



**HP Universal Print Driver for Windows, version 4.7
Evaluator's Guide**



Contents

Getting to know the HP Universal Print Driver	1
How the HP Universal Print Driver works	2
Key features and benefits	3
Evaluating the product	5
Flexible driver installation	6
Easy to use	10
Broad device support.....	14
Full-featured, bidirectional communication	15
Easy to manage, easy to configure.....	18
Customizable deployment	22
Environmental responsibility.....	24
Security.....	26
A—Technical specifications.....	28

Getting to know the HP Universal Print Driver



Transform your printing environment and improve your efficiency.

Welcome to the Reviewer/Evaluator's Guide for the new HP Universal Print Driver for Windows, version 4.7 and later. The guide offers an overview of the print driver and its management capabilities and helps you to conduct a successful evaluation.

The HP Universal Print Driver (UPD) is a single, intelligent, feature-rich driver that makes it easy to connect to a range of HP devices, in the office, or on the road—without downloading separate, product-specific drivers. When you are preparing to implement a new operating system or need to make other significant changes to your print environment, the Universal Print Driver can transform and simplify your environment. The driver features a common user interface so users can use the HP Universal Print Driver immediately, with little or no training. Real-time access to print features and job and device status allows users to print easily, solve basic problems on their own, and remain productive.

The HP Universal Print Driver is available in HP postscript 2 and 3 emulation, 32- and 64-bit versions, and HP PCL6 and HP PCL5 print languages. The print driver gives users access to a range of HP print devices while giving system administrators the tools to manage these devices more effectively.

The HP Universal Print Driver enables you to:

- Standardize the user's printing experience across all HP devices.
- Ensure compatibility with existing printing infrastructure and tools.
- Transform enterprise printing to a less complex, yet more flexible solution.
- Improve end user productivity by providing a common user interface across all devices and real-time printer status information – empowering users to manage their printers more efficiently.

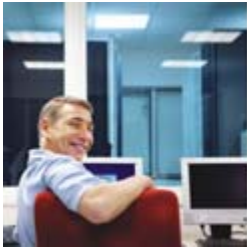
How the HP Universal Print Driver works

Once the HP Universal Print Driver has been installed on a PC, it communicates with each supported print device to determine the unique print capabilities installed on each device. As a result, the information you see reflects the real capabilities of the print device. Plus, this information can be updated when new finishing devices, for example, are added to the print device through the **Update Now** option. At the same time, many of the features—such as paper size, paper type, margins, and printing shortcuts—are consistent across devices. The user interface design is also consistent across devices, increasing usability.

When you print, the print job is sent to the print server or directly to the print device, depending on your environment. The same bi-directional communication that builds the product-specific user interface provides you with real-time information, like when the job has finished printing, not just when the job has been spooled to the print server. An optional Status Notification Prompt (SNP) displays job, device, and supplies information that helps you print successfully on your own, without requiring help desk intervention.



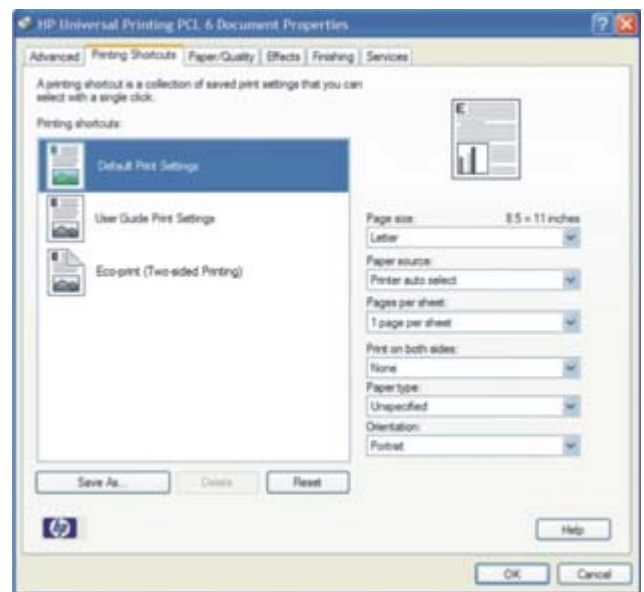
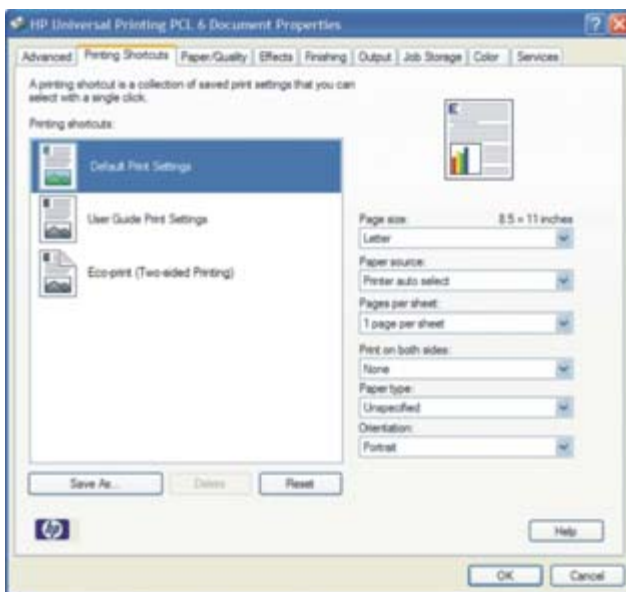
Key features and benefits



Provide instant access to any supported HP print device—on the road, in the office, or at home.

Rely on a driver that's anything but generic. The HP Universal Print Driver is more than a one-size-fits-all print solution. The sophisticated yet simple print driver communicates directly with HP devices, gathering configuration information, and then customizing the user interface to show the device's unique, available features.

The images below illustrate how the HP Universal Print Driver uses bi-directional communication to build a print driver based on each print device's unique capabilities. The screen on the left is for the HP LaserJet 4700 printer, a color printer, while the screen on the right is for the HP LaserJet P2015 printer, a black-and-white printer. Note the differences in the available tabs.



While some multi-device print drivers only enable the most basic functions, the HP Universal Print Driver enables most available features—no matter how advanced—from two-sided printing and stapling to watermark printing on all of the devices it supports. While the user interface is customized for each device, users enjoy a familiar experience regardless of device.

Meet corporate road warriors' needs

The HP Universal Print Driver can operate in two different modes to accommodate changing user needs. Dynamic mode allows you to find printers on a network, which is particularly valuable when you're on the road or want to print to a new device. Traditional mode performs like a traditional driver. Both modes can be used on the same PC to ensure the best user experience. For more detail, please see "Experience two modes for greater flexibility" on page 10 and "Full-featured, bidirectional communication" on page 15.

Decrease help-desk calls

By providing real-time print job, device and supplies information, the HP Universal Print Driver empowers users to resolve common problems on their own and place fewer calls to the help desk. This can mean faster problem resolution, improved printer uptime, and increased productivity.

Save time and money

In December, 2006, Industry Analysts, Inc. (IA) bestowed their prestigious Technical Innovation Award to the HP Universal Print Driver. IA praised the driver for the time it would save IT departments, concluding that “administrators will no doubt love that there is a single self-updating driver common to all HP devices.” The HP Universal Print Driver delivers more than convenience—it delivers concrete savings in time and money.

- A large university estimates that it now spends 20-30 percent less time adding new sites and has eliminated the time previously spent resolving driver issues.
- An insurance provider anticipates a 75 percent decrease in manpower to integrate printers.
- A construction management company expects a 50 percent reduction in the 16 hours it spends each month installing and maintaining print drivers.¹

Experience easy office integration

The HP Universal Print Driver is compatible with more HP print devices than ever, including a wide range of color and black-and-white HP LaserJet printers, and multifunction products (MFPs).

- The HP Universal Print Driver works with both networked and direct-connected HP devices.
- When you are creating a printer path in HP Web Jetadmin, the HP Universal Print Driver is the default driver. The two tools work seamlessly together.
- Ease IT’s burden when migrating to Windows Vista®. Rather than qualifying 100s of drivers as well as all of your printing devices, rely on a single Vista-compatible driver for virtually all of your HP LaserJet devices.
- The HP Universal Print Driver is available in 35 different languages and supports multiple printer languages, including PCL5, PCL6, and HP postscript 2 and 3 emulation.

Manage users’ printing experience

Use HP Managed Printing Administration (MPA) software or Active Directory (AD) group policy templates to provide an automated method to create a controlled and customized print environment. Assign users groups and policies that help control costs by limiting access to color printing, for example. You can also customize SNPs so that only those responsible for ordering supplies receive those alerts.

Depend on the HP Universal Print Driver to perform

The HP Universal Print Driver is built on proven HP print driver technology. Tested thoroughly and used in many applications for years, the HP Universal Print Driver is a powerful solution that you can rely on to perform consistently.

Evaluating the product



Depend on a quality solution that works well and performs reliably.

Based on extensive market research and customer feedback, HP has identified business needs in eight essential categories. These categories should be closely examined as you consider employing a universal print driver. In this section, we will examine each of these, and how the HP Universal Print Driver for Windows meets the criteria in each category.



