



HP PageWide XL 3920/4200/4700/5200
Printer and MFP
HP PageWide XL 8200 Printer
User Guide

SUMMARY

How to use your product.

Legal information

© Copyright 2021 HP Development Company, L.P.

Edition 3

Legal notices

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statement accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.



Trademarks

Adobe®, Acrobat®, and PostScript® are trademarks of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Apple and AirPrint are trademarks of Apple Inc., registered in the U.S. and other countries.

Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.

All products and company names are registered trademarks of their original owners. The use of any trademark is for identification and reference purposes only and does not imply any association between HP and the trademark owner or product brand.

Table of contents

1 Introduction	1
Welcome to your printer.....	1
Safety precautions	1
Main components.....	8
Front panel	10
HP DesignJet Utility (Windows only)	16
Embedded Web Server	16
Turn the printer on and off.....	18
Internal prints	19
Preparing your printer	20
Accessibility	35
Other sources of information	36
2 Paper handling	37
General information and tips.....	37
Supported paper types.....	38
Paper status	40
Load roll paper	40
Unload roll paper	45
Paper options.....	46
Store paper	46
Cannot load roll paper	47
Protect a paper type	48
Paper presets.....	48
Paper jam	51
3 Ink system.....	79
Eco-Carton ink cartridges	79
Print bar	82
Cleaning container.....	91

Maintenance cartridge	94
Safe mode	97
Disposal instructions	97
4 Networking	99
Introduction	99
Control network protocols	99
Front-panel menu items	100
Link configuration methods	103
Troubleshooting	103
5 Security	107
HP Connection Inspector	107
Access control	108
Certificate management	112
Other Embedded Web Server security settings	112
Front-panel security settings	112
Job-storage security options	113
Security event logging	113
6 Sending a job to print	115
Print from the driver	115
Print from a USB flash drive	121
Print from a network folder	122
Print from My Home Folder	123
Select print quality	125
7 Job queue management	127
Job queue in the front panel	127
Print job queue in the Embedded Web Server	133
Scan queue in the Embedded Web Server	136
8 Scanning and copying (MFP only)	137
Quicksets	137
Scanning	138
Copying	144
Scanner preferences	149
Scanner troubleshooting	149
Scanner diagnostic plot	160
9 Collection and finishing	163
Top stacker	163

High-capacity stacker	164
HP folders	166
Basket	176
10 Print quality	178
General printing advice.....	178
Optimize print quality app	178
Print diagnostic plot	179
Advanced calibrations.....	181
11 Maintenance	184
Check printer status	184
Clean the exterior of the printer.....	184
Move or store the printer	184
Move or store the high-capacity stacker	185
Move or store the folder.....	186
Clean the scanner's glass plate (MFP only)	186
Replace the scanner's glass plate (MFP only)	188
Calibrate the scanner (MFP only)	190
Replace the folder's tab reel.....	191
Update the firmware.....	195
Secure File Erase	196
Disk Wipe	197
12 Accessories	198
How to order	198
List of accessories	198
Non-HP accessories	199
13 When you need help	200
Request support.....	200
Customer Self-Repair	201
Service information.....	201
14 Retrieving printer usage information	202
Get printer accounting information	202
Check usage statistics	202
Check usage statistics for a job.....	205
Check cost assignment.....	207
15 Printer specifications.....	208
Functional specifications.....	208

Physical specifications 209

Memory specifications 209

Power specifications 210

Environmental specifications 210

Acoustic specifications 211

Speed specifications (Lines mode) 211

16 Front-panel error messages 212

Glossary 213

Index 216

1 Introduction

A summary of your printer's components and facilities.

Welcome to your printer

Your printer is a color inkjet printer designed for fast, consolidated monochrome and color printing; and also scanning and copying, if you have the MFP model.

Some major features:

- HP PageWide XL 3920 printer series: Print up to 6 D/A1 pages per minute in monochrome and color; first page out in 20 s from USB.

HP PageWide XL 4200 printer series: Print up to 10 D/A1 pages per minute in monochrome and color; first page out in 20 s.

HP PageWide XL 4700 printer series: Print up to 15 D/A1 pages per minute in monochrome and color; first page out in 20 s.

HP PageWide XL 5200 printer series: Print up to 20 A1 pages per minute in monochrome and color; first page out in 20 s.

HP PageWide XL 8200 Printer: Print up to 30 A1 pages per minute in monochrome and color.
- If you have an MFP model, you can print, scan, and copy with a single device—including an integrated 1200 dpi scanner.

Safety precautions

Before using your printer, read, understand, and follow these safety precautions, and your local Environmental, Health, and Safety regulations, to make sure you can use the equipment safely.

You are expected to have the appropriate technical training and experience necessary to be aware of hazards to which you may be exposed in performing a task, and take appropriate measures to minimize the risks to yourself and to other people.

This equipment is not suitable for use in locations where children are likely to be present.

For any maintenance or part replacement, follow the instructions provided in HP documentation to minimize safety risks and to avoid damaging the printer.


General safety guidelines

Turn off the printer in dangerous situations or if it is damaged. Do not try to service or repair the printer except in specific cases recommended by HP.

- There are no operator-serviceable parts inside the printer except those covered by HP's Customer Self Repair program (see <http://www.hp.com/go/selfrepair/>). Refer servicing of other parts to qualified service personnel.
- Turn off the printer and call your service representative in any of the following cases:
 - The power cord or plug is damaged.
 - The printer has been damaged by an impact.
 - There is any mechanical or enclosure damage.
 - Liquid has entered the printer.
 - There is smoke or an unusual smell coming from the printer.
 - The printer has been dropped.
 - The printer is not operating normally.
- Turn off the printer in either of the following cases:
 - During a thunderstorm
 - During a power failure
- Take special care with zones marked with warning labels.

Electrical shock hazard

Take appropriate precautions to avoid electric shock.

 **WARNING!** The internal circuits of the built-in power supplies and power inlet operate at hazardous voltages capable of causing death or serious personal injury.

The printer uses one power cord. Unplug the power cord before servicing the printer.

To avoid the risk of electric shock:

- The printer must be connected to earthed mains outlets only.
- Do not remove or open any other closed system covers or plugs.
- Do not insert objects through slots in the printer.
- Take care not to trip over the cables when walking behind the printer.

Heat hazard

The following sections provide details for this topic.

To avoid personal injury, take the following precautions:

- Let the printer cool down before accessing the paper output area in the case of a paper jam.
- Let the printer cool down before performing some maintenance operations.

Fire hazard

The following sections provide details for this topic.

To avoid the risk of fire, take the following precautions:

- You are responsible for meeting the printer's requirements and the Electrical Code requirements according to the local jurisdiction of the country where the equipment is installed. Use the power supply voltage specified on the nameplate.
- Use only the power cord supplied by HP with the printer. Do not use a damaged power cord. Do not use the power cord with other products.
- Do not insert objects through slots in the printer.
- Take care not to spill liquid on the printer. After cleaning, make sure all components are dry before using the printer again.
- Do not use aerosol products that contain flammable gases inside or around the printer. Do not operate the printer in an explosive atmosphere.
- Do not block or cover the openings of the printer.

Mechanical hazard

The printer has moving parts that could cause injury.

To avoid personal injury, take the following precautions when working close to the printer:

- Keep your clothing and all parts of your body away from the printer's moving parts.
- Avoid wearing necklaces, bracelets, and other hanging objects.
- If your hair is long, try to secure it so that it will not fall into the printer.
- Take care that sleeves or gloves do not get caught in the printer's moving parts.
- Do not operate the printer with covers bypassed.
- Do not try to dismantle the cutter assembly: refer servicing to qualified service personnel.
- Do not stand on the drawers: the printer could fall over.

Light radiation hazard

Light radiation is emitted from the beacon, ink level indicators, paper drawer indicators, and formatter status indicators.

The emitted light is in compliance with the requirements of the exempt group of IEC 62471:2006, *Photobiological safety of lamps and lamp systems*. Do not modify these modules.

Heavy paper hazard

Special care must be taken to avoid personal injury when handling heavy rolls or stacks of paper.

Heavy rolls

- Handling heavy rolls may require more than one person. Care must be taken to avoid back strain and/or injury.
- Consider using a forklift, pallet truck, or other handling equipment.
- When handling heavy rolls, wear personal protective equipment including boots and gloves.
- Do not exceed the maximum weight of a paper roll: see [Functional specifications on page 208](#).

Paper rolls could weigh up to 18 kg. Follow your local Environmental Health and Safety recommendations for handling heavy paper rolls.

Heavy stacks of sheets

- Handling heavy stacks of sheets may require more than one person. Care must be taken to avoid back strain and/or injury.
- If the total weight of the stacked sheets ≥ 10 kg it is recommended to handle/lift the sheets in several lots.
- When handling heavy stacks of sheets, wear personal protective equipment including boots and gloves.
- Do not exceed the maximum weight allowed of stacked sheets.
- Follow your local Environmental, Health and Safety regulations for handling heavy stacks of sheets.

Ink handling

HP recommends that you wear gloves when handling the ink maintenance cartridge or cleaning container.

Specific safety guidelines for the 5200 printer with dryer accessory

There are no operator-serviceable parts inside the dryer except those covered by HP's Customer Self Repair program.

See <http://www.hp.com/go/selfrepair/>.

Refer servicing of other parts to qualified service personnel.

Disconnect the dryer and call your service representative in any of the following cases:


- The dryer has been damaged by an impact.
- There is any mechanical or enclosure damage.
- Liquid has entered the dryer.
- There is smoke or an unusual smell coming from the dryer.
- The dryer has been dropped.
- The dryer is not operating normally.

Take special care with zones marked with warning labels.

Electrical shock hazard

Take appropriate precautions to avoid electric shock.

The dryer uses one power cord. Unplug the power cord before servicing the dryer.

 **WARNING!** The internal circuits of the dryer operate at hazardous voltages capable of causing death or serious personal injury.

To avoid the risk of electric shock:

- The dryer must be connected to earthed mains outlets only.
- Do not attempt to dismantle the dryer modules.
- Do not remove or open any closed system covers or plugs.

Heat hazard

The dryer operates at high temperatures and can cause burns if touched.

To avoid personal injury, take the following precautions:

- Let the dryer cool down before accessing the paper output area in the case of a paper jam.
- Let the dryer cool down before performing some maintenance operations.

Fire hazard

The internal parts of the dryer operate at high temperatures.

To avoid the risk of fire, take the following precautions:

- You are responsible for meeting the dryer's requirements and the Electrical Code requirements according to the local jurisdiction of the country where the equipment is installed. Use the power supply voltage specified on the nameplate.
- Use only the power cord supplied by HP with the dryer. Do not use a damaged power cord. Do not use the power cord with other products.
- Do not insert objects through slots in the dryer.
- Take care not to spill liquid on the dryer. After cleaning, make sure all components are dry before using the dryer again.
- Do not use aerosol products that contain flammable gases inside or around the dryer. Do not operate the dryer in an explosive atmosphere.
- Do not block or cover the openings of the dryer.
- Do not attempt to dismantle or modify the dryer modules.

Mechanical hazard

The dryer has moving parts that could cause injury.



To avoid personal injury, take the following precautions when working close to the dryer:

- Do not touch gears or moving rolls during folding or stacking.
- Do not operate the dryer with covers bypassed.

Warnings and cautions

The text of this guide includes warning and cautionary notices in appropriate places.


The following symbols are used to remind you to use the printer correctly and thus avoid damage to yourself and to the printer. Follow the instructions marked with these symbols:

-  **WARNING!** Failure to follow the guidelines marked with this symbol could result in serious personal injury or death.
-  **CAUTION:** Failure to follow the guidelines marked with this symbol could result in minor personal injury or damage to the printer.

Warning labels

You will find these labels on various parts of the printer.





Warning labels

Label	Explanation
	<p>5200 and 8200 printers:</p> <p>Electric shock hazard. Disconnect all power sources before servicing.</p> <p>CAUTION: Double pole. Neutral fusing.</p> <p>Before starting, read and follow the operating and safety instructions.</p> <p>Avant de commencer, lisez et suivez les instructions de fonctionnement et de sécurité.</p> <p>Lesen und befolgen Sie bitte die Bedienungs- und Sicherheitsanweisungen, bevor Sie starten.</p> <p>Antes de empezar, lea y siga las instrucciones sobre funcionamiento y seguridad.</p> <p>开始之前，请阅读并遵守操作和安全说明。</p> <p>開始之前，請閱讀並遵守操作和安全說明。</p> <p>قبل توصيل سلك إمداد الطاقة بالوحدة، راجع تعليمات التثبيت لتحديد تكوين جهز الإدخال الصحيح.</p>

Warning labels (continued)

Label	Explanation
	<p>Electric shock hazard. Disconnect all power sources before servicing.</p> <p>CAUTION: Double pole. Neutral fusing.</p> <p>Before starting, read and follow the operating and safety instructions.</p>
	<p>5200 with dryer accessory installed:</p> <p>Electric shock hazard. Heating modules operate at hazardous voltages. Disconnect power cord before servicing.</p> <p>CAUTION: Double pole. Neutral fusing.</p> <p>Before starting, read and follow the operating and safety instructions.</p>
	<p>Crush hazard. Keep hands away from moving parts.</p> <p>This label is located in the paper output area, by the access to the service carriage, on the gas springs, and in the folder.</p>
	<p>You are recommended to wear gloves when handling the cleaning container.</p> <p>This label is located on the cleaning container and by the access to the service carriage.</p>

Warning labels (continued)

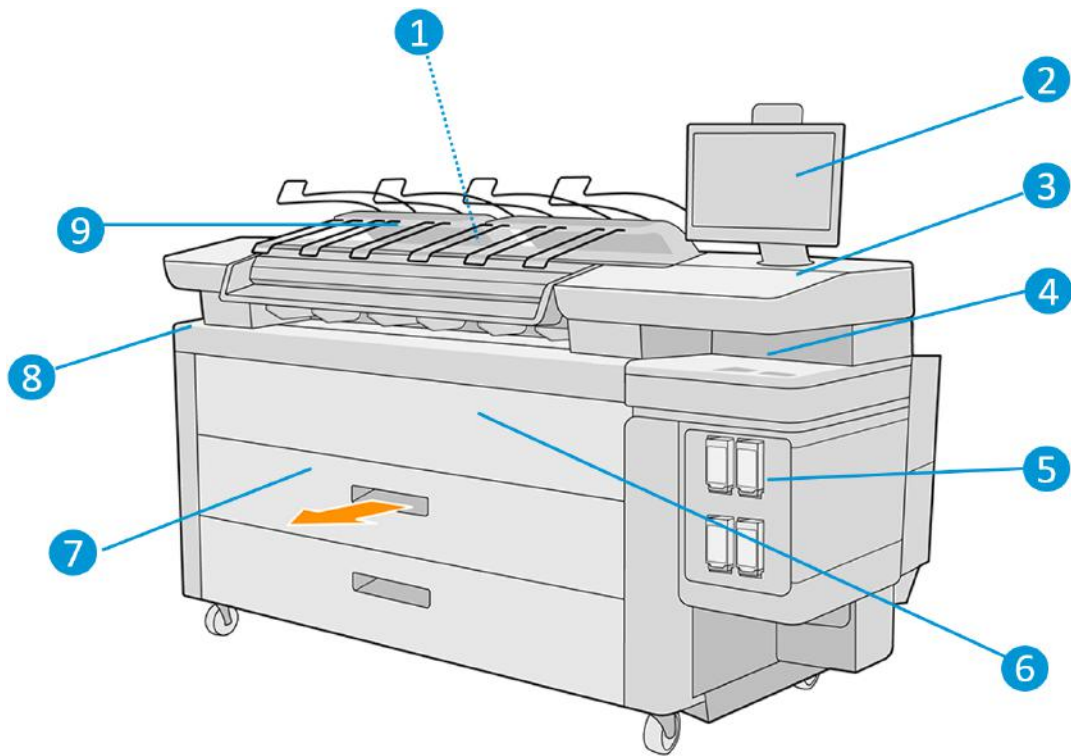
Label	Explanation
	<p>Do not use the drawers as stairs: the printer could overbalance.</p> <p>This label is located on the drawers.</p>
	<p>Do not touch the starwheels: they are fragile.</p> <p>This label is located on each side of the output area.</p>
	<p>Risk of trapped fingers. Do not touch the rollers.</p> <p>This label is located on the high-capacity stacker.</p>
	<p>Risk of trapped fingers. Do not touch the gears while they are moving.</p> <p>This label is located on the high-capacity stacker.</p>

Main components

The front and rear views of the printer illustrate the main components.

Front view

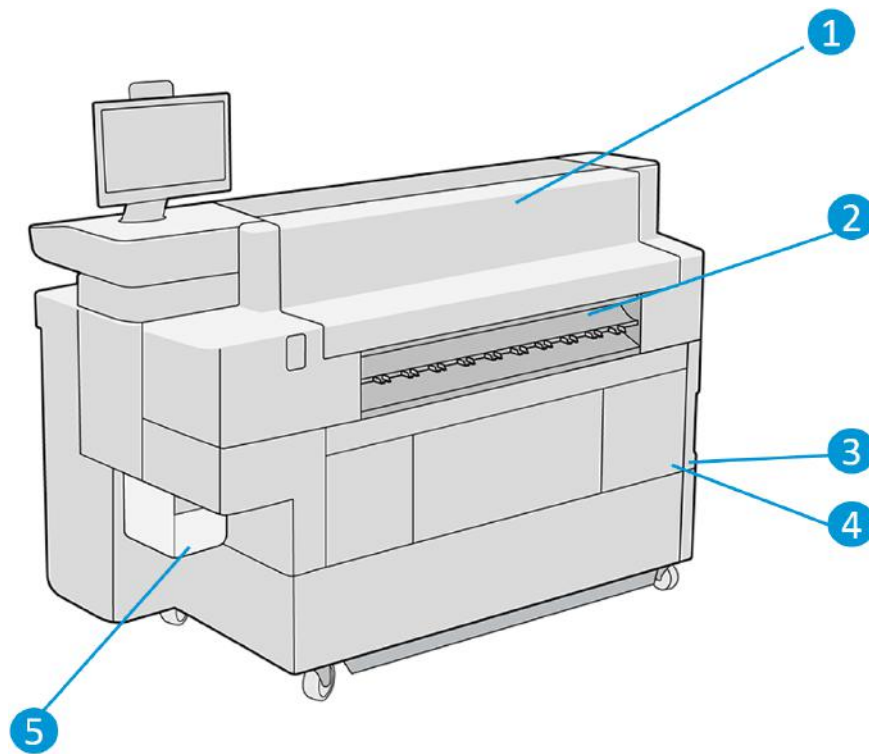
These components can be seen from the front of the printer.



1. Print bar
2. Front panel
3. Power key
4. USB port
5. Ink cartridges
6. Paper access front cover
7. Drawer
8. Maintenance cartridge
9. Top stacker

Rear view

These components can be seen from the rear of the printer.



1. Output module
2. Paper output
3. Power switch and plug
4. LAN connections
5. Cleaning container

Front panel

The front panel is a touch-sensitive screen on the front right of the printer.

It can rotate 270° horizontally, so you can use it from the front or rear of the printer. It can also be tilted to minimize reflections.

It gives you complete control of your printer: from the front panel, you can view information about the printer, change printer settings, monitor printer status, and perform tasks such as supplies replacement and calibrations. The front panel displays alerts (warning and error messages) when necessary.



It includes the following components:

1. The front panel itself: a 15.6 inch, full-color, touch-sensitive screen with a graphical user interface.
2. A loudspeaker.
3. The **Power** key, with which you can turn the printer on or off, or wake up from sleep mode. The key is illuminated when the printer is on. It flashes when the printer is in sleep mode.
4. The beacon, which enables you to see printer status and alerts from a distance.

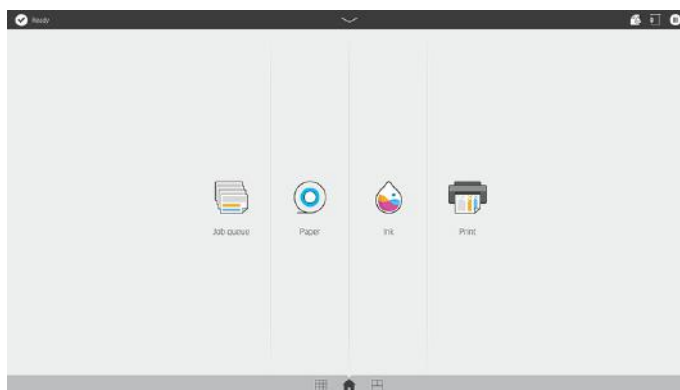
The front panel has a large central area to display dynamic information and icons.

Home screens

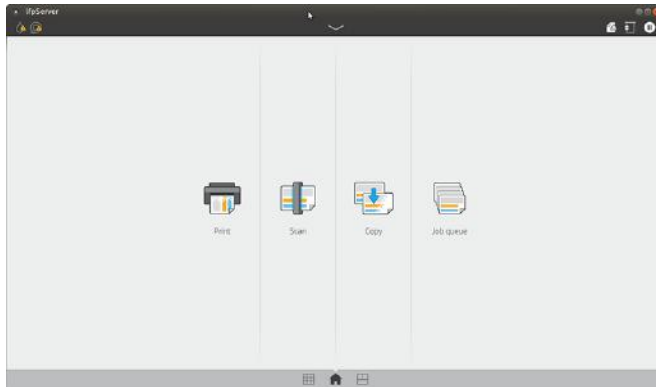
There are three top-level screens that you can move between by sliding your finger across the screen, or tapping the appropriate button at the bottom of the screen.

- The first main screen provides direct access to the important printer functions, depending on your printer model and accessories.

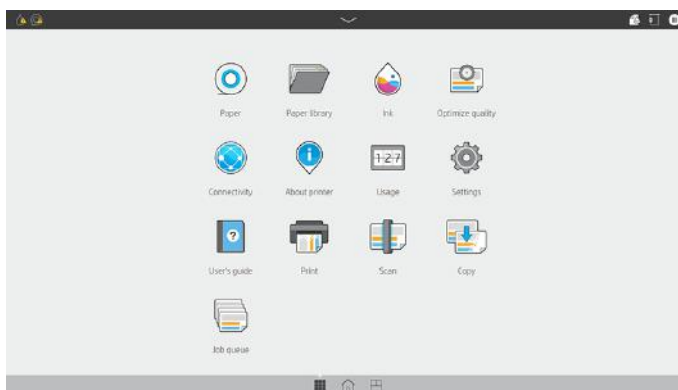
Non-MFP screen



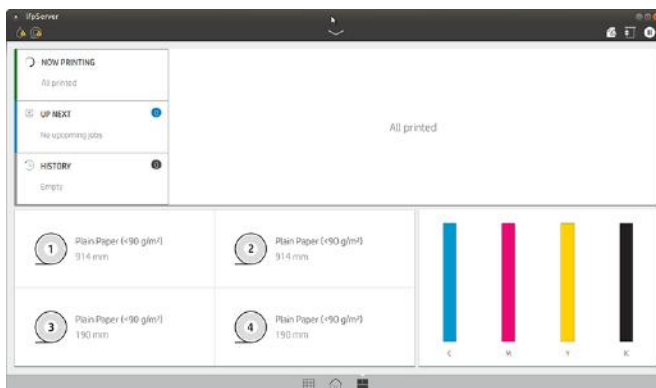
MFP screen



- The all-app screen displays a list of all apps available in your printer, and the status of each of them.



- The widget screen enables you to monitor at a glance supplies such as ink and paper, the job currently being printed, and the job queue.




Beacon

The printer has a beacon located on top of the front panel; it gives a summary of the printer status that can be seen from a distance.







See video: <http://www.hp.com/go/pagewidexl/alerts-and-status-messages/>.

 **IMPORTANT:** The information provided in the beacon is for functional information purposes only, and is not relevant to your safety. Warning labels on the printer must be always considered when operating the printer, regardless of the status indicated by the beacon lights.

Beacon

Image	Status	Meaning
	White light	The printer is ready.
	White moving from left to right	The printer is printing or preparing to print.
	White increasing from the middle	The printer is powering on.
	White decreasing towards the middle	The printer is powering off.

Beacon (continued)

Image	Status	Meaning
	One white LED pulsing	The printer is in sleep mode.
	Yellow flashing light	The printer will need attention soon: for example, it is almost out of ink or paper.
	Yellow light	The printer can print, but there is something wrong. If the problem persists, contact your service representative.
	Red light	The printer is unable to print and needs attention, or a major subsystem of the printer is not working.

You can change the beacon settings by tapping , then **System > Beacon**. For example, you can change the brightness of the beacon. You can also turn off beacon warnings and show only definite errors.

USB host port

Your printer has a Hi-Speed USB host port, intended for connecting a USB flash drive, which can provide files to be printed or a destination for scanned files.

Dim mode

After some time with no activity (5 minutes by default), the printer goes to dim mode, which reduces the brightness of the front panel by 25% and the brightness of the beacon by 10%.

Any activity, such as the use of the front panel or the arrival of a print job, ends dim mode and restores normal brightness. After some time in dim mode, the printer changes to sleep mode. The time periods can be changed from the front panel. See [Sleep mode on page 15](#).

Sleep mode

Sleep mode puts the printer into a reduced power state after a period of inactivity, turning off some elements to save energy.

Printer features can be enabled from this mode, and the printer maintains network connectivity, waking up only as necessary.

The printer can be woken from sleep mode in any of the following ways:


- By pressing the power button
- By opening a door or drawer
- By sending a print job
- By inserting a page into the scanner (MFP only)
- By installing or uninstalling the high-capacity stacker

The printer wakes up in several seconds, more quickly than if it is completely turned off. While in sleep mode, the power button blinks.

To change the time that elapses before sleep mode, see [Change system options on page 15](#).

Printer Monitoring (with the Print Spooler) and Remote Printer Management with the HP DesignJet Utility and Web JetAdmin continue to be available during sleep mode. Some remote management tasks offer the option of remotely waking up the printer if needed to perform the task.

Change the language of the front-panel display

To change the language of the front-panel menus and messages, tap , then **System > Language**.

The language selection menu should now appear on the front-panel display. Tap your preferred language.

The available languages are English, Portuguese, Spanish, Catalan, French, Dutch, Italian, German, Swedish, Polish, Russian, Simplified Chinese, Traditional Chinese, Korean, and Japanese.

Change system options

You can change various printer system options from the front panel.


Tap , then **System**.

- **Date and time options** to view or set the printer's date and time.
- **Speaker volume** to change the volume of the printer's loudspeaker. Select **Off**, **Low**, or **High**.
- **Front panel brightness** to change the brightness of the front-panel display. The default brightness is 50.
- **Beacon > Beacon** to change the brightness of the beacon. Select **High**, **Medium**, **Low**, or **Off**.
- **Beacon > Notify warning alerts** to turn warning alerts on or off.
- **Power options > Printer sleep** to change the length of time the printer waits before going into sleep mode (see [Sleep mode on page 15](#)). You can set the time from 5 to 60 minutes. The default time is 20 minutes (total time including 5 minutes in dim mode).

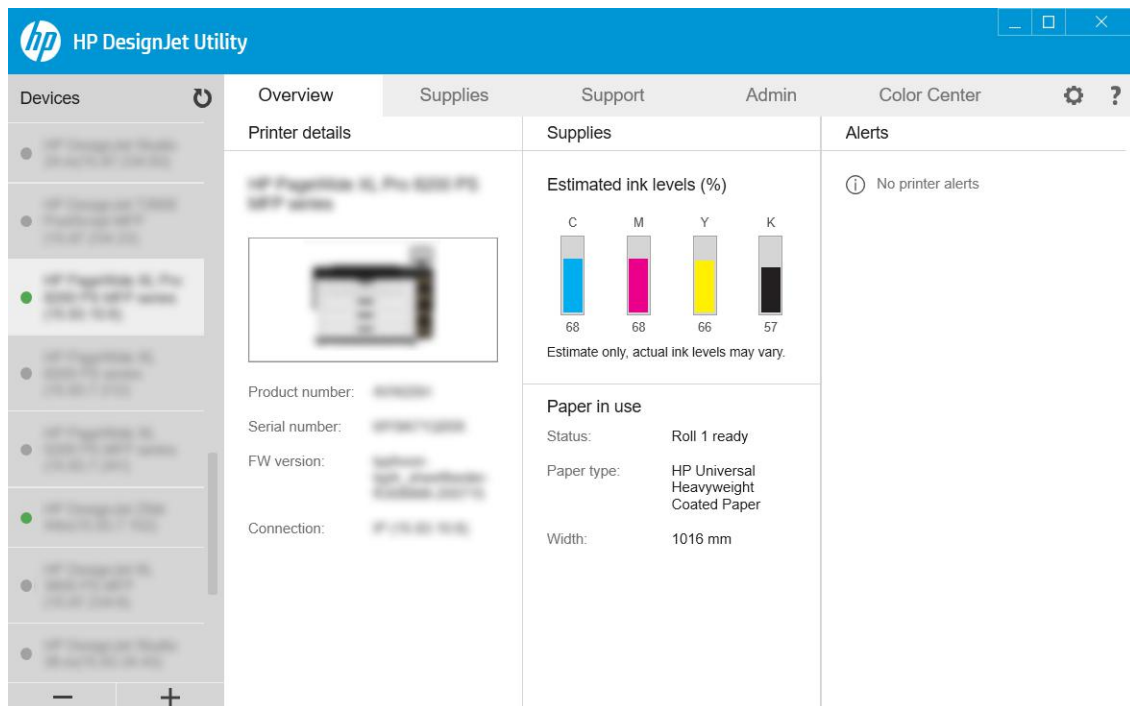
- **Unit selection** to change the units of measurement in the front-panel display. Select **English** or **Metric**. By default, units are set to **Metric**.
- **Restore factory settings** to restore the printer settings to their original values as set in the factory. This option restores all of the printer settings except the Gigabit Ethernet settings and paper presets.
- **Printer logs.**
- **Firmware update.**
- **Minimize paper and ink alerts.**
- **Height above sea level.**
- **Prepare printer for reshipment.**

HP DesignJet Utility (Windows only)

The HP DesignJet Utility enables you to manage your printer from a computer with a TCP/IP connection.

Start the HP DesignJet Utility from the  icon on your taskbar or from **Start > HP > HP DesignJet Utility > HP DesignJet Utility**. This launches the HP DesignJet Utility, showing the printers installed on your computer. When you open the HP DesignJet Utility for the first time, it may offer you an automatic update with enhanced functionality that we recommend you to accept.

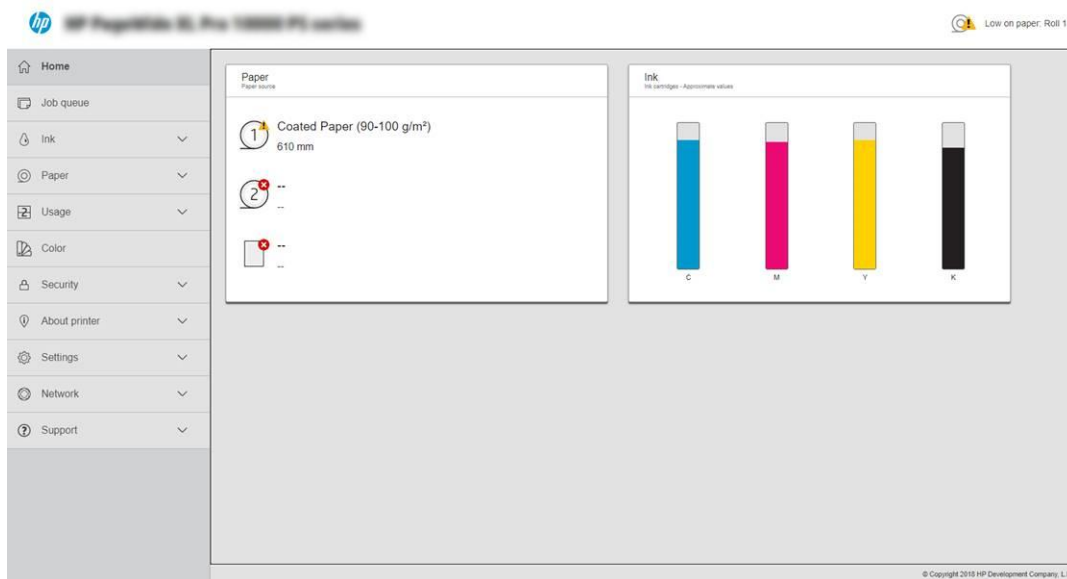
When you select your printer in the left pane, everything that appears in the right pane is specific to that printer.



Embedded Web Server

The Embedded Web Server is a Web server running inside the printer. You can use it to obtain printer information, manage settings and presets, install new firmware, and troubleshoot problems.

Service engineers can use it to retrieve internal information that helps to diagnose printer problems.



You can access the Embedded Web Server remotely by using an ordinary Web browser running on any computer.

Supported browsers for desktop and laptop computers


- Microsoft Edge 82 and later, for Windows 10 and later
- Apple Safari 12 and later, for OS X 10.13 and later
- Mozilla Firefox 77 and later
- Google Chrome 83 and later

Supported browsers for tablet computers and mobile phones

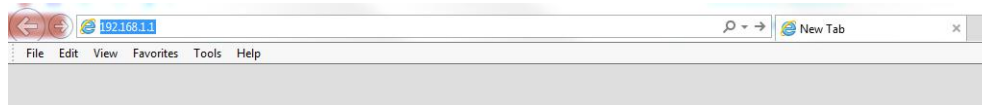
- Google Chrome, latest version, for Android 9 or iOS 12 and later
- Apple Safari for iOS 12 and later
- Mozilla Firefox, latest version, for Android 9 or iOS 12 and later



See video: <http://www.hp.com/go/pagewidexl/connect-ews/>.

Make a note of your printer's IP address, which you can see on the front panel by tapping the  icon, then **Network**.

To use the Embedded Web Server on any computer, open your Web browser and enter the printer's IP address in the browser's address bar.



The Embedded Web Server window displays five separate tabs. A button near the top of each page provides access to online help.

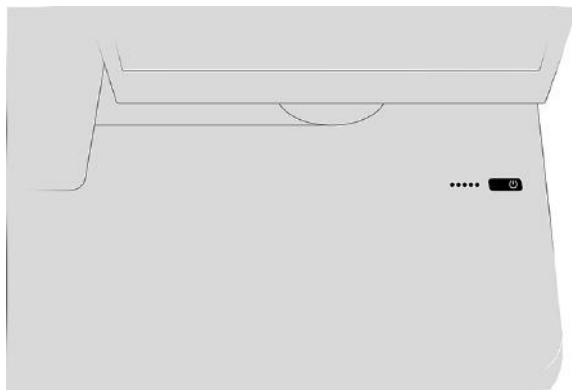
The Embedded Web Server functions in the following languages: English, Portuguese, Spanish, Catalan, French, Dutch, Italian, German, Swedish, Polish, Russian, Simplified Chinese, Traditional Chinese, Korean, and Japanese. It uses the language that you specified in your Web browser options. If you specify a language that it cannot support, it functions in English.

To change the language, change your Web browser's language setting.

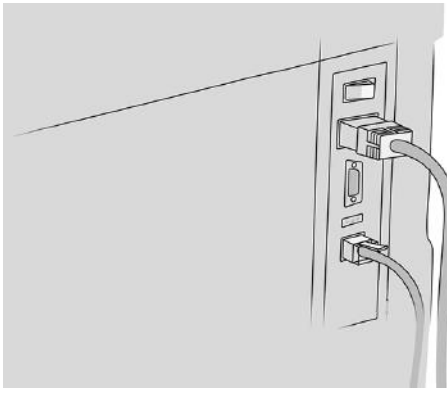
To complete the change, close and reopen your Web browser.

Turn the printer on and off

If you wish to turn the printer on or off or reset the printer, the normal and recommended method is to use the power key below the front panel.



However, if you plan to store the printer for a long period or the power key does not seem to work, you are recommended to turn it off using the power switch at the rear.



To turn it back on, use the power switch at the rear.

When the printer is powered back on, it takes about 3 minutes to initialize and check and prepare the print bar. Preparing the print bar takes about 75 seconds. However, if the printer has been off for 2 weeks or more, preparing the print bar could take up to 7 minutes, plus 13 minutes if it needs a printhead recovery.


See also [Sleep mode on page 15](#).

Internal prints

The internal prints give various kinds of information about your printer. They can be requested from the front panel.

Before requesting any internal print, check that the printer and the paper are ready for printing.

- The loaded paper should be at least A3 landscape—420 mm (16.53 in)) wide—otherwise the print may be clipped.
- The front panel should be displaying the **Ready** message.

To print any internal print, tap , then scroll down to **Internal prints** and tap it, then select the internal print you want. The following internal prints are available:

- Demo prints show some of the capabilities of the printer
 - Print drawing demo
 - Print rendering demo
 - Print GIS map
- User information prints
 - Usage report shows estimates of the total number of prints, number of prints by paper type, number of prints by print-quality option, counting of scans, and total amount of ink used per color (the accuracy of these estimates is not guaranteed)
 - HP-GL/2 palette shows the color or grayscale definitions in the currently selected color palette
 - PostScript font list shows PostScript fonts available (PostScript printers only)
 - Print folder pattern
- Service information prints

- Print current information
- Print usage information
- Print event logs
- Print calibration status
- Print connectivity configuration
- Print all pages (prints all the above reports)
- Output destination prints
 - Print test on folder to check alignment
 - Print test on stacker to test alignment

Preparing your printer

You need to connect the printer to your network, install printer software, and configure various communication options.

Default administrator password

Note that the printer comes with a default administrator password.

See [Default administrator password on page 108](#).

Connect the printer to your network

The printer is able to configure itself automatically for most networks, in a similar way to any computer in the same network.



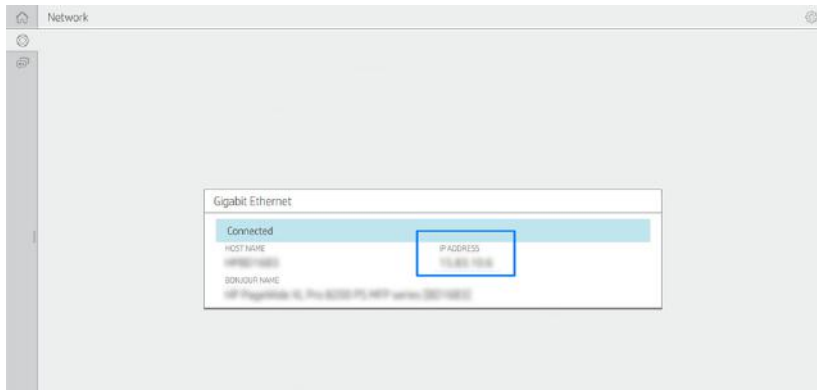
<http://www.hp.com/go/pagewidexl/connect-to-network/>

The first time you connect it to a network, this process may take a few minutes.

Once the printer has a working network configuration, you can check its network address from the front panel:



tap .



 **TIP:** Consider making a note of the printer's network name and IP address, because you may need them during the setup process of connecting your Windows or macOS computer clients.



Modify network configuration

You can change the network configuration manually, although it is not normally necessary to do so.

To modify the current network configuration, go to the front panel and tap , then  at the top of the page, then **Network** > **Gigabit Ethernet**. From here you can change the settings manually. You can also do this manually using the Embedded Web Server, which you can log into using the printer's default unique administrator password: see [Default administrator password on page 108](#).

If you accidentally misconfigure the printer's network settings, you can restore the network settings to their factory values from the front panel: tap , then  at the top of the page, then **Network** > **Restore factory settings**. Then you must restart the printer. This automatically provides a working network configuration for most networks. The printer's other settings remain unchanged.

For full details of the available connectivity settings, see [Networking on page 99](#).

Connect a computer to the printer by network (Windows)

The following steps provide the complete procedure for this topic.

When connecting a computer, also install the printer software.

The following instructions apply if you intend to print from software applications using a printer driver. See [Sending a job to print on page 115](#) for alternative ways of printing.

Before you begin, check your equipment:

- The printer should be set up and on.
- The Ethernet switch or router should be on and functioning correctly.
- The printer and the computer should be connected to the network (see [Connect the printer to your network on page 20](#)).

Now you can proceed to install the printer software and connect to your printer.

Printer software installation

1. Make a note of the printer's host name and IP address from the front panel.
2. Download the printer software from HP's website at <http://www.hp.com/go/pagewidexlseries/support/software>.

3. Select Windows or macOS software, and choose which specific software you want to install (by default, all of it).
4. Once downloaded, open it, and follow on-screen steps.

If your computer fails to find any printers on the network, the **Printer Not Found** window is displayed, which helps you to try to find your printer. If you have a firewall in operation; you may have to disable it temporarily in order to find the printer. You also have the options of searching for the printer by its hostname, IP address or MAC address.

Uninstall the printer software (Windows)

Use the Control Panel to uninstall the software, in the same way as you can uninstall any other software.

Connect a computer to the printer by network (macOS)

The following steps provide the complete procedure for this topic.

When connecting a computer, also install the printer software.

You can connect your printer to a network under macOS by using the following methods:

- Bonjour
- TCP/IP




NOTE: The printer does not support AppleTalk.

The following instructions apply if you intend to print from software applications using a printer driver. See [Sending a job to print on page 115](#) for alternative ways of printing.

Before you begin, check your equipment:

- The printer should be set up and on.
- The Ethernet switch or router should be on and functioning correctly.
- The printer and the computer should be connected to the network (see [Connect the printer to your network on page 20](#)).

Now you can proceed to install the printer software and connect to your printer.

1. Go to the front panel and tap . Note the mDNS service name of your printer.
2. Access the install package from HP's website: <http://www.hp.com/go/pagewidexlseries/support/software>. If prompted, select your printer from the list.
3. When the PageWide Printer window appears on your screen, click **Software and drivers**.
4. Select Windows or macOS software, and choose the specific software for your model.
5. In the Setup Assistant screen, look for your printer's mDNS service name (which you noted in step 1) in the Printer Name column.
 - If you find the right name, scroll sideways if necessary to see the Connection Type column, and check that it shows **Bonjour**. Then highlight that line. Otherwise, continue searching further down the list.

- If you cannot find your printer's name just click **Continue** and do the setup manually in your **System Preferences** later on.

Click **Continue**.

6. Continue following the instructions on the screen.

Uninstall the printer software (macOS)

You can use the HP Uninstaller to uninstall your printer software.

During the previous installation step, you have the option to install the HP Uninstaller application in your system. This should be available under **HP** in the system **Applications** folder.

 **IMPORTANT:** The HP Uninstaller application will uninstall all HP Software installed in your system.

To delete the print queue only, select the **Print & Scan** dialog from the system preferences. Click the name of the printer and then click the – button.

Configure AirPrint for macOS

Follow these instructions to use AirPrint with your printer.

Before you begin, check your equipment:

1. The printer should be set up and on.
2. The Ethernet switch or router should be on and functioning correctly.
3. The printer and the computer should be connected to the network.

