

HP Universal Print Driver for Windows, version 4 Reviewer/Evaluator's Guide



# Contents

Getting to know the HP Universal Print Driver	1
How the HP Universal Print Driver works	
Key features and benefits	3
Evaluating the product	5
Flexible driver installation	6
Easy to use	9
Broad device support	14
Full-featured, bidirectional communication	
Easy to manage, easy to configure	
Customizable deployment	
A—Technical specifications	24

# Getting to know the HP Universal Print Driver



Experience a single driver for all supported HP print devices.

Welcome to the Reviewer/Evaluator's Guide for the new HP Universal Print Driver for Windows, version 4 and later. The guide offers an overview of the print driver and the print driver's management capabilities and helps you to conduct a successful evaluation.

The HP Universal Print Driver is a single, intelligent, feature-rich driver that replaces individual drivers and makes it easy to connect to virtually any HP printing device, at home, in the office, or on the road—without downloading separate, product-specific drivers. As the image below demonstrates, the driver features a common user interface that is familiar to users so they 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 and solve basic problems on their own.

The HP Universal Print Driver is available in HP postscript 2 and 3 emulation, HP PCL6, and HP PCL5 print languages. The print driver gives users access to virtually any HP LaserJet or Edgeline product while giving system administrators the tools to manage these devices more effectively.

The HP Universal Print Driver enables you to:

- Reduce the time spent certifying, deploying, and managing drivers.
- Reduce driver-related help desk calls.
- Make printing easier for users.

HP Color LaserJet 4700	PS Documen	t Proper	ties					?
dvanced Printing Shortcuts	Paper/Quality	Effects Fi	nishing	Output	Job Stora	ge Color	Services	
Paper Options Page size:	8.5 × 1	11 inches				E=====		
Letter		*						
	Custom	1						
Paper Source:								
Automatically Select		~						
Paper Type:								
Unspecified		~						
Covers Print pages on different	Setting	ş						
<b>(p)</b>							Н	elp
							кП	Cancel

# 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 automatically updated when new finishing devices, for example, are added to the print device. At the same time, many of the features—such as paper size, paper type, margins, and printing shortcuts—as well as the user interface design is consistent across devices. This increases 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 each HP device, gathers configuration information, then customizes 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.

HP Universal Printing PCL & Document Properti	irs. 🛛 🛛 🕅 🔀	HP Universal Printing PCL 6 Document Properties	2
Advanced Penting Shortcuts Paper Quality Effects Final	ning   Output   Job Storage   Color   Services	Advanced Parting Shotcuts Paper/Quality Effects   Finahing	Services
A printing shotout is a collection of served pint settings that you select with a single click. Printing shotouts:	n can	A printing shotout is a collection of saved pint antizings that you can select with a single click. Printing shotouts: Coule & Print Settings	
User Guide Pert Settings	Page so: 8.5 + 11 inches Later M Paper source Proter auto select M Pages per sheet. Toge per sheet. Toge per sheet Toge to noth sides Facer type Unspecified M Onerstation.	User Guide Pirt Settings	Page size: 8.5 × 11 inches Later: V Pager siturce: Proter auto select: V Pages per sheet: Torage per sheet: None W Pager type: Unspecified: V Detertation: Porting V Pager type: V
Seve As Cuble Read		Seve As	Heb
	OK Caros		OK Canoel

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 users' needs at home and on the road

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 9 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% less time adding new sites and has eliminated the time previously spent resolving driver issues.
- An insurance provider anticipates a 75% decrease in manpower to integrate printers.
- A construction management company expects a 50% reduction in the 16 hours it spends each month installing and maintaining print drivers.<sup>1</sup>

# Experience easy office integration

The HP Universal Print Driver is compatible with more HP print devices than ever, including virtually all color and black-and-white LaserJet printers, multifunction products (MFPs), and digital copiers.

- 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, rely on a single Vista-compatible driver for virtually all of your HP LaserJet devices.
- The HP Universal Print Driver is available in 26 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 six 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

### 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



Accommodate changing user needs.

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.

# Installing the HP Universal Print Driver in traditional mode

For a current list of supported print devices, go to <u>www.hp.com/go/upd</u> 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, and 2003 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: <u>www.hp.com/go/upd</u>.
- 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	Recommended for printing in all Windows environments
	• Provides the overall best speed, print quality, and printer feature support for most users
	<ul> <li>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.</li> </ul>
HP PCL5 driver	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	Recommended for printing with Adobe or other highly graphics-intensive applications
driver	• Use for HP postscript level 2 and 3 needs and postscript font support.
	Slightly faster than PCL6 when using Adobe applications.
	<ul> <li>Best print compatibility between Apple Macintosh and Windows applications.</li> </ul>

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

- 4. Download and save the HP Universal Print Driver specific to your operating system and printing needs.
- 5. Navigate to and unzip the HP Universal Print Driver download file to a folder on your PC.
- 6. Open the unzipped HP Universal Print Driver folder.

