IT Administrator Guide to the Embedded Web Server

PageWide Pro
- 452dn/dw
- MFP 477dn/dw
- 552dw
- MFP 577dw

PageWide Managed
- P55250dw
- MFP P57750dw
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1 Get started

- About this guide
- HP Embedded Web Server
- Use the EWS

About this guide

This guide is designed for IT administrators who are responsible for setting up and managing one of the following HP PageWide products:

- HP PageWide Pro 452dn/dw
- HP PageWide MFP Pro 477dn/dw
- HP PageWide Pro 552dw
- HP PageWide Pro MFP 577dw
- HP PageWide Managed P55250dw
- HP PageWide Managed MFP P57750dw

This guide provides information on performing administrator tasks in the HP Embedded Web Server (EWS). These tasks include connecting the printer to a network, configuring printer settings, setting up user access, and monitoring and maintaining printer health. Tasks or features available only for multifunctional printers are indicated by the phrase (MFP only).

**NOTE:** For information about how to perform some of these tasks from the printer control panel or the HP Printer Assistant, see the user guide for your product.

Because the EWS features a user-friendly interface, this guide provides step-by-step instructions for only select tasks. Most of these tasks either help administrators get started setting up the HP PageWide product or require more guidance than other tasks.

The appendix defines many of the fields in the EWS user interface, for reference.

HP Embedded Web Server

- About the EWS
- About cookies
- Minimum browser requirement
- Minimum firmware requirement

About the EWS

This product is equipped with the HP Embedded Web Server, which provides access to information about product and network activities.

When the printer is connected to a network, you can use the EWS to view status information, change settings, and manage the printer from your computer.

The EWS resides on a hardware device (such as an HP printer) or in firmware, rather than as software that is loaded on a network server.
The advantage of the EWS is that it provides an interface to the product that anyone with a network-connected product and computer can use. There is no special software to install or configure, but you must have a supported web browser on the computer. To gain access to the EWS, type the IP address for the product in the address bar of the browser.

When the printer is connected to a network, you can use the EWS to view status information, change settings, and manage the printer from your computer.

**About cookies**

The EWS places cookies on your hard drive when you are browsing. The EWS uses the cookies only to save settings on your computer or to share information between the printer and the computer. It does not use the cookies to send information to HP websites.

**Minimum browser requirement**

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Browser version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows</td>
<td>● Internet Explorer (version 7.x or later)</td>
</tr>
<tr>
<td></td>
<td>● Google Chrome (version 5.x or later)</td>
</tr>
<tr>
<td></td>
<td>● Firefox (version 3.x or later)</td>
</tr>
<tr>
<td>OS X</td>
<td>● Safari (version 3.x or later)</td>
</tr>
<tr>
<td></td>
<td>● Google Chrome (version 5.x or later)</td>
</tr>
<tr>
<td>Android 4.x or later</td>
<td>● Android</td>
</tr>
<tr>
<td></td>
<td>● Chrome</td>
</tr>
<tr>
<td></td>
<td>● Opera Mobile</td>
</tr>
<tr>
<td></td>
<td>● Firefox</td>
</tr>
<tr>
<td>iOS 6.x or later</td>
<td>● Safari</td>
</tr>
<tr>
<td></td>
<td>● Chrome</td>
</tr>
<tr>
<td>Mobile Windows 8.x or later</td>
<td>● Mobile Internet Explorer (version 10.x or later)</td>
</tr>
</tbody>
</table>

**Minimum firmware requirement**

<table>
<thead>
<tr>
<th>Product</th>
<th>Firmware version</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP PageWide 452dn</td>
<td>ICEMDNPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide 452dw</td>
<td>ICEMDWPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide Pro MFP 477dn</td>
<td>MAVEDNPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide Pro MFP 477dw</td>
<td>MAVEDWPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide Pro 552dw</td>
<td>ICHDWOPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide Pro MFP 577dw</td>
<td>MAHDWOPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide Managed 55250dw</td>
<td>ICHDWOPP1N001.1548D.00</td>
</tr>
<tr>
<td>HP PageWide Managed MFP 57750dw</td>
<td>MAHDWOPP1N001.1548D.00</td>
</tr>
</tbody>
</table>
To view the printer firmware version, see View the firmware version.

**Use the EWS**

- Open the EWS
- View the firmware version
- Download the required firmware
- Configure the EWS Home tab
- Set up the EWS password

**Open the EWS**

1. Do one of the following:
   - In a supported web browser, type the product IP address into the address box. (To obtain the IP address, on the control panel dashboard, touch .)
   - In the printer software, open the HP Printer Assistant and on the Print tab, click Printer Home Page (EWS).

   **NOTE:** To open the HP Printer Assistant, on your computer, click Start, and then click All Programs. Click HP, click the name of the product, and then click your printer.

   - In OS X, use HP Utility or click System Preferences > Printers > <printer name> > Options & Supplies > General > Show Printer Webpage.

   **NOTE:** If an error occurs while opening the EWS, confirm that the proxy settings are correct for your network.

2. After you open the URL, bookmark it so that you can return to it quickly in the future.

**View the firmware version**

1. Open the EWS.
   For more information, see Open the EWS.

2. Click the Tools tab.

3. On the Printer Information page, in the Details table, find the firmware version.

**Download the required firmware**

1. Go to the HP Customer Support webpage.

2. Search for your product number or name.

3. Click Software and Drivers, confirm the model number, and select your operating system.

4. In the Firmware table, find the correct firmware version to download.
Configure the EWS Home tab

Set up the EWS Home tab so that it displays the information you need to monitor and maintain optimal printer health.

NOTE: Settings for the Home tab are automatically saved in the web browser's cookies. If the web browser's cookies are deleted, these settings are lost.

1. Open the EWS.
   For more information, see Open the EWS.
2. Click Personalize, and select the features you want to appear on the Home tab.
3. Click Done.

Set up the EWS password

Set up a password to prevent unauthorized users from remotely configuring the printer or viewing printer settings from the EWS.

1. Open the EWS.
   For more information, see Open the EWS.
2. Click the Settings tab.
3. Enter a password that complies with the onscreen guidelines for passwords. Then, confirm the password.
4. Click Apply.
2 Set up connectivity

- Set up a wired or wireless network
- Set up Web Services
- Set up Wi-Fi Direct
- Set up AirPrint™ (OS X)
- Set up Google Cloud Print
- Manage Internet Printer Protocols
- Configure advanced network settings

Set up a wired or wireless network

- Supported network protocols
- Configure settings for a wired network
- Connect product to and configure settings for a wireless network

Supported network protocols

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP/IPv4</td>
<td>gSOAP</td>
</tr>
<tr>
<td>IPv6</td>
<td>SAND box</td>
</tr>
<tr>
<td>DHCP, AutoIP</td>
<td>LPD</td>
</tr>
<tr>
<td>DHCP v6</td>
<td>Bootp, Bootp TCE improvement</td>
</tr>
<tr>
<td>HTTP server, HTTP client</td>
<td>Netbios</td>
</tr>
<tr>
<td>SMTP client for alerts</td>
<td>WIN5</td>
</tr>
<tr>
<td>SNMP v1</td>
<td>LLMNR</td>
</tr>
<tr>
<td>Open_ssl library</td>
<td>CIFS v6</td>
</tr>
<tr>
<td>Bonjour</td>
<td></td>
</tr>
</tbody>
</table>

Configure settings for a wired network

If you connected the product to a wired network, you can use the EWS to configure the network settings, which include the following.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPv4 Configuration</td>
<td>Configure the IPv4 address and DNS address</td>
</tr>
<tr>
<td>IPv6 Configuration</td>
<td>Enter the IPv6 address and DNS server</td>
</tr>
<tr>
<td>Advanced</td>
<td>Turn on or off the network interface and select the link speed for your wired network</td>
</tr>
</tbody>
</table>
Access these settings in the EWS, on the **Network** tab, under **Wired (802.3)**.

For more information about these settings, see the **Network** tab, in **UI reference**.

**Connect product to and configure settings for a wireless network**

If your product is a wireless model, you can use the EWS to both connect the product to a wireless network and to configure the network settings.

**Connect the product**

The Wireless Setup Wizard is the best method for installing the product on a wireless network.

Access the wizard on the **Network** tab, under **Wireless (802.11)**. Click **Wireless Setup Wizard**, and follow the onscreen instructions.

**Configure the settings**

Use the EWS to configure the wireless network settings, which include the following.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPv4 Configuration</td>
<td>Configure the IPv4 address and DNS address</td>
</tr>
<tr>
<td>IPv6 Configuration</td>
<td>Enter the IPv6 address and DNS server</td>
</tr>
<tr>
<td>Advanced</td>
<td>Turn on or off the network interface and enter the SSID, authentication or encryption, and compatibility information for your wireless network</td>
</tr>
</tbody>
</table>

Access these settings in the EWS, on the **Network** tab, under **Wireless (802.11)**.

For more information about these settings, see the **Network** tab, in **UI reference**.

**Set up Web Services**

- **What are Web Services?**
- **Set up Web Services**
- **Remove Web Services**

**What are Web Services?**

The printer offers innovative, web-enabled solutions that can help you quickly access the Internet, obtain documents, and print them faster and with less hassle—and all without using a computer.

**NOTE:** To use these web features, the printer must be connected to the Internet (either using an Ethernet cable or wireless connection). You cannot use these web features if the printer is connected using a USB cable.

**HP ePrint**

HP ePrint is a free service from HP that allows you to print to your HP ePrint-enabled printer anytime, from any location. It's as simple as sending an email to the email address assigned to your printer when you enable Web Services on the printer. No special drivers or software are needed. If you can send an email, you can print from anywhere, using HP ePrint.
NOTE:

- You can sign up for an account at the HP Connected website (might not be available in all countries/regions), and sign in to configure the ePrint settings.
- After you sign up for an account at the HP Connected website, you can sign in to view your HP ePrint job status, manage your HP ePrint printer queue, control who can use your printer's HP ePrint email address to print, and get help for HP ePrint.

Print apps

- Print apps allow you to easily locate and print preformatted web content, directly from your printer. You can also store your documents digitally on the web.
- Preformatted content designed specifically for your printer means no cut-off text and pictures and no extra pages with only one line of text. On some printers, you can also choose paper and print quality settings on the print preview screen.

Set up Web Services

NOTE: Before you set up Web Services, make sure your printer is connected to the Internet using either an Ethernet or wireless connection.

1. In the EWS, click the Web Services tab.
2. In the Web Services Settings section, click Setup, click Continue, and follow the onscreen instructions to accept the terms of use.
3. If prompted, choose to allow the printer to check for and install printer updates.

NOTE: If prompted for proxy settings and if your network uses proxy settings, follow the onscreen instructions to set up a proxy server. If you do not have the proxy details, contact your network administrator or the person who set up the network.

4. When the printer is connected to the server, the printer prints an information page. Follow the instructions on the information page to finish the setup.

Remove Web Services

1. In the EWS, click the Web Services tab.
2. In the Web Services Settings section, click Remove Web Services.
3. Click Remove Web Services to confirm.
4. Click Yes to remove Web Services from your printer.

Set up Wi-Fi Direct

With Wi-Fi Direct, you can print wirelessly from a computer, smart phone, tablet, or other wireless-capable device—without connecting to an existing wireless network.

1. In the EWS, click the Network tab.
2. Click Wi-Fi Direct, and then click Status.
3. Click Edit Settings, and then from the Status drop-down list, select On.
4. In the Wi-Fi Direct Name field, enter the printer model (for example, PageWide Pro 477dw).
5. From the **Connection Method** drop-down list, select a connection method.