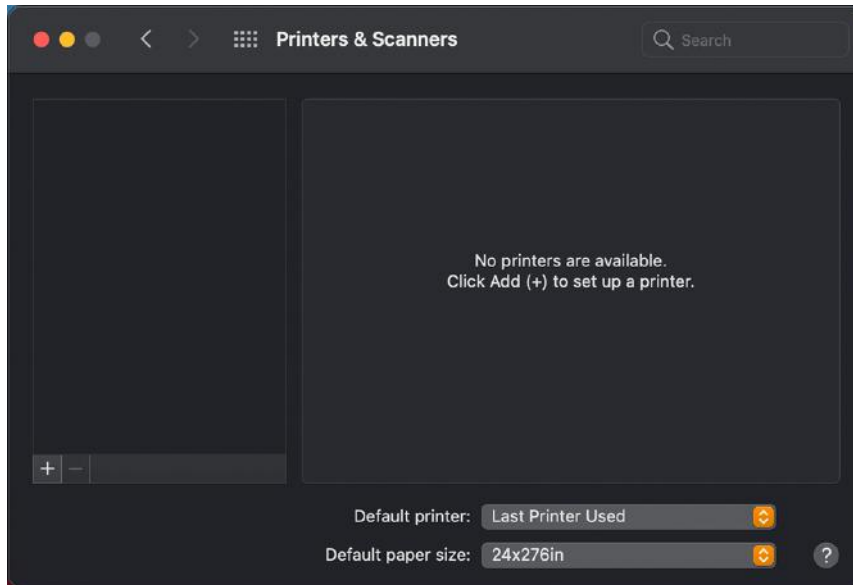
Now you can proceed to configure AirPrint for macOS:



1. Go to the front panel and tap **Network > Connectivity > Host name** to find your printer's host name.

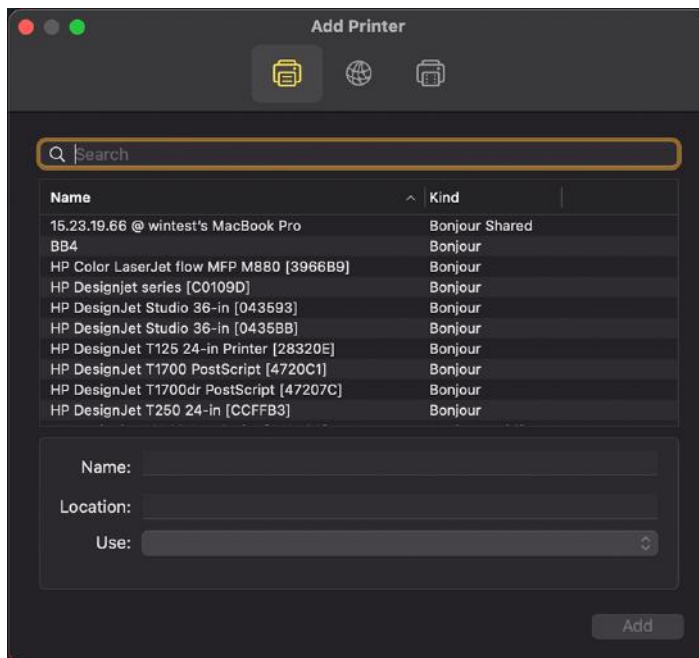


2. Check that your Mac and printer are both connected to the same network.

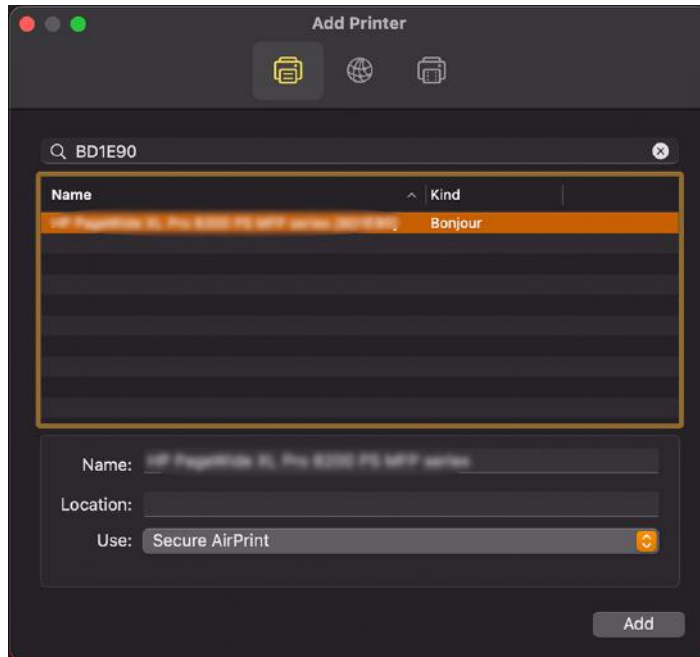
3. On the Mac, go to **System Preferences > Printers and Scanners**, and click **+** to add a new printer.



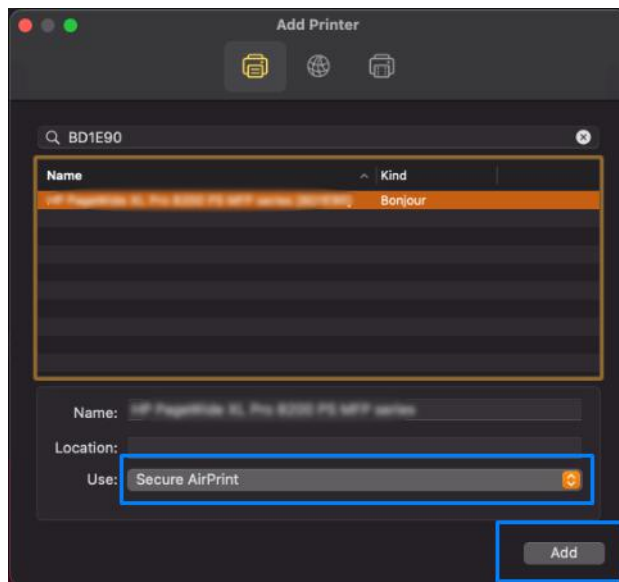
4. Click the host-name icon  and enter the host name into the search box (alternatively, click the IP-address icon  and enter the IP address).



5. Your printer will appear in the list. You can edit its name, if you like.



6. In the **Use** field, select **Secure AirPrint** or **AirPrint**, and click **Add**.



Configure your connectivity

By configuring your connectivity, you can print from your local network, keep your printer up to date, and access additional printer services.


Remember to connect your network cable to the printer.

Accept the connectivity agreement and settings in order to:

- Receive automatic firmware updates
- Participate in the Customer Involvement Program
- Enable additional printer services

A network connection is required, so the printer will test its own connectivity. Configure and troubleshoot the printer's connectivity and start benefitting from connecting your printer.


If you are part of the HP Partner Link Pay-per-use service, remember to go to the Connectivity app and tap **Printer services > Register new service** in order to register the printer service.

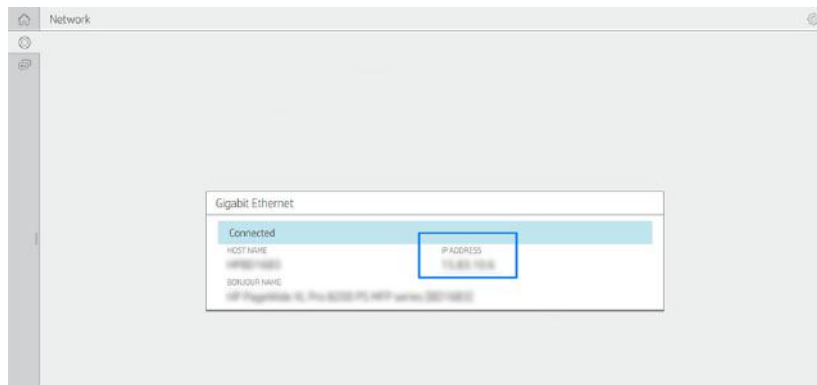
During initial printer setup, you are asked whether you want to enable these services. That decision can be reset later by tapping , then **Connectivity > Reset Connectivity Agreement**.

In addition, each service can be enabled or disabled individually as explained below.

Verify printer connection to HP

Check that your printer can connect to HP services.

You can do this by tapping  and viewing the status there. You can see detailed information by clicking the card. A panel similar to the one below is displayed:



If there is any problem connecting to HP, you will be provided with a description of the problem and some possible solutions.

Configure the Customer Involvement Program and other printer services

Check your Customer Involvement Program status.

You can do this by tapping , then  in the side panel.

Tap **Test all connectivity** to test your connection to HP, the Customer Involvement Program, and other online print services. If any problem is detected, you will be provided with a description of the problem and some possible solutions.

Configure firmware updates


You can choose from the Embedded Web Server or from the front panel whether and how to download firmware updates.

 **NOTE:** If an administrator password has been set, it will be required to change these settings.

- In the Embedded Web Server: click **About printer** > **Firmware update**.
- Using the front panel: tap , then  in the left panel, then **Check**.

The following settings are available:

- **Check:** The printer will inform you when new firmware is available.
- **Download:** The printer will automatically download new firmware whenever it becomes available. Deactivate this option to download new firmware manually.

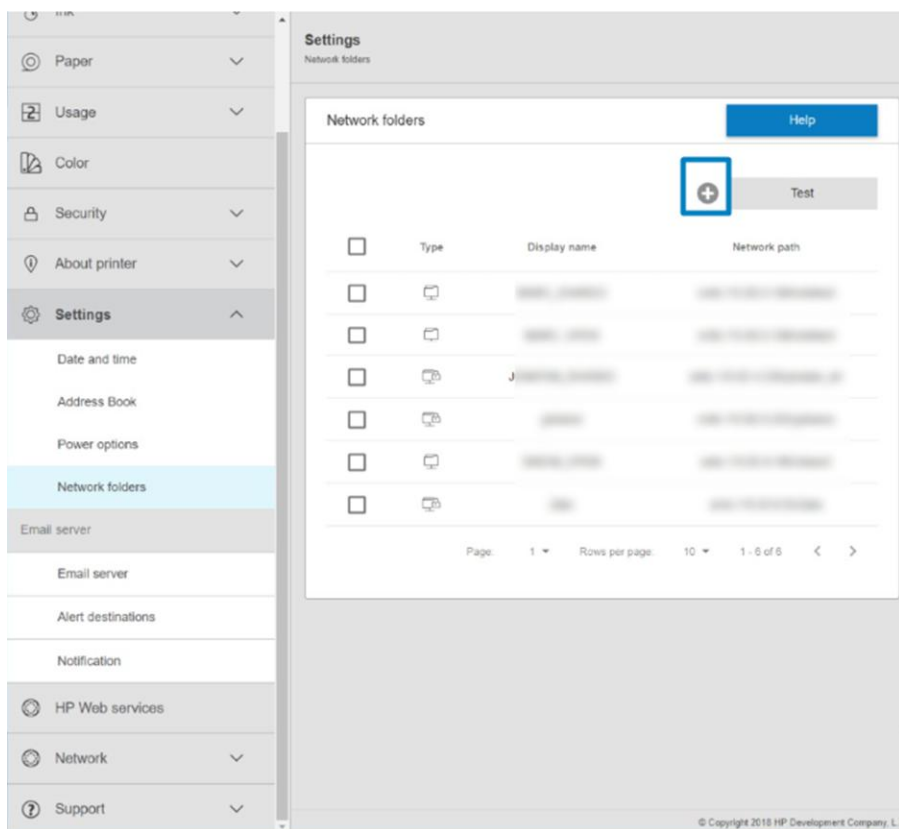
 **NOTE:** Downloading the firmware does not mean that you have installed it in your printer. To install the new firmware, you must confirm the installation manually.


- **Firmware update history:** A list of firmware versions that have been installed in the printer. It is usually possible to reinstall the version immediately before the version that is currently installed, if you have some problem with the current version.

Configure a network folder


Follow this procedure if you want to create a network folder.

In the printer's Embedded Web Server, click the **Settings** tab and **Network** folder. See [Embedded Web Server on page 16](#).



On the Network folders page, click  at the top of the page, and fill in the various fields:

- **Display name:** Name displayed in the front panel when you are choosing the file's scan destination/printing origin (depending of the functionality use).
- **Network path:** Should contain the network name of the remote computer and must start with // followed by the path.
- **Protocol:** SMB
- **Functionality Use:** Choose between **Print only**, **Scan only**, **Print and Scan** or **None**.
- **Default Network destination:** Enable this option to configure this folder as the default destination for files.
- **Browse Network folder Structure:** Enable to browse through the structure of folders.
- **Authentication requirements:** Enter the login username and password for the printer to access documents and images in the network folder. The username and password are stored and encrypted in the printer's memory. There are 3 options:
 - **None:** Use this setting for an unprotected folder on the network (no credentials required).
 - **Automatic login using following credentials:** Enter username and password only once during configuration and later use the folder in the front panel without entering credentials.
 - **Prompt for credentials when needed:** Enter username and password in the front panel every time you use it.



 **NOTE:** User password should contain the password of the **user**. Domain should contain the name of the domain in which the user name exists. If the **user** does not belong to any domain, leave this field empty.

- **Security Pin Option:** Create a 4-digit security PIN to prevent unauthorized people from accessing documents and images in this network folder.

For a network folder, enter the remote computer's name or IP address, the shared folder's name or IP address, and the username and password of the **user** already created on the remote computer. Leave the user domain field empty unless the user is a member of a Windows domain. If the user is only a local user of the remote computer, leave the field empty. You can use the name (instead of the IP address) in the server name field, only if the shared folder is on a Windows computer in the same local network.

- Click **Apply** to save the configuration.
- The printer automatically checks that it can access the network folder.

If not, see [Cannot access the network folder or HP SmartStream \(if installed as an accessory\) on page 159](#).

 **NOTE:** If the product has already been configured to use a network folder and you now want to use a different network folder, click .

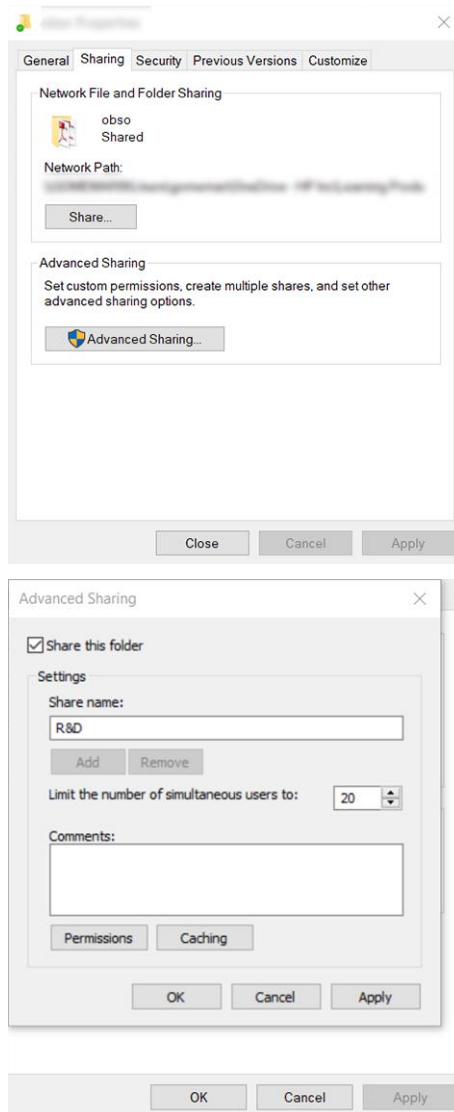
To clone the network folder, tap the clone icon; to delete the network folder, tap the delete icon.

You can check that the shared folder remains accessible by clicking **Verify** in the Embedded Web Server at any time. A correctly configured shared folder can become inaccessible if the user's password is changed, or if the shared folder is moved or deleted.

Example: Create a network folder under Windows

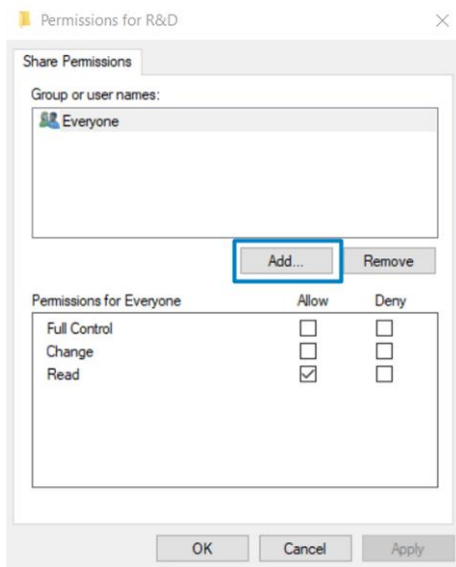
The following steps provide the complete procedure for this topic.

1. Create a new user account on the remote computer. You can use an existing user account for this purpose, but it is not recommended.
2. Create a new folder on the remote computer, unless you want to use an existing folder.
3. Right-click the folder and click **Properties**.
4. In the **Sharing** tab, click the **Advanced Sharing** button.

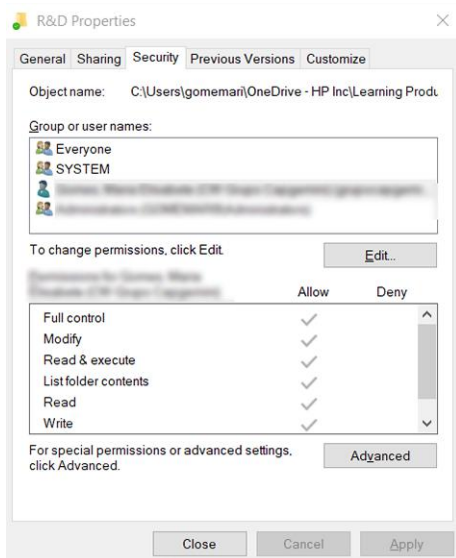


5. Ensure that the **user** has the correct permission settings depending of the functionality use of the network folder. If you configured a scan-to-folder, you need to ensure full read/write control over the shared folder so that the user(s) can add files to folder. To do this, click **Permissions** and grant **Full Control** to the user (or

to any suitable group that includes that user). If the user(s) is going to use the folder to print documents, a read-only permission is enough.



6. For **scanner users**, If there is a **Security** tab in the **Properties** window for your folder, then you must also grant the same user **Full Control** over the folder in the **Security** tab. Only some file systems such as NTFS require this.

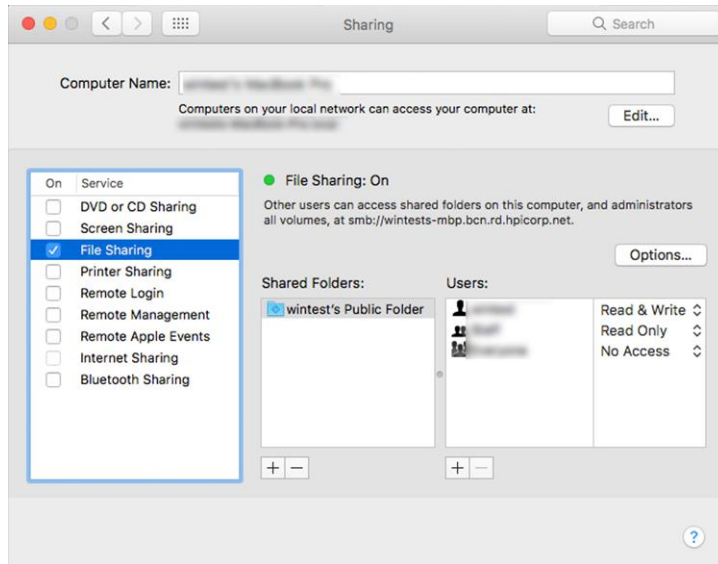


Example: Create a network folder under Mac OS

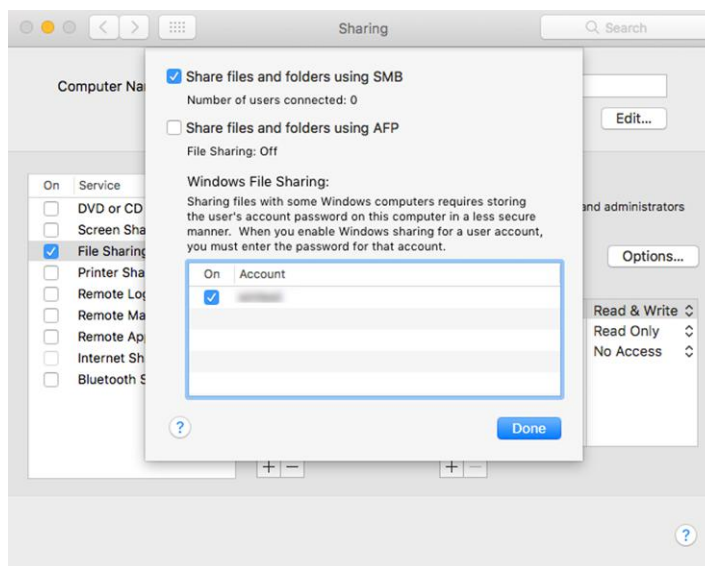
The following steps provide the complete procedure for this topic.

1. Create a new user account for the **User** on the remote computer. You can use an existing user account for this purpose, but it is not recommended.
2. Create or choose a folder on the remote computer. By default, Mac OS users have a Public folder that can easily be used for this purpose.

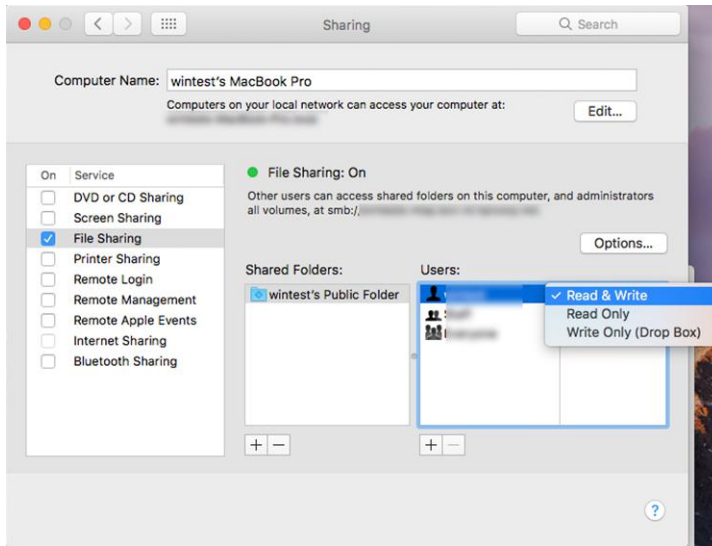
3. Open the **System Preferences** application and click the **Sharing** icon.



4. Depending on the functionality of the folder, make sure the user has the right permissions. For scanning purposes, **Read & Write** is needed to access the folder.
5. Click **Options**.
6. Check the **Share files and folder using the SMB** box, and make sure that the **scanner user** is checked in the **On** column.



7. Click **Done**. You can now see file sharing enabled and Windows sharing on.



8. You must configure the printer to send scans to the folder.

Configure the email server

Configuring the email server permits the printer to send email messages.

To configure the email server using the Embedded Web Server, click **Settings > E-mail server**, and fill in the following fields, which are usually supplied by the email server provider.

- **SMTP server and port number:** The IP address or fully qualified domain name of the outgoing mail server (SMTP) that will process all email messages from the printer. If the mail server requires authentication, email notifications will not work.
- **Printer e-mail address:** The email address assigned to the account that is being configured in the printer. This email address will appear in the From: field of all the email messages sent by the printer. This is not the same email address that is used by HP Connected.
- **Attachment size limit:** The maximum size of a file attached to an email message. When you scan to email from the front panel, you will be warned if an attachment is higher than this limit, but you can ignore the warning and send the message anyway.
- **Use SSL certificates:** Check this box to use SSL certificates if the server requires an encrypted connection. Click the link to configure advanced certificate settings.
- **Authentication.** If you choose authentication, you are also asked for your username and password.

Once you have configured the email server, you are strongly recommended to check the configuration.

Configure the email address book

The printer uses Lightweight Directory Access Protocol (LDAP), which provides access to a network address book for scan-to-email and authentication purposes.

The following instructions explain how to use LDAP to connect the printer to a network email address book, and to authenticate users of the printer using their LDAP credentials.

Email lookup

When the printer uses LDAP for scan-to-email, it searches a database of email addresses.

When you enter the email address and click the **Search** button, LDAP searches a list of email addresses for matching characters. You can refine the search results by typing additional characters and performing a new search.

Printers that support LDAP also support the use of a standard outgoing email profile, so they do not require a connection to an LDAP server in order to send email.

Information needed before starting

Ensure that you have this information before starting the configuration.

- Server address (hostname or IP)
- Server authentication requirements
- Path to start search (BaseDN, Search Root) (for example, `o=mycompany.com`)
- Attributes for matching the name entered (such as `cn` or `samAccountName`), retrieving the email address (such as `mail`), and how the name will be displayed on the control panel (such as `displayName`)

Address book setup

The following steps provide the complete procedure for this topic.

You can configure the printer to obtain email addresses from an LDAP server, so that they are available when users of the printer want to search for an address.

1. Open the Embedded Web Server.
2. Click **Settings > Address book**.
3. Enable the LDAP server (mandatory to continue with the LDAP configuration).
4. Network Directory Server section: Enter the name of the LDAP server address (for example, `ldap.mycompany.com`) and **Port**.
5. Server Authentication Requirements section: Select the appropriate authentication type in the server (Windows credentials, simple credentials, use printer user's credentials). You must fill in the domain name, username, and password.
6. LDAP Database Search Settings section: Fill in the following fields.
 - In the path to start a search (BaseDN, Search Root) box, enter the path to start searching the database (for example, `o=mycompany.com`).
 - In the recipients's display name box, enter the name of the attribute that contains the person's name (for example, `displayName`).
 - In the recipient's email address box, enter the name of the attribute that contains the person's email address (for example, `mail` or `rfc822Mailbox`).
 - Use the LDAP filter condition box to set up an optional filter to filter out email addresses.
7. Click the **Apply** button to save the settings. Setup is complete.

8. To check that the LDAP retrieval is set up correctly, enter at least three characters of a network contact name in the **Test** box, and then click the **Test** button. If the test is successful, a message is displayed.

Turn email notifications on and off

The notification service is always turned on, but all specific notifications are turned off by default.

You can turn them on or off individually by selecting **Notifications** from the **Settings** tab of the Embedded Web Server.



IMPORTANT: In order to receive email notifications from the printer, you must have configured the email server (see [Configure the email server on page 32](#)).

Drivers

There are various different drivers for your printer.

Which is best for you depends on your circumstances:

- Your operating system
- The types of applications from which you print

You may wish to install one or several drivers according to your needs.

You can find the latest drivers and software at <http://www.hp.com/go/pagewidexlseries/support/software/>.

Drivers for Windows

- PCL3 driver (basic driver)
- PDF driver (best for applications requiring accurate color or transparencies)

Drivers for macOS

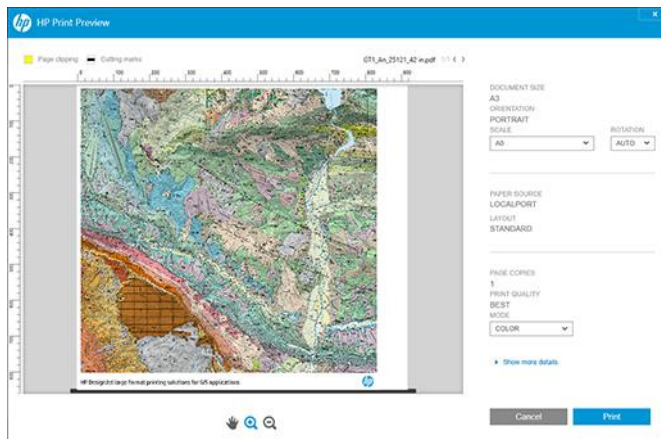
- Raster driver
 - For macOS 10.13 and later
 - Best for CAD, GIS, and office applications
- PostScript 3 driver
 - For macOS 10.13 and later
 - Best for applications requiring accurate color

HP Print Preview (Windows)

The HP Print Preview application enables you to see a basic preliminary preview of how your job will be printed. This application is available only under Windows.

You can install HP Print Preview by downloading the integrated installer from <http://www.hp.com/go/pagewidexlseries/support/software/>.

You can change the rotation, scaling, color mode and the paper source settings in the application before you print.



Set Windows driver preferences

You can change some default settings in your printer driver according to your own preferences, for instance to set color emulation or paper-saving options.

To do this, click the **Start** button on your computer's screen, then click **Devices and Settings**. In the Devices and Settings window, right-click your printer's icon, and click **Printing Preferences**. Any settings you change in the Printing Preferences window will be saved as default values for the current user.

To set the default values for all users of your system, right-click the printer's icon, click **Printer Properties**, go to the **Advanced** tab, and click **Printing Defaults**. Any settings you change in the printing defaults will be saved for all users.

Accessibility

Some printer settings can be changed to make the printer easier to use by people with particular disabilities.

Front panel

If required, the front-panel display brightness and the loudspeaker volume can be changed.

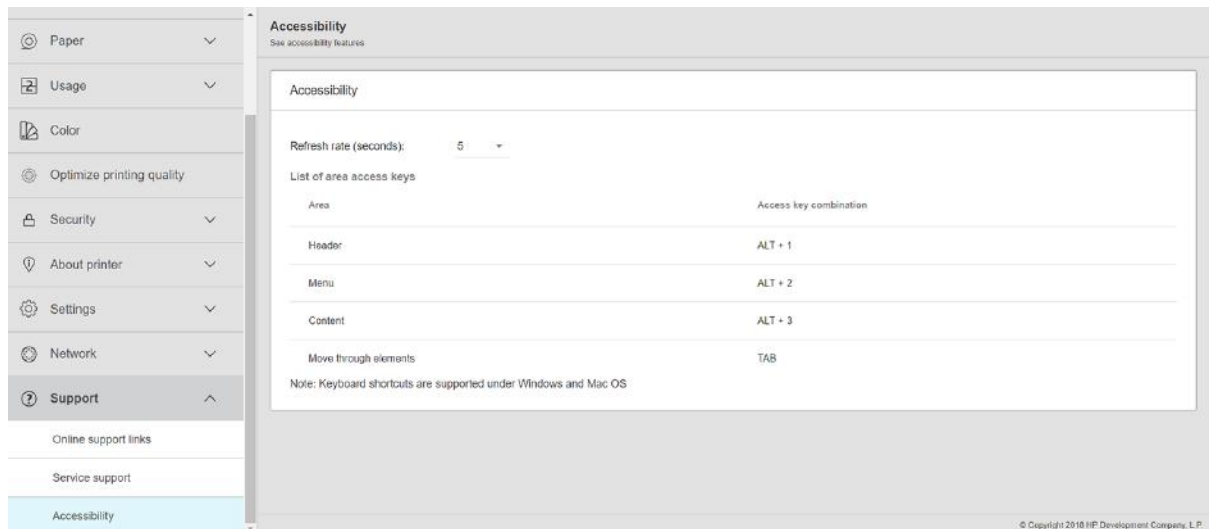
See [Change system options on page 15](#).

If your mouse is connected by USB, you can use the mouse wheel to enlarge the elements of the user interface.

Embedded Web Server

From the Embedded Web Server, you can see the status of the printer, and perform other actions without using the front panel. The Embedded Web Server has various accessibility options.

For information about these options, click **Support > Accessibility**.



See more about HP accessibility at <http://www.hp.com/hpinfo/abouthp/accessibility/> for information about the HP Accessibility Program, and HP's commitment to making its products and services accessible to people with disabilities.

Other sources of information

This guide is supplemented by various other documents about your printer.

The following documents can be downloaded from <http://www.hp.com/go/pagewidexlseries/support/manuals/>:

- Introductory information
- User's guide
- Legal information
- Limited warranty

The Quick Response (QR) code images found in some parts of this guide provide links to additional video explanations of particular topics.

2 Paper handling

The purpose of your printer is to print on various kinds of paper, so paper handling is an important subject.

General information and tips

The following sections provide details for this topic.

Please read this information before starting to load paper into the printer.

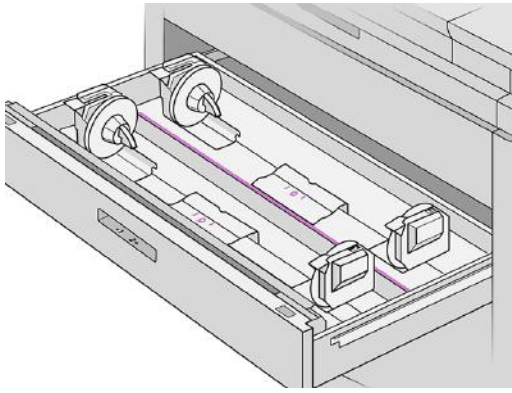
- Check that temperature and humidity in the room are within the recommended ranges for the printer.
- Wear gloves when handling paper, to avoid getting fingerprints and other marks on the paper.

Wear cotton gloves when handling photo paper, to avoid transferring oils onto the paper.

Printing on rolls

The following steps provide the complete procedure for this topic.

- All paper rolls must be between 279 mm (11 in)) and 1016 mm (40 in)) wide, and the roll core must be 76 mm (3 in)) in diameter.
- Each drawer can be loaded with two paper rolls (front and rear).
- 3920, 4200, 4700, 5200 printer series: Your printer has one or two drawers: the second may be purchased as an accessory. The roll positions are numbered 1 and 2 in the top drawer, 3 and 4 in the bottom drawer.
- 8200 Printer: Your printer has up to three drawers: the second and third may be purchased as accessories. The roll positions are numbered 1 and 2 in the top drawer, 3 and 4 in the middle drawer, 5 and 6 in the bottom drawer.
- The roll numbers are displayed on the front of each drawer and on the roll hubs.



- Each drawer has lights to communicate its status:

Drawer roll icon light

- Off: The roll has paper, or there is no roll.





- On (orange): The roll is running out of paper.



- On (red): The roll is out of paper.



Drawer lock light

-  Off: You can open the drawer.
-  On: Do not open the drawer. The paper is moving and you could cause a paper jam.

- You can save paper by using the appropriate settings.
- The printer automatically estimates the remaining length of the roll.

Supported paper types

Your printer can use a wide range of paper types, including bond papers, coated papers, films, self-adhesive materials, and banner and sign materials.

Supported HP papers

These papers are sold by HP for use with your printer.

See the latest information on HP-branded papers supported for your printer and download paper presets for any of these papers from the printer's front panel or from <http://www.hpmedia.com/>.



NOTE: On the webpage, go to the right pane and select the category **Graphics & Technical**, then filter by your printer.

Third-party-supported paper types

These generic paper types can also be used with your printer.

Rolls

This topic explains the concepts involved in this subject.

Plain papers

- Plain paper < 90 g/m²
- Plain paper 90–110 g/m²
- Plain paper > 110 g/m²
- Recycled paper
- Colored paper

Technical papers

- Natural tracing paper
(Supported only with the dryer installed. The dryer can be purchased as an accessory.)
- Vellum
- Translucent bond paper

Coated papers

- Coated paper 90–100 g/m²
- Heavyweight coated paper

Poster papers

- Poster matte paper
- Poster satin paper
- Poster gloss paper
- Poster semi-gloss paper

- Blueback paper

Banner and sign


- Polypropylene
- Tyvek 135 g/m²

Blueprint

- Blueprint

Paper status

Each paper loaded into your printer may have a different status.

The  icon displays the paper sources in your printer, and one of the following status messages for each:

- Low on paper
- Out of paper
- Paper not loaded
- Calibration pending
- Unsuccessfully loaded
- Load malfunction
- Ready
- Error

Load roll paper

The following steps provide the complete procedure for this topic.

This is the standard procedure for loading a roll of paper into your printer.

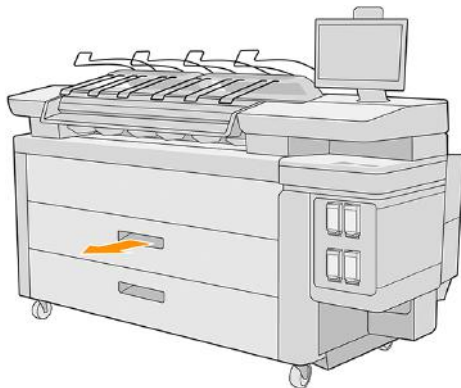


<http://www.hp.com/go/pagewidexl/load-roll/>


1. Tap , then **Load**.


 **TIP:** If the printer is not printing and the lock light on the drawer is off, you can skip this step.

2. Open the drawer.



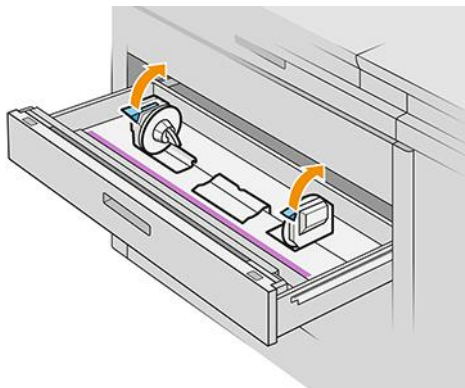
 **WARNING!** Do not stand on the drawer: the printer could fall over.

 **CAUTION:** MFP only: Do not leave the roll on top of the scanner.

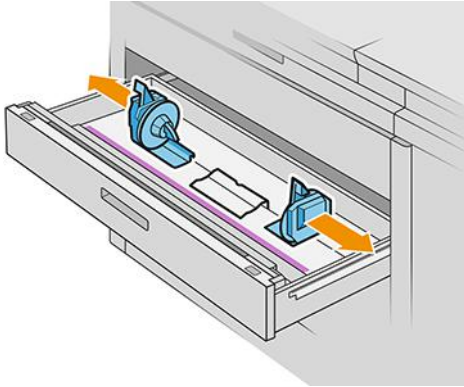
 **TIP:** You can load more than one roll at the same time.

 **TIP:** Load heavier rolls in upper drawers; they can weigh up to 18 kg (40 lb).

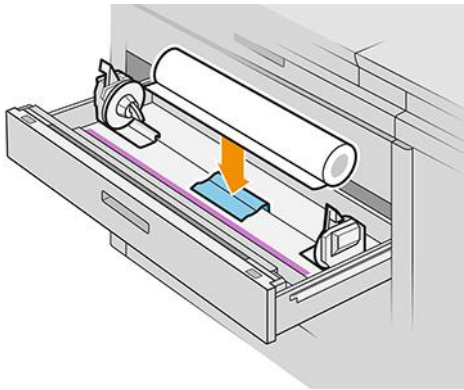
3. Open the locking levers on the left and right hubs.



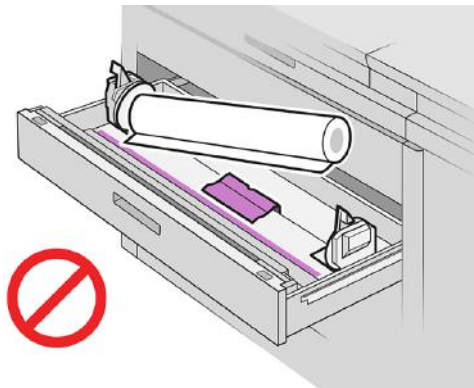
4. Move the hubs outwards (they are linked) to make room for the roll.



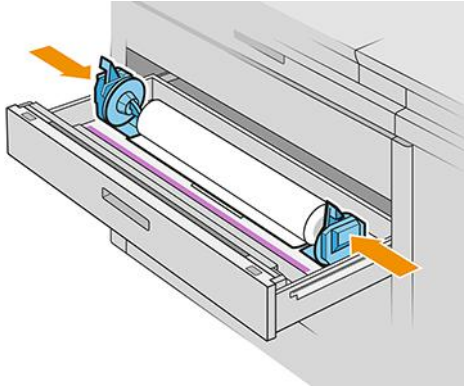
5. Place the roll into the drawer between the hubs, with the paper edge as shown.



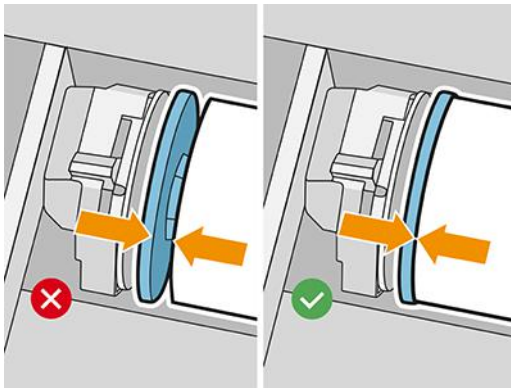
Do not load the roll at an angle, like this:



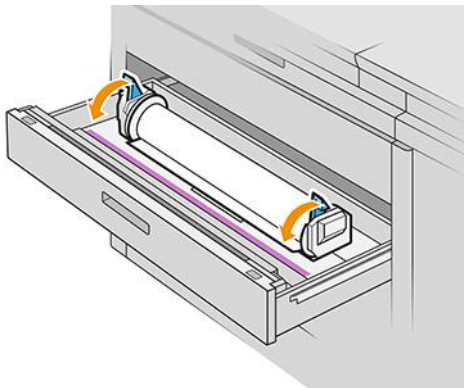
6. Slide the hubs back towards the center so that they engage with the roll.



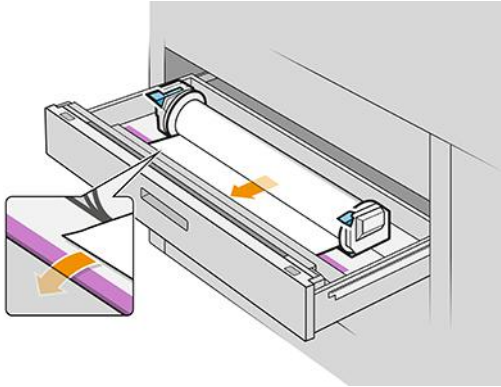
7. Ensure that the hubs are fitted tightly to the roll on both sides.



8. **Important:** Close the locking levers on the left and right hubs.



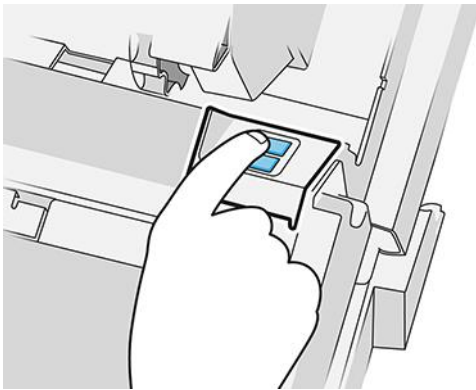
9. Feed the paper into the appropriate slot: the front slot for the front roll, the rear slot for the rear roll.



 **TIP:** The rear roll may need extra roll-ups to facilitate automatic feeding. Do not stop feeding until the paper is automatically advanced.

10. Continue feeding until you hear a beep.
11. If the paper edge is not straight and clean, you can cut it off with the appropriate button (there is a button for each roll in the drawer).

When you press the button, the paper is advanced; when you release the button, the paper is cut.



Remember to remove the cut strip of paper.

12. Close the drawer when you have finished loading rolls into it.

13. Select the paper type on the front panel. The front panel remembers the last paper type loaded in this position, in case that helps.

Paper load

Roll 1

Check pending

Paper type: B

Width: 841 mm

Length: 0.56 m

Roll 2

Almost out of paper

Paper type: B

Width: 841 mm

Length: 0.56 m

Roll 3

Ready

Paper type: B

Width: 190 mm

Length: 0.56 m

Roll 4

Ready

Paper type: B

Width: 190 mm

Length: 0.56 m

Roll 5

Roll 6

Load another Finish & check

Roll 1, Paper type

Recently used

Plain Paper 90 gsm

Plain Paper 120 gsm

Bond Paper 110 gsm

Bond & Coated paper

Photo paper

Done

14. When you are ready, tap **Finish and check**. The printer checks the position, width, and length of the loaded paper. The width and length are displayed on the main screen.



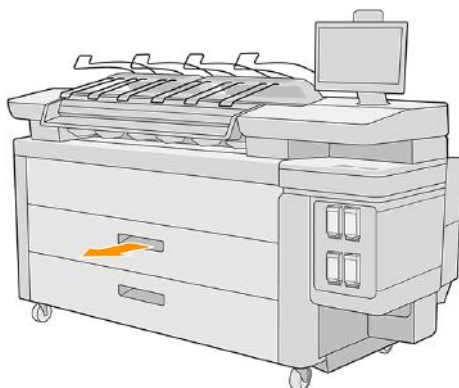
NOTE: If you do not select a paper type, the front panel waits a while and then executes **Finish and check** automatically.

Unload roll paper

The following steps provide the complete procedure for this topic.

You can unload a roll of paper from the printer without using the front panel.

1. Ensure that the printer is not printing and that the lock light on the drawer is off.
2. Open the drawer.



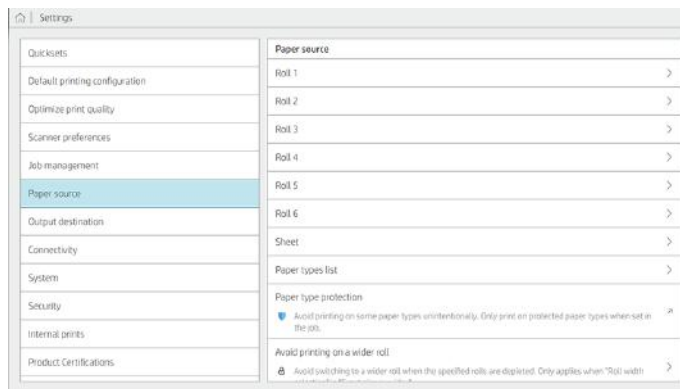
⚠ WARNING! Do not stand on the drawer: the printer could fall over.

3. Remove the paper from the feeding slot.
4. Open the locking levers on the left and right hubs.
5. Slide the hubs to the side so that you can remove the roll.
6. Remove the roll (or the core, if only the core is left).
7. Close the locking levers on the left and right hubs.
8. Close the drawer.

Paper options

You can use the paper options to change the paper type or protect a paper type from accidental printing.

To see the paper options, tap ●●●.



The following options are available:

- Select the paper source.
- Edit type: You can modify the type of the loaded paper.
- Edit length: You can modify the length of the loaded paper.
- Protect paper types: You can protect selected paper types to avoid printing on them unintentionally.

