions, and then click **Next**.

**Figure 3-17** USB install – **Do Not Block HP Install Wizard Processes** dialog box



**NOTE:** The **Check for recommended installation updates** dialog box appears only if the installer detects that a network connection is available.

**Figure 3-18** USB install – **Check for recommended installation updates (optional)** dialog box



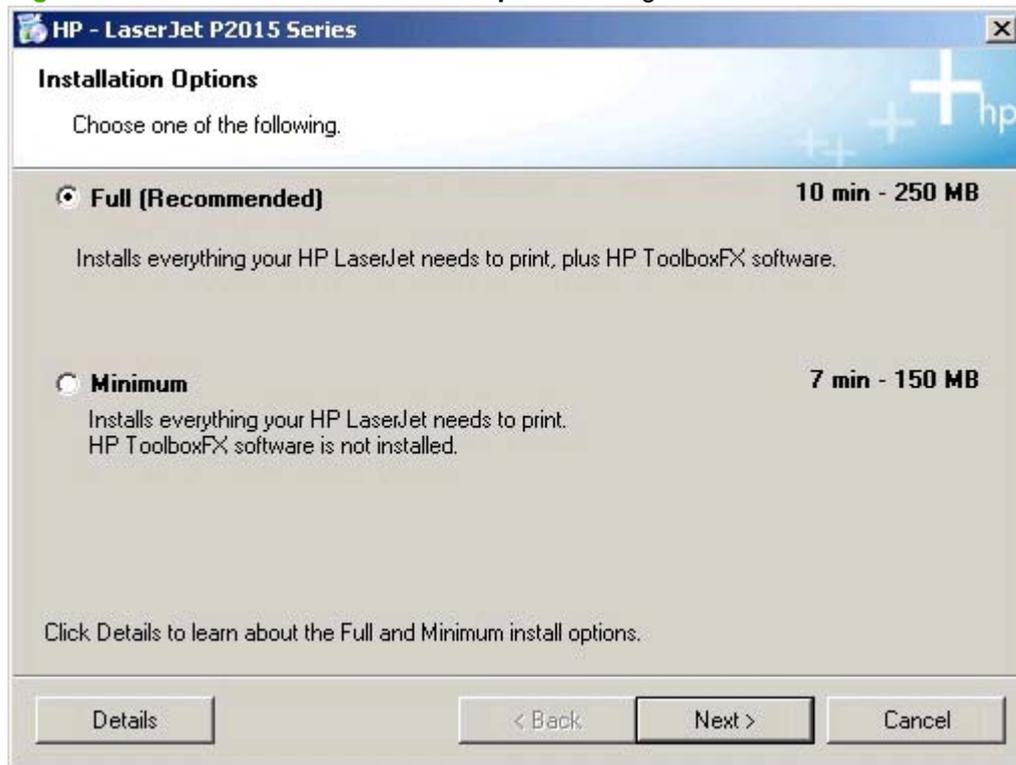
If you have Web access, click **Yes** to check for HP LaserJet P2015 installation updates. This step is optional.

Click any of the links to open a screen that provides further information:

- **Show the information that will be sent to HP**
- **More information about installation updates**
- **HP's Privacy Policy**

Click **No** to continue the installation without checking for installation updates.

**Figure 3-19** USB install – **Installation Options** dialog box

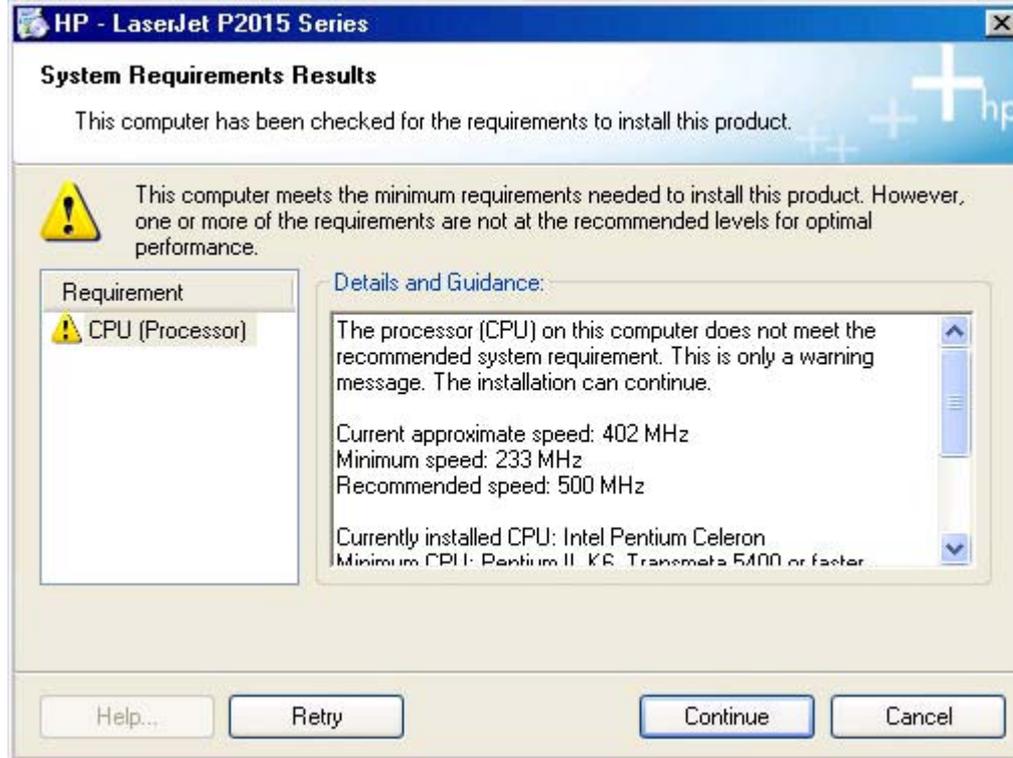


Select the **Full (Recommended)** option to install the complete printing-system software.

Select **Minimum** to install only limited software.

Click **Details** for information about the **Full (Recommended)** and **Minimum** installations and to find out if your system meets the recommended installation requirements. A sample **System Requirements Results** dialog box is shown in the following illustration.

**Figure 3-20** USB Install – sample **System Requirements Results** dialog box



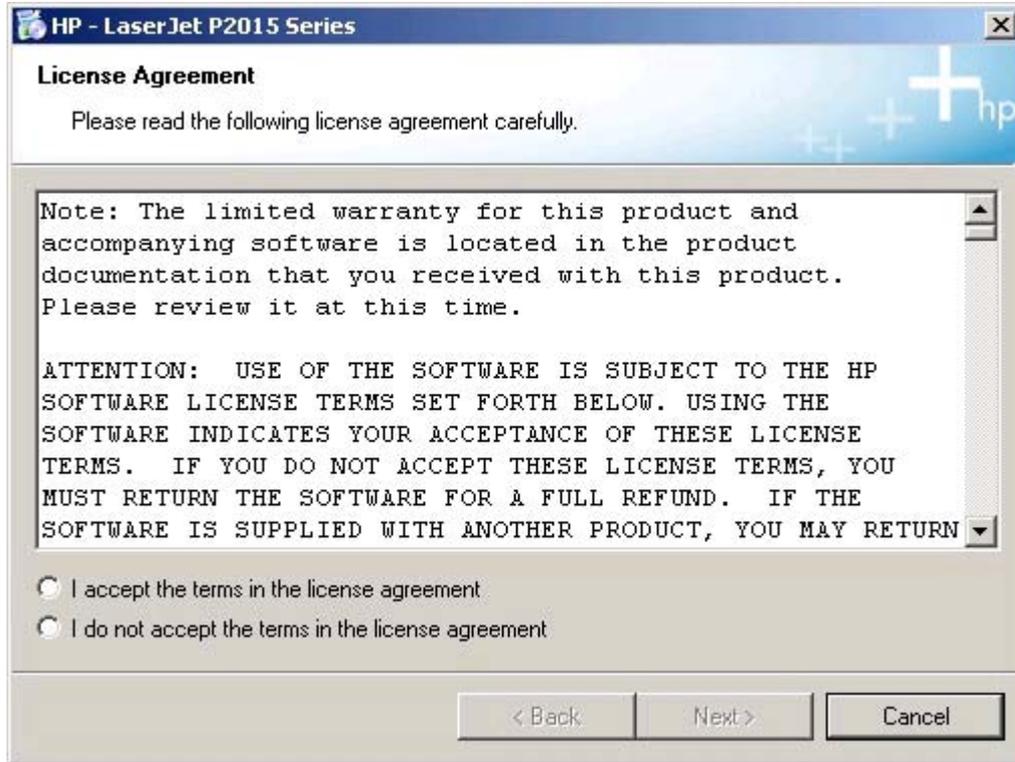
**NOTE:** When appropriate, the **Continue** button is available and installation can proceed despite the warning, such as in the **System Requirements Results** screen in the foregoing illustration. If a blocking condition prevents the installation from continuing, the **Continue** button is not available.

Click **Retry** to check again for minimum system requirements.

Click **Continue** to proceed with the installation.

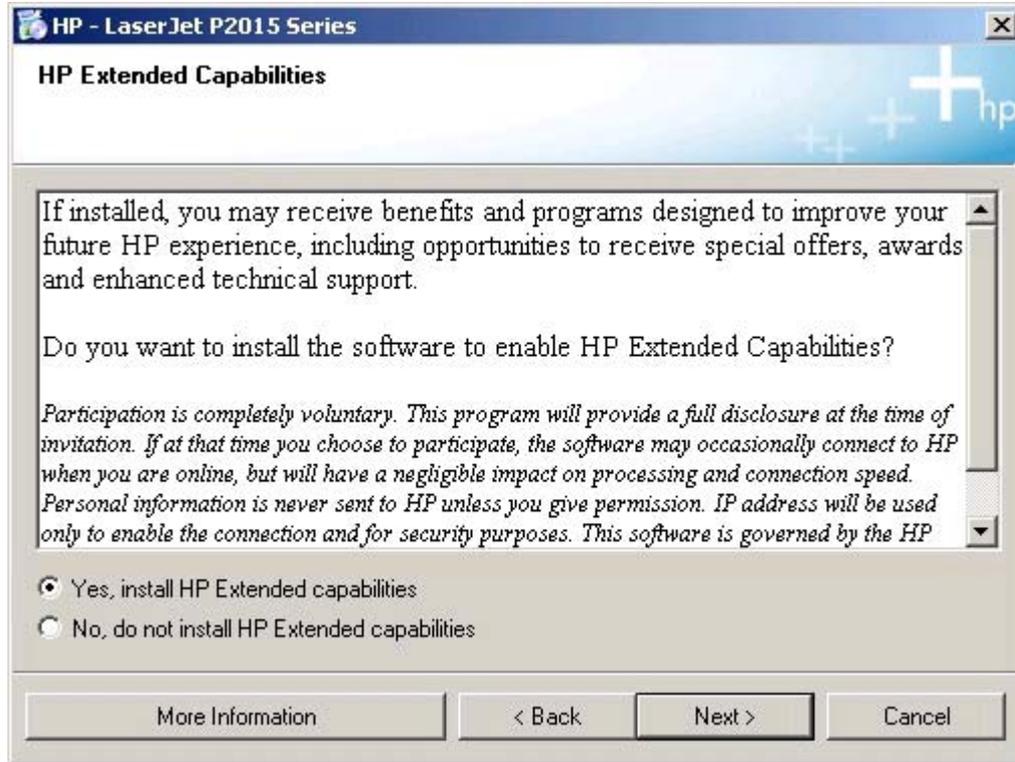
Between dialog boxes, a **Preparing to Install** screen appears. This screen shows the progress of the installation and provides information about the number of subtasks that have been completed in each step. This screen disappears, and the **License Agreement** dialog box appears.

**Figure 3-21** USB install – License Agreement dialog box



When you select the **I accept the terms in the license agreement** option, the **Next** button becomes available. Click **Next**. The **HP Extended Capabilities** dialog box appears.

**Figure 3-22** USB install – HP Extended Capabilities dialog box



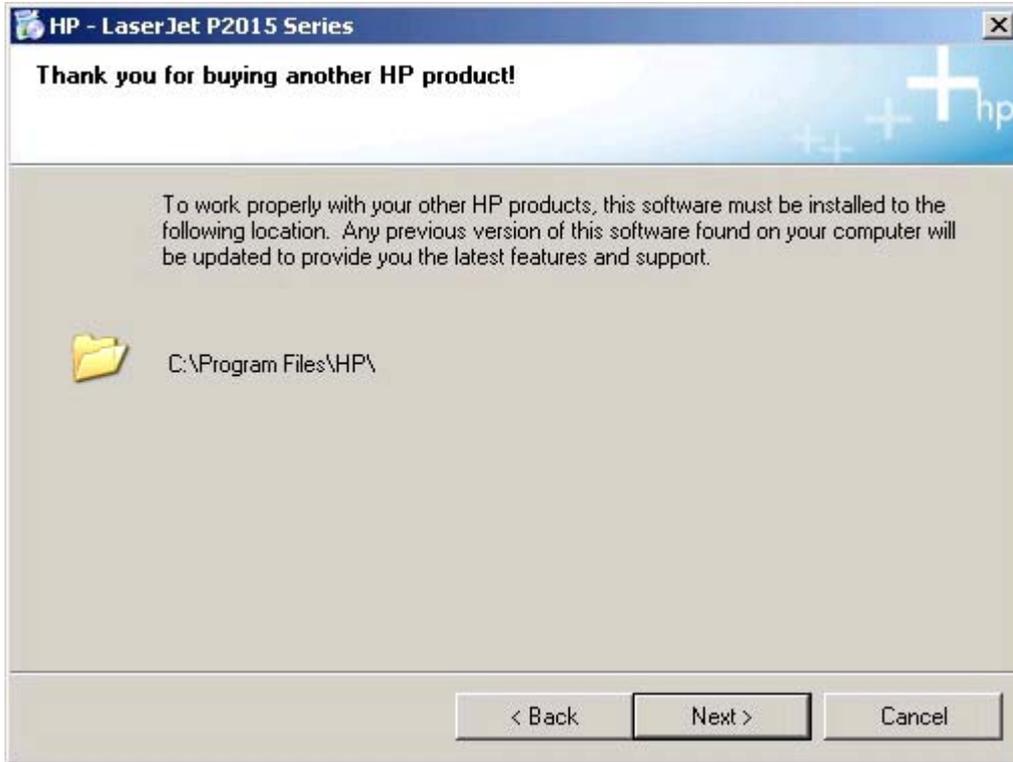
If you select the **Install HP Extended capabilities** option, a dialog box appears two weeks after installing the HP LaserJet P2015, giving details about participation in the HP Product Survey Program.

If you select the **Do not install HP Extended capabilities** option, you are not invited to participate in the HP Product Survey Program.

Click **More Information** to find out more about HP Extended Capabilities and the HP Product Survey Plan.

Click **Next** to continue the installation. The **Destination Folder** dialog box appears.

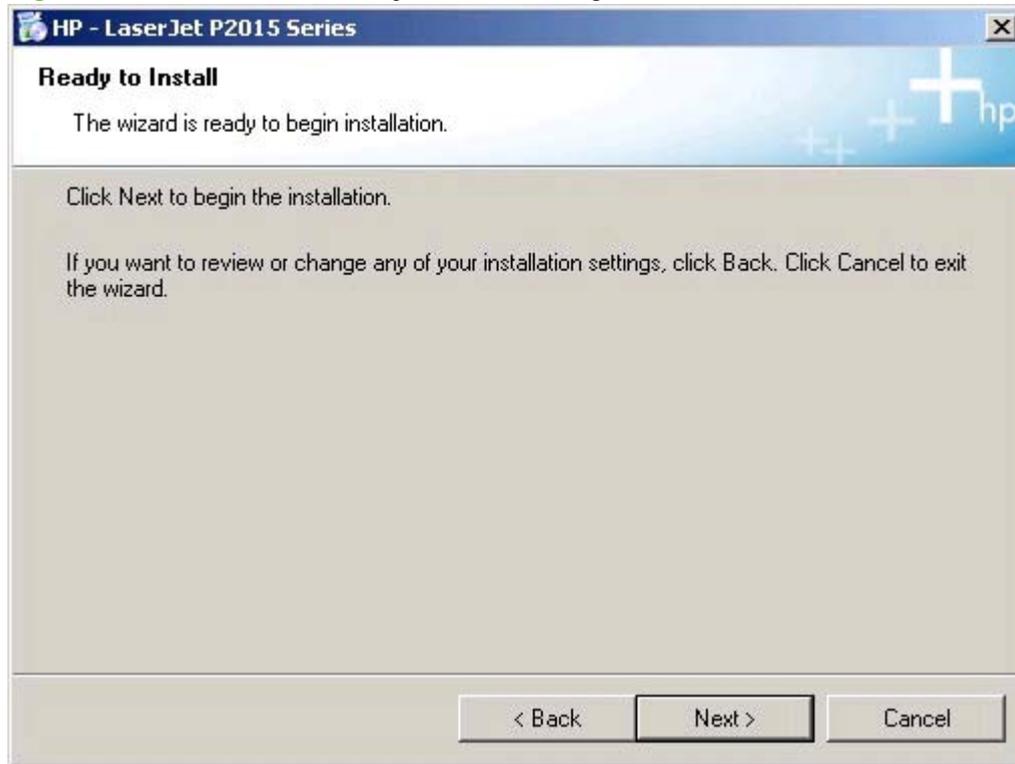
**Figure 3-23** USB install – **Destination Folder** dialog box



The **Destination Folder** dialog box shows where the printing-system software files are installed. The default option creates an **HP** program group, which you access by clicking **Start** and then selecting **Programs** or **All Programs**.

Click **Next** to open the **Ready to Install** dialog box.

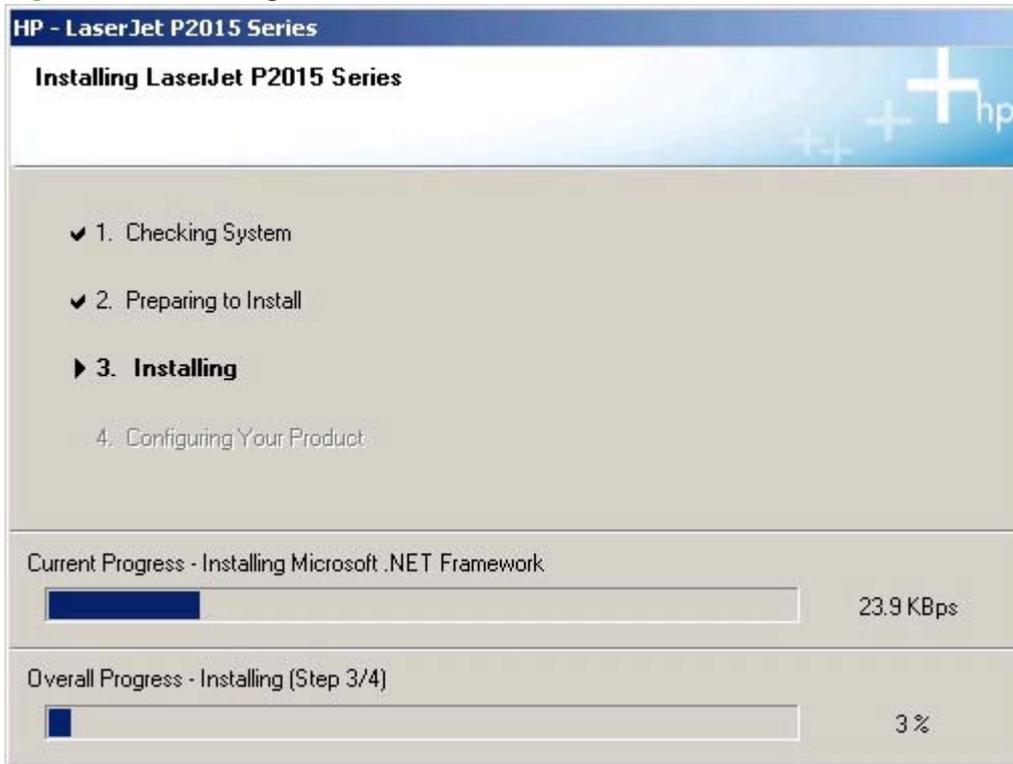
**Figure 3-24** USB install – **Ready to Install** dialog box



To continue the installation, click **Next**.

Between dialog boxes, an **Installing** screen appears. This screen shows the progress of the installation and provides information about the number of subtasks that have been completed in each step. This process might take a few minutes.

**Figure 3-25** Installing screen



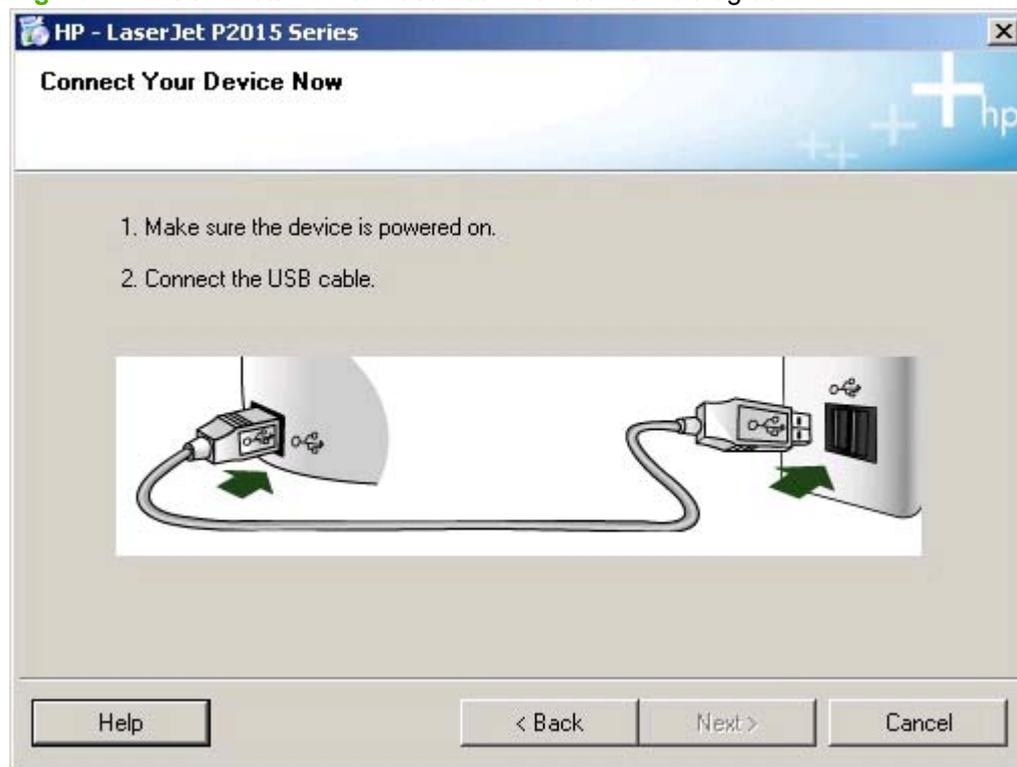
Next, the **Connection Type** dialog box appears.

**Figure 3-26** USB install – **Connection Type** dialog box



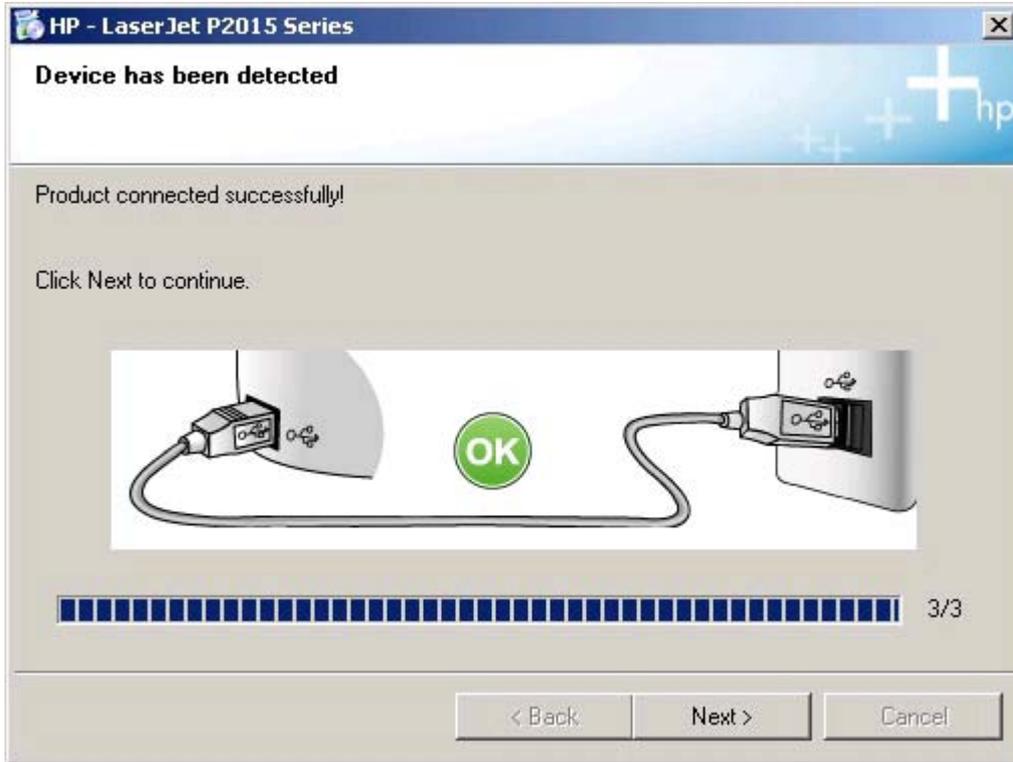
Select the **Directly to this computer using a USB cable.** option, and then click **Next** to continue the installation. The **Connect Your Device Now** dialog box appears.

**Figure 3-27** USB install – **Connect Your Device Now** dialog box



When the **Connect Your Device Now** screen appears, make sure that the HP LaserJet P2015 is turned on. Then attach the USB cable between the computer and the HP LaserJet P2015.

**Figure 3-28** USB install – **Device has been detected** dialog box



The **Device has been detected** dialog box appears. Click **Next** to continue the installation. It might take as long as 35 minutes for the installation to finish.

**Figure 3-29** USB install – **Restart your computer** dialog box



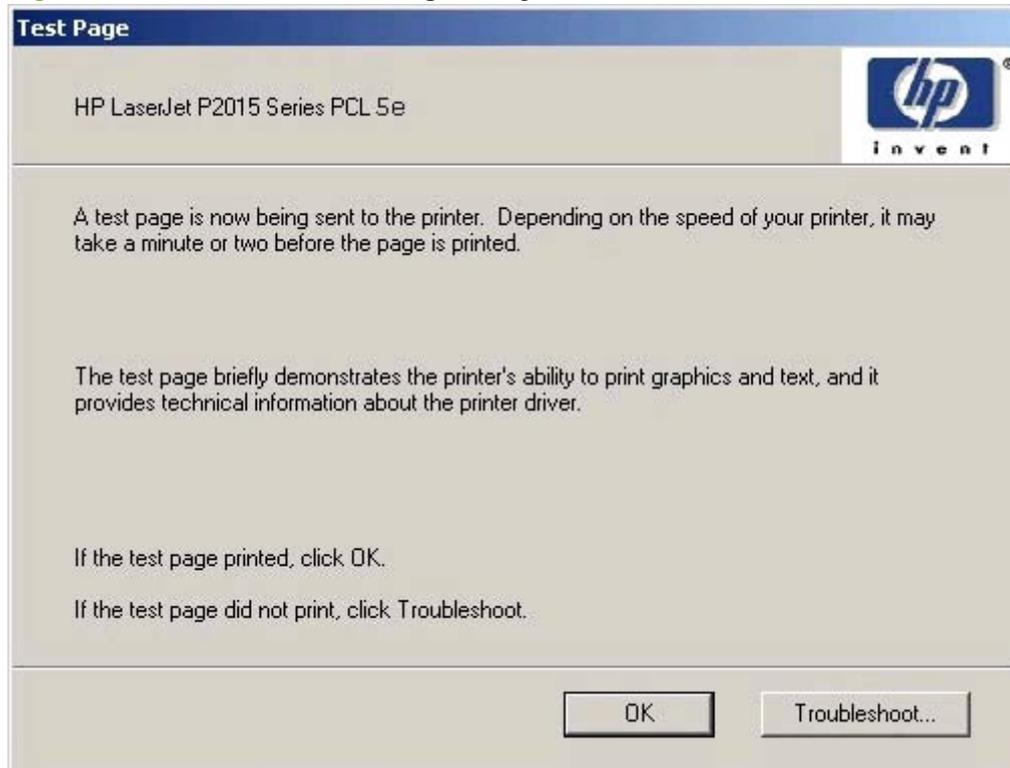
The **You must restart your computer to finish the installation of your device.** dialog box appears. Click **Restart** to continue the installation.

**Figure 3-30** USB install – **Congratulations! Software installation complete** dialog box



When you start the computer again, the **Congratulations! Software installation complete.** dialog box appears. Click **Finish** to continue.

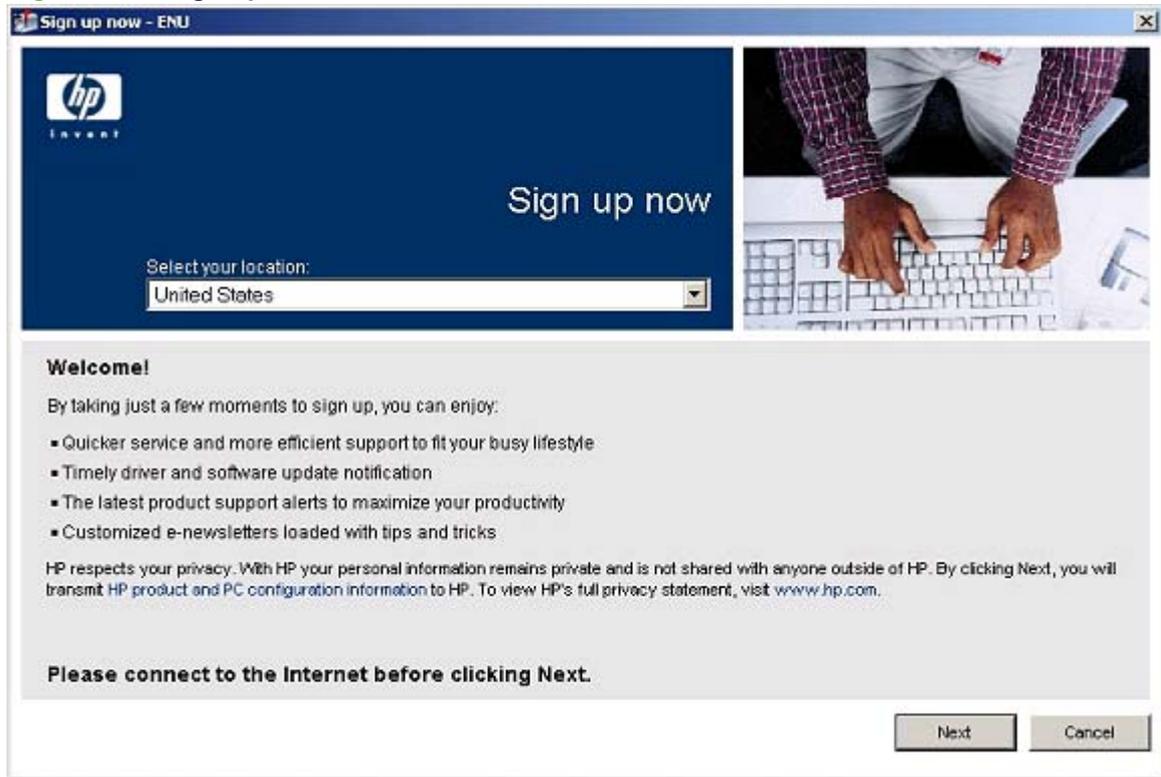
**Figure 3-31** USB install – **Test Page** dialog box



The **Test Page** dialog box indicates that a test page is being sent to the HP LaserJet P2015. If the test page prints successfully, click **OK**. If the test page fails to print, click **Troubleshoot**. This option opens a series of troubleshooting dialog boxes.