- 7. Double-click the install.exe file to install the software.
- 8. The **Universal Printing Installer Wizard** opens. Read the software license agreement and click **Yes** to continue.
- 9. The Installation Mode window opens.
- 10. Select Traditional mode, click Install, as shown in the image below. The Add Printer Wizard opens.

	rsal Printing Installer
nstalla	ation Mode
Select	t an installation mode for the 'HP Universal Printing PCL 6' driver.
Setup	can install the 'HP Universal Printing PCL 6' driver in either traditional mode or dynamic mode
Select	t an installation mode, then click 'Install'.
•	Traditional Mode - Creates a regular printer object in your Printers folder. With this mode, you select the destination printer now, and it remains fixed.
0	Dynamic Mode - Creates a special 'Universal Printer' object in your Printers folder. With this mode, you can dynamically select your destination printer each time you print.
15	

- 11. The Installing window opens. Wait for install to complete.
- 12. When the Finish window opens, click Finish.

#### Installing the HP Universal Print Driver in dynamic mode

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

- 11. 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.
- 12. Click on Properties.
- 13. Click on Search for Network Printers.

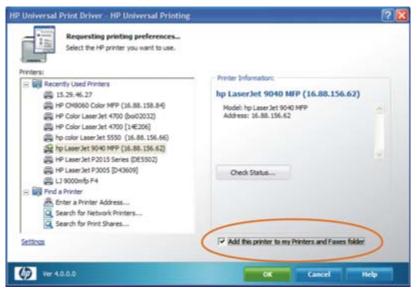


14. Select a device and click **OK**.

#### 15. Click Check Status.

- 16. Click **OK.**
- 17. Repeat 11 and 12.
- 18. Click Enter a Printer Address.
- 19. Type in the IP address 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.



# 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



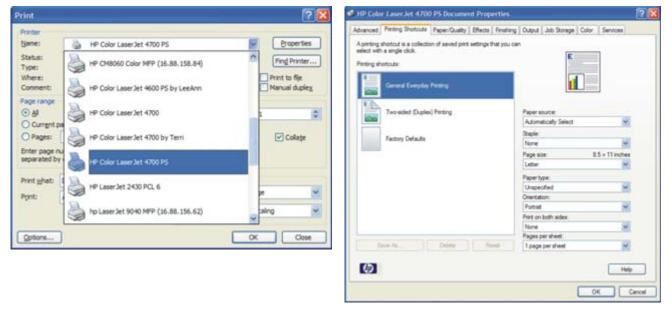
Enable users to print easily and solve problems on their own.

## Enjoy a common interface for virtually all HP print devices

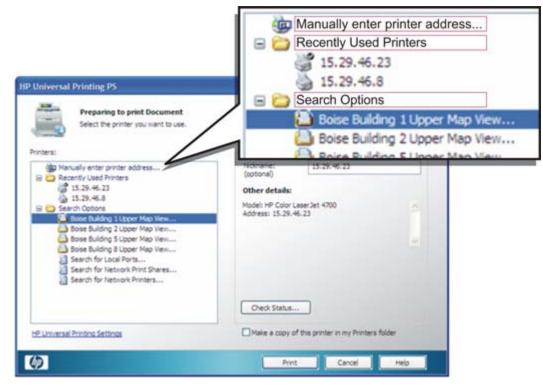
Regardless of what HP printer, MFP, or digital copier you are using, enjoy the same familiar experience. The HP Universal Print Driver features a universal interface that's customized to each printing device's unique, available features.

### 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 can then be selected from an application's print menu, as illustrated in the image on the left. Once selected, the HP Universal Print Driver user interface is nearly identical in appearance to a traditional, product-specific driver, as demonstrated by the image on the right.