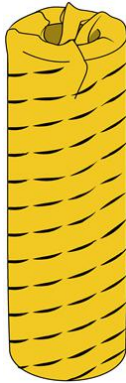
Store paper

You should take some precautions to maintain paper quality while it is in storage.

Storing rolls

- Store rolls in the original packaging within the temperature and humidity range specified on the paper label.
If the label gives no specification, try to store the rolls at 20°C and a relative humidity of 40–60%.

- When natural tracing paper is stored in a humid environment, its width when loaded can vary, and it may even jam in the printer. To avoid this, store this kind of paper in its packaging in humid conditions. Remove it from the printer in conditions of low temperature and high humidity (such as 15°C and 80% relative humidity). If you see that the paper has been affected by humidity, cut off the beginning of the roll: about 8 m (26 ft).
- Store rolls covered by another piece of paper or cloth.
- Allow all papers to adapt to room conditions, out of the packaging, for 24 hours before using them for printing.
- The use of tape to stick the leading edge of the roll to the core is especially important for heavy papers, because the inherent stiffness of the paper can cause it to loosen and unwind from the core.



See also [General information and tips on page 37](#).

Cannot load roll paper

The following sections provide details for this topic.

If you have a problem when trying to load a roll, try these suggestions:

- Check that you have a roll in the selected drawer and slot.
- Check that the locking levers are closed on both hubs, and that the hubs are correctly positioned.
- Ensure that you locked the hubs before feeding paper into the printer.
- Check that the paper is correctly fed into the printer.
- Check that the paper is not crumpled or warped, and that the edges are straight.
- Check that the drawer is correctly closed.
- Check that the paper is wound tightly on the roll.
- Check that the paper is attached to the core.
- Check that you follow the paper specifications.

 **TIP:** When loading rear rolls, you must feed more paper manually (about 40 cm (16 in)) than with front rolls.

Protect a paper type

You can protect selected paper types to avoid printing on them unintentionally. A protected paper type will be printed on only when the paper type is explicitly specified in the job.

To protect a paper type, go to the paper app, tap ... for the paper type you want to protect, then **Protect roll**.

Alternatively, you can tap , then **Paper source > Paper type protection**.

When a paper type is protected, the  icon appears before the paper name.

To print on a protected roll, just select the paper type explicitly when submitting the job from a printer driver or other job submission software.

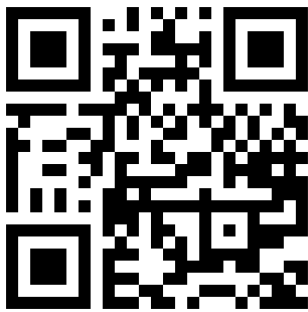


NOTE: If a protected paper type is not explicitly selected, and no other paper types are available, an out-of-paper message will appear.

Paper presets

Each supported paper type has its own characteristics. For optimum print quality, the printer changes the way it prints on each different paper type. For example, some may need more ink and some may require a longer drying time. So the printer must be given a description of the requirements of each paper type. This description is called the paper preset.

The paper preset contains the ICC profile, which describes the color characteristics of the paper; it also contains information on other characteristics and requirements of the paper that are not directly related to color. Existing paper presets for your printer are already installed in the printer's software; these are called *installed papers*. You can find more paper presets with an online search or with the HP Media Locator.



See video: <http://www.hp.com/go/pagewidexl/download-profile/>.

Online search in the paper library

You can search online for a paper preset by using the online search function within the **Paper library** front-panel menu. The printer connects to the HP Media Locator database on the Internet and allows you to search all available paper presets for your particular printer model, including HP and third-party paper brands. A wide variety of different paper presets may be available, and the database of paper presets is continuously updated and expanded. You will always get the most up-to-date content in this way.

When the printer is connected to the database (this may take a few seconds), a list of all available paper presets for your printer model is displayed. You can browse the list by scrolling it, and get details on any preset by tapping its name. Besides browsing, there are two additional ways to look for presets: free-text search and filters.

Free-text search allows you to type in any text using an on-screen virtual keyboard; all paper presets containing that text in any part of their name or description will be displayed.

Filters are available for brand, type, sub-type, and application. When a value is selected for a given filter, only the matching paper presets will be displayed. For example, if you select "HP" from the brand filter, only HP paper presets will be displayed. The effect of using more than one filter is to narrow the search to the combination of the filter settings. For example, if you choose "HP" from the brand filter and "Self-Adhesive Vinyl" from the type filter, only paper presets for HP Self-Adhesive Vinyl papers are displayed.

Once you have located the paper preset of your choice, tapping its download icon will queue it for automatic download and installation in the background. You can select as many paper presets as you want for download and installation (they will be processed in the order that they were selected). You can return to another part of the Media Manager or another front-panel screen at any time after queuing presets for download, and this will not interrupt the download and installation process.

Once a paper preset has been downloaded in the background, it is checked and installed on the printer's hard disk. During checking and installation, a full-screen message is shown on the front panel. This message disappears when checking and installation is complete.

The new paper preset now appears in the paper library, together with all previously installed and factory-provided presets, and is ready for use.

HP Media Locator

The HP Media Locator database of paper presets can also be accessed from a Web browser.

The HP website <https://www.printos.com/ml/> provides access to the database for different regions, printer models, applications, suppliers, paper types, and so on.

When you have located the paper preset of your choice, you can download it to your computer. To install the preset into the printer with which you want to use it, use the printer's Embedded Web Server. Click **Paper > Paper presets management > Import paper preset**.

Click **Browse** to browse to the paper preset file that you have previously downloaded to your computer, then click **Update** to install the preset in your printer.

The Embedded Web Server also allows you to export one or more paper presets from your printer for use with another printer of the same model. To export more than one paper preset at a time, click the paper presets you want to export while pressing the **Ctrl** key. All exported presets will be saved in the same **paperpresets.oms** file.

When importing a previously exported paper preset, you may see a message warning you that the package is not signed (only packages downloaded from the HP Media Locator Internet database are digitally signed, as a form of authentication); you can either ignore the warning and continue with the installation, or abort the installation.

If you get an error message while exporting:

- Check that you have enough disk space available.
- Check whether importing multiple paper presets will exceed the maximum permitted for the printer (10 presets).

To install a downloaded paper preset

Follow these instructions to install a new paper preset.

1. After finding the right paper preset at <https://www.printos.com/ml/>, or the paper manufacturer's website, click the **Download now** button and save the paper preset (an **.oms** file) on your computer.



NOTE: If you do not find the paper preset you want on the Web, you may find that it has been added to the latest firmware for your printer.

2. Before starting to install the new preset, make sure that the printer is idle and the print queue is stopped. Installing a new paper preset will interrupt any printing that is in progress.
3. Start the HP DesignJet Utility or the Embedded Web Server.

In the Embedded Web Server, click the **Paper** tab. In the Paper Management section, click the **Import paper preset** tab.
4. On the **Import** page, select the paper preset file that you downloaded in step 1.
5. Click the **Import** button and wait for the update process to finish. It may take some time.
6. Check that the new paper type appears in the **Additional paper** or **Custom paper** category in your printer's front panel.

Now that you have imported the paper preset, you can select the paper type from the front panel and from the driver. The paper preset for the new paper type is ready to use by your application.

To create a custom paper preset

Before using a custom paper type with your printer, you should add a paper preset for the new paper. You can create a custom paper preset directly from the front panel.

The paper preset name will appear in the printer driver and on the front panel.

You can export the new paper preset to your computer and use it on other printers, by using the Embedded Web Server:

1. Go to the installed papers inside the **Paper Library** in the front panel.
2. Tap the **Clone** button.
3. Select a paper category from the drop-down menu. The paper category determines the amount of ink used and other basic printing parameters.
4. Enter your paper's name.



TIP: The paper's commercial name is likely to be the most understandable for other users of the printer.

5. Select the appropriate settings: drying time, horizontal cutter, and so on.
6. Click the right-arrow icon.
7. You will find the paper name in the **Custom paper** category in the front panel.

To clone a paper preset, follow this simple procedure:

1. From the **Paper** tab, click **Paper management > Export paper preset**.
2. Select a paper preset and click the **Export** button. An OMS package with the paper preset will be downloaded.



NOTE: This page shows only the custom paper presets that you can export.

Now that you have created the paper preset, you will be able to select the paper type from the front panel and from the driver under the **Custom paper** category.

Paper jam

When the printer detects a jam, it tries to resolve the issue automatically. If it cannot, it stops, and you must fix the problem manually.

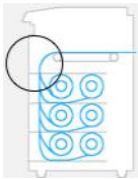
The front panel starts the paper jam wizard to display where the jam occurs and how to fix it.

Clear the paper jam as instructed on each screen of the wizard. When you have removed all the paper, tap **Check now** to check that the problem has been fixed successfully.

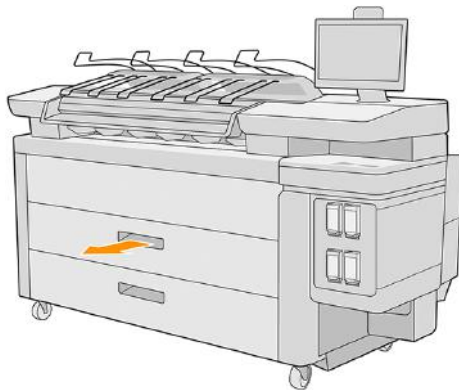
Paper jam in a drawer

The following steps provide the complete procedure for this topic.

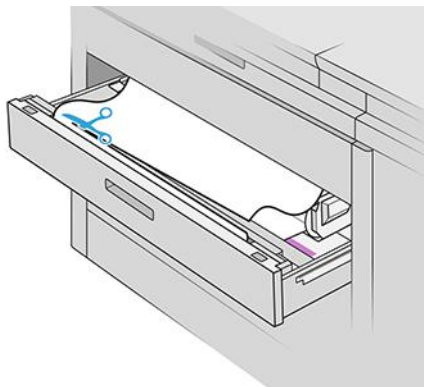
If the paper jams in a drawer, you may need to clear it manually.



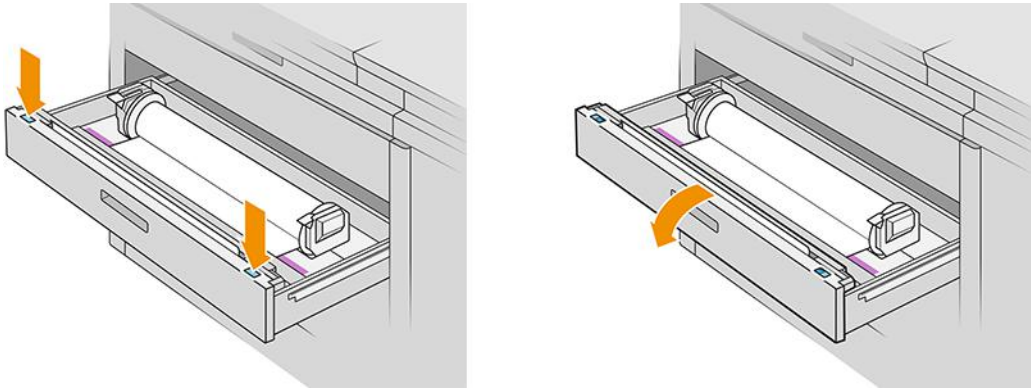
1. Open the drawer in which the paper jam has occurred.



2. Cut the paper if necessary.



3. Open the front cover of the drawer.



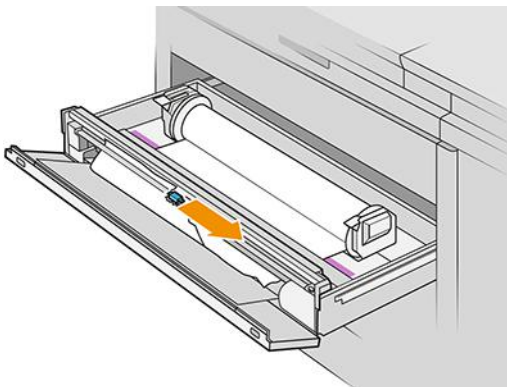
Areas where a jam may occur are identified with this label:



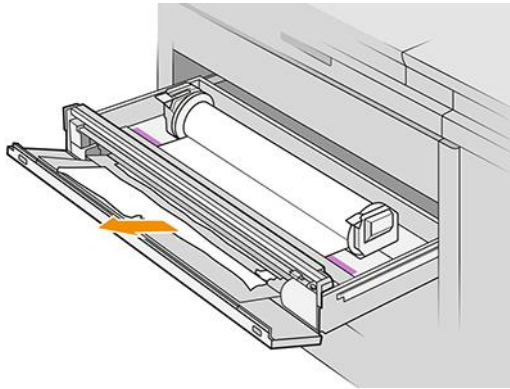
4. Move the cutter to the right-hand side, unless it is there already.

⚠ CAUTION: Take care not to cut yourself when moving the cutter.

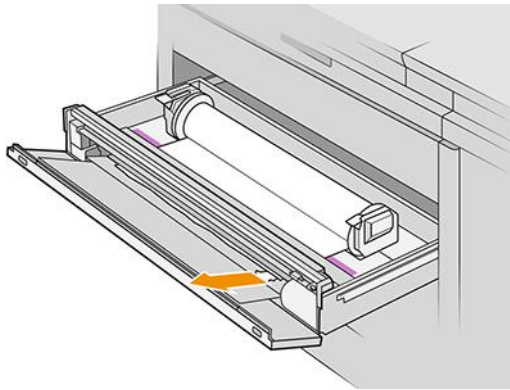
⚠ CAUTION: Do not dismantle the cutter assembly: refer it to qualified service personnel for servicing.



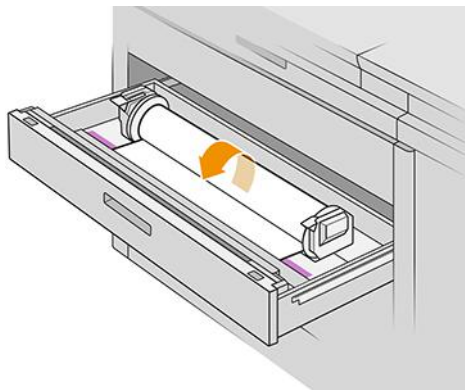
5. Remove the paper, cutting it manually if necessary.



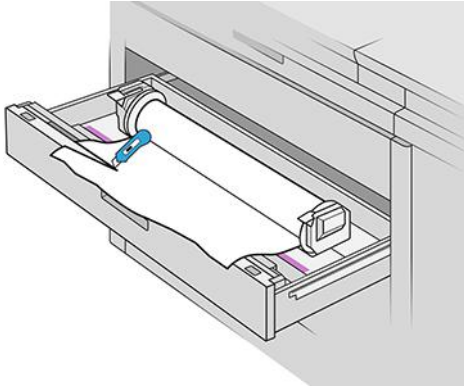
6. Make sure there are no loose pieces of paper left in the drawer.



7. Close the front cover of the drawer.
8. Rewind the paper.



9. Cut off the leading edge of the paper if it has been damaged.

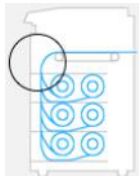


10. Rewind again and feed the paper into the slot.
11. Use the paper-cut button to cut the leading edge again.
12. Close the drawer.
13. Wait until the printer is ready for paper.
14. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

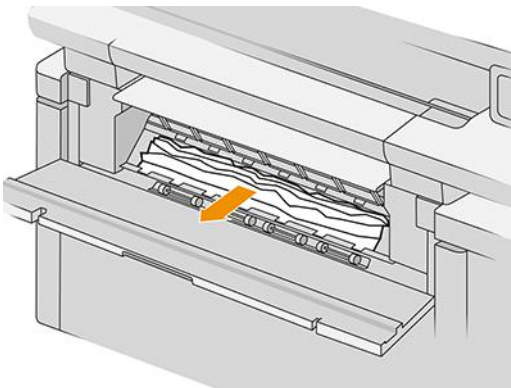
Paper jam in the paper-access front cover

The following steps provide the complete procedure for this topic.

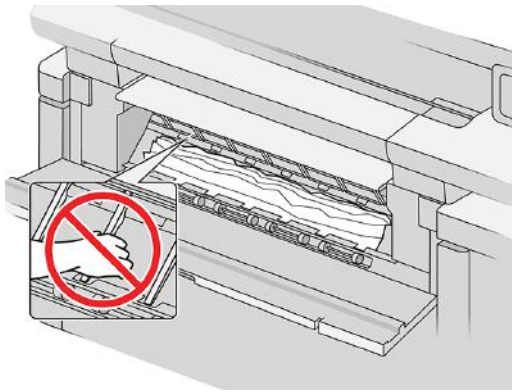
If the paper jams behind the paper-access front cover, you may need to clear it manually.



1. Open the front cover.
2. Pull out the paper.



CAUTION: Be careful to pull out only the paper and not the struts of the printer.



3. Cut the paper if necessary.

IMPORTANT: Use scissors for this purpose, not a single blade.



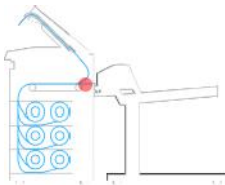
4. Make sure there are no loose pieces of paper left.
5. Close the front cover.
6. Wait until the printer is ready for paper.
7. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam in the belts

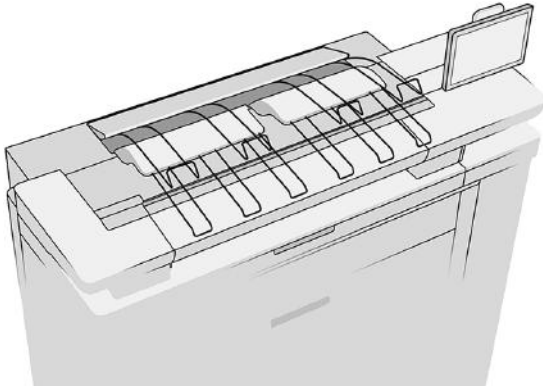
The following steps provide the complete procedure for this topic.

If the paper jams in the belts, you may need to clear it manually.

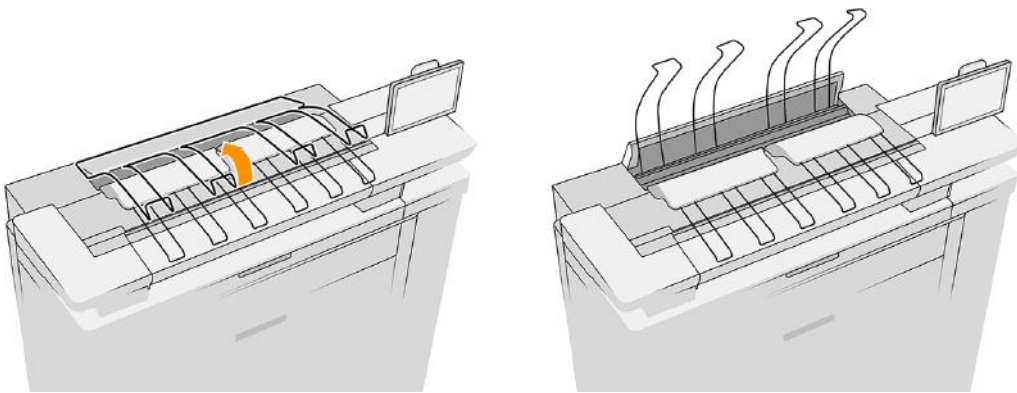
NOTE: If your printer does not have a top stacker, it is available as an accessory.




1. Locate the top-stacker cover.

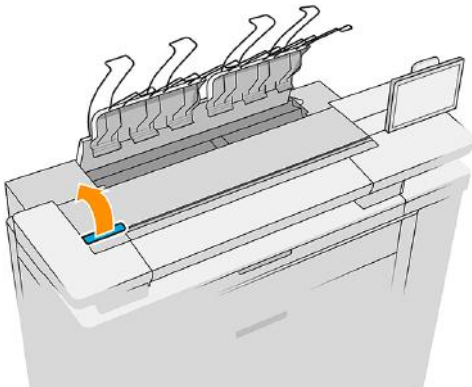


2. Open the top-stacker cover and remove the paper from the top stacker..

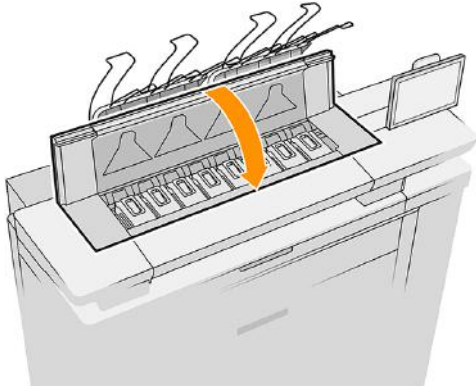


3. Locate and pull the handle(s) to open the print-bar cover, and remove any paper from the belts area.

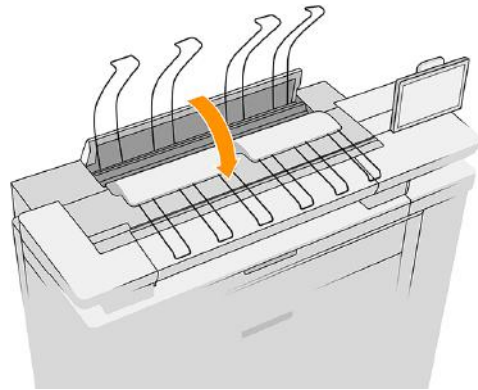
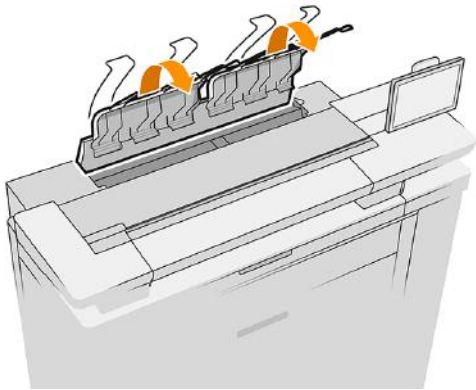
 **NOTE:** There may be one or two handles, depending on the model.



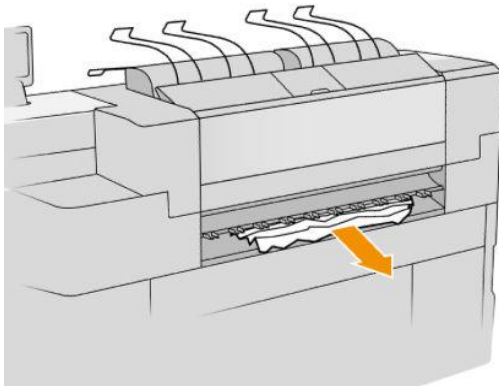
4. Close the print-bar cover.



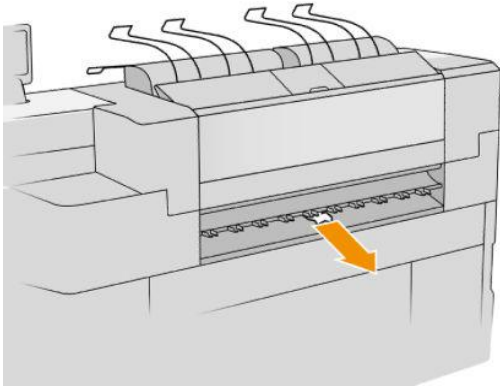
5. Close the top-stacker cover.



6. Check that there is no paper in the output zone at the rear of the printer. Be careful with the pinchwheels.



7. Ensure that no pieces of paper are left in the printer.



Paper jam in the paper output

If the paper jams where it emerges from the printer, you may need to remove it manually.

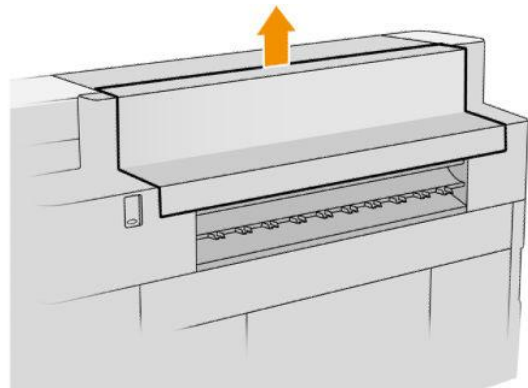
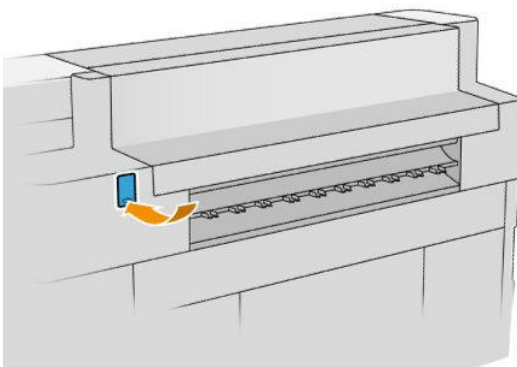


1. Make sure that the jam is not in the accessory interface.
2. If you have an F60 or F70 Folder installed, raise the folder tray.

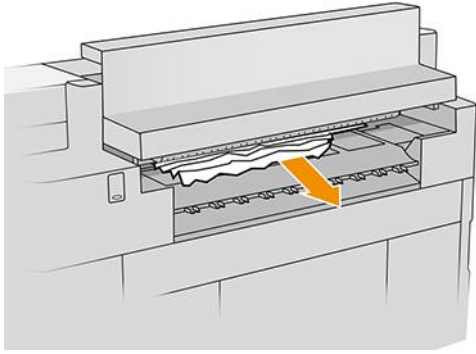
 **NOTE:** The F70 Folder is available only for certain models.

If you have other accessories, detach the accessory from the printer.

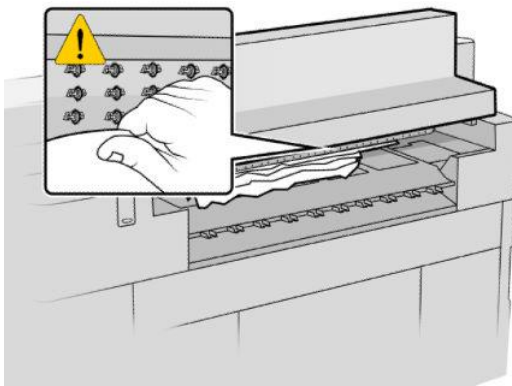
3. If your printer has an output button, press it to raise the output module.



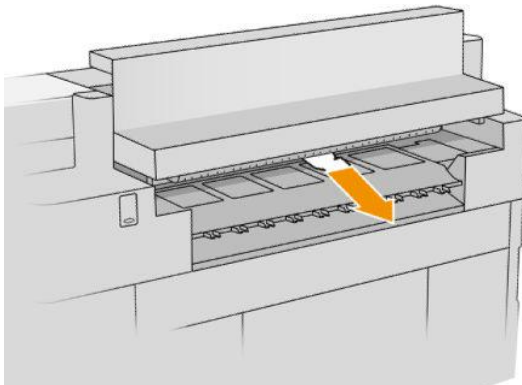
4. Pull out the paper.



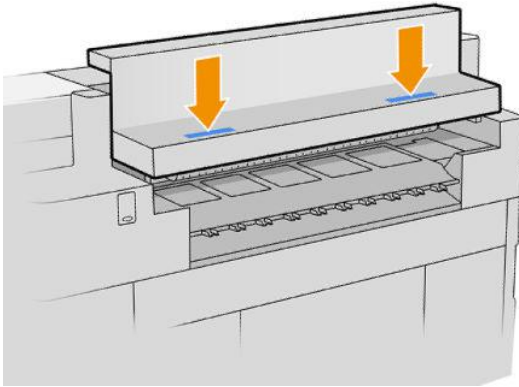
⚠ CAUTION: Be careful not to touch the pinchwheels: they are sharp and can cut your fingers.



5. Make sure there are no loose pieces of paper left.



6. Close the output module, if your printer has one.



7. Wait until the printer is ready for paper.
8. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

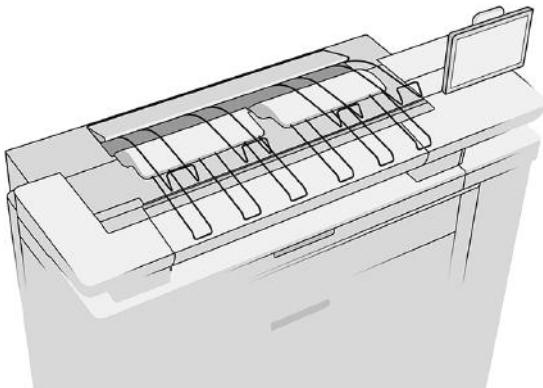
Paper jam in the top stacker (3920 and 4200 series only)

The following steps provide the complete procedure for this topic.

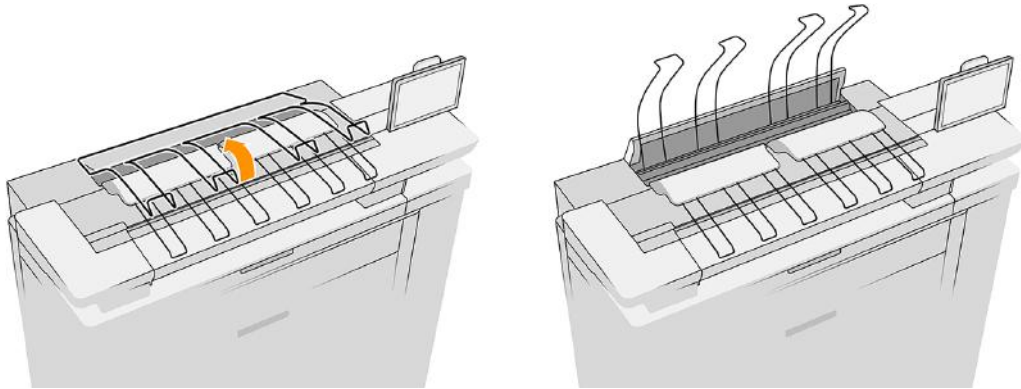
If the paper jams in the top stacker, you may need to remove it manually.



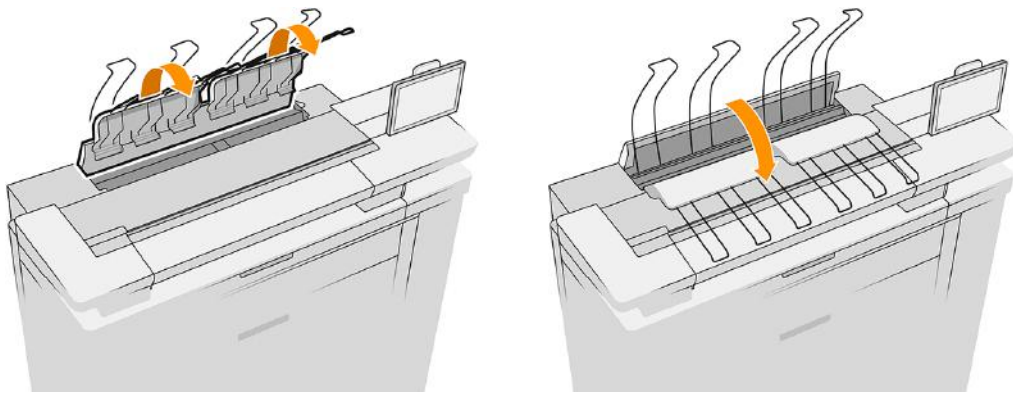
1. Locate the top-stacker cover.



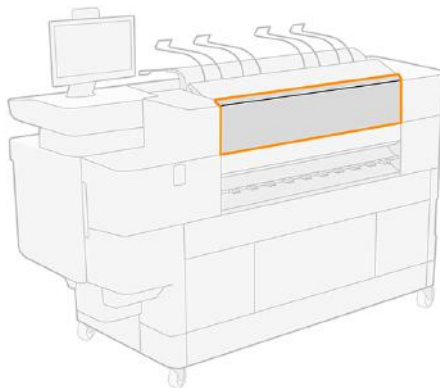
2. Open the top-stacker cover and remove the paper from the top stacker.



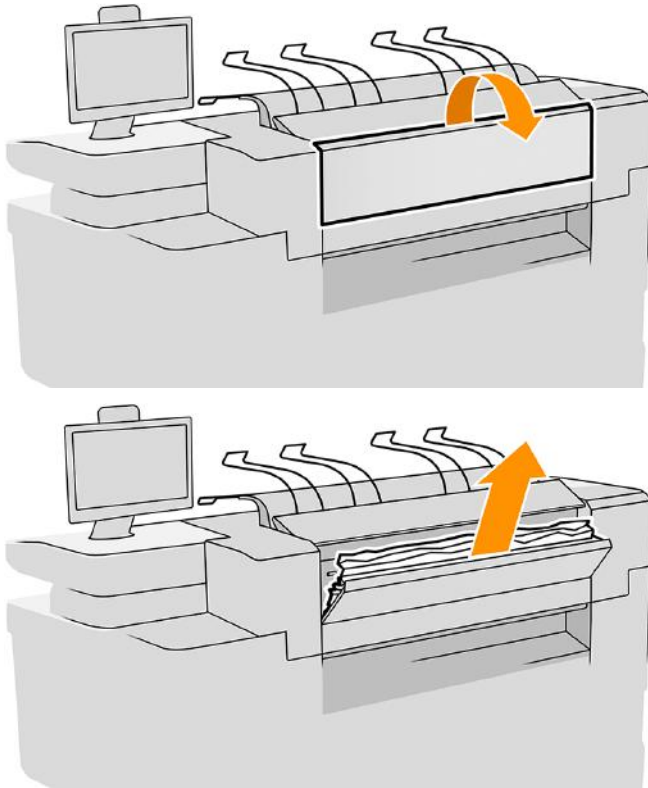
3. Close the top-stacker cover.



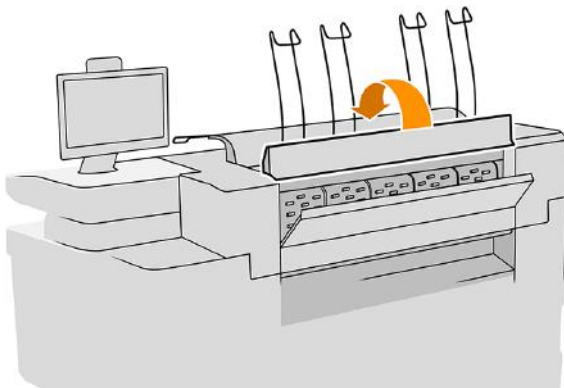
4. Locate the top-stacker rear cover.



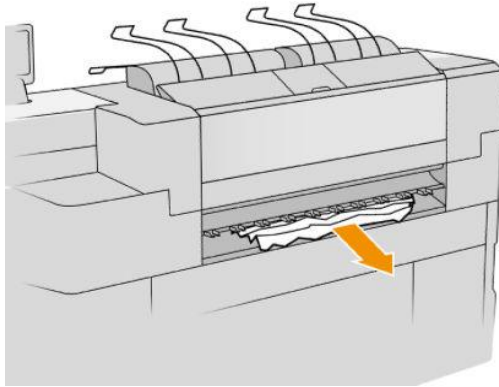
5. Open the top-stacker rear cover and remove the paper.



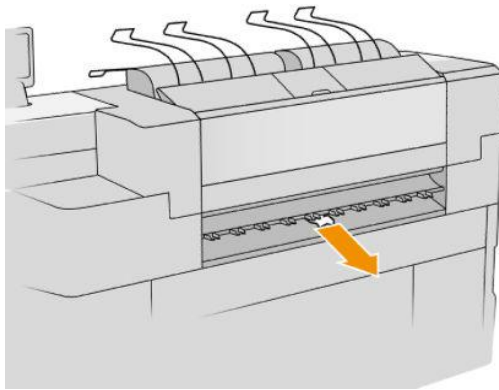
6. Close the top-stacker rear cover.



7. Check that there is no paper in the output zone. Be careful with the pinchwheels.




8. Ensure that no pieces of paper are left in the printer.



Paper jam in the top stacker accessory (4700 and 5200 series only)

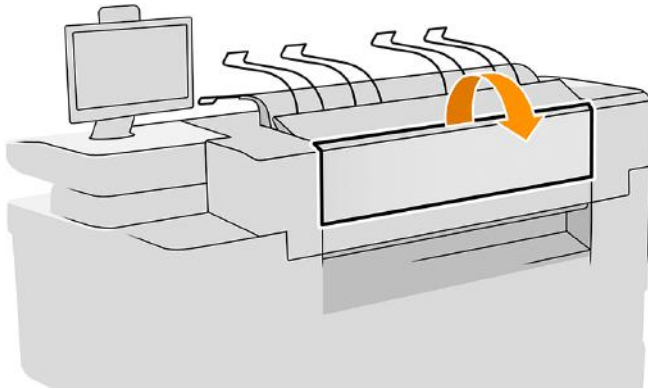
The following steps provide the complete procedure for this topic.

If the paper jams in the top stacker, you may need to remove it manually.

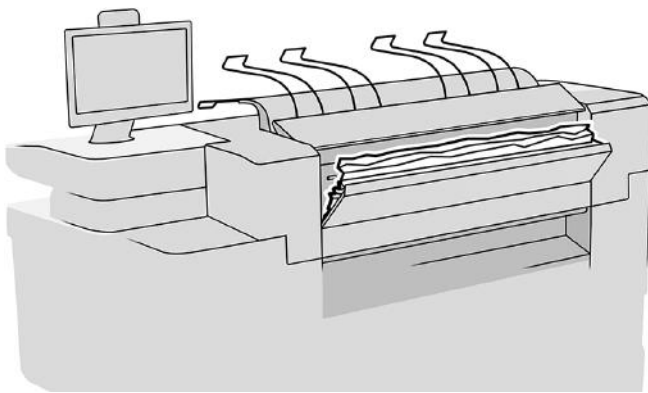
 **NOTE:** If your printer does not have a top stacker, it is available as an accessory. (If the top stacker is not installed, disregard this procedure.)

1. Open the paper-output door.
2. Remove the paper.

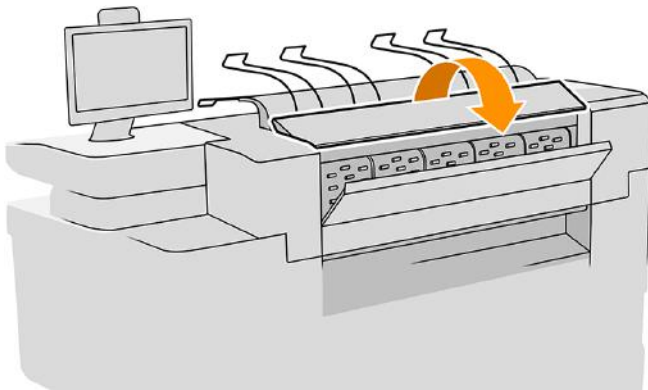
3. Open the rear cover.



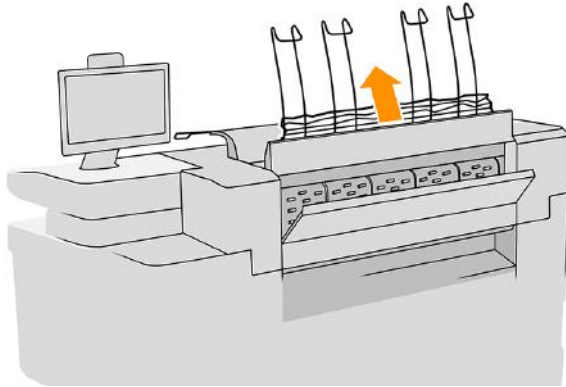
4. Pull out the paper.



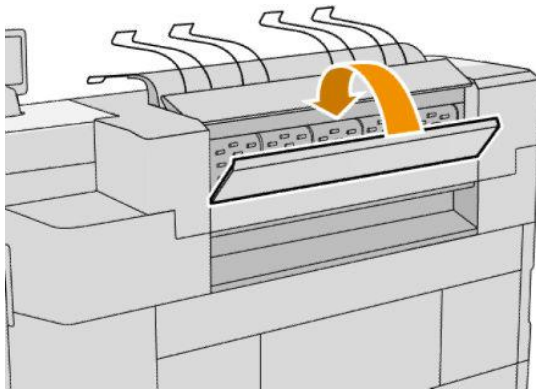
5. Open the stacker.



6. Pull out the paper.



7. Close the rear cover.

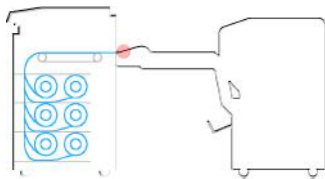


8. Close the stacker.
9. Wait until the printer is ready for paper.
10. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam in the folder input (HP F60 and HP F70 folders)

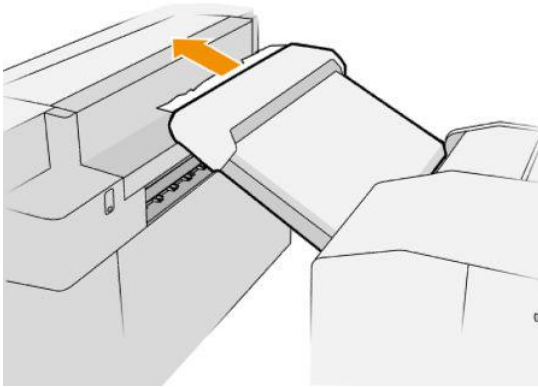
The following steps provide the complete procedure for this topic.

If the paper jams in the folder input, you may need to remove it manually.

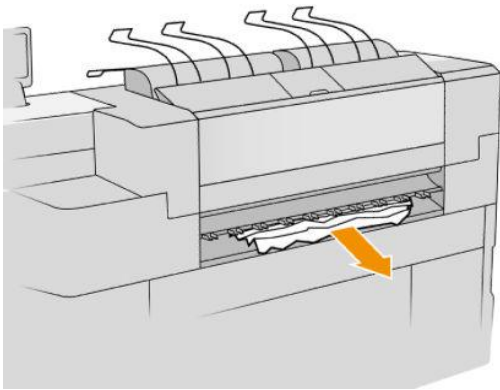


1. Lift the folder tray.

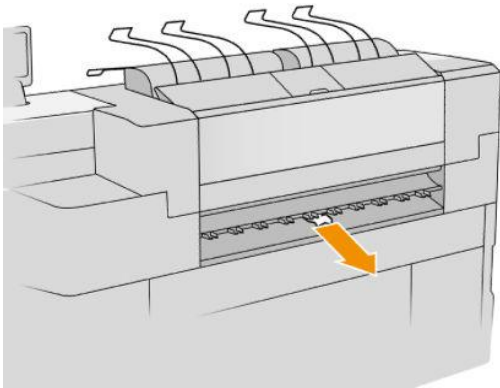
2. Remove the paper from the tray.



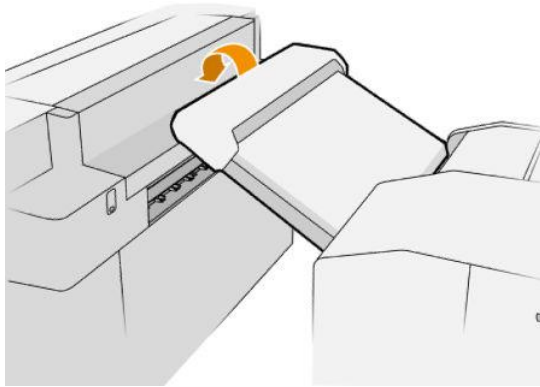
3. Pull the paper to remove it from the printer. Be careful with the pinchwheels.



4. Ensure that no pieces of paper are left in the printer.



5. Close the folder tray.



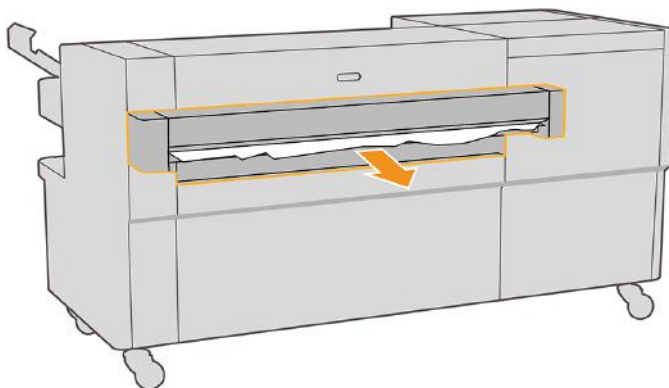
Paper jam in the folder input (HP F40 Folder only)

If the paper jams in the folder input, you may need to remove it manually.