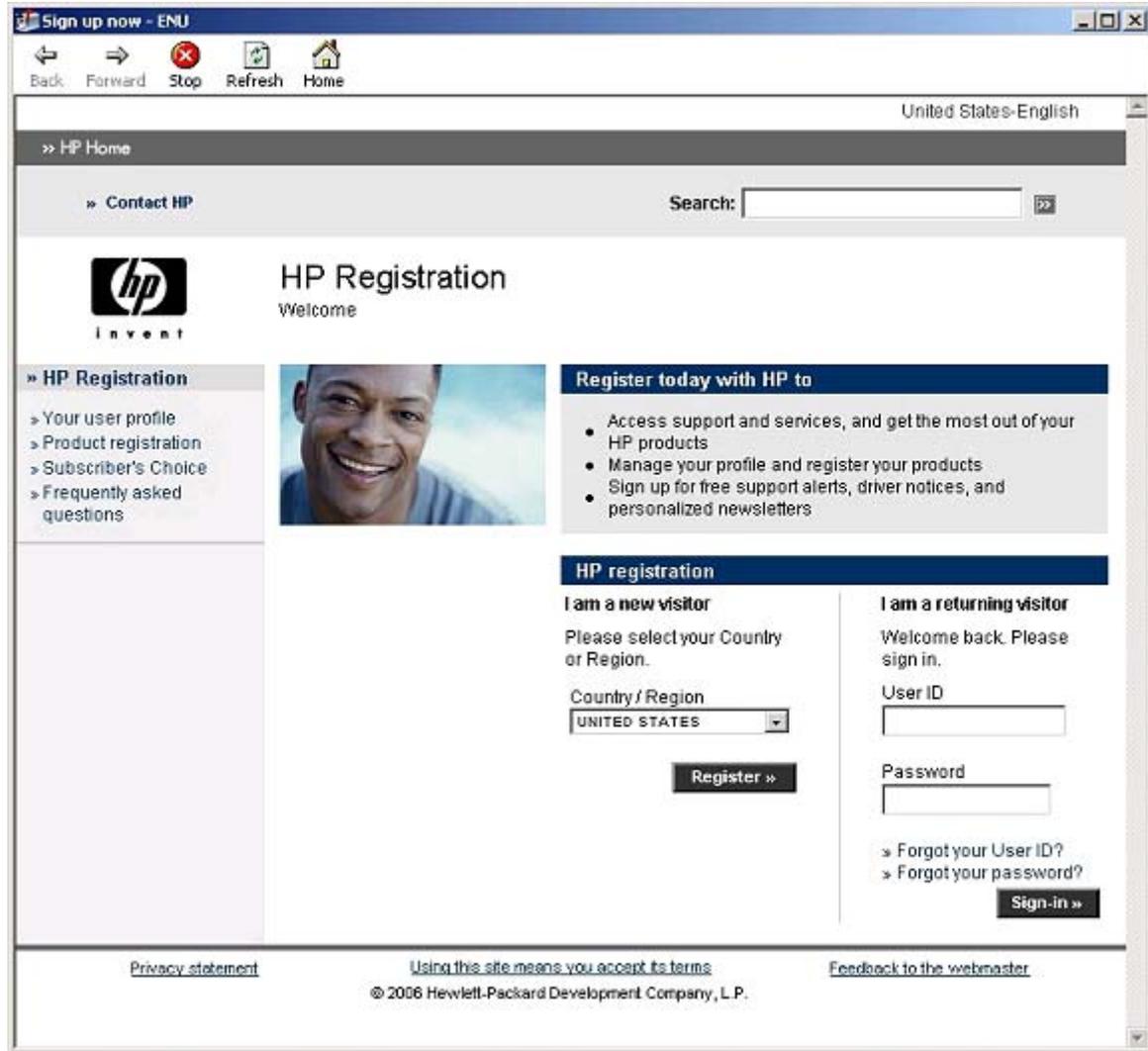
The **Sign up now** screen appears.

Figure 3-32 Sign up now screen



If you have Web access, you can sign up to receive information from HP. On the **Sign up now** screen, click **Next** to open the **HP Registration** Web page. Follow the onscreen instructions to register.

**Figure 3-33** HP Registration screen



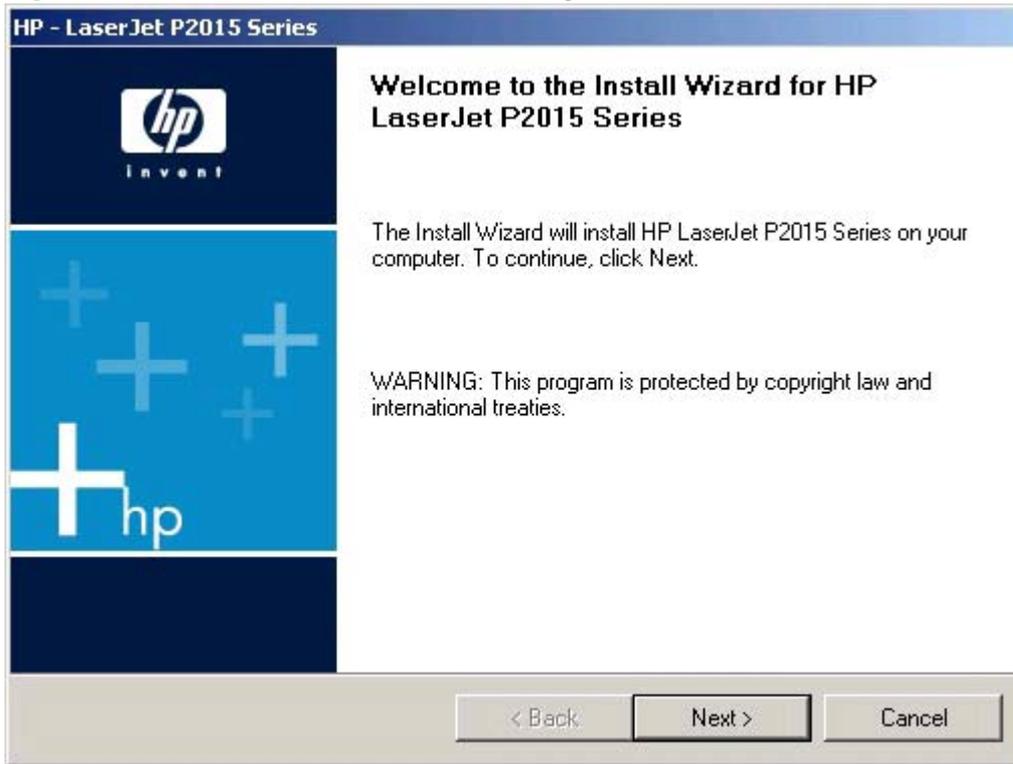
### Network installation dialog box options for Windows

This section shows the dialog boxes that appear when you install the HP LaserJet P2015 over a network connection.

In any dialog box where it is available, click the **Back** button to return to the previous dialog box, or click the **Cancel** button to cancel the installation.

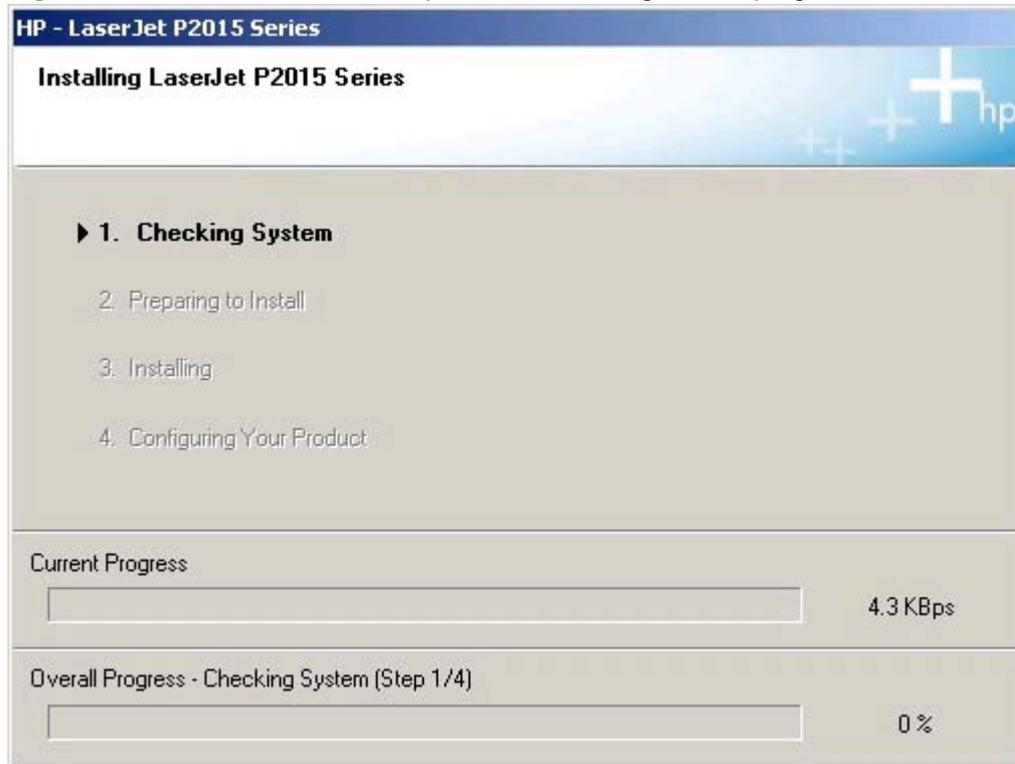
 **NOTE:** The sequence of dialog boxes might differ from what is shown here, depending on the product, the network configuration, and the selected options.

**Figure 3-34** Network install — **Welcome** dialog box



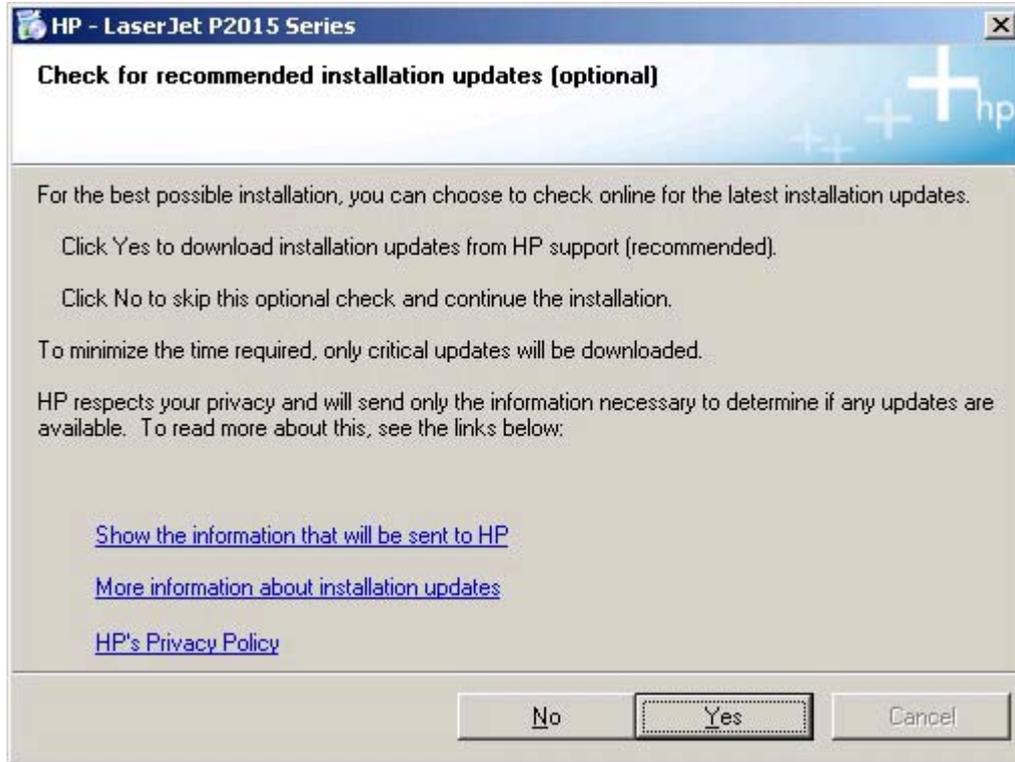
Click **Next** to continue. Between dialog boxes, a current-progress screen appears. This screen shows the progress of the installation and provides information about the number of subtasks that have been completed in each step. The current-progress screen appears throughout the installation, but is sometimes covered by a new dialog box that contains the next option in the installation sequence.

**Figure 3-35** Network install – Sample screen showing current progress



 **NOTE:** The **Check for recommended installation updates** dialog box appears only if the installer detects that a network connection is available.

**Figure 3-36** Network install – **Check for recommended installation updates (optional)** dialog box



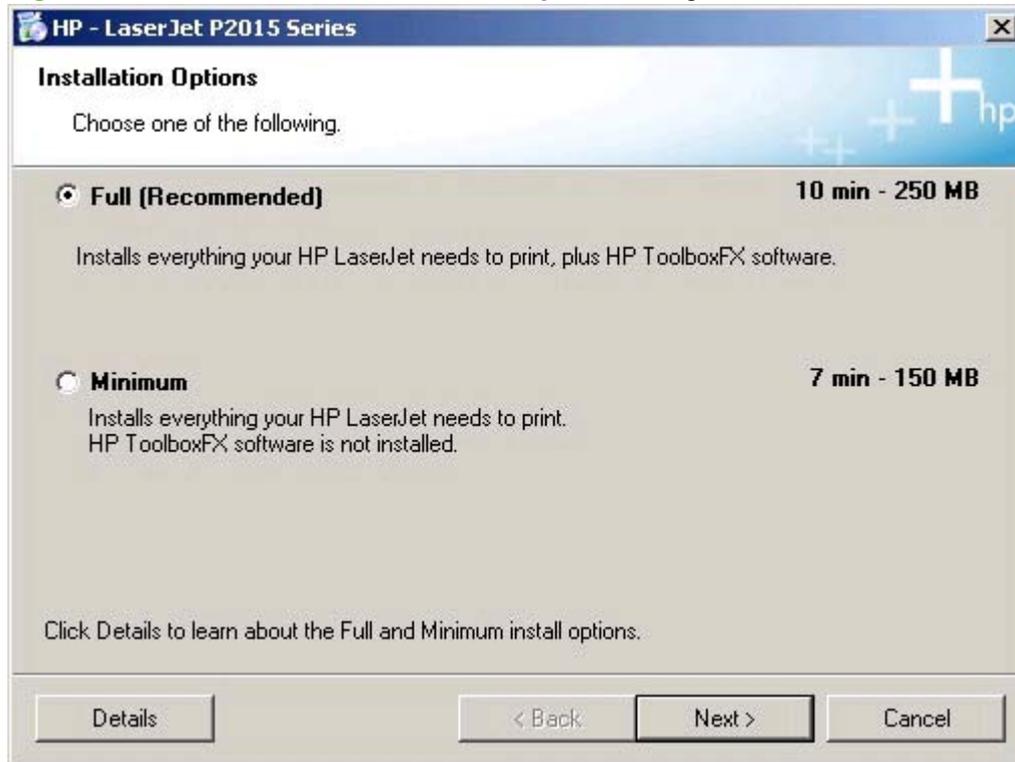
If you have Web access, click **Yes** to check for HP LaserJet P2015 installation updates. This step is optional.

Click any of the links to open a screen that provides further information:

- **Show the information that will be sent to HP**
- **More information about installation updates**
- **HP's Privacy Policy**

Click **No** to continue the installation without checking for installation updates.

**Figure 3-37** Network install – **Installation Options** dialog box

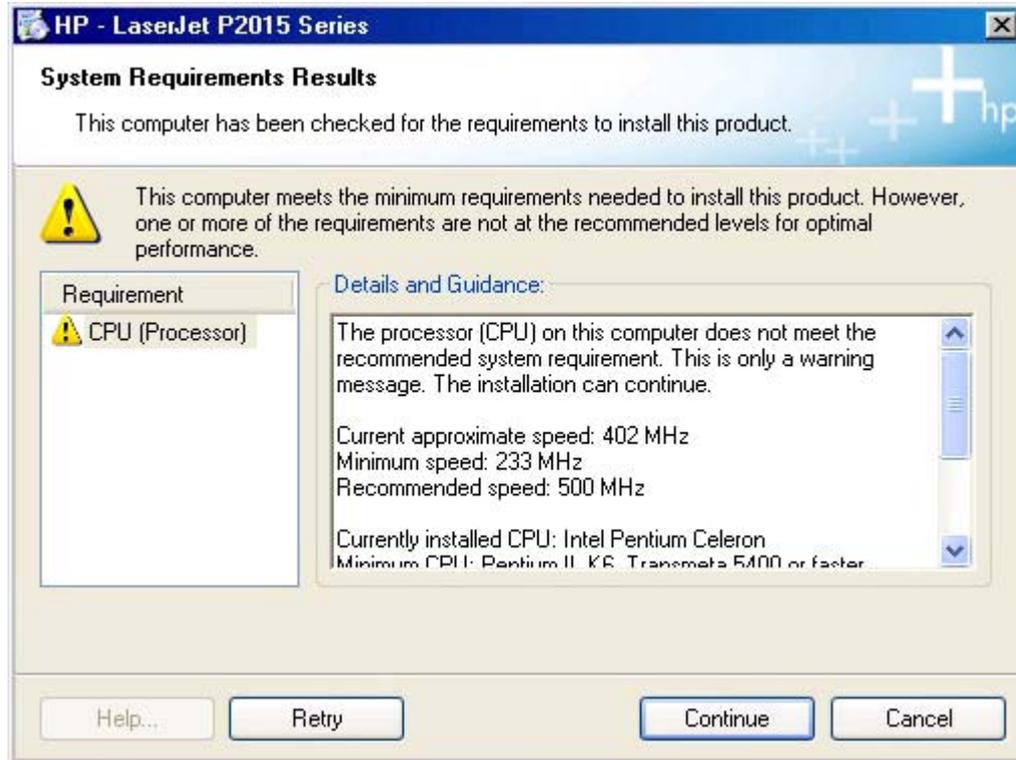


Select the **Full (Recommended)** option to install the complete printing-system software.

Select **Minimum** to install only limited software.

Click **Details** for information about the **Full (Recommended)** and **Minimum** installations and to find out if your system meets the recommended installation requirements. A sample **System Requirements Results** dialog box is shown in the following illustration.

**Figure 3-38** Network Install – sample **System Requirements Results** dialog box



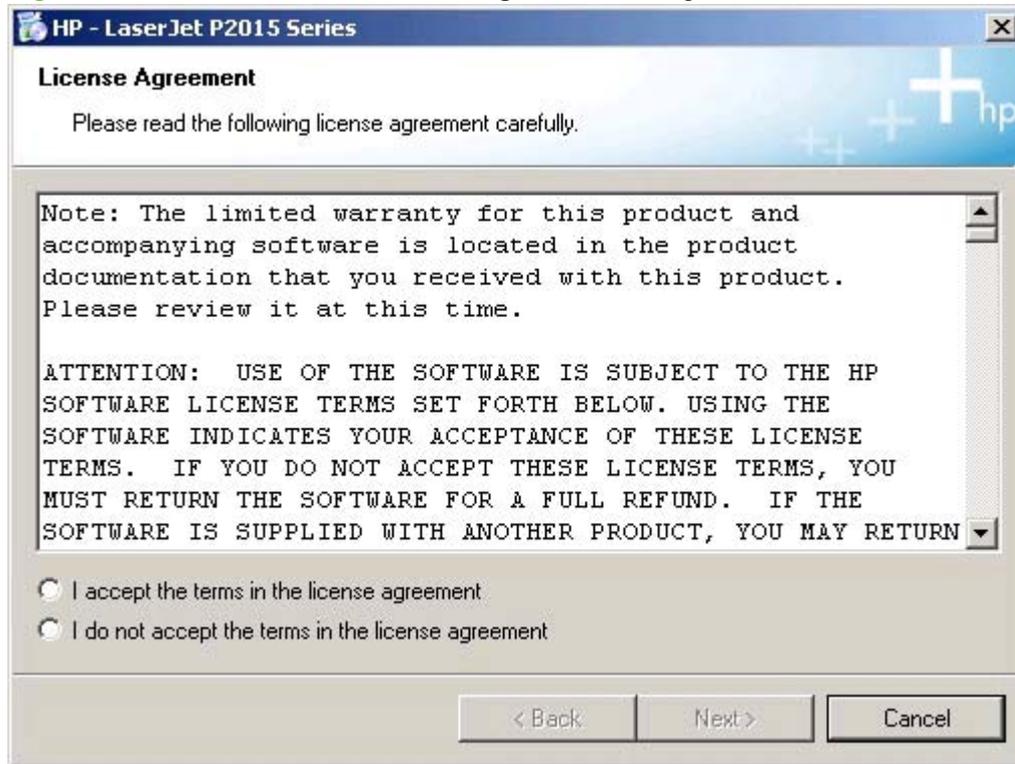
 **NOTE:** When appropriate, the **Continue** button is available and installation can proceed despite the warning, such as in the **System Requirements Results** screen in the illustration. If a blocking condition prevents the installation from continuing, the **Continue** button is not available.

Click **Retry** to check again for minimum system requirements.

Click **Continue** to proceed with installation.

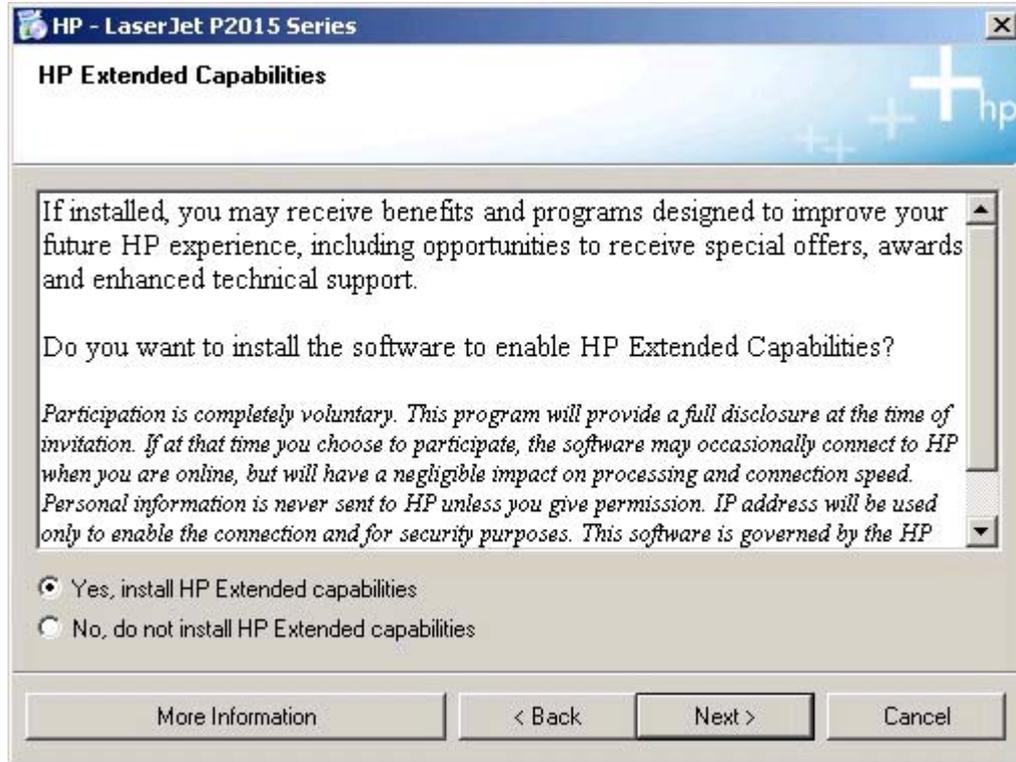
Between dialog boxes, a **Preparing to Install** screen appears. This screen shows the progress of the installation and provides information about the number of subtasks that have been completed in each step. This screen disappears, and the **License Agreement** dialog box appears.

**Figure 3-39** Network install – Licence Agreement dialog box



When you select the **I accept the terms in the license agreement** option, the **Next** button becomes available. Click **Next**. The **HP Extended Capabilities** dialog box appears.

**Figure 3-40** Network install – **HP Extended Capabilities** dialog box



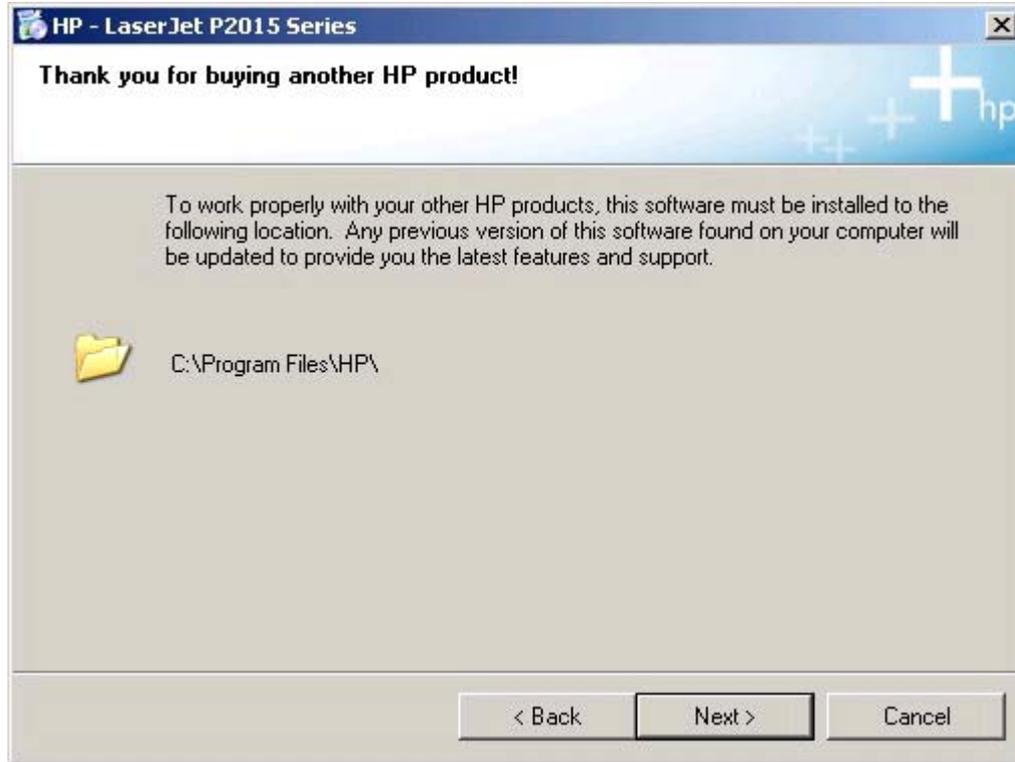
If you select the **Install HP Extended capabilities** option, a dialog box appears two weeks after installing the HP LaserJet P2015 product, giving details about participation in the HP Product Survey Program.

If you select the **Do not install HP Extended capabilities** option, you are not invited to participate in the HP Product Survey Program.

Click **More Information** to find out more about HP Extended Capabilities and the HP Product Survey Plan.

Click **Next** to continue the installation. The **Destination Folder** dialog box appears.

**Figure 3-41** Network install – **Destination Folder** dialog box



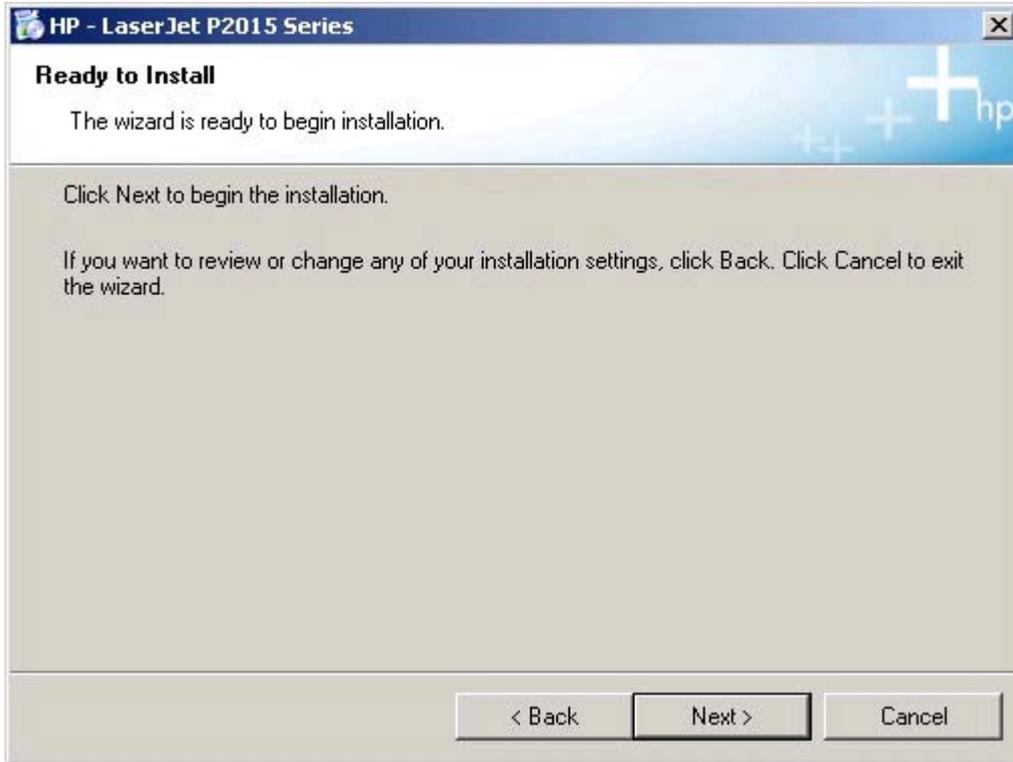
The **Destination Folder** dialog box shows where the printing-system software files are installed. The default option creates an **HP** program group, which you access by clicking **Start** and then selecting **Programs** or **All Programs**.

**NOTE:** The destination-folder path might differ from what is shown in the illustration. If HP software has been installed previously, the **Change...** option will *not* appear.

To change the location of the files to be installed, click the **Change** button, navigate to the appropriate location, and then click **OK**.

Click **Next** to open the **Ready to Install** dialog box.

**Figure 3-42** Network install – **Ready to Install** dialog box



To continue the installation, click **Next**.

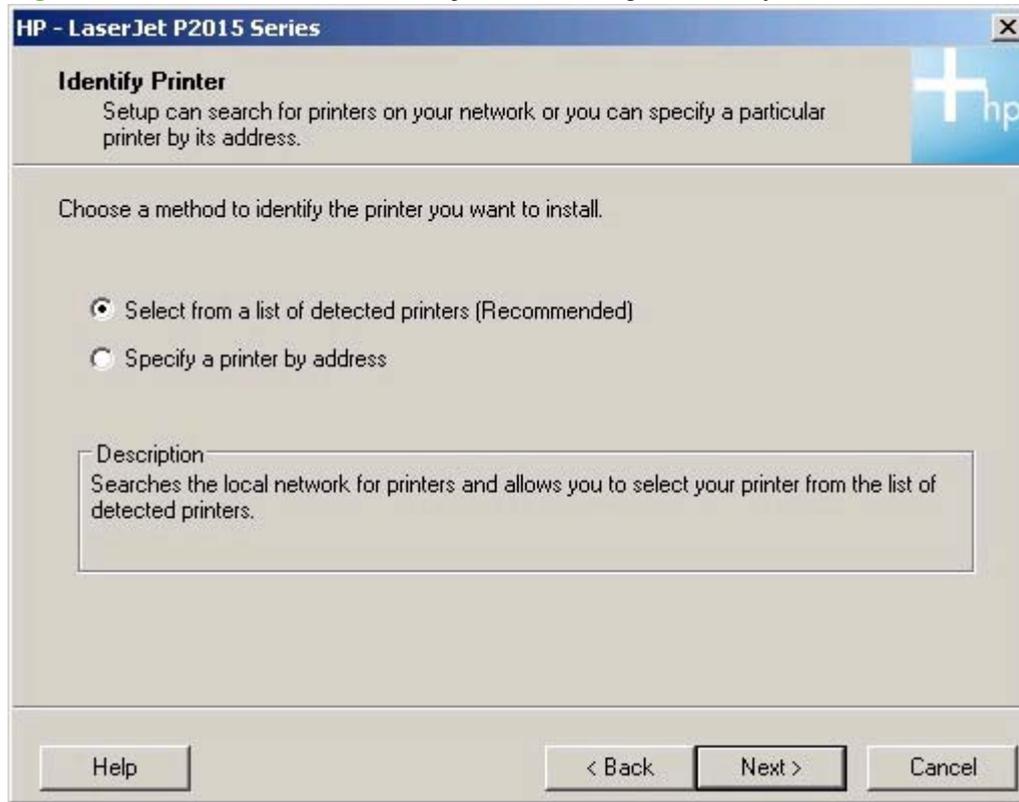
Between dialog boxes, an **Installing** screen appears. This screen shows the progress of the installation and provides information about the number of subtasks that have been completed in each step.