Dynamic mode allows you to find printers on a network. It's great when you're on the road or want to print to 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 Universal Print Driver - HP Universal Printing	2 🛛
Requesting printing preferences Select the HP printer you want to use.	
Printers:         IS. 29, 46, 27         IF P Color Laser Xet 4700 [14E206]         IF P Color Laser Xet 5500 [EC9709]         IF p color Laser Xet 5500 [16.88, 157, 170]         IF p color Laser Xet 5500 [16.88, 156, 62]         IF p Laser Xet 9040 MFP (16.88, 156, 62)         IF P Laser Xet 9000 MFP (16.88, 156, 62)         IF P Laser Xet 90005 [D43609]         IF 0 Laser Xet 90005 [D43609]         IF 0 Laser Xet 9000 [F44         IF 0 Laser Xet 9000 [P 14         IF 0 Laser Xet 9000 [P 14	Printer Information: hp color LaserJet 5550 (16.88.157.170) Model: hp color LaserJet 5550 Address: 16.88.157.170 Check Status Wednesday, August 01, 2007 @ 6:03:21 PM Powersave on Add this printer to my Printers and Faxes folder
100 Ver 4.0.0.0	OK Cancel Help

**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.

Template:	(Create a new template)	~
	New template:	
Printer Alert Notification		_
Settings:	Show for Every Print Job	~
	Device Guery Interval	
	Normal	
	Supplies Details	
	Allows users to select the Supplies Details link	
	Shop for Supplies	
	Allow users to select the Shop for Supplies link	
	Access HP Online Product Support	
	Allow users to select the HP Support link for product specific online	e help
	Atternate Online HP Support URL:	
	« Hide Apply	

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.

hp color LaserJet 5550					
Â	REPLACE YELLOW CARTRIDGE - Approximate pages remaining: 0				
Ø	Settings HP Support Supplies Details				

# 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.<sup>2</sup>

**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 (<u>www.hp.com/go/support</u>) 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:

- In general, is the software easy to use?
- 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



Enjoy more compatibility than ever.

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 Server (32/64 bit); Microsoft Windows Terminal Services, Citrix Presentation Server Environments, and Novell iPrint.
- 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 using dynamic mode. Either way
  you enjoy the benefits of instant connectivity. The list of supported products is as follows:

HP LaserJet/Co	or 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	s 4100mfp	4600 series	5200 series	9000mfp 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	9040mfp 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	s CM8050 MFP	9050mfp series
	2550 series	M3035 MFP series	3800 series	4345mfp series	CM4730 MFP series	CM8060 MFP	9055mfp
	2605 series	3050 AiO	4000 series	M4345 MFP series	5000 series	8100 series	9065mfp
	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	8150mfp series	9500mfp series
HP Business Ink	jet/Officejet						
2250 series	2280 series	2300 series	2600 series	2800 series	3000 series	9100 series all-ir	n-one
Supported by H	P postscript emul	ation driver edition	only				
HP Color LaserJ	et 2500 and 25	50 series printers	2800 series all-ir	n-one	HP Business Inkje	et 2800 series pri	nter
Supported with	plug and play						
1320 series	2550 series	M2727 MFP series	M3035 MFP series	3055 AiO	CP3505 series	M4345 MFP series	M5025 MFP series
P2015 series	2605 series	P3005 series	3050 AiO	3390 AiO	CP4005 series	4700 series	M5035 MFP series
2420 series	2700 series	M3027 MFP series	3052 AiO	3392 AiO	4345mfp series	4730 MFP series	s 5200 series
						CM4730 MFP	5550 series

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 <a href="https://www.hp.com/go/upd">www.hp.com/go/upd</a>.)
- 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



Experience intelligent communication.

When installed in dynamic mode, the HP Universal Print Driver offers the most flexibility. Users can print within any network or print environment without downloading a product-specific driver. When printing in a mobile environment, the end user can print to any HP printer using the features within the HP Universal Print Driver.

## 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 user interface will reflect that change.

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 the first printer doesn't have. The HP Universal Print Driver detected these differences and customized the user interfaces accordingly.

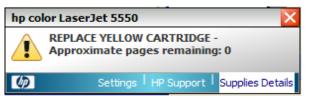
Print Task Quick Sets	6	
Type new Quick Set name	HP Universal Print Driver Document Property	2
Document Options  Print On Both Sides  Pages payses up Booklet layout:  Pages per sheet:  Tpage per sheet:  Tpage per sheet:  Page order  Page order Page order  Page order  Page order Page order Page order Page order Page order Page order Page order Page order Page order Page order	Advanced Paper/Gualty Effects Finaling Output J Print Task Quick Sets Type new Quick Set name here Resizing Options O Actual size O Print document on: Letter Scale to ft O % of actual size: 100	ob Storage Color Invices
Ø		Watemarks [none] (V) Confidential Daft SAMPLE
	(J)	Heb

# 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. Normal printing will not be affected.

The SNP feature provides immediate job and printer status information. Administrators can configure the SNP feature 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**. This 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).