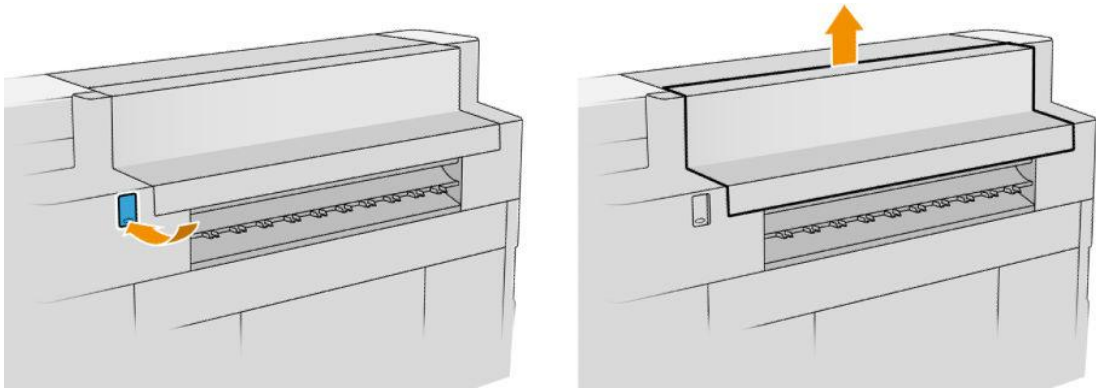


See video: <http://www.hp.com/go/pagewidexl/removing-paper-jams-in-folder-F40/>.

1. Disengage the printer from the folder.
2. If necessary, cut the paper between the printer and the folder.
3. Remove the paper from the folder input.

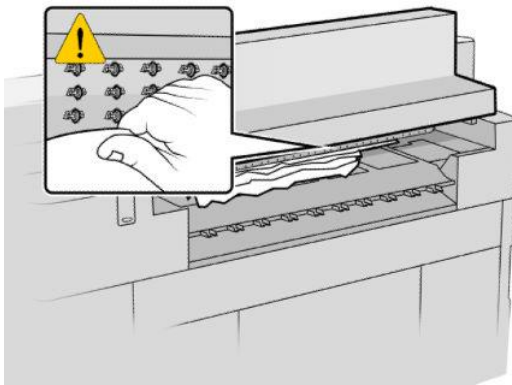


4. If your printer has an output button at the rear, push the button to raise the printer's output module.



5. Pull out the paper.

⚠ CAUTION: Be careful not to touch the pinchwheels: they are sharp and can cut your fingers.




6. Ensure that there is no paper left anywhere in the folder. See [Paper jam on the fan-folding path \(HP F40 Folder only\) on page 70](#) and [Paper jam on the cross-folding path \(HP F40 Folder only\) on page 73](#).
7. Close the output module, if your printer has one.
8. Re-engage the printer with the folder.
9. Wait until the printer is ready for paper.
10. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam in the no-fold tray (HP F60 and HP F70 folders)

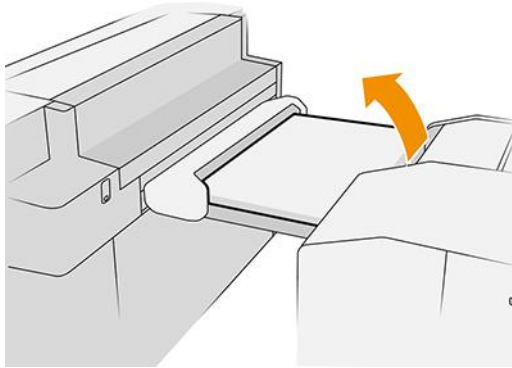
If the paper jams in the no-fold tray, you may need to remove it manually.




See video: <http://www.hp.com/go/pagewidexl/paper-jams-in-folder-F60-and-F70/>.

 **IMPORTANT:** This operation must be performed by a service engineer or by someone else with appropriate training.

1. Open the top cover of the tray.



2. Cut the paper between the printer and the folder, if necessary.
3. Remove the paper.
4. Close the cover.

 **CAUTION:** Be careful where you place your hands.

5. Wait until the printer is ready for paper.
6. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

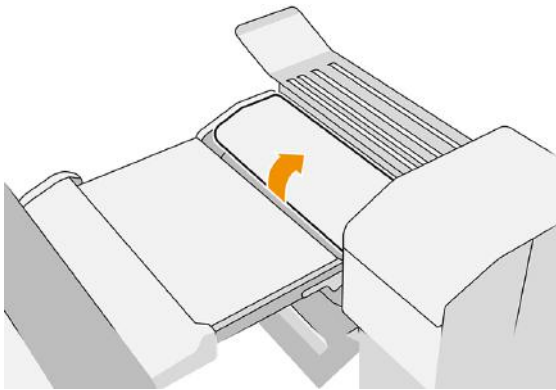
Paper jam on the fan-folding path (HP F60 and HP F70 folders)

If the paper jams in the fan-folding path, you may need to remove it manually.



See video: <http://www.hp.com/go/pagewidexl/paper-jams-in-folder-F60-and-F70/>.

1. Try to remove the paper by pulling it from the no-fold tray. If you cannot remove all the paper this way, continue with the following steps.
2. Open the fan-folding cover.



3. Pull the paper out.



NOTE: You may see paper by the fan-fold tray or at the rear of the folder. Try to pull it out wherever you see it.

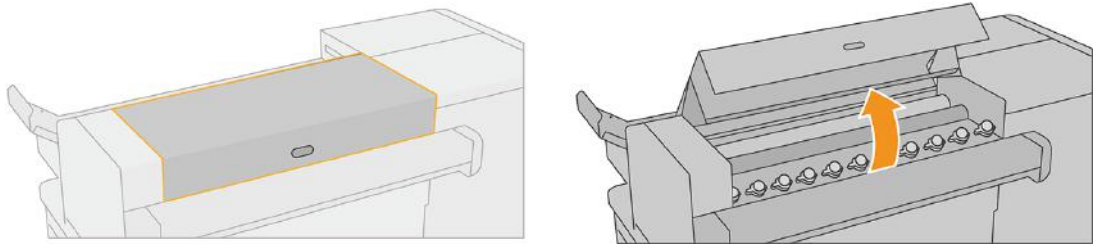
4. Remove any remaining pieces of paper.
5. Ensure that the metal balls remain in place.
6. Close the cover.
7. Wait until the printer is ready for paper.
8. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam on the fan-folding path (HP F40 Folder only)

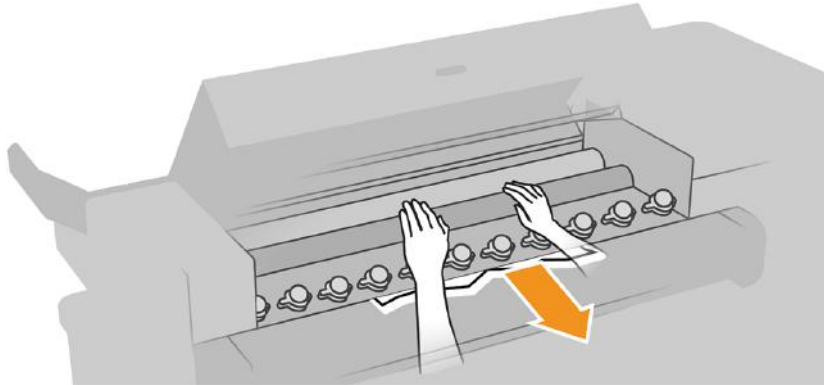
The following steps provide the complete procedure for this topic.

If the paper jams in the fan-folding path, you may need to remove it manually.

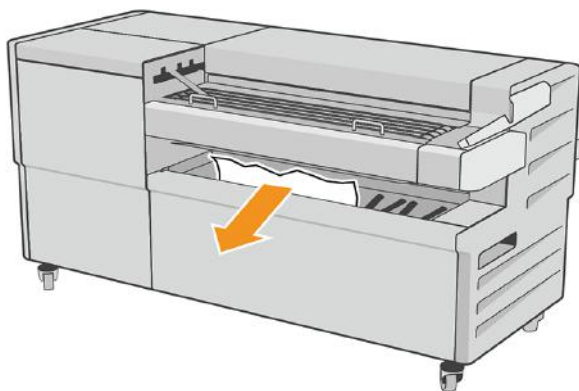
1. Open the fan-folding cover.



2. Move the rollers to release the paper.



3. Pull the paper out.
4. Ensure that the metal balls remain in place.
5. Close the fan-folding cover.
6. Check whether there is any paper left in the fan area on the output side of the folder.



7. Remove any remaining pieces of paper.
8. Wait until the printer is ready for paper.
9. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam between the fan fold and cross-folding path

This should be easily visible from behind the folder. Open the fan-fold cover to stop the folder motor, and remove the paper.

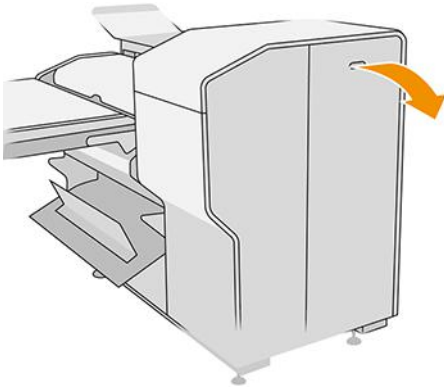
Paper jam on the cross-folding path (HP F60 and HP F70 folders)

If the paper jams in the cross-folding path, you may need to remove it manually.




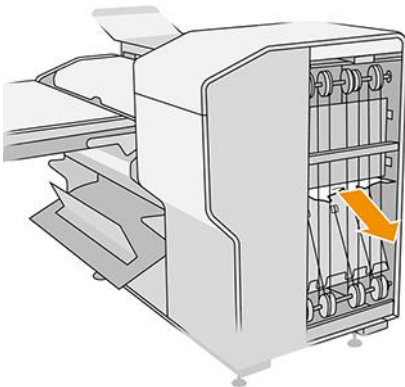
See video: <http://www.hp.com/go/pagewidexl/paper-jams-in-folder-F60-and-F70/>.

1. Open the cross-folding cover.



2. Remove the paper.

 **CAUTION:** Take care to avoid injury.



3. Close the cover.

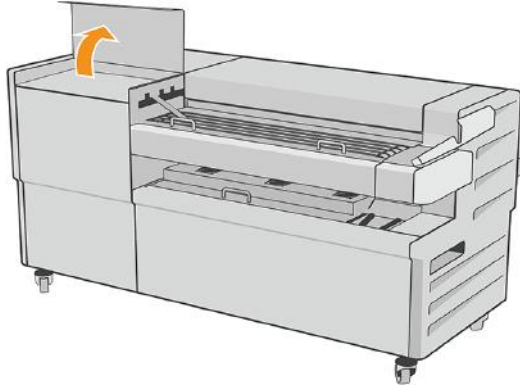
4. Wait until the printer is ready for paper.
5. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam on the cross-folding path (HP F40 Folder only)

The following steps provide the complete procedure for this topic.

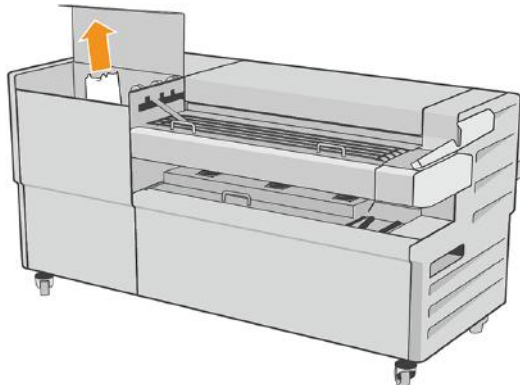
If the paper jams in the cross-folding path, you may need to remove it manually.

1. Open the top cross-folding cover.



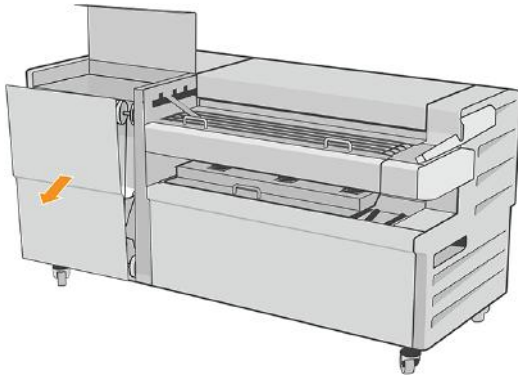
2. Remove the paper.

⚠ CAUTION: Take care to avoid injury.



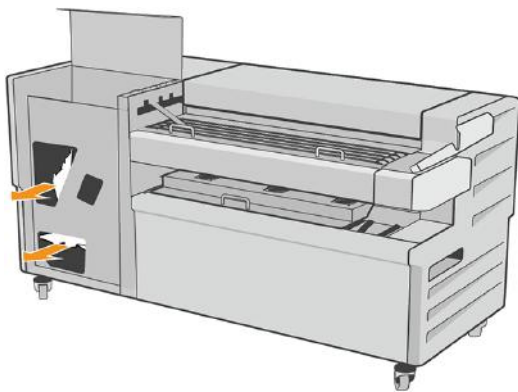
3. Close the top cross-folding cover.

4. If the jam is not resolved, open the lateral cross-folding cover.



5. Remove the paper.

⚠ CAUTION: Take care to avoid injury.



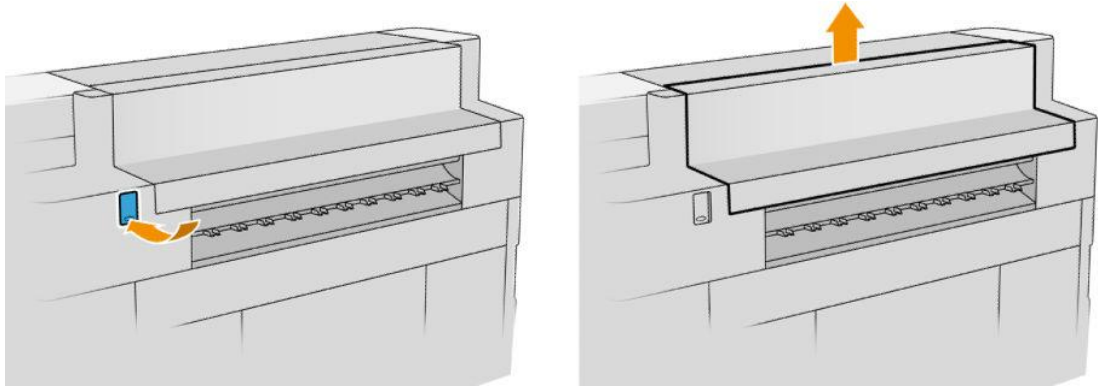
6. Close the cover.
7. Wait until the printer is ready for paper.
8. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

Paper jam in the stacker accessory

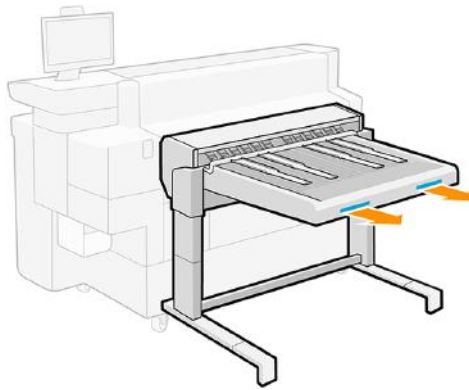
The following steps provide the complete procedure for this topic.

If the paper jams in the stacker accessory, you may need to remove it manually.

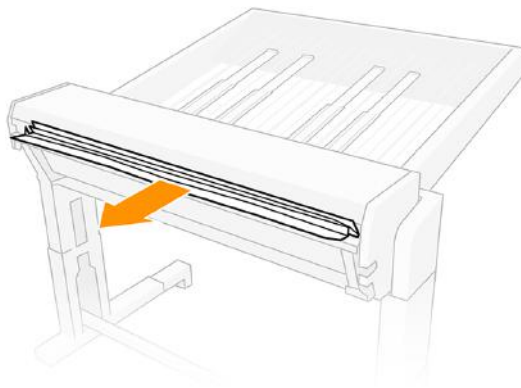
1. If your printer has an output button, press it to raise the output module.



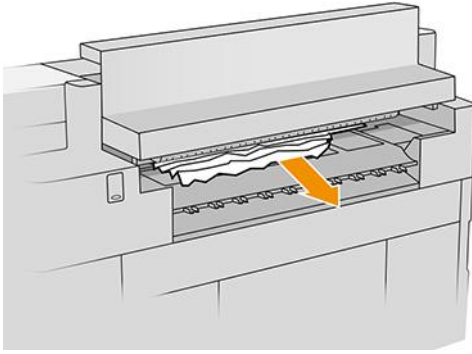
2. Pull out the stacker by the beam at the rear of the tray.



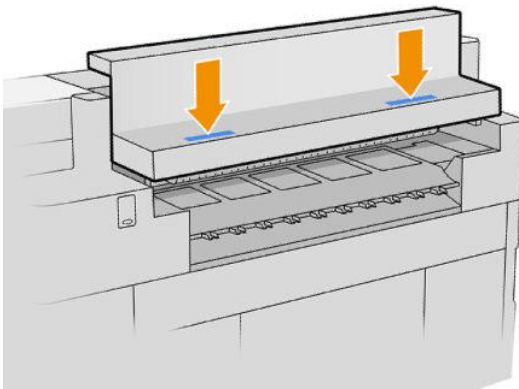
3. Cut the paper between the printer and the stacker, if necessary.
4. Remove the paper from the stacker.



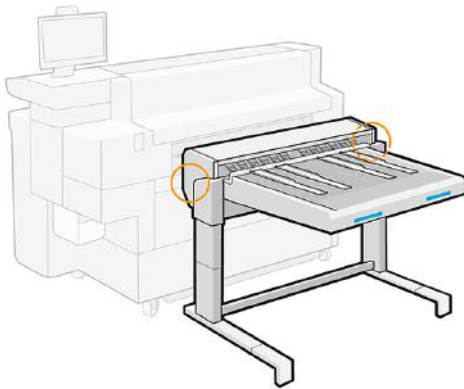
5. Remove the paper from the printer.



6. Close the output module, if your printer has one.



7. Reconnect the stacker.

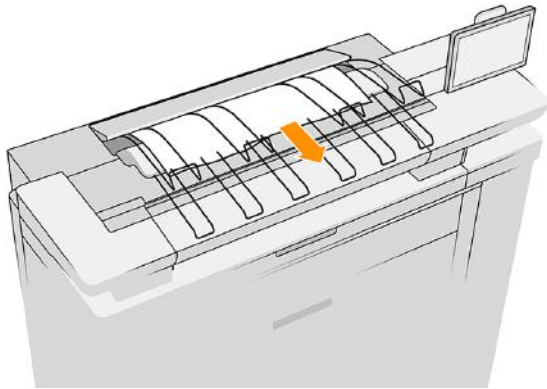


8. Wait until the printer is ready for paper.
9. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

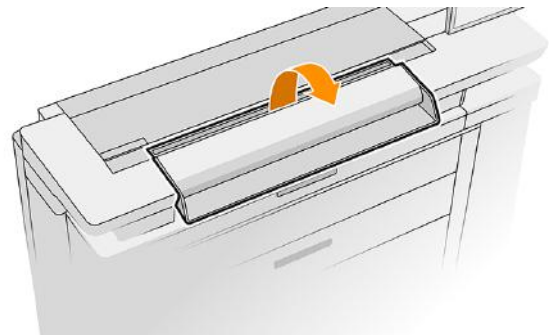
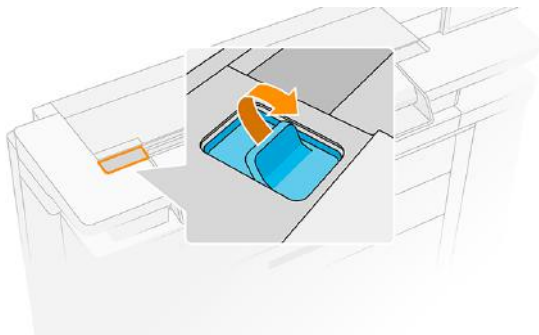
Paper jam in the scanner (MFP only)

If the paper jams in the scanner, you may need to remove it manually.

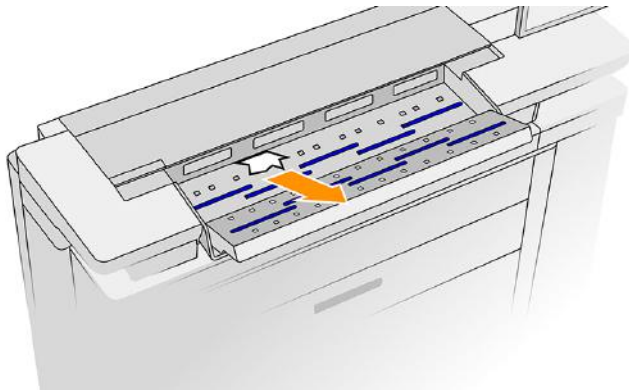
1. Empty the top stacker, if you have one.



2. Pull out the top stacker, if you have one.
3. There is a small lever at the rear left of the scanner. Slide the lever up and open the scanner cover.

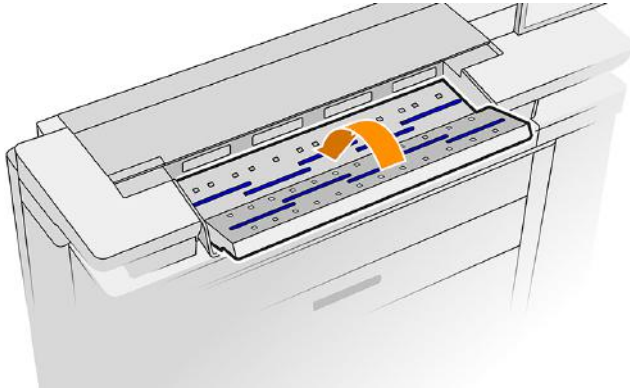


4. Remove the paper.



5. Make sure there is no paper left in the scanner (insert your hand).

6. Close the cover.



7. Close the top stacker, if you have one.
8. The printer resumes the job and automatically reprints any lost pages. However, you should check that all pages of the job have been printed.

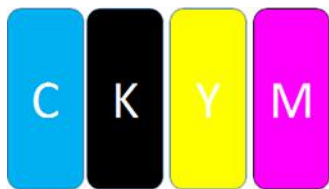
3 Ink system

The ink system delivers ink to the paper.

Eco-Carton ink cartridges

Eco-Carton ink cartridges provide ink to the printheads.

The printer has a set of four Eco-Carton ink cartridges in the order CKYM, with a capacity of 500 ml or 1 L each, depending on your printer model.



Ink cartridges require no maintenance or cleaning, but must be shaken before installation. High-quality printing is maintained even when the ink level is low.

⚠ CAUTION: Avoid touching pins, leads, and circuitry when handling ink cartridges, because these elements are sensitive to electrostatic discharge. Such devices are called ESD-sensitive devices. See [Glossary on page 213](#). Electrostatic discharges are one of the main hazards to electronics products. This type of damage can reduce the life expectancy of the device.

The status of each Eco-Carton ink cartridge is reported in the front panel:


- **OK:** The cartridge is working normally.
- **Reseat:** The cartridge is not responding, but removing and reinserting it may solve the problem.
- **Replace:** The cartridge has been identified as faulty. It should be replaced by a functional cartridge.
- **Low on ink:** The cartridge is low on ink. It should be replaced soon.
- **Very low on ink:** The cartridge is very low on ink. It should be replaced very soon.
- **Empty:** The cartridge has no ink. It should be replaced.
- **Missing:** The cartridge is missing.
- **Wrong/Incompatible/Incorrect:** The cartridge type is not suitable for this printer.
- **Expired:** The cartridge has reached its expiration date.

- **Altered:** The cartridge has been identified as refilled or altered.

Ink-cartridge LED indicators (5200 and 8200 printers only)

Below each ink cartridge, the printer has two LED indicators: a padlock and an inkdrop.

- The padlock LED is on when the cartridge is in use.

 **IMPORTANT:** Do not try to remove a cartridge when the padlock LED is on.

- The inkdrop LED turns yellow when the cartridge is almost out of ink, and turns red when the cartridge is empty or faulty.

Ink-cartridge part numbers

Contact your local reseller to get the part numbers for your region.

Replace ink cartridges on the fly (5200 and 8200 printers only)

You can replace a cartridge at any time when its padlock LED is off. If the padlock LED is on, you must pause the job queue and wait until the LED turns off.

Replace ink cartridges from the front panel

The procedure for ink cartridge replacement is followed by some general advice.

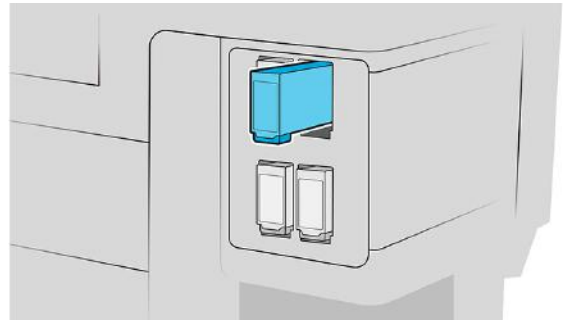
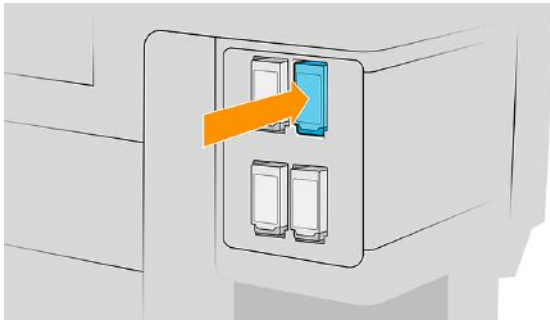


<http://www.hp.com/go/pagewidexl/load-ink/>

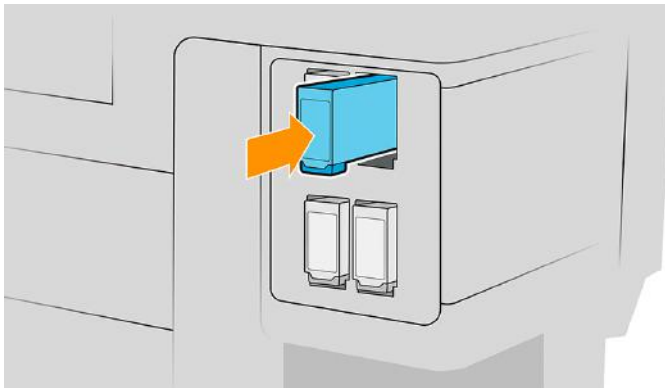
1. Go to the front panel and tap , then the **Ink cartridges** tab, then **Replace**.

 **NOTE:** If the ink cartridge you want to replace is locked, you will need to pause the job queue to continue.

2. When prompted, press the old cartridge and slide it up to release it.



3. Shake the new cartridge six times.
4. Insert the new cartridge and push it in as far as it will go.



5. Follow the instructions in the front panel.
6. When you have replaced all cartridges that you want to replace, tap **Finish and check**.
7. Make sure that you comply with all applicable federal, state, and local regulations when disposing of ink system consumables.






If the available ink is exhausted while printing a page, printing stops and the page is ejected. When a new cartridge is inserted, printing can resume, and the interrupted page is reprinted in full.

HP recommends that you replace an empty cartridge with a new HP cartridge. See [Ink-cartridge part numbers on page 80](#).

The use of refilled or altered ink cartridges has several serious disadvantages:


- There is some risk of damaging the printer. In this case the printer warranty will not be valid for any printer repairs that are related to the cartridge, nor for any problems due to ink contamination.
- You will invalidate the warranty of all printheads of the same color used in the printer subsequently.
- Print quality may be impaired.
- The printer will be unable to estimate the ink level in the cartridge, and will not report it.

If you want to force the printer to accept what it sees as an empty cartridge, proceed as follows:

1. Tap  on the front panel, then , , , .

2. The front panel notifies you that the cartridge is altered, and the cartridge acceptance process starts. Follow the instructions displayed on the front panel. If your cartridge is not an Original HP cartridge, HP recommends that you stop the process. To check the authenticity of your cartridges, go to <http://www.hp.com/go/anticounterfeit/>.
3. If you proceed, the front panel displays a series of warning messages.

When the process is finished, the front panel gives the usual ink cartridge display, but the cartridge does not report its ink level.

 **NOTE:** This printer uses dynamic security, which may be updated periodically by firmware updates. The printer is intended to be used solely with cartridges using an original HP chip. Cartridges using a non-HP chip may not function or may cease to function. More at: <http://www.hp.com/learn/ds/>.

Ink cartridge maintenance

During the normal lifetime of a cartridge, no specific maintenance is required. You should replace a cartridge when it has reached its expiry date.


You can find the expiry date in the the ink cartridge information on the front panel.

Ink cartridge troubleshooting

The following steps provide the complete procedure for this topic.

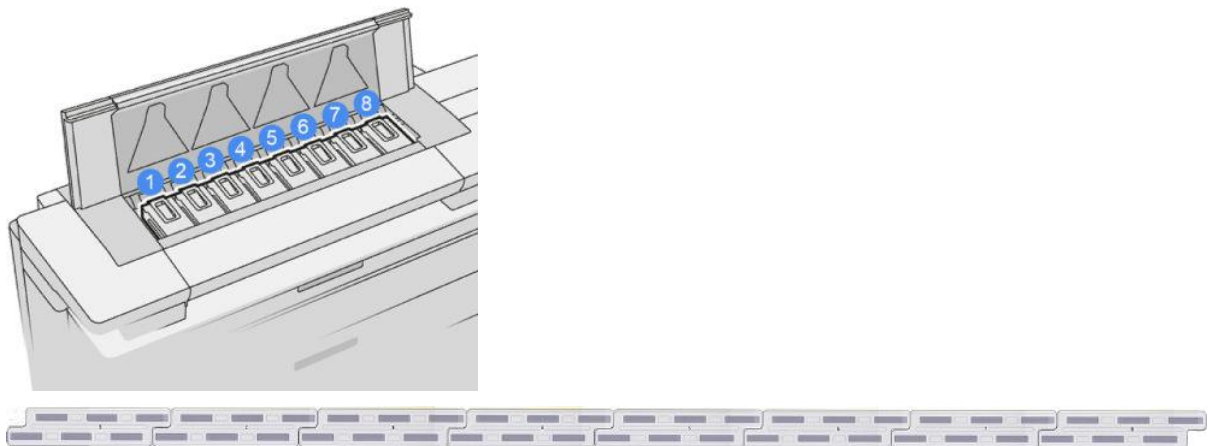
If you have a problem with an ink cartridge, try these suggestions.

1. Check that you have the correct type of cartridge (model number).
2. Check that the cartridge label is the same color as the slot label.
3. Check that the cartridge is correctly oriented: the arrow on the front of the cartridge should face upwards.

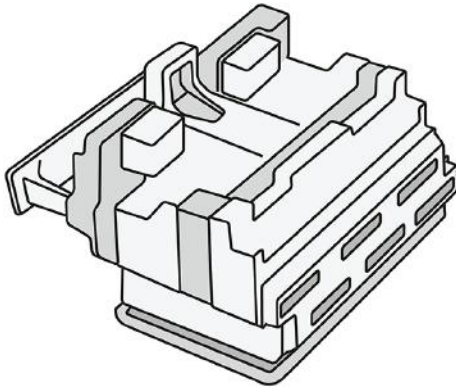
 **CAUTION:** Never clean inside the ink cartridge slots.

Print bar

The key printing element is a fixed 40 inch (1016 mm) print bar, composed of 8 printheads, numbered 1 to 8 from left to right, looking at the printer from the front. The paper advances at high speed underneath the print bar, which ejects pigmented inks in four colors.



The printheads are extremely durable and do not need to be replaced every time an ink cartridge is replaced. They provide excellent results even when the ink cartridges contain a low level of ink.




To maintain optimum print quality, the printheads are automatically tested at regular intervals, and automatically serviced when necessary. This takes a little time and can occasionally delay printing. When a printhead eventually needs to be replaced, the front panel will display a message.

The printer's paper-loading system includes an auto-indexing facility: whenever paper is loaded, the printer moves the position of the roll to compensate for printhead nozzle usage and extend the lifetime of each printhead. This is an automatic behavior, but you may notice that the front and rear rolls change position slightly between rolls.

 **CAUTION:** Do not touch the printhead nozzles.



 **CAUTION:** Do not put the printhead down on any surface for any reason.


 **TIP:** Printheads are best preserved inside the printer. Moreover, if you remove the printheads, the printer will need to be recalibrated whenever you put them back. Therefore you are recommended not to remove them unnecessarily.

Printhead status

- **OK:** The printhead is working normally.
- **Missing:** No printhead is detected in the slot.
- **Replace:** The printhead has been identified as faulty. It should be replaced by a new or working printhead.
- **Reseat:** The printhead has been identified as faulty, but removing and reinserting it may perhaps solve the problem.
- **Remove:** The printhead needs to be removed.
- **Printhead replacement incomplete. Restart it.**

The printhead did not complete the replacement procedure. You must restart the replacement and fully complete it.

- If the warranty status is **Out of warranty**, this indicates that the warranty conditions have expired (for example, ink consumption exceeds the warranted limit).

 **NOTE:** If a printhead is out of warranty, one of three possible status values may be seen in its health gauge:

- **OK:** The printhead can print normally.
- **Monitor IQ:** Print quality may not be maintained in all prints.
- **Recover:** You are recommended to use enhanced printhead recovery on that printhead (see [Enhanced printhead recovery on page 181](#)).

If the warranty status is **See warranty note**, this indicates that the warranty conditions have been breached (for example, expired or non-HP ink has been used).

You can check the warranty status in the printer information app.

See the limited warranty document provided with your printer for details of the warranty implications.


Printhead part number

The HP 841/874 HP PageWide XL printhead has the part number C1Q19A.

Replace printheads

Printheads rarely need to be replaced, but the front panel will tell you when a printhead is failing or has reached the end of its life.

Alternatively, a test print may indicate a printhead problem before the printer detects it.

 **CAUTION:** Avoid touching pins, leads, and circuitry when handling printheads, because these elements are sensitive to electrostatic discharge. Such devices are called ESD-sensitive devices. See [Glossary on page 213](#). Electrostatic discharges are one of the main hazards to electronics products. This type of damage can reduce the life expectancy of the device.




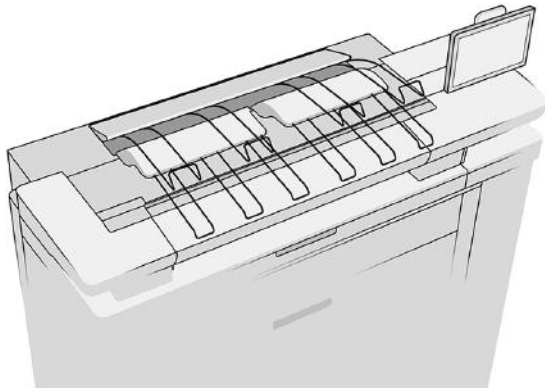
<http://www.hp.com/go/pagewidexl/change-printhead/>

MISSING TITLE

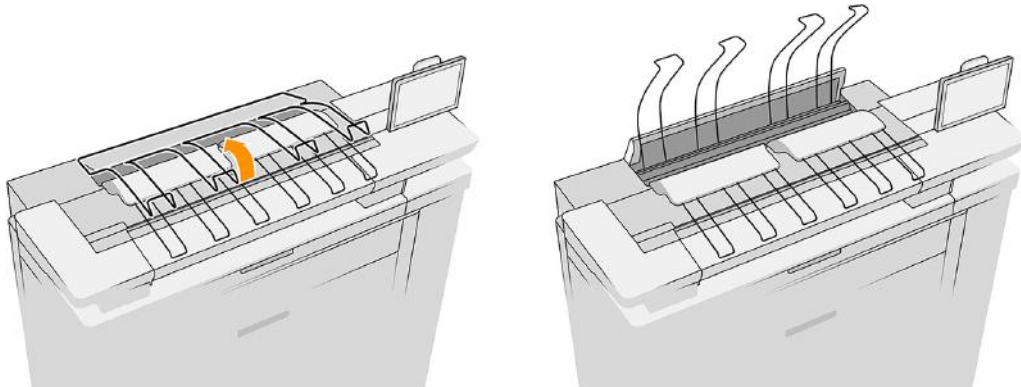
The following steps provide the complete procedure for this topic.

1. Ensure that all ink cartridges are at least 25% full.

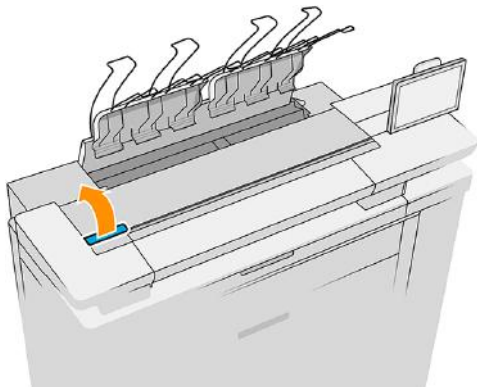
2. Start the printhead replacement from the front panel: tap , then the **Printhead** tab, then **Replace**.
3. Locate the top-stacker cover, if you have one.



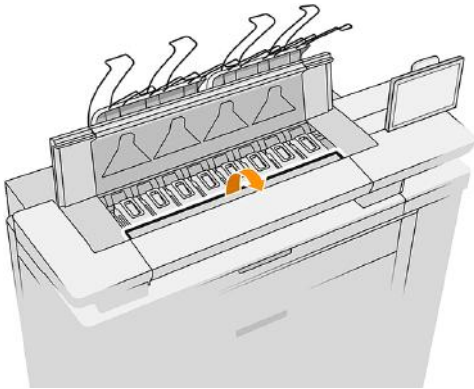
4. Open the top-stacker cover, if you have one.



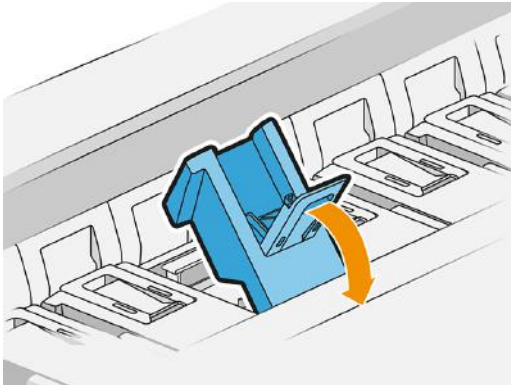
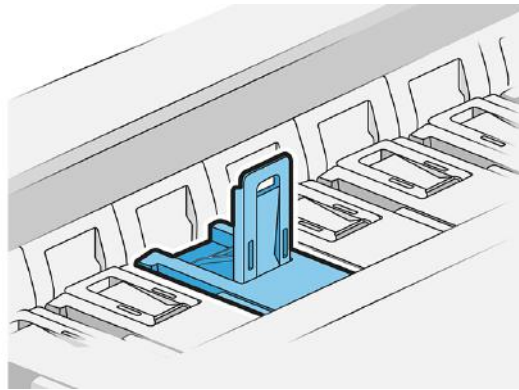
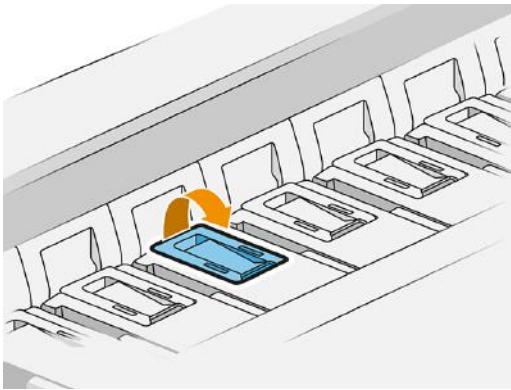
5. Locate and pull the left handle to open the print-bar cover.



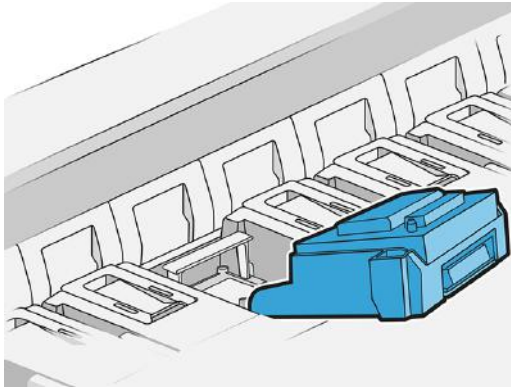
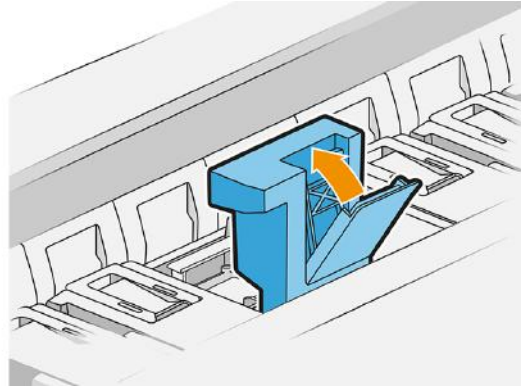
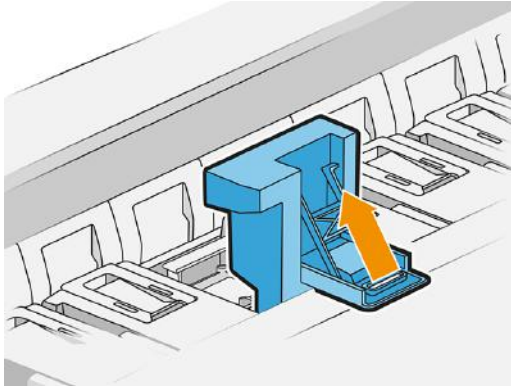
6. Open the internal cover.



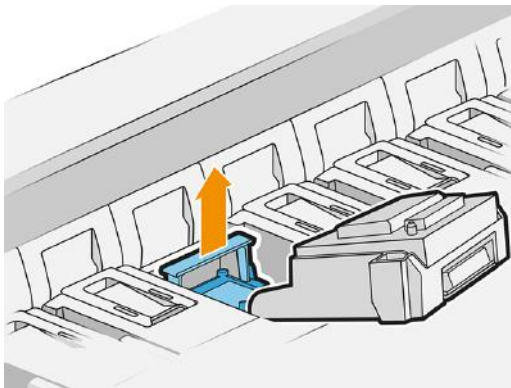
7. Pull the blue handle to open the latch.



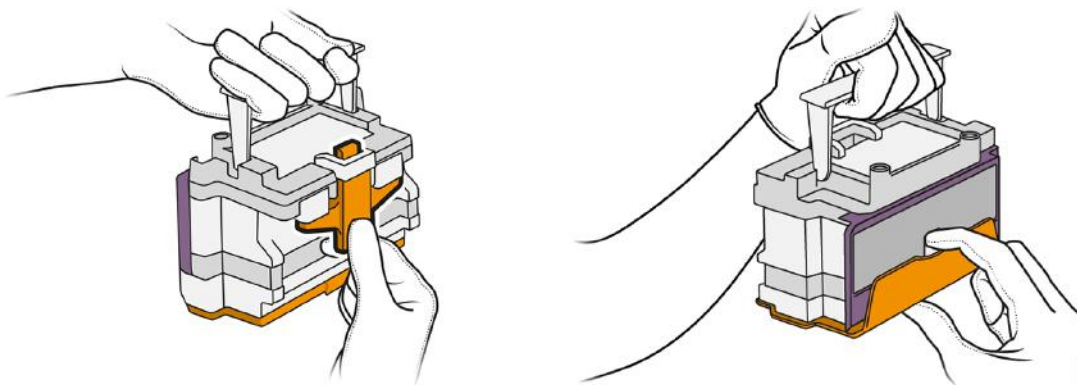
8. Pull the latch to place it on the cover.



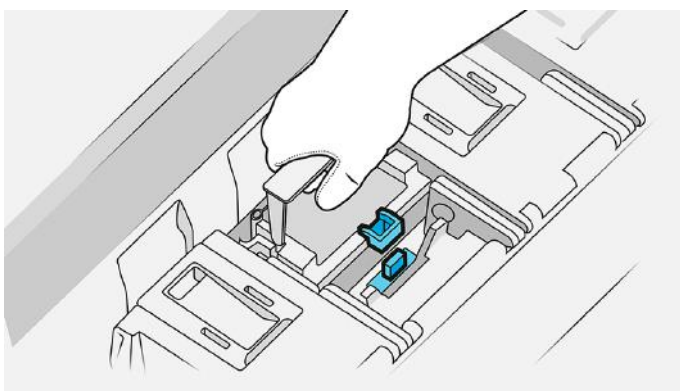
9. Extract the printhead, using the handle.