**Figure 3-43** Network install – **Connection Type** dialog box



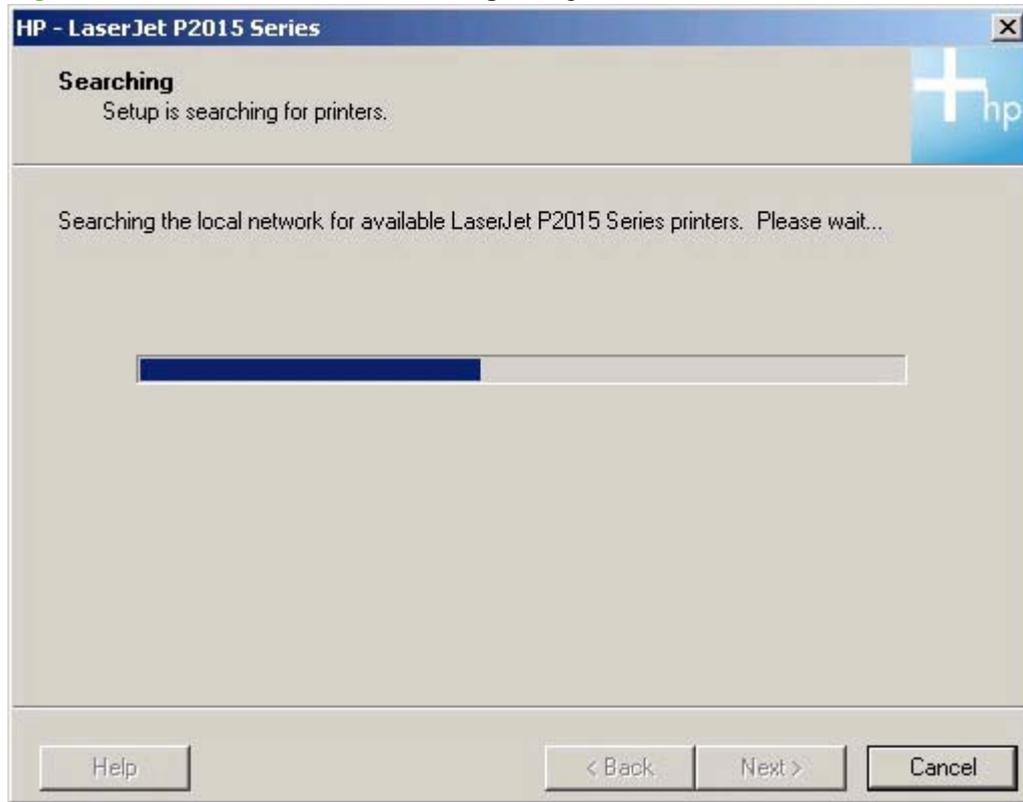
Select the **Through the network** option and then click **Next** to continue the installation. The **Identify Printer** dialog box appears.

**Figure 3-44** Network install – **Identify Printer** dialog box



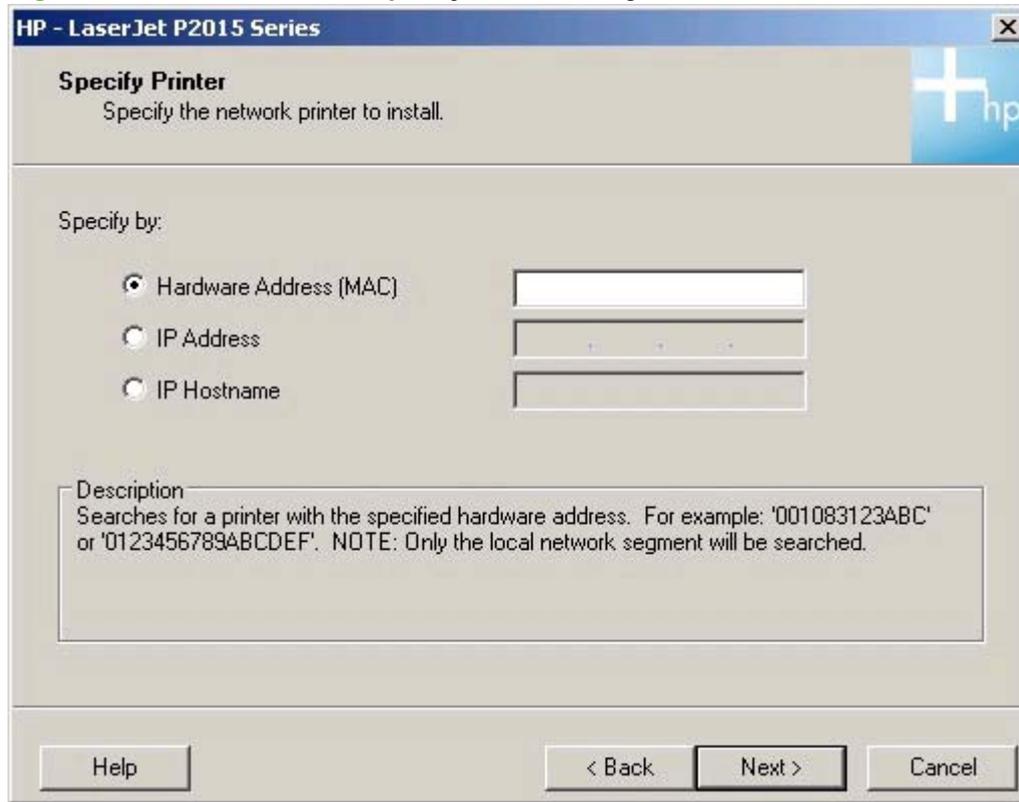
If you select **Search from a list of detected printers (Recommended)**, the **Searching** dialog box appears as the software searches the network for the HP LaserJet P2015.

**Figure 3-45** Network install – **Searching** dialog box



If you select the **Specify a printer by address** option on the **Identify Printer** dialog box, the **Specify Printer** dialog box appears.

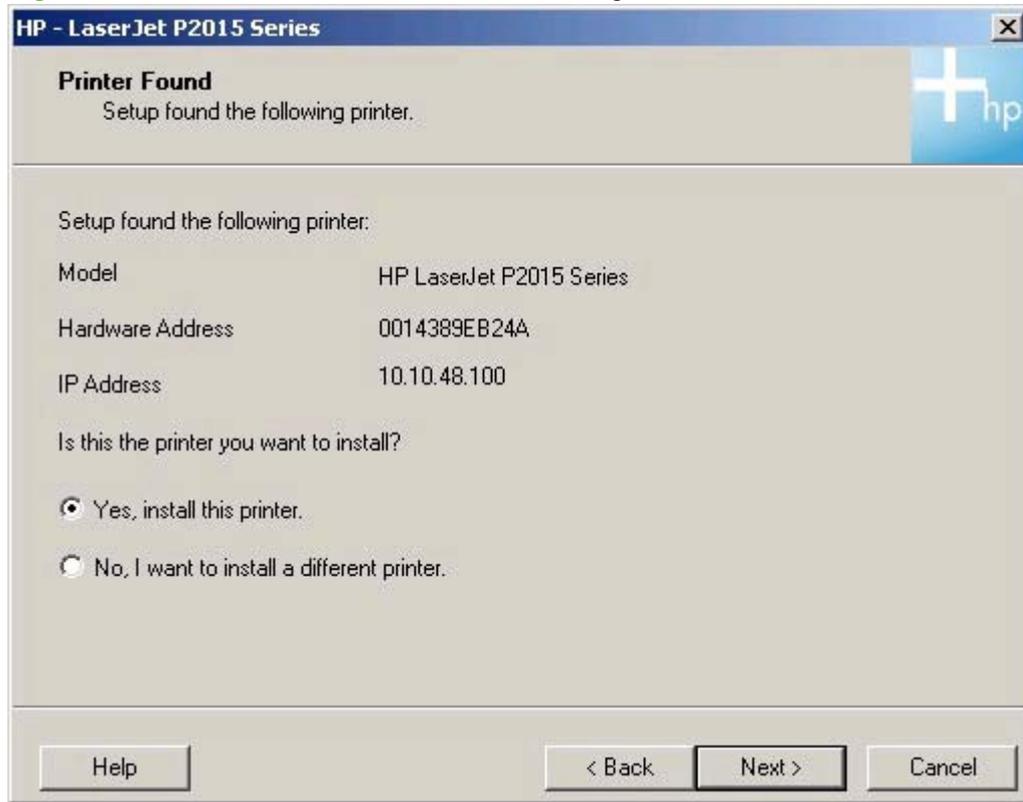
**Figure 3-46** Network install – **Specify Printer** dialog box



Specify the HP LaserJet P2015 by hardware address (MAC), TCP/IP address, or IP Hostname. After typing one of these options in the appropriate field, click **Next** to continue.

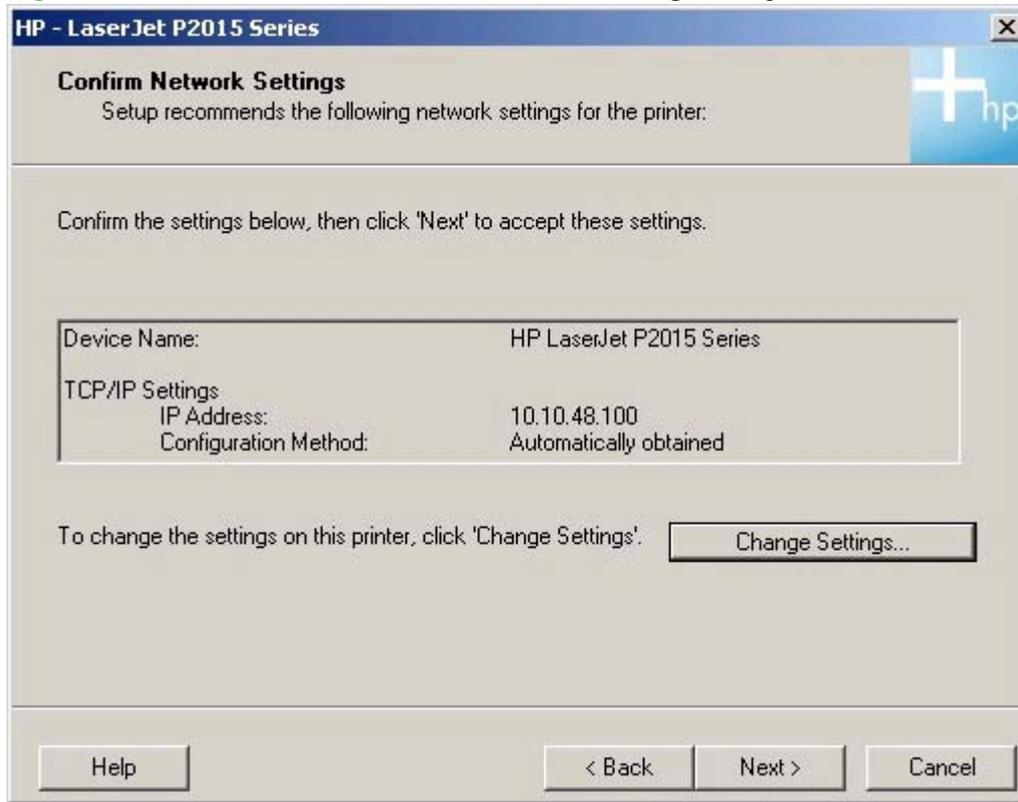
The **Printer Found** dialog box appears either after the software completes its search for the HP LaserJet P2015, or after you specify the product.

**Figure 3-47** Network install – **Printer Found** dialog box



The **Yes, install this printer** option is selected by default. To install a different printer, select the **No, I want to install a different printer** option. To continue installing the HP LaserJet P2015, click **Next**. The **Confirm Network Settings** dialog box appears.

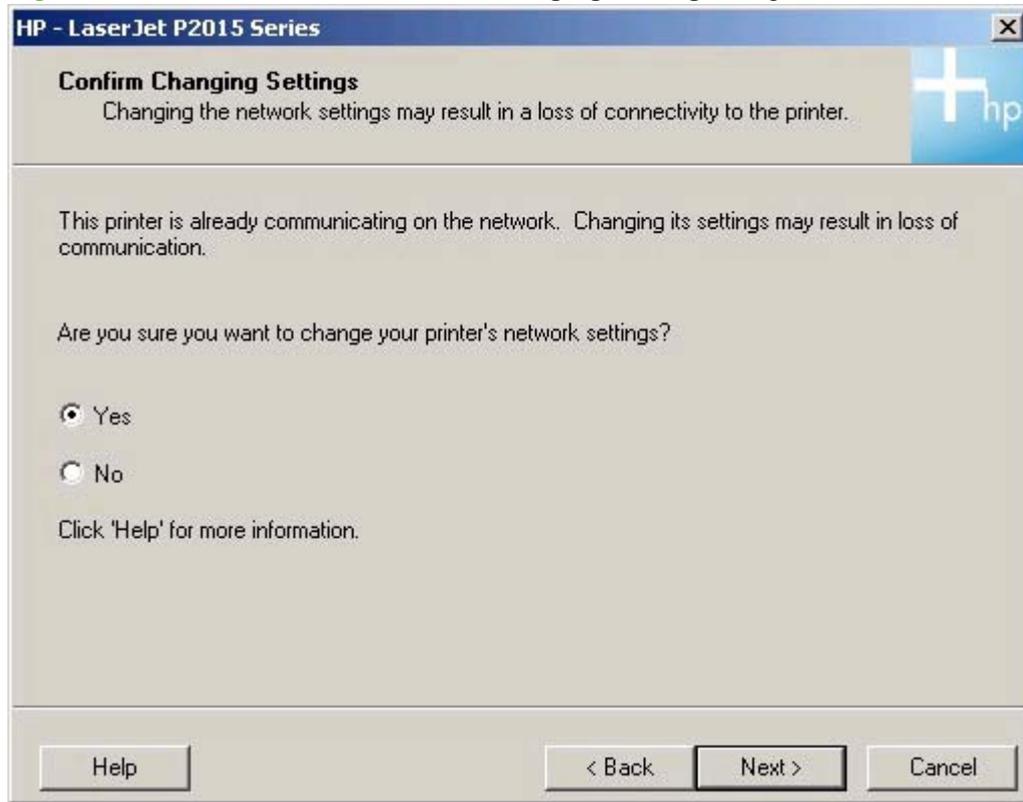
**Figure 3-48** Network install – **Confirm Network Settings** dialog box



To accept the settings (recommended), click **Next** to continue the installation. The **Congratulations! Software installation complete** dialog box appears.

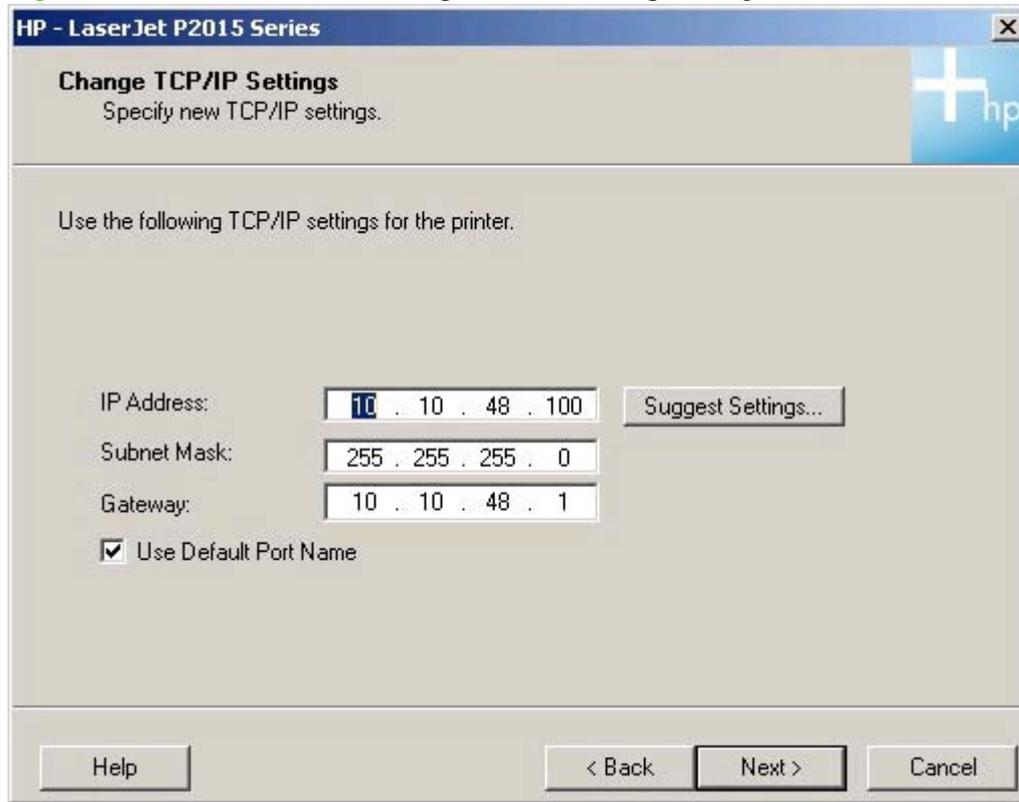
To change the settings, click **Change TCP/IP Settings**. The **Confirm Changing Settings** dialog box appears.

**Figure 3-49** Network install – **Confirm Changing Setting** dialog box



Because the printer is already configured for the existing network, first confirm that you want to change the settings. Click **Next** to continue. The **Set Network Protocol** dialog box appears.

**Figure 3-50** Network install – **Change TCP/IP Settings** dialog box



To change the settings, make your changes in the dialog box that appears, and then click **Next** to continue. The **Confirm Settings** dialog box appears (see [Figure 3-48 Network install – Confirm Network Settings dialog box on page 131](#)).

Click **Next** to continue. It might take as long as 35 minutes for this step to finish the installation process.

**Figure 3-51** Network install – **Restart your computer** dialog box



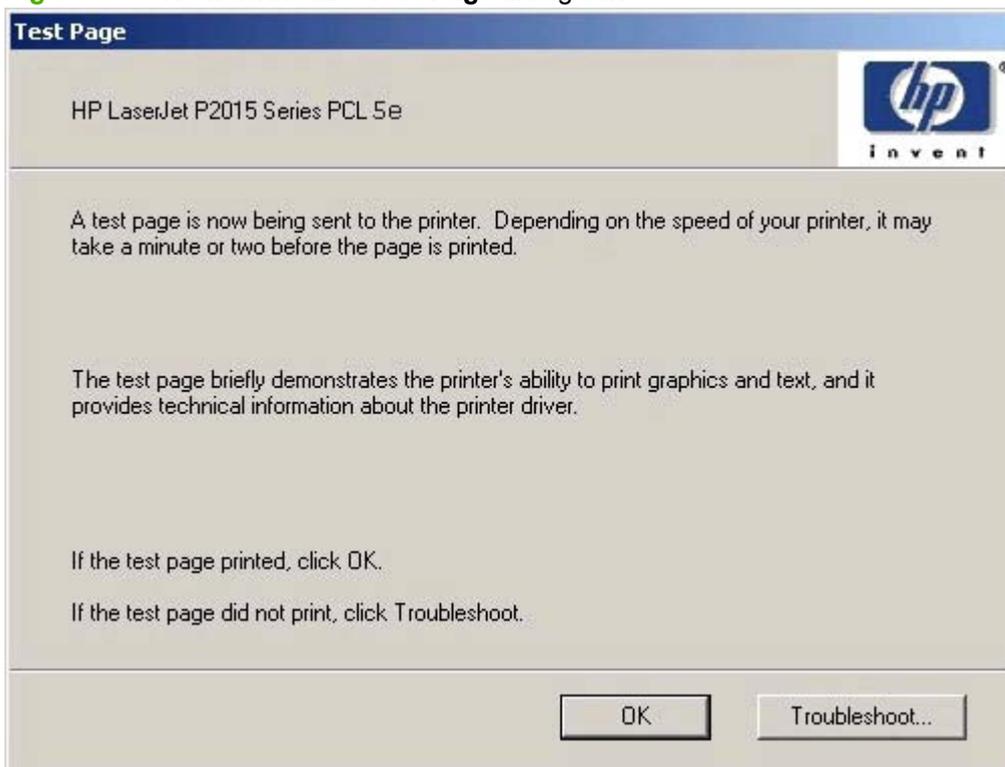
The **You must restart your computer to finish the installation of your device.** dialog box appears. Click **Restart** to continue the installation.

**Figure 3-52** Network install – **Congratulations! Software installation complete** dialog box



Click **Finish** to continue the installation. The **Test Page** dialog box appears.

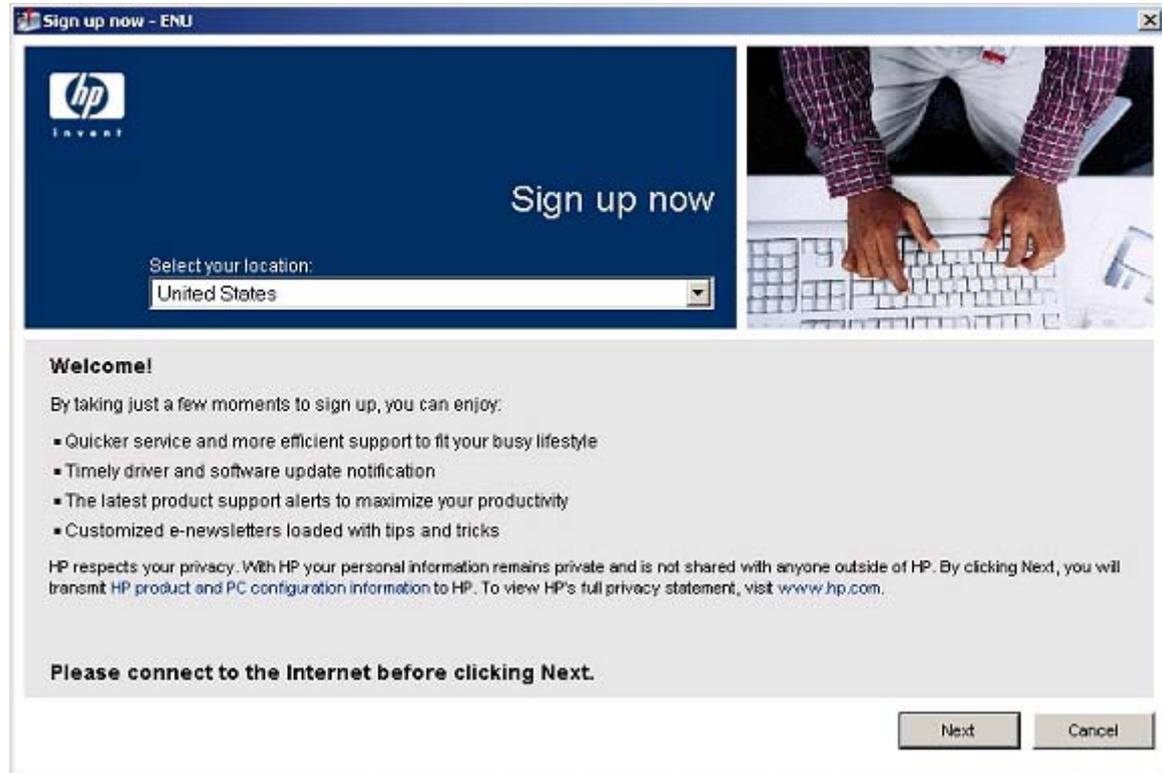
**Figure 3-53** Network install – **Test Page** dialog box



Click **OK** if the test page prints successfully. If the test page fails to print, click **Troubleshoot**. This option opens a series of troubleshooting dialog boxes.

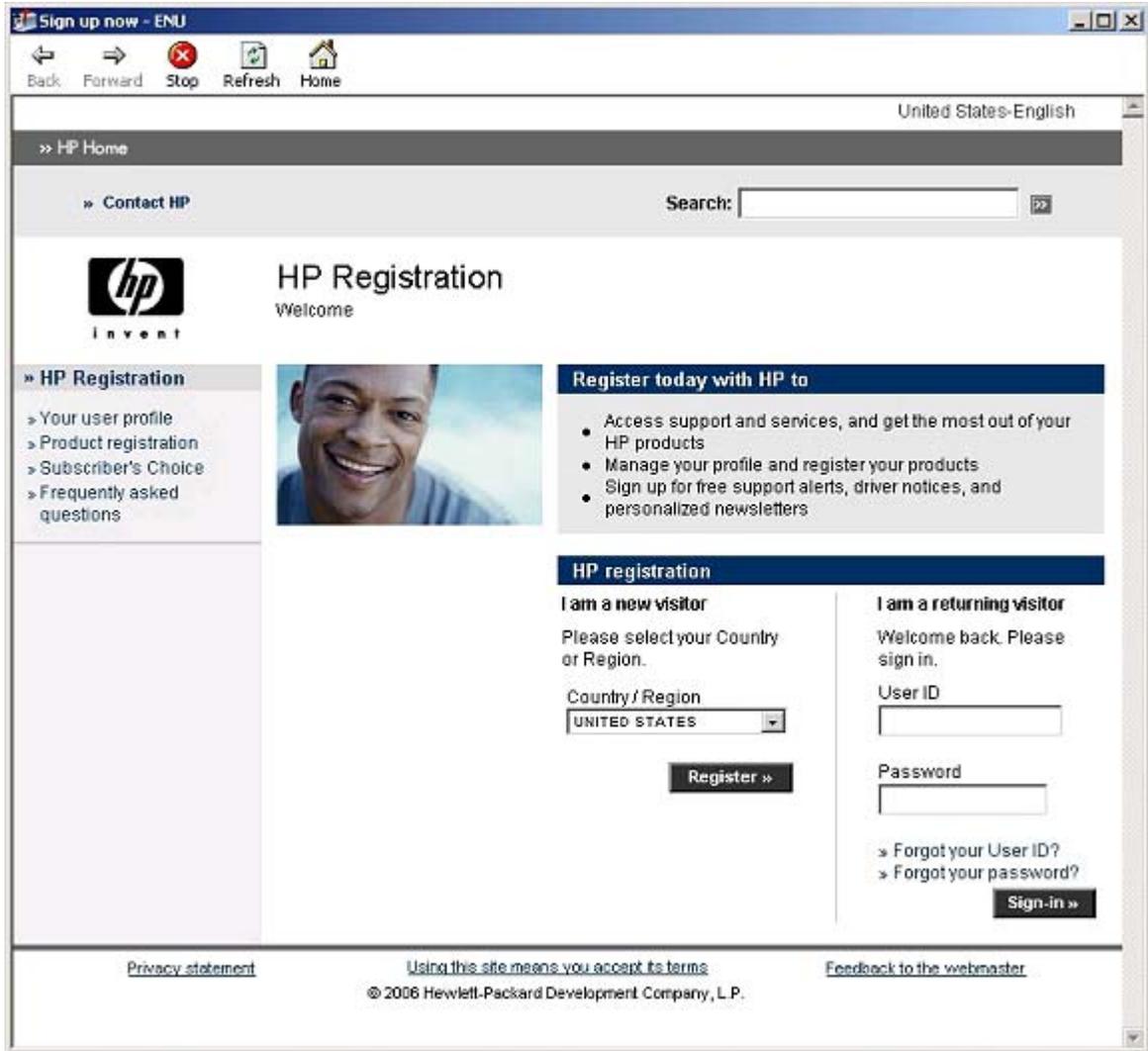
The **Sign up now** screen appears.

**Figure 3-54** Sign up now screen



If you have Web access, you can sign up to receive information from HP. On the **Sign up now** screen, click **Next** to open the **HP Registration** Web page. Follow the onscreen instructions to register.

Figure 3-55 HP Registration screen



MS Windows install



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# 4 HP PCL 6, PCL 5, and PS emulation unidrivers for MS Windows

## Introduction

This document describes the features of the HP LaserJet P2015 unidrivers: the HP PCL 6 Unidriver, the HP PCL 5e Unidriver, and the HP Postscript Level 3 Emulation Unidriver (PS 3 Emulation Unidriver) for Windows 2000, Windows XP (32-bit and 64-bit), and Windows Server 2003 (32-bit and 64-bit).

You can control print jobs from several places:

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

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

When installing the print-system software in Windows 2000, Windows XP, and Windows Server 2003, the HP PCL 6 Unidriver is installed by default. The HP PCL 5e Unidriver and the PS 3 Emulation Unidriver 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 Unidriver, the HP PCL 5e Unidriver, and the PS 3 Emulation Unidriver.

This document also describes differences between the HP PCL 6 Unidriver, the HP PCL 5e Unidriver, and the PS 3 Emulation Unidriver. Unless otherwise noted, features described here apply to all three.

Topics:

- [Access to print drivers in Windows 2000 and Windows XP](#)
- [Help system](#)
- [HP postscript level 3 emulation support](#)
- [Advanced tab features](#)
- [Paper/Quality tab features](#)
- [Effects tab features](#)
- [Finishing tab features](#)

- [Services tab features](#)
- [Device Settings tab features](#)
- [About tab features](#)

# Access to print drivers in Windows 2000 and Windows XP

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:

- [Software-program print-dialog box](#)
- [Print-driver user interface](#)

## Software-program print-dialog box

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

1. Click **File**.
2. Click **Print**.
3. Click **Properties**.

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

## 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:

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 device name.
5. Click **Printing Preferences**.

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

- **Advanced**
- **Paper/Quality**
- **Effects**
- **Finishing**
- **Services**

All of these tabs are device-specific.

## 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 device name.
5. Click **Properties**.

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

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

Only device-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 LaserJet P2015 PCL 6 and PS emulation unidrivers include a full-featured Help system to provide assistance with printing and configuration options. The following Help options are available.

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

## “What's this?” Help

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

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

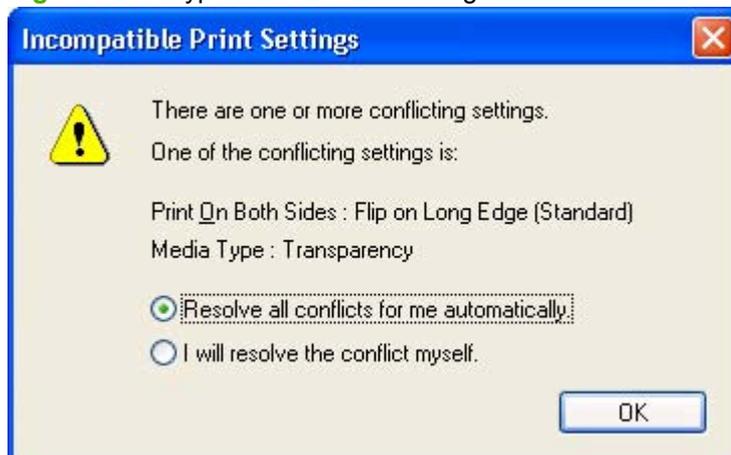
## Context-sensitive Help

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

## Constraint messages

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

**Figure 4-1** A typical constraint message



Whenever a constraint message appears with **Resolve all conflicts for me automatically** or **I will resolve the conflict myself** buttons, the action of the buttons is as follows:

- To reject the change that was just made, returning the control to its previous value, click **Resolve all conflicts for me automatically** and then click **OK**.
- To accept the change that was just made and return to the driver settings to resolve the conflict, click **I will resolve the conflict myself** and then click **OK**.

## HP postscript level 3 emulation support

The HP postscript level 3 emulation maintains full compatibility with Adobe PS level 3 when PS level 3 soft fonts are purchased from Adobe.

Users of Adobe-licensed software might also have the right to use the Adobe PS level 3 print drivers from Adobe with the HP LaserJet printer postscript level 3 emulation PPD, available on the HP LaserJet printer software CD or from the HP Web site. Users must comply with all Adobe licensing agreements when using the Adobe PS level 3 print driver, as stated on the Adobe Web site at [www.adobe.com/support/downloads/license.html](http://www.adobe.com/support/downloads/license.html).