1—Flexible driver installation

2—Easy to use

3—Broad device support

4—Full-featured, bidirectional communication

5—Easy to manage, easy to configure

6—Customizable deployment

7—Environmental responsibility

8—Security

Evaluating universal print drivers

When performing your evaluation, be certain to simulate your print environment as closely as possible. Try to make a fair comparison by setting up in the same environment and testing similar settings and configurations.

Flexible driver installation



Because the HP Universal Print Driver is flexible, you can install it in Traditional or Dynamic mode—and you can have both running on your PC at once.

- **Traditional mode** functions like most product-specific print drivers you are accustomed to using. During installation, the driver is associated with a specific printer, creating a permanent instance of the driver in your **Printers and Faxes** folder.
- You can also install it in **Dynamic mode**, which is unique to the HP Universal Print Driver. Dynamic mode allows users to find and connect to network print devices on their own—without IT or help desk assistance. Unlike product-specific drivers, users can print within any network or print environment without downloading a product-specific driver—perfect for on the road or for when users want to print to a new device.

HP provides advanced deployment and configuration tools for enterprise environments. You can fully configure the HP Universal Print Driver for your specific enterprise requirements. Please see the Systems Administrator’s Guide at www.hp.com/go/upd for more information.

Installing the HP Universal Print Driver in Traditional mode

For a current list of supported print devices, go to www.hp.com/go/upd and click the **Specifications** tab.

1. Before beginning installation, make sure the HP Universal Print Driver supports your environment. The driver supports:
 - Microsoft® Windows Vista, 2000, XP®, XP Professional x64, 2003 and 2008 Server (32/64 bit)
 - Microsoft Windows Terminal Services and Citrix Presentation Server Environments

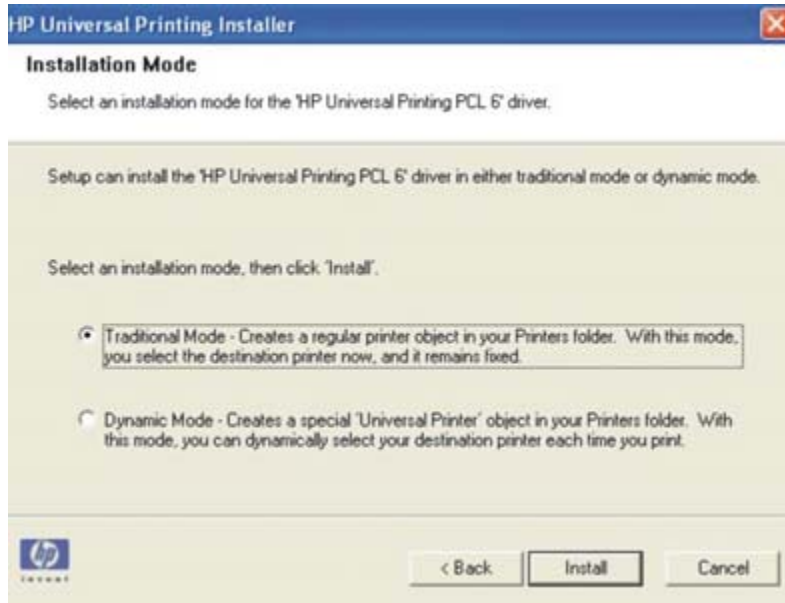
Note The HP Universal Print Driver can be used independently of management tools. However, for network administrators, the HP Managed Printing Administration (MPA) software or Active Directory templates are recommended. For more information on both, see page 18.

2. Go to the following Web site: www.hp.com/go/upd.
3. Decide which HP Universal Print Driver to install based on your specific printing needs. The table below provides a description and recommended environment for each.

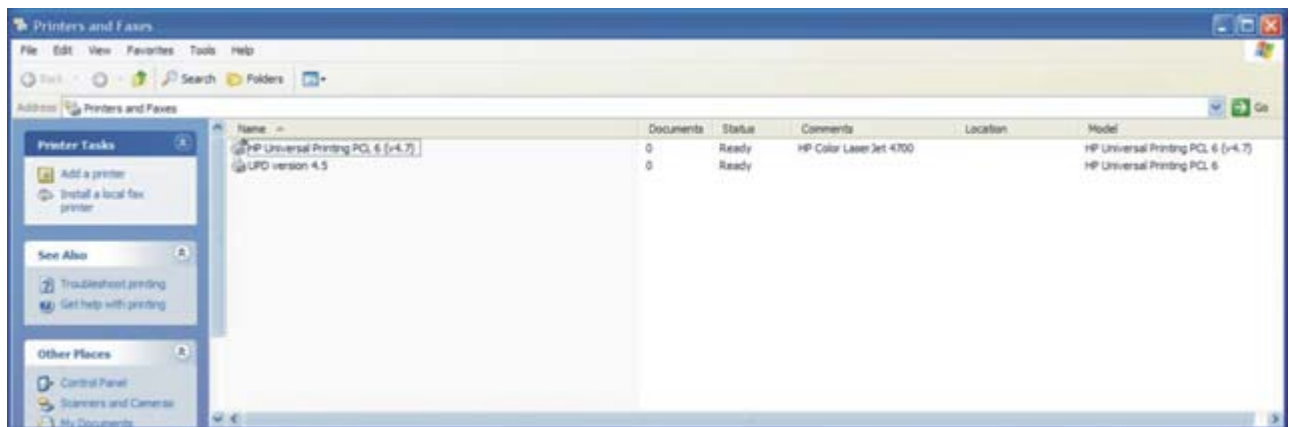
PDL	Recommended print environment
HP PCL6	<ul style="list-style-type: none"> • Recommended for printing in all Windows environments • Provides the overall best speed, print quality, and printer feature support for most users • Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments. May not be fully compatible with third-party and custom solutions based on PCL5
HP PCL5 driver	<ul style="list-style-type: none"> • Recommended for general office Windows printing • Backward compatible with previous PCL versions or older HP LaserJet printers • Is the best choice for third party or home-grown custom solutions (forms, fonts, SAP programs)
HP postscript emulation driver	<ul style="list-style-type: none"> • Recommended for printing with Adobe or other highly graphics-intensive applications • Use for HP postscript level 2 and 3 needs and postscript font support • Slightly faster than PCL6 when using Adobe applications • Best print compatibility between Apple Macintosh and Windows applications

For more information on installation, refer to www.hp.com/go/upd and select the **Documentation** tab.

- Download and save the HP Universal Print Driver specific to your operating system and printing needs.
- Navigate to and unzip the HP Universal Print Driver download file to a folder on your PC.
- Open the unzipped HP Universal Print Driver folder.
- Double-click the install.exe file to install the software.
- The **Universal Printing Installer Wizard** opens. Read the software license agreement and click **Yes** to continue.
- The **Installation Mode** window opens.
- Select **Traditional mode**, click **Install**, as shown in the image below. The **Add Printer Wizard** opens.



- The **Installing** window opens. Wait for install to complete.
- When the **Finish** window opens, click **Finish**. Both the HP Universal Print Driver version number and the model name of the installed device will be displayed.

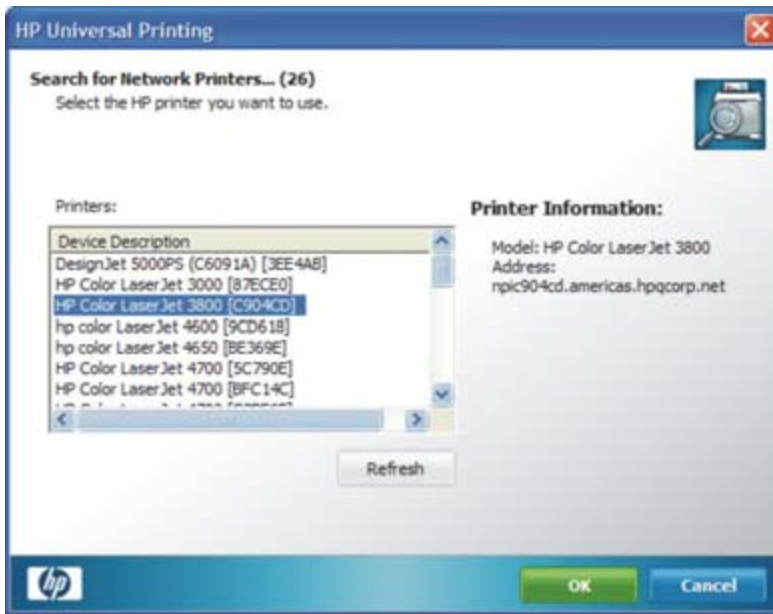


Installing the HP Universal Print Driver in Dynamic mode

Repeat instructions beginning at step 5 above, selecting Dynamic mode at step 10.

- Right-click on the HP Universal Print driver in your Printers and Faxes folder or select the HP Universal Print Driver from the Print dropdown menu of an application.
- Click on Properties.