6. To create a Wi-Fi Direct password, click **Generate**.

7. Click **Apply**.

### Set up AirPrint™ (OS X)

Your product supports printing with Apple's AirPrint for iOS 4.2 and Mac OS X v10.9 or later. Use AirPrint to print wirelessly to the printer from an iPad (iOS 4.2), iPhone (3GS or later), or iPod touch (third generation or later).

AirPrint is on, by default, in wireless-enabled HP inkjet printers. Use the following instructions if AirPrint is turned off and you want to turn it back on.

1. In the EWS, click the **Network** tab.
2. Click **AirPrint**, and then click **Status**.
3. Click **Turn On AirPrint**, enter the printer name and printer location, and select a geographic location.
4. Click **Apply**.

### Set up Google Cloud Print

Google Cloud Print is a mobile printing solution available to Gmail account users that allows them to print over the web from anywhere, including their phone or tablet, to any printer.

Using the Chrome browser, users can print from Android, Chrome, iOS, OS X, Windows, and Linux devices to a Google Cloud Print-ready printer on the same local network (Local Destination) or to a printer connected to the Google Cloud.

A cloud connection also enables users to print to one or more of the following printer destinations:
- Nearby printer not connected to a local network
- Remote printer connected to the cloud
- Nearby or remote printer on a different network

**NOTE:**
- A Google account is required.
- To confirm whether your printer is Google Cloud Print-ready, visit the [HP Printers Compatible with Google Cloud Print](https://www.hp.com) webpage.

### Register the printer with Google Cloud

Before your printer can be found on a network or recognized by the cloud with the Chrome browser, Chrome app, or Cloud Print plug-in, you must register the printer with the Google Cloud Print website.

The following instructions describe how to register the printer with Google Cloud by using the EWS.

1. In the EWS, click the **Network** tab.
2. Click **Google Cloud Print**, and then click **Setup**.
3. Click **Print Claim Sheet**.

4. Follow the instructions on the claim sheet to complete the registration.

   A confirmation page prints when the printer registration is complete. The page includes the printer identifier that you can use to find the printer in a list and the email address associated with the printer registration. Save this page for reference.

NOTE: For instructions on how to register the printer with Google Cloud using the Chrome browser, visit the [HP ePrint Capable Printers website](#).

(Optional) Share the printer with other Gmail accounts

If users in your organization want to print remotely, you can set up the printer to be shared with other Gmail accounts.

1. In the Chrome browser, click the menu button (<svg> ), and select **Settings**.
2. At the bottom of the page, click **Advanced settings**, and under **Google Cloud Print**, click **Manage**.
3. Under **My devices**, next to your printer, click **Manage**.
4. Click **Share**, and in the **Invite people** field, enter the names, email addresses, or groups (comma separated) of the account users to share the printer with.
5. From the **Can print** drop-down list, select whether users can do the following: (1) only print from the printer, or (2) print from and also manage the printer.
6. Click **Share**.

Manage Internet Printer Protocols

On the **Network** tab, under **Internet Printing Protocol**, and under **Status**, you can configure and manage the printer’s IPP settings.

Then, under **User Access List**, you can add and set printer permissions for users printing from mobile devices.

For more information about these settings, see the **Network** tab, in **UI reference**.

Configure advanced network settings

On the **Network** tab, under **Advanced Settings**, you can configure and manage the following settings.

- Certificates
- Management Protocol
- 802.1X Authentication
- Device Announcement Agent
- Bonjour
- SNMP
- WINS
- SLP
- LPD
- LLMNR
- Port 9100 Printing
- Microsoft Web Services
- Syslog
- Advanced DHCP Settings

For more information about these settings, see the **Network** tab, in **UI reference**.
Configure printer settings

- Enable or disable printer features
- Add control panel shortcuts
- Configure control panel display settings
- Configure general printer settings
- Configure energy save settings
- Configure anonymous storage settings
- Configure tray and paper management
- Set up and manage job storage
- Erase job data

Enable or disable printer features

On the Settings tab, under Security, and in Administrator Settings, you can customize your printer by enabling or disabling printer features. Disabled features are unavailable from the EWS and the printer control panel.

If a feature is disabled by default and you want to set it up, you must first enable it on the Administrator Settings page so that it appears in the EWS. You can then select the feature and configure its settings.

Printer features that you can enable or disable include the following.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>Enable or disable Ethernet and wireless features</td>
</tr>
<tr>
<td>Network Settings</td>
<td>- Enable or disable proxy settings, which define an intermediary server to</td>
</tr>
<tr>
<td></td>
<td>handle your network communication</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable AirPrint™, which enables users to print over a wireless</td>
</tr>
<tr>
<td></td>
<td>LAN from an iPad, iPhone, or iPod touch device</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable Google Cloud Print, which enables Gmail account users</td>
</tr>
<tr>
<td></td>
<td>to print over the web from an Android, Chrome, iOS, OS X, Windows, or</td>
</tr>
<tr>
<td></td>
<td>Linux device</td>
</tr>
<tr>
<td>Web Services Settings</td>
<td>Enable or disable Web Services, which consist of HP ePrint and print apps</td>
</tr>
<tr>
<td>Printer Settings</td>
<td>- Enable or disable copy features (MFP only), such as color copying and</td>
</tr>
<tr>
<td></td>
<td>copying from a computer or mobile device</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable fax features (MFP only), which include reprinting faxes,</td>
</tr>
<tr>
<td></td>
<td>printing color faxes, and faxing from a computer or mobile device</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable scan features (MFP only), which include scanning from</td>
</tr>
<tr>
<td></td>
<td>a computer or mobile device</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable the digital send features (MFP only), which include</td>
</tr>
<tr>
<td></td>
<td>Scan to Email, Scan to Network Folder, Scan to SharePoint, and HP Digital</td>
</tr>
<tr>
<td></td>
<td>Fax</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable the control panel lock feature, which enables you to</td>
</tr>
<tr>
<td></td>
<td>add shortcuts to the printer control panel and prevent users from</td>
</tr>
<tr>
<td></td>
<td>changing the printer control panel configuration</td>
</tr>
</tbody>
</table>
Feature | Description
---|---
| Enable or disable the usage data collection feature, which enables the printer to transmit information about your printer usage to HP as input for future printer development

Memory Device/Direct Port Settings | Enable or disable the host USB feature, which enables you to store jobs on and print jobs from the USB port on the front of the printer, near the control panel
Enable or disable the direct ports feature, which enables you to store jobs on and print jobs from any USB port on the printer

Printer Updates | Enable or disable the firmware updates feature, which enables the printer to automatically download and install firmware updates

For more information about these settings, see Administrator Settings page.

**Add control panel shortcuts**

Select which shortcuts appear in the Shortcuts folder on the printer control panel and the order in which they appear.

1. In the EWS, click the **Settings** tab.
2. Click **Security**, and then click **Control Panel Shortcuts**.
3. In the **Feature** table, select the features that you want to appear in the Shortcuts folder.
4. To specify where a feature appears on the control panel display, click the feature, and then click one of the arrow buttons at the top of the table:
   - Up arrow: Moves the shortcut to the left on the control panel display
   - Down arrow: Moves the shortcut to the right
5. Click **Apply**.

**Configure control panel display settings**

On the **Settings** tab, under **Preferences**, and in **Display Settings**, you can configure the control panel display settings.

These settings include the following.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Brightness</td>
<td>Set the brightness of the control panel display</td>
</tr>
<tr>
<td>Inactivity Timer</td>
<td>Set the number of seconds that the printer can be inactive before it logs the user out of the control panel and returns to the home screen</td>
</tr>
<tr>
<td>Continuable Events</td>
<td>Select whether the user must acknowledge a noncritical error message before the printer continues operation</td>
</tr>
</tbody>
</table>

For more information about these settings, see the **Settings** tab, in UI reference.
Configure general printer settings

On the **Settings** tab, under **Preferences**, you can configure general printer settings.

These settings include the following.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Printer Settings</td>
<td>Enter the number of seconds (5-300) a print job can take to process before the printer cancels it, and select whether the printer prompts you to load paper manually for all jobs that do not have a specific tray selected</td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td>Set the date and time or synchronize with a network time server</td>
</tr>
<tr>
<td>International</td>
<td>Select the country/region where the printer is located, and select the language to use in the printer control panel and in the EWS</td>
</tr>
<tr>
<td>Image Registration</td>
<td>Adjust the alignment for individual trays when text or images are not centered or aligned correctly on the printed page</td>
</tr>
<tr>
<td>ColorLok Settings</td>
<td>Indicate whether you use plain paper with the ColorLok logo</td>
</tr>
<tr>
<td>Quiet Mode</td>
<td>Enable or disable this mode, which reduces the noise levels of the printer, and schedule the times when the mode automatically turns on and off during the day</td>
</tr>
</tbody>
</table>

For more information about these settings, see the **Settings** tab, in [UI reference](#).

Configure energy save settings

You can use the Energy Save Mode to minimize the amount of power that the printer consumes when it is idle.

1. In the EWS, click the **Settings** tab.
2. Click **Power Management**, and then click **Energy Save Settings**.
3. From the **Standby After** drop-down list, select the amount of time that the printer is idle before it enters Energy Save Mode.
4. To schedule the printer to turn on and off automatically during specific times and days, do the following:
   a. Select the **Start Time (HH:MM)** checkbox, and enter the time to automatically turn the printer on.
   b. Select the **Shutdown Time (HH:MM)** checkbox, and enter the time to automatically turn the printer off.
   c. Select the days to schedule the printer to automatically turn on and off.
5. Click **Apply**.

Configure anonymous storage settings

You can use the anonymous usage information feature to transmit information about printer usage to HP as input for future printer development.

1. In the EWS, click the **Settings** tab.
2. Click **Preferences**, and then click **Anonymous Usage Information Storage**.
3. Select the **On** option, and click **Apply**.
4. Under **Preferences**, click **Anonymous Usage Information Transmission**.
5. Select the **Automatically send anonymous usage data to HP** checkbox, and specify the printer usage environment.

6. Click **Apply**.

**Configure tray and paper management**

Setting up how the printer manages its trays is a multistep process:

- **Step 1: Configure the paper settings**
- **Step 2: Configure specific tray settings**
- **Step 3: Configure the general tray settings**
- **Step 4: Configure the advanced settings**

**Step 1: Configure the paper settings**

Set the paper settings to use when printing tray-specific jobs. Make sure that the paper you select for an individual tray in the EWS is also loaded in that tray in the printer.

1. In the EWS, click the **Settings** tab.
2. In the **Preferences** section, click **Tray and Paper Management**.
3. In the **Paper Settings** section, from the drop-down lists, select a specific paper size and paper type for each tray in your printer.
4. Click **Apply**.

**Step 2: Configure specific tray settings**

Set up the printer to take the actions you want if (1) the media specified for a print job does not match the media in the specified tray or if (2) no tray is specified for a print job.

When either of these cases occurs, the printer automatically searches for a tray that contains media with the same paper size and type as those specified for the print job. The first tray the printer searches is called the default tray.

If you have special paper, such as letterhead, in a tray and want to protect it from accidental use, you can lock that tray, which removes the tray from the printer’s automatic search.

1. In the **Tray Settings** section, from the **Default Tray** drop-down list, specify the first tray the printer searches when trying to find a match for the print job.
2. (Optional) From the **Tray Lock** drop-down list, select a tray to remove from the printer’s automatic tray search.

**NOTE:** Locking Tray 1 removes the tray from the automatic tray search. However, if no match exists, the printer requests that you load the correct media into Tray 1 so it can print the job.