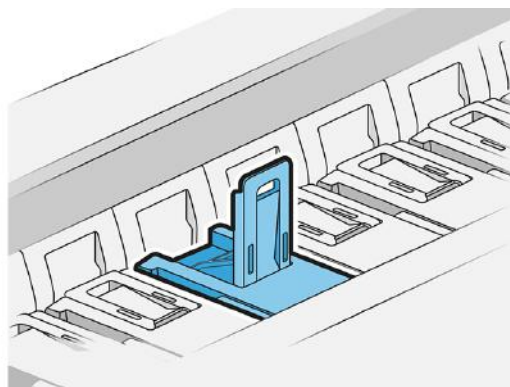
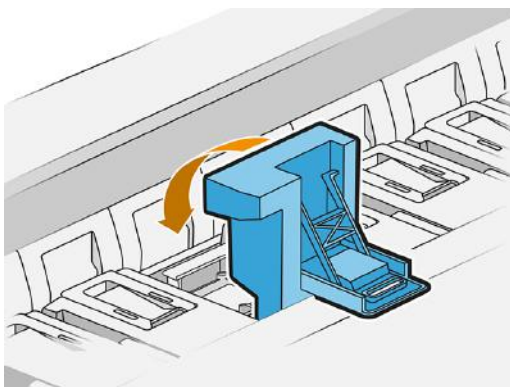
10. Slowly remove the protective caps from the new printhead in the order shown below.



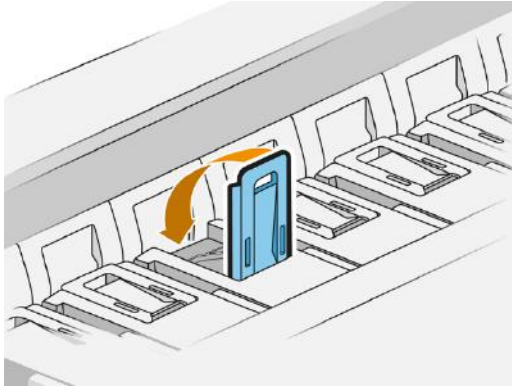
11. Insert the new printhead in the correct orientation, clipping it into place.



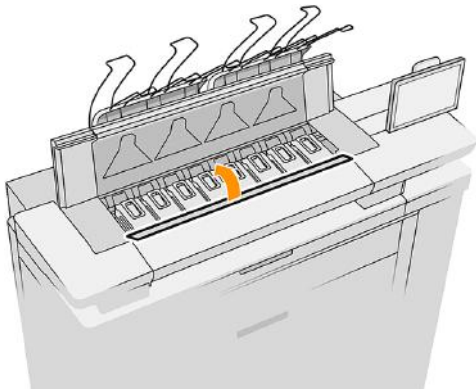
12. Close the latch.



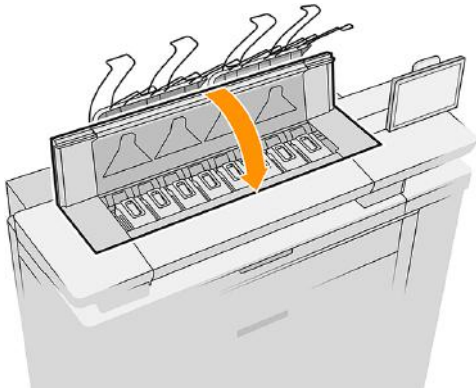
13. Close the blue handle.



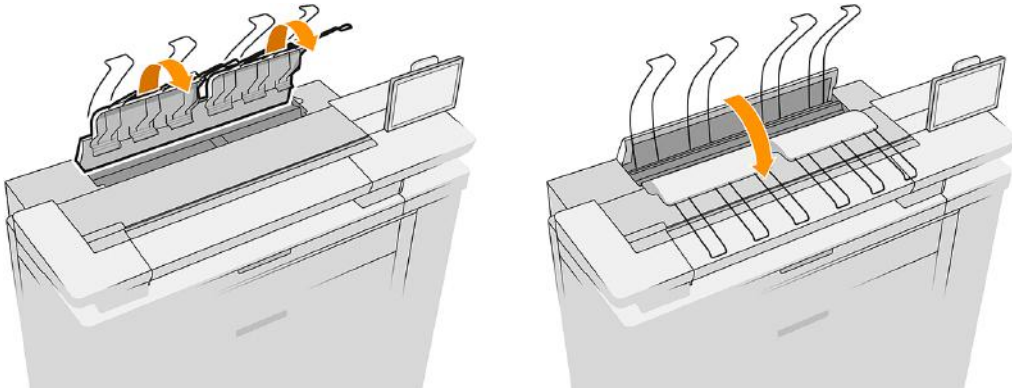
14. Close the internal cover.



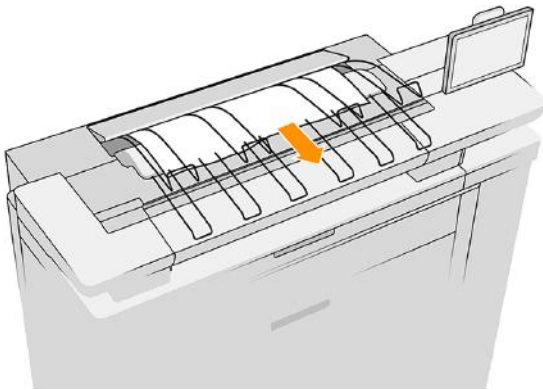
15. Close the print-bar cover.



16. Close the top-stacker cover, if you have one.



17. Empty the top stacker, if you have one.



18. Tap **Continue** and wait about 32 minutes while the printer performs automatic calibrations and checks.
19. Make sure that you comply with all applicable federal, state, and local regulations when disposing of ink system consumables.

Printhead maintenance

The printer and the maintenance cartridge clean the printheads automatically.

Avoid removing printheads unnecessarily.

Printhead troubleshooting

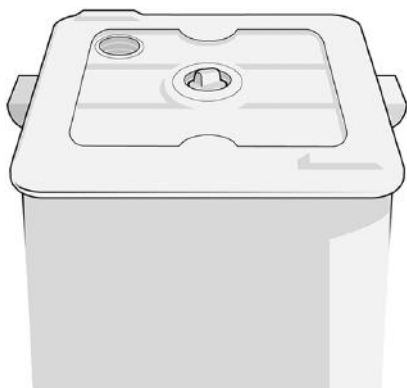
The following steps provide the complete procedure for this topic.

If you have a problem with a printhead, try these suggestions.

1. Check that you have the correct type of printhead (model number).
2. Check that you have removed the orange protective caps from the printhead.
3. Check that the printhead is correctly oriented: compare it with the others.
4. Check that you have closed and latched the printhead cover.
5. If you still have problems when printing, see [Print quality on page 178](#).

Cleaning container

The cleaning container is a replaceable part that collects waste ink in liquid form, with a capacity of about 5.5 liters.



The cleaning container is designed to keep the printer's waste ink from damaging the printer and dirtying its surroundings.

In order to achieve these objectives, you must ensure that it is correctly installed and maintained, changing it when prompted by the front panel.

 **TIP:** You are recommended to wear gloves when replacing the cleaning container.

Always replace the cleaning container with the printer switched on, otherwise the counters may not work properly.

 **IMPORTANT:** After removing the cleaning container, close it with the cap.

If the printer continues operating while the container is incorrectly installed or connected, HP will not be responsible for any resulting damage or cleaning expenses.

You can check the cleaning container status in the front panel.

Cleaning container status

- **Ready**
- **Missing:** The cleaning container is not detected.
- **Almost full:** This is estimated by the printer.
- **Full:** The printer has stopped printing. It will continue after the cleaning container has been replaced.

Cleaning container part number

The HP 874/876 PageWide XL Cleaning Container has the part number 3WW73A.

Replace the cleaning container

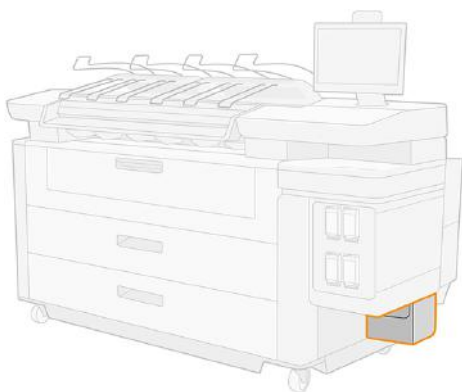
The following steps provide the complete procedure for this topic.

You should replace the cleaning container when requested by the front panel.

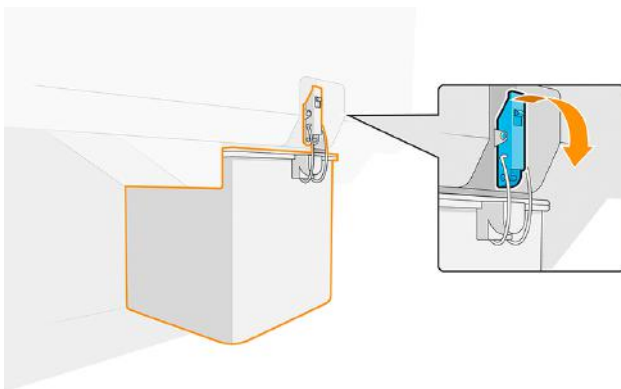


<http://www.hp.com/go/pagewidexl/change-cleaning-container/>

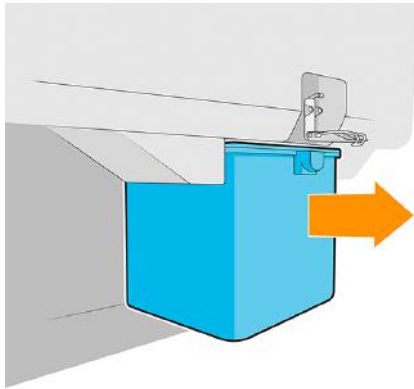
1. At the front panel, tap , then , then **Cleaning container > Replace**.
2. Locate the cleaning container.



3. Open the latch.

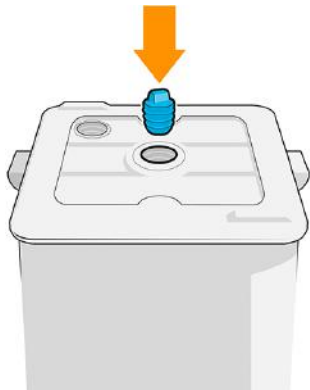


4. Extract the cleaning container: lift up the latch, lift the cleaning container a little, then pull it out.



 **TIP:** If you leave the printer without a cleaning container for long, some drops of liquid may escape and stain the floor. Try to replace it rapidly.

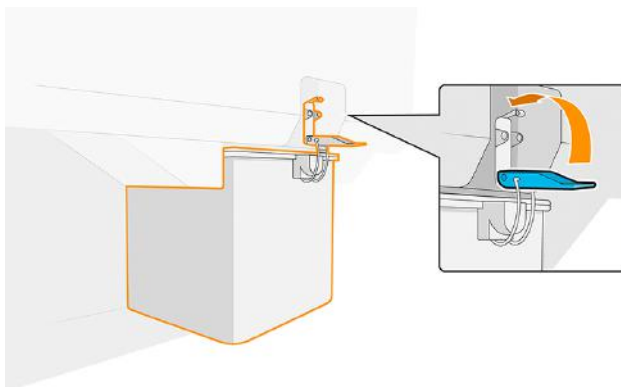
5. Close the cleaning container with the cap.



6. Remove the packaging from the new cleaning container.
7. Lift up the latch, and Insert the new cleaning container in place of the old one.

 **NOTE:** If you insert a cleaning container that has been used in another printer, the **Almost full** warning will be unreliable.

8. Close the latch.



9. The printer checks the installation.
10. Make sure that you comply with all applicable federal, state, and local regulations when disposing of ink system consumables.

Cleaning container troubleshooting

If the cleaning container is correctly installed but the printer does not detect it, first try taking it out and putting it back again. If that fails, take it out, rotate it 180°, and put it back again. If that also fails, contact your service representative.

Maintenance cartridge

The maintenance cartridge cleans and maintains the printheads, and stores waste ink.

The maintenance cartridge contains a roll of cloth, which is used to clean the printheads. It has a total capacity of 500 wipes (cleaning operations). A heavy user will need to replace it about every 2 months.

The printer will refuse to start a print job if it detects the end of the cleaning roll. You should then replace the maintenance cartridge with a new one.

 **TIP:** You are recommended to wear gloves when replacing the maintenance cartridge.

Maintenance cartridge status

- Ready
- Missing
- Almost finished
- Finished


Maintenance cartridge part number

The HP 841/874/876 maintenance cartridge has the part number 3WW99A.

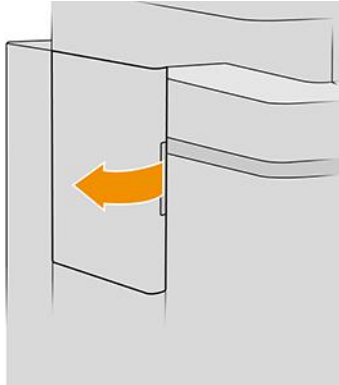
Replace the maintenance cartridge

You should replace the maintenance cartridge when requested by the front panel.



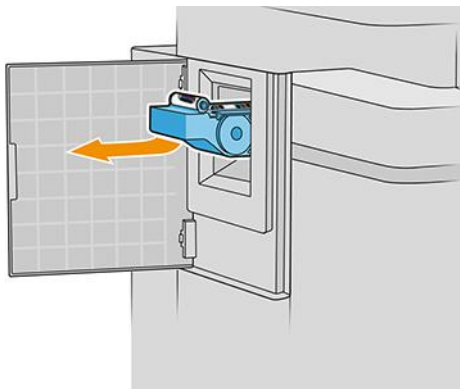
 **IMPORTANT:** Be ready with the new maintenance cartridge before starting the replacement. Once the cartridge is moved to the replacement position, you have 40 seconds to change it. If you exceed that limit, the maintenance cartridge is automatically moved back so that the printheads do not become dry. If the front panel shows an error, close the service door.

1. Remove the packaging from the new maintenance cartridge.
2. Start the replacement from the front panel.
3. When prompted by the front panel, open the maintenance cartridge door.

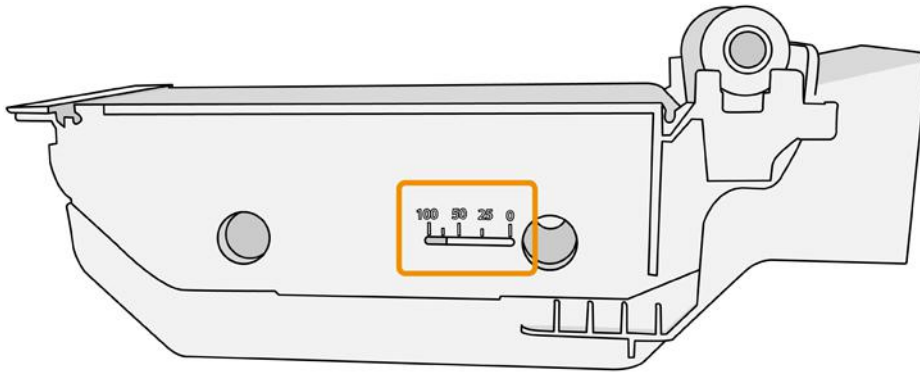


 **IMPORTANT:** When removing a maintenance cartridge, remember that it contains ink. Therefore, wear gloves and hold the cartridge by the handle.

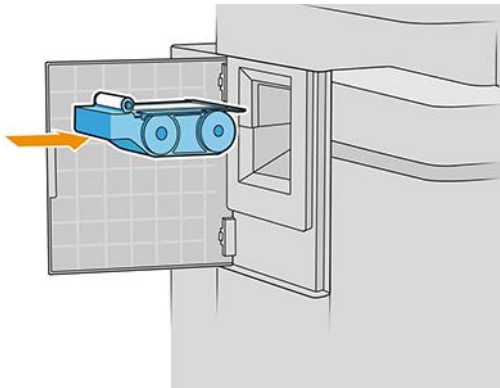
4. To remove the maintenance cartridge, grip the handle and slide it out.



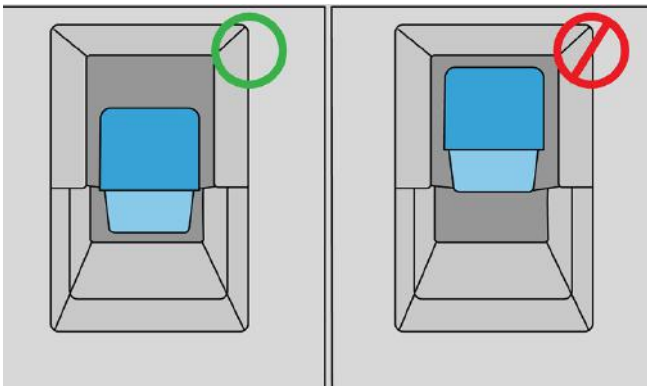
5. If you intend to insert a partially used replacement cartridge, make a note of the percentage of cloth remaining, which is shown approximately on the side of the cartridge. You will be asked for this figure later.



6. Insert the new maintenance cartridge into the slot.



 **IMPORTANT:** Be careful to insert the maintenance cartridge correctly.



7. Push in the maintenance cartridge into place; do not use excessive force.

 **NOTE:** The front panel will not show the new maintenance cartridge until the door is closed.

8. Close the door.
9. Make sure that you comply with all applicable federal, state, and local regulations when disposing of ink system consumables.



NOTE: In order to start printing, the printer needs all the ink cartridges, printheads, and maintenance cartridge to be installed, and the printer window and maintenance cartridge door to be closed.

The front panel asks whether the cartridge is new or used. If used, you are asked to enter the percentage of cloth remaining. This information is used by the printer to estimate when the cartridge will need replacing.

Maintenance cartridge troubleshooting

If the printer does not detect the maintenance cartridge that you have inserted, open the door and make sure the maintenance cartridge is correctly inserted. If this does not solve the problem, contact your service representative.

Safe mode

Under certain conditions, including printer operation outside of environmental specifications, and when a used, refilled, or counterfeit ink cartridge has been detected, the printer will operate in safe mode.

HP is unable to warrant the performance of the printing system when operated outside of environmental specifications or when a used, refilled, or counterfeit ink cartridge is installed. Safe mode is designed to protect the printer and the printheads from damage due to unexpected conditions, and is in operation when the icon is displayed on the printer's front panel and by the Embedded Web Server and HP DesignJet Utility.

For optimal performance, use original HP ink cartridges. HP printing systems, including original HP inks and printheads, are designed and engineered together to provide uncompromising print quality, consistency, performance, durability, and value—with every print.



NOTE: This printer is not designed to use continuous ink systems. To resume printing, remove the continuous ink system and install genuine HP (or compatible) cartridges.



NOTE: This printer is designed for ink cartridges to be used until they are empty. Refilling cartridges prior to depletion might cause your printer to fail. If this happens, insert a new cartridge (either genuine HP or compatible) to continue printing.



NOTE: This printer uses dynamic security, which may be updated periodically by firmware updates. The printer is intended to be used solely with cartridges using an original HP chip. Cartridges using a non-HP chip may not function or may cease to function. More at: <http://www.hp.com/learn/ds/>.

Disposal instructions


HP provides many free and convenient ways to recycle your used original HP ink supplies.


Additionally, HP provides a free program for business customers to return signage printed using selected eligible and recyclable HP large-format papers. For more information about these HP programs, see the HP website: <http://www.hp.com/recycle/>. See also the video: <http://www.hp.com/go/pagewidexl/recycle-ink/>.



For your printer, the following items can be recycled through the HP Planet Partners program:

- Ink cartridges
- HP PageWide XL printheads
- HP recyclable large-format papers

 **NOTE:** Visit the HP website <http://www.hp.com/recycle/> for details of the HP Planet Partners program: features, availability, and how to participate. The program may not be available in your area. Where this program is not available, consult the Material Safety Data Sheet (MSDS) available at the HP website <http://www.hp.com/go/ecodata/> to determine the appropriate method of disposal.

 **NOTE:** Recyclable HP papers can be recycled through commonly available recycling programs, or according to region-specific practices. Some HP papers are eligible for return through the HP Large Format Media takeback program, which may or may not exist in your area. See the HP website <http://www.HPLFMedia.com/hp/ecosolutions/> for details.

4 Networking

The following sections provide details for this topic.

Introduction

The printer provides a single RJ-45 connector port for a network connection.

In order to meet Class B limits, the use of shielded I/O cables is required.

The embedded Jetdirect print server supports connection to IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet and 802.3ab 1000Base-T Gigabit Ethernet compliant networks. When connected and powered on, the printer auto-negotiates with your network to operate with a link speed of 10, 100, or 1000 Mbps, and to communicate using full- or half-duplex mode. However, you can manually configure the link using the printer's front panel, or through other configuration tools once network communication is established.

The printer can support multiple network protocols simultaneously, including TCP/IPv4 and TCP/IPv6. For security, it includes features to control IP traffic to and from the printer and supports configuration of IP Security (IPsec) protocols.

Control network protocols

The printer can simultaneously support multiple network communication protocols. This allows network computers that may be using different protocols to communicate with the same printer.

Each protocol may require some configuration before the printer can communicate on the network. For some protocols, required parameters are automatically sensed and user-specified settings are not needed. However, for other protocols, there may be many parameters to configure.

Enable or disable network protocols

If a network protocol is enabled, the printer may actively transmit on the network even when there are no computers on the network that use the protocol. To eliminate unnecessary network traffic, you can disable unused protocols.



Disabling unused protocols allows you to:

- Reduce network traffic by eliminating broadcast messages from unused protocols
- Provide better control over who prints to the printer by eliminating users from other networks who might route print jobs to this printer
- Display protocol-specific error conditions for enabled protocols only

To disable unused protocols through the device's control panel menu, see [Front-panel menu items on page 100](#). For other tools, such as system command access to the embedded Telnet server, see the *HP Jetdirect Print Server Administrator's Guide* for your print server model.

Front-panel menu items

There are various networking options that can be changed from the front panel.

To access the printer network configuration settings, go to the front panel and tap , then , then **Gigabit Ethernet**.

Front-panel menu items

Menu item	Sub-menu item	Sub-menu item	Values and description
Information	Print Sec Report		Yes: Prints a report.
			No (default): Does not print a report.
TCP/IP	Host Name		An alphanumeric string, up to 32 characters, used to identify the device. This name is listed on the HP Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.
	IPv4 Settings	Config Method	Specifies the method that TCP/IPv4 parameters will be configured on the HP Jetdirect print server.
			Bootp: Use BootP (Bootstrap Protocol) for automatic configuration from a BootP server.
			DHCP (default): Use DHCP (Dynamic Host Configuration Protocol) for automatic configuration from a DHCPv4 server. If selected and a DHCP lease exists, DHCP Release and DHCP Renew menus are available to set DHCP lease options.
			Auto IP: Use automatic link-local IPv4 addressing. An address in the form 169.254.x.x is assigned automatically.
			Manual: Use the manual settings menu to configure TCP/IPv4 parameters.
		DHCP Release	This menu appears if Config Method was set to DHCP and a DHCP lease for the print server exists.
			No (default): The current DHCP lease is saved.
			Yes: The current DHCP lease and the leased IP address are released.
	DHCP Renew		This menu appears if Config Method was set to DHCP and a DHCP lease for the print server exists.
			No (default): The print server does not request to renew the DHCP lease.
			Yes: The print server requests to renew the current DHCP lease.
	Manual Settings		(Available only if Config Method is set to Manual) Configure parameters directly from the printer control panel:
			IP Address: The unique IP address of the printer (n.n.n.n).
			Subnet Mask: The subnet mask for the printer (n.n.n.n).
			Default Gateway: The IP address (n.n.n.n) of the gateway or router used for communications with other networks.
			Syslog Server: The IP address of the syslog server (n.n.n.n) used to receive and log syslog messages.

Front-panel menu items (continued)

Menu item	Sub-menu item	Sub-menu item	Values and description
			Idle Timeout: The time period, in seconds, after which an idle TCP print data connection is closed (default is 270 seconds, 0 disables the timeout).
		Default IP	Specify the IP address to default to when the print server is unable to obtain an IP address from the network during a forced TCP/IP reconfiguration (for example, when manually configured to use BootP or DHCP). Auto IP: A link-local IP address 169.254.x.x is set. Legacy: The address 192.0.0.192 is set, consistent with older HP Jetdirect devices.
		Primary DNS	Specify the IP address (n.n.n.n) of a Primary DNS Server. NOTE: This item appears only if Manual configuration is a higher priority than DHCP in the Config Precedence table, configured through the embedded Web server.
		Secondary DNS	Specify the IP address (n.n.n.n) of a Secondary Domain Name System (DNS) Server. NOTE: This item appears only if Manual configuration is a higher priority than DHCP in the Config Precedence table, configured through the embedded Web server.
IPv6 Settings	Enable		Use this item to enable or disable IPv6 operation on the print server. Off: IPv6 is disabled. On (default): IPv6 is enabled.
	Address		Use this item to manually configure an IPv6 address. Manual settings: Use the Manual settings menu to enable and manually configure a TCP/ IPv6 address. Enable: Select this item and choose On to enable manual configuration, or Off to disable manual configuration. Address: Use this item to type a 32 hexadecimal digit IPv6 node address that uses the colon hexadecimal syntax.
	DHCPv6 Policy		Router Specified: The stateful auto-configuration method to be used by the print server is determined by a router. The router specifies whether the print server obtains its address, its configuration information, or both from a DHCPv6 server. Router unavailable: If a router is not available, the print server should attempt to obtain its stateful configuration from a DHCPv6 server. Always: Whether or not a router is available, the print server always attempts to obtain its stateful configuration from a DHCPv6 server.
	Primary DNS		Use this item to specify an IPv6 address for a primary DNS server that the print server should use. NOTE: This item appears only if Manual configuration is a higher priority than DHCP in the Config Precedence table, configured through the embedded Web server.
	Secondary DNS		Use this item to specify an IPv6 address for a secondary DNS server that the print server should use. NOTE: This item appears only if Manual configuration is a higher priority than DHCP in the Config Precedence table, configured through the embedded Web server.
Web Proxy	Proxy Server		Specifies the proxy server to be used by embedded applications in the device. A proxy server is typically used by network clients for Internet access. It caches Web pages, and provides a degree of Internet security, for those clients. To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.

Front-panel menu items (continued)

Menu item	Sub-menu item	Sub-menu item	Values and description
			For some networks, you may need to contact your Independent Service Provider (ISP) for the proxy server address.
		Proxy Port	Type the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on your network, and can be a value from 0 to 65535.
Security	Print Sec Page		Yes: Prints a page that contains the current IPsec security settings on the HP Jetdirect print server. No (default): A security settings page is not printed.
	Secure Web		For configuration management, specify whether the embedded Web server will accept communications using HTTPS (Secure HTTP) only, or both HTTP and HTTPS. HTTPS (Required): For secure, encrypted communications, only HTTPS access is accepted. The print server will appear as a secure site. HTTP/HTTPS (Optional): Access using either HTTP or HTTPS is permitted. NOTE: The factory default setting depends on the print server model.
	IPSEC		Specify the IPsec or Firewall status on the print server. Keep: IPsec/Firewall status remains the same as currently configured. Disable: IPsec/Firewall operation on the print server is disabled.
	802.1x		
	Enable Wipe		
	Reset Security		Specify whether the current security settings on the print server will be saved or reset to factory defaults. No (default): The current security settings are maintained. Yes: Security settings are reset to factory defaults.
Link Speed			The link speed and communication mode of the print server must match the network. The available settings depend on the device and installed print server. Select one of the following link configuration settings: CAUTION: If you change the link setting, network communications with the print server and network device might be lost. Auto (default): The print server uses auto-negotiation to configure itself with the highest link speed and communication mode allowed. If auto-negotiation fails, either 100TX HALF or 10TX HALF is set depending on the detected link speed of the hub/switch port. (A 1000T half-duplex selection is not supported.) 10T Half: 10 Mbps, half-duplex operation. 10T Full: 10 Mbps, Full-duplex operation. 10T Auto: Limits auto-negotiation to a maximum link speed of 10 Mbps. 100tx Half: 100 Mbps, half-duplex operation. 100tx Full: 100 Mbps, full-duplex operation. 100tx Auto: Limits auto-negotiation to a maximum link speed of 100 Mbps. 1000 Full: 1000 Mbps, full-duplex operation.

Link configuration methods

The printer can usually configure itself automatically to communicate over a network. Otherwise, you can configure it manually.

It supports 10, 100, or 1000 Mbps network link speeds using full-duplex or half-duplex communication modes (a 1000T half-duplex selection is not supported).

When connecting to network hubs and switches that do not support auto-negotiation, the printer will configure itself for 10 Mbps or 100 Mbps half-duplex operation. For example, when connected to a non-negotiating 10 Mbps hub, the print server will automatically set itself to operate at 10 Mbps half-duplex.

If the printer cannot connect to the network through auto-negotiation, you can set the link setting by one of the following methods:

- The front panel
- The Embedded Web Server
- The Telnet interface, through a system command prompt
- A TFTP (Trivial File Transfer Protocol) configuration file that is downloaded, for example, from a BootP or DHCP server
- Network management tools such as HP Web Jetadmin


Troubleshooting

If your printer fails to communicate with your network or with your printer software, try the following suggestions.

IO Configuration page

The IO Configuration page provides comprehensive print server status. It is an important diagnostic tool, especially if network communications are not available.

For a description of messages that may appear on the IO Configuration page, see the *HP Jetdirect Print Servers Administrator's Guide* for your print server model.

To print the IO Configuration page, go to the front panel and tap , then **Connectivity > Print Connectivity Configuration**.

To verify correct operation:

1. Print an IO Configuration page to check for status messages.
2. In the upper section of the IO Configuration page, look for the status message **I/O Card Ready**.
3. If **I/O Card Ready** appears, the print server is operating properly. Proceed to the next section.



If a message other than **I/O Card Ready** appears, try the following:

- a. Turn the printer off and then on again to re-initialize the print server.
- b. Check that the status indicator lights (LEDs) are providing proper status.

See the *HP Jetdirect Print Servers Administrator's Guide* for your print server model to interpret and troubleshoot other messages.

Reset network parameters

If you accidentally misconfigured the printer's network settings, you can reset them to the factory default values.

Tap , then  at the top of the page, then **Network** > **Restore factory settings**.

CAUTION: A factory-installed HP Jetdirect X.509 certificate will be saved during reset to factory default values. However, a Certificate Authority (CA) certificate that has been installed by the user to validate a network authentication server will not be saved.

Link troubleshooting

You can detect and fix a failure to link to the network.

The printer has status lights (LEDs) beside the network connector that indicate the link status and network activity.

- When the green light is on, the printer has successfully linked to the network.
- When the yellow light is blinking, there is network transmission activity.

If the printer does not successfully connect to the network:

- Both LEDs will be off.
- **LAN Error – Loss of Carrier** will be indicated on the IO Configuration page.

In this situation, try the following:

1. Check the cable connections at both ends.
2. Consider replacing the cables by known good ones.
3. Consider switching to another network connector in the network switch, hub, or device to which the printer is connected.
4. Manually configure the link setting to match the port configuration of the network hub or switch. For manual configuration methods, see [Link configuration methods on page 103](#). Turn the printer off, then on again, to re-initialize the setting.
5. Print an IO Configuration page and check link settings.

Link settings

Item	Description
Port Config	If the printer is properly linked, this item has one of the following values: <ul style="list-style-type: none">• 10BASE-T HALF: 10 Mbps, half-duplex• 10BASE-T FULL: 10 Mbps, full-duplex• 100TX-HALF: 100 Mbps, half-duplex• 100TX-FULL: 100 Mbps, full-duplex• 1000TX FULL

Link settings (continued)

Item	Description
	<p>If the printer is not properly linked, one of the following messages will appear:</p> <ul style="list-style-type: none">• UNKNOWN: The printer is in an initialization state.• DISCONNECTED: A network connection has not been detected. Check network cables. Reconfigure the link settings, or restart the printer.
Auto Negotiation	<p>Indicates whether auto-negotiation for link configuration is on or off.</p> <ul style="list-style-type: none">• ON (default): The printer will attempt to automatically configure itself onto the network at the proper speed and communication mode.• OFF: You must manually configure the link speed and communication mode using the front panel. Your settings must match those of the network for proper operation.

6. In case of doubt or misconfiguration of link settings, reset the network parameters to their factory settings. See [Reset network parameters on page 104](#).

Communication failures between computer and printer

Sometimes your printer may be connected to the network, but not to your computer.

Some symptoms are:

- The front-panel display does not show the **Received jobs** message when you have sent jobs to the printer.
- Your computer displays an error message when you are trying to print.
- Your computer or printer hangs (stays idle), while communication is taking place.
- Print jobs get stuck in your computer's print spooler.
- Your printed output shows random or inexplicable errors (misplaced lines, partial graphics, and so on).


To solve a communication problem:

- Ensure that you have selected the correct printer when sending your job.
- Ensure that the printer works correctly when printing from other applications.
- If your printer is connected to your computer through any other intermediate devices, such as switch boxes, buffer boxes, cable adapters, or cable converters, try using it when connected directly to your computer.
- Try another network cable.
- Remember that very large prints may take some time to receive, process, and print.
- If your printer displays warning or error messages that require action, take the required action before trying to print.

Cannot access the Embedded Web Server

The following steps provide the complete procedure for this topic.

If you cannot access the Embedded Web Server from your computer, try these suggestions.

1. If you have not done so already, read [Embedded Web Server on page 16](#).
2. Make sure that Embedded Web Server functionality is enabled in the printer: from the front panel, tap , then **Security > Connectivity > Embedded Web Server (EWS) > On**.
3. Check the proxy configuration in your Web browser in case it is preventing communication with the printer.
4. Ensure that the printer works correctly when printing or accessed from other applications.
5. If the printer displays warning or error messages that require further action, take the action to resolve the problems.
6. If all else fails, turn the printer off and on again with the power key on the front panel.

Cannot access the printer from the HP DesignJet Utility

If the HP DesignJet Utility cannot access your printer, try these suggestions.

1. If you have not done so already, read [HP DesignJet Utility \(Windows only\) on page 16](#).
2. From the front panel, tap , then **Security > Web services > Printing & management**, and make sure that it is enabled. If it is disabled, some parts of the HP DesignJet Utility may not work properly.

Print jobs take too much time to be received by the printer

Very large prints may take some time to receive, process, and print. However, if the delay seems excessive, try these suggestions.

- Make sure the network cable connected to the printer is rated at least Cat5e.
- Make sure that gigabit-speed networking equipment and cabling interconnects your computer client to the printer.
- Make sure that there are no network link issues. See [Link troubleshooting on page 104](#).
- Take into account that, in network deployments with IPSec security protocols enabled and configured in the printer, network performance may be reduced due to the use of cryptographic algorithms to protect network communications.
- If you experience low-performance network issues when using tools such as HP SmartStream or third-party RIPs, check that the RIP printing service and high-speed printing ports 9101 and 9102 are enabled in **Embedded Web Server > Networking > Other settings > High-speed RIP mode > Enable high-speed mode**.
- Try resetting the network configuration to its factory settings in order to get default settings that are suitable for most standard network environments. See [Reset network parameters on page 104](#).
- You may also find it helpful to test connecting the computer to the printer directly, using a normal Ethernet (Cat5e or Cat6) cable point-to-point, without passing through an Ethernet switch or router. In this configuration, the printer and the computer should both automatically change their IPv4 addresses to the form 169.254.x.x. In this point-to-point configuration you can discard any issues caused by other network equipment.

5 Security

The following sections provide details for this topic.

HP Connection Inspector

HP Connection Inspector is a new intelligent embedded security feature. The technology is unique in that it can inspect outbound network connections typically abused by malware, determine what is normal and stop suspicious activity. If the printer is compromised, it can automatically trigger a restart to initiate self-healing procedures.

Enable/disable the Connection Inspector

In the Embedded Web Server, click **Networking** > **TCP/IP settings** > **Network identification**.

See the *HP Connection Inspector Technical White Paper* at <http://h10032.www1.hp.com/ctg/Manual/c05818653> for more information.

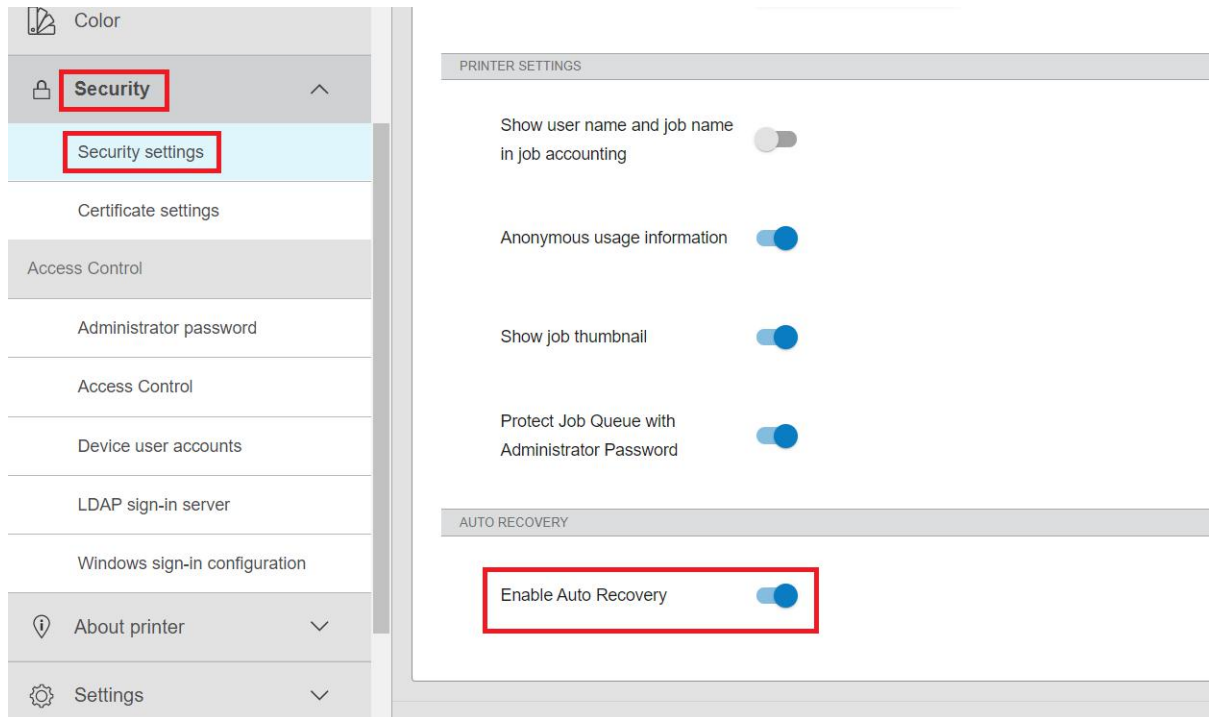
Enable/disable auto-recovery

This topic provides a full set of reference information for this subject.

If the Connection Inspector detects a severe incident, the printer can respond in two different ways:

- When auto-recovery is enabled, it recovers automatically by restarting itself. In this case, all printing and scanning operations are terminated.
- When auto-recovery is disabled, it displays a system error and recommends contacting a service representative.

You can enable or disable auto-recovery in the Embedded Web Server by clicking **Security** > **Security settings** > **Enable auto-recovery**.




Access control

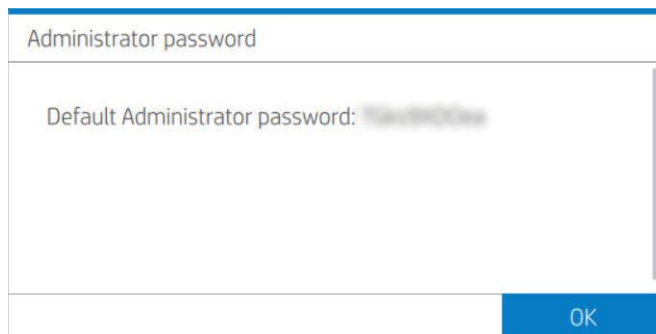
The printer administrator can use passwords to control access to specific features of the printer.

Administrator password

The administrator password gives access to the security and configuration settings of the printer.

Default administrator password

Your printer comes with a default administrator password. To find out what it is, go to the front panel and tap , then **Security** > **Administrator password**. You should see something like this.




Alternatively, tap , then **Printer information card**. You should see something like this.

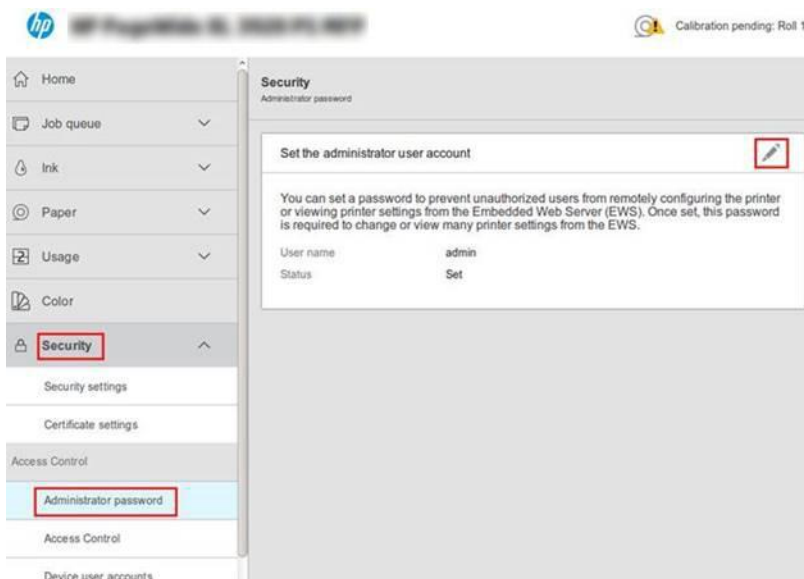
Printer Information	
PRODUCT NAME HP PageWide XL 3920 PS MFP	
SERIAL NUMBER XXXXXXXXXX	PRODUCT NUMBER 4VW11A
SERVICE ID 29300	ADMINISTRATOR PASSWORD [REDACTED]
DATE 2020/07/15	

How to change the administrator password

HP recommends that you change the password to one of your own choice.

 **NOTE:** The administrator password cannot be left blank.

To change the password, go to the Embedded Web Server and click **Settings** > **Security** > **Administrator password**, then click .



If you forget the password

If you forget the administrator password, contact a service representative and ask for it to be reset to the default password. You cannot do this yourself.

Access control permissions will also be reset to the default values.

Access control tab

In the Embedded Web server you can set sign-in requirements for specific tasks, and restrict access by users who have not signed in (guests) to specific features. Permissions can be applied to local user accounts stored on the printer.

Device user accounts

In the Embedded Web Server's **Device user accounts** tab, the administrator can create new printer user accounts and assign them specific permissions depending on their role.

To create a new device user account, click the **+** at the top of the page. Now fill in the fields **Name**, **Email**, **User access code** and the permission set. Click **Apply** to create the new account.

Share the access code with the user. When using device user accounts, users sign in to the device using an access code.

New device user account

NAME * 0 / 63

EMAIL 0 / 127

USER ACCESS CODE * 33612861 8 / 8

NETWORK USER NAME (FULLY QUALIFIED) 0 / 63

PERMISSION SET * Device user

Cancel Apply

LDAP—sign-in server

The Lightweight Directory Access Protocol (LDAP) is an open, industry-standard application protocol for accessing and maintaining distributed directory information services.

Information needed before starting

Ensure that you have the following information before starting the configuration:

- Server address (hostname or IP)
- Server authentication requirements
- Path to start search (BaseDN, Search Root) (for example, `o=mycompany.com`)
- Attributes for matching the name entered (such as `cn` or `samAccountName`), retrieving the email address (such as `mail`), and how the name will be displayed on the control panel (such as `displayName`)

Setup

The following steps provide the complete procedure for this topic.

In the Embedded Web Server, click **Settings** > **LDAP sign-in server**.

1. Enable the LDAP server (mandatory to continue with the LDAP configuration).
2. In the network directory server section, enter the name of the LDAP server address (for example, `ldap.mycompany.com`) and **Port**.
 - If you do not know the LDAP server, contact the server administrator.
 - If you want to enable a secure (SSL) connection, enable the toggle **Use a secure connection (SSL)**.