13. Click on **Search for Network Printers**.



14. Select a device and click **OK**.

15. Click **Check Status**.

16. Click **OK**.

17. Repeat 11 and 12.

18. Click **Enter a Printer Address**.

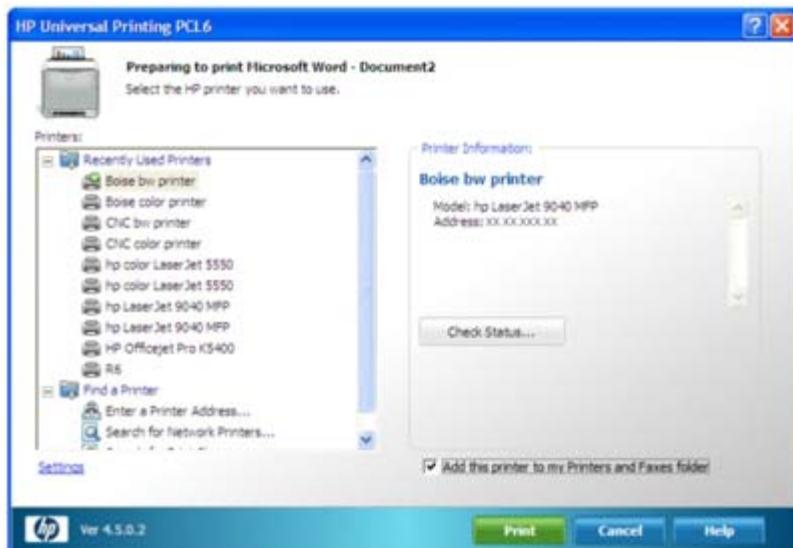
19. Type in the IP address or host name of a printer and click **OK**.

20. Click **Check Status**.

21. Click **OK**.

A permanent instance of this driver can be created by simply clicking **Add this printer to my Printer and Faxes folder**, as shown below. When you select this, the driver will function in Traditional mode and users can select print devices from an application's **Print** menu.

Note This option is only available for users with Local Admin rights.



Evaluating software installation

During print driver installation, please consider the following:

- Note which platforms and printer languages the drivers support.
- Overall, is the print driver easy to obtain and install?
- Do you have different choices during installation? How easy is it to understand and select the correct one?
- Install the driver in all of the available modes, such as Traditional and Dynamic. Print some test pages from frequently used applications. Document any driver or software changes performed during testing.

Easy to use



Enable users to print easily and solve problems on their own.

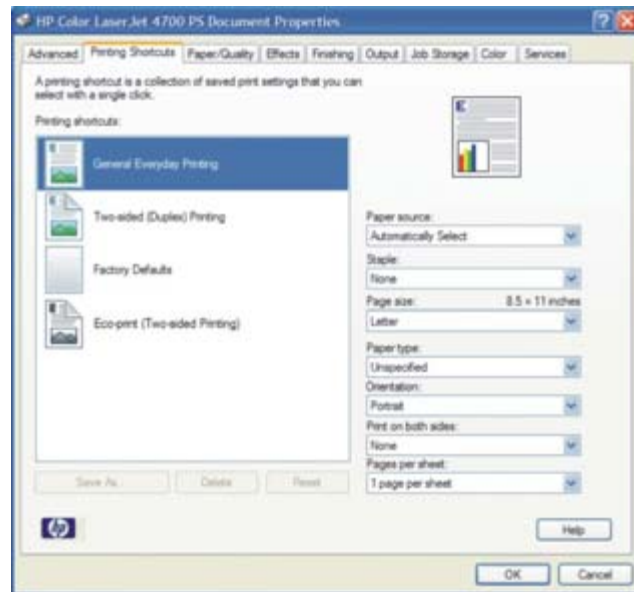
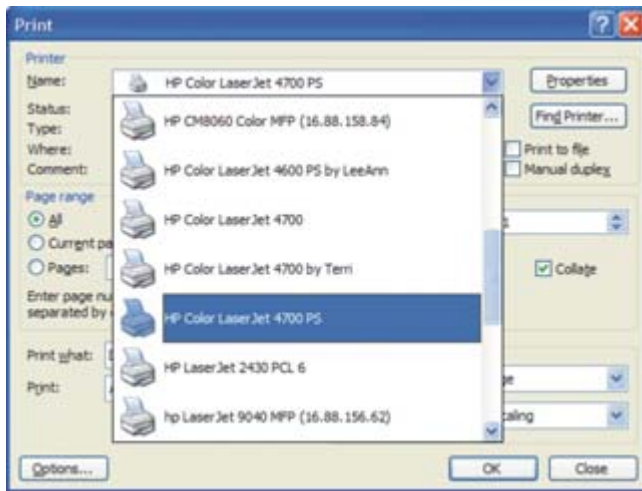
Enjoy a common interface for all supported HP print devices

Regardless of what HP printer or MFP you are using, enjoy the same familiar experience. The HP Universal Print Driver features a universal interface that's customized to each printing device's unique, available features.

Experience two modes for greater flexibility

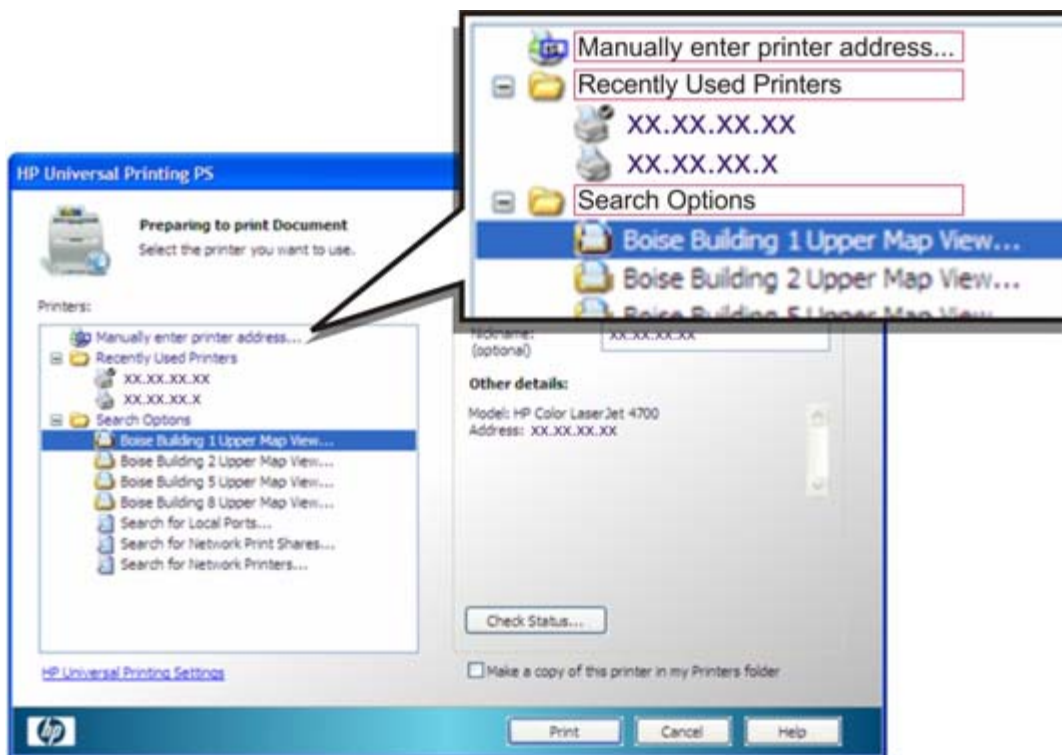
The HP Universal Print Driver can operate in two different modes, Traditional or Dynamic, to accommodate your needs.

Traditional mode functions exactly like the product-specific drivers you are accustomed to using. When installed in Traditional mode, the HP Universal Print Driver is associated with a specific print device, which you can then select from an application's print menu, as illustrated in the image on the left. Once selected, the driver functions as a traditional, product-specific driver (refer to the image on the right).



When installed in Dynamic mode, the HP Universal Print Driver offers the most flexibility. Dynamic mode enables users to find printers on a network. Print within any network or print environment without downloading a product-specific driver. When printing in a mobile environment, you can print to any supported HP device using the full HP Universal Print Driver features—perfect when you're on the road, in a conference room, or want help finding a new device. An easy-to-use interface helps users connect to HP print devices on their own.

There are four methods for finding a printer in Dynamic mode. The image below illustrates three of the four Dynamic modes for finding a printer: **Manually enter printer address**, **Recently Used Printers**, **Managed Printer Lists**, or **Search Options**.



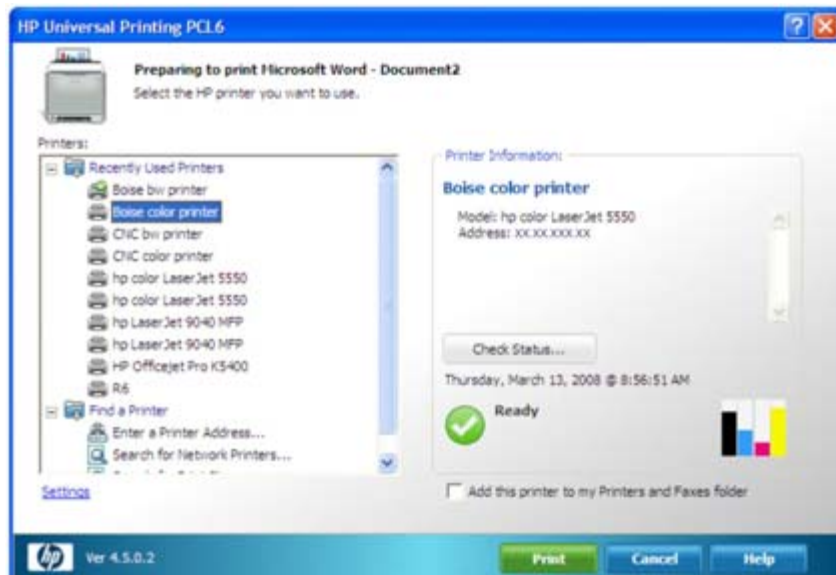
You can also find printers using Managed Printer Lists, discussed in "Create, import, and modify Managed Printer Lists" on page 19.