3. Click **Apply**.

**Step 3: Configure the general tray settings**

Configure these settings, which help you use the correct tray and paper when printing.

1. In the **General Tray Settings** section, from the **Manual Feed Prompt** drop-down list, select when to display a prompt to manually load Tray 1:
Always: Always display the prompt, even if the paper size and type in Tray 1 matches the media specified for the print job

Unless Loaded: Display the prompt only if Tray 1 is empty or contains media that does not match the media specified for the print job

2. From the Size/Type Prompt drop-down list, select whether to display prompts in the printer control panel to confirm paper size and type after the user closes the tray:
   - Display: Always display the size and type prompts
   - Do Not Display: Do not display the prompts

3. From the Use Requested Tray drop-down list, select whether to use one of the following:
   - Exclusively: Only the requested tray
   - First: If the print job size and type do not match the tray settings, the printer tries to find a match in the other trays

4. From the Alternative Letterhead Mode drop-down list, enable or disable this feature, which enables you to print in both simplex and duplex modes without reorienting the paper.

   **NOTE:** Alternative Letterhead Mode is designed for letterhead, preprinted media, or prepunched forms.

5. From the Override A4/Letter drop-down list, select one of the following:
   - Yes: Allow an A4 job to print to a letter tray and vice versa
   - No: Prevent the A4/letter override (that is, an A4 job can print only to an A4 tray and a letter-sized job can print only to a letter tray)

6. Click Apply.

**Step 4: Configure the advanced settings**

Configure these advanced settings, which define what to do in certain cases.


2. In the Default Paper Settings section, select a paper size and type to use if none are specified for the print job.

3. In the Input Auto Continue Settings section, select a timeout period and specify what action the printer takes after that period elapses.

   This setting applies if the tray is empty or contains paper that does not match the paper for the print job.

   A load paper or size mismatch message displays, and if you take no action during the selected timeout period, the printer performs the selected action.

   **NOTE:**
   - The default timeout period is Wait Forever, which means the input auto continue settings are turned off.
   - The timeout period of No Timeout means that the selected printer action occurs without delay.
   - (MFP only) The printer action of Cancel applies to both print and fax jobs.
4. In the **Custom Tray Settings** section, select the default tray for specific job types (for example, you might select Tray 1 as the default tray for jobs printed from a USB memory device).

5. Click **Apply**.

**Set up and manage job storage**

### NOTE:
This feature is not available on the HP PageWide Pro 452dn/dw series.

You can set up the job storage feature to enable users to store a print job for printing later when convenient. Jobs can be stored either to the internal printer memory or to a USB memory device, inserted into the rear USB port.

With the job storage feature, users can print to the following jobs:

- **Proof and Hold**: Prints the first copy of a multiple-copy job so you can verify the print quality and prints the remaining copies when you request them at the printer control panel
- **Personal Job**: Does not print the job until you request it at the printer control panel
- **Quick Copy**: Prints the requested number of copies of the job and stores a copy of it so you can print it again later
- **Stored Job**: Prints the job on the printer and lets other users print it at any time

Stored or Personal Jobs can be configured to require a PIN or encryption code before printing.

Job storage to the internal printer memory is enabled, by default. This section describes how to complete the job storage configuration.

### NOTE:
To print using the job storage feature, users must select the job storage settings in the **Printer properties** window for each print job. For printing instructions, see the user guide for your product.

**Set up job storage**

Setting up job storage involves two main steps: (1) Configuring the job storage settings, and (2) installing the printer driver.

If you decide to save print jobs to a USB memory device, instead of the internal printer memory default, you must perform a third step: formatting the USB device.

- **Step 1**: Configure job storage in the EWS
- **Step 2**: Install the printer driver
- *(Optional) Step 3*: Insert the USB device
- Manually enable job storage in the printer driver

**Step 1: Configure job storage in the EWS**

1. Access the job storage feature:
   a. In the EWS, click the **Settings** tab.
   b. Click **Security**, and then click **Protect Stored Data**.
   c. Select whether to save jobs to the internal printer memory or to a USB memory device.

2. Configure the security settings for Stored Jobs:
NOTE: These settings apply only to Stored Jobs. They do not apply to temporary jobs (for example, Private Jobs, Quick Jobs, or Proof and Hold Jobs).

- **Require all print driver Stored Jobs to be PIN-protected or encrypted**: Select this checkbox to require users to enter a PIN or encryption when they set up job storage. The encryption type is AES 256.

- **Cancel all print driver Stored Jobs that do not have PIN protection**: Select this checkbox to cancel all Stored Jobs that are not PIN-protected.

- **Add PIN protection to existing Stored Jobs**: Select this checkbox to add PINs to all Stored Jobs that do not have PIN protection.

  **NOTE:** Add PIN protection to existing Stored Jobs takes precedence over Cancel all print driver Stored Jobs that do not have PIN protection if both are selected. It ensures that all Stored Jobs are PIN protected.

- **Sort Stored Jobs By**: Select whether to sort Stored Jobs by date or job name.

- **Delete Standard Jobs After**: Select whether to retain all Stored Jobs or to delete them after a specified time period.

3. Configure the security settings for temporary jobs:

  **NOTE:** Temporary jobs include Private Jobs, Quick Jobs, and Proof and Hold Jobs.

- **Retain Temporary Jobs after Restart**: Select whether to keep all temporary jobs, no temporary jobs, or only Personal Jobs after printer restart.

- **Delete Temporary Jobs After**: Select whether to retain all temporary jobs or to delete them after a specified time period.

- **Temporary Job Storage Limit**: Enter the number of temporary jobs allowed (maximum of 100). When the limit is reached, the printer overwrites the oldest job with the newest job.

4. Click **Apply**.

**Step 2: Install the printer driver**

There are two printer drivers you can install:

- **Default driver**—This is a product-specific driver that is automatically installed when you install the product from 123.hp.com/pagewide or from the HP software CD provided with the printer.

- **HP Universal Print Driver (UPD) driver**—You can install this driver from the HP Universal Print Driver website.

**To install the default driver**

▲ On the client computer, install the product from 123.hp.com/pagewide (recommended) or from the HP software CD provided with the printer, and follow the onscreen instructions for installing the Windows or Mac driver.

Job Storage and Mopier are enabled by default.

**To install the UPD driver**

▲ On the client computer, install the HP Universal Print Driver (UPD).

For driver and installation instructions, visit [HP Universal Print Driver](https://123.hp.com/pagewide).
NOTE: If you install UPD 6.2.0 or later, the driver configures the device settings for you. If you install an earlier version, see Manually enable job storage in the printer driver.

(Optional) Step 3: Insert the USB device

If you set up job storage to store jobs to a USB device, rather than the internal printer memory, you have a third step to perform: formatting the device.

1. In the printer’s rear USB port, insert a USB device.
2. In the printer control panel, follow the onscreen instructions for formatting the USB device.

Manually enable job storage in the printer driver

Use the following instructions to manually enable job storage in the printer driver. These instructions apply to both the default driver and the UPD driver.

1. On the client computer, click Start, and do one of the following, depending on your operating system:
   ● Windows 10: Click Settings, click Devices, and then click Printers or Printers and Scanners.
   ● Windows 8, 8.1: Click Control Panel, click Hardware and Sound, and then click Devices and Printers.
   ● Windows 7: Click Devices and Printers.
2. Right-click your printer, and then click Properties or Printer properties.
3. In the Printer Properties window, click the Device Settings tab.
4. From the Storage Device drop-down list, select Installed.
5. From the Job Storage drop-down list, select Automatic.
6. From the Mopier Mode drop-down list, select Enable.
7. Click Apply.

Disable job storage

Disabling job storage is a multistep process:

● Step 1: Disable job storage in the EWS
● Step 2: Disable job storage in the printer driver

Step 1: Disable job storage in the EWS

1. In the EWS, click the Settings tab.
2. Click Security, and then click Protect Stored Data.
3. Clear the Allow Stored Jobs on this printer checkbox, and click Apply.

Step 2: Disable job storage in the printer driver

Use the following instructions to disable job storage in the printer driver. These instructions apply to both the default driver and the UPD driver.

1. On the client computer, click Start, and do one of the following, depending on your operating system:
● **Windows 10**: Click **Settings**, click **Devices**, and then click **Printers** or **Printers and Scanners**.

● **Windows 8, 8.1**: Click **Control Panel**, click **Hardware and Sound**, and then click **Devices and Printers**.

● **Windows 7**: Click **Devices and Printers**.

2. Right-click your printer, and then click **Properties** or **Printer properties**.

3. In the **Printer Properties** window, click the **Device Settings** tab.

4. From the **Job Storage** drop-down list, select **Disable**.

5. From the **Mopier Mode** drop-down list, select **Disable**.

6. Click **Apply**.

### Erase job data

[NOTE: This feature is not available on the HP PageWide Pro 452dn/dw series.]

You can use the erase job data feature to manually delete files that printed but are still stored in the printer.

1. In the EWS, click the **Settings** tab.

2. Click **Security**, and then click **Protect Stored Data**.

3. To erase job data, click **Erase Now**.

4. Click **Apply**.

[NOTE: To configure the printer to automatically delete files after a specified time period, use the **Delete Standard Jobs After** and the **Delete Temporary Jobs After** drop-down lists in Set up job storage.]
4 Set up and manage user access

Setting up and managing user access is a flexible, multistep process that you can tailor to fit your organizational needs. This section describes a generic approach to setup and management:

- Open the Access Control page
- Step 1: Set up and manage sign-in methods
- Step 2: Set up permissions
- Step 3: Define relationships between users and permissions
- Configure sign-out settings
- Set up printer user accounts
- Restrict color

Open the Access Control page

1. In the EWS, click the **Settings** tab.
2. Click **Security**, and then click **Access Control**.

Step 1: Set up and manage sign-in methods

You can use the sign-in feature to restrict access to specific printer features. There are three sign-in methods, and you can assign different methods to different features.

Following are the available sign-in methods:

- **Local Device**: Authenticates accounts by storing them on the printer's flash memory

  Local Device supports a maximum of 50 user accounts.

- **LDAP**: Authenticates accounts using a Lightweight Directory Access Protocol (LDAP) server

- **Windows**: Authenticates accounts by using Windows domain accounts

Local Device sign-in method

The Local Device method is always enabled. Use this method if you want to authenticate an account with the information stored in the printer’s flash memory, instead of an LDAP server database or your Windows domain accounts. Local Device user accounts are also known as printer user accounts.

With this feature, the printer prompts for a PIN if the user is one of the following: (1) a user whose permission is set to **Access Denied**, or (2) a guest whose permission is set to **Required Sign In**. For more information, see Step 2: Set up permissions.

- Creating Local Device user accounts
- Changing Local Device user accounts
- Deleting Local Device user accounts
Creating Local Device user accounts

1. Open the Access Control page.
   For more information, see Open the Access Control page.
2. In the Printer User Accounts section, click 📝.
3. In the Display Name field, enter the user name (maximum of 320 characters).
4. (Optional) In the Email Address field, enter the user's email address (maximum of 320 characters).
5. In the User Access Code field, enter an access code (between four and eight digits in length), and then click Apply.

Changing Local Device user accounts

1. Open the Access Control page.
   For more information, see Open the Access Control page.
2. In the Printer User Accounts section, for the account you want to change, click Edit.
3. Change the account information, and click Apply.

Deleting Local Device user accounts

1. Open the Access Control page.
   For more information, see Open the Access Control page.
2. In the Printer User Accounts section, select the checkbox next to the account you want to delete, and click ✗.

LDAP sign-in method

The LDAP method is disabled, by default. Enable this method if you want to authenticate an account with the information stored in an LDAP server database, instead of the printer's flash memory or your Windows domain accounts.