## Advanced tab features

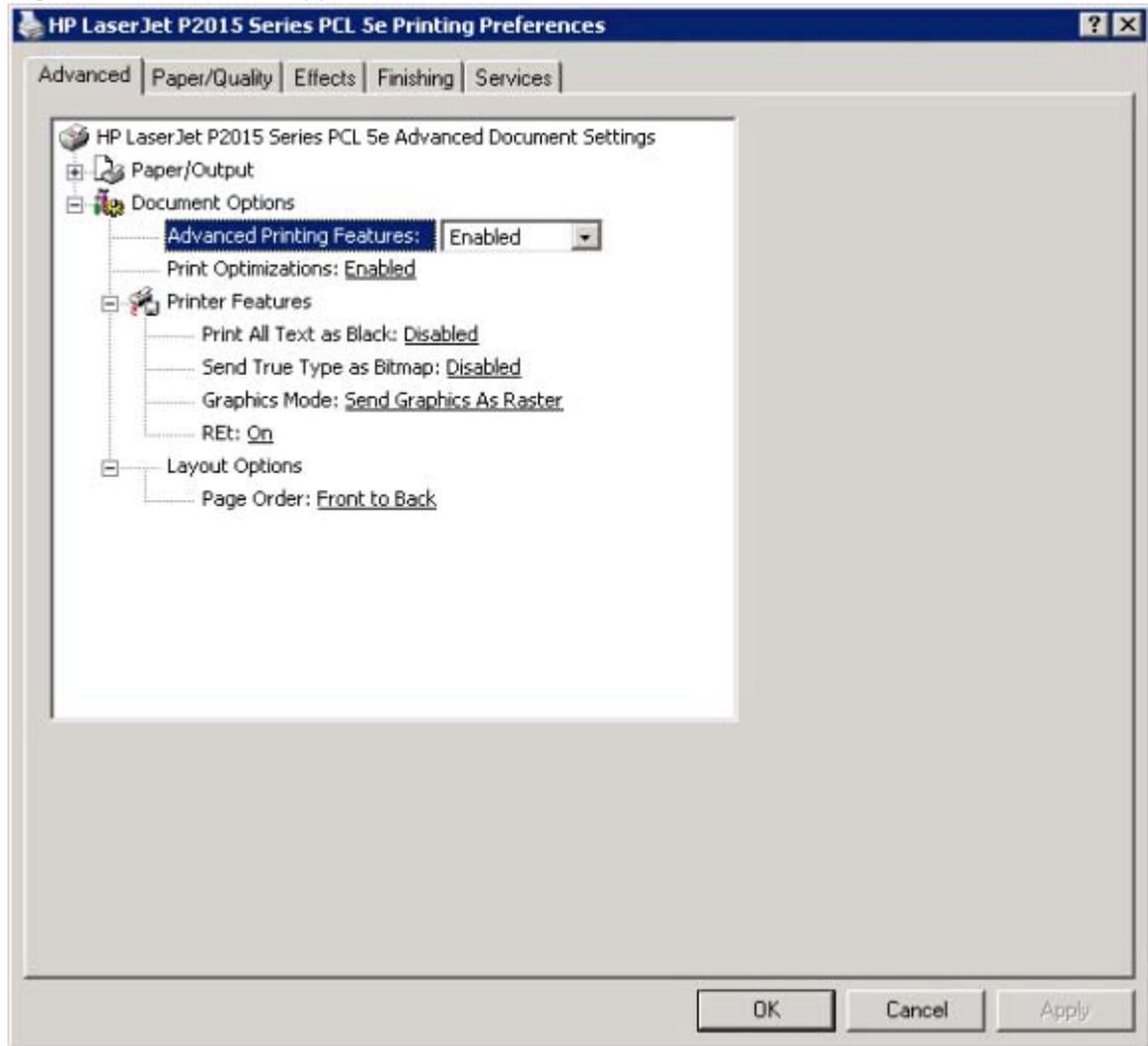
To gain access to the **Advanced** tab, follow these steps:

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 device 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.

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



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

- [Paper/Output](#)
- [Document Options](#)

## Paper/Output

The **Paper/Output** settings contain the **Copy Count** control:

## 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 will result in 100 copies (10 x 10) being printed. Set the number of copies in the software program, wherever possible.

## Document Options

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

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

## Advanced Printing Features

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

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 **NOTE:** Print Optimization settings are available only in the HP PCL 6 Unidriver and HP PCL 5e Unidriver. They are not available in the PS 3 Emulation Unidriver.

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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 device fonts for TrueType fonts and scanning for horizontal and vertical rules, are turned off.

## PostScript Options

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 **NOTE:** Postscript Options are available only in the PS 3 Emulation Unidriver. They are not available in the HP PCL 6 Unidriver and HP PCL 5e Unidriver.

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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, use this option to create a postscript file and print 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** drop-down menu:

- **Automatic.** This is the default setting. The PS 3 Emulation Driver determines which format is best.
- **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.

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

- **Yes.** Select this option to print a negative of the image by reversing the values for black and white.
- **No.** Print the image without reversing the values for black and white. This is the default setting.

## 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.

- **REt**

HP Resolution Enhancement technology (REt) is a suite of proprietary image-enhancement technologies. Working with the image-writing systems in the print cartridge, FastRes 1200 and HP REt ensure professional-quality printing.

- **Alternative Letterhead Mode**

Use this feature to load letterhead or preprinted paper into the tray the same way for all jobs, whether printing on one side or both sides of the sheet. When this option is selected, load the paper the same as for printing on both sides. See the user documentation that came with the device for instructions about loading letterhead for printing on both sides.

When this option is selected, the device speed slows to the speed required for printing on both sides.

## 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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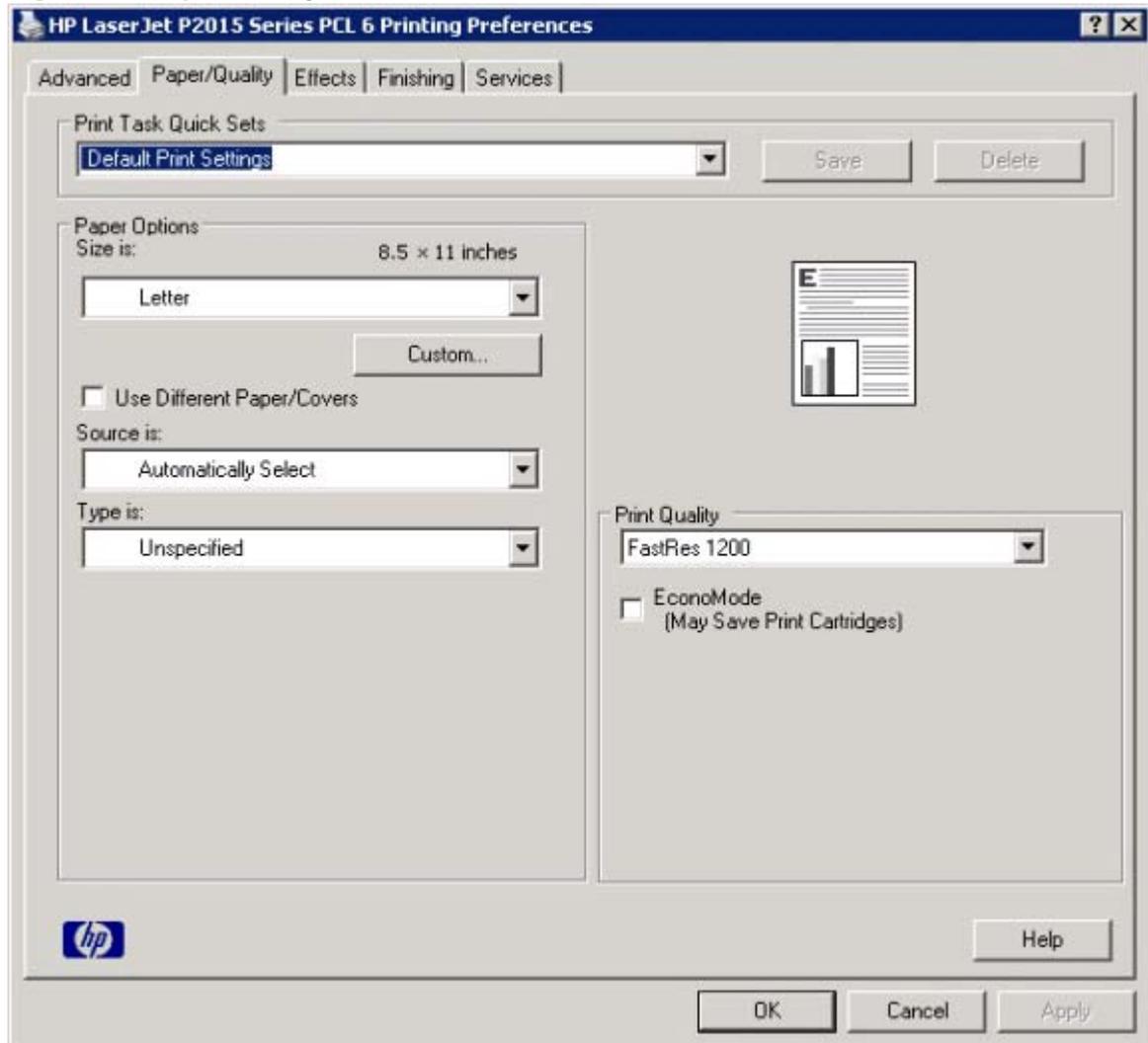
## Paper/Quality tab features

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

1. Click **Start**.
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 device name.
5. Click **Printing Preferences**.
6. 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](#)
- [Print Quality](#)

## 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**

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

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 user on the computer last closed the printing **Properties** dialog box by clicking **OK**.

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

**Table 4-1 Print Task Quick Set default values for the HP LaserJet P2015 printer**

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

**Table 4-1 Print Task Quick Set default values for the HP LaserJet P2015 printer (continued)**

Driver feature	Feature setting location	Default values for U.S. English Print Task Quick Sets	Preconfigurable
Style (watermark font)	Effects tab, Watermark Details dialog box, Font Attributes group box	Regular	Yes <sup>1</sup>
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
Economode	Paper/Quality tab, Print Quality dialog box	Available, unselected	Yes
Unlabeled group box	Job Storage tab	Status message: for example, <b>Your job will be printed but not stored on the printer</b>	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 ( <b>Windows User Name</b> 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

<sup>1</sup> Not supported in Windows 98 and Windows Me.

## User Guide Print Settings

The **User Guide Print Settings** option provides a Print Task Quick Set for optimal printing of the *HP LaserJet P2015 Series 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, **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**.

## 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**.

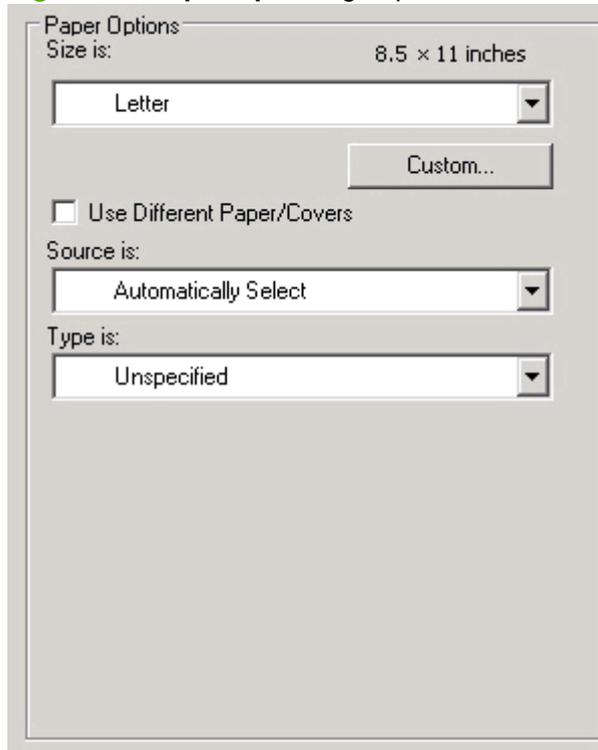
 **NOTE:** Administrators can predefine Print Task Quick Sets for their users. These administrator Print Task Quick Sets are defined on the server and are available to users, but usually cannot be modified by users. Users can also define Print Task Quick Sets for their own use.

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 that states: **There are too many Print Task Quick Sets defined. Please delete some before adding new ones.**

## 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 154](#)
- [Custom Paper Size on page 155](#)
- [Source is on page 157](#)
- [Type is on page 157](#)
- [Use Different Paper/Covers on page 158](#)

### Size is

The **Size is:** setting is a drop-down menu that lists all of the supported media sizes.

When the mouse cursor moves over the dimensions label, the cursor changes 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 device, a control-panel message appears that prompts you to load the media size or select another tray.

For information about media sizes, see the [Media attributes on page 245](#) section of this STR.

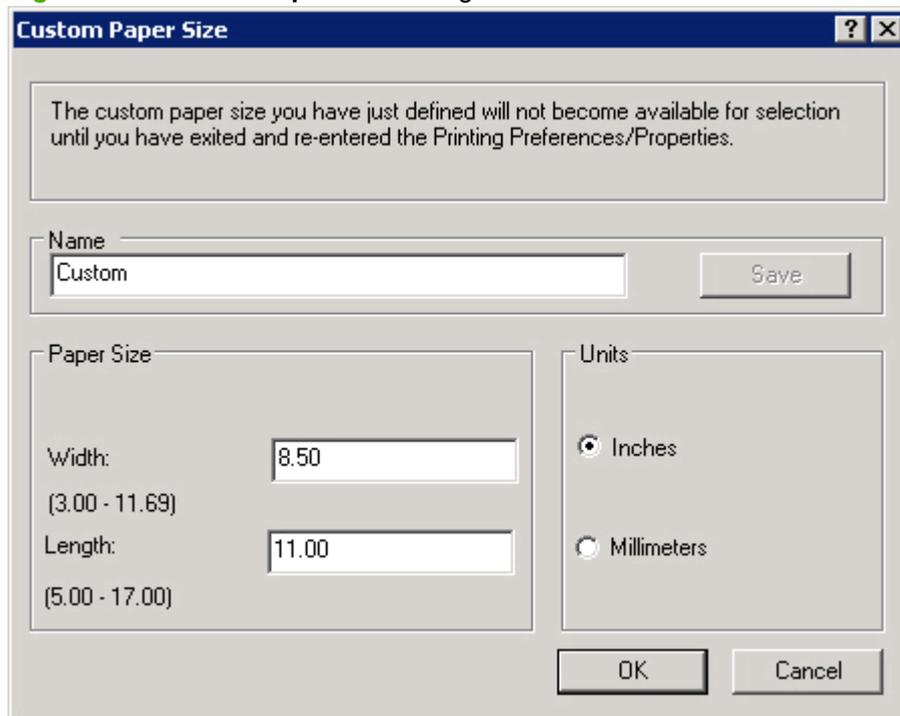
When the **Use Different Paper/Covers** check box is selected and different options are configured, the **Size is:**, **Source is:**, and **Type is:** menus change, offering a variety of options.

## 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.

The **Custom Paper Size** dialog box for the HP LaserJet P2015 printer, shown in the following figure, does not reflect the maximum media size that the HP LaserJet P2015 printer supports. The maximum width is 312 mm (12.28 inches); the maximum height is 470 mm (8.5 inches).

**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 LaserJet P2015 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 device.

**Table 4-2 PCL 6 custom media sizes**

Tray	Dimensions	Minimum	Maximum
Tray 1 (100-sheet multipurpose)	Width	76 mm (3.0 inches)	312 mm (12.28 inches)
	Height	127 mm (5.0 inches)	470 mm (18.5 inches)
Tray 2 (250-sheet)	Width	148.0 mm (5.83 inches)	297 mm (11.7 inches)
	Height	210 mm (8.26 inches)	432 mm (17 inches)
Tray 3 (250-sheet, optional)	Width	148.0 mm (5.83 inches)	297 mm (11.7 inches)
	Height	210 mm (8.26 inches)	432 mm (17 inches)

**Table 4-2 PCL 6 custom media sizes (continued)**

Tray	Dimensions	Minimum	Maximum
Duplexing unit	Width	148.0 mm (5.83 inches)	297 mm (11.7 inches)
	Height	210.0 mm (8.26 inches)	432 mm (17 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 device 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 device:

- **Automatically select**
- **Printer Auto Select**
- **Manual Feed in Tray 1**
- **Tray 1** (100-sheet multipurpose tray)
- **Tray 2** (250-sheet tray)
- **Tray 3** (optional 250-sheet tray)

The default setting is **Automatically Select**. When this setting is selected, the HP LaserJet P2015 uses the source tray that supports the selected media size. If you select a source tray other than **Automatically select**, make sure that the correct media size is loaded in the source tray. For information about media sources, see the [Media attributes on page 245](#) section of this STR.

## Type is

The **Type is:** drop-down menu shows all of the media types that the HP LaserJet P2015 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 device 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**
- **HP Multipurpose Paper**
- **HP Office Paper**
- **HP All-in-one Printing Paper**

- **HP LaserJet Paper**
- **HP Premium Choice LaserJet Paper**
- **Preprinted**
- **Letterhead**
- **Transparency**
- **Prepunched**
- **Labels**
- **Bond**
- **Recycled**
- **Color**
- **Light 60-75 g/m2 (16–20 lb)**
- **Heavy 90-105 g/m2 (24-28 lb)**
- **Cardstock 105-176 g/m2 (28–65 lb)**
- **Envelope**
- **Rough**

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 device, a control-panel 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.

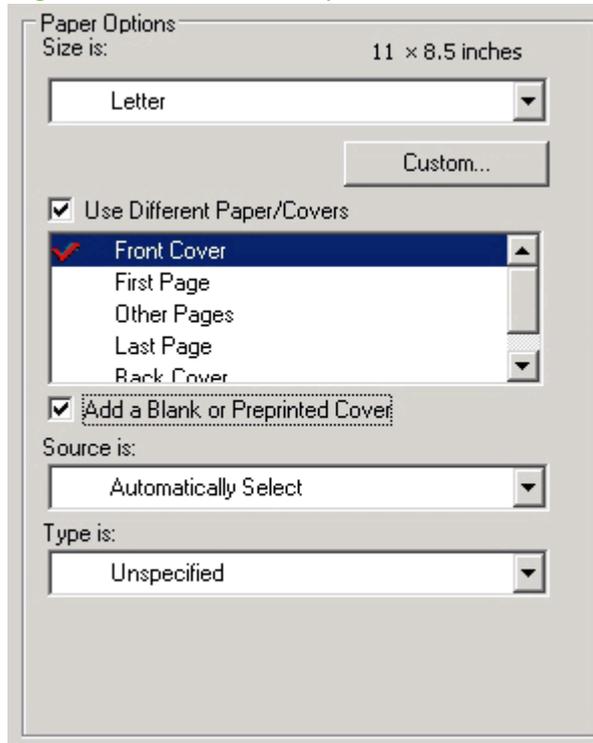
---

## 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 override any previous **Size is:** settings in other **Use Different Paper/Covers** options.

When you select **Front 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 **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 device 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 device supports.

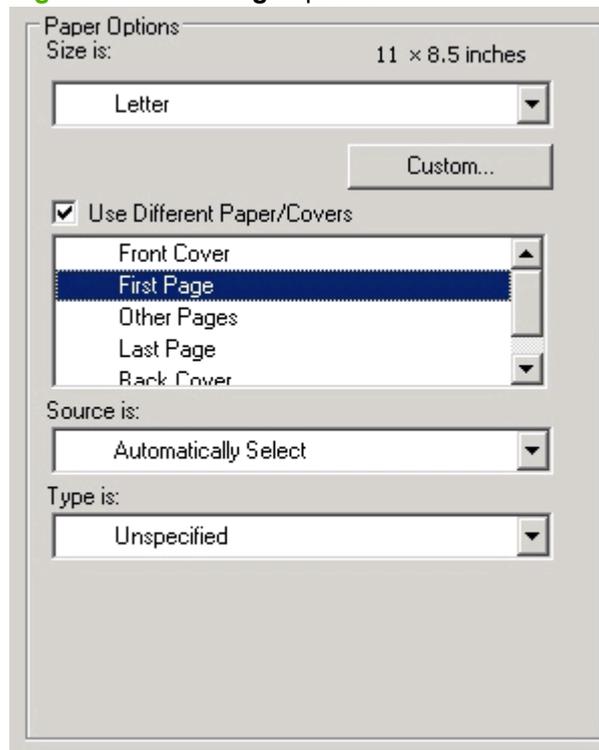
 **NOTE:** Use the same size of media for the entire print job. All **Use Different Paper/Covers** options use the last **Size is:** setting selected in *any one* of the **Use Different Paper/Covers** options.

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

## 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 **Use Different Paper/Covers** 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 device 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 device supports.

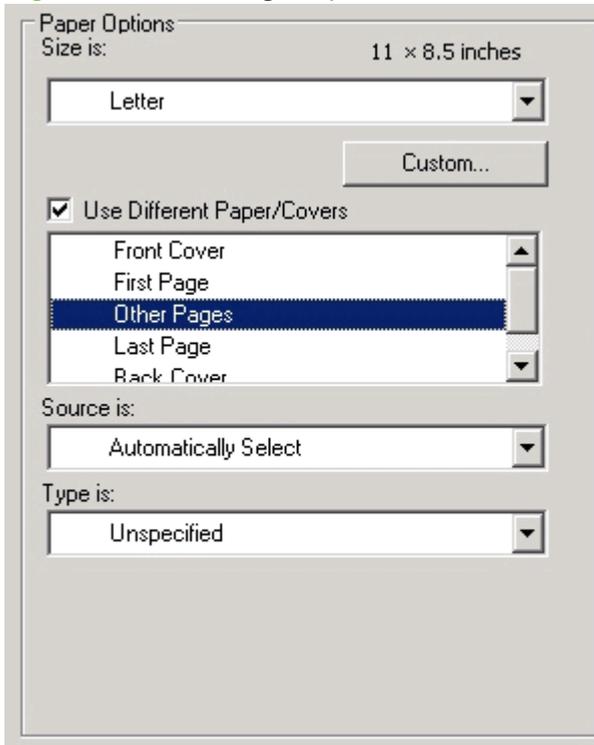
 **NOTE:** Use the same size of media for the entire print job. All **Use Different Paper/Covers** options use the last **Size is:** setting selected in *any one* of the **Use Different Paper/Covers** options.

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 **Use Different Paper/Covers** 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 device 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 device 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.

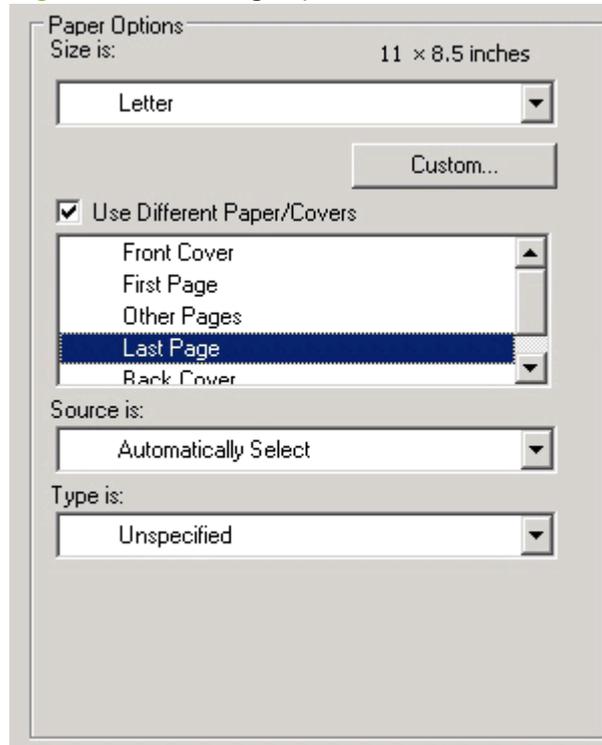
When you change the type and source of the media and covers, the settings remain configured until you close the software program.

---

## 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 **Use Different Paper/Covers** 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 device 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.

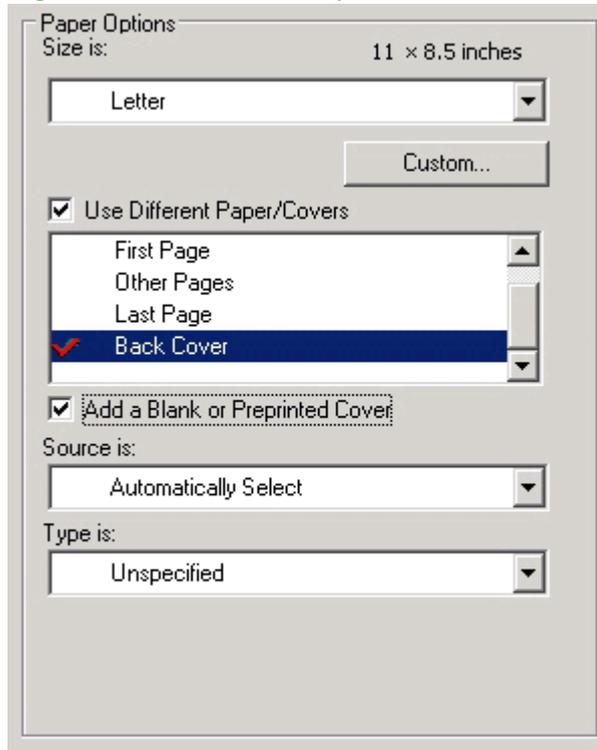
---

## 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
- **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 device 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 device 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. The document preview image appears in the upper-right corner of the following **Printing Preferences** driver tabs:

- **Paper/Quality**
- **Effects**
- **Finishing**

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

## Print Quality

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

- [Print Quality drop-down menu](#)
- [EconoMode](#)

### Print Quality drop-down menu

The **Print Quality** drop-down menu contains the following controls in the HP PCL 6 Unidriver:

- **ProRes 1200 (132 lpi)**
- **ProRes 1200 (180 lpi)**
- **FastRes 1200**
- **600 dpi**

---

 **NOTE:** When a **ProRes1200** setting is selected, documents are printed using a resolution of 1200 x 1200 dpi. This is the best print quality, but printing speed is slower than for documents printed on the FastRes 1200, which uses a resolution of 1200 x 600 dpi.

---

The **Print Quality** drop-down menu contains the following controls in the HP PCL 5e Unidriver:

- **600 dpi**
- **300 dpi**

The **Print Quality** drop-down menu contains the following controls in the PS 3 Emulation Unidriver:

- **1200 dpi**
- **FastRes 1200**
- **600 dpi**
- **300 dpi**

 **NOTE:** When a “ProRes” setting is selected, documents are printed using a resolution of 1200 x 1200 dpi. This is the best print quality, but printing speed is slower than for documents printed on a “FastRes” setting. The “FastRes” setting emulates 1200-dpi printing, but places fewer dots on the page and uses less toner, and printing speed is faster than for documents printed on a “ProRes” setting.

## EconoMode

Select the **EconoMode** check box to reduce the amount of toner on each printed page.

Selecting this option extends the life of the toner supply and reduces cost per page. However, it also reduces print quality. The printed image is lighter, but it is adequate for printing drafts or proofs.

HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time when the average toner coverage is significantly less than 5%, it is possible that the toner supply will outlast the mechanical parts in the print cartridge. If print quality begins to degrade under these circumstances, install a new print cartridge, even if toner remains in the cartridge.

 **NOTE:** The **EconoMode** setting might work only if a genuine HP print cartridge is installed. HP print cartridges can measure the life of the mechanical parts as well as the quantity of toner. If the **EconoMode** setting is used frequently, the mechanical parts can wear out before the supply of toner is depleted, increasing the risk of toner leaking. Use genuine HP parts to avoid this problem.

The **EconoMode** option can be activated from the printer control panel, from the **Print Quality** tab in the software application properties, or from the Print Quality dialog on the **Paper-Quality** tab in the driver. If the **EconoMode** option is selected from the control panel, and if the printer has a genuine HP cartridge, the ON setting overrides any setting made in the application or driver, as shown in the following table.

Driver EconoMode setting for print job	HP Cartridge	Device control panel reports	EconoMode setting takes effect
Selected	Yes	On	Yes
Selected	No	Off	No
Not selected	Yes	On	Yes
Not selected	No	Off	No
Selected	Yes	Off	Yes
Selected	No	Off	No
Not selected	Yes	Off	No
Not selected	No	Off	No

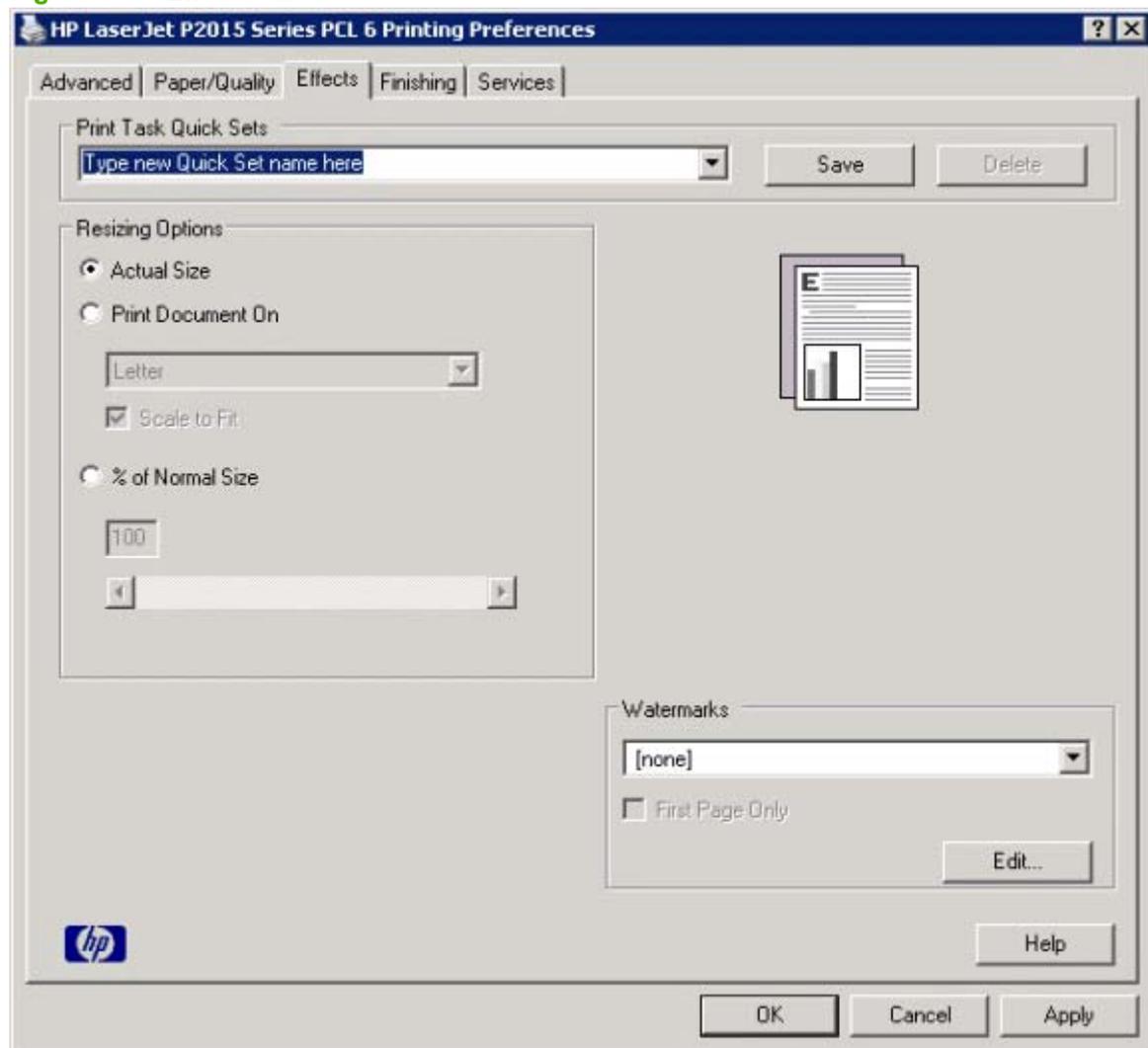
## Effects tab features

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 device 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.

**Figure 4-11** 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:

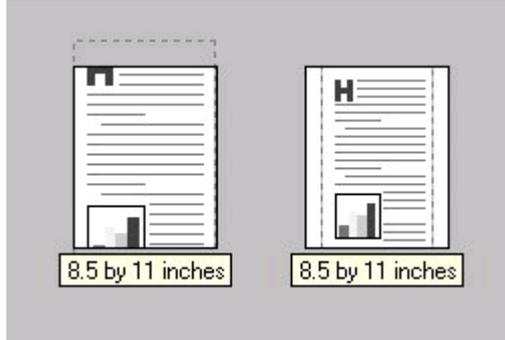
- The **% of Normal Size** value is not 100.
- The **Pages per Sheet** value (on the **Finishing** tab) is not 1.