Note Both Traditional and Dynamic modes can be used on the same PC to support both office and mobile printing, and users can switch easily between them. This enables the best printing experience.

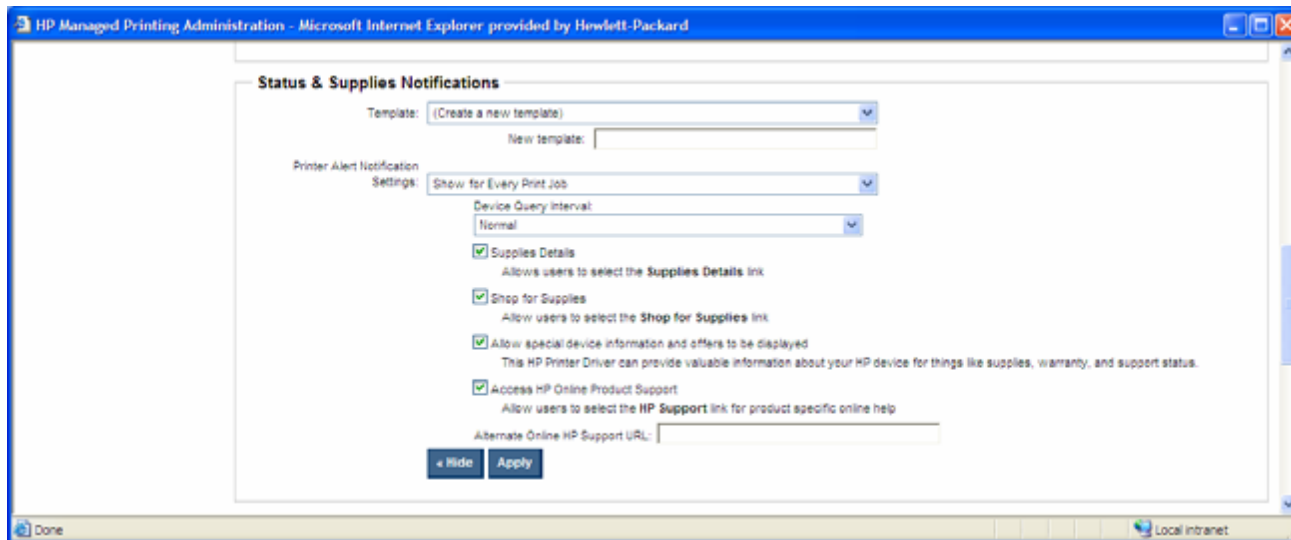
Solve basic problems on your own

By providing real-time print features, print job, device, and supplies status information, the HP Universal Print Driver empowers users to resolve common problems themselves and place fewer calls to the help desk. This can mean less time waiting for your problem to be resolved, improved printer uptime, and increased productivity.

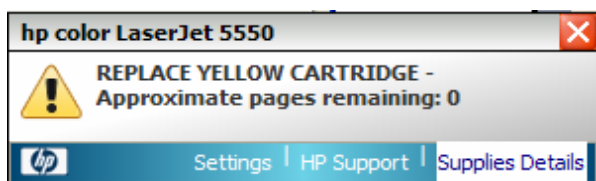
If users need assistance, an optional Status Notification Prompt (SNP) provides users a link to HP Support, as illustrated below.



HP Support is the default support link, but you can customize the SNP with a link to an internal support site using HP Managed Print Administration or Active Directory templates. The screen below illustrates SNP link options.



If the printing device is installed in Dynamic mode, users can check printer status before sending a print job. An SNP will let them know if the printer is out of paper or a print cartridge needs to be replaced as shown below.



Experience intelligent HP printing supplies

The HP Universal Print Driver takes advantage of intelligence built into Original HP printing supplies, providing supplies status information and an easy way to shop for supplies. Enjoy convenient, online reordering from your choice of reseller through HP SureSupply.²

Note The SureSupply (**Shop for Supplies**) link default is active for small businesses. In enterprise environments where the domain name does not end in .local, the **HP Support** and **Shop for Supplies** links are not active. In most of these environments, the ordering of supplies is handled by internal centralized ordering personnel, and internal Help Desks exist to assist end users with day-to-day problem resolution.

For more information on customizing supply notification, see “Accurate device status” on page 17.

Simplify printing

Enjoy single-click Printer Shortcuts for types of documents you print frequently. You can also create your own printer shortcuts, such as n-up or two-sided printing, depending on your print device’s available features.

Depend on legendary HP support

Experience excellent support with HP’s Customer Care program. HP Customer Care includes all of HP’s support programs and technologies, keeping commercial customers, small businesses, and individual consumers up and running. HP Customer Care offers full-service support through a broad range of services, including setup and installation, warranty upgrades, troubleshooting tools, repair and exchange services, phone and Web support, software updates, and self-maintenance services.

The HP Customer Care Web site (www.hp.com/go/support) provides customers with free, one-stop access to technical support for more than 600 HP products, including personal computers, printers, and imaging products. HP Customer Care call centers also provide technical support from numerous call centers worldwide.

Evaluating ease of use

Testing printer software

Evaluate the printer software after installation:

- Is the driver easy to use?
- What special features or utilities does the driver include?
- Does the driver automatically detect the print device's configuration or does it require manual setup?

Testing interactions with the printer

Print drivers should be easy to use. To evaluate ease of use, open the print driver and perform some common tasks. All levels of users should interact with the software. Take note of any problems or weaknesses. When comparing products, consider the following:

- Can you quickly locate print devices and discover their capabilities?
- Does the software provide links to support sites?
- Will the software save time for your help desk?
- Does the software provide status information that enables users to print successfully without assistance?
- How well does the print driver diagnose print device problems?

Broad device support



With the HP Universal Print Driver, you get the broadest compatibility of any print driver:

- **Speaks your printer’s language**—The HP Universal Print Driver is available in multiple printer languages, including PCL5, PCL6, and HP postscript 2 and 3 emulation. This means it is compatible with more HP printing devices than ever, including virtually all HP LaserJet or Edgeline products.
- **Supports most Windows operating systems**—The HP Universal Print Driver includes support for Microsoft Windows Vista, 2000, XP, XP Professional x64, and 2003 and 2008 Server (32/64 bit); Microsoft Windows Terminal Services; Citrix Presentation Server Environments; and Novell iPrint.
Note Windows 2000 will be supported through March 2009.
- **Communicates with networked and direct-connected HP devices**—Simply plug your USB cable into any supported USB-enabled HP LaserJet or Edgeline products or find a network device using Dynamic mode. Either way you enjoy the benefits of instant connectivity. The list of supported products is as follows:
 List needs to be updated.

HP LaserJet/Color LaserJet							
CM1015 MFP	P2015 series	3000 series	3200 AiO series	4100 series	4550 series	5100 series	9000 series
1150 series	2100 series	P3005 series	3300 MFP series	4100 MFP	4600 series	5200 series	9000 MFP series
1160 series	2200 series	3015 AiO	3390 AiO	4200 series	4610 series	5500 series	9040 series
1200 series	2300 series	3020 AiO series	3392 AiO	4240 series	4650 series	5550 series	9040 MFP series
1300 series	2400 series	M3027 MFP series	CP3505 series	4250 series	4700 series	8000 series	9050 series
1320 series	2500 series	3030 AiO series	3700 series	4300 series	4730 MFP series	CM8050 MFP	9050 MFP series
	2550 series	M3035 MFP series	3800 series	4345MFP series	CM4730 MFP series	CM8060 MFP	9055 MFP
	2605 series	3050 AiO	4000 series	M4345 MFP series	5000 series	8100 series	9065 MFP
	2700 series	3052 AiO	CP4005 series	4350 series	M5025 MFP series	8150 series	9500 series
	M2727 MFP series	3055 AiO	4050 series	4500 series	M5035 MFP series	8150 MFP series	9500 MFP series

HP Business Inkjet/Officejet						
2250 series	2280 series	2300 series	2600 series	2800 series	3000 series	9100 AiO series

Evaluating compatibility

- Does the print driver support virtually all of the HP print devices in your environment? (For a current list of supported print devices, go to www.hp.com/go/upd.)
- Does the print driver connect to both networked and direct-connected devices?
- Does the print driver work in your Microsoft Windows print environment?