After enabling this method, configure the settings that the printer uses to establish a connection with the LDAP server, authenticate users, and search the LDAP server database.

- Enabling and configuring the LDAP sign-in method
- Changing the LDAP sign-in method
- Disabling the LDAP sign-in method

Enabling and configuring the LDAP sign-in method

1. Open the Access Control page.
   For more information, see Open the Access Control page.
2. In the Enable and Configure Sign-In Methods section, for the LDAP method, click Setup.
3. Select the Enable LDAP Sign In checkbox.
4. In the LDAP Sign-In Setup section, configure the sign-in settings:
• **LDAP Server Address**: Enter the IP address or hostname of the LDAP server. Do not use the following characters: & < > ;

• **Port**: Enter the port number that the LDAP server monitors for queries. The default port is 389.

• **Always use secure connection (SSL/TLS)**: To enable SSL/TLS, select this checkbox. Otherwise, to disable it, leave the checkbox cleared.

![IMPORTANT:](image)

**IMPORTANT**: When SSL/TLS is enabled, you must import the server's CA certificate into the printer.

5. In the **Server Authentication Requirements** section, select one of the following authentication credential methods:

• **Use Printer User’s Credentials**: Select this method if you want to use the user’s credentials to authenticate to the LDAP server.
  
  ◦ **Bind Prefix**: Enter the LDAP attribute to use to construct the user's Distinguished Name (DN) for authentication. Do not use the following characters: & < > ;

• **Use LDAP Administrator’s Credentials**: Select this method if you want to use the LDAP administrator’s credentials to authenticate to the LDAP server.
  
  ◦ **User Name**: Enter the LDAP administrator’s name.
  
  ◦ **Password**: Enter the LDAP administrator’s password.

6. In the **LDAP Database Search Settings** section, configure the search settings:

• **Bind and Search Root**: Enter the root name of the location in the LDAP directory structure where the printer begins the search. To enter multiple locations, separate the root names with the vertical bar ( | ) character.

• **Match the name entered with this attribute**: Enter the LDAP attribute name that the printer uses to authenticate the user login name.

• **Retrieve the user’s email address using this attribute**: Enter the LDAP attribute name for the user’s email address.

• **Retrieve the printer user’s name using this attribute**: Enter the LDAP attribute name for the user’s name.

• **Retrieve the printer user’s group using this attribute**: Enter the LDAP attribute name for the user group that the user belongs to.

• **Exact match on group attribute**: Select this checkbox if the LDAP attribute name for the user group must be an exact match.

7. In the **Test LDAP Sign In** section, enter the user name and password, and click **Save and Test**.

8. Click **Apply**.

### Changing the LDAP sign-in method

1. Open the Access Control page.
   
   For more information, see [Open the Access Control page](#).

2. In the **Enable and Configure Sign-In Methods** section, for the LDAP method, click **Edit**.

3. Change the LDAP sign-in information, and click **Apply**.
Disabling the LDAP sign-in method

1. Open the Access Control page.
   For more information, see Open the Access Control page.
2. In the Enable and Configure Sign-In Methods section, for the LDAP method, click Edit.
3. Clear the Enable LDAP Sign In checkbox, and click Apply.

Windows sign-in method

The Windows method is disabled, by default. Enable this method if you want to authenticate an account with the information stored in the Windows domain, instead of the printer’s flash memory or an LDAP server database.

After enabling this feature, configure the Windows trusted domain and the attributes that the printer uses to authenticate users.

- Enabling and configuring the Windows sign-in method
- Changing the Windows sign-in method
- Disabling the Windows sign-in method

Enabling and configuring the Windows sign-in method

1. Open the Access Control page.
   For more information, see Open the Access Control page.
2. In the Enable and Configure Sign-In Methods section, for the Windows method, click Setup.
3. Select the Enable Windows Sign In checkbox.
4. In the Windows Sign-In Setup section, configure the sign-in settings:
   - Default Windows Domain: Enter the domain name.
   - Enable reverse DNS lookups: To enable the printer to use the Domain Name System to determine the domain name of an IP address, select this checkbox. Otherwise, to disable it, leave this checkbox cleared.
   - Always use secure connection (SSL/TLS): To enable SSL/TLS, select this checkbox. Otherwise, to disable it, leave the checkbox cleared.
   
   **IMPORTANT:** When SSL/TLS is enabled, you must import the server’s CA certificate into the printer.

   - Match the name entered with this attribute: Enter the Windows attribute name that the printer uses to authenticate the user login name.
   - Retrieve the user’s email address using this attribute: Enter the Windows attribute name for the user email addresses.
   - Retrieve the printer user’s name using this attribute: Enter the Windows attribute name for user names.
5. In the Test Windows Sign In section, enter the user name and password, and click Save and Test.
6. Click Apply.
Changing the Windows sign-in method

1. Open the Access Control page.
   For more information, see Open the Access Control page.

2. In the Enable and Configure Sign-In Methods section, for the Windows method, click Edit.

3. Change the Windows sign-in information, and click Apply.

Disabling the Windows sign-in method

1. Open the Access Control page.
   For more information, see Open the Access Control page.

2. In the Enable and Configure Sign-In Methods section, for the Windows method, click Edit.

3. Clear the Enable Windows Sign In checkbox, and click Apply.

Step 2: Set up permissions

Use the permissions feature to assign a sign-in method to each printer feature. Then, use this feature to restrict access to specific printer features for certain groups. You can apply permissions to local user accounts stored on the printer or to network users.

Permissions apply to features that are accessible from the printer control panel. Access to color printing depends on the printer drivers installed on the client computer.

NOTE: The color copy and print features for color printers are enabled, by default. To disable these features, see Restrict color.

You can set permissions for the following groups:

- **User group**: These are users who log in to the printer through the Local Device, LDAP, or Windows sign-in method.
  
  All jobs sent from HP drivers are considered user print jobs.

- **Guest group**: These are users who do not log in to the printer but can still access some printer features.
  
  All jobs sent from third-party drivers are considered guest print jobs.

- **Custom group**: These are users who can access printer features because they meet requirements that you specify.

Assigning a sign-in method to each printer feature

1. Open the Access Control page.
   For more information, see Open the Access Control page.

2. In the Sign-In and Permission Policies section, in the Feature heading row, from the Sign-In Method drop-down list, select the default sign-in method for all the printer features.

3. In each table row, from the Sign-In Method drop-down list, you can select to override the default sign-in method for an individual printer feature.

4. Click Apply.
Setting user permissions

Members of the user group are those who log in to the printer through the Local Device, LDAP, or Windows sign-in method.

1. Open the Access Control page.
   For more information, see Open the Access Control page.

2. In the **Sign-In and Permission Policies** section, in each table row, select the **User** checkbox for each printer feature that the user can access.

   **NOTE:** To enable or disable access to all the printer features, select (✓) or clear (☐) the **User** checkbox in the **Feature** heading row.

3. In each table row, from the **Sign-In Method** drop-down list, you can select to override the default sign-in method for an individual printer feature.

   **NOTE:** The override applies to the feature and affects all user groups with access to the feature. The feature cannot have a different sign-in method for a different user group.

4. Click **Apply**.

Setting guest permissions

Members of the guest group are those who do not log in to the printer but can still access some printer features.

1. Open the Access Control page.
   For more information, see Open the Access Control page.

2. In the **Sign-In and Permission Policies** section, in each table row, select the **Guest** checkbox for each printer feature that the guest can access.

   **NOTE:** To enable or disable access to all the printer features, select (✓) or lock (☐) the **Guest** checkbox in the **Feature** heading row.

3. In each table row, from the **Sign-In Method** drop-down list, you can select to override the default sign-in method for an individual printer feature.

   **NOTE:** The override applies to the feature and affects all user groups with access to the feature. The feature cannot have a different sign-in method for a different user group.

4. Click **Apply**.

Setting custom permissions

Members of the custom group are those who can access printer features because they meet requirements that you specify.

You can set up a maximum of 20 custom groups.

1. Open the Access Control page.
   For more information, see Open the Access Control page.

2. In the **Sign-In and Permission Policies** section, click **Manage Permission Set**.

3. Above the **Permission Set** table, click ➕, and do the following:
a. Enter the name of the custom group, and click **Apply**.

b. Click **OK**, and then click **Back**.

4. In the **Sign-In and Permission Policies** section, in each table row, select the `<custom group name>` checkbox for each printer feature that the custom user can access.

   **NOTE:** To enable or disable access to all the printer features, select (✓) or clear (☐) the `<custom group name>` checkbox in the **Feature** heading row.

5. In each table row, from the **Sign-In Method** drop-down list, you can select to override the default sign-in method for an individual printer feature.

   **NOTE:** The override applies to the feature and affects all user groups with access to the feature. The feature cannot have a different sign-in method for a different user group.

6. Click **Apply**.

---

**Step 3: Define relationships between users and permissions**

Select the default permission set for each sign-in method. This permission set applies to all users in the group unless otherwise specified.

1. Open the Access Control page.

   For more information, see [Open the Access Control page](#).

2. In the **Relationships Between Network Users or Groups and Printer Permissions** section, in the first table, select the default permission set for each sign-in method.

3. In the second table, identify the exceptions to the default permission sets. These users or groups can use permission sets other than the default sets defined in the first table:
   
   a. Click ☑.
   
   b. Select the permission set and sign-in method, and enter the name of the user or group.
   
   c. Click **Apply**, and then click **OK**.

4. Click **Apply**.

---

**Configure sign-out settings**

For additional security, you can configure the printer to automatically sign out the current user from the printer control panel after starting a walk-up job.

1. Open the Access Control page.

   For more information, see [Open the Access Control page](#).

2. In the **Job Status Screen Behavior** section, select the **Enable Automatic Sign Out** checkbox.

3. Select whether to sign out immediately after the job starts or to sign out 10 seconds after the job starts, with the option to stay signed in.

4. Click **Apply**.
Set up printer user accounts

With printer user accounts, users sign in at the printer control panel using an access code. You can assign permission sets to each account. These are the same as Local Device user accounts. For more information, see Local Device sign-in method.

Restrict color

Use the restrict color feature to manage the use of color supplies within your organization. This feature applies to color printers only.

**NOTE:**
- This feature does not apply to printer reports, such as the Printer Status, Print Quality, and so forth.
- This feature does not apply to fax jobs. To restrict color on fax jobs, on the Settings tab, under Security, click Administrator Settings. In the Printer Features table, clear the Color Fax (Incoming Fax) checkbox, and then click Apply.

With the restrict color feature, you can specify one of the following:
- All color jobs print in color.
- All color jobs print in black-and-white or grayscale.
- Color jobs print in color or in black-and-white or grayscale based on the user's permission settings or on the software application the user is printing from.

To restrict color

1. In the EWS, click the Settings tab.
2. Click Copy/Print Settings, and then click Restrict Color.
3. In the Color Printing Controls section, select one of the following:
   - **Enable color printing:** Prints all color jobs in full color
   - **Disable color printing:** Prints all color jobs in black-and-white or grayscale (using black ink only)
   - **Custom color printing:** Prints color jobs in black-and-white or grayscale (using black ink only) based on software applications, user groups, or both, which you specify

   **NOTE:** During self-servicing routines, the printer might use ink from the color cartridges.

   **NOTE:** You can apply the custom color printing option to both software applications and user groups. If you do, the printer uses the lowest permission to restrict color usage.