3. In the server authentication requirements section, you can select the appropriate authentication type in the server (use printer user's credentials, use LDAP administrator's credentials). You must fill in the domain name, username, and password.
4. In the LDAP database search settings section, fill in these fields:
 - In the **Bind and search root** enter the path to start searching the database (for example, `o=mycompany.com`).
 - In the **Retrieve the printer user's name using this attribute** box, enter the name of the attribute that contains the person's name (for example, `displayName`).
 - In the **Match the name entered with this attribute** box, enter the name of the attribute whose content should be matched with the username type during sign-in.
 - In the **Retrieve the user's email address using this attribute** box, enter the name of the attribute that contains the person's email address (for example, `mail` or `rfc822Mailbox`).
 - In the **Retrieve the printer user group using this attribute** box, enter the name of the attribute that contains the groups to which the person belongs.
5. Click the **Apply** button to save the settings. Setup is complete.
6. To check that the LDAP retrieval is set up correctly, enter at least three characters of a network contact name in the **Test** box, and then click the **Test** button. If the test is successful, a message is displayed.

Windows sign-in configuration

Configure the Windows sign-in process.

Information needed before starting

Ensure that you have the following information before starting the configuration:

- Windows domain
- Attributes for matching the name entered (such as `cn` or `samAccountName`), retrieving the email address (such as `mail`), and how the name will be displayed on the control panel (such as `displayName`)

Setup

The following steps provide the complete procedure for this topic.

In the Embedded Web Server, click **Settings** > **Windows sign-in configuration**.

1. Enable Windows sign-in status (mandatory to continue with Windows sign-in configuration).
2. Enter the name of the default Windows domain (for example, `mycompany.com`).
 - If you do not know the Windows domain, contact the server administrator.
 - If you want to enable a secure (SSL) connection, enable the toggle **Use a secure connection (SSL)**.
3. In the **Match the name entered with this attribute** box, enter the name of the attribute; its content should be matched with the username type during sign-in.
4. In the **Retrieve the user's email address using this attribute** box, enter the name of the attribute that contains the person's email address (for example, `mail` or `rfc822Mailbox`).

5. In the **Retrieve the printer user's name using this attribute** box, enter the name of the attribute that contains the person's name (for example, `displayName`).
6. Click the **Apply** button to save the settings. Setup is complete.
7. To check that the LDAP retrieval is set up correctly, enter at least three characters of a network contact name in the **Test** box, and then click the **Test** button. If the test is successful a message is displayed.

Certificate management

You can configure the printer's identity certificate, and the list of trusted certification authorities (CA), in **EWS > Settings > Certificate settings**. These certificates are used to establish trusted and secure connections with external servers.

Other Embedded Web Server security settings

In the Embedded Web Server menu **Security > Security Settings**, you can customize your printer if you enable or disable features from the list below. A feature is no longer available after it has been disabled.

- Change the firmware update settings: Enable or disable **Firmware updates sent as print jobs** and **Firmware update from USB**.
- Enable or disable the use of USB drives for mass storage.
- Protect stored data. See [Secure File Erase on page 196](#) and [Disk Wipe on page 197](#).
- Enable or disable other printer settings such as **Show user name and job name in job accounting**, **Anonymous usage information**, and **Show job thumbnail and download job file remotely**.

Front-panel security settings

This topic explains the concepts involved in this subject.

From the front panel, you can tap  then **Security**, to control some of the features of the printer:

- **User sessions**: Enable or disable automatic log-out after 1, 3, or 5 minutes.
- **Embedded Web Server**: Enable or disable the Embedded Web Server.
- **Printing & management Web services**: Enable or disable Web services that are used by printing and management tools such as the HP Utility, HP Click, and SDK for RIPs.

If an administrator password has been set, it must be given in order to perform the following operations:

- Change the security settings (including the administrator password itself).
- Change the configuration of the Internet connection.
- Change the automatic firmware update configuration.
- Enable or disable automatic downloading and/or installation of automatic firmware updates.
- Restore an earlier firmware version.

- Reset factory defaults.




NOTE: The administrator password can contain only characters that appear on the front panel's on-screen keyboard. If you set a new password with the Embedded Web Server, it will reject characters that do not appear in that limited character set.

Job-storage security options

Use **Required account ID** and **Encrypted PIN printing** to control who has access to your printer and confidential documents.

Required account ID

If you want to keep records of printer usage by different users, you can set your printer to require an account ID for each job. At the front panel, tap , then **Job management** > **Account ID required**.

If this setting is turned on, the account ID field will be mandatory and jobs with no account ID will be kept on hold for accounting.

The account ID can be set in the printer driver when sending the job. If the job is set on hold for accounting by the printer, you can introduce the account ID in the driver or front panel, by going to the job queue and clicking the job that is on hold. A window with a text box is displayed and you can enter the account ID into it.

Job storage and encrypted PIN printing

Job storage allows jobs to be stored and then printed when required; it also provides features for setting print jobs as *private*, with a personal identification number (PIN).

To access job storage features, open the printer properties, and then click **Printing Preferences**. Click the **Job Storage** tab, where the following job storage features are available:

- **Print and store:** After a job has printed, it is stored in the printer; more copies can then be printed from the front panel.
- **Print and delete:** Once printed, the job is automatically removed from the printer.
- **Retrieve from front panel (personal job):** Use the personal job printing feature to specify that a job cannot be printed until you release it from the printer's front panel.

To preview it in the Embedded Web Server, you will need to enter the PIN.

- **Encrypted PIN printing:** Protect confidential prints, and reduce the risk of leaking sensitive data. Send jobs to print from the driver, encrypted and with a PIN. From the driver, go to the Job storage section, select **Retrieve from front panel (private job)**, enter a 4-digit PIN, then go to the printer, enter the PIN at the front panel, and retrieve the printed job.

Security event logging

The printer can report security event information to a standard syslog server for auditing.

To configure the syslog server and settings, go to the Embedded Web Server and click **Network** > **TCP/IP settings** > **Advanced**.

Ink

Paper

Usage

Security

About printer

Settings

Network

Configuration

TCP/IP Settings

Network Settings

Other Settings

Web Proxy

Security

Settings

Authorization

Secure Communication

Mgmt. Protocols

802.1X Authentication

IPsec/Firewall

Diagnostics

Network Statistics

Protocol Info

Network

TCP/IP Settings

SummaryNetwork IdentificationTCP/IP(v4)TCP/IP(v6)Config.precedenceAdvanced

TCP Idle Timeout

270

(Seconds)

System Contact

System Location

Default IP:

Auto IP (169.254.x.x)

(when BOOTP/DHCP/RARP servers are not available)

☒ Send DHCP requests if IP address is Auto IP (169.254.x.x) or Legacy Default IP

☐ Use Stateless DHCPv4 When Manually Configured

☐ Enable DHCPv4 FQDN compliance with RFC 4702

☐ SLP Client-Mode Only

Hop Limit/WSD

32

(Seconds)

TTL/SLP:

4

Syslog Server

Syslog Protocol

UDP

Syslog Port

514

Syslog Maximum Messages

1000

Syslog Priority

7

(Use '8' to disable.)

6 Sending a job to print

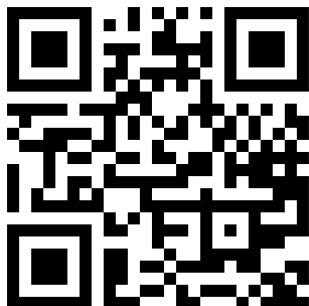
There are various different ways in which you can choose to print, depending on your circumstances and preferences.

- From HP SmartStream: See the HP SmartStream documentation at <http://www.hp.com/go/smartstreampagewidthxl/manuals/>.
- From a printer driver: Print any kind of file from a computer connected to the printer by network, using a software application that can open the file, and a printer driver supplied with your printer. See [Print from the driver on page 115](#).
- From a USB flash drive: Print a file directly from a USB flash drive. See [Print from a USB flash drive on page 121](#).
- From a network folder: See [Print from a network folder on page 122](#).
- From My Home Folder: See [Print from My Home Folder on page 123](#).
- From a RIP: You can use a Raster Image Processor (RIP) program, run on a separate computer, to send jobs to the printer. RIP software is available from various different companies. See your RIP vendor's documentation.
- MFP only: Copy a file. See [Scanning and copying \(MFP only\) on page 137](#).
- Print a file that is already in the job queue. See [Job queue management on page 127](#).

Print from the driver

This is the traditional way of printing from a computer. The correct printer driver must be installed on the computer, and the computer must be connected to the printer by network.

When the printer driver has been installed and the computer is connected to the printer, you can print from a software application by using the application's own **Print** command and selecting the correct printer.



See video: <http://www.hp.com/go/pagewidexl/print-from-driver/>.



NOTE: When first printing, Windows automatically searches for the printer driver on the Internet (if the computer is connected to the Internet). This means that you do not need to search for the driver yourself. However, this process will install the driver without the rest of the software. Therefore, we recommend installation using the install package that you can download from HP's website <http://www.hp.com/go/pagewidexlseries/support/drivers>, so that all of the printer software is installed.

Driver installation

Printer drivers can be installed using the following two different methods.

1. Printer driver installer

The HP printer driver installer can be downloaded from the relevant product page by searching for the printer model at the HP Customer Support Software and Driver Downloads website.

Check <https://support.hp.com/us-en/drivers/printers/>. When you have found the printer model, navigate to the **Driver-Driver Pack** tab, download the printer driver installer, and proceed to install the driver on the computer.



2. Add printer driver wizard

The following steps provide the complete procedure for this topic.


Like the printer driver installer, the add printer driver wizard provides an easy-to-use interface for installing the printer driver. However, unlike the printer driver installer, the add printer driver wizard installs the printer driver only and does not allow the user to install any additional printer software.

Installation with a wired or wireless network connection, and Windows 10 or 8:

1. In Windows, search for and open Control Panel.
2. Click **Devices and Printers**, then click **Add a printer**.
3. In the **Choose a device or printer to add to this PC** window, select your printer, click **Next**, then follow the on-screen instructions to install the driver.

If your printer is not in the list, continue with the following steps.

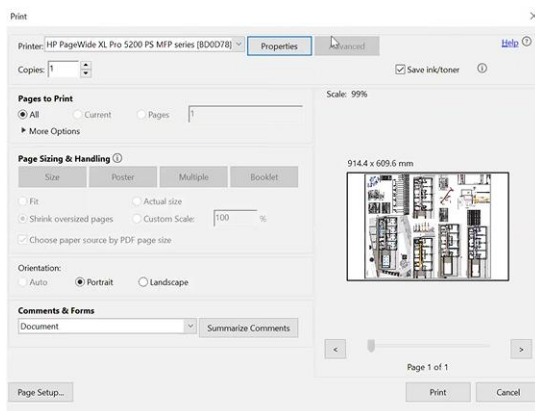
- a. Click **The printer I want isn't listed**.
- b. Click **Add a local printer or network printer with manual settings**.
- c. Click **Next**.
- d. Select the port to be used by your printer, such as USB001 for a USB-connected printer, then click **Next**.
- e. Click **Windows Update**, then wait for the print drivers to update.



- f. Click **HP, Hewlett-Packard**, or **Hewlett Packard** in the **Manufacturer** pane, then click the name of your printer in the **Printers** pane.
 - If your printer is in the list, select it, click **Next**, then follow the on-screen instructions to install the driver.
 - If your printer is not in the list, click the back arrow in the upper left corner of the window twice to return to the **Find a printer by other options** step, then continue with the following steps.
 - g. Select **Add a printer using TCP/IP address or hostname**, then click **Next**.
 - h. Select **Autodetect** from the **Device type** drop-down list.
 - i. Type your printer's IP address into the text box, then click **Next**.
-
-  **TIP:** To find the printer's IP address, print a Wireless Network Test report or a Network Configuration page.
-
- j. Wait for the computer to connect to the printer, then click **Next** to install the print driver.

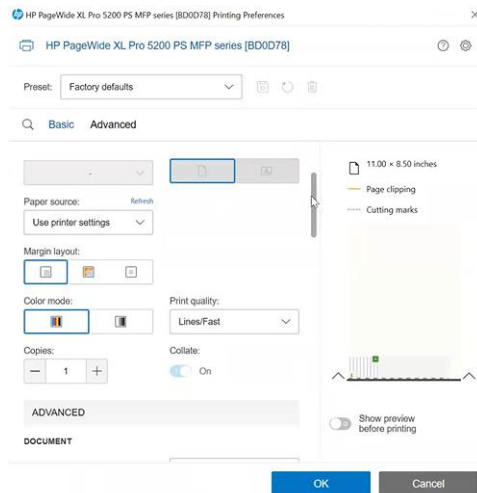
Check and change main driver settings

There are a relatively large number of print settings that you can use when printing with a printer driver, to try to satisfy all requirements.

When printing from an application, you can see the driver settings by clicking **File > Print** and then **Print options** or **Properties** (depending on the application).



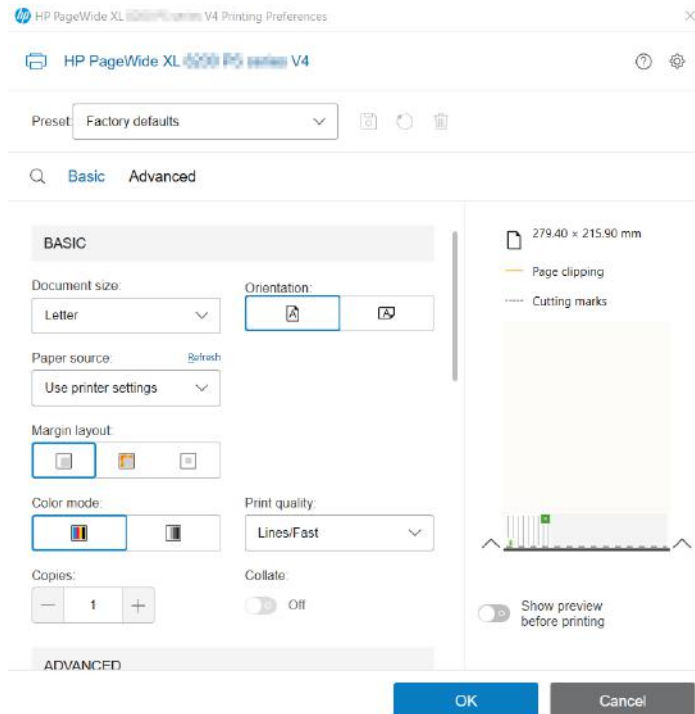
-
-  **TIP:** In general you are recommended to use the default settings unless you know that they do not meet your requirements. The printer will apply its own policies regarding roll and paper to choose the most suitable for your job.
-  **TIP:** Windows only: If you intend to reuse a particular group of settings repeatedly, you can save those settings under a name of your own choice and recall them later. A saved group of settings is known as a *quickset*.
-



The printer drivers support any accessories such as a stacker or folder connected to your printer. The printer's default output is also the driver's default output. However, from the driver you can change the output destination and other options such as the folding style, collation, and first or last page on top.

Basic driver settings

This topic provides a full set of reference information for this subject.



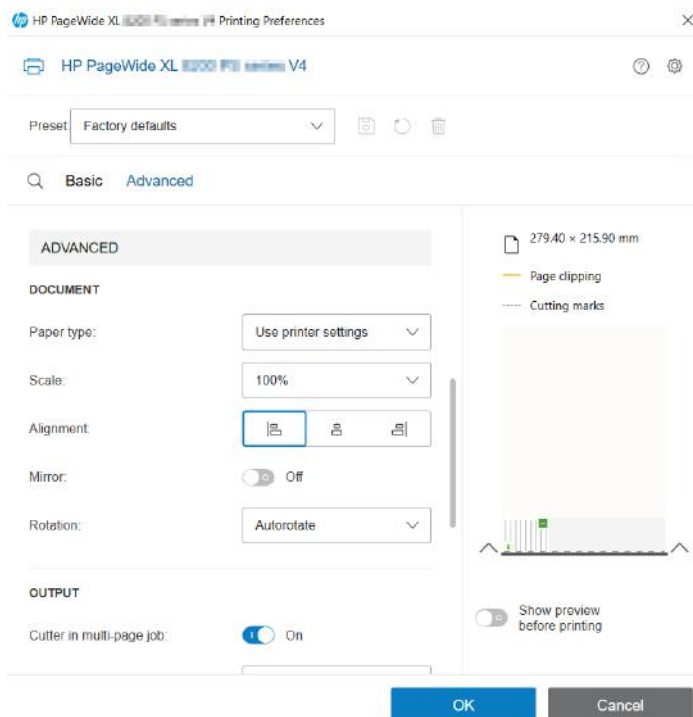
These are the basic operations that can be used in the driver to print a job:

- Document size
- Document orientation
- Margin layout

- Standard: Your image will be printed on a page of the size you have selected, with a narrow margin between the edges of the image and the edges of the paper. The image should be small enough to fit between the margins.
 - Clip content by margins: Your image will be printed on a page of the size you have selected, with a narrow margin between the edges of the image and the edges of the paper. In this case, if the image is the same size as the page, the printer assumes that the extreme edges of the image are either white or unimportant, and do not need to be printed. This may be useful when your image already contains a border.
 - Oversize: Your image will be printed on a page slightly larger than the size you have selected. If you cut off the margins, you will be left with a page of the size you selected, with no margins remaining between your image and the edges of the paper.
 - Borderless: Your image will be printed on a page of the size you have selected, with no margins. The image is slightly enlarged to ensure that no margin is left between the edges of the image and the edges of the paper. By default, the **Horizontal cutter** box is checked. Uncheck it if you want to cut the paper manually.
- Color mode
 - Color: Uses ink from all cartridges for full color prints.
 - Grayscale: Uses ink from both the color and black cartridges to produce a wider range of black and grey tones for high-quality black-and-white prints.
 - Print quality

Advanced driver settings

This topic provides a full set of reference information for this subject.



These are further operations that can be used in the driver to obtain more control over your print. They are divided into five different categories.

Document

- Paper type
- Scale: You can resize the print in two different ways: to a percentage of its original size, or to fit a particular paper size. The default is 100% (its original size).
- Alignment: Left, center, or right
- Mirroring
- Rotation (not available in the macOS raster driver)

Output

- Enable or disable the cutter
- Order the pages
- Printer margins
- Remove blank areas
- Job destination
- Folding style (if you are using a folder)

Color and quality

- Color management
- RGB source profile; color can be managed by the application or the printer
- CMYK source profile (for the PDF driver and macOS PostScript driver)
- Pantone emulation (for the PDF driver and macOS PostScript driver)

Accounting

- You can create an accounting ID for the job.

Storage

- You can assign a user or job name.
- Storage mode
 - **Print and store:** After a job has printed, it is stored in the printer; more copies can then be printed from the front panel.
 - **Print and delete:** Once printed, the job is automatically removed from the printer.
 - **Retrieve from front panel (personal job):** Use the personal job printing feature to specify that a job cannot be printed until you release it from the printer's front panel.

To preview it in the Embedded Web Server, you will need to enter the PIN.

- **Retrieve from front panel (private job):** Use the private printing feature to specify that a job cannot be printed until you release it with a PIN. First, click **Retrieve from front panel (private job)**, after which the **PIN to print** checkbox will be available. If checked, a 4-digit personal identification number must be set. The PIN is sent to the printer as part of the print job. After sending the print job, use the PIN to print the job. Once printed, it is automatically removed from the printer.

To preview it in the Embedded Web Server or on the front panel, you will need to enter the PIN.

Print from a USB flash drive



The following steps provide the complete procedure for this topic.


You can print from a USB flash drive containing one or more TIFF, JPEG, HP-GL/2, RTL, PDF, or PostScript files.

1. Insert the USB flash drive into the printer's USB port.




 **NOTE:** To print PDF or PostScript file, you must have a PostScript printer or install the license (see [Accessories on page 198](#)).

 **NOTE:** The use of USB flash drives with your printer may be disabled by the administrator (see [Security on page 107](#)).

2. At the front panel, go to the home screen and tap , then .

You can tap folders to browse their contents. Files are shown as document thumbnails, and you can preview a file by tapping the preview icon. When the preview is displayed, you can zoom in and out. Files that cannot be printed are indicated with . For more details, tap the **Information** button.


3. Select a file to be printed. A preview of the document is displayed. Multipage documents are supported only in PDF files; in this case, you can also select a page to print.
4. Use the toolbar buttons to zoom in and out to see information about the selected job. You can also choose the predefined zoom modes: fit to screen, pinch to zoom, or original document size. Tap **OK** to proceed to quickset selection.
5. The list of print-from-USB quicksets is displayed. You can choose and/or edit one of the quicksets for the selected job.

 **NOTE:** If you edit a quickset after selecting a job, the changed settings are applied only to the current job and are not saved permanently. You can change any of your own quicksets permanently by tapping  on the quicksets screen, then **Manage quicksets**; or by tapping , then **Quicksets**.


The following settings are available:

- **Quickset name** allows you to name the quickset you are working with.
- **Output scale** allows you to resize the print in two different ways: to a percentage of its original size, or to fit a particular paper size. The default is 100% (its original size).
- **Print quality** allows you to set the print quality to **Lines/Fast**, **Uniform areas**, or **High detail**.
- **Color options** allows you to choose color or grayscale.

- **Black & white** allows you to choose black and white.
- **Paper source** allows you to select a specific paper source, or you can choose **Save paper**, which automatically chooses the narrowest roll on which the print will fit (if more than one roll is loaded).

 **NOTE:** The printer setting **Roll width selection** has two values: **Print on same width only** and **Print on same width or wider**. When **Print on same width only** is selected, each page is printed only on a roll with the same width as the page.


- **Paper category** allows you to choose a paper-type category.
- **Page order** allows you to choose first page on top, or last page on top.
- **Collate** allows you to turn collation on or off.
- **Rotation** allows you to rotate the print by any multiple of 90°, or you can choose **Automatic**, which rotates the print automatically if that will save paper.
- **Printer margins** allows you to change the default printer margins.
- **Storage mode** offers two options, print and delete (the job is not retained in the job queue) and print and store (the job is retained in the job queue).
- **Output destination** allows you to direct output to the stacker (the default, if you have one), the basket, or the folder (if installed).
- **Default folding style** allows you to select the folding style when the folder is installed. To use the folder, you must select **Folder** in the **Output destination** setting.

 **NOTE:** The factory quicksets cannot be modified.




6. When you are satisfied with the quickset settings, tap **Print** to continue.
7. After printing, you can choose to print another file or go to the job queue. If you print another file immediately without returning to the home screen, the temporary settings used for the previous file are used again.

Print from a network folder

The following steps provide the complete procedure for this topic.


1. Confirm that the network folder is configured. See [Configure a network folder on page 27](#).
2. At the front panel, go to the home page and tap .
3. Select **Network folder**.
4. Select a file to be printed. Multipage documents are only supported in PDF; in this case, you can also select a page to print.

5. The list of print-from-Network quicksets is displayed. You can choose and/or edit one of the quicksets for the selected job.

 **NOTE:** If you edit a quickset after selecting a job, the changed settings are applied only to the current job and are not saved permanently. You can change any of your own quicksets permanently by tapping , then **Manage quicksets**, or by tapping , then **Quicksets**.


 **NOTE:** The factory quicksets cannot be modified.


The following settings are available:




- **Quickset name** allows you to name the quickset you are working with.
 - **Print quality** allows you to set the print quality to **Lines/Fast**, **Uniform areas**, or **High detail**.
 - **Output scale** allows you to resize the print in two different ways: to a percentage of its original size, or to fit a particular paper size. The default is 100% (its original size).
 - **Color options** allows you to choose color or grayscale.
 - **Black & white** allows you to choose black and white.
 - **Paper source** allows you to select a specific paper source, or you can choose **Save paper**, which automatically chooses the narrowest roll on which the print will fit (if more than one roll is loaded).
 - **Paper category** allows you to choose a paper-type category.
 - **Page order** allows you to choose first page on top, or last page on top.
 - **Collate** allows you to turn collation on or off.
 - **Rotation** allows you to rotate the print by any multiple of 90°, or you can choose **Automatic**, which rotates the print automatically if that will save paper.
 - **Print margins** allows you to change the default printer margins.
 - **Storage mode** offers two options, print and delete (the job is not retained in the job queue) and print and store (the job is retained in the job queue).
 - **Output destination** allows you to direct output to the stacker (the default, if you have one), the basket, or the folder (if installed).
 - **Default folding style** allows you to select the folding style when the folder is installed. To use the folder, you must select **Folder** in the **Output destination** setting.
6. When you are satisfied with the quickset settings, tap **OK** to continue. You can tap , then **Show quickset details panel** to show the most common quickset settings used.
 7. **Copies**, **Page order**, and **Collate** can be selected in the right column of the screen. Tap **Print** to continue.
 8. After printing, you can choose to print another file or go to the job queue. If you print another file immediately without returning to the home page, the temporary settings used for the previous file are used again.

Print from My Home Folder

The following steps provide the complete procedure for this topic.

 **NOTE:** You need to configure the **LDAP – sign-in server** or **Windows sign-in configuration** to be able to print from **My Home Folder**. See [Configure the email address book on page 32](#) or [Windows sign-in configuration on page 111](#).

1. At the front panel, go to the home page and tap .
2. Select **My Home Folder**.
3. Authenticate with **LDAP – sign-in server** or **Windows sign-in configuration**. Go to **...** at the top of the page and select the option you wish to use for authentication. See [Configure the email address book on page 32](#) or [Windows sign-in configuration on page 111](#).
4. Select a file to be printed. Multipage documents are only supported in PDF; in this case, you can also select a page to print.
5. The list of **print-from-My Home Folder** quicksets is displayed. You can choose and/or edit one of the quicksets for the selected job.

 **NOTE:** If you edit a quickset after selecting a job, the changed settings are applied only to the current job and are not saved permanently. You can change any of your own quicksets permanently by tapping , then **Manage quicksets**, or by tapping , then **Quicksets**.

 **NOTE:** The factory quicksets cannot be modified.

The following settings are available:

- **Quickset name** allows you to name the quickset you are working with.
- **Print quality** allows you to set the print quality to **Lines/Fast**, **Uniform areas**, or **High detail**.
- **Output scale** allows you to resize the print in two different ways: to a percentage of its original size, or to fit a particular paper size. The default is 100% (its original size).
- **Color options** allows you to choose color or grayscale.
- **Black & white** allows you to choose black and white.
- **Paper source** allows you to select a specific paper source, or you can choose **Save paper**, which automatically chooses the narrowest roll on which the print will fit (if more than one roll is loaded).
- **Paper category** allows you to choose a paper-type category.
- **Page order** allows you to choose first page on top, or last page on top.
- **Collate** allows you to turn collation on or off.
- **Rotation** allows you to rotate the print by any multiple of 90°, or you can choose **Automatic**, which rotates the print automatically if that will save paper.
- **Print margins** allows you to change the default printer margins.
- **Storage mode** offers two options, print and delete (the job is not retained in the job queue) and print and store (the job is retained in the job queue).
- **Output destination** allows you to direct output to the stacker (the default, if you have one), the basket, or the folder (if installed).

- **Default folding style** allows you to select the folding style when the folder is installed. To use the folder, you must select **Folder** in the **Output destination** setting.
6. When you are satisfied with the quickset settings, tap **OK** to continue. You can tap **...**, then **Show quickset details panel** to show the most common quickset settings used.
 7. **Copies**, **Page order**, and **Collate** can be selected in the right column of the screen. Tap **Print** to continue.
 8. After printing, you can choose to print another file or go to the job queue. If you print another file immediately without returning to the home page, the temporary settings used for the previous file are used again.

Select print quality

The printer has three print-quality modes which have been designed, as their names indicate, to match the specific needs of different kinds of images.

Although all print-quality modes are for 1-pass printing (in contrast to HP DesignJet printers), several parameters such as print speed, color strategy, and image processing have been optimized for each case.

See the print-mode table and diagram below for guidance on selecting the most appropriate print mode for your purposes.

Print quality

	If the image content is...	Recommended print mode	You will obtain...
A	Monochrome or color lines and text Any content if maximum productivity is needed	Lines/Fast	High-quality lines with maximum productivity*
B	Large areas of uniform colors	Uniform areas	More uniform and saturated colors for long-distance viewing
C	Text or lines on top of color backgrounds Highly complex drawings with plenty of detail	High detail	Smooth background with fine detail in lines and text

* The intention of the Lines/Fast mode is twofold: it can be used for images with only lines and text, or for any kind of image when you need maximum productivity.



7 Job queue management

The following sections provide details for this topic.

Job queue in the front panel

You can manage the job queue(s) from the front panel.

At the front panel, tap the Job Queue icon  on the home screen to view the job queue(s).

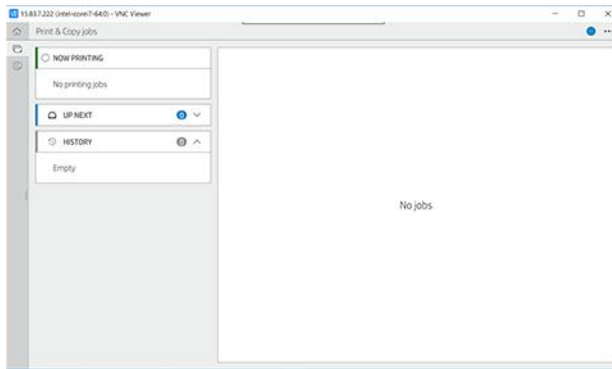
You can choose **Print & Copy queue** or **Scan queue** from the tabs at the left of the screen. The job queue page shows all jobs that are available in the selected job queue.



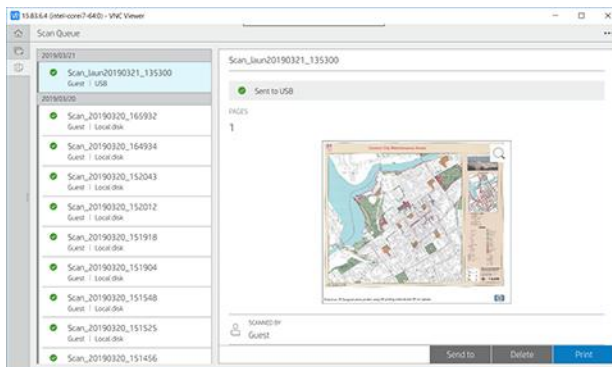
See video: <http://www.hp.com/go/pagewidexl/manage-job-queue/>.

Print & Copy queue

The Print & Copy queue(s) includes jobs that are in different phases: being received, parsed, rendered, printed, already printed, and so on.



Tap the name of the job to see all the job details, including information about status and preview. The details displayed depend of the type of job.



In an active queue, the job you are printing appears in the middle of the queue, with printed jobs below and jobs to be printed above. You can scroll up and down. Once scrolled, the queue remains static and does not move automatically.

Jobs in the left pane are divided into four categories (Up next, Now printing, On hold, and History) in chronological order starting from the top. On hold is shown only when there are one or more jobs on hold. Below the job name, you can see its status:

Up next

- **Waiting to process:** The job has been received by the printer and is waiting to be rendered.
- **Processing:** The printer is parsing and rendering the job.
- **Waiting to print or Paused:** The job is processed and waiting for the print engine to be ready to proceed with printing.

Now printing

The job is being printed.

- **Paused:** The job is paused.



NOTE: Sometimes, while printing, you may see a **Self-servicing** status, which means that the printer is performing some task such as paper type change or print mode change between pages of the same job.

On hold

The job will not be printed until you take some action. You should respond in one of the following ways:

- **On hold: Private job:** Enter the PIN required to print the job. The job will be deleted from the queue after printing.
- **On hold: Personal job:** The job is not automatically printed: you must select it from the queue. No details can be seen.
- **On hold to preview:** The job is not automatically printed: you must select it from the queue.
- **On hold for paper mismatch:** Load the paper required by the job.
- **On hold for accounting:** Enter an account ID to be used for the job.
- **On hold: Recovered job:** After a printer recovery, some jobs that were not printed are kept on hold.

History

- **Printed:** In chronological order, divided into today, yesterday, last week, and so on.
- **Canceled:** Canceled by the user.
- **Failed:** The job has failed for one or more reasons.



Scan queue

The scan queue structure is similar to the Print & Copy queue, but with the files organized by date. The main details (selected destination and its respective status) are in the left panel, below each job.

In the right pane, detailed information appears after scrolling:

- Scanned by
- Date and time
- File type
- File Size (if there are several sizes, value will be **several**)
- Content type
- Size
- Color mode
- Resolution
- Destination

Scan queue actions

Some job queue actions are determined by the settings selected. Depending on the environment, it may be worthwhile to change some default settings; to do so, tap  in the home screen, then **Job Management**. Alternatively, in the job queue, tap  at the top right, then **Settings**.

Print

In the left panel, tap the job to print, then on the **details screen** select **Print**. On the following screen, select the number of copies, choose a quickset, and edit the printing preferences. When you press **Print**, there is an option to manage the job in the job queue.

Delete

To delete a job manually, select the job and tap **Delete**.

Cancel Sending

The transfer of a file can be canceled if it is in the status: **waiting to be sent** or **sending**.

Send to

Available only if the file has already been sent or failed. When you tap **Sent to** options appear:

- **To Network folder:** Possible only if a network folder is configured. See [Configure a network folder on page 27](#).
- **To email:** See [Configure the email server on page 32](#).
- **To HP Smartstream:** Possible only if you have HP Smartstream installed. See [Accessories on page 198](#).
- **USB drive:** See [Scanning and copying \(MFP only\) on page 137](#).

Scan queue options

You can choose to delete all jobs in the queue, or manage the queue from the Embedded Web Server.

Delete all scan jobs

To delete the whole job queue: tap **...**, then **Delete all jobs**.

Manage remotely


To access the scanned files in the Embedded Web Server, scan the QR code or enter the URL shown.

Tap the ellipsis icon **...** at the top of the screen, then **Manage remotely**. A QR code is displayed.





NOTE: The device used to connect to this link must be on the same network as the printer.

Job queue actions

Some of the actions in the job queue are determined by the settings selected. Some default settings may be worth changing, depending on your environment. To do so, tap  in the home screen, then **Job management**. Alternatively, in the job queue app, tap **...** at the top right, then **Settings**.

Pause the job queue

You can pause the job queue.

To do so, tap the Pause icon ; you can resume by tapping the Play icon . The pause takes effect at the end of the page that is currently printing.

Reprint

In the History section, tap the job you want to reprint. On the details screen, tap **Reprint**. On the next screen, you can select the number of copies, the source, and the destination.

Print next

If you want to change the position of a job in the queue to be printed immediately after the currently printing job, select the desired job and tap the **Print next** button.

Enable print now


Enabling print now allows you to interrupt the job that is currently printing and print the selected job immediately.

Select when to print a job

This topic explains the concepts involved in this subject.



NOTE: The When To Start Printing options cannot be used with PostScript jobs.

You can select at what point you want to print a job in the queue. Tap , then **Job management > When to start printing**.

There are three options you can select:

- **After processing:** The printer waits until the whole page has been processed and then it starts to print. This is the slowest setting but ensures the best print quality in large or complex prints.
- **Optimized** (this is the default setting): The printer calculates the best time to begin printing the page.
- **Enable print now:** The printer interrupts the job currently printing to start printing this job as soon as possible.

See job details

Tap the name of the job to show its details, including information about status, pages, copies, total, and preview. Scroll down as necessary to see all of the information.


By tapping the thumbnail, you can navigate over all pages of the job. From there you can zoom in and out (pinch and zoom) and see more information about each page.

In an active queue, the job you are printing appears in the middle of the queue, with printed jobs below and jobs to be printed above.

Roll policies

You can choose how the printer selects which roll to use for each job.

At the front panel, tap , then , then , then **Roll policies**.




Alternatively, tap , then **Job management > Roll policies**.

The following options are available:

- **Increase productivity:** To increase the productivity of the printer.
 - **Job autorotation:** The printer can rotate a job automatically in order to save paper.
- **Automatic roll selection:**
 - **Roll width selection:** The printer can be more or less restrictive when selecting the roll width on which to print. You can select:
 - **Print on the same width only:** Each page prints on a roll with the same page width.
 - **Print on the same width or wider:** Each page prints on a roll with the same width or wider.
 - **Use most depleted roll:** When there are two with the same paper type and width, the roll selected is the roll with less paper.
- **Paper type protection:** You can avoid printing accidentally on special paper types by protecting them. Protected types are eligible for printing only when paper type or roll are specified in the job.




See also [Protect a paper type on page 48](#).

Solve paper mismatch

If the paper currently loaded in the printer is not suitable for a particular job or page, the printer can automatically solve the conflict or give a number of choices depending on the printer policies. Such a conflict may be caused by a job sent to the printer with no specific roll or paper type assigned to it, or by a roll coming to its end during printing. The following options are available in the paper mismatch settings menu; you can reach this menu from the job queue by tapping , then , then **Mismatch actions > Paper mismatch**; or by tapping , then **Job management > Mismatch actions > Paper mismatch**.


- **Pause and ask** (the most restrictive option): Printing stops until the correct paper is loaded. This option is recommended when the printer is attended. A message appears, asking what you want to do: cancel the job, print anyway, put on hold, or load paper. These options are also available in the job queue.
- **Hold job and continue with next:** Put mismatched jobs on hold until the correct paper is loaded, and continue printing the rest of the job queue. The printer sends an alert whenever a job is put on hold. This option is recommended when the printer is unattended, even though the integrity of a job may be disrupted, to avoid stopping the queue. Once the paper required for the job is loaded, the job or pages are automatically resumed.
- **Print anyway** (the least restrictive option): Print on whatever paper is loaded. The printer will choose the roll to print according to the following criteria: first where the page fits and then the same paper type. This option will never select a paper type that has been protected.

Job queue options

To change the job queue options, tap , then **Job management > Job queue**. Alternatively go to , then , then **Settings > Job queue**.

You can select the maximum number of printed jobs to have in the queue, when to delete printed jobs, and whether to delete jobs on hold after a specified time.

Default printing preferences

At the front panel, tap , then **Default Printing configuration** to define the default properties of jobs sent to your printer from remote locations.

You can define settings in the following areas: Print quality, Color, Paper, Margins, PostScript, Print retrieval.

Job deletion

If the printer runs out of storage space for new jobs, the oldest printed jobs are automatically deleted from the queue.


You can request that printed jobs should be automatically deleted from the queue when the total number of printed jobs exceeds a specified limit (the maximum number in the history setting), or when the jobs were printed more than a specified time ago (clear history settings).

To delete jobs on hold, the setting **Delete jobs on hold** allows you to define the time after which these jobs will be removed (2–48 h).

To delete a job manually, select the job and tap **Delete** on the bottom right.

The **Delete** option deletes the job from the queue, while the **Cancel** option cancels the job but leaves it in the queue, marked as **Canceled by the user** in the history category.

To cancel a job while printing, tap **X**. To cancel a job from the Up Next category, tap the job name on the list and then tap **Cancel job** on the bottom right.

 **NOTE:** If you tap **X**, you cancel the currently printing job only.

Print job queue in the Embedded Web Server

The HP DesignJet Utility, available for some models only, provides a different way of accessing the Embedded Web Server's job management facilities, but the facilities are exactly the same whether you use the Embedded Web Server or the HP DesignJet Utility.

To see the queue in the Embedded Web Server, select **Job queue** in the **Main** menu.

Job queue page

By default, access to the job queue is open to all users. An administrator can set a password so that users are required to enter a password to access the page.

The job queue page shows all jobs that are available in the queue. The queue includes jobs that are being received, parsed, rendered, printed and already printed.

The Embedded Web Server displays the following information for each print job:

- **File name:** The name of the job
- **Status:** The current status of the job
- **Pages:** The number of pages in the job

- **Copies:** The number of copies printed
- **Total:** The total number of pages (including copies)
- **Sent by:** The username
- **Account ID:** The account ID for the job
- **Date:** The date and time attached to the job that was received by the printer, shown in the locale of the Embedded Web Server
- **File source:** The application from which the job was sent to print
- **Paper destination:** The output option selected for the printed job

You can perform the following operations on one or all jobs in the queue:

- **Cancel:** Cancels the selected jobs. You are asked to confirm before the job is canceled. The job remains stored in the printer, but will not be printed unless you click **Reprint**.
- **Hold:** Holds the select jobs until you click **Continue** to print.
- **Resume:** All selected jobs, which are on hold, continue printing.
- **Reprint:** Prints more copies of a job.
- **Next print:** Sends all selected jobs to the top of the job queue.
- **Print anyway:** The printer will try to print the job even if there is some problem with it.
- **Delete:** Deletes selected jobs from the job queue. You are asked to confirm before the job is deleted.

Prioritize a job in the queue

You can select any job in the queue and make it the next one to be printed.

After selecting the job, click **Print next**.

If nesting is turned on, the prioritized job may still be nested with others. If you really want this job to be printed next, and not nested with others, first turn nesting off in the front panel and then move it to the front of the queue.

In the following cases, the **Next print** button is not displayed:

- The job is already at the front of the queue.
- The job is on hold—in this case the **Resume printing** button is displayed instead.
- The job has finished—in this case the **Reprint** button is displayed instead.
- The job has some error condition.

Delete a job from the queue

Under normal circumstances, there is no need to delete a job from the queue after printing it, as it will just fall off the end of the queue as more files are sent. However, if you have sent a file in error, and want to avoid printing it, you can simply select the job and then click **Delete**.

In the same way, you can delete a job that has not been printed yet.

If the job is currently being printed (its status is **printing**), you can click **Cancel** and then **Delete**.

Reprint a job in the queue

To reprint an already-printed job, select the job from the queue, then click **Reprint**. When reprinting a print job, you cannot change the print settings, because the job has already been rasterized.

Job status messages

The following sections provide details for this topic.

These are the possible job status messages, approximately in the order in which they may be seen:

- **Downloading:** The printer is receiving the job from the computer.
- **Processing:** The printer is parsing and rendering the job.
- **Waiting to print:** The job is waiting for the print engine to become free to proceed with printing.
- **Nested:** The printer is set up with Nesting=On and is waiting for other jobs in order to complete the nest and proceed with printing.
- **Preparing to print:** The printer is performing writing system checks before printing the job.
- **On hold for preview:** The job was sent with the **on hold for preview** option.



NOTE: If the printer hangs up while printing a job, and the queue facility is turned on, the partially printed job will appear in the queue as **on hold** when the printer is next turned on. When you resume the job, it will start printing at the page at which it was interrupted.

- **On hold for paper:** The job cannot be printed because the right paper is not loaded in the printer. Load the required paper, see [Paper handling on page 37](#), and click **Continue** to resume the job.
- **On hold for accounting:** The job cannot be printed because the printer requires all jobs to have an account ID: enter the account ID and then click **Continue** to resume the job.



TIP: To set an account ID, see [Required account ID on page 113](#).

- **Printing**
- **Drying**
- **Cutting paper**
- **Ejecting page**
- **Canceled:** The job is being canceled, but will remain in the printer job queue.
- **Deleting:** The job is being deleted from the printer.
- **Printed**
- **Canceled:** The job has been canceled by the printer.
- **Canceled by user**
- **Empty job:** The job does not contain anything to print.

Reactivate a job on hold

When the printer puts a job on hold you receive an alert.

See [Front panel on page 10](#), which explains why the job is on hold. Follow the instructions on the screen to remove the hold and continue printing.

Scan queue in the Embedded Web Server

To see the queue in the Embedded Web Server, tap **Job queue > Scan queue**. The administrator can set a password for users to access the page.

By default, access to the job queue is open to all users.

The Embedded Web Server displays the following information for each job:

- **File name:** Name of the job
- **Status:** Current status of the job
- **Pages:** Number of pages in the job
- **Date:** Date and time attached to the job that was scanned
- **Destination:** Storage location

You can perform the following operations on one or all jobs in the queue:

- **Delete all:** Deletes all jobs from the job queue from the top of the window. You are asked to confirm before the job is deleted.
- **Delete:** Click the button at the bottom of the window to delete selected jobs from the job queue. You are asked to confirm before the job is deleted.
- **Download:** The selected job can be download and saved to your local disk.
- **Preview:** To see the job in full-screen mode. If the job is multi-page, select the page you want to preview.

Manage scanned files remotely

During the scan process you can request a QR code from the front panel to manage your job remotely. Scan the QR code with your mobile phone to access your printer's Embedded Web Server remotely, and select the job to manage from the job queue.



NOTE: Your device must be on the same network as the printer.

8 Scanning and copying (MFP only)

Multi-function printers have a built-in scanner that can be used to scan and copy documents.

Quicksets

A quickset is a named group of settings with default values defined, which helps you to be more efficient and is convenient for inexperienced users.

Quicksets can be used for scan, copy, and print jobs.

Factory quicksets

The printer comes with some factory quicksets already defined, designed to support typical user requirements.