Full-featured, bidirectional communication



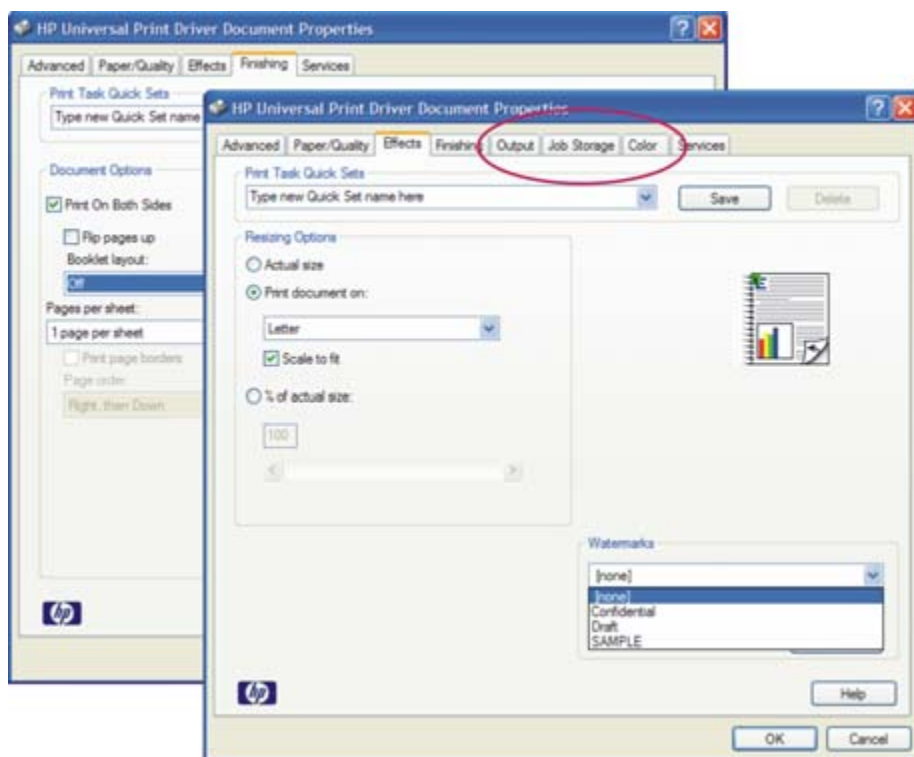
Offer intelligent communication.

The HP Universal Print Driver communicates with each HP device to gather information and to provide real-time print job and device information. This accurate, real-time information gives users the information they need and empowers them to resolve common problems. The driver also automatically customizes the user interface for each device's unique features.

Accurate device features

Because the HP Universal Print Driver discovers device features using bidirectional communication with your HP printing devices, it provides current, accurate device information. The print driver knows and displays such advanced features as automatic two-sided printing, job storage (private print, stored, or proof-and-hold jobs), input trays, output bins, stapling, and watermarks. In addition, if you add or remove a feature, such as a paper tray or a hard disk, the HP Universal Print Driver will revise the device's capabilities via the **Update Now** option.

The images below show the differences in the **Document Properties** tab between two different printers. The second printer has **Output**, **Job Storage**, and **Color** capabilities that the first printer does not. The HP Universal Print Driver detected these differences and customized the user interfaces accordingly.



If you want more control of your print environment, you can use the driver preconfiguration utility to disable the bi-directional communication and preconfigure the driver. This is particularly useful when you need to create queues before print devices are physically installed. You can also use this utility to limit print features, such as paper sizes or finishing devices, to specific user groups depending on need. You can also limit types of media, such as transparencies. For more on this utility, see "Pre-configure the HP Universal Print Driver" on page 22.

Note You can also manually configure the HP Universal Print Driver from the **Device Settings** tab without bidirectional communication. (See the System Administrator’s Guide, which can be found at www.hp.com/go/upd. Select the **Documentation** tab.)

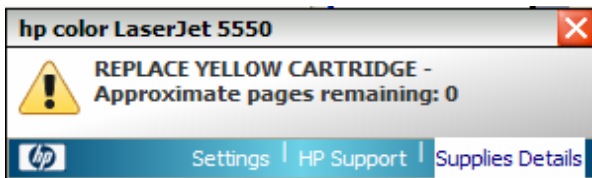
Current device and supplies information

When the HP Universal Print Driver is used, it communicates directly with the printer to gather status and job information. By querying the printer only during printing, network traffic is kept to a minimum. If the HP Universal Print Driver is unable to communicate with the printer because of security settings or because of the SNMP community names set on the printing devices, then the pop-ups will not appear.

Note Printing with the HP Universal Print Driver requires that bi-directional is enabled on the devices via SNMP. In large organization of 100 or more users, SNPs are turned off by default.

The SNP feature provides immediate job and printer status information. Administrators can configure the SNP feature listed below using management tools.

- **Printer status and error messages.** Provides users with printer status information so they can respond to and resolve many minor printer problems such as an open cover or paper jams, reducing the number of help desk calls.



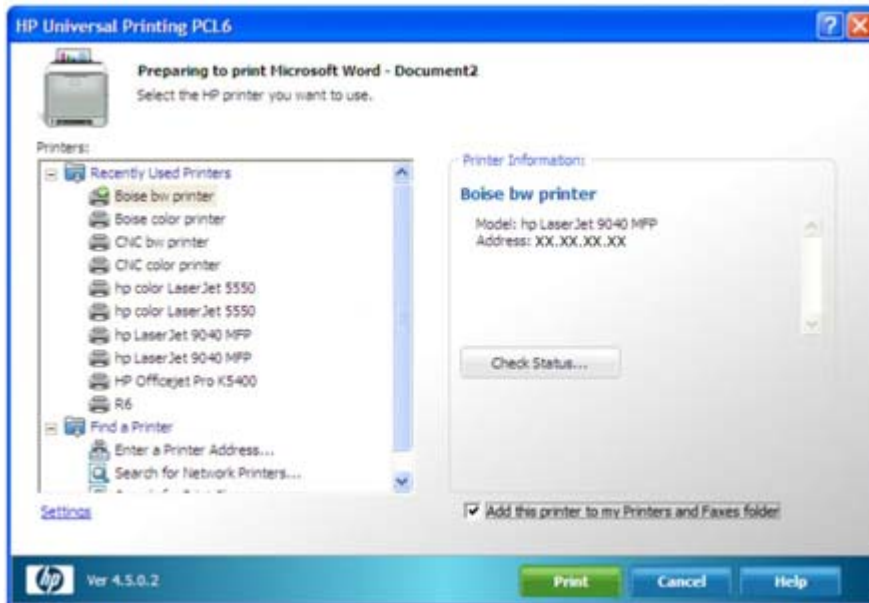
- **Dashboard view of supply levels.** Allows users to plan ahead and ensure that there are sufficient supplies in the printer prior to printing large print jobs. It also provides current information about printer consumables (toner and paper levels). Configure the supply level notifications through the **Settings** tab.



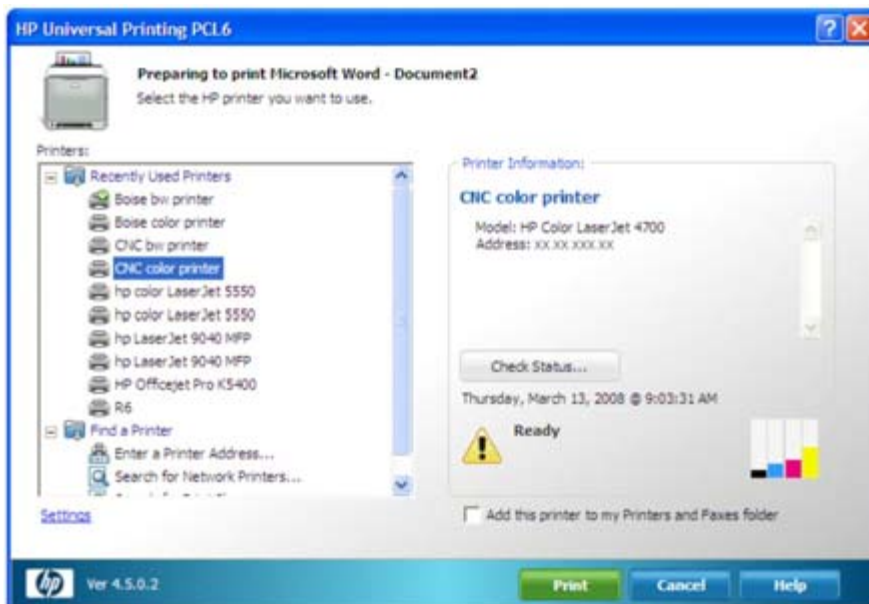
- **Links to the HP SureSupply ordering system.** Enables convenient genuine HP supply ordering. Click **Shop for Supplies** to access the HP SureSupply ordering system.²
- **Links to HP Support pages.** Get instant support for many printer problems by clicking **HP Support**. Get detailed information on printer status and error messages.

Accurate device status

To check the status of a printer prior to printing, users can click the **Check Status** button, as shown below.



The Check Status screen appears (below) and provides information (gas gauges) that show users toner cartridge levels and highlights printer cartridges that need to be ordered. Additionally, the model name, model number, and printer status are displayed.