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 you have 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 4-12** Preview images – Legal on Letter; **Scale to Fit** off (left) and on (right)



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

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

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

The following settings disable **% of 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. The

document preview image appears in the upper-right corner of the following Printing Preferences driver tabs:

- **Paper/Quality**
- **Effects**
- **Finishing**

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

## Watermarks

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

- **(none)**
- **Confidential**
- **Draft**
- **SAMPLE**

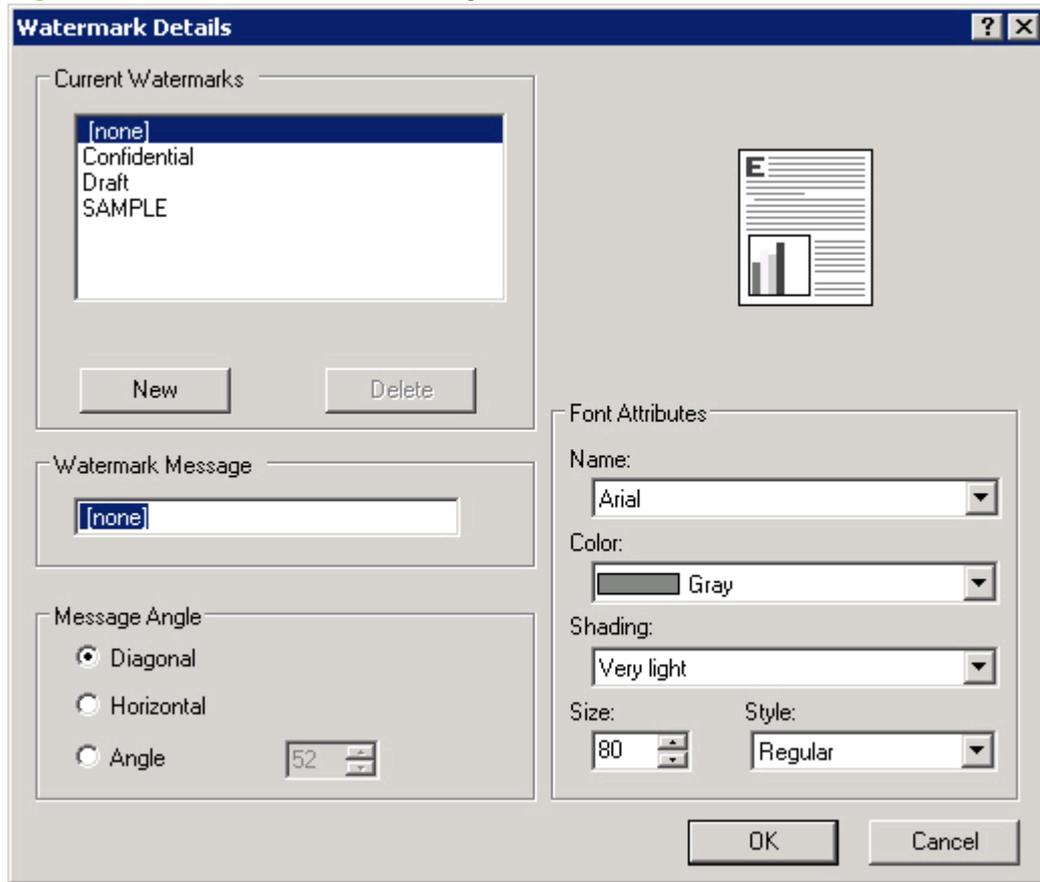
The drop-down menu shows alphabetically sorted watermarks that are currently available on the system, plus the string "(none)", which indicates that no watermark is selected. This is the default setting. Any watermark that is selected from this list appears in the preview image.

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

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

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

**Figure 4-13** Watermark Details dialog box



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

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

## Current watermarks

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

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

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

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

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

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

## Watermark Message

The **Watermark Message** is also the name that identifies the watermark in the **Current Watermarks** list, except when more than one watermark has the same message. For example, you might want several different watermarks with the message DRAFT, each with a different typeface or font size. When this occurs, the string is appended with a space, a pound sign, and a number (for example, **Draft #2**). When a number is added, the number two is used first, but if the resulting name is also in the list, then the number increases until the name is unique (**Draft #3**, **Draft #4**, and so on).

## Message Angle

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

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

## Font Attributes

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

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

- **Name**

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

The **Color** drop-down menu contains only one option: **Gray**.
- **Shading**

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

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

- **Medium**
- **Medium Dark**
- **Dark**
- **Very Dark**
- **Darkest**

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

- **Size**

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

- **Style**

The following settings are available:

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

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

## Default watermark settings

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

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

Setting	New watermark	Preset watermark
<b>Name</b>	Arial	Varies by language
<b>Color</b>	Gray	Gray
<b>Shading</b>	Very Light	Very Light
<b>Size</b>	80	Varies by language
<b>Style</b>	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.

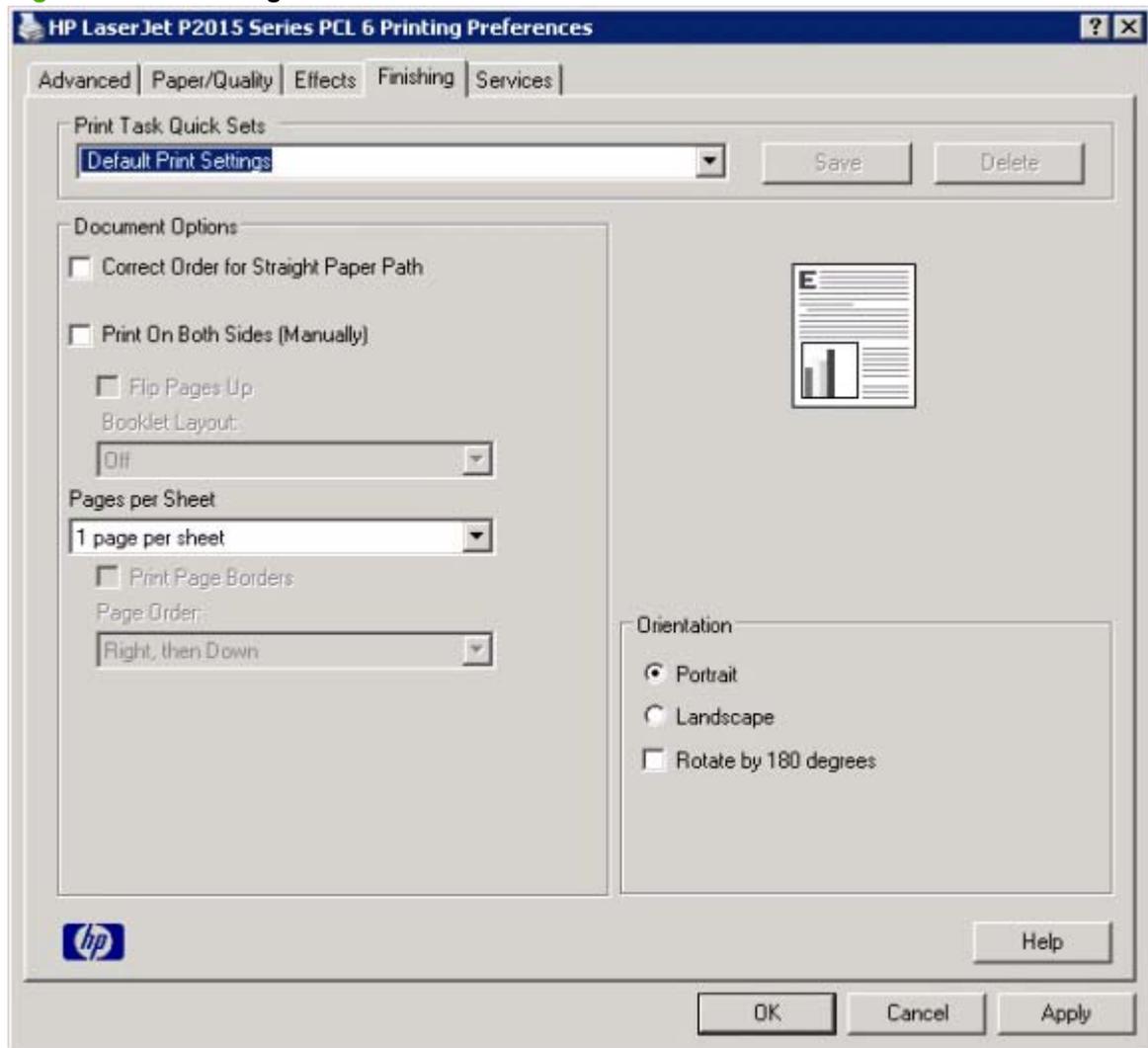
## Finishing tab features

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

1. 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 device name.
5. Click **Printing Preferences**.
6. Click the **Finishing** tab.

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

**Figure 4-14** Finishing tab



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

- [Print Task Quick Sets](#)
- [Document options](#)
- [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:

- [Correct Order for Straight Paper Path](#)
- [Print on Both Sides](#)
- [Flip Pages Up](#)
- [Booklet layout](#)
- [Pages per Sheet](#)
- [Print Page Borders](#)
- [Page Order](#)

## Correct Order for Straight Paper Path

The HP LaserJet P2015 has a door in the back that can be opened to make the paper go straight out the back of the printer. Use this bin or slot to minimize curl and avoid jams with heavier paper, such as cardstock. You may also need to feed the paper from the multipurpose tray for best results. The paper is delivered printed side up. Use this feature to order the pages correctly for this bin or slot. If you click this check box and also click **Print on Both Sides**, the printer prints the first side of each page, pauses for you to reload the paper, and then prints the second side of each page. Other documents cannot be printed while the printer is paused. Follow the onscreen instructions.

## 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** tab is set to any media type *except for* the following types:
  - **Labels**
  - **Transparency**
  - **Envelope**

- Cardstock
- Tough Paper
- **Size is:** is set to any media size *except for* the following sizes:
  - **Statement**
  - **Envelope #10**
  - **Envelope DL**
  - **Envelope C5**
  - **Envelope B5**
  - **Envelope Monarch**

 **NOTE:** As a rule, extra memory need not be installed on the HP LaserJet P2015 printer in order to print on both sides. However, very complex double-sided print jobs might require additional memory.

Topics:

- [Automatically print on both sides](#)
- [Manually print on both sides](#)

### Automatically print on both sides

The duplexing unit in the device prints on two sides of a sheet of paper when the **Print on Both Sides** option is specified in the print job. The HP LaserJet P2015 printer comes with a duplexing unit installed in the following models:

- HP LaserJet P2015dn
- HP LaserJet P2015x

To achieve the best print quality when printing on the second side of the page, the printer needs to make adjustments to its print modes. When you select a media type, you are, in effect, instructing the printer to use a group of settings (such as fuser temperature and print speed) to print the media with the best possible quality. 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 LaserJet P2015 and HP LaserJet P2015n printer models, which do not have a duplexing unit installed. Also select Print on Both Sides (Manually) on the other HP LaserJet P2015 printer models for media types that are not available when using the automatic duplexing unit, such as cardstock and thick media.

Manually printing on the second side of a page is available when you are using the HP PCL 6, PCL 5, or PS emulation unidriver. 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.

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

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

---

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

If you want 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.

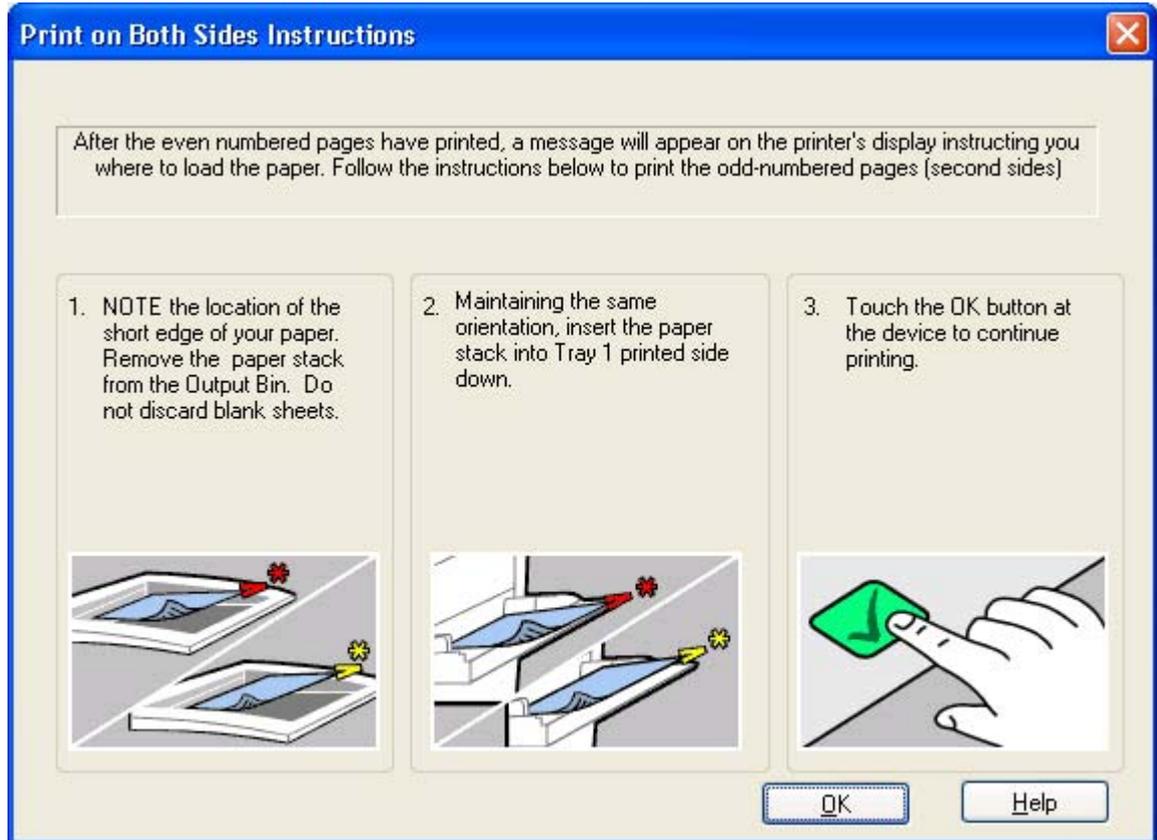
---

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:

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

**Figure 4-15** Print on Both Sides Instructions dialog box



When you have completed the steps that appear in the dialog box, the second half of the print job prints on the back side of the stack of 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 is used 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

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**

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

Topics:

- [Book and Booklet Printing](#)
- [Print a booklet](#)

## Book and Booklet Printing

The HP LaserJet P2015 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** 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.

1. 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 that you want to print on a single sheet of media.

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

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

 **NOTE:** When you select an option other than **1 page per sheet**, booklet printing is 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.

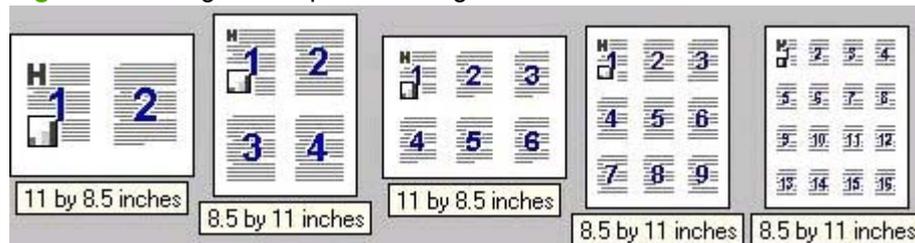
## Page Order

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

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

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

**Figure 4-16** Page-order preview images



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

## Document preview image

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

- **Paper/Quality**
- **Effects**
- **Finishing**

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

## Orientation

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

---

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

---

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

- **Portrait.** The top edge of the document is the shorter edge of the media.
- **Landscape.** The top edge of the document is the longer edge of the media.
- **Rotate by 180 degrees.** This creates a landscape or portrait orientation in which the image is rotated 180°. This setting is useful for printing prepunched media.

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

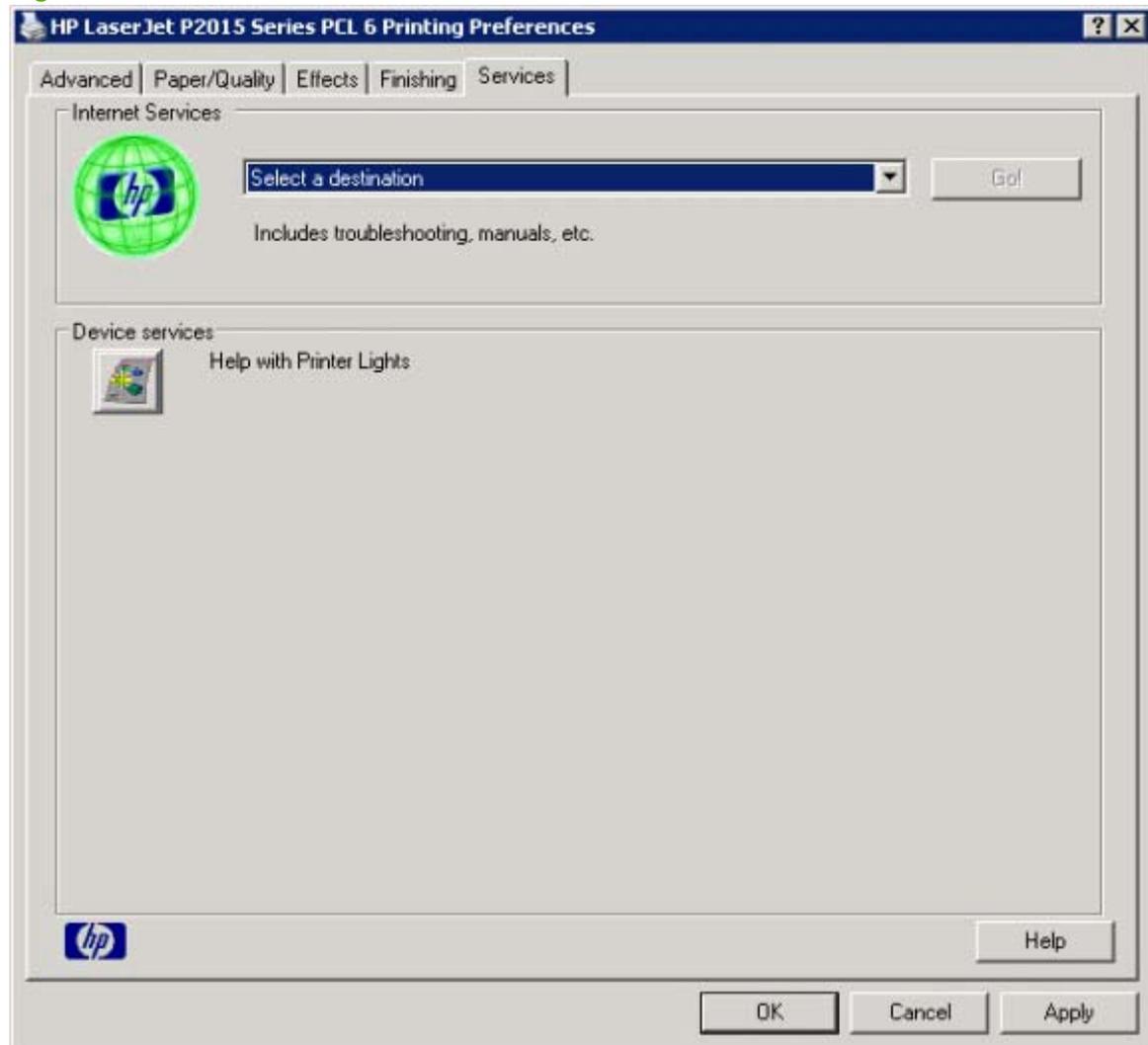
## Services tab features

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).
4. Right-click the device name.
5. Click **Printing Preferences**.
6. Click the **Services** tab.

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

**Figure 4-17** Services tab



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.** Open the HP Instant Support Web site, where you can find interactive tools and contacts for troubleshooting.
- **Support and troubleshooting.** Open the product page for the HP Business Center.
- **Product manuals.** Open a Web page from which you can view or download HP LaserJet P2015 printer manuals.
- **Check for driver updates.** Automatically check the print drivers to see whether the correct and most up-to-date print drivers are installed.
- **Order supplies.** Open the HP SureSupply Web page and shop online for HP LaserJet P2015 printer supplies.

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

## Device services

Click the **Device and Supplies** status icon to open the **Device Status** screen of the HP EWS.

## Device Settings tab features

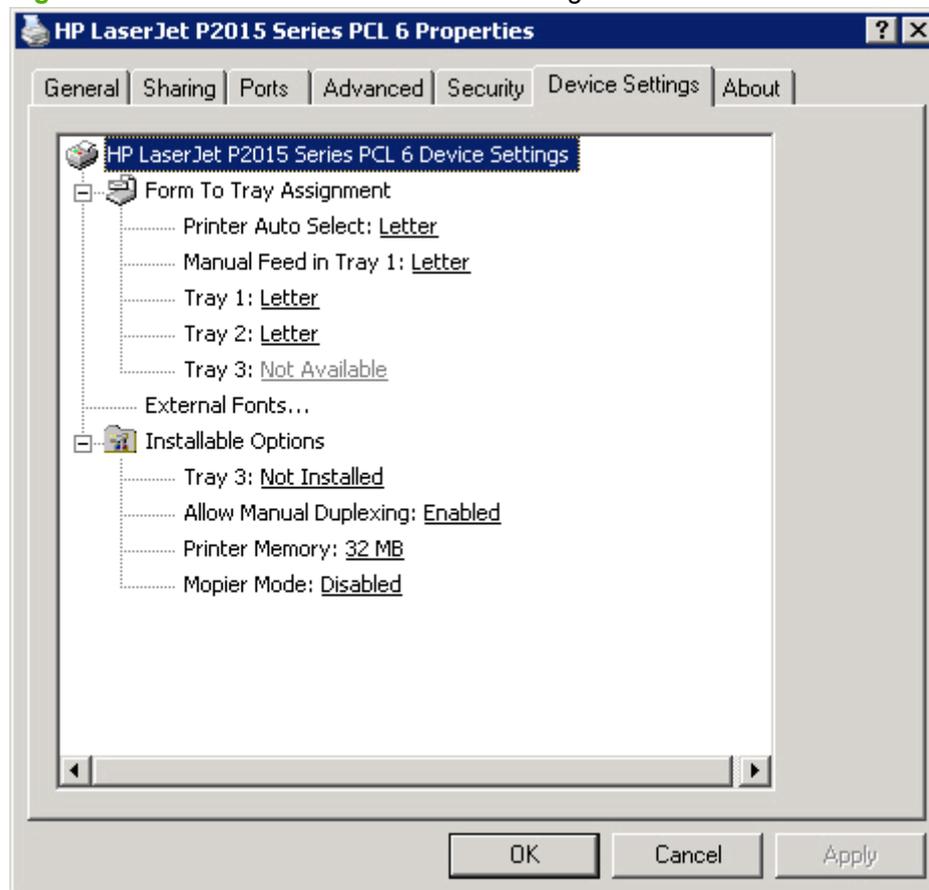
The **Device Settings** tab is in the Properties window for the print driver. To gain access to the Device Settings tab, follow these steps:

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 device name.
5. Click **Properties**.
6. Click the **Device Settings** tab.

The **Device Settings** tab contains controls for media-handling devices and controls for managing the HP LaserJet P2015 printer.

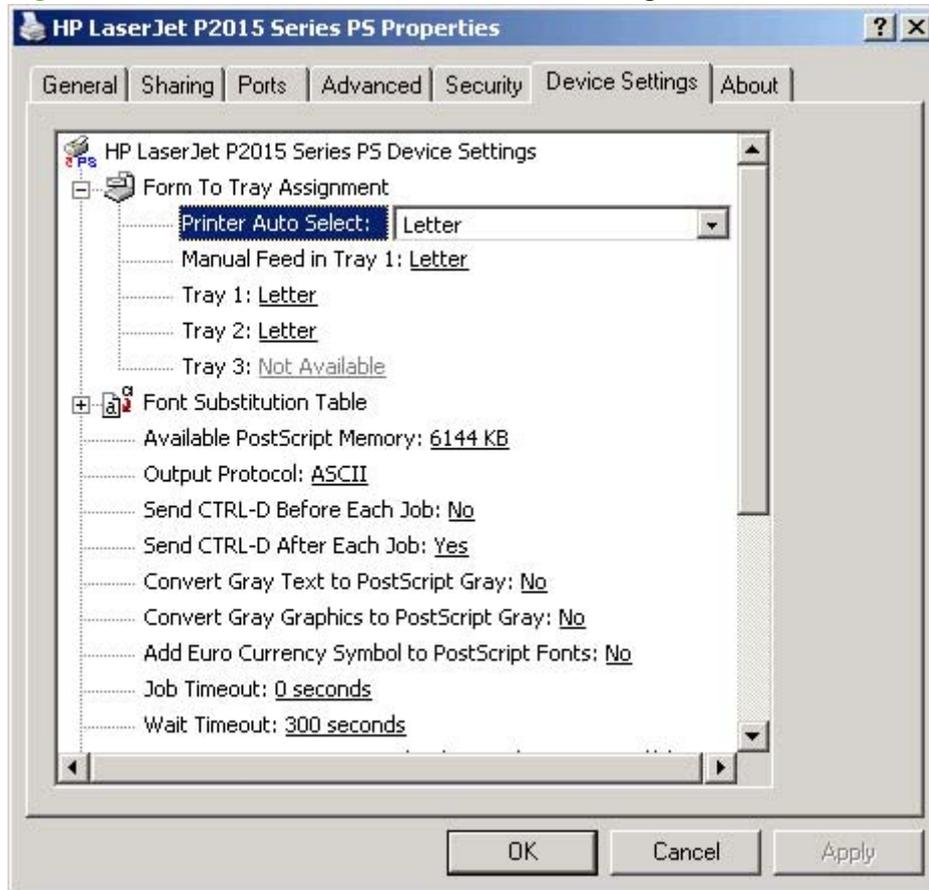
Available options depend on the driver and the particular feature. The following figure shows the **Device Settings** tab for the HP PCL 6 Unidriver.

**Figure 4-18** HP PCL 6 Unidriver Device Settings tab



The following figure shows the **Device Settings** tab for the PS 3 Emulation Unidriver.

**Figure 4-19** PS 3 Emulation Unidriver **Device Settings** tab



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

- [Form to Tray Assignment](#)
- [Font Substitution Table](#)
- [External Fonts](#)
- [PS 3 Emulation Unidriver Device Settings](#)
- [Installable Options](#)

## Form to Tray Assignment

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

The HP LaserJet P2015 printer supports more than one source of media. You can assign a form (which defines the media size and margins) to each media source. When a form is matched to a source, you can select the form when you print. The device prints from the tray to which that form is assigned.

Network administrators can use the **Form to Tray Assignment** setting to specify, in the driver, the 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

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

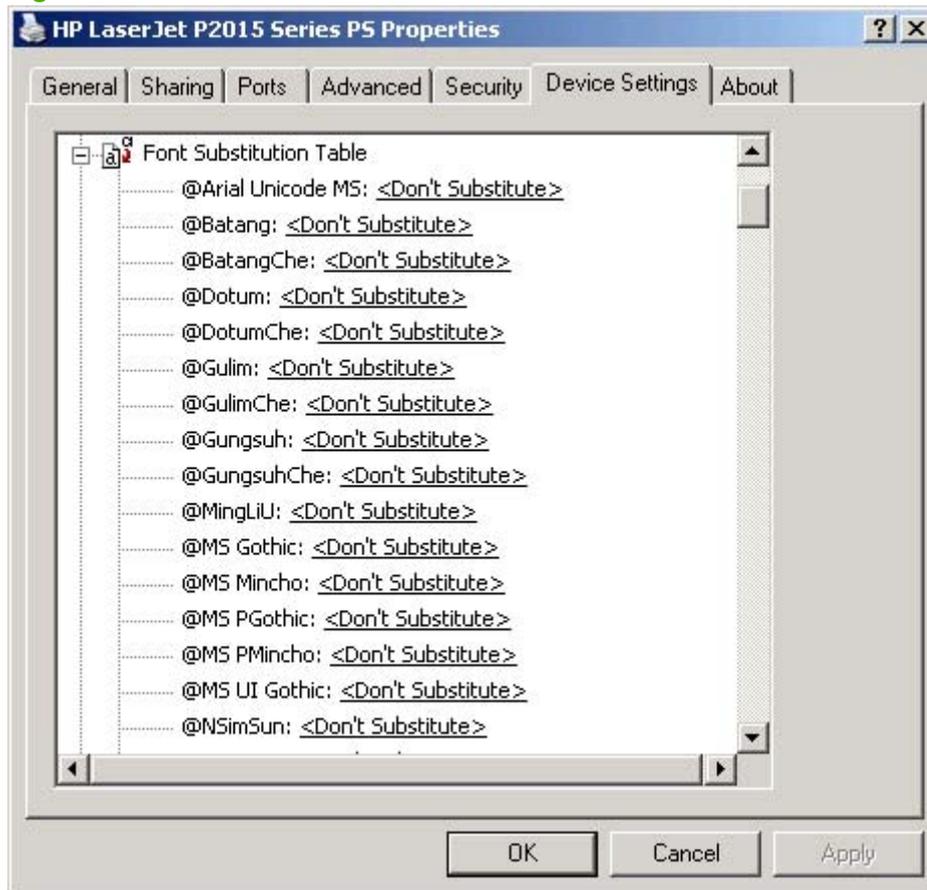
## Font Substitution Table

 **NOTE:** The Font Substitution Table is available only in the PS 3 Emulation Unidriver. It is not available in the HP PCL 6 and PCL 5 unidrivers.

Use the **Font Substitution Table** settings to install and remove external fonts for the device. 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 4-20** Font Substitution Table



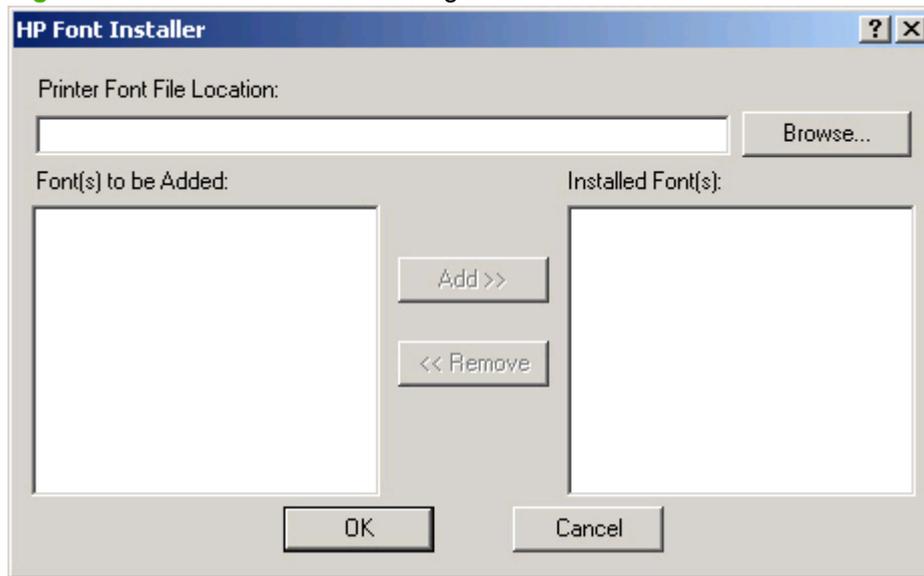
## External Fonts

 **NOTE:** The External Fonts option is available only in the HP PCL 6 and PCL unidrivers. It is not available in the PS 3 Emulation Unidriver.

Use the **External Fonts** option to install and remove external fonts for the device. 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 4-21** 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 device.
5. Click **Properties**.
6. Click the **Device Settings** tab.

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

## Removing external fonts

1. Click **Start**.
2. Select **Settings**.
3. Click **Printers** (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 device.
5. Click **Properties**.
6. Click the **Device Settings** tab.
7. Click the **External Fonts** option. The **Properties** button appears.
8. Click **Properties**. The **HP Font Installer** dialog box appears. The external fonts that are installed appear in the **Installed Fonts** window.
9. Select the fonts that you want to remove, and then click **Remove**. The fonts are removed.
10. Click **OK** to close the **HP Font Installer** dialog box.

## PS 3 Emulation Unidriver Device Settings

The following controls are available and appear only in the PS 3 Emulation Unidriver **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](#)

## 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 device total physical memory. It is usually best to set the postscript memory to match the total RAM that is shown on the configuration page. To print a configuration page, open HP ToolboxFX, select **Print Info Pages**, and then click **Print** next to the **Configuration page** option.

## Output Protocol

This control specifies the protocol that the device uses for print jobs. The following options are available:

- **ASCII** (default)
- **TBCP**
- **Binary**

When you click **ASCII**, data is sent in ASCII format (7-bit), which might take longer to print but can be sent through any I/O channel, such as a serial, parallel, or network port.

When you click **TBCP** (Tagged Binary Communications Protocol), all data except special control characters is sent in binary (8-bit) format. The binary formats can be sent over parallel or serial communications ports and are faster than sending data in ASCII format.

When you click **Binary**, all data except special control characters is sent in binary (8-bit) format. The binary formats can be sent over parallel or serial communications ports and are faster than sending data in ASCII format.