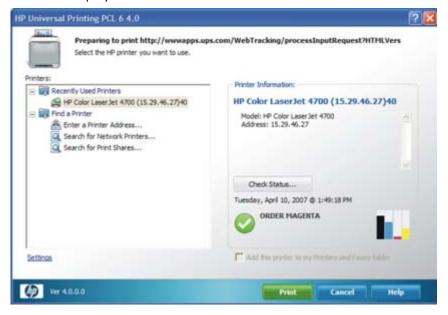
- Links to the HP SureSupply ordering system. This makes it convenient to order genuine HP supplies. Click Shop for Supplies to access the HP SureSupply ordering system.
- Links to HP Support pages. Get instant support for many printer problems by clicking HP Support. Get detailed information on printer 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.

P Universal Printing PCL 6 4.0	[?
Preparing to print https://www.rooms Select the HP printer you want to use.	.hp.com/
Printers:           Image: Secondly Used Printers         Image: Secondly Used Printers           Image: HP Color LaserJet 4700 (15:29-40.27)40	Printer Information: HP Color LaserJet 4700 (15.29.46.27)40
Find a Printer     A Printer Address     Search for Network Printers     Search for Print Shares	Model: HP Color Laser Jet 4700 Address: 15.29.46.27
	Check Status
Settings	F" Add this product to my Priming and Passas holder
6 Ver 4.0.0.0	Print Cancel Help

The Check Status screen appears (below) and provides 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 preconfiguration?
- Did the software automatically update the capabilities in dynamic mode when a change is 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

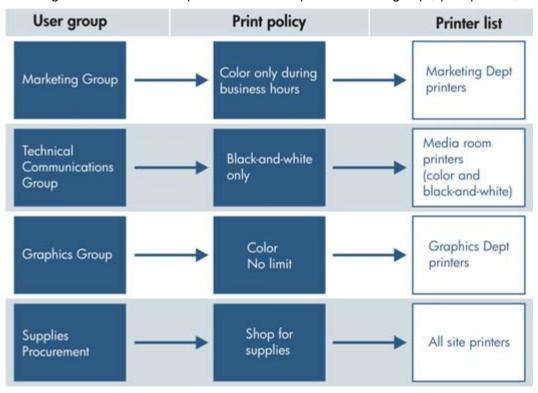


Deploy powerful tools that make management easy and effective.

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 <u>www.hp.com/go/mpa</u>.

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 the 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.
					J					5

Home	Edit an existing MPP	· bentri	+ Properties		
E Managed Printer Lists Managed Print Policies	UseMode Setti	ings	Configure a		
Edit an easting policy     Duplicate an estating policy     Associate user groups     Associate user groups     Remove an estating policy     Wee Groups     Help     Now to     Edit an MPP     Edit likelikole sattings     Edit likelikole sattings     Edit likelikole sattings     Edit pol seconding     aetings     Edit pol seconding     aetings	Color Access		(Create a new tanglater) Rew tanglater Allow color protog Allow color protog Allow color protog on Sunday Allow color protog on Tuesday Allow color protog on Talanta Allow color protog on Salurday Allow color protog on Salurday	To T	
	User Search C	apabilit	e Male Appry		

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. For more information on online supply ordering, visit www.hp.com/learn/suresupply.

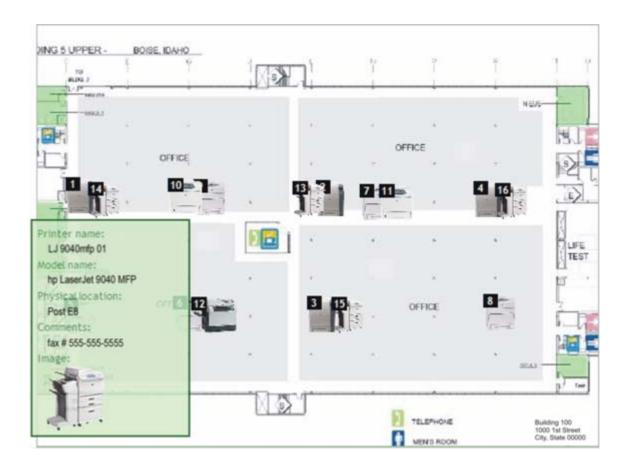
You can also disable or limit the information available to users in the **Services** tab of the HP Universal Print Driver with MPPs.

For additional information on all of the management capabilities and how to set them for your environment, see the <u>System Administrator's Guide</u>, <u>Managed Printing Administration Guide</u>, and <u>Active Directory Administrator</u> <u>Template White Paper</u>.