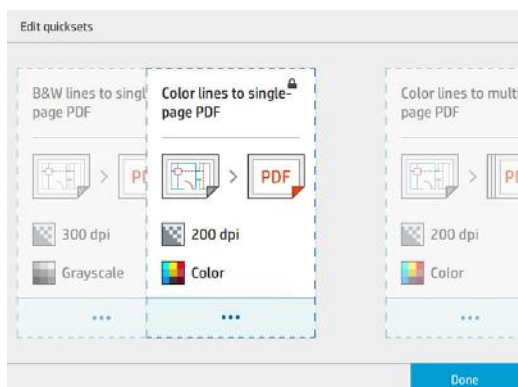
User quicksets

Depending on the permissions set in your printer, you can create, delete, reorder, or change a quickset.

To do these things, tap **Print, Scan & Copy quicksets** in the settings application, or tap **Manage quicksets** from the scan, copy, or print workflow.

Your own quicksets can be duplicated, edited temporarily or permanently, and deleted. Factory quicksets can only be duplicated.

You can reorder the quicksets from **Manage quicksets**. Tap an entire quickset and drag it to the desired position. The **Last settings** quickset is always shown first.







See video: <http://www.hp.com/go/pagewidexl/scanning-presets/>.

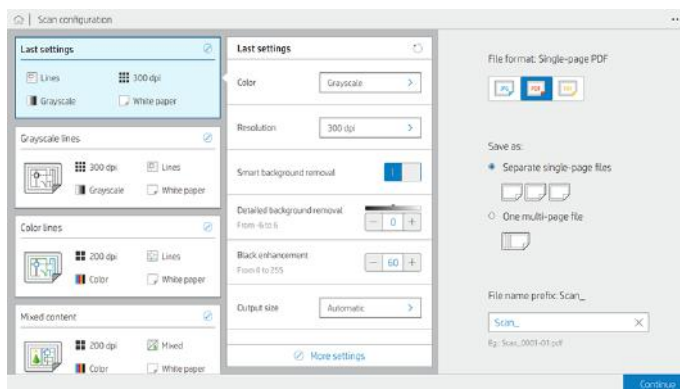
Scanning


Scanning an image saves the image in a file that can be saved or delivered to whatever location you select.



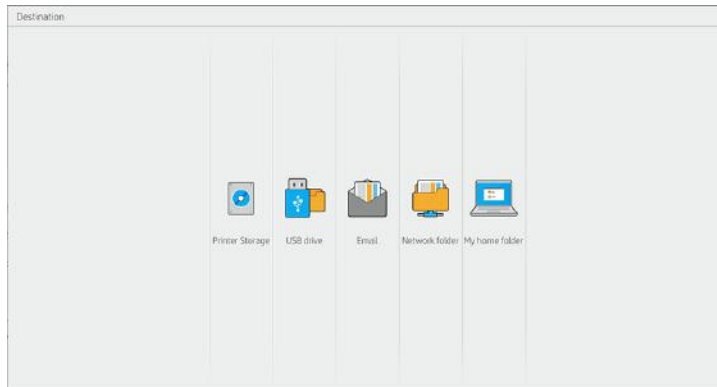
See video: <http://www.hp.com/go/pagewidexl/scan-and-copy/>.

1. Tap .
2. Select an appropriate quickset for your scan job. Any quickset can be modified by tapping . You can select the file format, single or multiple pages, and change the default filename.

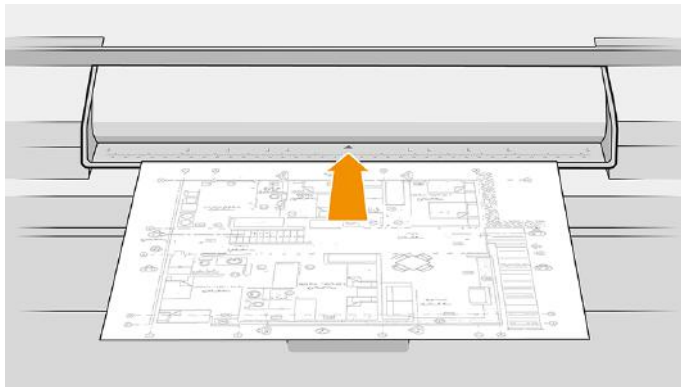


To change a quickset permanently, tap , then **Manage quicksets**.

3. Select the scan destination.

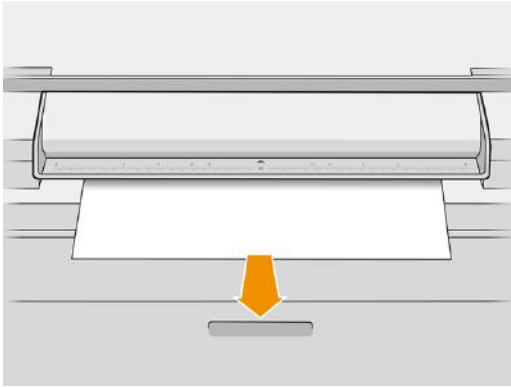


- Scan to printer storage.
 - Scan to USB drive.
 - Scan to my home folder—if you have configured the LDAP sign-in server or Windows sign-in.
 - Scan to network folder—if a network folder has been added.
 - Scan to HP SmartStream folder—if installed.
 - Scan to email—if an email server has been configured (see [Configure the email server on page 32](#)). You can also create an address book (see [Configure the email address book on page 32](#)).
4. Insert the original, facing upwards and centered on the scanner. There is a mark indicating the center of the scanning area.



The front panel will display the live preview of the page. You can stop the process by tapping the **Stop scan** button.

5. Pick up the original when the scanner releases it.



 **TIP:** To release the page, you can select automatic release in the quickset settings, or keep the original on hold until you tap **Release page** or insert a new original.

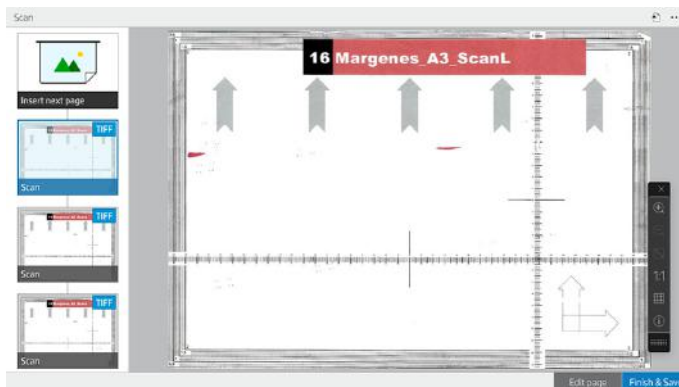
6. One of the most useful options is the one to scan a multipage or single-page document.



See video: <http://www.hp.com/go/pagewidexl/scan-multiple-pages/>.

- Multipage: The result will be a single file containing all the scanned pages.

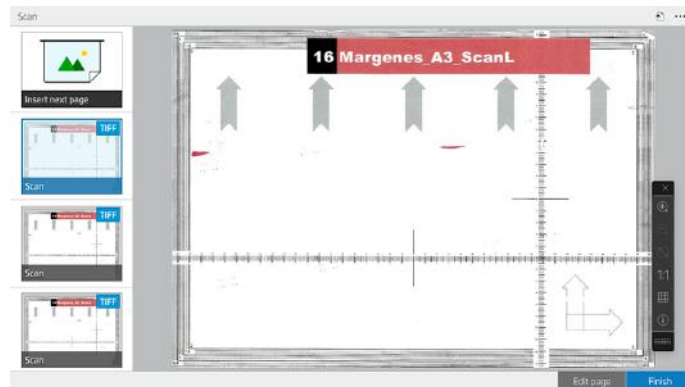
When scanning a multipage document, insert the next page when the panel on the right side of the screen displays **Insert new page**.



- Single-page: The result will be a single-page file for each scanned page.

When scanning a single page, the document is automatically saved. If you insert another page, a new document is created.

You can send scanned images directly to their destination while scanning (productivity mode), or scan all pages before starting to send them to their destination (default mode). To change from one mode to the other, tap **☰**, then **Scanner preferences > Scan-mode configuration single page**.

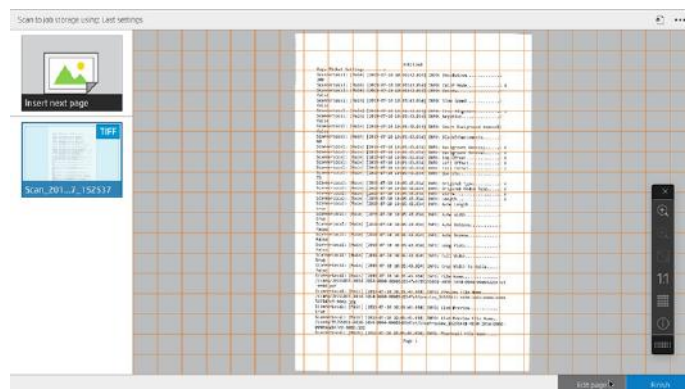


7. Other options:



See video: <http://www.hp.com/go/pagewidexl/editing-features/>.

- With the toolbar buttons you can zoom in and out, insert a grid over the preview and see scanner information about the selected page. You can also choose from the predefined zoom modes: **Fit to screen**, **Original document size**, or **Pinch to zoom**. In a multipage document, you can delete a page.

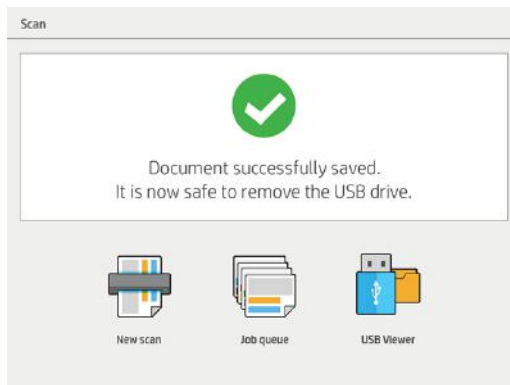


- By tapping **☰** you can show or hide the toolbar, show or hide the background removal setting, and change the scan settings for the following pages. Change the settings as you like and tap **OK**.



NOTE: By tapping the button at the bottom of the toolbar, you can move the toolbar above the preview. The X button above the toolbar allows you to close it.

- You can use **Edit page** to edit the scanned page, correct any skew manually, crop the edges, and adjust rotation, contrast, and brightness.
8. Exit the scan by tapping **Finish** for single-page documents, or **Finish & Save** for multipage documents.
 9. Tap **New scan** to scan again with the same settings. Tap **Job queue** to see the status of the scanned jobs. With **USB viewer** (only when scanning to USB) you can go to the USB flash drive to confirm that the job is there and preview it. To manage scan jobs, see [Scan queue on page 129](#) and [Scan queue in the Embedded Web Server on page 136](#).



The following settings are available in scan quicksets:

- **Quickset name** allows you to name the quickset you are working with.
- **Content type** allows you to set the content type to **Lines**, **Mixed**, or **Image**.
- **Long original** allows you to scan documents from 8 to 50 m (26 to 164 ft) in length. When this setting is enabled, some other settings and the preview are not available. The scanned images are saved in PDF format. This setting is supported only if the PostScript licence is installed.
- **Original paper type** allows you to set the content type to **White paper**, **Photo paper**, **Old/recycled paper**, **Translucent paper**, **Blueprint**, or **Ammonia/old blueprint**.
- **Blueprints invert** allows you to invert blueprints (or not).
- **Auto-release original** allows you to auto-release the page once scanned.
- **Output size** allows you to set the page size to **Automatic**, **Custom size**, a list of the available loaded rolls (**Roll width**), or a fixed list of standard sizes, by width and length (**Standard size**).

If you select **Custom size**, two new settings are displayed:

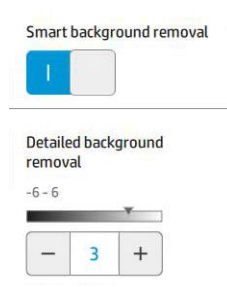
- **Custom width** allows you to set a specific scan area width, or enter 0 (zero) for automatic width detection. The minimum width is 66 mm (2.6 in).
- **Custom length** allows you to set a specific scan area length, or enter 0 (zero) for automatic length detection. The minimum length is 66 mm (2.6 in).
- **Orientation** allows you to set the page orientation to **Landscape** or **Portrait** when **Input size** is set to **Custom size**, **Roll width**, or any **Standard size** except A0.
- **Positioning** allows you to set the position of the original page in the input size area, when input size is not automatic. The options are **Top-left**, **Top-center**, **Top-right**, **Middle-left**, **Middle-center**, **Middle-right**, **Bottom-left**, **Bottom-center**, **Bottom-right**.

For example, if you are scanning an A1 original and the input size is smaller (such as A2), top-left positioning crops the original page from the top left corner.

If you are scanning an A2 original and the input size is larger (for instance A1), top-left positioning places the original image in the top-left corner and adds white margins on the right and bottom to create an A1 image.


- **Scan resolution** allows you to set the resolution to 200, 300, 600, or 1200 dpi.
- **Color options** allows you to choose **Black and white**, **Grayscale**, or **Color**.
- **Smart & detailed background removal** may be used if you have an original with a background that is not completely white, or an original on translucent paper.

Smart background removal analyses the content of the scanned original and automatically removes the background to make it pure white without removing the contents (lines and areas). Smart removal is available only for Lines and Mixed images (content type) in Grayscale (color option). After the scan process, the main window is displayed, tap **...** and select **Background removal**.



Detailed background removal allows you to fine-tune the result of the smart background removal when it is on, or to set a manual level of background removal when smart removal is off, for any type of original. You can define these values on a scale of darker to lighter measured in values from -6 to +6. The default value of both options is zero.

For example, if you are copying an original blueprint (lines with the blue background) and the result of the smart background removal shows some background noise, you can increase the detailed background removal (for instance, to +3) in order to remove the background and make it whiter. Keep in mind that the smart background removal is analyzing each page; so, if you have pages with different backgrounds, it automatically sets a different removal value for each page.

 **NOTE:** For better results, most original paper types should be inserted with their contents (lines, area fields, title box) in the first 8.4 cm length of the scanned area.

The ammonia/old blueprint paper type can be inserted from any side because background removal uses a smart algorithm optimized for originals with a non-uniform or noisy background.

- **Black enhancement** can be used to change dark grays to black.



For example, if you are copying a brochure with a mixture of text and pictures, the text is often digitized to a color that we may see as black but is really a dark gray. When the printer receives this gray text, it may be printed with a halftone pattern, meaning scattered dots instead of solid black.

By increasing the black enhancement value, you can force the text to be copied in real black, and it will therefore appear clearer. Use the black enhancement option with caution, because it can change other dark colors (not only grays) into black, making small dark spots appear in the picture.

Both black enhancement and background removal function as cutoff values in which pixels under or over a certain value are affected by the setting. You define these values on a scale of low to high lightness measured in values from 0 to 255 for the black enhancement and from -6 to +6 for the detailed background removal.

For example, you have copied an original and want to improve it by making the text blacker and the background whiter. Adjust the black enhancement value upwards from its default of zero (to 25, for example) and increase the detailed background removal (to 6, for example), making pixels with low lightness values go to black and lighter background pixels go to white.

- **Automatic de-skew** allows you to turn the digital skew correction on or off.
- **Reduce scan speed to enhance quality** allows you to reduce the scan speed to get better scan results when scanning at 200 and 300 dpi.
- **Format** allows you to set the file format to **Single-page PDF**, **Multi-page PDF**, **JPG**, **Single-page TIFF**, **Multi-page TIFF**, or **PDF/A**.

 **NOTE:** PDF file output is available only with the appropriate license. If you have the license, enable the setting in the front panel: tap , then **Scanner preferences** > **PDF/A** (for example).

- **Compression** allows you to set the level of compression.
- **File name prefix** allows you to set the file name prefix for the generated file.
- **Job storage mode** offers two options:
 - **Scan and delete:** Scanned files are not saved in the scan queue.
 - **Scan and store:** Scanned files are saved in the scan queue.


Copying

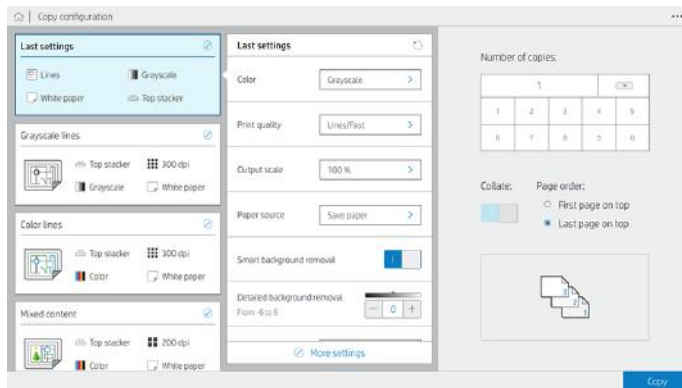
Copying an image prints the scanned image on your printer.



See video: <http://www.hp.com/go/pagewidexl/scan-and-copy/>.


1. Tap .

2. Select an appropriate quickset for your copy job. Any quickset can be modified by tapping .



3. You can select the number of copies, the page order (first or last page on top), and whether you want collation.

The right-hand side of the screen shows a representation of how the job will be printed (depending on the number of copies, collation, order, and the output device).

4. You can change the copy mode by tapping , then **Choose copy mode**.

The copy mode allows you to choose between two ways of printing copy jobs:

- **Send copy job directly to print queue while scanning**
 - Print the copy job while scanning the pages (depends on output destination and printing preferences).
 - The copy job takes priority over other jobs in the queue.
 - The option of deleting pages of the copy job is not available.
 - The input length is always automatic: you cannot set a manual value.
 - If you want to print an urgent job interrupting the job currently being printed, select **Allow copy to interrupt current print job**.

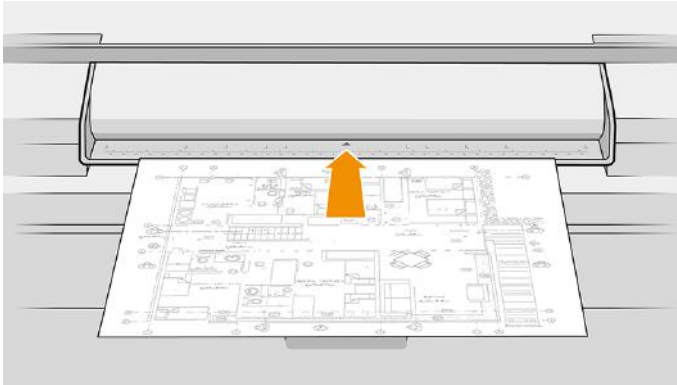


NOTE: When the page order selected does not match the order needed for the output device, or when collation is activated, the job is sent to the job queue when you tap **Finish & Print**.

- **Scan all pages, then send to print queue**
 - Print the copy job after scanning all pages.
 - The job queue continues printing other jobs during the copy job.
 - You can delete or edit pages of the copy job.

5. Tap **Copy** to continue.

6. Insert the original, facing upwards.

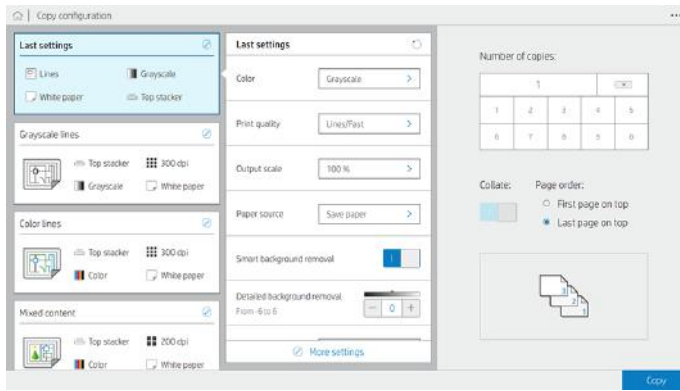


7. In the next screen you can see a preview of each copied page and browse the thumbnails.



- With the toolbar buttons, you can zoom in and out, view a grid over the preview and see scanner information about the selected page. You can use the **Pinch to zoom** feature, and choose the predefined zoom modes **Fit to screen** or **Original document size**. When using the **Scan all pages, then send to print queue** copy mode, you can delete a page.
 - By tapping **...** you can show or hide the toolbar, show or hide the background removal setting, and change the copy settings for the following pages. Change the settings as you like; they will be applied to the next page scanned.
8. Tap **Finish** when there are no more pages to copy. If you selected indirect printing, tap **Finish & Print**.

If you want to change the main settings of the quicksets before starting the copy, you can tap **...** and then select **Show quickset details panel**.



The following settings are available in copy quicksets:

- **Quickset name** allows you to name the quickset you are working with.
- **Content type** allows you to set the content type to **Lines**, **Mixed**, or **Image**.
- **Original paper type** allows you to set the content type to **White paper**, **Photo paper**, **Old/recycled paper**, **Translucent paper**, **Blueprint**, or **Ammonia/old blueprint**.
- **Blueprints invert** allows you to invert blueprints (or not).
- **Auto-release original** allows you to auto-release the page once scanned.
- **Output size** allows you to set the page size to **Automatic**, **Custom size**, a list of the available loaded rolls (**Roll width**), or a fixed list of standard sizes, by width and length (**Standard size**).

If you select **Custom size**, two new settings are displayed:

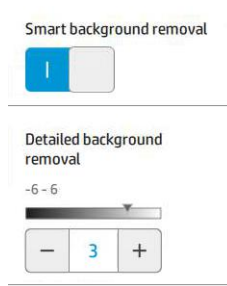
- **Custom width** allows you to set a specific scan area width, or enter 0 (zero) for automatic width detection. The minimum width is 66 mm (2.6 in).
- **Custom length** allows you to set a specific scan area length, or enter 0 (zero) for automatic length detection. The minimum length is 66 mm (2.6 in).
- **Orientation** allows you to set the page orientation to **Landscape** or **Portrait** when **Input size** is set to **Custom size**, **Roll width**, or any **Standard size** except A0.
- **Positioning** allows you to set the position of the original page in the input size area, when input size is not automatic. The options are **Top-left**, **Top-center**, **Top-right**, **Middle-left**, **Middle-center**, **Middle-right**, **Bottom-left**, **Bottom-center**, **Bottom-right**.

For example, if you are scanning an A1 original and the input size is smaller (such as A2), top-left positioning crops the original page from the top left corner.

If you are scanning an A2 original and the input size is larger (for instance A1), top-left positioning places the original image in the top-left corner and adds white margins on the right and bottom to create an A1 image.


- **Scan resolution** allows you to set the resolution to 200, 300, or 600 dpi.
- **Color options** allows you to choose **Black and white**, **Grayscale**, or **Color**.
- **Smart & detailed background removal** may be used if you have an original with a background that is not completely white, or an original on translucent paper.

Smart background removal analyses the content of the scanned original and automatically removes the background to make it pure white without removing the contents (lines and areas). Smart removal is available only for Lines and Mixed images (content type) in Grayscale (color option).



Detailed background removal allows you to fine-tune the result of the smart background removal when it is on, or to set a manual level of background removal when smart removal is off, for any type of original. You can define these values on a scale of darker to lighter measured in values from -6 to +6. The default value of both options is zero.

For example, if you are copying an original blueprint (lines with the blue background) and the result of the smart background removal shows some background noise, you can increase the detailed background removal (for instance, to +3) in order to remove the background and make it whiter. Keep in mind that the smart background removal is analyzing each page; so, if you have pages with different backgrounds, it automatically sets a different removal value for each page.

 **NOTE:** For better results, most original paper types should be inserted with their contents (lines, area fields, title box) in the first 8.4 cm length of the scanned area.

The ammonia/old blueprint paper type can be inserted from any side because background removal uses a smart algorithm optimized for originals with a non-uniform or noisy background.

- **Black enhancement** can be used to change dark grays to black.

For example, if you are copying a brochure with a mixture of text and pictures, the text is often digitized to a color that we may see as black but is really a dark gray. When the printer receives this gray text, it may be printed with a halftone pattern, meaning scattered dots instead of solid black.


By increasing the black enhancement value, you can force the text to be copied in real black, and it will therefore appear clearer. Use the black enhancement option with caution, because it can change other dark colors (not only grays) into black, making small dark spots appear in the picture.

Both black enhancement and background removal function as cutoff values in which pixels under or over a certain value are affected by the setting. You define these values on a scale of low to high lightness measured in values from 0 to 255 for the black enhancement and from -6 to +6 for the detailed background removal.

For example, you have copied an original and want to improve it by making the text blacker and the background whiter. Adjust the black enhancement value upwards from its default of zero (to 25, for example) and increase the detailed background removal (to 6, for example), making pixels with low lightness values go to black and lighter background pixels go to white.

- **Automatic de-skew** allows you to turn the digital skew correction on or off.
- **Reduce scan speed to enhance quality** allows you to reduce the scan speed to get better scan results when scanning at 200 and 300 dpi.
- **Print quality** allows you to set the print quality to **Lines/Fast**, **Uniform areas**, or **High detail**.


- **Output scale** allows you to select the output page size.
- **Paper source** allows you to specify printing on a specific paper source, or you can choose **Save paper**, which automatically chooses the narrowest roll on which the print will fit (if more than one roll is loaded).

 **NOTE:** The printer setting **Roll width selection** has two values: **Print on same width only** and **Print on same width or wider**. When **Print on same width only** is selected, each page is printed only on a roll with the same width as the page.

- **Paper category** allows you to change the paper category used for printing.
- **Rotation** allows you to set the rotation to **Automatic**, **0°**, **90°**, **180°**, or **270°**.
- **Copy margins** allows you to change the default printer margins.
- **Job storage mode** offers two options:
 - **Print and delete:** The job is not retained in the job queue.
 - **Print and store:** The job is retained in the job queue.
- **Output destination** allows you to select the paper output from those available to the printer.
- **Folding style** allows you to select the folding style when the folder is installed. To use the folder, you must select **Folder** in the **Output destination** setting.

Scanner preferences

There are a few options that normally remain the same from one job to another, and a couple of troubleshooting actions that you can take.

You can select the following settings by tapping , then **Scanner preferences**.

- **Load delay** allows you to add a delay before the scanner feeds in the original document.

 **NOTE:** The minimum delay is 1 second.

- **PDF/A** allows you to enable the PDF/A format for archiving.
- **Enhanced colors** allows you to capture enhanced colors when the **Original paper type** is **White paper**.
- **Scan mode configuration for single page** allows you to choose between the following options:
 - **Send scan job directly to destination while scanning another page**
 - **scan all pages, then send to destination** (the default option)
- **Print scanner IQ plot:** See [Scanner diagnostic plot on page 160](#).
- **Calibrate scanner:** See [Calibrate the scanner \(MFP only\) on page 190](#).

Scanner troubleshooting

In this section the most common defects and failure modes are shown, sorted by relevance and frequency of appearance.

A defect is a common image artifact that usually appears when using any CIS scanner. These are due to incorrect settings, product limitations, or easily solvable mistakes. A failure mode is due to malfunctions of some of the scanner components.

Some of the corrective actions proposed here require the use of the scanner diagnostic plot, which you can print and scan as indicated in [Scanner diagnostic plot on page 160](#). Do not use any printed version of this guide to test the scanner, as the resolution of the images included here is insufficient. Use the diagnostic plot when recommended in response to any of the errors described in this chapter.

You are recommended to clean the CIS sensors at first installation, and at any time for good scanning quality.


Random vertical lines

This is one of the most common issues in sheet-fed scanners. Usually, the vertical streaks are caused by dust particles inside the scanner, or miscalibration of the scanner (in these cases, the problem can be solved).

Here are some examples of images suffering from vertical lines or streaks. Note the black arrow indicating the scanning direction in these examples.



1. Clean the scanner's glass plate and the original to be scanned as described in [Clean the scanner's glass plate \(MFP only\) on page 186](#). Re-scan your original afterwards.
2. If the streaks remain, recalibrate the scanner as indicated in [Calibrate the scanner \(MFP only\) on page 190](#). Make sure you clean the maintenance sheet before calibrating the scanner, and check that the maintenance sheet is not damaged (if so, call your service representative and ask for a new maintenance sheet). Re-scan your original after the calibration is completed.
3. If the streaks still remain, check the scanner's glass plate visually. If it is damaged (scratched or broken), call your service representative.
4. If the streaks remain, there may be dust particles inside the glass plate. Carefully take out the glass plate and clean it as described in [Clean the scanner's glass plate \(MFP only\) on page 186](#).

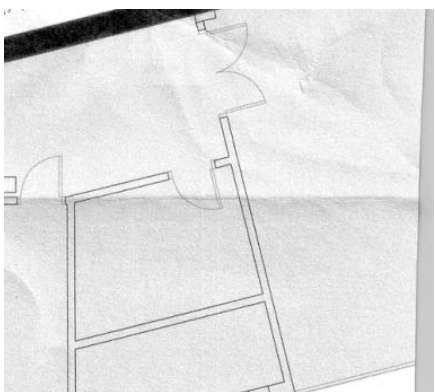
 **NOTE:** The problem of vertical streaks cannot always be solved, due to the technological limitations of CIS technology. HP offers HD Scanners with CCD technology for higher quality requirements. If the streaks remain after the corrective actions explained above, then no further action can be taken to improve the image quality, except to buy a more expensive CCD scanner.

Wrinkles or folds

The following steps provide the complete procedure for this topic.

Scanners based on CIS technology have a high optical resolution within their focus plane, at the price of a very limited depth of field. Hence, the images are sharp and detailed only when the scanned original is perfectly flat against the glass plate.

If the original contains wrinkles or folds, these defects are clearly visible in the scanned image (as shown in the following example).



Actions

1. Re-scan the original, setting the content type to **Image**, and contrast and background cleaning to zero.
2. If the problem persists, re-scan the original at a lower scanner resolution (Standard quality if scanning, Fast or Normal if copying). It may also help to flatten the original manually as much as possible before scanning it again.



NOTE: The problem of wrinkles cannot always be solved, due to the technological limitations of CIS technology. HP offers HD Scanners with CCD technology for higher quality requirements. If the wrinkles remain after the corrective actions explained above, then no further action can be taken to improve the image quality, except to buy a more expensive CCD scanner.

Line discontinuities

The following steps provide the complete procedure for this topic.

When scanning or copying large originals, you may sometimes find that a straight line (not necessarily horizontal) appears with discontinuities or small steps.

Note the black arrow indicating the scanning direction in this example.



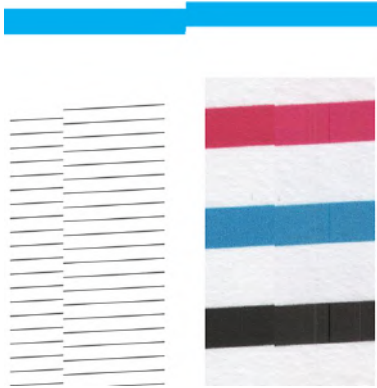
1. Repeat the scan, preferably using a higher resolution, and this time make sure that the product is correctly positioned (it is flat on the floor and it does not move), and that the printer is not printing while you scan. Turning the original 90 or 180° and scanning it again may also solve the problem.
2. If the problem persists, check that the original to be scanned is not skewed, and that it does not become skewed during the scan. If so, see [Incorrect paper advance, skew during scanning, or horizontal wrinkles on page 155](#). You might also want to deactivate the automatic de-skew algorithm as indicated in [Copied or scanned image is very skewed on page 158](#).
3. If there is no skew but the problem persists, clean and calibrate the scanner as indicated in [Maintenance on page 184](#). Take care not to move the printer during the calibration (the printer should not be printing during scanner calibration), and check that the maintenance sheet is correctly positioned before starting the calibration. Also check that the maintenance sheet is not damaged before calibrating the scanner (an old or

damaged maintenance sheet may cause this problem); if it is damaged, call your service representative and ask for a new maintenance sheet.

4. If the problem persists, proceed to analyze the following areas of the diagnostic plot:

- a. 4 (from module A to E).
- b. 10, at the intersection between modules.
- c. 13 in modules A and E, and 14 in modules B, C, and D.

If you see any of these defects in the studied areas, call your service representative and report a “line discontinuities” error after calibration.



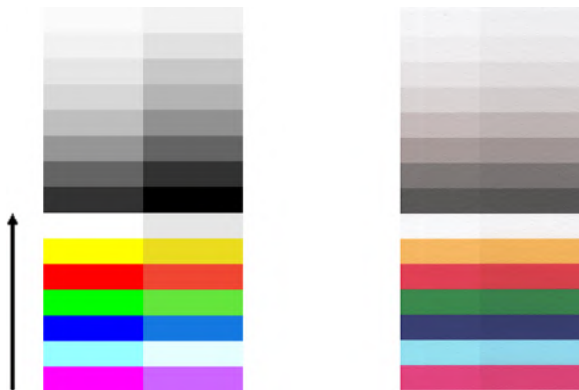
The four vertical thin black lines at the beginning and the end of the diagnostic plot show, approximately, the position of the intersection between CIS modules, where this kind of error usually appears. If the error appears outside these areas, call your service representative and report “line discontinuities within a CIS module”.

Small color differences between adjacent CIS modules

The following steps provide the complete procedure for this topic.

When scanning wide images, sometimes slightly different colors can be seen at both sides of the junction between two CIS modules.

This issue, if present, can be easily seen by analyzing patterns 9 of the diagnostic plot at the intersection between CIS modules. Here are some examples. Note the black arrow indicating the scanning direction in these examples.



Sometimes the color mismatch between adjacent modules can be enormous, showing a serious scanner malfunction, as in the following example.

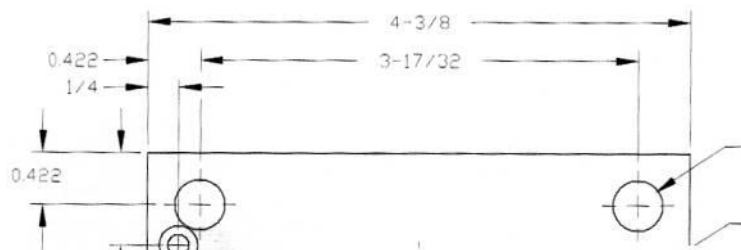


1. Repeat the scan or copy, setting the content type to **Image**, reducing the background cleaning to 0 or turning the original 90° before scanning it again.
2. If the problem persists, clean and calibrate the scanner as indicated in [Maintenance on page 184](#). If calibration ended without errors, proceed to analyze again pattern number 9 and modules A through E of the diagnostic plot.
3. After analyzing pattern 9, if you see some color differences between left and right sides of the bars for neutral and vivid colors, call your service representative and report “small color differences between adjacent CIS modules”.

Variable line thickness or missing lines

The following steps provide the complete procedure for this topic.

When scanning some CAD plots at Standard resolution, mostly when working with grayscale or black-and-white prints that contain very thin lines, you may see a variation in line thickness, or even some missing lines, in some places.



Actions.

1. Repeat the scan or copy using a higher resolution (High or Max if scanning, Normal or Best if copying). You should also set background cleaning to 2, or set the content type to **Mixed**. You might also deactivate the automatic de-skew as explained in [Copied or scanned image is very skewed on page 158](#). In case you were working in black-and-white mode, we recommend using grayscale instead.
2. If the problem persists, turn the original plot 90° before scanning it again.
3. If the problem persists, clean and calibrate the scanner as indicated in [Maintenance on page 184](#).

Inaccurately reproduced colors

The following steps provide the complete procedure for this topic.

You have to deal with several variables if you want perfect color matching between the original you are scanning and the copy or scanned file you obtain as a result.

If you find undesired colors in cases like the example shown below (original on the left, scanned image on the right), you can follow these guidelines.



Actions.

1. Make sure that you choose the correct paper type in the scan settings before scanning.
2. When dealing with copies, you must take into account that good color matching between a given original and its copy can be achieved only if both are printed on the same type of paper. In the case of scanned files, good color matching can be achieved only if your monitor is color-calibrated or compliant with sRGB or AdobeRGB standards.
3. If the above conditions are met, you should also take into account that various scanner settings can affect the final color result, such as contrast, background cleaning, content type and paper type. To obtain the best possible colors, set contrast and background cleaning to 0, set the content type to **Image**, and select the most appropriate type of paper according to the original you are scanning (if in doubt, use photo paper).
4. Note that the image enhancement settings are automatically reset to default values after a certain time, so you may get a different result from copying the same original if you have not checked the settings before starting the job.
5. If you scanned to a PDF file, try opening the PDF file in Adobe Acrobat and saving it as a PDF/A file. For more information, see <http://www.adobe.com/products/acrobat/standards.html> (English only).
6. For optimum color results, clean and calibrate the scanner as indicated in [Maintenance on page 184](#).
7. Avoid placing the scanner in direct sunlight or near sources of heat or cold.

Color fringing

The following steps provide the complete procedure for this topic.

This problem occurs when the scanner is affected by incorrect paper advance and/or miscalibration. However, some amount of color fringing is unavoidable, especially at high scanning speeds.

It can be seen at the borders of sharp black text over a white background, as in the example below (original on the left, scanned image on the right). Note the black arrow indicating the scanning direction.



1. Repeat the scan after increasing the scanner's resolution (choose Max quality if scanning, Best if copying). Turn your original 90°, if possible, before scanning it again.

2. If the problem persists, clean and calibrate the scanner as indicated in [Maintenance on page 184](#). Repeat the scan at a high resolution (Max if scanning, Best if copying) and check whether the problem disappears.
3. If the problem still persists, you can diagnose this issue by analyzing the patterns 6 and 8 (A to E) of the diagnostic plot. The black horizontal lines appear slightly colored at the top and bottom of each end (in the example on the right, below). Normally, they look red at the top and blue or green at the bottom, but it could be the other way around.



If you see this effect, call your service representative and report “color fringing problem after calibration”.

Vibration

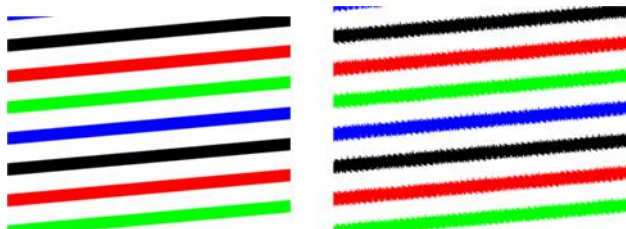
The following steps provide the complete procedure for this topic.

If your printer is not properly placed on a flat surface, or if the scanner lid does not close correctly, you may sometimes find that the scanned image suffers from vibration.

In the following example, the original is on the left, and the scanned image on the right.



1. Make sure that the scanner is placed on a flat surface, the scanner lid is correctly closed, and the printer is not working while you are scanning. Scan your original again.
2. If the problem persists, change (increase or decrease) the scanning resolution and re-scan your original. We also recommend turning the original 90° before scanning it again.
3. If the problem persists, analyze pattern 4 of the diagnostic plot. If you see the problem shown on the right, call your service representative and report a “vibration problem”.



Incorrect paper advance, skew during scanning, or horizontal wrinkles

You may encounter problems with some thick glossy originals being moved through the scanner’s paper path. In some cases, the original may become skewed during the scanning process.

If some of the paper rollers are not working correctly, you may find small horizontal wrinkles in the scanned image, due to the paper being stuck in some regions while not in others.

1. Turn your original 90° and repeat your scan.

2. If the problem persists, open the scanner cover. Clean the motor wheels (small black rubber) and the pressure rolls (wide white plastic). Check that all the pressure rolls can move freely. If you find dust particles or objects that obstruct the movement of the rollers, try to remove them, then close the scanner lid and repeat your scan.
3. If the problem persists, restart the scanner by turning it off and on again. If you find an error message on the front panel during this operation, call your service representative and report the error message. If no error message appears, try repeating your scan.
4. If the problem persists, analyze patterns 4, 13 and 14 of the diagnostic plot. The plot should look like this:



If you see an image resembling the incorrect examples below, call your service representative and report an “incorrect paper advance” problem.



Vertical black band 20 cm wide

The following steps provide the complete procedure for this topic.

Your scanner contains various different CIS modules. If one of the modules fails, and the scanner hardware check does not detect the failure, you may see a black vertical band 20 cm (7.9 in) wide, corresponding to the width of a single CIS module, in your scanned image or copy.

Here is an example: original on the left, scan on the right. The black arrow indicates the scanning direction.



Actions.

1. Open the lid of the scanner and check that the five CIS modules show blinking red, green and blue lights alternately. If a module is failing, call your service representative and report a “CIS module illumination” error.
2. If all the modules lit up correctly in the previous step, restart the scanner by turning it off and on again. If you find an error message on the front panel during this operation, call your service representative and report the error message. If no error message appears, try repeating your scan.

3. If the problem persists, try to calibrate the scanner as indicated in [Calibrate the scanner \(MFP only\) on page 190](#). If this operation fails, call your service representative with the error code given on the front panel. If no error code appears, try to repeat your scan.
4. If the problem persists, call your service representative and report a “vertical black band 20 cm wide”.

Scanner damages some originals

HP is aware that this scanner may cause vertical scratches on inkjet originals on thick glossy paper. Very thin tracing paper or old originals may also be damaged.

This is because CIS technology requires the original to be held down with high pressure to obtain accurate results and avoid blurring and defocus problems.

If the original you intend to scan is valuable, and if it belongs to one of the types described above (inkjet-printed, thick, glossy original or old/thin/tracing paper original), HP recommends using a CCD scanner such as the HP DesignJet T1200 HD MFP.

Object replication (ghosting)

The following steps provide the complete procedure for this topic.

This error very rarely appears in CIS scanners.

However, you can occasionally find image defects such as the following: original on the left, scanned image on the right.



Image © www.convincingblack.com, reproduced with permission.

Actions.

1. Restart your printer. Then calibrate the scanner, as indicated in [Calibrate the scanner \(MFP only\) on page 190](#), and repeat your scan. Turn the original 90° if possible before rescanning.
2. If the problem persists, analyze pattern 3, modules A through E, of the diagnostic plot. Call your service representative and report an “object replication” issue if you see the kind of error shown on the right.



Clipping or incorrect scale factor when down-scaling in copies and prints

When making copies or prints (from USB, Embedded Web Server, or printer driver), the scaling setting is available with various possible options.

If you are experiencing problems related to border clipping, or it seems that your print has lost the scale-factor adjustment, read this section carefully in order to select the best value for the scaling setting in future jobs.

- **Precise scaling:** In this case, the content of the original image is scaled by the percentage factor that you have selected. For example, in an original CAD image with a 1:100 scale, if user selects scale to 50%, the printed plot will have an accurate scale of 1:200. Nevertheless, in the case of down-scalings when selecting a fixed percentage, some clipping of the marginal content of the plot may occur, as it is impossible for the printer to print up to the borders of the paper.
- **Scale to fit into page size:** In this case, the content of the original image is scaled by the percentage necessary to make sure that all the content is correctly printed and no clipping occurs. Nevertheless, in the case of down-scalings when selecting fit to page, the scale-factor adjustment may not be an integer divisor of the original. For example, in an original CAD plot with a 1:100 scale on A2 paper size, if user selects scale to fit on A3 paper size, the scaling factor will not be exactly 50% and the scale of the printed plot will not be 1:200 exactly. However, the plot will be printed completely without clipping any content.

Incorrect edge detection, mostly when scanning tracing paper

The following steps provide the complete procedure for this topic.

When scanning tracing or translucent paper, inaccurate detection of the paper edge may cause the scanned image to have extra margins or some clipping.

This can also happen when scanning plain paper, if the glass plate is dirty.



NOTE: Completely transparent papers are not supported.


In order to avoid these unwanted effects, follow these recommendations.



Actions.

1. Carefully clean the scanner's glass plate and the original to be scanned with a cloth. Turn the original 90° if possible and re-scan it afterwards. Remember to select **Translucent** as the paper type at the scanner if your original is translucent.
2. If the problem persists, calibrate your scanner, and re-scan your original again afterwards.
3. If the problem persists in the case of translucent paper, attach a sheet of white paper to the back of the original to be scanned. Remember to select **White paper** as the paper type for the scanner in this case.

Copied or scanned image is very skewed

The scanner has a built-in automatic de-skew algorithm, which straightens the scanned image of a skewed original. However, the algorithm may fail in some cases, especially if the skew is particularly bad.

To load the original with minimum skew, grasp the original with the image facing up and your hands at left and right edges. You are recommended to avoid resting your hands or the original on the scanner's input tray. Push the original into the scanner insertion slot until you feel the whole top border of the original pressing against the scanner rubber rolls, which will load the original after a delay of 0.5 seconds. Now you can take your hands off the original. If you are not happy with the way the scanner has grabbed your original, you can tap  and try again.

The action of the automatic de-skew algorithm can be deactivated by tapping  or . Select the quickset to use, then tap **More settings** and disable the **Automatic de-skew** setting. You can correct the skew manually with **Edit page**.