Evaluating real-time feature support

- Did the software present the actual capabilities of the printer in the user interface without pre-configuration?
- Did the software automatically update the capabilities in Dynamic mode when a change was made to a printer?
- Were you able to check printer status before printing?
- Did an SNP appear, providing information about your print job, device, and supplies?

Easy to manage, easy to configure

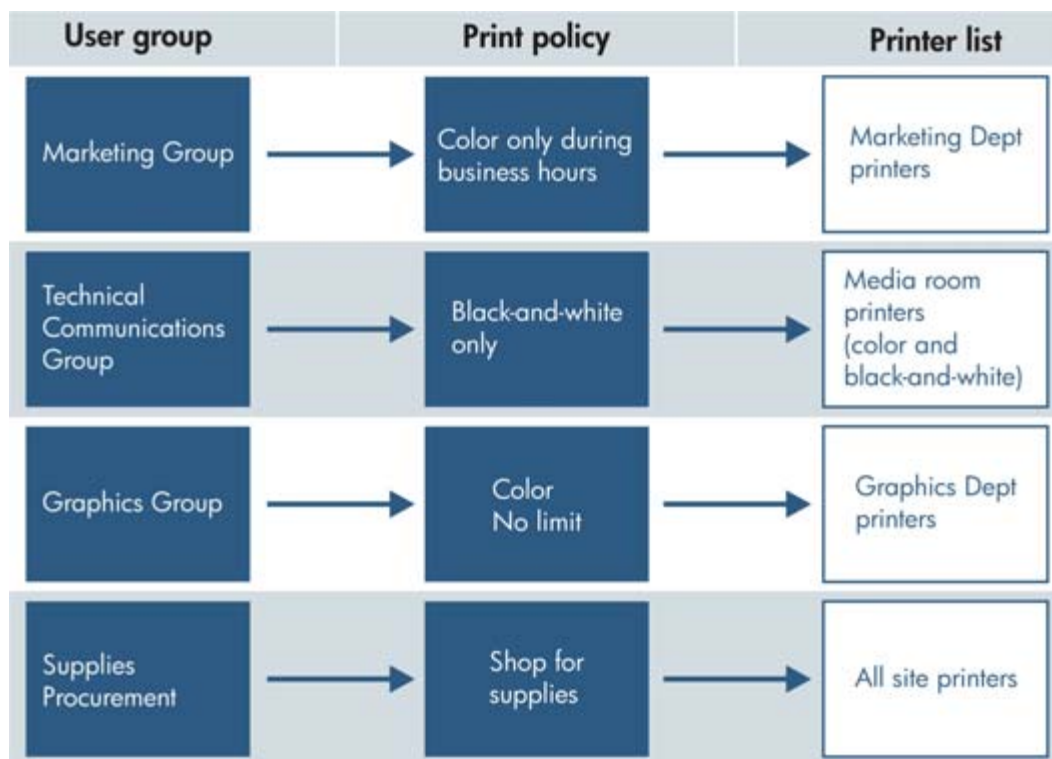


Deploy powerful tools that make management easy and effective.

The HP Universal Print Driver is a straightforward, simple solution that you can implement with minimal disruption to your existing print environment. There's no need to change your workflow or your processes.

Get even more functionality from the HP Universal Print Driver—use HP Managed Printing Administration (MPA) software or Active Directory (AD) group policy templates to create User Groups or Managed Print Policies that manage notifications and control color access. HP MPA software also allows you to create Managed Printer Lists to help users quickly find a printer. Both provide an automated method to create a controlled and customized print environment. Download HP MPA software or AD templates from www.hp.com/go/mpa.

The image below illustrates the potential relationship between user groups, print policies, and printer lists.



Create and modify Managed Print Policies

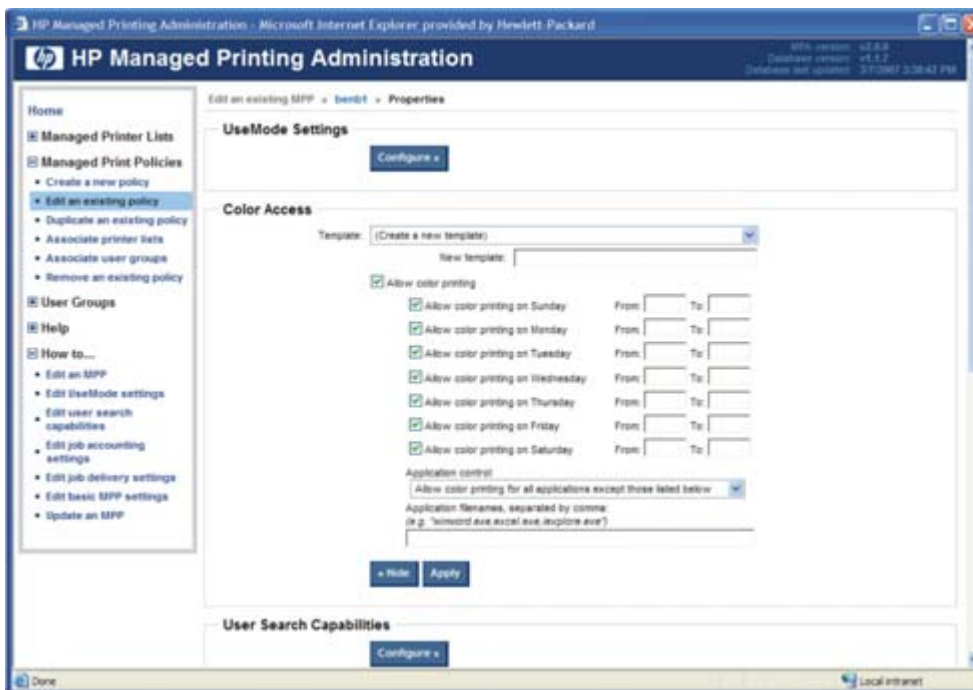
Use Managed Print Policies (MPPs) to create a customized print environment and to limit user network access to certain printers. An MPP controls the driver operation in a particular printing environment. For example, users in one environment could print in color any time, while in another environment could print only during business hours.

One benefit of an MPP is that it extends the control of IT administrators over the printer environment, ultimately reducing support costs, supplies costs, and productivity costs in the company. IT administrators can assign color access by user, time of day, or application, or shut color capability down completely until it's needed for special projects. This ensures that the people who truly need to leverage the power of color—such as your sales team and marketing department—can, while others automatically default to black-and-white printing.

The MPP contains the following features:

- **UseMode settings.** Controls how users access the printing environment and controls printing attributes, detection of HP printers, device-verification level, and availability of services.
- **Color access.** Controls users' access to printing color on a color-capable device.
- **User search capabilities.** Controls user searches based on local ports, network print shares, and network printers (in Dynamic mode).
- **Status and supplies notifications.** Controls what status and supplies notifications (if any) appear when the user opens the HP UPD dialog box.
- **Job accounting.** Controls what job accounting information to submit to an external application or post to a Web server.
- **Job delivery.** Controls what print-job data to submit to an external application. For example, the job data can be used in a pay-for-print environment.
- **Basic MPP settings.** Controls basic features such as refresh rate, name, and default MPP for users who are not currently associated to a specific MPP.

The image below illustrates the dialog box that limits color usage.



MPPs also allow you to control when status and supplies notifications appear. Customize job, device, and supplies status notifications to fit the needs of your company or a specific department or group of users. So if you decide it's appropriate, notifications may include links that allow the user to contact your company's support web page or shop online for supplies—or they may not.

You can also disable or limit the information available to users in the **Services** tab of the HP Universal Print Driver with MPPs.

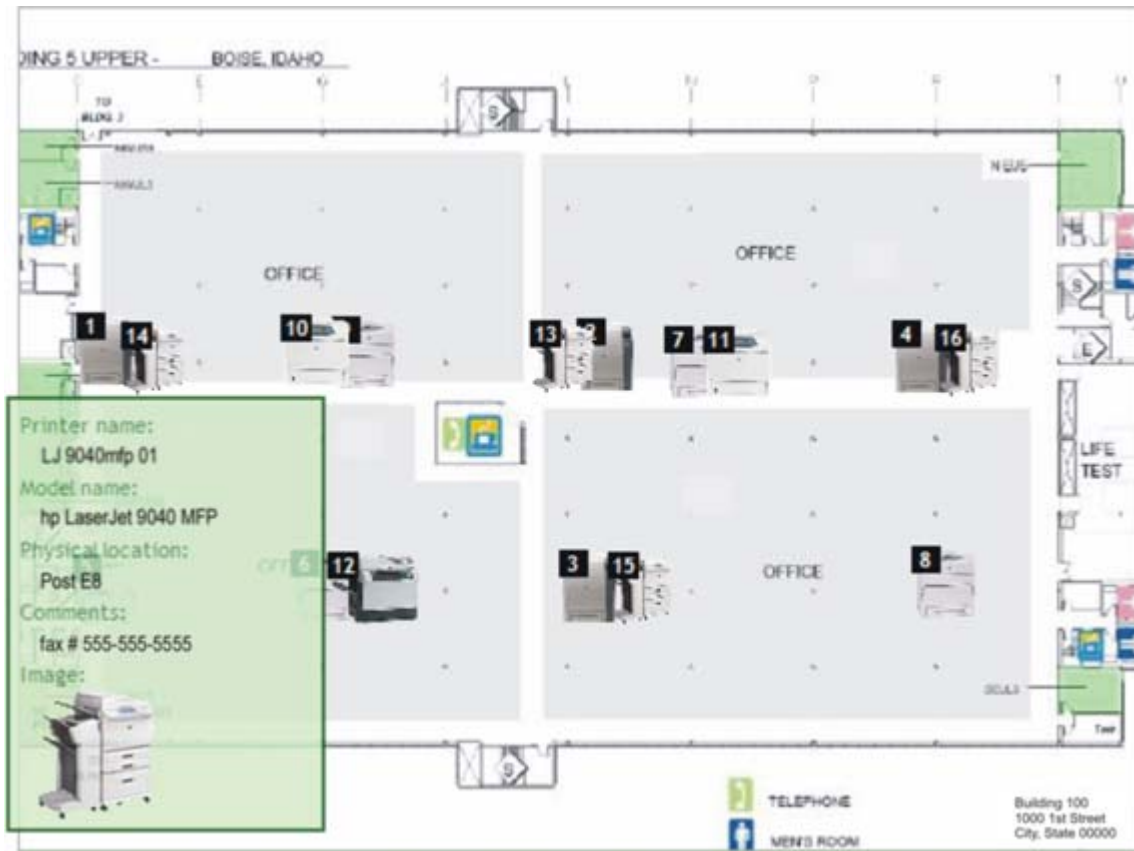
For additional information on all of the management capabilities and how to set them for your environment, see the documentation at www.hp.com/go/upd.