#### 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 9.) 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.

Name	Model	Address	Location	Comments	Features
CLJ 4700 CS	HP Color Laser3et 4700	15.98.151.31	5 upper/C5		
CLJ 4700 L5	HP Color LaserJet 4700	15.98.151.37	5 upper/L5		
CLJ 4700 LB	HP Color Laser3et 4700	15.98.151.44	5 upper/L8		
CLJ 4700 R5	HP Color LeserJet 4700	15.98.151.41	\$ upper/RS		
CLJ 5550 CB	hp color LaserJet 3550	15.98.151.33	5 upper/C8		
CLJ 5550 GB	hp color LaserJet 5350	15.98.151.35	5 upper/G8		
CLJ 5550 R5	hp color LaserJet 5550	15.98.151.39	5 upper/NS		
CLJ 5550 RB	hp color LaserJet 3530	15.98.151.42	5 upper/RB		
CL35550 65	hp color Later2et 5350	15.98.151.29	5 upper/GS		
LJ 4250dtn 65	hp LaserJet 4250	15.98.151.30	5 upper/G5		
LJ 4250dta mono 85	hp LaserJet 4250	15.98.151.38	5 upper/NS		
LJ 434Smlp GB	hp LaserJet 4345 mfp	15.98.151.34	5 upper/G8	fax # 200- 396-7581	
L3 9000mfp 15	HP LaserJat 9000 MFP	15.98.151.36	3		

#### 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.

# Pre-configure the HP Universal Print Driver

You can pre-configure the HP Universal Print Driver before installing and deploying it using the driver preconfiguration utility. 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.

To pre-configure the SNP behavior of the HP Universal Print Driver, follow the instructions below.

1. Download and launch the DMC driver pre-configuration utility from <u>www.hp.com/go/hpdpc\_sw</u>.

A message will display stating that, depending on how the driver is installed, changes made to the HP Universal Print Driver may invalidate the digital signature, and Microsoft may display a warning message. This is typical. Click **OK** to continue.

- 2. Click File, then Open and browse to the directory where the HP Universal Print Driver resides.
- 3. Select the HP Universal Print Driver's .inf file, and click the **Open** button.
- 4. Click **Device settings** and expand the SSNP\_Level listing by clicking the Plus sign (+). Select the SNP characteristics you desire.
- 5. When finished, click **File** and **Save** to complete.

A file named hpmcpd25.cfg will be created in the same folder as the HP Universal Print Driver file. This configuration file will follow all installations of the HP Universal Print Driver to control the SNP behavior for each installation.

**Note** For additional information on the HP Driver Pre-configuration utility, please refer to the PDF manual that is included with the downloaded image of the HP Pre-configuration utility.

### 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:

- Install using the Add Printer Wizard
- Install using the Install.exe
- Install using the command prompt
- Install using Point and Print
- Install using the HP Web Jetadmin display plug-in
- Install on a cluster server
- Install on a Terminal Server/Citrix
- Install using Novell NDS
- Install using HP Web Jetadmin display plug-in

The most common installation methods are Point and Print and the Web Jetadmin plug-in.

#### Point and print installation

Large print environments often use Point and Print to provide users print drivers. To install the HP Universal Print Driver using Point and Print, install the driver on a server in Traditional mode. After the driver is installed on a user's workstation, it will behave like any other product-specific driver. Users will print to a statically bound port on the server.

The first time a client PC connects to a shared printer, the HP Universal Print Driver is automatically downloaded to the client PC through Point and Print. The driver files are not duplicated every time a user prints to a new print device using Point and Print.

#### 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-config 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?

# A—Technical specifications

32/64 bit); Microsoft
00 series, 1320 series, P2015 2605 series, 2700 series, MFP series, 3030 AiO series, eries, 3390 AiO, 3392 AiO, 100 series, 4100mfp, 4200 850 series, 4500 series, 4550 0 MFP series, 5000 series, series, 8000 series, CM8050 8100 series, 8150 series, ries, 9050mfp series,
) series, 3000 series, 9100
2550 series printers, 2800
2605 series, 2700 series, 3052 AiO, 3055 AiO, series, 4700 series, 4730 , 5550 series

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

#### Endnotes

- <sup>1</sup> From "One Driver to Rule Them All: The Universal Print Driver,"
- published in InfoTrends, November 15, 2006.
- <sup>2</sup> Program features and availability may vary by country. For more information, visit <u>www.hp.com/learn/suresupply</u>.

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