4. If you selected Custom color printing and want to restrict by software applications that the user prints from, do the following:
   a. Select the Restrict color printing from some software applications checkbox.
   b. From the Select the default color printing setting for all software applications drop-down list, select a type of color usage.
   c. In the table, identify and manage the software applications that override the default color printing setting:
      - Add an application: Click †, and then in the Application Name field, enter the application name or the name of the executable file that starts the application (for example, Microsoft
Word or winword.exe). From the **Color Control** drop-down list, select the type of color usage, and then click **Apply**.

- Change an application: Next to the application that you want to change, click **Edit**.
- Delete an application: Select the checkbox next to the application that you want to delete, and click **X**.

5. If you selected **Custom color printing** and want to restrict by user groups, do the following:
   
   a. Select the **Restrict color printing for user or groups** checkbox.
   
   b. In the table, define the permissions and access for the user, guest, and custom groups.

   📝 **NOTE:** The settings you make in this table also appear on the **Access Control** page.

6. Click **Apply**.
5 Set up scanning (MFP only)

- Enable and use Webscan
- Set up scan to email
- Set up scan to a network folder
- Set up scan to SharePoint

Enable and use Webscan

Webscan is a feature of the EWS that lets you scan photos and documents from your printer to your computer using a web browser.

Webscan is disabled, by default. You can enable it only from the EWS, not from the printer control panel or from the printer software.

- Enable Webscan
- Use Webscan

Enable Webscan

1. In the EWS, click the Settings tab.
2. Click Security, and then click Administrator Settings.
3. Select Scan, which automatically selects Webscan from EWS, and then click Apply.

Use Webscan

Webscan offers basic scan options. If you want additional scan options or functionality, use the printer software.

1. Load your original print-side down on the scanner glass or print-side up in the automatic document feeder (ADF).
2. In the EWS, click the Scan tab.
3. On the Scan to Computer page, select the scan settings:
   - **Document Source**: Specify whether you are scanning from the ADF or the scanner glass
   - **Document Type**: Select whether to scan to PDF or JPEG
   - **Color Preference**: Specify whether to scan in black-and-white or color (color scanning is available only for color originals)
   - **Two Sided**: Specify whether to scan one or both sides of the original (two-sided scanning is available only from the ADF)
   - **Paper Size**: Specify the size of the original
   - **Quality Settings**: Select the resolution and quality of the scan
   - **Lighter/Darker**: Drag the slider to the left for a lighter scan or to the right for a darker scan
4. Click **Start Scan**.
   A new browser window opens, displaying the scanned photo or document.

5. In the EWS, in the **Status** section, follow the onscreen instructions for saving the scan.

**Set up scan to email**

The Scan-to-Email app allows you to quickly scan and email photos or documents to the specified recipients directly from your printer. You can set up your email addresses, log in to your accounts with the given PIN codes, and then scan and email your documents.

Setting up scan to email is a multistep process:

- **Step 1: Set up outgoing email settings or profiles**
- **Step 2: Set up the email address book**
- **Step 3: Set up the email options**

**Step 1: Set up outgoing email settings or profiles**

How you set up scan to email depends on whether your organization uses a single or multiple email servers to manage its email accounts:

- Single email server: Follow the instructions in **Configure outgoing email settings**
- Multiple email servers: Follow the instructions in **Configure outgoing email profiles**

**Configure outgoing email settings**

Use these instructions if your organization uses a single email server.

1. In the EWS, click the **Scan** tab.
2. Click **Scan to Email**, and then click **Scan to Email Setup**.
3. In the **Outgoing Email Settings** section, configure the following settings:
   - **To** and **From** fields: Specify which email addresses to use
   - **SMTP** fields: Enter the address of the SMTP server and its port number
   - **Maximum Size of Email**: Select the maximum size of each email
   - **Server Authentication**: Select whether the server requires authentication
4. In the **Send a test email to** field, enter an email address, and click **Save and Test**.
5. Click **Apply**.

**Configure outgoing email profiles**

Use these instructions if your organization uses multiple email servers.

1. In the EWS, click the **Scan** tab.
2. Click **Scan to Email**, and then click **Scan to Email Setup**.
3. In the **Outgoing Email Profiles** section, click **+** and do the following:
a. Enter the email address, display name, and a four-digit security PIN for the email profile. Click Next.

b. Enter the SMTP server and port for this email profile, specify the maximum size of each email, and select whether the server requires authentication. Click Next.

c. Select whether to include the sender in all email messages sent from the printer, and click Next.

4. Confirm the profile settings, and click Save and Test.

5. Click Apply.

**Step 2: Set up the email address book**

1. In the EWS, click the Scan tab.

2. Under Scan to Email, click Email Address Book.

3. In the Network Contacts Setup section, select a method for searching the contacts in the address book.

4. To search your Lightweight Directory Access Protocol (LDAP) server, select the Enable Network Contacts checkbox, and click Setup to configure the LDAP directory server.

5. In the Contacts Stored on the Printer section, click to add an individual or click to add a group.

6. Enter the email address and name of the network contact, and click Apply.

**Step 3: Set up the email options**

You can scan documents and send them to one or more email addresses as attachments—without additional scanning software. You do not need to scan files from your computer and attach them to email messages.

Use these instructions to configure your scan settings and email messages for email sent from the printer.

1. In the EWS, click the Scan tab.

2. Under Scan to Email, click Email Options.

3. From the Email Address Field Settings drop-down list, select whether users at the printer control panel can do one of the following:
   - Enter a new email address
   - Only select existing addresses from the address book

4. In the Default Subject and Body Text section, enter the email subject and body text.

5. In the Scan Settings section, select the original paper size, one- or two-sidedness, orientation, and darkness.

6. In the File Settings section, configure the file name, compression method, file type, color preference, output quality, resolution, and other settings.

7. Click Apply.

**Set up scan to a network folder**

If you have access permissions to a network folder, you can configure that folder to store scanned images or documents from the printer.

1. In the EWS, click the Scan tab.

2. Click Scan to Network Folder, and then click Network Folder Setup.
3. To enter setup information, click.

4. On the Step 1: Network Folder page, enter the name and path of the network folder, and click Next.

5. On the Step 2: Log-in Authentication page, do the following:
   - Select to use the credentials of the current user or enter the specific credentials to use, including domain, user name, and password.
   - If you enter specific credentials, then also enter a four-digit security PIN.
   - Click Next.

6. On the Step 3: Setup Configuration page, do the following:
   - In the Scan Settings section, select the original paper size, one- or two-sidedness, orientation, and lightness/darkness.
   - In the File Settings section, configure the file name, compression method, file type, color preference, output quality, resolution, and other settings.
   - Click Save.

**Set up scan to SharePoint**

If you have access permissions to a SharePoint folder, you can configure that folder to store scanned images or documents from the printer.

1. In the EWS, click the Scan tab.

2. Click Scan to SharePoint Path, and then click SharePoint Setup.

3. To enter setup information, click.

4. On the Step 1: Add SharePoint Path page, enter the name and path of the SharePoint folder, and click Next.

5. On the Step 2: Log-in Authentication page, do the following:
   - Select to use the credentials of the current user, or enter the specific credentials to use, including domain, user name, and password.
   - If you enter specific credentials, then also enter a four-digit security PIN.
   - Click Next.

6. On the Step 3: Setup Configuration page, do the following:
   - In the Scan Settings section, select the original paper size, one- or two-sidedness, orientation, and lightness/darkness.
   - In the File Settings section, configure the file name, compression method, file type, color preference, output quality, resolution, and other settings.
   - Click Save.
6 Maintain and manage the printer

As the EWS administrator, set up features that enable you to maintain the optimal health and operation of the printer. The following sections describe just a few of the features that you might use:

- Maintain printer quality
- Manage printer assets

**Maintain printer quality**

- Set up email alerts
- Review printer reports
- Perform cleaning routines
- Automatically install printer updates

**Set up email alerts**

On the **Settings** tab, under **Email Alerts**, set up the printer to send email messages to specific people when printer problems occur (the recipients are called alert destinations).

On the **Alert Destinations** page, enter the names and email addresses of the recipients for specific alerts. Then, on the **Alert Settings** page, assign the alerts to the alert destinations.

You can set up alerts for the following printer problems.

<table>
<thead>
<tr>
<th>Problem area</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplies</td>
<td>• Cartridge missing</td>
</tr>
<tr>
<td></td>
<td>• Cartridge empty</td>
</tr>
<tr>
<td></td>
<td>• Ink cartridge low</td>
</tr>
<tr>
<td></td>
<td>• Printhead error</td>
</tr>
<tr>
<td></td>
<td>• Printhead missing</td>
</tr>
<tr>
<td></td>
<td>• Other supply errors</td>
</tr>
<tr>
<td>General Printer Problems</td>
<td>• Door open</td>
</tr>
<tr>
<td></td>
<td>• Media mismatch</td>
</tr>
<tr>
<td></td>
<td>• Paper jam</td>
</tr>
<tr>
<td></td>
<td>• Tray empty</td>
</tr>
<tr>
<td></td>
<td>• Other device errors</td>
</tr>
<tr>
<td>Fax and Scan (MFP only)</td>
<td>• ADF cover open</td>
</tr>
<tr>
<td></td>
<td>• ADF paper jam</td>
</tr>
<tr>
<td></td>
<td>• Fax failure</td>
</tr>
<tr>
<td>Problem area</td>
<td>Problem</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Job Storage Memory (not available on the HP PageWide 452dn/dw series)</td>
<td>● Scan failure</td>
</tr>
<tr>
<td></td>
<td>● USB device disconnected</td>
</tr>
<tr>
<td></td>
<td>● Out of memory</td>
</tr>
</tbody>
</table>

**Review printer reports**

On the **Tools** tab, under **Reports**, view reports on printer health and usage.

These reports include the following.

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage Report</td>
<td>Tracks all of the printer’s paper sizes, monochrome or color jobs, simplex or duplex job, and page counts (useful for reconciling contractual billing statements)</td>
</tr>
<tr>
<td>Printer Reports</td>
<td>Prints a list of all installed PCL, PCL6, or PS fonts</td>
</tr>
<tr>
<td>Event Log</td>
<td>Shows a log of errors that occurred during printer operation</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> To chat with an the HP Customer Support representative about an error in the log, click <strong>Support</strong>.</td>
</tr>
<tr>
<td>Job Log</td>
<td>Shows a list of the most recent jobs performed by the printer</td>
</tr>
<tr>
<td>Color Usage Job Log</td>
<td>Shows the number of pages printed in color or black-and-white and grayscale for all jobs and for individual jobs</td>
</tr>
</tbody>
</table>

**Perform cleaning routines**

On the **Tools** tab, under **Utilities**, and in **Print Quality Toolbox**, run maintenance tools to improve the print quality of your printouts.

You can print a diagnostic report on your print quality. You can also run a cleaning routine to remove buildup in the printer that can cause smearing on printed pages.

For more information about these tools, see the **Tools** tab, in **UI reference**.

**Automatically install printer updates**

HP recommends using automatic updates to ensure that your printer has the latest security fixes and feature enhancements.

On the **Tools** tab, under **Printer Updates**, and in **Print Firmware Updates**, set up the printer to automatically install updates.

For more information about this feature, see the **Tools** tab, in **UI reference**.

**Manage printer assets**

- **Track assets**
- **Monitor and order cartridges**
- **Back up and restore settings**
Track assets

On the **Tools** tab, under **Utilities**, and in **Asset Tracking**, you can assign an asset number and location to the printer to help track your office assets.

Monitor and order cartridges

On the **Tools** tab, under **Product Information**, and in **Cartridge Level Gauge**, you can monitor cartridge levels and order cartridges when the levels are low.

Back up and restore settings

On the **Tools** tab, under **Backup and Restore**, you can create a password-encrypted file to store specific printer settings and restore those settings when needed.