## Send Ctrl-D Before Each Job

This control specifies whether the device will be reset at the beginning of every postscript document. The default setting is **No**. Pressing **Ctrl-D** resets the device 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 device is connected through a network. If the document fails to print when sent to a device connected through parallel or serial ports, change **No** to **Yes**.

## Send Ctrl-D After Each Job

This control specifies whether the device will be reset at the end of every postscript document. The default setting is **Yes**. Pressing **Ctrl-D** resets the device 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 device 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 provided by the PS 3 Emulation Driver. The following settings are available:

- **Yes**
- **No.** This is the default setting.

## 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 PS 3 Emulation Driver. The following settings are available:

- **Yes**
- **No.** This is the default setting.

## 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.** This is the default setting.
- **No**

## Job Timeout

This control specifies how long the document can take to get from the computer to the device before the device stops trying to print the document. If you specify **0 seconds**, the device continues trying to print indefinitely. The default setting is **0 seconds**. You can use the spin box to change this value to a maximum of **32,767 seconds**.

## Wait Timeout

This control specifies how long the device waits to get more postscript information from the computer. After the specified time passes, the device stops trying to print the document and prints an error message. If you are trying to print a very complicated document, you might want to increase this value. If you specify **0 seconds**, the device waits indefinitely. The default setting is **300 seconds**. You can use the spin box to change this value 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. A 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)**. You can use the spin box to change this value 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. A 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)**. You can use the spin box to change this value to a maximum of **32,767** pixels.

## Installable Options

Topics:

- [Tray 3](#)
- [Duplex Unit \(for 2-Sided Printing\)](#)
- [Allow Manual Duplexing](#)
- [Printer Memory](#)
- [Mopier Mode](#)
- [Mopier mode and collation](#)
- [Postscript Passthrough \(PS 3 Emulation Unidriver only\)](#)
- [JPEG Passthrough \(PS 3 Emulation Unidriver only\)](#)

### Tray 3

This control specifies whether you have tray 3, an optional 250-sheet tray, installed on the device. The default setting is **Not Installed**.

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

The HP LaserJet P2015dn and the HP LaserJet P2015x printer models come with a duplex unit installed. This setting is enabled (**Installed**) by default.

### 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 device pauses while you make 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 device. The driver generates ranges of memory that can be selected, up to the maximum that the device can accept. The driver can use this information to manage how the print driver uses the device memory.

### Mopier Mode

The multiple-original print (mopy) function is an HP-designed feature that produces multiple, collated copies from a single print job. Multiple-original printing (mopying) increases performance and reduces network traffic by transmitting the job to the device 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 LaserJet P2015 supports the transmit-once mopying feature when the **Mopier Mode**: setting on the **Device Settings** tab is **Enabled**.

When you use the HP PCL 6 Unidriver, HP PCL 5e Unidriver, or PS 3 Emulation Unidriver, mopying is performed in one of two ways: either through the software or through the device hardware. When the mopier is enabled, mopying takes place through the device hardware by default. One copy of a multiple-page print job is transmitted once through the network to the device, together with a printer job language (PJM) command directing the device to make the specified number of copies.

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

## Mopier mode and collation

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

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

To receive uncollated multiple copies of a print job, 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

## Postscript Passthrough (PS 3 Emulation Unidriver only)

**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**, **n-up** and **Booklet Printing** might not print correctly from some

software programs with **Postscript Passthrough** enabled, because such programs send postscript information to the printer that cannot be controlled by the driver. 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.

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## JPEG Passthrough (PS 3 Emulation Unidriver only)

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.** When this option is selected, the printer connection type is automatically detected. For network (TCP/IP) connections, JPEG passthrough is disabled. For parallel (LTP), DOT4, and USB connections, JPEG passthrough is enabled.

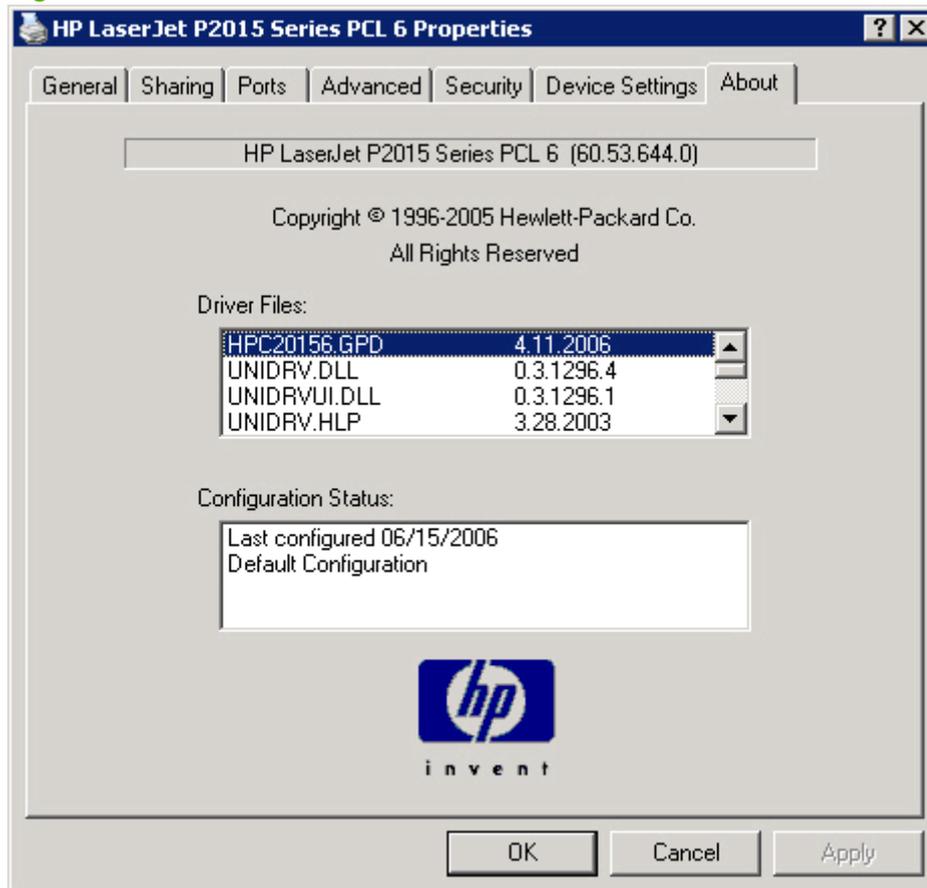
## About tab features

The **About** tab is in the **Properties** for the print driver. To gain access to the print driver **Properties**, click **Start** on the MS Window task bar, select **Settings**, and then click **Printers** (Windows 2000) or **Printers and Faxes** (Windows XP Professional and Windows Server 2003) or **Printers and Other Hardware Devices** (Windows XP Home).

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 device 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 LaserJet P2015 model number, driver, date, and versions. The **About** tab is shown in the following figure.

**Figure 4-22** About tab



The **About** 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.



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# 5 Macintosh

## Introduction

The HP LaserJet P2015 comes with printing software and installers for Apple Computer, Inc., Macintosh operating systems.

Topics:

- [Macintosh printing-system software](#)
- [Macintosh install and uninstall instructions](#)
- [HP Embedded Web Server \(EWS\)](#)

## Macintosh printing-system software

The HP LaserJet P2015 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 device 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 P2015 PPD
- HP LaserJet P2015 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 LaserJet P2015 printing-system software and related software and firmware. Printing-system software on a CD is available from HP fulfillment centers.

Topics:

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

## Printing-system software on the Web

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

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

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

Topics:

- [Printing-system software](#)
- [Software component availability](#)

## Printing-system software

The HP LaserJet P2015 printing-system software is available for download at the following Web site:

[www.hp.com/go/ljP2015\\_software](http://www.hp.com/go/ljP2015_software)

## Software component availability

The following HP LaserJet software components are installed:

- HP LaserJet P2015 PPD
- HP LaserJet P2015 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 LaserJet P2015 printer contains the files for installing the printing-system software on the computer.

Topics:

- [Macintosh partition](#)
- [CD versions](#)

## Macintosh partition

The HP LaserJet P2015 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 under the Documents directory on the Macintosh CD Partition.

## CD versions

The software CD for the HP LaserJet P2015 contains the files for installing the printing-system software on the computer.

The HP LaserJet P2015 printing-system software CD is available in five versions, each of which contains printing-system documentation in various languages, as follows:

- **CD AM – Americas and Western Europe (part number CB366-60105):**

- CA = Catalan (Català)
- DE = German (Deutsch)
- EL = Greek
- EN = English
- ES = Spanish (Español)
- FR = French (Français)
- IT = Italian (Italiano)
- NL = Dutch (Nederland)
- PT = Brazilian Portuguese (Português)

- **CD NE – Northern Europe (part number CB366-60106):**

- DA = Danish (Dansk)
- EN = English
- ET = Estonian
- FI = Finnish (Suomi)
- HE = Hebrew
- LV = Latvian
- LT = Lithuanian
- NO = Norwegian (Norsk)
- SV = Swedish (Svenska)

- **CD EE – Eastern Europe (part number CB366-60107):**

- AR = Arabic
- BG = Bulgarian
- HR = Croatian
- CS = Czech (Cesky)

- EN = English
- FR = French (Français)
- HU = Hungarian (Magyar)
- KK = Kazakh
- PL = Polish (Polski)
- RO = Romanian
- RU = Russian
- SK = Slovak
- SL = Slovenian
- SR = Serbian
- TR = Turkish
- UK = Ukrainian
- **CD AS – Asia (part number CB366–60108):**
  - EN = English
  - ID = Indonesian (Bahasa)
  - KO = Korean
  - TH = Thai
  - ZHCN = Simplified Chinese
  - ZHTW = Traditional Chinese

# Macintosh install and uninstall instructions

The HP LaserJet P2015 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 LaserJet P2015 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 device includes the following software for Macintosh computers:

- HP LaserJet P2015 PPD
- HP LaserJet P2015 PDE
- HP USB EWS Gateway
- HP Device Configuration 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 device configuration settings and installable options. These settings are usually configured during the installation process by using Apple Mac OS X tools such as Print Center, Printer Setup Utility, and Print & Fax. For more information, see [Table 5-1 Adding a printer in Macintosh operating systems on page 204](#).

## PDEs

Printer Dialog Extensions (PDEs) are code plug-ins (for Mac OS X V10.2.8 or later only) that provide access to device 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 device status and change device settings.
- View and change network settings for the device.
- Print information pages for the device.
- View the device 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 device if the device is connected using a USB cable. The HP EWS can also be 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 device 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 Center.

## 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

1. If you are connecting the printer to a network, connect the network cable to the printer network port (on HP LaserJet P2015n, HP LaserJet P2015dn, or HP LaserJet P2015x printers only). If you are connecting the printer to a computer using the USB cable, install the software *before* connecting the USB cable.

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

 **NOTE:** If the CD screen does not open automatically, double-click the **hp LaserJet P2015** CD-ROM icon on the desktop to open the CD-ROM window.

3. Double-click the **HP LaserJet v6.1.0.213.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 5-1 Adding a printer in Macintosh operating systems**

Operating System	Print Center	Printer Setup Utility	Print & Fax
Mac OS X V10.2.8	x		
Mac OS X V10.3		x	x
Mac OS X V10.4		x	x

## Detailed Mac OS X installation

Topics:

- [Main Install dialog sequence](#)

### Main Install dialog sequence

This section provides information about the Macintosh installation dialog-box sequence 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 LaserJet P2015 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 LaserJet P2015** CD-ROM icon on the desktop to open the installer folder.

**Figure 5-1 hp LaserJet P2015 CD-ROM icon**



The **hp LaserJet Software** dialog opens.

**Figure 5-2** hp LaserJet Software screen



In the **hp LaserJet Software** pane, double-click the Mac OS X folder to open it.

In the Mac OS X folder, double-click the **HP LaserJet v6.1.0.213.app** icon. This begins the install process.

**Figure 5-3** HP LaserJet v.5.7 icon



The **Authenticate** dialog appears.

**Figure 5-4** Authenticate dialog



Type the correct “admin” name and password and click **OK** to continue. The installer startup screen appears.

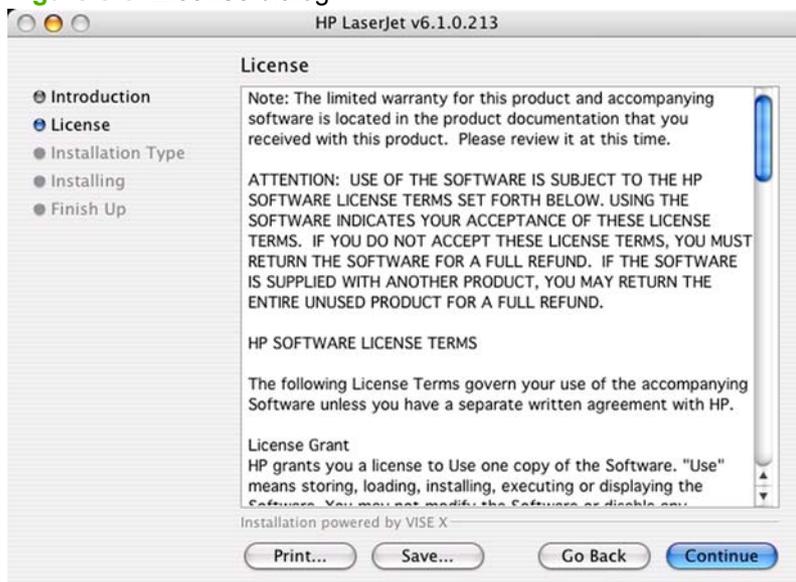
Click **Cancel** to exit the installation.

**Figure 5-5** HP LaserJet for Macintosh installer startup-screen



Click **Continue**. The **License** dialog appears.

**Figure 5-6** 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. Click **Agree** to accept the agreement. The **Easy Install** dialog appears. Click **Decline** to end the installation process and close the installer.

**Figure 5-7 Easy Install dialog**

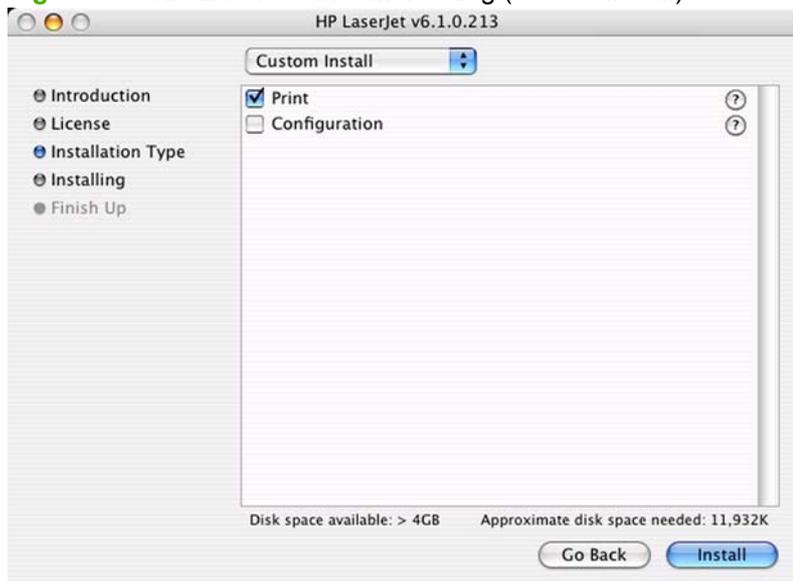


The default option in the drop-down menu at the top of the screen is **Easy Install**. You can also select **Custom Install** in the same menu.

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 219](#).

Click **Install** to start the installation.

**Figure 5-8 HP LaserJet Installer dialog (custom install)**

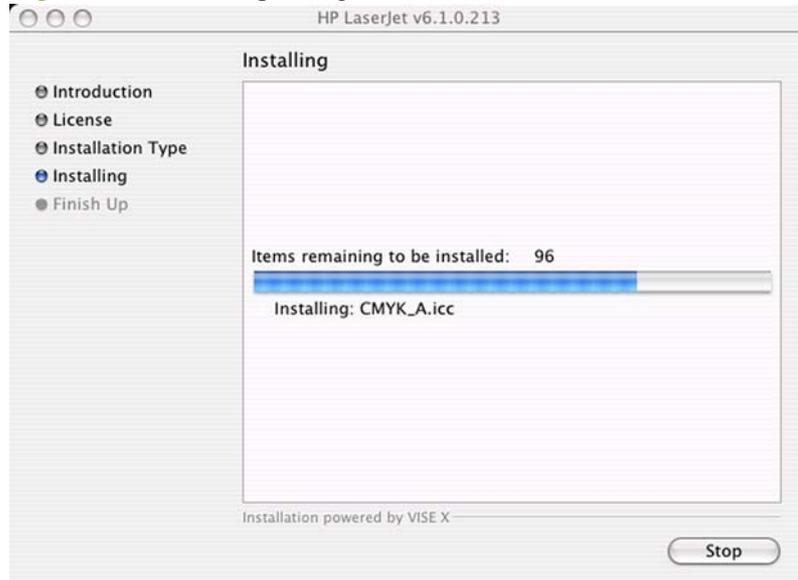


The **Custom Install** screen displays all of the options that are available on the printing-system software CD. Use the check boxes on the list to install the components that you want to install.

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 printing system files are installed in the main Library folder on the Macintosh hard drive. 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 Device Configuration utility is also installed in this directory.

**Figure 5-9** 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.

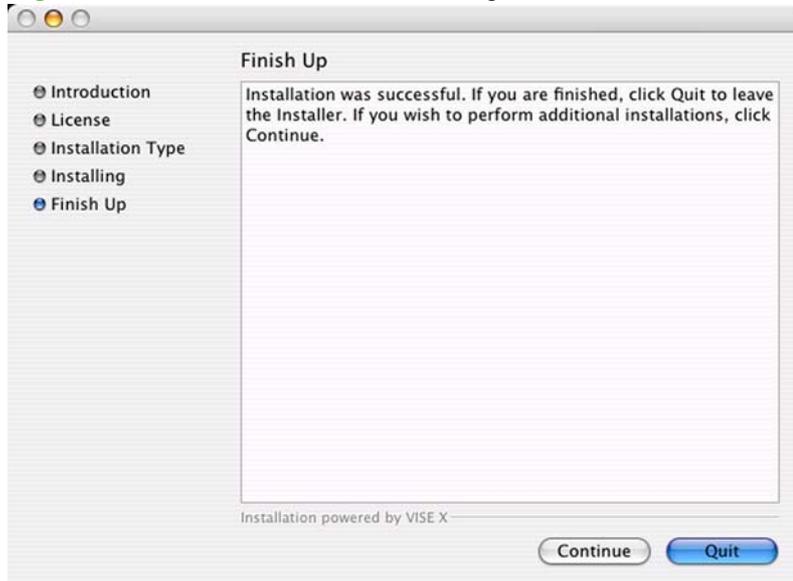
When installation is complete, the LASERJET README.RTF file opens and the **LaserJet ReadMe.rtf** icon appears on the desktop. Follow these instructions to set up a printer queue for the HP LaserJet P2015 printer.

**Figure 5-10** LaserJet ReadMe icon



A pop-up message stating that the installation was successful also appears.

**Figure 5-11** Installation success message



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 higher](#)
- [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 higher

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 LaserJet P2015 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.

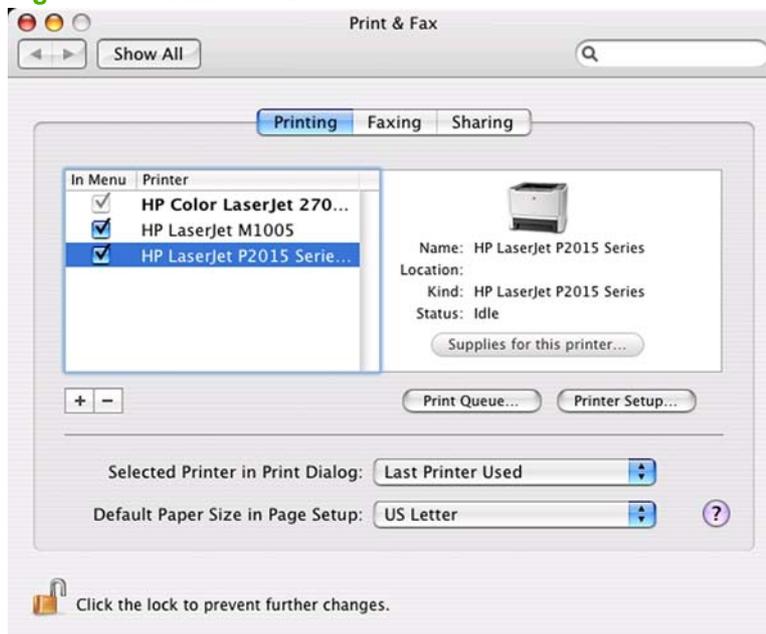
2. In the **Applications** folder, open the **Utilities** folder, and then run the **Printer Setup Utility**. The **Printer List** appears. It looks similar to the one shown in the following figure.

**Figure 5-12 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 5-13 Print & Fax screen**



3. 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 should display **HP LaserJet P2015 Series**. 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** column, see [Troubleshooting the printer setup on page 218](#).

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

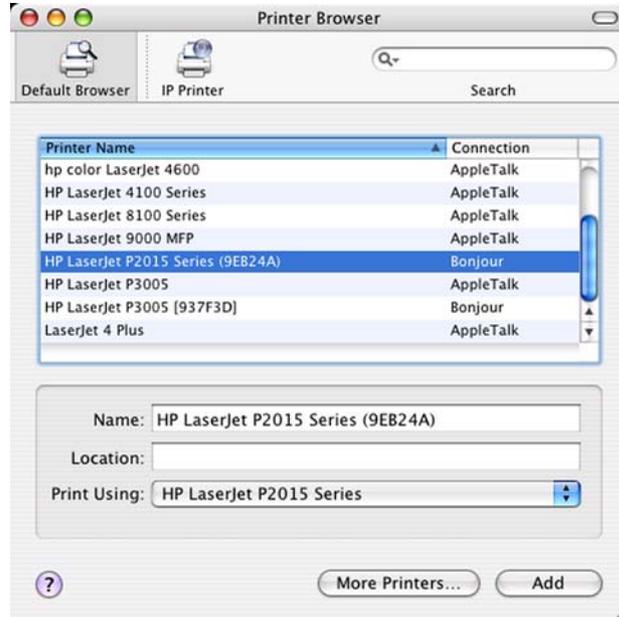
4. Click **Add** (or the **+** button in the Print & Fax utility) to open the Printer Browser screen.

5. You can use either Bonjour or IP Printing for the network connection.

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

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

**Figure 5-14** Default Browser tab



- b. Select the HP LaserJet P2015 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 printer.

 **NOTE:** If the HP LaserJet P2015 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 LaserJet P2015 Series** PPD does not appear in the **Print Using** pull-down list, turn the computer off and then on again, then restart the setup process. For more troubleshooting information, see [Troubleshooting the printer setup on page 218](#).

If you want to use the IP Printing method, carry out the following steps:

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



- b. Select **HP Jet Direct – Socket** from the **Protocol** pull-down menu. This is the recommended setting for HP printers.
- c. Print out the printer configuration pages. On the printer, press and hold in the green button for eight seconds, or until you see the LEDs above the button start to blink. The printer prints out the configuration pages.
- d. On the first configuration page, under **Product Settings**, find the IP Address. Type this address into the **Address** field on the add printer screen.
- e. The **Name**, **Location**, and **Print Using** information will automatically be filled in. If the **HP LaserJet P2015 Series** PPD does not appear in the **Print Using** field, turn the computer off and then on again and restart the setup process.

6. Click **Add**. The **Installable Options** screen appears.

**Figure 5-15** Installable Options screen



7. In the **Collation in Printer** drop-down menu, select one of the following options, depending on the device configuration:
  - Yes – Total RAM > 96 MB or Hard Disk
  - No – Total RAM < 96 MB and No Hard Disk
8. If the device has the optional 250-sheet tray 3, select **Tray 3**.
9. If the device has a duplex unit (a standard feature on the HP LaserJet P2015dn and the HP LaserJet P2015x models), select the **Duplex Unit** check box.
10. After selecting the installable options, click **Continue**. The device name appears in the **Printer List** and the setup is complete.

**Figure 5-16** Printer List screen



## Set up a printer with Mac OS X V10.3

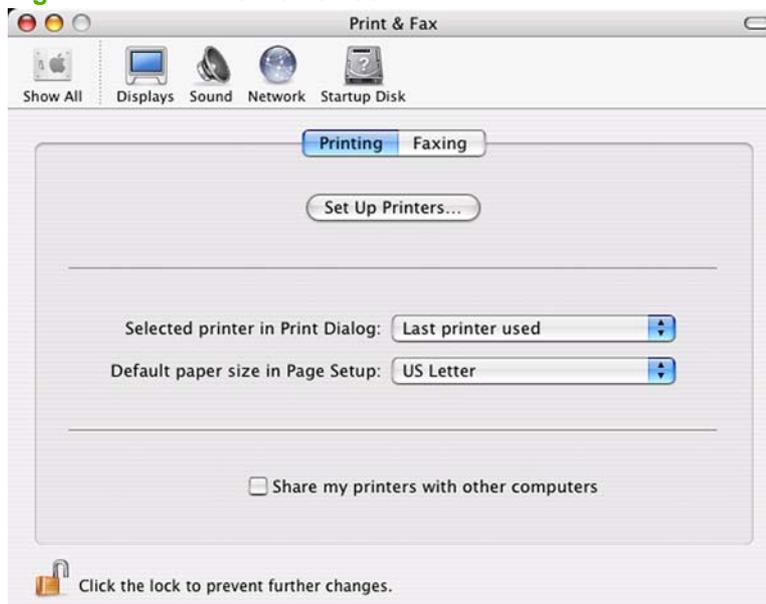
1. If you are installing the printer using a USB connection, connect the USB cable between the HP LaserJet P2015 printer and the computer. Turn on the printer. If you are installing using a network connection, verify that the network cable is connected to the printer and the printer is on.
2. In the **Applications** folder, open the **Utilities** folder, and then run the **Printer Setup Utility**.

**Figure 5-17** 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 5-18** Print & Fax screen



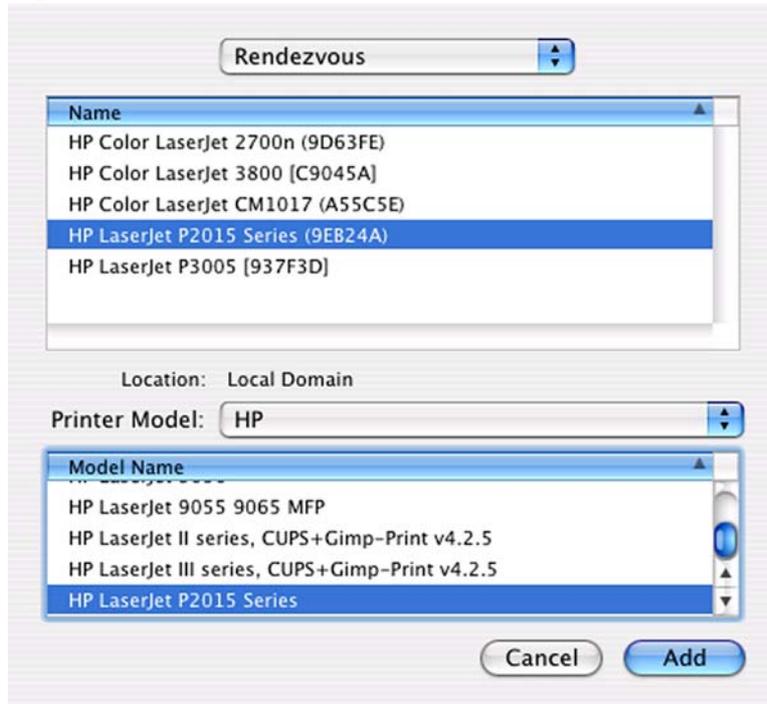
3. If you are installing the printer using a USB connection, verify that the printer appears on the printer list. (In the Print & Fax screen, click the **Set Up Printers...** button to see the printer list.) The **Kind** column in the printer list should display **HP LaserJet P2015 Series**. If this is the case, the setup is complete.

If the printer does not appear, or if the correct information does not appear in the **Kind** column, see [Troubleshooting the printer setup on page 218](#).

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

4. Click **Add** (or the **Set Up Printers...** button in the Print & Fax screen, and then **Add**) to open the add printer screen.

**Figure 5-19** Add printer screen



5. Select the network connection protocol in the top pull-down menu. The two supported protocols are **Rendezvous** and **IP Printing**.

If you are using Rendezvous, carry out the following step:

- Select the HP LaserJet P2015 in the **Name** list. The **Printer Model** and **Model Name** are selected automatically.

 **NOTE:** If the HP LaserJet P2015 does not appear in the list, verify that the printer is powered 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 218](#).

**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 LaserJet P2015 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:

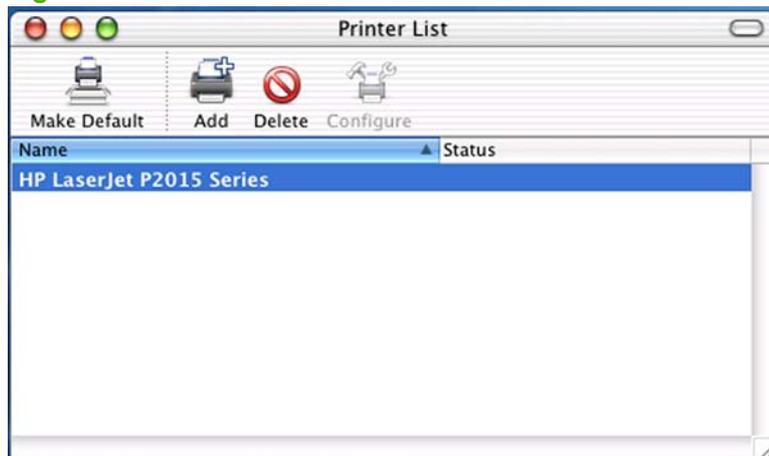
- a. Select **Socket/HP Jet Direct** from the **Printer Type** pull-down menu. This is the recommended setting for HP printers.
- b. Print out the printer configuration pages. On the printer, press and hold in the green button for eight seconds, or until you see the LEDs above the button start to blink. The printer prints out the configuration pages.

- 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 LaserJet P2015 in the **Model Name** list. If the **HP LaserJet P2015 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 LaserJet P2015 printer 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 select **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 device configuration:
    - Yes – Total RAM > 96 MB or Hard Disk
    - No – Total RAM < 96 MB and No Hard Disk
  9. If the device has the optional 250-sheet tray 3, select **Tray 3**.
  10. If the device has a duplex unit (a standard feature on the HP LaserJet P2015dn and the HP LaserJet P2015x models), 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

1. If you are installing the printer using a USB connection, connect the USB cable between the HP LaserJet P2015 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 **Print Center**.

**Figure 5-20** Print Center screen



3. 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 should display **HP LaserJet P2015 Series**. If this is the case, the setup is complete.

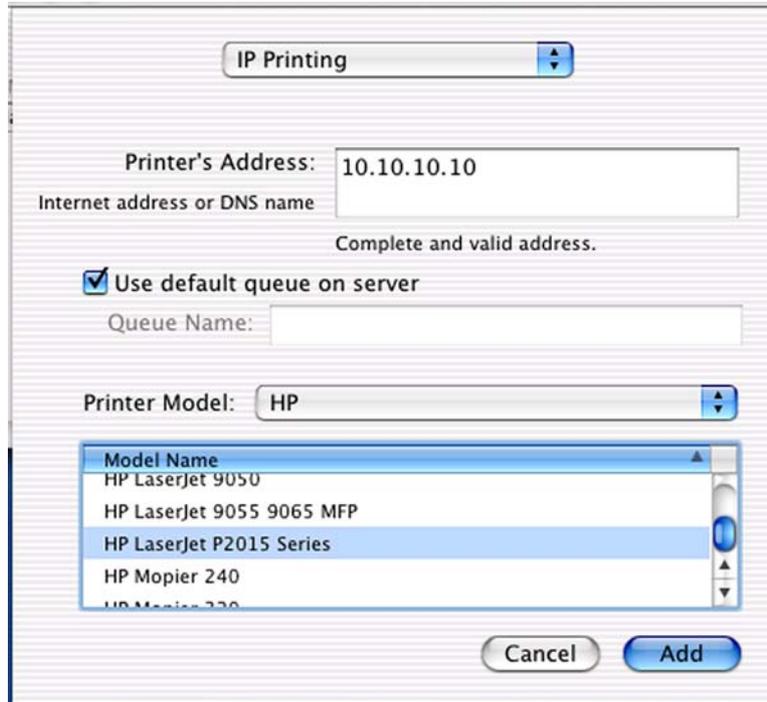
 **NOTE:** If the **Kind** column does not appear in the printer list, go to the **View** menu, and choose **Columns** and then **Kind**.