Create, import, and modify Managed Printer Lists

Help users find the printing devices they need by employing Managed Printer Lists (MPLs). MPLs are defined lists of printers based on department, printing needs (such as color or advanced finishing), or location. Printer lists may be imported from HP Web Jetadmin, and you may add printers to existing MPLs.

Use MPA software to customize MPL views to simplify locating available print devices. Printers that are located in an MPL can be automatically discovered using the Dynamic mode, making it easy for mobile users or users in

a changing environment to find a printer. (See “Experience two modes for greater flexibility” on page 10.) Display printer lists using the Default HP Universal Print Driver view, Tabular HTML view, List with Printer Graphics, or Clickable Image Map (shown below). This interactive image-based map displays printers that users can select. The image map allows users to click on the map to select specific printers.



The screen below shows the tabular view of the same MPL shown above in the image map.

Building 5 upper						
Name	Model	Address	Location	Comments	Features	
CLJ 4700 CS	HP Color LaserJet 4700	15.98.151.31	5 upper/CS			
CLJ 4700 LS	HP Color LaserJet 4700	15.98.151.37	5 upper/LS			
CLJ 4700 LB	HP Color LaserJet 4700	15.98.151.44	5 upper/LB			
CLJ 4700 RS	HP Color LaserJet 4700	15.98.151.41	5 upper/RS			
CLJ 5550 CB	hp color LaserJet 5550	15.98.151.33	5 upper/CB			
CLJ 5550 GB	hp color LaserJet 5550	15.98.151.35	5 upper/GB			
CLJ 5550 RS	hp color LaserJet 5550	15.98.151.39	5 upper/RS			
CLJ 5550 RB	hp color LaserJet 5550	15.98.151.42	5 upper/RB			
CLJ5550 GS	hp color LaserJet 5550	15.98.151.29	5 upper/GS			
LJ 4250dtn GS	hp LaserJet 4250	15.98.151.30	5 upper/GS			
LJ 4250dtn mono RS	hp LaserJet 4250	15.98.151.38	5 upper/RS			
LJ 4345mfp GB	hp LaserJet 4345 mfp	15.98.151.34	5 upper/GB	fax # 209-396-7581		
LJ 9000mfp LS	HP LaserJet 9000 MFP	15.98.151.36	5			

Create and modify User Groups

Establish user groups, determine their printing needs, and assign Managed Printer Lists and Managed Print Policies based on those needs. For example, create a user group for your finance department and assign a policy that allows color printing from 8 to 5 on weekdays, or assign a printer list to the departments that are located in the same building.

User groups can be created using MPA software. You can also apply print policies to user groups already established in Active Directory.

Evaluating management features

It can be time consuming to manage all of the drivers you need for your business. When comparing print drivers, consider the following:

- Can you create a list of printers based on location or device capabilities?
- How easy is it to create groups of devices or users based on various criteria?
- Can you configure alerts and status updates to bypass potential issues?
- Can you control access to color based on users, application, or time of day?
- Does the software allow customization of the links?

Customizable deployment



Tie into your enterprise management infrastructure easily.

The HP Universal Print Driver is easy to integrate and customize to your print environment. When you are creating a printer path in HP Web Jetadmin, the HP Universal Print Driver is the default driver. The two tools work seamlessly together.

Pre-configure the HP Universal Print Driver

You can pre-configure the HP Universal Print Driver before installing and deploying it using the HP Driver Pre-configuration Utility found at www.hp.com/go/hpdpc_sw. This is most beneficial when configuring the driver for multiple workstations or print servers for print queues that share the same configuration. This utility allows you to define device defaults and feature availability such as two-sided or grayscale printing. Some of these defaults can be locked so that users must always use certain features, for example two-sided printing to reduce printing costs.

Note For additional information on the HP Driver Pre-configuration utility, please refer to the System Administrator's Guide, which can be found at www.hp.com/go/upd. Select the **Documentation** tab.

Supported printing environments

- **Point and Print environment**—Point and Print is the feature that enables a Microsoft Windows user to connect and print to a remote printer without any disks or other installation media. Using the HP Universal Print Driver in a Point and Print environment results in fewer drivers to manage on print servers. Point and Print automatically downloads and installs all printer driver and data files and the configuration information required to use the remote printer from the client computer.
- **Direct IP Printing**—Direct IP printing connects computers directly to network printers without requiring print servers. The HP Universal Print Driver makes Direct IP printing easy and convenient for users while simplifying printing support for IT administrators. You can use Add Printer Wizard, the HP Universal Print Driver installer, and/or Dynamic mode to create direct IP printers on client PCs.

Installation methods

The HP Universal Print Driver can be deployed into most environments using the same tools and approaches used for product-specific drivers. Install or modify the driver using one of the following methods:

- Add Printer Wizard
- Install.exe
- Microsoft command line tools prompt
- HP Web Jetadmin display plug-in

Web Jetadmin 10.0 installation

The HP Universal Print Driver postscript emulation driver is bundled with HP Web Jetadmin 10.0 software and can be installed from any **Create** or **Edit** queue interface. HP Universal Print Drivers PCL5 and PCL6 can be added to HP Web Jetadmin through **Application Management**, **Application Update**.

When HP Web Jetadmin 10.0 creates a queue using the HP Universal Print Driver, the driver and printer (specified in HP Web Jetadmin 10.0) are installed in Traditional mode.

Evaluating deployment features

- Can the driver be pre-configured using existing pre-configuration tools?
- Can the HP Universal Print Driver be deployed to users using Point and Print?
- Is the HP Universal Print Driver integrated into HP Web Jetadmin 10.0?

Environmental responsibility

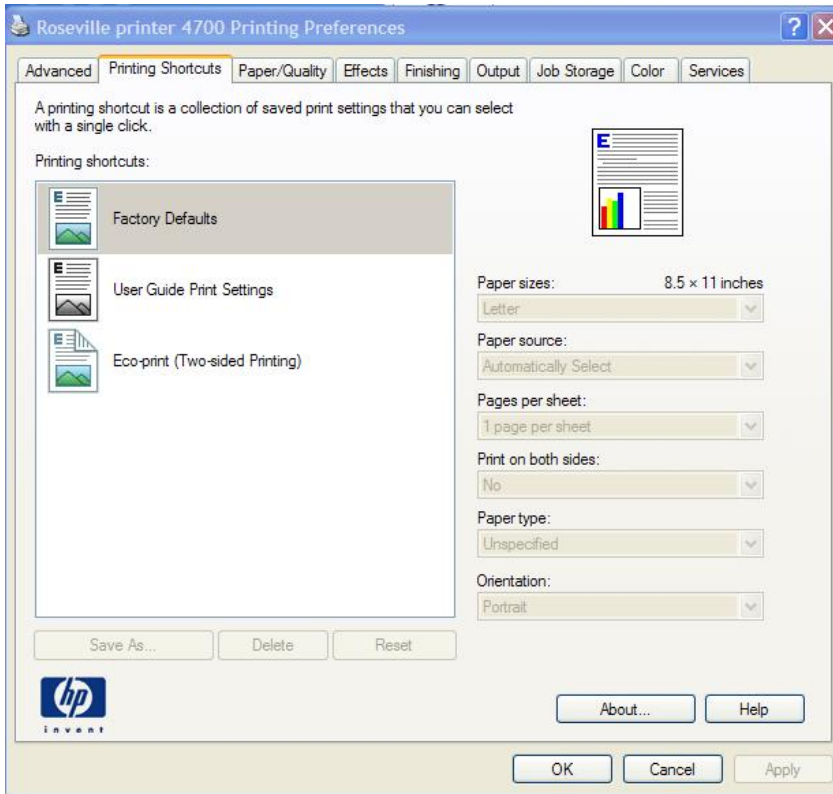


Minimize your impact on the environment.