These settings might include the following.

<table>
<thead>
<tr>
<th>Printer feature</th>
<th>Example settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy (MFP only)</td>
<td>● Number of copies</td>
</tr>
<tr>
<td></td>
<td>● Sidedness</td>
</tr>
<tr>
<td></td>
<td>● Resizing</td>
</tr>
<tr>
<td></td>
<td>● Quality and enhancements, such as lighter/darker, collation, and binding margin</td>
</tr>
<tr>
<td>Printer</td>
<td>● Tray 1 paper size and paper type</td>
</tr>
<tr>
<td></td>
<td>● Tray 2 paper size and paper type</td>
</tr>
<tr>
<td></td>
<td>● Optional Trays 3 or 4 paper size and paper type</td>
</tr>
<tr>
<td></td>
<td>● Default tray</td>
</tr>
<tr>
<td>Email Alerts</td>
<td>● Email server</td>
</tr>
<tr>
<td></td>
<td>● Alert destinations</td>
</tr>
<tr>
<td></td>
<td>● Alert settings, including specific supply, printer, fax and scan (MFP only), and job storage memory problems</td>
</tr>
<tr>
<td>Digital Fax (MFP only)</td>
<td>● Network folder for storing incoming digital faxes</td>
</tr>
<tr>
<td></td>
<td>● Email addresses used by the printer to receive and send incoming faxes as email attachments</td>
</tr>
<tr>
<td>Fax Phone Book (MFP only)</td>
<td>● Individual contact names and numbers</td>
</tr>
<tr>
<td></td>
<td>● Group contact names and numbers</td>
</tr>
<tr>
<td>Fax (MFP only)</td>
<td>● Basic settings, such as fax header name and number, rings-to-answer, and tone or pulse dialing</td>
</tr>
<tr>
<td></td>
<td>● Advanced settings, such as fax confirmation, busy redial, Error Correction Mode, and fax speed</td>
</tr>
<tr>
<td></td>
<td>● Fax forwarding number, start day and time, and stop day and time</td>
</tr>
<tr>
<td></td>
<td>● Fax numbers to block</td>
</tr>
<tr>
<td>Scan to Email (MFP only)</td>
<td>● Scan to Email setup</td>
</tr>
<tr>
<td></td>
<td>● Email address book</td>
</tr>
<tr>
<td></td>
<td>● Email options, such as scan and file settings</td>
</tr>
<tr>
<td>Scan to Folder (MFP only)</td>
<td>● Folder name and path for storing scanned images or documents from the printer</td>
</tr>
<tr>
<td></td>
<td>● Log-in authentication credentials</td>
</tr>
<tr>
<td>Printer feature</td>
<td>Example settings</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>● Configuration options, including scan and file settings</td>
</tr>
</tbody>
</table>

For more information about these settings, see the **Settings** tab, in [UI reference](#).
This UI reference provides descriptions of many of the fields in the HP Embedded Web Server. Fields available only for multifunctional printers are indicated by the phrase (MFP only).

- Home tab
- Scan tab (MFP only)
- Fax tab (MFP only)
- Web Services tab
- Network tab
- Tools tab
- Settings tab

**Home tab**

Use the **Home** tab to access frequently used items from the **Scan** (MFP only), **Fax** (MFP only), **Web Services**, **Network**, **Tools**, and **Settings** tabs.

**NOTE:**
- Not all of the following items are visible by default. Use the **Personalize** button to show or hide the items of your choice.
- Settings for this page are automatically saved in the web browser’s cookies. If the web browser’s cookies are deleted, these settings are lost.

The **Home** tab might include the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan to Email (MFP only)</td>
<td>Configure target email profiles for the scan-to-email feature</td>
</tr>
<tr>
<td>Scan to Network Folder (MFP only)</td>
<td>Configure a target network folder for the scan-to-network feature</td>
</tr>
<tr>
<td>HP Digital Fax (MFP only)</td>
<td>Configure the printer to save faxes to the network or forward them to email</td>
</tr>
<tr>
<td>Energy Save Settings</td>
<td>Configure energy-saving features that switch the printer to Sleep Mode or turn the printer on or off automatically</td>
</tr>
<tr>
<td>Web Services</td>
<td>Enable or disable HP ePrint or print apps that allow you to print from email</td>
</tr>
<tr>
<td>Printer Update</td>
<td>Check for new printer updates</td>
</tr>
<tr>
<td>Estimated Cartridge Levels</td>
<td>Review cartridge level status</td>
</tr>
<tr>
<td>Network Summary</td>
<td>View wired (802.3) status or wireless (802.11) status</td>
</tr>
<tr>
<td>Print Quality Toolbox</td>
<td>Run maintenance tools to improve print quality</td>
</tr>
<tr>
<td>Wireless Setup Wizard</td>
<td>Set up a wireless connection using the wizard</td>
</tr>
<tr>
<td>Wi-Fi Direct</td>
<td>Set up Wi-Fi Direct to print from a mobile device directly to the printer without connecting to a wireless network</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AirPrint™</td>
<td>Set up AirPrint™ for printing from Apple-supported products</td>
</tr>
<tr>
<td>Printer Information</td>
<td>View information about the printer, such as product serial number, service ID, firmware version, and total page count</td>
</tr>
<tr>
<td>Administrator</td>
<td>Set up administrator control of printer features</td>
</tr>
<tr>
<td>Backup</td>
<td>Back up the printer settings into a password-encrypted file</td>
</tr>
<tr>
<td>Fax Log (MFP only)</td>
<td>Display and manage all fax-related activities (including digital fax log)</td>
</tr>
<tr>
<td>Fax Setup Wizard (MFP only)</td>
<td>Run the wizard to set up fax features</td>
</tr>
<tr>
<td>Firewall</td>
<td>Configure the network firewall</td>
</tr>
<tr>
<td>Printer Reports</td>
<td>Print the information pages about your printer</td>
</tr>
<tr>
<td>Scan to SharePoint (MFP only)</td>
<td>Configure a SharePoint destination for saving scanned documents from the printer</td>
</tr>
<tr>
<td>Usage Report</td>
<td>Display usage counters for print, fax (MFP only), and copy (MFP only) jobs</td>
</tr>
<tr>
<td>Webscan (MFP only)</td>
<td>Enable Webscan, which allows anyone with access to the printer to scan whatever is on the scanner glass</td>
</tr>
</tbody>
</table>

### Scan tab (MFP only)

Use the **Scan** tab to configure the product’s scan features. The **Scan** tab includes the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan to Computer</td>
<td><strong>Webscan</strong></td>
</tr>
<tr>
<td><strong>IMPORTANT:</strong></td>
<td>For security purposes, Webscan is disabled by default. To enable Webscan, open the Settings tab, click Administrator Settings, select the Enable checkbox for Webscan, and then click Apply.</td>
</tr>
<tr>
<td></td>
<td>When Webscan is enabled, anyone with access to the printer can scan whatever is on the scanner glass.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Document Source</strong>: Select whether to scan from the ADF or the scanner glass</td>
</tr>
<tr>
<td></td>
<td>• <strong>Document Type</strong>: Select whether to scan to PDF or JPEG</td>
</tr>
<tr>
<td></td>
<td>• <strong>Color Preference</strong>: Select whether to scan in black-and-white or color (color scanning is available only for color originals)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Two Sided</strong>: Select whether the original to scan has one or two sides (two-sided scanning is available only from the ADF)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Paper Size</strong>: Select the paper size of the original</td>
</tr>
<tr>
<td></td>
<td>• <strong>Quality Settings</strong>: Select the resolution and quality of the scan</td>
</tr>
<tr>
<td></td>
<td>• <strong>Lighter/Darker</strong>: Drag the slider to the left for a lighter scan or to the right for a darker scan</td>
</tr>
</tbody>
</table>

<p>| Scan to Email               | <strong>Scan to Email Setup</strong>                                                                                                                      |
|                            | In the Outgoing Email Settings section, configure the following settings if your organization uses a single email server to manage all its email accounts: |
|                            | • <strong>To</strong>: Select to use the current user’s email address or leave this field blank                                                          |
|                            | • <strong>From</strong>: Select to use the current user’s email address or use the Default From address                                                   |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User editable</strong></td>
<td>Select this checkbox to allow the user to change the <strong>To</strong> or <strong>From</strong> fields if scanning at the printer control panel</td>
</tr>
<tr>
<td><strong>Default From</strong></td>
<td>Enter the default email address for the sender</td>
</tr>
<tr>
<td><strong>Default Display Name</strong></td>
<td>Enter the default name to display for the sender</td>
</tr>
<tr>
<td><strong>SMTP Server</strong></td>
<td>Enter the SMTP server address</td>
</tr>
<tr>
<td><strong>SMTP Port</strong></td>
<td>Enter the port number for SMTP data</td>
</tr>
<tr>
<td><strong>Always use secure connection (SSL/TLS)</strong></td>
<td>Select this checkbox if you want to use a secure connection for the Scan to Email feature</td>
</tr>
<tr>
<td><strong>Maximum Size of Email</strong></td>
<td>Select the maximum size per email message</td>
</tr>
<tr>
<td><strong>Server Authentication</strong></td>
<td>Select whether the server requires authentication</td>
</tr>
<tr>
<td><strong>Send a test email to</strong></td>
<td>Enter an email address to send a test email</td>
</tr>
</tbody>
</table>

In the **Outgoing Email Profiles** section, click , and configure the following settings if your organization uses multiple email servers to manage its email accounts:

<table>
<thead>
<tr>
<th>Email Address Book</th>
<th>Email Address</th>
<th>Enter the email address to use for this outgoing email profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display Name</strong></td>
<td>Enter the name to use for this email profile</td>
<td></td>
</tr>
<tr>
<td><strong>Create a Security PIN</strong></td>
<td>Enter a four-digit security personal identification number to prevent unauthorized use of this email profile</td>
<td></td>
</tr>
<tr>
<td><strong>Default From</strong></td>
<td>Enter the default email address for the sender</td>
<td></td>
</tr>
<tr>
<td><strong>SMTP Port</strong></td>
<td>Enter the port number for SMTP data</td>
<td></td>
</tr>
<tr>
<td><strong>Always use secure connection (SSL/TLS)</strong></td>
<td>Select this checkbox if you want to use a secure connection for the Scan to Email feature</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Size of Email</strong></td>
<td>Select the maximum size per email message</td>
<td></td>
</tr>
<tr>
<td><strong>Server Authentication</strong></td>
<td>Select whether the server requires authentication</td>
<td></td>
</tr>
</tbody>
</table>

**Email Address Book**

| Search method | Select a way to search your address book for a contact, and select whether to also search your LDAP server |
| In the **Contacts Stored on the Printer** section, click , and enter the contact name and address |

**Email Options**

| Address Field Restrictions | Select whether users at the printer control panel can enter a new email address or must select an existing address from the address book |
| Email Subject | Enter a default email subject line |
| User editable | Select this checkbox to allow the user to change the subject field |
| **Body Text** | If you want all email messages sent from the printer to use default body text, select the **Show body text** option and type the text. Otherwise, select the **Hide body text** option. |
| **Original Size** | Select the size of the original image or document |
| **Original Sides** | Select whether you are scanning one side or both sides (ADF only) of the original |
| **Content Orientation** | Select whether the original is in landscape or portrait orientation |
| **Darkness** | Using a scale of 1 (lightest) to 9 (darkest), indicate how dark to make the scan (for example, if the original is very light, you might select a higher value to compensate) |
### Fax tab (MFP only)