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 218](#).

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

4. Click **Add** to open the add printer screen.

**Figure 5-21** Add printer screen



5. Select the network connection protocol in the top pull-down menu. The two supported protocols are **Rendezvous** and **IP Printing**.

If you are using Rendezvous, carry out the following step:

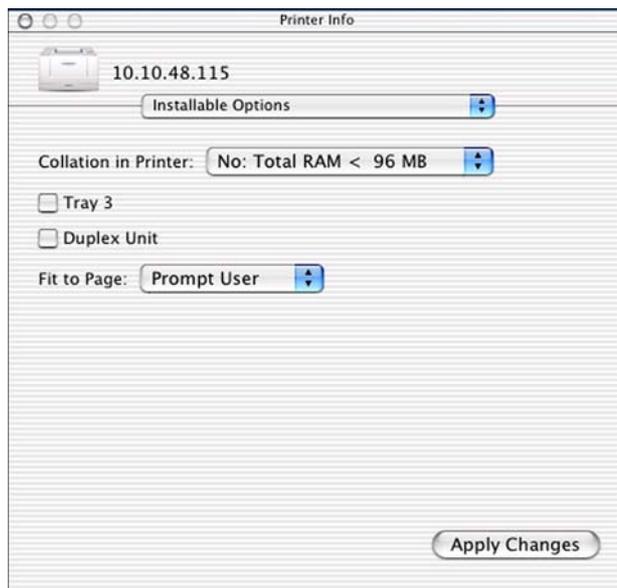
- Select the HP LaserJet P2015 in the **Name** list. The **Printer Model** and **Model Name** are selected automatically.

**NOTE:** If the HP LaserJet P2015 does not appear in the list, verify that the printer is powered 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 218](#).

**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 LaserJet P2015 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. Print out the printer configuration pages. On the printer, press and hold in the green button for eight seconds, or until you see the LEDs above the button start to blink. The printer prints out the configuration pages.
  - b. On the first configuration page, under **Product Settings**, find the IP Address. Type this address into the **Printer's Address** field.
  - c. Select the **Printer Model** and select HP LaserJet P2015 in the **Model Name** list.
6. Click **Add**. The HP LaserJet P2015 printer appears in the **Printer List**.
  7. Select the HP LaserJet P2015 printer, go to the **Printers** menu, and choose **Show Info**.
  8. Select **Installable Options** from the top pull-down menu.



9. In the **Collation in Printer** drop-down menu, select one of the following options, depending on the device configuration:
  - Yes – Total RAM > 96 MB or Hard Disk
  - No – Total RAM < 96 MB and No Hard Disk
10. If the device has the optional 250-sheet tray 3, select **Tray 3**.
11. If the device has a duplex unit (a standard feature on the HP LaserJet P2015dn and the HP LaserJet P2015x models), select the **Duplex Unit** check box.
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.
- Try forcing the printer into USB Full Speed mode by using the printer control panel.

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

1. Unplug USB cable.
2. Delete the print queue with the incorrect type (for example, Generic PostScript Printer).
3. Reinstall the printer software.
4. Turn the computer off and then on again.
5. Reconnect the USB cable from the computer to the printer.

If these steps do not resolve the problem, delete the incorrect print queue, click **Add**, select the printer from the list, and then browse manually for the **HP LaserJet P2015 Series PPD**.

## Uninstall the Macintosh printing system

Follow these instructions to uninstall the Macintosh Printing System.

1. Browse to the folder containing the 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 language.
2. Select the HP LaserJet P2015.gz file and drag it to **Trash**.
3. Empty the **Trash**.
4. To uninstall the HP Device Configuration application and supporting files, go to Applications/HP EWS Device Configuration and run the HP Uninstaller application.

## 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 tools in Mac OS X.

Topics:

- [Access to the HP EWS](#)
- [Status 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 LaserJet P2015 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 LaserJet P2015 printer, click the **Print Queue...** button, then click **Utility**.

- **Using a web browser:**

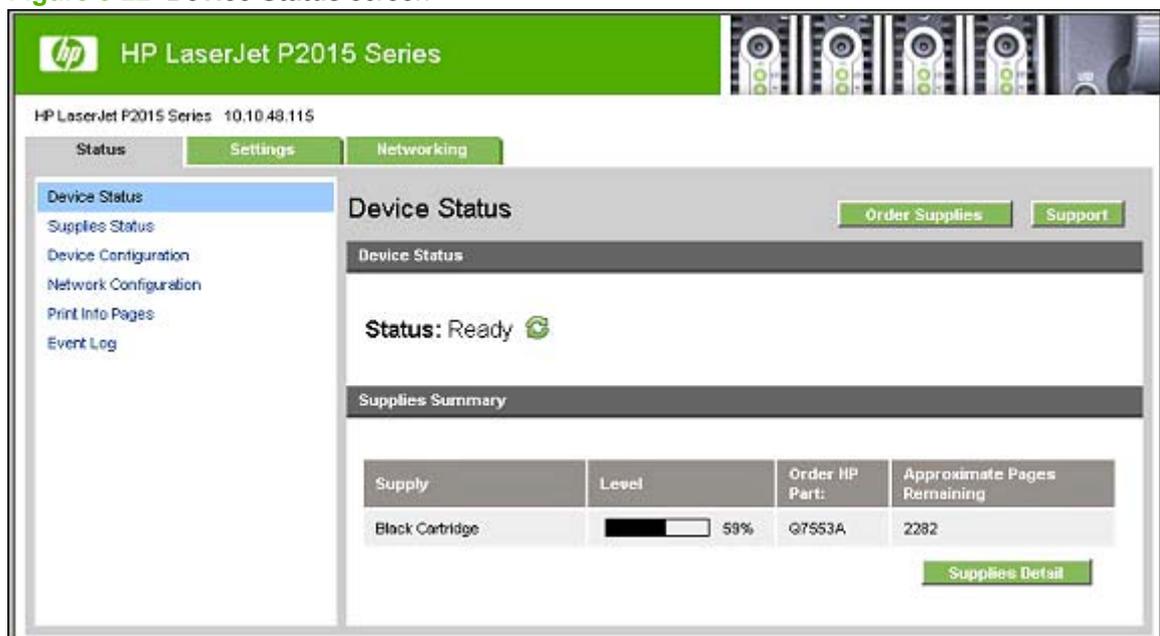
 **NOTE:** This method can only be used if the printer is using a network connection.

1. On the printer, press and hold in the green button for eight seconds, or until you see the LEDs above the button start to blink. The printer prints out the configuration pages.
2. 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. Select the HP LaserJet P2015 from the list of devices. The web browser opens and the **Device Status** screen appears.

**Figure 5-22** Device Status screen



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

## Status tab

The **Status** tab allows you to access and print out detailed information regarding device and supply status, device configuration, network configuration, and usage.

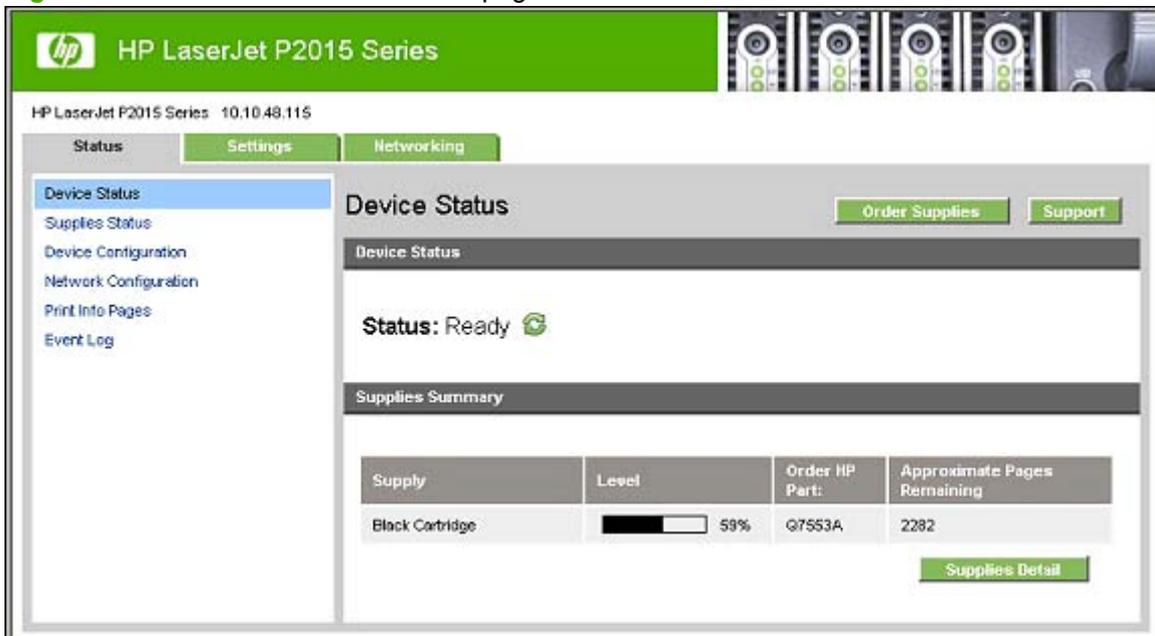
The **Status** tab contains the following pages:

- [Device Status](#)
- [Supplies Status page](#)
- [Device Configuration page](#)
- [Network Configuration page](#)
- [Print Info Pages](#)
- [Event Log page](#)

## Device Status

The **Device Status** page shows device status messages from the device. The **Device Status** page also displays some pertinent printer information and device settings.

**Figure 5-23** HP EWS – Device Status page



The screenshot displays the HP Embedded Web Server (EWS) interface for an HP LaserJet P2015 Series printer. The page title is "HP LaserJet P2015 Series" and the IP address is "10.10.48.115". The "Status" tab is selected, and the "Device Status" page is active. The status is "Ready" with a refresh icon. A "Supplies Summary" table shows the Black Cartridge level at 59% with approximately 2282 pages remaining. Buttons for "Order Supplies" and "Support" are visible.

Supply	Level	Order HP Part:	Approximate Pages Remaining
Black Cartridge	<div style="width: 59%;"></div> 59%	Q7553A	2282

## 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 5-24** HP EWS – **Supplies Status** page

HP LaserJet P2015 Series 10.10.48.115

Status Settings Networking

Device Status  
Supplies Status  
Device Configuration  
Network Configuration  
Print Info Pages  
Event Log

### Supplies Status

Order Supplies Support

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

**Black Cartridge**  
Order HP Part: Q7553A 59%

<b>Approximate Pages Remaining:</b>	2282
<small>(Pages remaining will vary depending on the types of documents printed.)</small>	
<b>Low Reached:</b>	No
<b>Serial number:</b>	1122348
<b>Pages Printed With This Supply:</b>	1609
<b>First Install Date:</b>	20060330
<b>Last Used Date:</b>	20060621

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

## Device Configuration page

The **Device Configuration** page displays the values of all of the settings available to be set in the printer. The contents of this page are consistent with the Configuration page generated by the firmware.

**Figure 5-25** HP EWS – Device Configuration page

The screenshot displays the HP Embedded Web Server (EWS) interface for an HP LaserJet P2015 Series printer. The page is titled "HP LaserJet P2015 Series" and shows the IP address "10.10.48.115". The "Settings" tab is selected, and the "Device Configuration" section is active. The left sidebar contains navigation options: Device Status, Supplies Status, Device Configuration (selected), Network Configuration, Print Info Pages, and Event Log. The main content area is divided into several sections:

- Product Information:** Lists details such as Product Name (HP LaserJet P2015 Series), Formatter Number (ODYSSEYA472), Product Serial Number (CNCFG12345), Service ID (16165), Firmware Datecode (0517\_01:38:41 Phoenix Firmware), Max print quality (ProRes 1200), Controller Number (8), Device Description (HP LaserJet P2015 Series), Language (English), Asset Number, Company Name, Contact Person, Hardware Address (00:14:38:9e:b2:4e), IP Address (10.10.48.115), Total Memory (32 MBytes), and Available Memory (17.64 MBytes).
- Installed Personalities and Options:** Lists installed personalities (PCL5e, PostScript, PCLXL) and DIMM Slot 1 (Empty).
- Page Counts:** Shows various page counts: Total pages printed (8), Pages mispicked in printer (0), Pages jammed in printer (0), PCL6 pages printed (8), PS pages printed (0), and PCL pages printed (0).
- Paper Settings:** Lists paper settings: Paper size (A4), Paper type (Plain), Tray 1 size (Any size), Tray 1 type (Any type), and Tray 2 size (Any size).

Buttons for "Order Supplies" and "Support" are visible in the top right corner of the configuration section.

## Network Configuration page

The **Network Configuration** page contains all the information about the network and its enabled features.

**Figure 5-26** HP EWS – Network Configuration page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists 'Device Status', 'Supplies Status', 'Device Configuration', 'Network Configuration' (selected), 'Print Info Pages', and 'Event Log'. The main content area is titled 'Network Configuration' and includes 'Order Supplies' and 'Support' buttons. It is divided into three sections: 'Network Hardware Configuration', 'Enabled Features', and 'TCP/IP'.

Network Hardware Configuration	
Status:	Ready
Hardware Address:	00:14:38:9e:b2:4a
Firmware Datecode:	0517_01:38:41 Phoenix Firmware
Link Speed and Duplex Negotiations:	Automatic
Link speed:	100 Mbps
Duplex:	Full
Automatic Crossover:	Enabled
Connection Timeout (I/O):	300 seconds

Enabled Features	
Password:	Not Specified
DHCP:	Enabled
BOOTP:	Enabled
AUTOIP:	Enabled
LPD Printing:	Enabled
Bonjour:	Enabled
HP SLP:	Enabled
SNMP:	Enabled

TCP/IP	
Host Name:	NP19EB24A
Domain Name:	sakson.corp
Bonjour printer name:	HP LaserJet P2015 Series (9EB24A)
IP Address:	10.10.48.115
Subnet Mask:	255.255.255.0
Default Gateway:	10.10.48.1
IP Configured By:	DHCP
DHCP/BOOTP Server:	10.10.48.15
DHCP Expiration Time:	03:00:00 (days:hours:minutes)
WINS server:	10.10.48.15

SNMP	
Status:	Read-Write Access Enabled

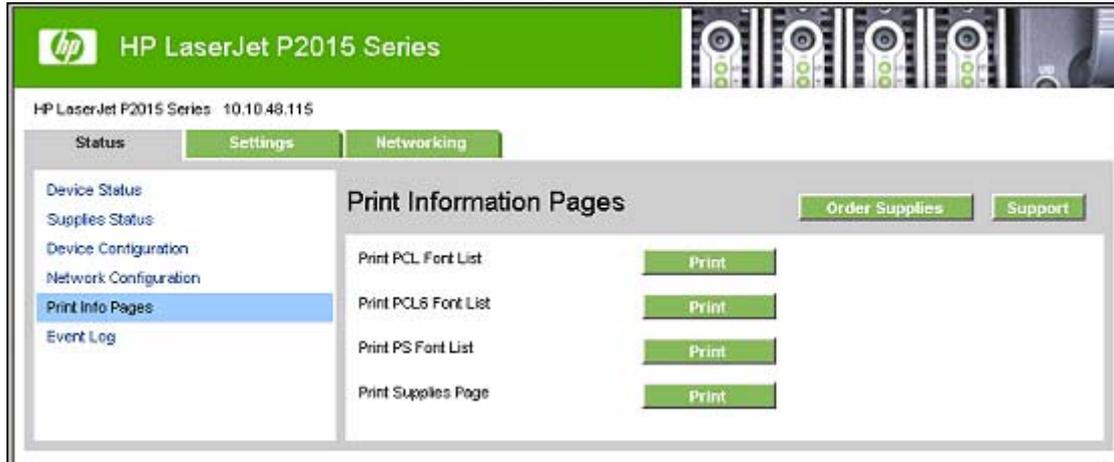
## Print Info Pages

The **Print Info Pages** page provides users the ability to easily print out the internal special pages that are generated by the device. The following information pages are available.

- PCL Font List
- PCL6 Font List

- PS Font List
- Supplies Page

**Figure 5-27** HP EWS – **Print Info Pages** page



## Event Log page

Use the **Event Log** page to track the events that occur on the HP LaserJet P2015 printer.

**Figure 5-28** HP EWS – **Event Log** page



## Settings tab

The **Settings** tab allows you to view and change settings for the following features:

- [Device Information page](#)
- [Paper Handling page](#)
- [Printing page](#)
- [PCL5e page](#)
- [PostScript page](#)
- [Print Quality page](#)
- [Paper Types page](#)

- [System Setup page](#)
- [Service page](#)

## Device Information page

The **Device Information** page contains identifying information about the HP LaserJet P2015 printer.

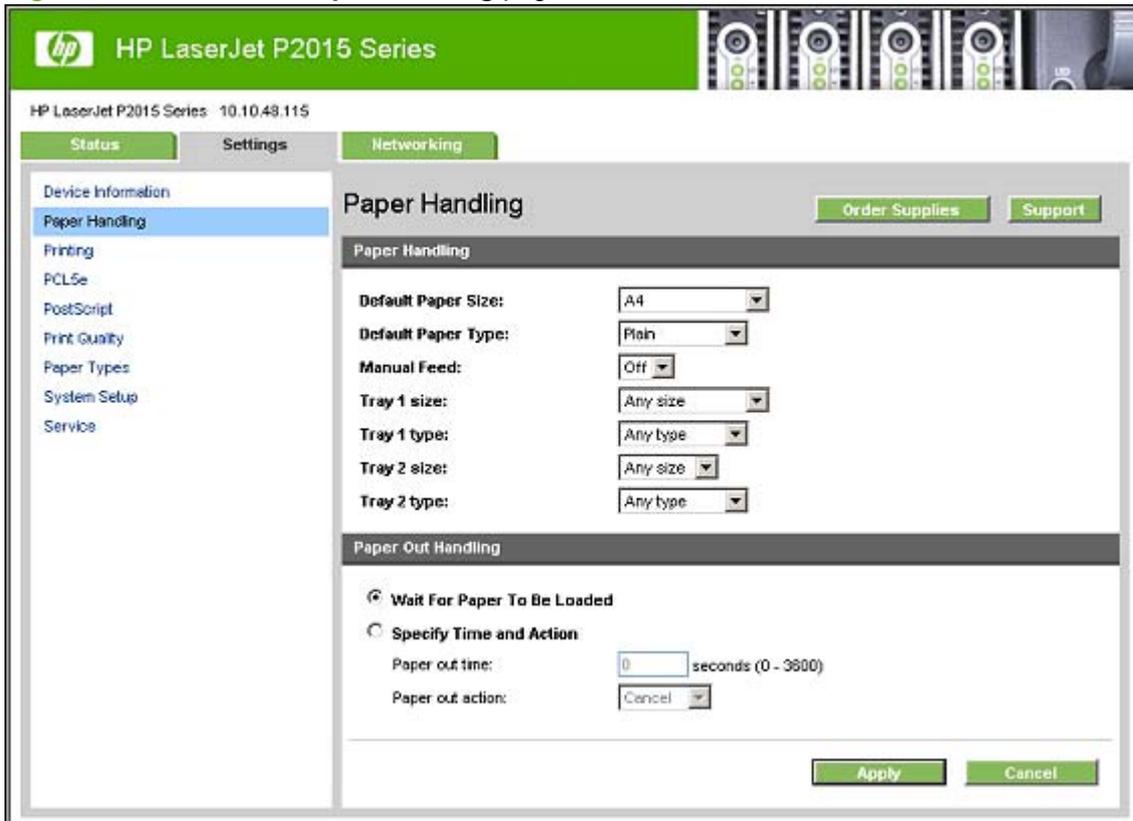
**Figure 5-29** HP EWS – Device Information page



## Paper Handling page

Use this page to configure the paper-handling settings for the HP LaserJet P2015 printer.

Figure 5-30 HP EWS – Paper Handling page



## Printing page

Use this page to change the printing defaults for the HP LaserJet P2015 printer.

Figure 5-31 HP EWS – Printing page



## PCL5e page

Use the **PCL5e** page to change font information and form length. This page does not apply to Macintosh print drivers.

**Figure 5-32** HP EWS – **PCL5e** page



## PostScript page

The **PostScript** page allows you to change the **Print PS Errors** option.

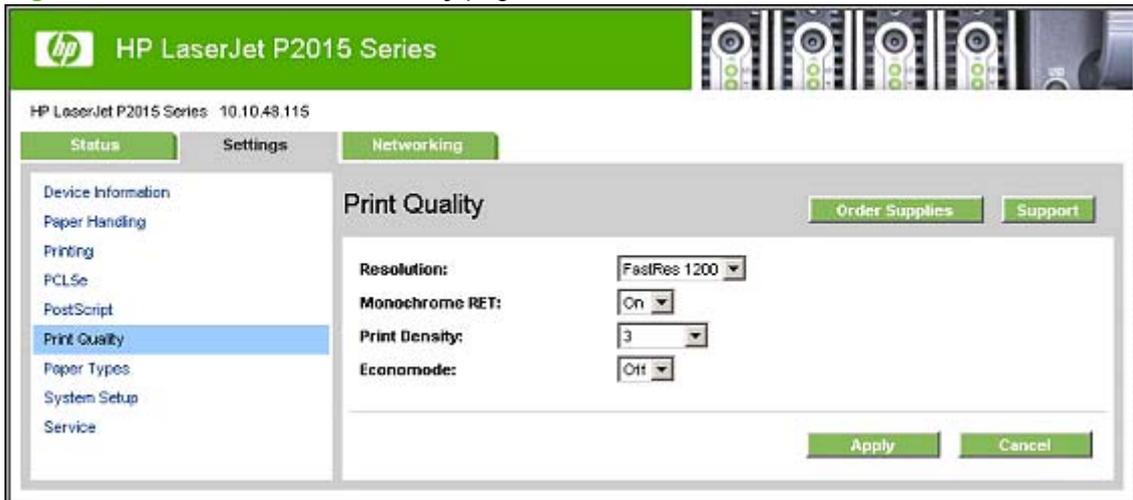
**Figure 5-33** HP EWS – **PostScript** page



## Print Quality page

Use the **Print Quality** page to change the print quality defaults for the HP LaserJet P2015 printer.

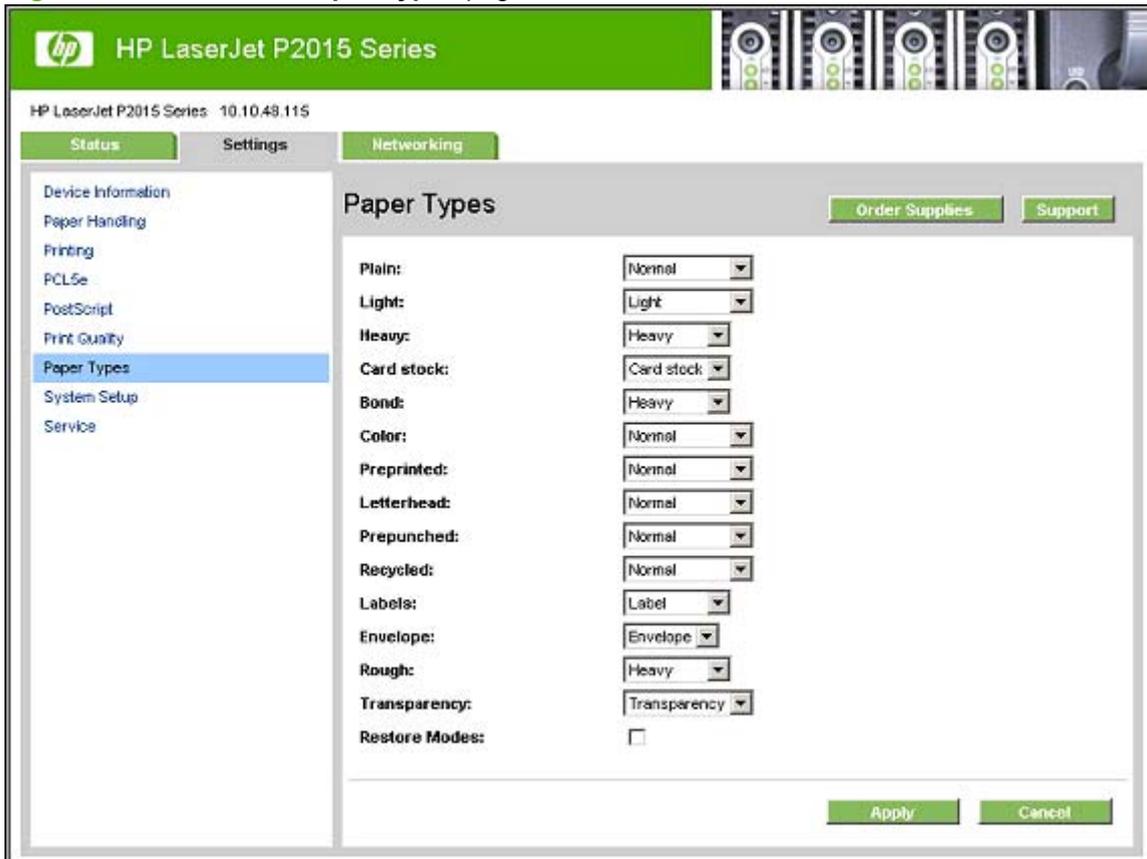
**Figure 5-34** HP EWS – **Print Quality** page



## Paper Types page

Use the **Paper Types** page to set the default paper type settings for the HP LaserJet P2015 printer.

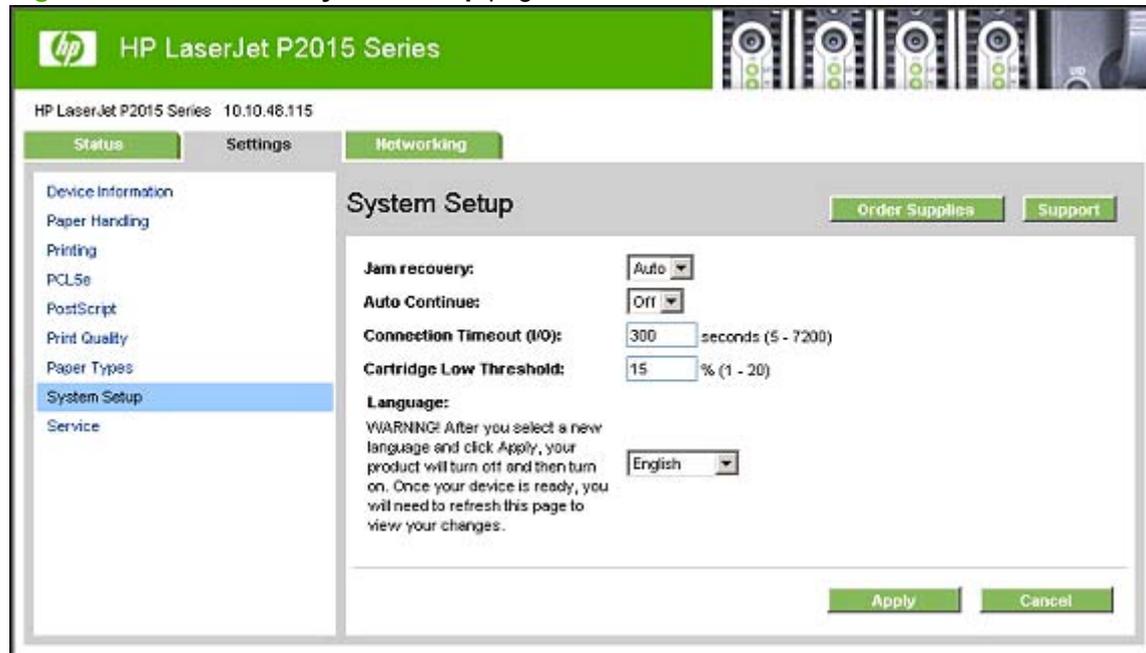
**Figure 5-35** HP EWS – **Paper Types** page



## System Setup page

Use the **System Setup** page to change settings on the HP LaserJet P2015 printer such as Jam Recovery and Auto Continue.

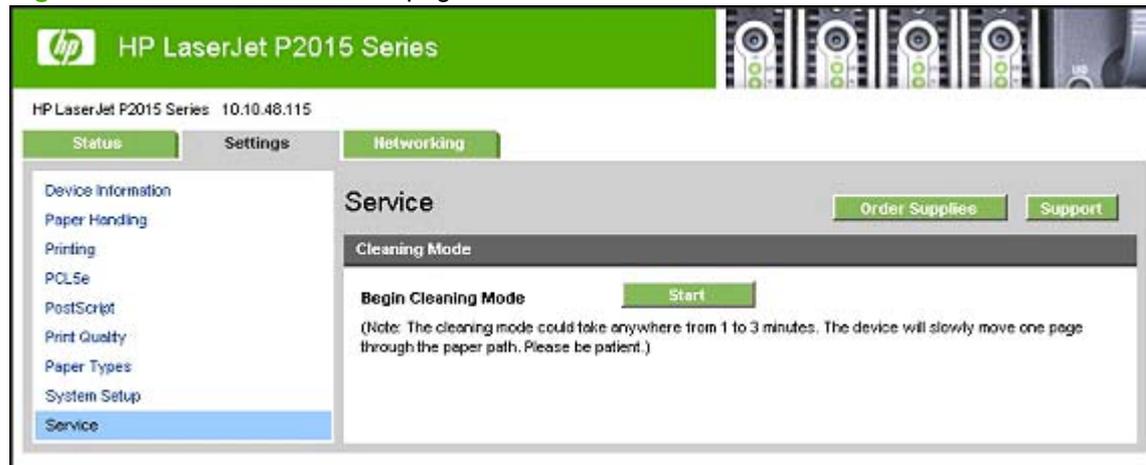
**Figure 5-36** HP EWS – **System Setup** page



## Service page

Use the **Service** page to initiate the cleaning mode on the HP LaserJet P2015 printer.

**Figure 5-37** HP EWS – **Service** page



## Networking tab

The **Networking** tab allows you to view and change settings for the device's network connection and communication. The following pages are available:

- [IP Configuration page](#)

- [Advanced page](#)
- [Bonjour page](#)
- [SNMP page](#)
- [Network Configuration page](#)
- [Password page](#)

## IP Configuration page

Use the **IP Configuration** page to configure the IP address and host and domain names for the HP LaserJet P2015 printer.

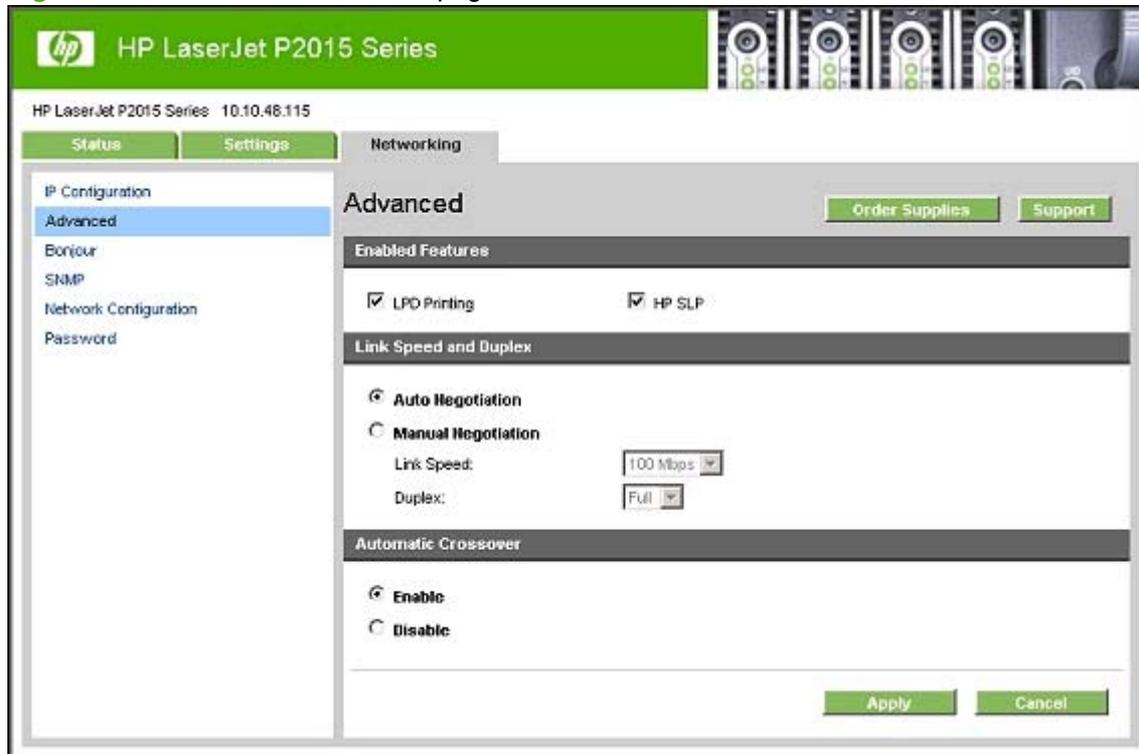
**Figure 5-38** HP EWS – IP Configuration page

The screenshot displays the HP Embedded Web Server (EWS) interface for an HP LaserJet P2015 Series printer. The page title is "HP LaserJet P2015 Series" and the current IP address is 10.10.48.115. The "Networking" tab is selected, and the "IP Configuration" sub-tab is active. A warning message states: "Warning: A change in the IP Address will result in loss of connectivity to the browser." The "IP Configured By:" is set to "DHCP". The "Host Name:" is "NP19EB24A" and the "Domain Name:" is "sakison.com". Under "Automatic IP", the "DHCP", "BOOTP", and "AUTOP" checkboxes are all checked. The "Manual IP" option is unselected. The "IP Address:" is 10.10.48.115, the "Subnet Mask:" is 255.255.255.0, and the "Default Gateway:" is 10.10.48.1. The "WINS" section shows a "WINS server:" of 10.10.48.15. "Apply" and "Cancel" buttons are located at the bottom right.