As one of the world’s largest consumer IT companies, a leading IT supplier to small and medium-size businesses, and a leader in enterprise computing, HP’s largest impact on the environment is through its products. The environmental performance of products is largely determined at the design stage. HP’s Design for the Environment initiative is driving improvements at every stage in the product lifecycle—helping to reduce the amount of energy, paper, packaging, and materials used at HP and by our customers. Through intelligent design, we can reduce the environmental impact of our products, and of our customers.

The HP Universal Print Driver makes it easy to reduce paper use by controlling print settings automatically from one location, helping your company to print more responsibly and save money.

- **Two-sided printing Eco Print short cut saves paper.** The HP Universal Print Driver’s new **Eco-print** short cut enables two-sided printing, making it easier to reduce paper use.



- **Policy controls help you be a little greener while saving money.** The HP Managed Printing Administration and Active Directory templates support a variety of policy controls that can help your company lessen its impact on the environment and save money via your HP LaserJet and Edgeline print devices. The **Duplex Default** setting reduces paper use and **Edgeline Quality Modes Control** ensures the right print quality is pre-set for HP Edgeline MFPs.

Evaluating environmental responsibility

When evaluating environmental responsibility, consider the following:

- Can users select two-sided printing as a default?
- Can administrators set two-sided printing as a default for all print devices from one location?

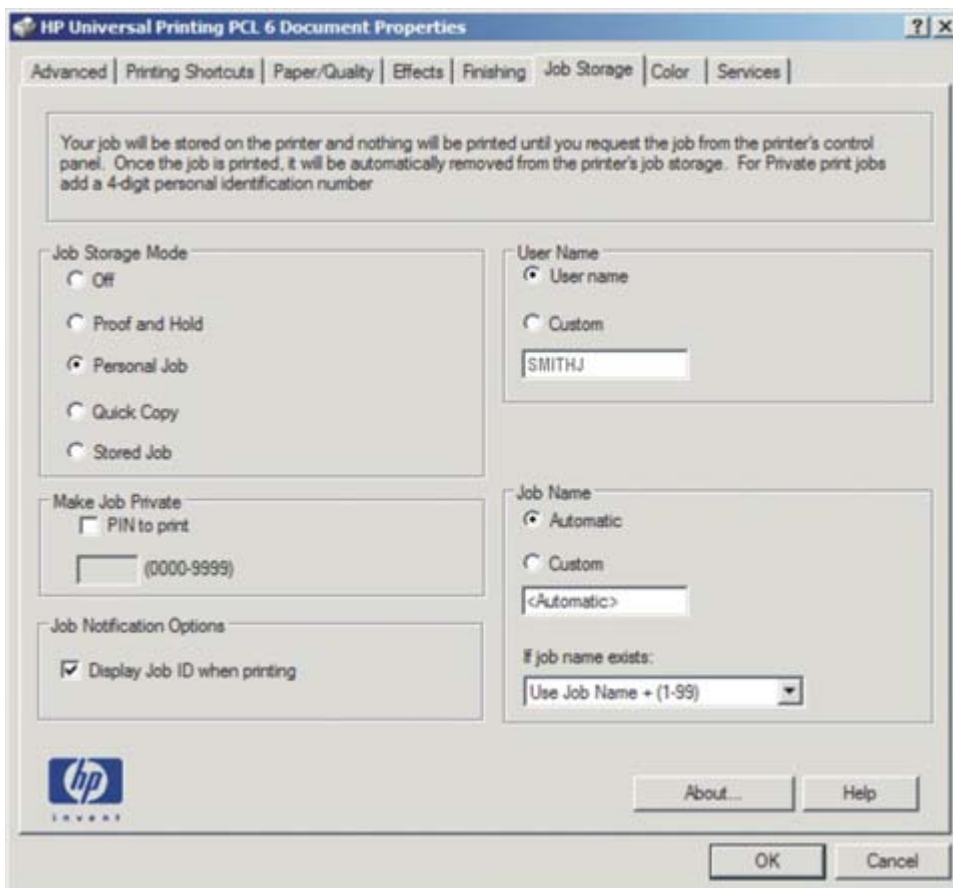
Security



HP has made security an integral component of its imaging and printing devices and solutions. In addition to supporting a wide range of standard, trusted security protocols, HP digital senders and HP LaserJet printers and MFPs offer industry-leading security capabilities and solutions that are designed to enable secure management, network communications, output, access, and device integrity. Moreover, HP has reduced complexity—the biggest obstacle to ensuring end-to-end security. Impressive security features are frequently ignored because IT can find them difficult to implement, so HP focuses not only on delivering state-of-the-art security capabilities but creating seamlessly integrated, easy-to-use solutions as well.

- **PIN printing provides extra security when printing.** In environments where privacy and security are critical, PIN printing ensures that the right person picks up a printed document. With PIN printing, the user enters a four-digit PIN in the driver when sending a print job. When at the printer, the user enters the same PIN to authorize the printer to begin printing the document. Print jobs are cleared from the printer’s memory when they have finished printing for added security.
- **Print private documents securely without a PIN.** New PIN-less printing allows users to print and then pick up documents when they want. Users queue print jobs and control when they print by printing from the print device. Print jobs are then cleared from the printer memory after printing for added security.

Note: The printer must support PIN and PINless printing to use these features.



- **Help make your printing environment and your printers more secure.** The HP Managed Printing Administration and Active Directory templates can make your printing environment more secure throughout the organization. You can set Private (PIN) Printing as a default, which allows users to queue print jobs when they want but requires them to enter a PIN at the print device when jobs are printed. You can also secure your print path using solutions specifically created for the HP Universal Print Driver by our print solutions partners.

Evaluating security

When evaluating security, consider the following:

- What tools are available to help you secure your imaging and printing environment?
- Are features available to help you secure the data on your printer?

A—Technical specifications

Compatibility Client operating systems supported: Microsoft Windows Vista Business, Enterprise, Home Basic, Home Premium, and Ultimate, 32-bit x86 and x64; Microsoft Windows XP (SP2 and later) Embedded, Home Edition, and Professional, 32-bit x86 and x64; Microsoft Windows 2000 (SP3) through March 2009

Server operating systems supported: Microsoft Windows Server 2008 Datacenter, Enterprise, and Standard Editions (Architectures: 32-bit x86 and x64; Services: Terminal Server, Cluster Server); Microsoft Windows Server 2003 (SP1 and later) Datacenter, Enterprise, and Standard Editions (Architectures: 32-bit x86 and x64; Services: Terminal Server, Cluster Server); Microsoft Windows 2000 Advanced Server (Services: Terminal Server); Microsoft Windows 2000 Server (SP4) (Services: Terminal Server; Citrix Presentation Server 3.0, 4.0 and 4.5); Citrix MetaFrame XP FR 1, 2, 3; Citrix MetaFrame 1.8 on Windows 2000 Terminal Services; Novell NetWare 6.5 (SP7); Novell iPrint Client for Windows 4.36; Novell iPrint Client for Windows Vista 5.04; and Novell iManager 2.7

Supported devices HP LaserJet/Color LaserJet CM1015 MFP, 1150 series, 1160 series, 1200 series, 1300 series, 1320 series, P2015 series, 2100 series, 2200 series, 2300 series, 2400 series, 2500 series, 2550 series, 2605 series, 2700 series, M2727 MFP series, 3000 series, P3005 series, 3015 AiO, 3020 AiO series, M3027 MFP series, 3030 AiO series, M3035 MFP series, 3050 AiO, 3052 AiO, 3055 AiO, 3200 AiO series, 3300 MFP series, 3390 AiO, 3392 AiO, CP3505 series, 3700 series, 3800 series, 4000 series, CP4005 series, 4050 series, 4100 series, 4100 MFP, 4200 series, 4240 series, 4250 series, 4300 series, 4345 MFP series, M4345 MFP series, 4350 series, 4500 series, 4550 series, 4600 series, 4610 series, 4650 series, 4700 series, 4730 MFP series, CM4730 MFP series, 5000 series, M5025 MFP series, M5035 MFP series, 5100 series, 5200 series, 5500 series, 5550 series, 8000 series, CM8050 Color MFP with Edgeline Technology, CM8060 Color MFP with Edgeline Technology, 8100 series, 8150 series, 8150 MFP series, 9000 series, 9000 MFP series, 9040 series, 9040 MFP series, 9050 series, 9050 MFP series, 9055 MFP, 9065 MFP, 9500 series, 9500 MFP series

HP Business Inkjet/Officejet 2250 series, 2280 series, 2300 series, 2600 series, 2800 series, 3000 series, 9100 AiO series

For more information go to www.hp.com/go/upd.

Endnotes

¹ From "One Driver to Rule Them All: The Universal Print Driver," published in InfoTrends, November 15, 2006.

² Program features and availability may vary by country. For more information, visit www.hp.com/learn/suresupply.

Windows and Windows XP are U.S. registered trademarks of Microsoft Corporation. Windows Vista is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

© Copyright 2008 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

To learn more, visit www.hp.com