Use the **Fax** tab to configure the product’s fax features. The **Fax** tab includes the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax Setup Wizard</td>
<td>To configure the printer’s fax feature, follow the onscreen instructions.</td>
</tr>
<tr>
<td>Basic Fax Settings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● <strong>Fax Header Name</strong>: Enter the name to display in the fax header</td>
</tr>
<tr>
<td></td>
<td>● <strong>Fax Number</strong>: Enter the fax number to display in the fax header</td>
</tr>
<tr>
<td></td>
<td>● <strong>Rings-to-answer</strong>: Select the number of rings before the printer receives an incoming fax</td>
</tr>
<tr>
<td></td>
<td>● <strong>2-sided Printing</strong>: Select whether to print the fax on one or two sides of the paper</td>
</tr>
<tr>
<td></td>
<td>● <strong>Fax Sound Volume</strong>: Select whether the printer emits a sound when it receives a fax</td>
</tr>
<tr>
<td></td>
<td>● <strong>Tone or Pulse Dialing</strong>: Select to use tone (numeric keypad) or pulse (rotary) dialing to represent the dialing of the fax number</td>
</tr>
<tr>
<td></td>
<td>● <strong>Auto Answer</strong>: Enable or disable this feature, which transfers voice calls to voice mail or answering machines</td>
</tr>
<tr>
<td></td>
<td>● <strong>Fax Prefix</strong>: Include or exclude the first set of digits after the country, regional, or area codes of a fax number</td>
</tr>
<tr>
<td>Advanced Fax Settings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● <strong>Fax Confirmation</strong>: Disable the printing of a fax confirmation report or enable it to print when a fax is sent, received, or both</td>
</tr>
</tbody>
</table>

---

**Network Folder Setup**: Configure a network folder for saving scanned images or documents from the printer.

**SharePoint Setup**: Configure a SharePoint destination for saving scanned documents from the printer.
### Item Description

- **Image on Fax Send**: Select whether to include an image, such as your company logo, on outgoing faxes
- **Fax Error Report**: Disable the printing of a fax error report or enable it to print when a fax is sent, received, or both
- **Busy Redial**: Enable or disable the redialing of the fax number if the printer receives a busy signal
- **No Answer Redial**: Enable or disable the redialing of the fax number if the printer receives no answer
- **Communication Error Redial**: Enable or disable the redialing of the fax number if the printer experiences a communication error
- **Error Correction Mode**: Enable or disable the redialing of a fax number if the printer detects an error during the fax transmission
- **Backup Fax Reception**: Enable or disable the backing up of a received fax
- **Fax Speed**: Select the speed of the fax transmission
- **Automatic Reduction**: Enable or disable the size reduction of incoming faxes
- **Distinctive Ring**: Select whether to use different rings to differentiate between incoming voice calls and incoming fax calls

### Fax Speed-dial
- Enter and store speed dial numbers

### Fax Forwarding
- Automatically redirect incoming faxes to another fax number

### Junk Fax Blocker
- Block faxes from specific people or businesses

### Information
- **Fax Log**: View a list of the faxes that have been sent from or received by this product

### HP Digital Fax
- **Digital Fax Profile**: Save incoming black-and-white faxes to a designated folder on the network or forward them as email

---

### Web Services tab

Use the **Web Services** tab to configure and enable HP Web Services for this product. You must enable HP Web Services to use the HP ePrint feature.

The **Web Services** tab includes the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>• <strong>Web Services Status</strong>: Indicates whether Web Services is enabled</td>
</tr>
<tr>
<td></td>
<td>• <strong>Internet connection</strong>: Indicates whether the printer is connected to the Internet</td>
</tr>
<tr>
<td></td>
<td>• <strong>Printer connection to HP Connected</strong>: Indicates whether the printer is connected to the HP Connected website, which gives you a single login for select HP apps and cloud solutions</td>
</tr>
<tr>
<td></td>
<td>• <strong>HP ePrint</strong>: Indicates whether HP ePrint is turned on</td>
</tr>
<tr>
<td></td>
<td>• <strong>Print Apps</strong>: Indicates whether print apps are turned on</td>
</tr>
<tr>
<td>Print Info Page</td>
<td>Print an information page for Web Services that contains useful information and simple instructions on how to use HP ePrint and print apps</td>
</tr>
<tr>
<td>Proxy Settings</td>
<td>• <strong>Manual</strong>: Specify a proxy server for Web Services, including its server address and port number</td>
</tr>
</tbody>
</table>
Network tab

Use the Network tab to configure and secure network settings for the product when it is connected to an IP-based network. The Network tab does not appear if the product is connected to other types of networks.

The Network tab includes the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Network Summary</td>
<td></td>
</tr>
<tr>
<td>● Wired (802.3)</td>
<td>Displays the connection status, host name, IP address, and hardware address of your wired network</td>
</tr>
<tr>
<td>● Wireless (802.11)</td>
<td>Displays the connection status, host name, IP address, hardware address, and SSID of your wireless network</td>
</tr>
<tr>
<td>● Wi-Fi Direct</td>
<td>Displays the status and name of the Wi-Fi Direct connection with your printer</td>
</tr>
<tr>
<td>Network Identification</td>
<td></td>
</tr>
<tr>
<td>● Host Name</td>
<td>View or enter the host name for the network</td>
</tr>
<tr>
<td>● Domain Name (IPv4/IPv6)</td>
<td>View or enter the domain name for the IPv4 and IPv6 configurations</td>
</tr>
<tr>
<td>● Domain Name (IPv6 only)</td>
<td>View or enter the domain name for the IPv6 configuration</td>
</tr>
<tr>
<td>Network Protocols</td>
<td></td>
</tr>
<tr>
<td>● Enable IPv4 only</td>
<td>Select this option to enable only this configuration</td>
</tr>
<tr>
<td>● Enable IPv6 only</td>
<td>Select this option to enable only this configuration</td>
</tr>
<tr>
<td>● Enable both IPv4 and IPv6</td>
<td>Select this option to enable both configurations</td>
</tr>
<tr>
<td>Proxy Settings</td>
<td></td>
</tr>
<tr>
<td>● Manual</td>
<td>Specify a proxy server for your network, including its server address and port number</td>
</tr>
<tr>
<td>● No Proxy</td>
<td>Select if you do not use a proxy server</td>
</tr>
<tr>
<td>Wired (802.3)</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>● Displays the connection status and the IPv4, IPv6, network interface, and link settings of your wired network</td>
<td></td>
</tr>
<tr>
<td>IPv4 Configuration</td>
<td></td>
</tr>
<tr>
<td>● IP Address Configuration</td>
<td>Specify whether the IPv4 configuration for your wired network uses a DHCP, BOOTP, automatic IP, or manual IP address</td>
</tr>
<tr>
<td>● DNS Address Configuration</td>
<td>Specify whether your wired network uses an automatic or manual DNS server</td>
</tr>
<tr>
<td>IPv6 Configuration</td>
<td></td>
</tr>
<tr>
<td>● Enter the manual IP address, preferred DNS server, and alternate DNS server for the IPv6 configuration of your wired network</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Advanced                     | **Network Interface**: Turn the network interface on or off  
**Link Settings**: Select the link speed                                                                                           |
| Wireless (802.11) Status     | Displays the connection status and the IPv4, IPv6, network interface, network name, and network settings of your wireless network             |
| Wireless Setup Wizard        | To connect the printer to a wireless network, follow the onscreen instructions.                                                             |
| I Pv4 Configuration          | **IP Address Configuration**: Specify whether the IPv4 configuration for your wireless network uses a DHCP, BOOTP, automatic IP, or manual IP address  
**DNS Address Configuration**: Specify whether your wireless network uses an automatic or manual DNS server |
| IPv6 Configuration           | Enter the manual IP address, preferred DNS server, and alternate DNS server for the IPv6 configuration of your wireless network            |
| Advanced                     | **Network Interface**: Turn the network interface on or off  
**Network Name**: Enter the Service Set Identifier  
**Network Settings**: Configure the authentication or encryption settings (WPA or WEP) for your wireless network  
**Compatibility**: Select whether to use 802.11b/g behavior in an infrastructure network |
| Wi-Fi Direct: Status         | View or change your Wi-Fi Direct name and password                                                                                         |
| AirPrint: Status             | View or change your AirPrint settings                                                                                                       |
| Google Cloud Print: Setup    | Set up Google Cloud Print to enable computers or mobile devices to print documents and photos directly to a web-connected printer            |
| Internet Printing Protocol   | **Internet Printing Protocol (IPP)**: Select whether to use IPP, IPP over HTTPS, or both when you print jobs over the Internet  
**User Access List**: Enter the names and permissions of users printing from mobile devices |
| Advanced Settings            | **Certificates**: Install and manage security certificates for access to the printer and the network  
**Management Protocol**: Configure and manage security protocols for this printer, including HTTPS redirection and encryption strength  
**802.1X Authentication**: Configure 802.1X authentication settings on the print server as required for client authentication on the network, or reset the 802.1X authentication settings to factory-default values  
**Device Announcement Agent**: Enable or disable this feature, which allows a configuration server to automatically configure network printers, with no administrator intervention  
**Bonjour**: Enable or disable these services, which are typically used on small networks for IP address and name resolution where a conventional DNS server is not used  
**SNMP**: Enable or disable the Simple Network Management Protocol, which is used by network management applications for product management |
Tools tab

Use the **Tools** tab to view or manage product utilities. The **Tools** tab includes the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Information</strong></td>
<td></td>
</tr>
<tr>
<td>Printer Information</td>
<td><strong>View information about the printer, such as product serial number,</strong>&lt;br&gt;<strong>service ID, firmware version,</strong>&lt;br&gt;<strong>and total page count</strong></td>
</tr>
<tr>
<td>Cartridge Level Gauge</td>
<td><strong>Review cartridge level status</strong></td>
</tr>
<tr>
<td>Cartridge Settings</td>
<td><strong>Set the threshold at which the printer provides notifications that</strong>&lt;br&gt;<strong>cartridges are running low</strong></td>
</tr>
<tr>
<td><strong>Reports</strong></td>
<td></td>
</tr>
<tr>
<td>Usage Report</td>
<td><strong>Shows a count of all paper sizes that have passed through the product;</strong>&lt;br&gt;<strong>lists whether they were monochrome or color,</strong>&lt;br&gt;<strong>simplex or duplex; and reports the page count</strong></td>
</tr>
<tr>
<td>Printer Reports</td>
<td>Prints a list of all installed PCL, PCL6, or PS fonts</td>
</tr>
<tr>
<td>Event Log</td>
<td><strong>View the printer’s last 50 error messages</strong></td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> To chat with an the HP Customer Support representative about an**&lt;br&gt;**error in the log, click <strong>Support</strong>.</td>
</tr>
<tr>
<td>Job Log</td>
<td>View a list of the most recent jobs performed by the printer</td>
</tr>
<tr>
<td>Color Usage Job Log</td>
<td><strong>View the number of pages printed in color or black-and-white and</strong>&lt;br&gt;<strong>grayscale for all jobs and for individual jobs</strong></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
</tr>
<tr>
<td>Bookmarking</td>
<td><strong>Bookmark pages in the EWS</strong></td>
</tr>
<tr>
<td>Print Quality Toolbox</td>
<td>Run maintenance tools to improve the print quality of your printouts</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Assign an asset number or location to this product</td>
</tr>
<tr>
<td><strong>Backup and Restore</strong></td>
<td></td>
</tr>
<tr>
<td>Backup</td>
<td><strong>Create a password-encrypted file that stores the printer’s settings</strong></td>
</tr>
</tbody>
</table>
### Settings tab

- **Settings tab**
- **Administrator Settings page**

**Settings tab**

Use the Settings tab to set and maintain various options on your product including power management, date and time, printing and paper settings, email alerts, factory defaults, and firewall settings.