## Advanced page

Use the **Advanced** page to configure the enabled settings and other settings, such as link speed, for the HP LaserJet P2015 printer.

**Figure 5-39** HP EWS – **Advanced** page



## Bonjour page

Use the **Bonjour** page to enable or disable the Bonjour settings for the HP LaserJet P2015 printer. You can also use this page to change the Bonjour printer name.

**Figure 5-40** HP EWS – **Bonjour** page



## SNMP page

Use this page to configure the SNMP settings for the HP LaserJet P2015 printer.

Figure 5-41 HP EWS – SNMP page

The screenshot shows the HP Embedded Web Server (EWS) interface for an HP LaserJet P2015 Series printer. The page title is "HP LaserJet P2015 Series" and the IP address is "10.10.48.115". The "Settings" tab is selected, and the "SNMP" option is highlighted in the left-hand navigation menu. The main content area is titled "SNMP" and includes a caution: "Caution: Changing these settings can potentially disrupt network scanning, network faxing (if supported by your device), or other network functionality". There are three radio button options: "Enable SNMP v1 read-write access" (selected), "Enable SNMP v1 read-only access (uses 'public' for the Get Community Name)", and "Disable SNMP v1". The "Enable SNMP v1 read-write access" option has four input fields: "Set Community Name:", "Confirm Set Community Name:", "Get Community Name:", and "Confirm Get Community Name:". A checkbox "Disable SNMP v1 default Get Community Name of 'public'" is also present. At the bottom right, there are "Apply" and "Cancel" buttons. In the top right corner of the page, there are "Order Supplies" and "Support" buttons.

## Network Configuration page

The **Network Configuration** page contains all the information about the network and its enabled features.

**Figure 5-42** HP EWS – Network Configuration page

The screenshot displays the HP EWS interface for an HP LaserJet P2015 Series printer. The top navigation bar includes 'Status', 'Settings', and 'Networking'. The left sidebar lists various status and configuration options, with 'Network Configuration' selected. The main content area is titled 'Network Configuration' and includes buttons for 'Order Supplies' and 'Support'. It is divided into three sections: 'Network Hardware Configuration', 'Enabled Features', and 'TCP/IP'.

Network Hardware Configuration	
Status:	Ready
Hardware Address:	00:14:38:9e:b2:4a
Firmware Datecode:	0517_01:38:41 Phoenix Firmware
Link Speed and Duplex Negotiations:	Automatic
Link speed:	100 Mbps
Duplex:	Full
Automatic Crossover:	Enabled
Connection Timeout (I/O):	300 seconds

Enabled Features	
Password:	Not Specified
DHCP:	Enabled
BOOTP:	Enabled
AUTOIP:	Enabled
LPD Printing:	Enabled
Bonjour:	Enabled
HP SLP:	Enabled
SNMP:	Enabled

TCP/IP	
Host Name:	NP99E024A
Domain Name:	sakson.corp
Bonjour printer name:	HP LaserJet P2015 Series (9EB24A)
IP Address:	10.10.48.115
Subnet Mask:	255.255.255.0
Default Gateway:	10.10.48.1
IP Configured By:	DHCP
DHCP/BOOTP Server:	10.10.48.15
DHCP Expiration Time:	03:00:00 (days:hours:minutes)
WINS server:	10.10.48.15

SNMP	
Status:	Read-Write Access Enabled

## Password page

Use this page to set or change the Administrator password.

**Figure 5-43** HP EWS – Password page





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# 6 Engineering Details

## Introduction

Topics:

- [Troubleshooting](#)
- [Uninstall](#)
- [Media attributes](#)
- [Hewlett-Packard HP LaserJet P2015 Series Printing System Readme](#)

# Troubleshooting

This section contains the following topics:

- [Basic troubleshooting checklist](#)
- [Troubleshooting tools](#)
- [Known Issues for the HP LaserJet P2015 printer](#)

## Basic troubleshooting checklist

Use the following steps when trying to solve a problem with the device.

**Table 6-1 Troubleshooting checklist**

Step number	Verification step	Possible problems	Solutions
1	<p><b>Is the power on?</b></p> <p>When the device is connected to a grounded power source, amber lights on the top of the printer will show that it is warming up. When the device is ready to print, only the green light will be on.</p>	No power due to failed power source, cable, switch, or fuse.	<ol style="list-style-type: none"> <li>1. Verify that the device is plugged in.</li> <li>2. Verify that the power cable is functional and that the power switch is on.</li> <li>3. Check the power source by plugging the device directly into the wall or into a different outlet.</li> <li>4. Test the outlet or connect another device to the outlet to verify that the outlet is functioning.</li> </ol>
2	<p><b>Does the device print from the computer?</b></p> <p>Use a word-processing application to send a print job to the device.</p>	<p>Software is not installed correctly or an error occurred during software installation.</p> <hr/> <p>The cable is not connected correctly.</p> <hr/> <p>An incorrect driver is selected.</p> <hr/> <p>Other devices are connected to the USB port.</p> <hr/> <p>There is a port driver problem in Microsoft Windows.</p>	<p>Uninstall and then reinstall the device software. Verify that you are using the correct installation procedure and the correct port setting.</p> <hr/> <p>Reconnect the cable.</p> <hr/> <p>Select the proper driver.</p> <hr/> <p>Disconnect the other devices and try again to print.</p> <hr/> <p>Uninstall and then reinstall the device software. Verify that you are using the correct installation procedure and the correct port setting.</p>
<p>If the error persists, contact HP Customer Contact Center.</p>			

## Troubleshooting tools

The HP LaserJet P2015 printing-system CD contains the following troubleshooting tools in the Utilities folder on the root directory. This section contains the following topics:

- [File to E-mail utility](#)
- [AccessDeniedUtility.exe](#)
- [FixErr1714 utility](#)

## File to E-mail utility

The File to E-mail utility collects the data specified in an .INI file and then attaches the data files to an e-mail that can be sent to HP Customer Support to assist troubleshooting. The utility runs on the computer, but does not interact with the HP LaserJet all-in-one.

The tool is included on the installer CD, but is *not* copied to the computer during the software installation. HP Customer Support can also send the utility to you by e-mail or by posting it to an HP Web page.

The tool is compatible with Windows 98 SE, Windows Me, Windows 2000, and Windows XP.

The File to E-mail utility runs with any MAPI-compliant e-mail applications. It does not run with Web-based e-mail services such as Yahoo, Hotmail, or AOL.

Depending on the speed of the computer, it might take a few minutes for the utility to gather the log files and attach them to an e-mail message.

The File to E-mail utility consists of two files that are located in the util folder on the HP LaserJet P2015 software CD:

- <CD-ROM drive>util\CCC\FiletoEmail\FileToEmail.exe
- <CD-ROM drive>util\CCC\FiletoEmail\FileToEmail.ini

To use the File to E-mail utility, copy these files to the desktop, navigate to them in Explorer, and double-click **FileToEmail.exe** to open the utility. The utility generates files, opens an e-mail message, and attaches the files so that you can send them to your IT administrator, as shown in the following figure shows some of the attachments.

If the File to E-mail utility is not successful for any reason (for instance, if you cancel the new message or you are using Web-based e-mail software), all the files are copied to a folder on the desktop that is named HpCCC, possibly with strings of 0's attached to the end. You can zip these files and e-mail them separately.

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 **NOTE:** This version of the File to Email utility does not copy the collect .BAT logs.

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## AccessDeniedUtility.exe

This utility is used by CCC agents when customers call in with registry “access denied” problems.

- Fixes the registry access-denied issues
- Not very useful because the Shield plug-in already does this.
- CCC requested this utility to ship anyway
- No command line options exist, just double-click.
- No logging takes place

## FixErr1714 utility

This utility is used by CCC agents when customers call in with MSI error 1714, which is an occasional problem that occurs when a different user than the installing user attempts to uninstall the product.

- This utility might fix the 1714 problem; some evidence exists that this utility might not work in all cases.
- No command line options exist, just double-click.
- No logging takes place.
- No user interface exists.

## Known Issues for the HP LaserJet P2015 printer

The following issues are known issues for the HP LaserJet P2015 printer.

# Uninstall

This section provides information about the following topics:

- [Uninstall methods](#)
- [Uninstall component list](#)
- [Uninstall instructions for Microsoft Windows 2000 and Microsoft Windows XP](#)
- [Uninstall instructions for Microsoft Windows 98 SE and Microsoft Windows Me](#)

## Uninstall methods

The following three methods exist for uninstalling the HP LaserJet P2015 printing-system software from the computer:

- **Program group.** Click **Uninstall** from the HP LaserJet P2015 program group from **Programs** menu on the computer. This is the preferred uninstall method.
- **Add/Remove programs.** Click **Add/Remove Programs** from the Windows Control Panel, and then click the HP LaserJet P2015 software components that you want to remove.
- **HP LaserJet P2015 printing-system CD.** Reinsert the HP LaserJet P2015 printing-system CD into the CD-ROM drive on the computer and then click **Uninstall**.

## Uninstall component list

The HP LaserJet P2015 uninstaller removes the following components from the computer:

- Drivers
- HP ToolboxFX
- User guides

The HP LaserJet P2015 uninstaller does *not* remove the following components from the computer:

- HP Extended Capabilities
- HP Software Update

You must remove these components using Microsoft Windows Add/Remove Programs feature. A warning screen appears if any other HP products are still using the components you want to remove.

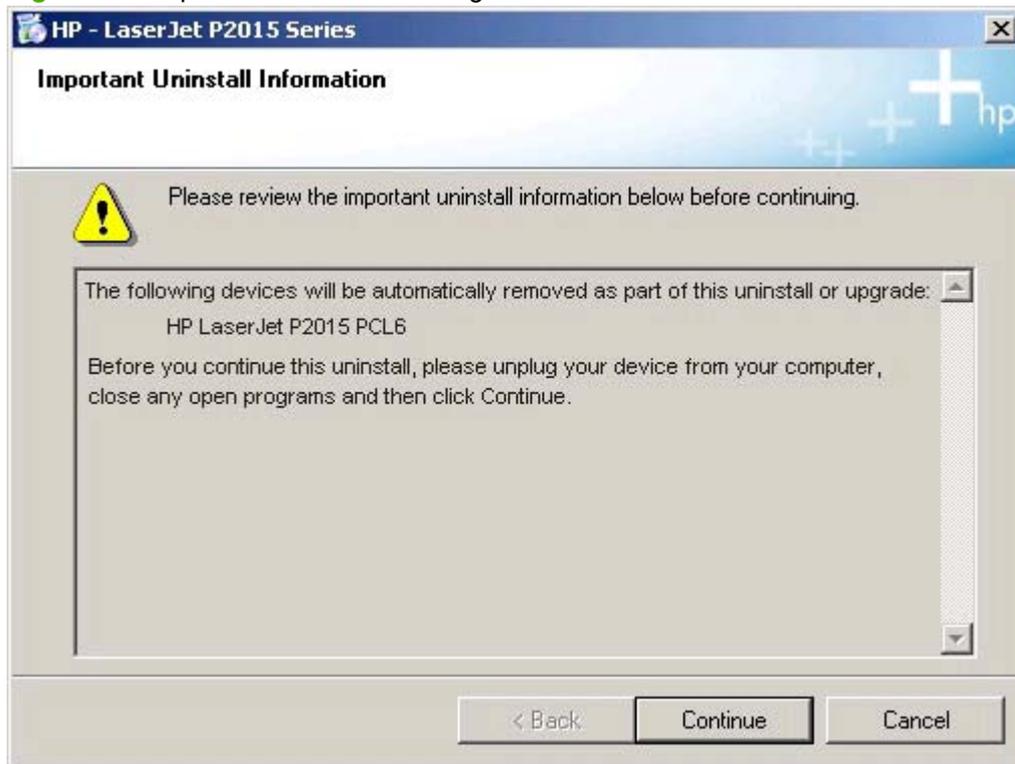
For a full list of the files installed and uninstalled on the computer using the HP LaserJet P2015 uninstaller, see the *HP LaserJet P2015 Software Technical Reference Addendum*.

## Uninstall instructions for Microsoft Windows 2000 and Microsoft Windows XP

 **NOTE:** To uninstall the software from Microsoft Windows 2000 and Microsoft Windows XP, log on with Administrator privileges.

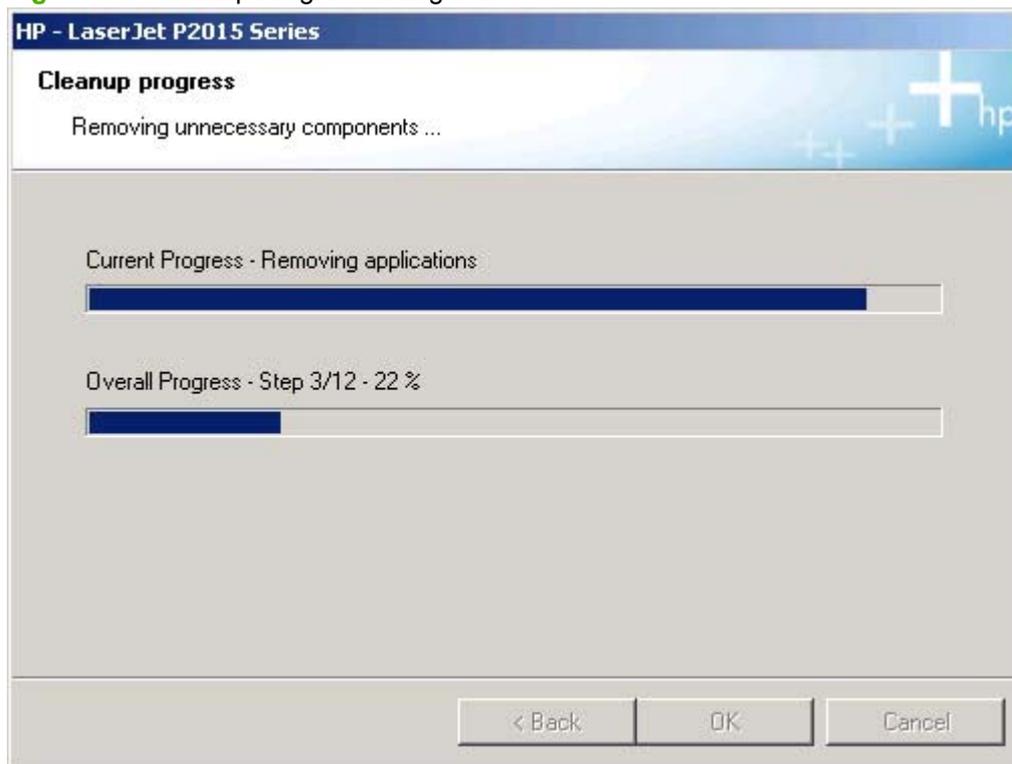
1. Quit all open programs.
2. Click **Start**, click **Programs** (or **All Programs** in Microsoft Windows XP), select **HP**, select **HP LaserJet P2015 series**, and then click **Uninstall**.
3. The **Important Information** dialog box appears. Click **Next** to continue.

**Figure 6-1** Important Information dialog box



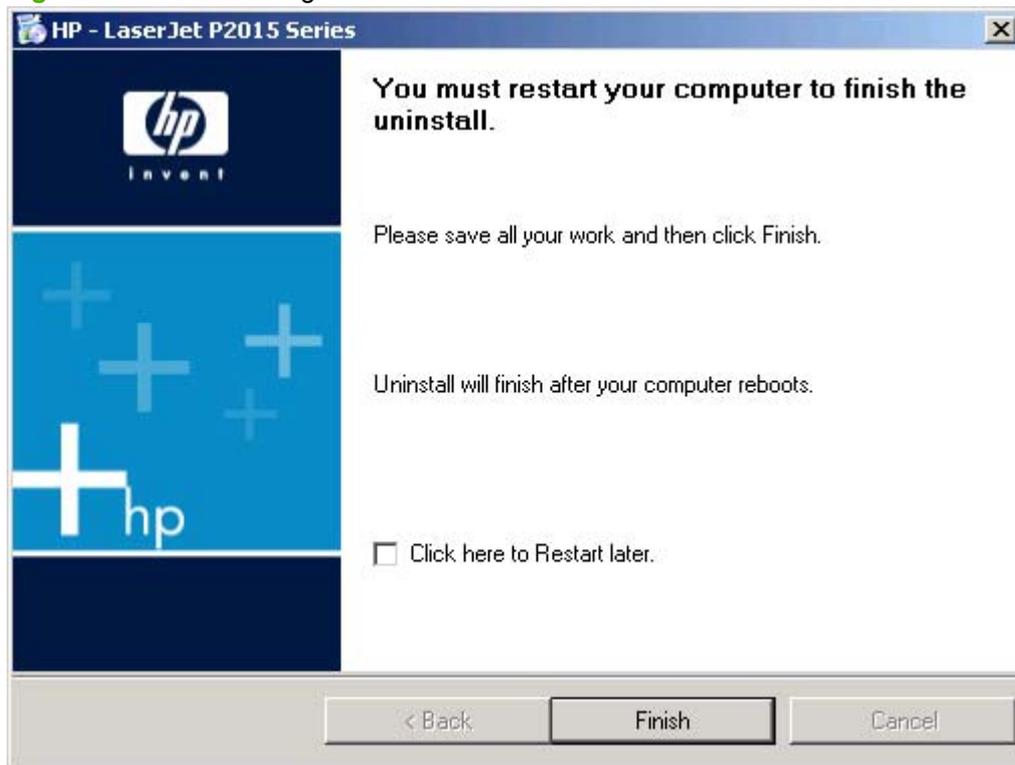
4. The **Cleanup Progress** dialog box appears. A progress bar reflects the status of the uninstall process.

**Figure 6-2** Cleanup Progress dialog box



5. When the uninstall process is completed, the **Restart** dialog box appears. Select the **Click here to restart later** check box if you want to restart the computer at a later time, and then click **Finish**. Or, click **Finish** to restart the computer and finish the uninstall process.

**Figure 6-3** Restart dialog box



## Uninstall instructions for Microsoft Windows 98 SE and Microsoft Windows Me

Follow these steps to uninstall the HP LaserJet P2015 printing-system software for Microsoft Windows 98 SE and Microsoft Windows Me.

1. Click **Start**, click **Settings**, and then click **Printers**.
2. Right-click the icon for the HP LaserJet P2015 printer and then click **Delete**. The product icon and the associated files are removed from the computer.

## Media attributes

This section includes the following information about media attributes:

- [Media types and sizes](#)
- [Custom paper sizes](#)

### Media types and sizes

The tables in this section provide information about media features, media attributes, and paper-handling constraints for the HP LaserJet P2015 printer.

 **NOTE:** The following table lists the features and attributes of various media listed under the **Size Is** drop-down menu on the **Paper/Quality** tab. The list order can vary, depending on the operating system. The list will contain all the sizes shown here, and might contain sizes from other drivers.

**Table 6-2 Supported media attributes**

Paper sizes	Width	Height
Letter	216 mm	279 mm
	(8.5 inches)	(11.0 inches)
Legal	216 mm	355 mm
	(8.5 inches)	(14.0 inches)
A4	210 mm	297 mm
	(8.27 inches)	(11.69 inches)
Executive	185 mm	266 mm
	(7.25 inches)	(10.5 inches)
B5 (ISO)	176 mm	250 mm
	(6.93 inches)	(9.84 inches)
Envelope #10	105 mm	241 mm
	(4.13 inches)	(9.5 inches)
Envelope Monarch	99 mm	190 mm
	(3.88 inches)	(7.5 inches)
Envelope C5 (ISO)	162 mm	229 mm
	(6.38 inches)	(9.02 inches)
Envelope DL (ISO)	110 mm	220 mm
	(4.33 inches)	(8.66 inches)
Envelope B5 (ISO)	176 mm	250 mm
	(6.93 inches)	(9.84 inches)
Custom	Minimum:	Minimum:
	76 mm	127 mm

**Table 6-2 Supported media attributes (continued)**

<b>Paper sizes</b>	<b>Width</b>	<b>Height</b>
	(3.0 inches)	(5.00 inches)
	Maximum:	Maximum:
	216 mm	356 mm
	(8.5 inches)	(14.0 inches)
B5 (JIS)	182 mm	257 mm
	(7.16 inches)	(10.12 inches)
Postcard (JIS)	100 mm	148 mm
	(3.94 inches)	(5.83 inches)
Double Postcard (JIS)	148 mm	200 mm
	(5.83 inches)	(7.87 inches)
A5	148 mm	210 mm
	(5.83 inches)	(8.27 inches)
8.5 x 13 (Foolscap)	216 mm	330 mm
	(8.5 inches)	(13 inches)
16K 7.75 x 10.75	197 mm	273 mm
	(7.75 inches)	(10.75 inches)
16K 184x260mm	184 mm	260 mm
	7.2 inches	10.2 inches
16K 195x270mm	195 mm	270 mm
	7.67 inches	10.6 inches

## Custom paper sizes

The following table identifies the media types the HP LaserJet P2015 supports in trays 1, 2, and 3.

**Table 6-3 Tray 1 and Tray 2 specifications**

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

<sup>1</sup> The printer supports a wide range of standard and custom sizes of print media. Check the printer driver for supported sizes.

<sup>2</sup> Capacity can vary depending on media weight and thickness, and environmental conditions.

<sup>3</sup> Smoothness: 100 to 250 (Sheffield).

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

**Table 6-4 Optional Tray 3 specifications**

Optional Tray 3 (250-sheet tray)	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>
Plain paper	Minimum: 76 x 127 mm (3 x 5 inches) Maximum: 216 x 356 mm (8.5 x 14 inches)	60 to 163 g/m <sup>2</sup> (16 to 43 lb)	Up to 200 sheets

<sup>1</sup> The printer supports a wide range of standard and custom sizes of print media. Check the printer driver for supported sizes.

<sup>2</sup> Capacity can vary depending on the media weight and thickness, and environmental conditions.

**Table 6-5 Specifications for automatic 2-sided printing**

Tray 1, Tray 2, and optional Tray 3	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>
Paper	Letter, A4, legal, 8.5 x 13 inches	60 to 105 g/m <sup>2</sup> (16 to 28 lb)	Single sheet for Tray 1 Up to 250 sheets for Tray 2 and optional Tray 3
HP LaserJet glossy paper	Letter, A4	75 to 120 g/m <sup>2</sup> (20 to 32 lb)	Single sheet for Tray 1 Up to 250 sheets for Tray 2 and optional Tray 3

<sup>1</sup> The printer supports a wide range of standard and custom sizes of print media. Check the printer driver for supported sizes.

<sup>2</sup> Capacity can vary depending on the media weight and thickness, and environmental conditions.

# Hewlett-Packard HP LaserJet P2015 Series Printing System Readme

- [Introduction](#)
- [Product Software](#)
- [Known issues and workarounds](#)
- [Installation Instructions](#)
- [Customer assistance](#)
- [Legal statements](#)

## Introduction

### Purpose of this document

This document contains installation instructions for the HP LaserJet P2015 printing system software.

### Product connection information

All HP LaserJet P2015 Series printers have a Hi-Speed USB 2.0 port.

The HP LaserJet P2015n, HP LaserJet P2015dn, and HP LaserJet P2015x models can also connect to a network by using the HP internal networking port.

## Product Software

The HP LaserJet P2015 Series printer comes with an installation CD-ROM that contains printer drivers for Windows and Macintosh, HP ToolboxFX software for Windows, and uninstaller software for Windows.

### Supported operating systems

The printer software runs on the following operating systems:

- Windows 98 (printer driver only)
- Windows Me (printer driver only)
- Windows 2000
- Windows Server 2003 (printer driver only)
- Windows XP (32-bit)
- Windows XP (64-bit) (printer driver only)
- Macintosh OS X V10.2.8, V10.3.9, and V10.4.3

### Printer drivers

A printer driver is software that allows other software programs to access printer configuration features. Typically, you should install a printer driver for each printer that you use.

## Microsoft Windows printer drivers

The software CD-ROM that came with the printer includes three Windows printer drivers: PCL 5e, PCL 6, and HP postscript level 3 emulation. Choose a printer driver based on the way you use the printer.

- Use the **PCL 6** printer driver to take full advantage of all printer features. Unless complete backward compatibility with previous PCL drivers or older printers is necessary, the PCL 6 driver is recommended.
- Use the **PCL 5e** printer driver if you need print results to look consistent with those from older HP LaserJet printers. Certain features are not available in this printer driver.
- Use the **HP postscript level 3 emulation** printer driver for HP postscript level 3 emulation. Certain printer features are not available in this printer driver.

## Macintosh printer driver

The software CD-ROM that came with the printer includes an HP LaserJet P2015 Series printer driver for Macintosh OS X V10.2.8, V10.3.9 and V10.4.3.

## Printer driver downloads

The latest printer drivers and printing software for the HP LaserJet printer are available on the Web at <http://www.hp.com/support/ljp2015>.

## HP ToolboxFX software for Microsoft Windows

The software CD-ROM that came with the printer includes HP ToolboxFX software for Windows. HP ToolboxFX is used to complete the following tasks:

- Check the printer status.
- Configure the printer settings.
- View troubleshooting information.
- View online documentation.

## Uninstaller software for Microsoft Windows

The uninstaller utility allows you to remove the Windows HP printing system components. See [Uninstaller on page 253](#) for more instructions.

## Known issues and workarounds

- The HP ToolboxFX application that is installed with a full installation of the HP LaserJet P2015 Series software might not function in Windows 2000 if Service Pack 4 (SP4) and critical updates are not currently installed. If you encounter problems with the HP ToolboxFX application, verify that Windows 2000 Service Pack 4 is installed, and install all available critical updates for Windows 2000 from Windows Update.
- Firewall software can interfere with the HP software installer. If you do not disable the firewall during installation, you may experience longer install times and failures to detect the device during a network install.
- Certain high-speed USB 2.0 cards ship with unsigned host controller drivers. If you have purchased a USB 2.0 add-in card and have an unsigned driver, you may experience driver installation

problems or communication problems between the device and HP software. It is recommended that you always use a Microsoft WHQL Certified host controller driver with the USB hardware.

- Plug-and-Play print driver packages are available on the web at the following URL: <http://www.hp.com/support/ljp2015>.
- Functionality on systems that meet only minimum system requirements will be limited. Use of many images or videos requires a system that meets the recommended system requirements for acceptable performance and reliability.

If the device is not recognized:

- Verify that the cable is USB 2.0 high-speed compliant.
- Ensure that the cable is connected correctly. Remove the USB cable, look at the end of the cable, and then match it to the pattern on the USB port. Make sure that it is not upside down. Insert one end of the USB cable completely into the USB port on the HP device and the other end into the back of the computer.
- Check that the peripheral is turned on. Peripherals will not be recognized if the power is off.
- Ensure that the USB cable is no more than 15 feet or 5 meters in length.
- Check that the USB port is enabled. Some computers ship with disabled USB ports.

For a complete list of known issues and workarounds, click the following link (a connection to the internet is required): <http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp>

## Installation Instructions

On Microsoft Windows, the CD-ROM installation software detects the operating system version.

### Installation options for Microsoft Windows

Two methods are available for installing printer drivers and software components for the printer.

**Full (Recommended).** Installs everything that the device needs to work plus HP ToolboxFX:

- **HP LaserJet P2015 Series PCL 6 driver.**
- **HP ToolboxFX.** Allows you to change printer settings and contains documentation and self-help tools.
- **Screen Fonts.** Printer-matching TrueType fonts help ensure WYSIWYG printing.
- **HP LaserJet P2015 Series printer documentation.** A list of documentation, which includes information about product operation, troubleshooting, warranty and specifications, supplies, and support.
- **HP Software Update.** Use this software to check for software updates for your HP products.

**Minimum.** Installs only the software required to print. The following is a list of available components:

- **HP LaserJet P2015 Series PCL 6 driver.**
- **Screen Fonts.** Printer-matching TrueType fonts help ensure WYSIWYG printing.
- **HP Software Update.** Use this software to check for software updates for your HP products.

---

 **NOTE:** To install additional printer drivers (PCL 5e or HP postscript level 3 emulation), utilize the Windows Add Printer utility.

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## Installing software on Microsoft Windows

 **NOTE:** Administrator privileges are required to install the printing system onto a Windows 2000 or Windows XP operating system.

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### USB Connection

1. Insert the software installation CD into the computer CD-ROM drive.
2. If the installation program does not start automatically, browse the CD contents and run the SETUP.EXE file.
3. Follow the on-screen instructions.

### Network Connection

If a computer on the network already has the HP LaserJet P2015 software installed, no additional software installation is necessary when adding a new HP LaserJet P2015 printer to the network. Otherwise, install the printer software on one of the networked computers as directed below.

1. Insert the software installation CD into the computer CD-ROM drive.
2. If the installation program does not start automatically, browse the CD contents and run the SETUP.EXE file.
3. Follow the on-screen instructions.

## Installing software on Macintosh OS X V10.2.8, V10.3.9, and V10.4.3

### USB connection

1. Insert the CD-ROM.
2. Run the installation utility.
3. After the software installation is complete, attach the USB cable to the printer and the computer and then restart the computer.
4. After the computer has restarted, open the Print Center or Printer Setup Utility to see if the printer name appears in the Printer List.
5. If the printer name displays in the Printer List, the setup is complete. If the printer name does not display in the Printer List, go to the next step.
6. Click the **Add** button, and then select **USB** from the drop-down list.
7. Select **HP LaserJet P2015 Series** and then click **Add**. The printer name displays in the Printer List. Setup is complete.

### Network connection

1. Connect the local area network (LAN) cable to the printer.
2. Print the Network configuration report from the printer control panel. Find the "mDNS printer name" located under the TCP/IP heading. The mDNS name will be needed in step 7.

3. Insert the CD-ROM.
4. Run the installation utility.
5. After the installation utility has completed, open the Print Center or Printer Setup Utility.
6. Click **Add**, and then select **Bonjour/Rendezvous** from the drop-down list.
7. Select the **HP LaserJet P2015 Series printer** name that matches the mDNS printer name found on the Network configuration report printed in step 2.
8. Click **Add**. The printer name displays in the Printer List. Setup is complete.

## Uninstaller

Use the Uninstall icon in the HP LaserJet P2015 Series printer program group to select and remove the HP printing system components from a Windows machine.

1. From the **Start** menu, in the **HP LaserJet P2015 Series** program group, click the **Uninstall** icon.
2. The printing system guides you through removing all of the printing system components.
3. If you have performed a **Full** install and you do not have any other HP devices installed, follow steps 4 and 5. Following these steps may disable certain functionality of other HP devices that are installed because they share the software.
4. Open the Microsoft Windows Control Panel. Double-click **Add/Remove Programs**.
5. You will see entries for **HP Extended Capabilities** and **HP Software Update**. For each item, click **Change/Remove** and follow the prompts.

 **NOTE:** For printer-driver-only (Add Printer) installations, delete the printer icon from the Printers folder (Windows 98 Second Edition, Windows Me, Windows 2003 Server, and Windows XP 64-bit).

## Customer assistance

Browse to one of the following URLs for online technical support:

- United States: <http://www.hp.com/support/ljp2015>
- Worldwide: <http://www.hp.com>

See the printer user guide for additional methods of obtaining software and support information, such as printer driver distribution centers, fax services, and other online support.

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