The Settings tab includes the following items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
</table>
| Power Management: Energy Save Settings | - **Standby After**: Select the amount of time that the printer is idle before it enters Energy Save Mode  
- **Start Time (HH:MM)**: Select this checkbox to schedule the printer to turn on automatically at a time that you specify  
- **Shutdown Time (HH:MM)**: Select this checkbox to schedule the printer to turn off automatically at a time that you specify  
- `<day of the week>`: Select the days to automatically turn the printer on and off |
| Preferences | - **General Printer Settings**: Configure the following settings:  
  - **I/O Timeout**: Enter the number of seconds (5-300) a print job can take to process before the printer cancels it  
  - **Manual Feed**: Select whether the printer prompts you to load paper manually, instead of automatically loading paper from the paper trays, for all jobs that do not have a specific tray selected  
- **Date & Time**: Set the date and time or synchronize with a network time server  
- **International**: Select the country/region where the printer is located, and select the language to use in the printer control panel and in the EWS  
- **Tray and Paper Management**: Set the paper settings to use when printing tray-specific jobs, select the tray that the printer uses by default, enable the tray lock feature to protect special paper from accidental use, and configure other general tray parameters  
- **Image Registration**: Adjust the alignment for individual trays when text or images are not centered or aligned correctly on the printed page  
- **ColorLok Settings**: Indicate whether you use plain paper with the ColorLok logo  
- **Display Settings**: Configure the following settings:  
  - **Screen Brightness**: Drag the slider to the left to decrease the brightness of the control panel display or drag it to the right to increase the brightness |
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactivity Timer</td>
<td>Enter the number of seconds (10-300) that the printer can be inactive before it logs the user out of the control panel and returns to the home screen</td>
</tr>
<tr>
<td>Continuable Events</td>
<td>When a noncritical printer error occurs, select whether the user must acknowledge the error message before printer operation continues</td>
</tr>
<tr>
<td>Anonymous Usage Information Storage</td>
<td>Enable or disable this feature, which stores information about printer usage</td>
</tr>
<tr>
<td>Anonymous Usage Information Transmission</td>
<td>Enable or disable this feature, which transmits information about printer usage to HP to aid future printer development</td>
</tr>
<tr>
<td>Quiet Mode</td>
<td>Enable or disable this mode, which reduces the noise levels of the printer, and schedule the times when the mode automatically turns on and off during the day</td>
</tr>
<tr>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>Password Settings</td>
<td>Set up a password to prevent unauthorized users from remotely configuring the printer or viewing printer settings from the EWS</td>
</tr>
<tr>
<td>Administrator Settings</td>
<td>Enable or disable printer features, which controls their availability from the printer control panel and the EWS</td>
</tr>
<tr>
<td>Control Panel Shortcuts</td>
<td>Select which shortcuts appear in the Shortcuts folder on the printer control panel and the order in which they appear</td>
</tr>
<tr>
<td>Access Control</td>
<td>Set up and manage sign-in methods and user group permissions</td>
</tr>
<tr>
<td>Protect Stored Data</td>
<td>Set up and manage job storage and deletion (not available on the PageWide Pro 452dn/dw series)</td>
</tr>
<tr>
<td>Email Alerts</td>
<td></td>
</tr>
<tr>
<td>Email Server</td>
<td>Enter the SMTP server and port information</td>
</tr>
<tr>
<td>Alert Destinations</td>
<td>Enter the names and email addresses of the recipients for specific alerts</td>
</tr>
<tr>
<td>Alert Settings</td>
<td>Assign the alerts to the alert destinations</td>
</tr>
<tr>
<td>Copy (MFP only)/Print Settings</td>
<td></td>
</tr>
<tr>
<td>Copy Settings (MFP only)</td>
<td>Set the default values for number of copies, sidedness, resizing, and quality and enhancements</td>
</tr>
<tr>
<td>Print Settings</td>
<td>Set the default paper size and paper type for each tray in your printer, and select the default paper tray to use when no tray is specified or the specified tray is incorrectly loaded</td>
</tr>
<tr>
<td>Restrict Color</td>
<td>Set up and manage user access to color printing</td>
</tr>
<tr>
<td>Restore Defaults</td>
<td></td>
</tr>
<tr>
<td>Restore Factory Defaults</td>
<td>Reset printer settings to the factory defaults</td>
</tr>
<tr>
<td>Restore Network Settings</td>
<td>Reset settings for your wired or wireless network, including IPv4 configuration, IPv6 configuration, and network interface</td>
</tr>
<tr>
<td>Firewall</td>
<td></td>
</tr>
<tr>
<td>Firewall Rules</td>
<td>Enable or disable your firewall, and set up rules for how the firewall handles specific IP addresses</td>
</tr>
<tr>
<td>Firewall Rules Priority</td>
<td>Specify the order of precedence for the firewall rules</td>
</tr>
<tr>
<td>Firewall Address Template</td>
<td>Set up and manage standardized formats for handling specific types of local and remote IP addresses, for example, IPv6 Link Local Addresses</td>
</tr>
<tr>
<td>Firewall Services Template</td>
<td>Set up and manage standardized formats for handling specific types of firewall services, such as digital send (DNS, NetBIOS, SMTP) or management (HTTP, HTTPS, SNMP)</td>
</tr>
<tr>
<td>Firewall Services List</td>
<td>Set up and manage firewall services, including their protocols, service types, and local and remote ports</td>
</tr>
<tr>
<td>Firewall Options</td>
<td>Enable or disable failsafe and bypass options</td>
</tr>
</tbody>
</table>
**Administrator Settings page**

Under **Security**, use the **Administrator Settings** page to enable or disable specific printer features. Disabled features are unavailable from the EWS and the printer control panel.

The printer features include the following items.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connectivity</strong></td>
<td><strong>All Network (Ethernet/Wireless):</strong> Enable or disable all Ethernet and wireless features</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Ethernet:</strong> Clear the checkbox to disable this feature, which enables you to connect the printer to a wired network</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>All Wireless:</strong> Clear the checkbox to disable all wireless features (wireless models only)</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Wireless Infrastructure:</strong> Clear the checkbox to disable this feature, which enables access to your wireless network</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Wireless Access Point:</strong> Clear the checkbox to disable this feature, which enables access to your wireless networking hardware devices</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Near Field Communication (NFC):</strong> Clear the checkbox to disable this feature, which enables communication between a nearby device and the printer</td>
</tr>
<tr>
<td><strong>Network Settings</strong></td>
<td><strong>Proxy Settings:</strong> Enable or disable proxy settings</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Web Proxy Auto-Discovery (WPAD):</strong> Clear the checkbox to disable this feature, which uses DHCP or DNS to locate the URL of a configuration file</td>
</tr>
<tr>
<td></td>
<td><strong>AirPrint:</strong> Enable or disable this feature, which enables users to print over a wireless LAN from an iPad, iPhone, or iPod touch device</td>
</tr>
<tr>
<td></td>
<td><strong>Google Cloud Print:</strong> Enable or disable this feature, which enables Gmail account users to print over the web from an Android, Chrome, iOS, OS X, Windows, or Linux device</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Print with Google Cloud Print over Wireless Network:</strong> Clear the checkbox to disable this feature, which enables you to use a wireless network to print over the web</td>
</tr>
<tr>
<td><strong>Web Services Settings</strong></td>
<td><strong>All Web Services:</strong> Enable or disable all Web Services features</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Only HP ePrint:</strong> Clear the checkbox to disable this feature, which enables you to print from your email-capable device to your web-connected printer anytime, from any location, over the Internet</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Only Print Apps:</strong> Clear the checkbox to disable this feature, which are special print applications available exclusively for use on HP web-enabled printers</td>
</tr>
<tr>
<td><strong>Printer Settings</strong></td>
<td><strong>Copy</strong> (MFP only): Enable or disable copy features</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Color Copy:</strong> Clear the checkbox to disable this feature, which enables access to color copying</td>
</tr>
<tr>
<td></td>
<td><strong>Copy from a Computer or Mobile Device:</strong> Clear the checkbox to disable this feature, which enables you to copy jobs from a computer or mobile device</td>
</tr>
<tr>
<td></td>
<td><strong>Fax</strong> (MFP only): Enable or disable fax features</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Fax Reprint:</strong> Clear the checkbox to disable this feature, which enables you to reprint received faxes</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Color Fax (Incoming Fax):</strong> Clear the checkbox to disable this feature, which enables you to print color faxes</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Fax from a Computer or Mobile Device:</strong> Clear the checkbox to disable this feature, which enables you to fax a job from a computer or mobile device</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>IPP FaxOut:</strong> Clear the checkbox to disable this feature, which enables you to send faxes using the Internet Printing Protocol</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Scan (MFP only): Enable or disable scan features</td>
<td>▪ Scan from a Computer or Mobile Device: Clear the checkbox to disable this feature, which enables you to scan a job from a computer or mobile device</td>
</tr>
<tr>
<td></td>
<td>▪ Webscan from EWS: Clear this checkbox to disable this feature, which enables you to scan photos and documents from your printer to your computer using a web browser</td>
</tr>
<tr>
<td>Digital Send (MFP only): Enable or disable digital send features</td>
<td>▪ Scan to Email: Clear the checkbox to disable this feature, which enables you to quickly scan and email photos or documents to the specified recipients directly from your printer</td>
</tr>
<tr>
<td></td>
<td>▪ Scan to Network Folder: Clear the checkbox to disable this feature, which enables you to save scanned documents from the printer to a network folder</td>
</tr>
<tr>
<td></td>
<td>▪ Scan to SharePoint: Clear the checkbox to disable this feature, which enables you to save scanned documents from the printer to a SharePoint destination</td>
</tr>
<tr>
<td></td>
<td>▪ HP Digital Fax: Clear the checkbox to disable this feature, which enables you to save incoming black-and-white faxes to a network folder or forward them as email</td>
</tr>
<tr>
<td>Control Panel Lock: Enable or disable this feature, which enables you to prevent users from changing the printer control panel configuration</td>
<td>▪ Control Panel Shortcuts: Clear the checkbox to disable this feature, which enables you to select which shortcuts appear in the Shortcuts folder on the printer control panel</td>
</tr>
<tr>
<td>Usage Data Collection: Enable or disable this feature, which enables the printer to transmit information about your printer usage to HP as input for future printer development</td>
<td></td>
</tr>
</tbody>
</table>

### Memory Device/Direct Port Settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host USB (USB Flash Drive/Mass Storage): Enable or disable storing jobs on and printing from the USB port on the front of the printer, near the control panel</td>
<td>▪ Open/Print from USB Devices: Clear the checkbox to disable this feature, which enables you to open or print a job stored on a USB device</td>
</tr>
<tr>
<td></td>
<td>▪ Color Print from USB Devices: Clear the checkbox to disable this feature, which enables you to print in color a job stored on a USB device</td>
</tr>
<tr>
<td></td>
<td>▪ Save to USB (Scan to USB): Clear the checkbox to disable this feature, which enables you to save a scanned file from the printer to a USB device</td>
</tr>
<tr>
<td>Direct Ports: Enable or disable this feature, which enables you to store jobs on and print jobs from any USB port on the printer</td>
<td></td>
</tr>
</tbody>
</table>

### Printer Updates

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Firmware Updates: Enable or disable this feature, which enables the printer to automatically download and install all firmware updates</td>
<td>▪ Only Web-Downloaded Firmware Updates: Clear the checkbox to disable this feature, which enables the printer to install only firmware updates that you download from the web</td>
</tr>
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