Cannot access the network folder or HP SmartStream (if installed as an accessory)

If you have set up a network folder, but the printer cannot access it, try the following suggestions.

- Check that you have filled in each field correctly.
- Check that the printer is connected to the network.
- Check that the remote computer is switched on, working normally and connected to the network.
- Check that the folder is shared.
- Check that you can put files into the same folder from a different computer on the network, using the printer's logon credentials.
- Check that the printer and the remote computer are in the same network subnet; if they are not, check that the network routers are configured to forward the CIFS protocol traffic (also known as Samba).

For more information about setting up a network folder, see [Configure a network folder on page 27](#).

Scanning to file is slow

The following steps provide the complete procedure for this topic.

Scanning a large image or at a high resolution is likely to take time, especially when scanning across a network. However, if you think it is taking too long, try the following suggestions.

1. Use the front panel to check the status of your scan job. If it is taking an intolerably long time, you can select the job and then cancel it.
2. Check that the **Resolution** setting is right for the job. Not all scanning tasks require high resolutions. If you lower the resolution, you will speed up the scanning process. For JPEG and PDF scan jobs, you can also change the **Quality** setting. Lower quality values produce smaller files.
3. Check your network configuration. Your network should be a Gigabit Ethernet or one of a higher transfer rate in order to achieve optimal scanning speeds. If your network is a 10/100 Ethernet configuration, you can expect slower transfer of the scan data and thus slower scanning speeds.
4. Contact your network administrator for information about your network configuration, transfer rates, scan-to-file destinations on the network and possible solutions for increasing the speeds.
5. If scanning to files on the network is too slow and the network configuration cannot be amended to correct this, improved speeds can be achieved by scanning to a USB flash drive.
6. If scanning to a USB flash drive seems slow, check your USB flash drive interface compatibility. Your system supports a Hi-Speed USB interface. Your USB flash drive should be compatible with Hi-Speed USB (sometimes known as USB 2). Also check that your USB flash drive contains enough storage space for scanned large-format images.

Copying blueprints with low contrast and dirty blue areas

You can improve print quality by using the following settings.

For strong cleaning

- Background removal: 4
- Black enhancement: 6
- Contrast: 2

To clean while preserving thin lines

- Background removal: 5
- Black enhancement: 6
- Contrast: 1

To improve thin lines with low contrast at low resolution

You can improve print quality at 200 or 300 dpi by using the following settings.

Scan

- Background removal: 2
- Black enhancement: 6

Copy

- Background removal: 2
- Black enhancement: 6
- Contrast: 0

Scanner diagnostic plot

You can use the diagnostic plot to identify the cause of a scanning problem.

Prepare the printer and the paper to print the diagnostic sheet

Select a suitable paper type and size for the diagnostic plot.

Turn on your printer and wait until it is functioning. Then select the paper on which the diagnostic plot is going to be printed (you can reuse the diagnostic plot any time in the future, if it is saved carefully). Ideally, the diagnostic plot should be printed on glossy paper, and you are highly recommended to do that if you use your printer mostly for scanning or copying photo originals (posters, pictures printed on glossy paper, etc). If you use your printer mostly to scan or copy matte originals, then you can use any matte white paper to print the diagnostic plot. Do not use recycled or tracing paper to print this plot. The size of the diagnostic plot is 610 × 914 mm (24 × 36 in). It can be printed on any 914 mm (36 in) landscape or 610 mm (24 in) portrait paper roll. You can also use a single sheet that is at least 610 × 914 mm (24 × 36 in).

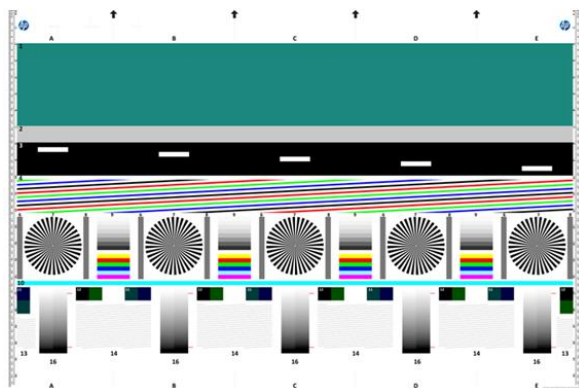
Once the correct paper is loaded, if this paper permits color calibration then we recommend color-calibrating the printer.


You can print the diagnostic plot from the front panel: tap , then **Scanner preferences > Scanner IQ plot**.

Visual check for errors while printing the diagnostic sheet

Once the diagnostic plot is printed, the first step is to check that all the patterns included in it are correctly printed.

The diagnostic plot, if printed correctly, should look like this:



If you see any problems, you should follow the recommended recovery procedure, all of which are available by tapping , then **Scanner preferences > Print scanner IQ plot** at the front panel. Once the printer has been diagnosed and it is working correctly, you can reprint the diagnostic plot as described in [Scanner diagnostic plot on page 160](#).

Scan or copy the diagnostic plot

There are two options for evaluating the diagnostic plot: scanning into a JPEG file, or copying onto paper.

HP recommends using the scan option, so that the generated file can be analyzed more easily by a remote support engineer if necessary. If you decide to scan the plot, first adjust your computer's monitor as described in [Monitor calibration on page 162](#). Once you have scanned the diagnostic plot, remember to open the scanned file in any image viewer software and select a zoom of 100% for correct visual evaluation of patterns.

If you decide to copy, make sure that a paper roll at least (36 in)(914 mm) wide is loaded in the printer. Ideally, the same type of paper used to print the diagnostic plot should be used for copying it.

These are the settings that you should select:

Scan

- Quality: Max
- File type: JPG
- Content type: Image
- Compression: medium
- Paper type: photo or matte, according to the paper used to print the diagnostic plot. Use photo if in doubt.

Copy

- Quality: Best
- Content type: Image
- Paper type: photo or matte, according to the paper used to print the diagnostic plot. Use photo if in doubt.

Load the diagnostic plot into the scanner input tray, making sure that the printed side of the plot is facing up. The black arrows on the diagnostic plot indicate the direction of loading. Make sure that the diagnostic plot is loaded without skew, and it is centered (that is, it covers the whole scanner area).

Once you have scanned the diagnostic plot (in case you selected the scan option), remember to open the scanned file in any image viewer software and select a zoom of 100% for correct visual evaluation of patterns.

Monitor calibration

The monitor on which the plot is going to be evaluated should ideally be calibrated. If this is not feasible, there is an easy procedure to adjust the brightness and contrast of the monitor, so that at least you can see the patterns correctly.

Adjust the brightness and contrast of your monitor until you can see a difference in lightness between these two squares:



Now you are ready to check each pattern individually.

Save the diagnostic plot for future use

We recommend saving the diagnostic plot with the maintenance sheet, in the solid tube provided.

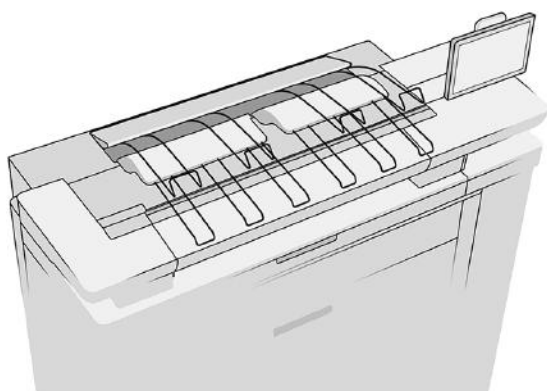
9 Collection and finishing

If you choose no specific job destination, prints are sent to the default output destination, which can be changed from the front panel.

From the home screen, tap , then **Output destination**.

Top stacker

Your printer may come with a top stacker to stack the pages of your job automatically. If not, it is available as an accessory.



It can accommodate up to 100 sheets of paper, depending on the paper type and size.

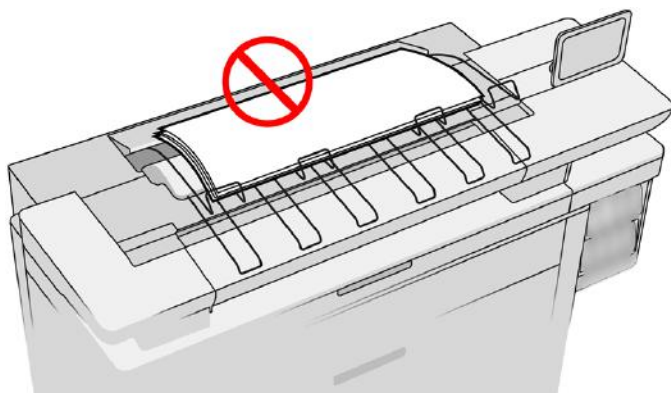
When stacking Natural Tracing Paper, use the supports attached to the top stacker (not recommended for other paper types).

By default, the printer cuts the paper after every printed page, and the resulting sheets of paper are neatly stacked by the stacker.


If you send pages longer than 1.2 m (4 ft) to the stacker, you are recommended to stand by the stacker to prevent the prints from falling on the floor.

You can retrieve part of the stacker pile by waiting until the current job finishes, or by pausing the current job.


After retrieving sheets from the stacker, do not return them to the stacker or put them on top of the stacker, which can cause a paper jam.



To use the stacker, select it as follows before sending the job to print:


- Front panel: Tap , then **Output destination** > **Top stacker**.
- Printer driver: Go to the printer properties, select the **Layout/Output** tab, and change the output destination to **Top stacker**.
- HP SmartStream: Set the destination to **Top stacker**, in the job preparation pane or in the settings pane.

The printed job is automatically collected by the top stacker. Wait until the job has finished, then collect the output.

 **NOTE:** During normal use, you do not need to do anything with the stacker except to remove the stack of printed paper. Occasionally you will need to open the top cover to access the printheads for replacement (see [Replace printheads on page 84](#)), and you may need to take action to clear a paper jam (see [Paper jam on page 51](#)).

Stacker status in the front panel

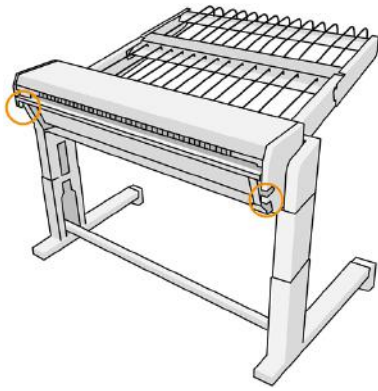
- **Ready:** Ready to receive prints.
- **Error:** Hardware malfunction, paper jam, and so on. Jobs are put on hold or paused for output, depending on the policy selected.
- **Open:** The rear arm, the front tray, or the cleanout is open (you should close whichever is open). Jobs are put on hold or paused for output, depending on the policy selected.
- **Full:** The stacker is full. Jobs are put on hold or paused for output, depending on the policy selected.

 **NOTE:** Some types of paper, such as curled paper, can cause jams in the stacker. For that reason, the stacker may report itself as full when stacking pages coming from the end of a roll.

- **Collection required:** To avoid problems due to the characteristics of some papers, in some cases you may need to collect printed jobs to continue printing.

High-capacity stacker

The high-capacity stacker is available as an accessory. It is designed to support only centered paper rolls, not flexible or rigid sheets.




By default, the printer cuts the paper after every printed page, and the resulting sheets of paper are neatly stacked by the stacker.

The stacker can accommodate 500 plain paper sheets of A1 or A0 size at 80 g/m². Its capacity for different paper types or sizes may be lower, depending on density and weight. It can handle all paper types accepted by the printer.


The accessory roof should be horizontal, unless you are printing on natural tracing paper, in which case you should put the roof into its vertical position.

Printed pages are stacked face up and in reverse order with respect to the order of the pages in the document sent (if multipage). To change this order, use the setting **First page on top** in the submission software.

If you send pages longer than 1.5 m (5 ft) to the stacker, you are recommended to stand by the stacker to prevent the prints from falling on the floor.

 **IMPORTANT:** The stacker will not work unless it is connected to the printer.

1. To use the stacker, select it as follows when sending the job to print:

- Front panel: Tap , then **Output destination > High-capacity stacker**.
- Printer driver: Go to the printer properties, select the **Layout/Output** tab, and change the output destination to **High-capacity stacker**.
- HP SmartStream: Set the destination to **High-capacity stacker**, in the job preparation pane or in the settings pane.

 **TIP:** Enable **Separator** in the HP SmartStream job options to print a separator page between jobs.

2. The printed job is automatically collected by the stacker. Go to the rear of the printer, wait until the job has finished, and collect the output.


 **TIP:** You are recommended to pause the job queue if you want to retrieve part of a job from the stacker.


Status in the front panel

- **Ready:** You can use the stacker.
- **Full:** Unload the stacker before sending more jobs.
- **Paper jam:** Follow front-panel instructions to clear the jam.

- **Error**

Follow the instructions on the front panel to fix the error. If the problem persists, contact your service representative.

If you have a high-capacity stacker output error, you can uninstall the stacker (at the front panel, tap , then **Output > Settings > Uninstall**) and continue printing to another destination. Otherwise, you cannot continue printing to any destination until the error is solved.

 **NOTE:** If you later reconnect the stacker without having changed it, the complete install process is not needed.

- **Detached. Stacker is offline.**

You may sometimes separate the stacker from the printer to clear paper jams in the printer. In that case, the front panel warns you that the stacker is separated, the printer puts all jobs on hold, and displays the message **Output is now detached from printer. Please reposition**. You cannot print until the stacker is mechanically reconnected.

HP folders

HP can offer various different folders for use with your printer.

HP F60 and HP F70 folders

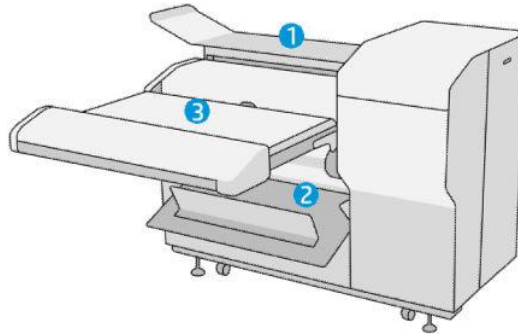
The HP folders fold printed sheets of paper, managing the printed sheet from end to end.

They support roll sizes up to 36 in (914 mm) wide, with multiple folding styles, and can handle paper weights from 75 to 90 g/m².

You can choose the cross-fold or fan-fold tray; or, if you do not want to fold the sheets, you can choose to stack them in the no-fold tray.


1. The **cross-fold tray** collects folded pages. The tray holds up to 150 A0 folded sheets. They may be up to 914 mm (36 in) wide and up to 2.5 m (98 in) long. Longer sheets are not transported into the cross-folder but deployed fan-folded in the catch tray under the no-fold tray.
2. The **fan-fold tray** holds five to ten long pages. The tray can handle all sheet sizes from 210 mm (8.5 in) to 6 m (19.6 ft) long (80 g/m² paper), or longer with an extra-length license (an option), and width up to 914 mm (36 in). Long sheets are deployed fan-folded in the catch tray under the no-fold tray.

3. The **no-fold tray** is used for stacking unfolded pages, up to around 10 sheets. It can handle A1 landscape or A0 sheets; maximum width 914 mm (36 in). Prints that should not be folded will be deployed onto the top of the no-fold tray.




Submitting a job to the folder


While the folder is installed, it is the printer's default output device. If you submit a job without specifying a folding style, the default style is applied.

You can tap  to change the folder settings or default folding styles.

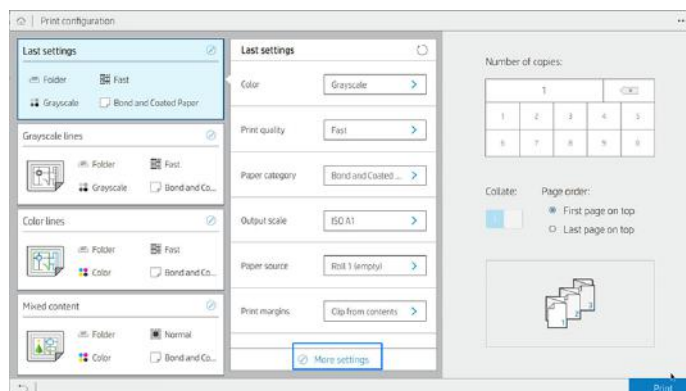
 **NOTE:** If you want to stack jobs in the folder without folding them, select **Not folded** as the folding style.

 **NOTE:** In most cases the title block (legend) should be on the leading edge of the document entering the folder. The title block position has to be set in the printing software you are using (by rotation if necessary).


To use the folder, select it as follows when sending the job to print:

- **Front panel:** Tap , then **Output destination > Folder**.

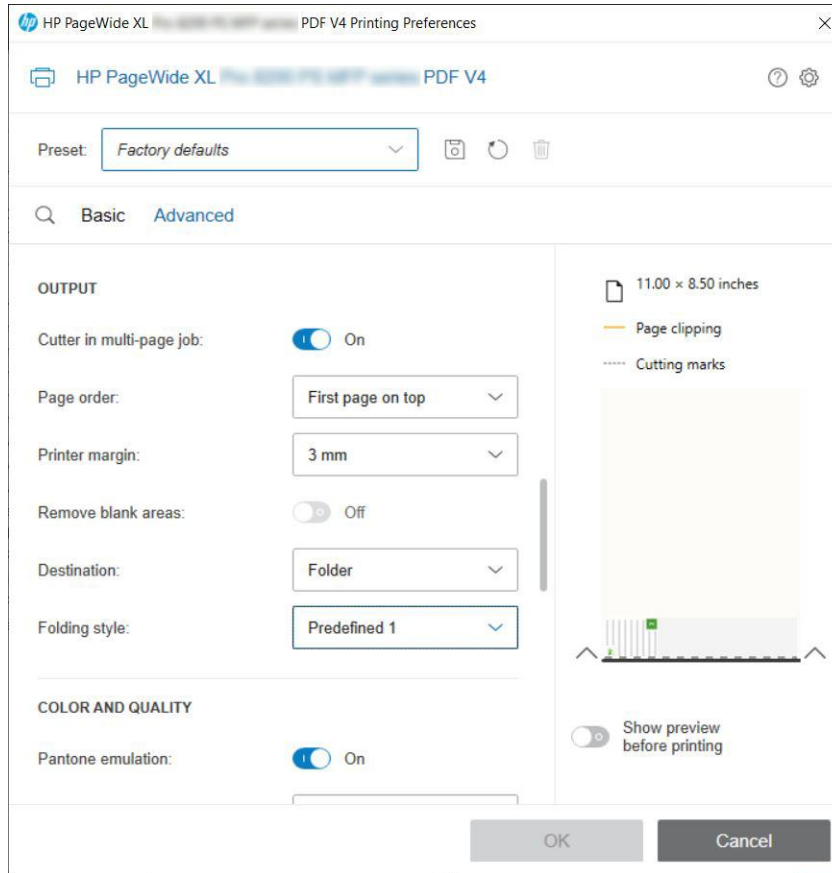
When printing or copying, you can select the folder as the output destination. Tap **Print**, then select the location of the file (USB flash drive, network folder, or home folder), then on the **Quicksets** tab select **More settings > Output destination > Folder**. You can also adjust the default folding style.



- **Printer driver:** Go to the printer properties, select the Output section, and change the output destination to Folder.

The first time you use the folder, you must specify the folding styles that you expect to use. To do that, go to the front panel and tap , then **Output destination > Printing from driver**; from there you can assign one folding style to each predefined style.

Then, in the printing dialog, you will be able to select each predefined style or the default.



Recommended settings for folding jobs:

- Clip content by margin: To avoid printing in the margins and fold properly. From the **Paper/Quality** tab, click **Margins/Layout > Clip content by margin**.
- Right-alignment: To ensure that the block title is in the correct position when folding. Select this in the **Layout/Output** tab.
- Portrait orientation: Select this in the **Layout/Output** tab.

There are some paper types that are not supported by the folder. You will see a warning if you try to send such a paper type to the folder.

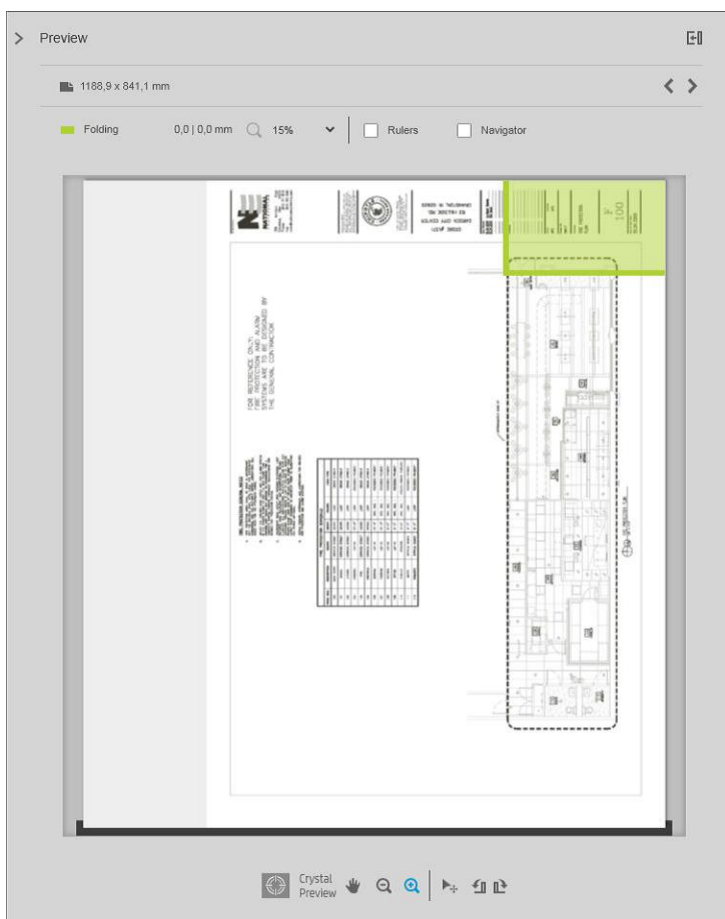
- **HP SmartStream:** Set the destination to **Folder**, in the job preparation pane or in the settings pane. You can also select the folding style.

Folding options	Paper type
Folder Selected	
190 x 297	per
190 + Margin x 297	
210 x 297	per
210 x 305	
210 Inverse Din	
AFNOR 297	per
7,5 inch x 11 inch	
7,5 inch + Margin x 11 inch	
Folder Selected	(Auto) Plain Paper

You can specify in the application preferences whether you want to see the dimensions of the folded paper indicated in green in the preview.



NOTE: The folded dimensions are not shown if they are unknown at this point.



The green rectangle in the preview indicates which part of the page will be on top after folding. If the page contains some header or summary information describing its contents, you may want to ensure that this is in the green rectangle, so that it will be easily visible once the page has been folded. To move the contents of the page, you can use the rotation, alignment, and/or margins options (among the paper source options in the settings pane).

The following steps are recommended to check that the required content is in the green rectangle, and to adjust the page if necessary:

1. Set the default alignment between pages and roll in the preferences so that the page is placed on the correct side of the roll. You need to do this only once.
2. Select the first page of the job to see it in the preview.
3. Zoom in on the green rectangle. You may want to maximize the preview.
4. If required, use the **E** key on the keyboard to rotate the page 90° counterclockwise or the **R** key to rotate 90° clockwise.
5. Use the down-arrow navigation key to select and preview the next page.

Folder status

The folder can be in one of various possible states.

- **Starting:** The folder is initializing and not yet ready.
- **Ready:** The folder is ready to receive jobs, waiting for jobs, or receiving jobs.
- **Full:** The cross-fold or no-fold tray has reached its full capacity. The printer finishes the current page, then stops printing.
- In these cases of error, all jobs are put on hold for output:
 - **Paper jam**
 - **Cover open**
 - **Folder not attached**
 - **Communication error** (the cable is connected but there is no communication)
 - **Tab applicator empty** (if a job is to be folded with tabs)
- **Offline folding active** (not available for F40 Folder)
- **Disconnected** (the cable is not connected)

Folder status LED

The folder status LED gives an at-a-glance indication of the folder status.

- White: Ready
- White blinking: Working
- White/yellow blinking: Out of tabs
- Red: Error, needs attention (may be full)

Folding styles

The folder can fold pages in two different ways and in different sizes.

- Fan fold, in which folds are perpendicular to the printing direction

- Cross fold, in which folds are parallel to the printing direction

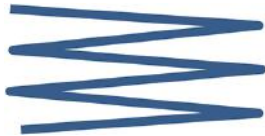
Folding styles are usually based on DIN B or DIN C style:

DIN B



The top and bottom folds are always on opposite sides. If this is what you want, select a folding style below marked with an asterisk, as these are the ones based on DIN B style. All folding styles that include a filing option (tab or filing margin) need to follow that configuration. It requires compensation folds in many formats since the last page's end needs to be in a certain position for the filing option (hanging strip/filing margin). As those packets have more, unevenly distributed, folds, they tend to be thicker on one side making them topple over when you pile them up. Furthermore, the stack gets bigger.

DIN C

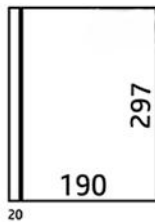


The top and bottom folds are not necessarily on opposite sides. There are no compensation folds, which means that you are getting a thinner and more even stack when plotting a lot of prints and keeping them in one stack, either in plastic jackets or in envelopes/ folders.

DIN

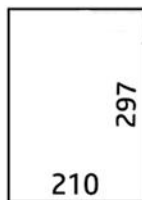
- DIN A 190+20 × 297 mm (with binding edge)*

190 mm width, 20 mm margin, 297 mm height



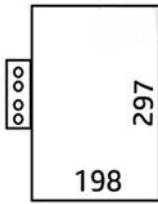
- DIN B 210 × 297 mm (back panel covered)*

210 mm width, height 297 mm



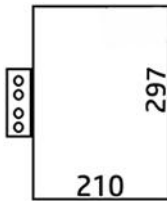
- DIN B 198 × 297 mm TAB*

198 mm width, 297 mm height, with tabs



- DIN B 210 × 297 mm TAB*

210 mm width, 297 mm height, with tabs



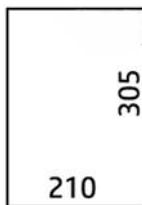
- DIN C 210 × 297 mm (compact fold)

210 mm width, 297 mm height



- DIN B 210 × 305 mm*

210 mm width, 305 mm height

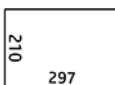


AFNOR (HP F60 and HP F70 folders only)

For AFNOR style, use DIN format rolls. Jobs should be submitted as A0 portrait, A1 landscape, or A3 landscape.

- AFNOR (297 × 210 mm)

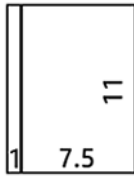
297 mm width, 210 mm height



ANSI

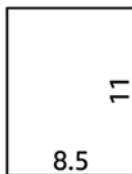
- ANSI 7.5 + 1 × 11 in

7.5 in width, 1 in margin, 11 in height



- ANSI 8.5 × 11 in

8.5 in width, 11 in height



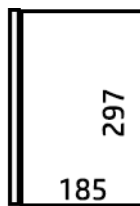
Fan fold only

- Fan fold only (210 mm)
- Fan fold only 9 in

Others

- 185 + 25 × 297 mm (with binding edge)

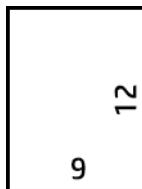
180 mm width, 25 mm margin, 297 mm height



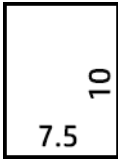
20

- ARCH 9 × 12 in

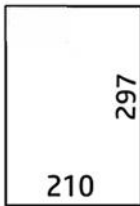
9 in width, 12 in height



- Mailer 7.5 × 10 in
7.5 in width, 10 in height




- Inverse DIN (210 × 297 mm)
210 mm width, 297 mm height



The title block will be shown as follows when unfolded:



For the full list, see the front-panel menu at the default **Folding style** selection.

 **TIP:** The folder tries to compensate automatically if the sheet width is exceeded. If the compensation is not successful, try choosing the DIN B 210 × 305 mm folding style.

There are other functionalities available for purchase. For more information, contact your service representative.

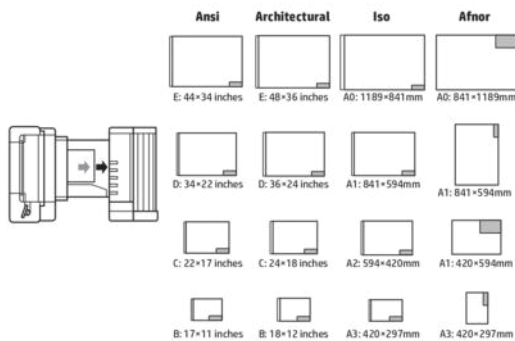
Tab applicator (HP F60 and HP F70 folders only)

You can apply tabs to the folded paper.

- When available, a folding style with tab application can be selected from HP SmartStream, USB flash drive, or Copy.
- During installation or replacement, you are asked how many tabs are in the roll. See [Replace the folder's tab reel on page 191](#).
- The message **Folder out of tabs** is displayed when the folder runs out of tabs, and jobs with tab are put on hold.

Block title

You can choose where the block title should be placed according to page size, folding style, and printing direction.

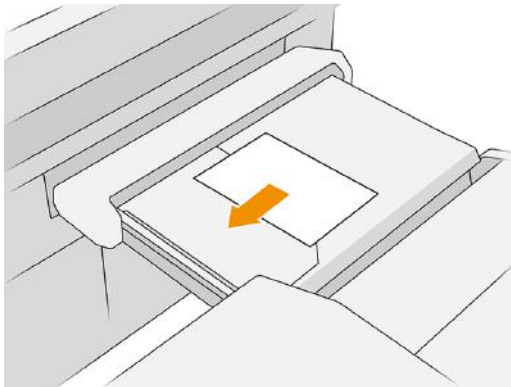


Offline folding (HP F60 and HP F70 folders only)

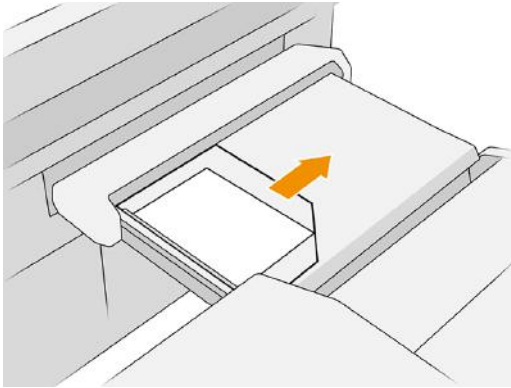
The following steps provide the complete procedure for this topic.

Offline folding means that you provide the printed sheets to the folder manually: they do not come directly from the printer. The default folding style is used.

1. In the Output menu, tap **Offline fold**. The job queue is automatically paused.
2. Empty the no-fold tray if there are any jobs stacked there.
3. Insert the first sheet face down, with the title block leading.



4. Move the tray to the center. The insertion rail on the table can be slid into the best position for the document you are inserting.



5. Go to the job queue and release it.

Troubleshooting

If you have a folding problem, try these suggestions.

- **Jams:** If a paper jam is detected, the front panel will notify you. See [Paper jam on page 51](#).
- **Calibration:** If you notice that folded jobs are not well aligned on the folding edge, or there is more skew than expected, the folder may not be calibrated. Contact your service representative.
- **Communication problems:** If the printer does not recognize the folder, try to switch off the printer and folder. Disconnect the communication cable, make sure the bridge is attached, then start both printer and folder separately. Once both systems are up and ready (the folder LED should be blue), connect the communication cable and wait for the folder to switch to online (the folder LED should be white). If the problem persists, contact your service representative.

How to improve productivity

To fold faster, try these suggestions.

- Use portrait orientation.
- Use DIN or AFNOR folding styles for metric rolls (A0, A1, A2, A3, and A4).
- Use ANSI folding styles for imperial rolls (36 in, 24 in).

Basket

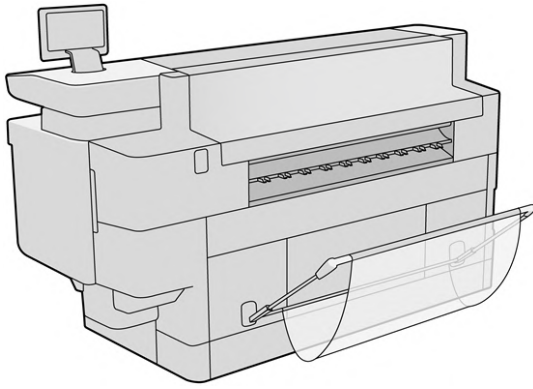
The basket serves as a secondary output path, mainly collecting waste and pages that cannot be sent to other destinations.

You can use the basket, for example, if other destinations are full, or if you want to separate a job from others.

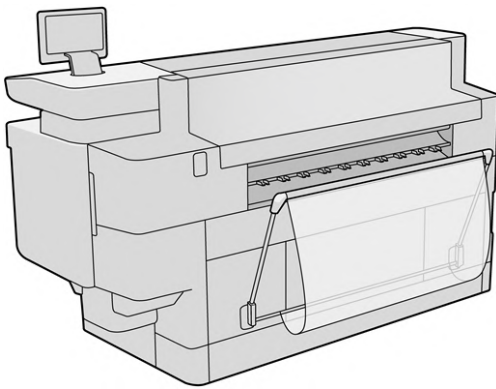
After sending a print of A0/E size or greater to the basket, you must collect the print in order to continue printing.

If you send long pages to the basket, you are recommended to stand by the printer to prevent the prints from falling on the floor or causing jams.

The illustration below shows the basket ready for use.



The illustration below shows the basket closed, permitting easier access to the printer (to clear printer jams, for example).



NOTE: If the basket is the selected output device, do not try to print with the basket closed.

10 Print quality


The following sections provide details for this topic.

General printing advice

These general recommendations will help to avoid printing problems.

When you have any print-quality problem:

- To achieve the best performance from your printer, use only genuine manufacturer's supplies and accessories, whose reliability and performance have been thoroughly tested to give trouble-free performance and best-quality prints.
- Make sure that the paper type selected in the front panel is the same as the paper type loaded into the printer. At the same time, check that the paper type has been calibrated. Also make sure that the paper type selected in your software is the same as the paper type loaded into the printer.

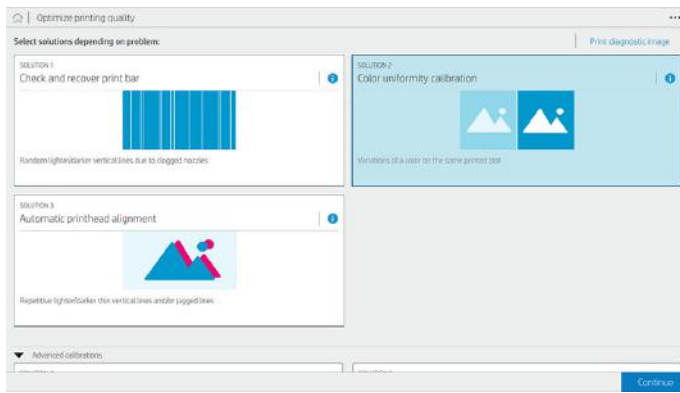
 **CAUTION:** If you have the wrong paper type selected, you could experience poor print quality and incorrect colors, and perhaps even damage to the printhead.

- Check that you are using the most appropriate print-quality settings for your purposes (see [Select print quality on page 125](#)).
- Check that your environmental conditions (temperature, humidity) are in the recommended range for printer and paper.
- Check that your ink cartridges have not passed their expiration dates and are in good condition.
- Check the printhead status.
- If you have any pending calibration for a paper type, tap **Calibrate Print Bar**.

If you still experience print-quality problems, you can follow a more hands-on print-quality troubleshooting procedure, by printing, interpreting, and performing corrective actions as follows.

Optimize print quality app

Go to the optimize print quality app in the front panel to see the different options available.



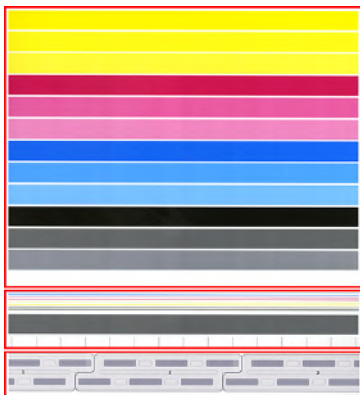
Print diagnostic plot

If you have a print-quality problem, the diagnostic plot can be used to identify the cause.

Use the same paper type that you were using when you detected a problem, and check that the selected paper type is the same as the paper loaded into the printer.

Tap the **Print diagnostic image** button.

The print is divided into three parts. The top part is about print-bar and color calibration problems, the center is about alignment problems, and the bottom part is an illustration of the printhead positions that can be used as a reference.



Check and recover print bar

If you detect problems in the top part of the plot, where there are random (not regular) lighter, very thin lines, some printheads may need cleaning.

Tap **Check and recover print bar**.

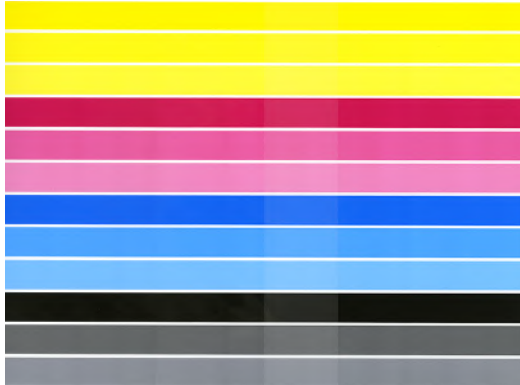



The time required depends on the number of printheads to be cleaned; the process can take up to 5 minutes. Once they have been cleaned, reprint the diagnostic plot to check that the problem has been solved.



If the problem persists, check in the diagnostic plot for which printhead the defects appear. You can identify which printhead has the problem from the numbered printhead image on the bottom of the top part. To clean only that printhead, tap **Advanced calibrations** > **Enhanced printhead recovery** (see [Enhanced printhead recovery on page 181](#)).



Color uniformity calibration



Color variation in the bands in the top part of the plot indicates a possible problem in the color uniformity calibration. The central part of the plot indicates whether the print bar is correctly calibrated.




If you see defects, you should calibrate the printer by tapping , then **Color uniformity calibration**. You should also calibrate the printer if you are warned that a paper source has a calibration pending status.

To check what calibrations have been done in the past, tap , then , then **Calibration history**.

To restore the original factory calibrations at any time, tap , then , then **Restore calibration factory values**.

To schedule calibrations, tap , then , then **Schedule calibrations**.

 **NOTE:** Make sure that the room temperature during calibration is similar to the temperature during normal printing. Big temperature differences (> 10°C) can affect the calibrations.

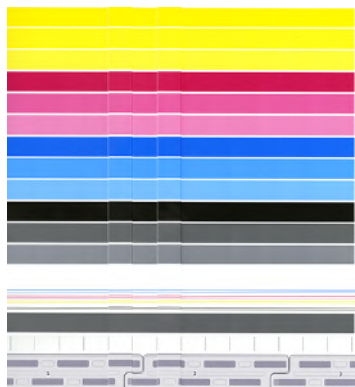
 **NOTE:** Some paper types cannot be calibrated.

Automatic printhead alignment


The following steps provide the complete procedure for this topic.

Follow these steps to align the printheads automatically.

1. Tap **Automatic printhead alignment**, and select the paper format on which to perform the alignment.



The vertical lines indicate the boundaries of the different print elements within a printhead (die boundaries). In the horizontal gray band, no repetitive white lines or dark lines should be seen above the die boundaries. The horizontal lines of different colors should be continuous and not broken or jagged at the die boundaries; if this occurs, a printhead alignment is required.

 **NOTE:** You are recommended to use HP Universal Heavyweight Coated Paper, 40 in (1016mm) wide, to calibrate the print bar.

2. Make sure that you have loaded a roll of HP Production Matte Polypropylene, 40 in (1016 mm) wide, for best results and least waste.
3. The front panel displays the estimated duration, estimated paper usage, and estimated ink usage of the process. It can take up to 16 minutes.

Advanced calibrations


You can run specific custom calibrations to solve particular kinds of problems.

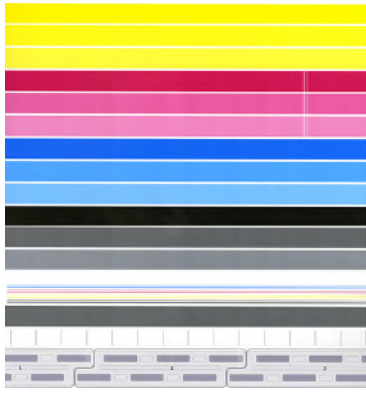
Tap , then **Advanced calibrations**.

Enhanced printhead recovery

This procedure aims to recover a printhead that has been degraded by heavy usage, or when other methods have failed.


It is an intensive procedure to recover printheads with severe degradation, such as multiple nozzles malfunctioning, or color mixing. It may also be used to optimize printheads for jobs with high ink coverage. See [Check and recover print bar on page 179](#).

 **NOTE:** First print a diagnostic plot (see [Print diagnostic plot on page 179](#)) to identify which printheads require cleaning and thus avoid waste of ink. You can select particular printheads for enhanced recovery. In the example below, the affected printhead would be number 3.



Page length accuracy

If you find that printed page lengths are slightly incorrect, you can correct the problem.

Tap , then **Advanced calibrations** > **Page length accuracy**.

The next screen shows the loaded paper types. Select the one you need to correct automatically or manually. If you select **Start** (recommended), the printer makes an automatic correction. The front panel warns you to allow some time and paper for the correction. If you select **Adjust manually**, you must enter the value of the length error.

For example, you may print an A0 (1189 mm) page, but you measure the print and find that its length is 1187 mm. You should select A0 and a measured page length of 1187 mm. The page length correction is automatically updated to +2 mm when you enter the measured value.

 **IMPORTANT:** You could cause a system error or damage to the printer by entering an incorrect error value after **Adjust manually**.

If the above procedures do not solve your problem, call your service representative.

Manual printhead alignment

Manual printhead alignment is a calibration that works on top of the automatic alignment run during the print bar calibration.

The aim of this calibration is to fine-tune the overlap between the different printheads and printing areas in order to remove white/dark lines.



Manual printhead alignment

Alignment values

For each number on the printout select "-1" or "1" depending on the defect. If no adjustment is needed leave the value as "0".

	01 - 0 +	02 - 0 +
	03 - 0 +	04 - 0 +
	05 - 0 +	06 - 0 +
	07 - 0 +	08 - 0 +

Finish Print test

-
-  **TIP:** Some defects may appear on some specific paper types only. You may be able to achieve better results in some cases by changing your paper type.
-  **TIP:** In some cases, automatic printhead alignment by itself may be enough to correct defects. If not, try manual printhead alignment.
-

11 Maintenance

The following sections provide details for this topic.

Check printer status

You can check the current status of the printer in various ways.


- If you start the HP DesignJet Utility and select your printer, you see a page of information describing the status of the printer and its paper and ink supplies.
- If you access the Embedded Web Server, you see information about the general status of the printer. The Supplies page in the **Main** tab describes the status of the paper and ink supplies.
- At the front panel, you can see information about paper, ink levels, ink cartridges, and printhead by tapping its corresponding icon.
- At the front panel, If there are any current alerts, the dashboard on the home screen shows the top-priority alert. Tap this message to see a list of all current alerts, with an icon indicating the severity of each alert. You can tap an alert to get help in solving the problem.


You may see some alerts about the PMKs (Preventive Maintenance Kits). If you would like to know more about printer maintenance, you can contact your service representative.

- From a distance, you can get a quick idea of the printer status by looking at the beacon. See [Beacon on page 12](#).

Clean the exterior of the printer

Clean the outside of the printer and all other parts of the printer that you regularly touch as part of normal operation with a damp sponge or a soft cloth and a mild household cleaner such as non-abrasive liquid soap.

 **WARNING!** To avoid an electric shock, make sure that the printer is turned off and unplugged before you clean it. Do not let water get inside the printer.


 **CAUTION:** Do not use abrasive cleaners on the printer.

Move or store the printer


The following steps provide the complete procedure for this topic.


To move your printer or store it for an extended period of time at the same site, prepare it correctly to avoid possible damage.

Move the printer on its own wheels only over smooth, flat surfaces and do not attempt to go up or down steps.

 **IMPORTANT:** If the printer needs to be shipped to a different location, you should contact your reseller for assistance. The printer has sensitive components that can be damaged during transportation: special transportation features and tools are needed.

1. Do not remove the ink cartridges, maintenance cartridge, or cleaning container.
2. If you are moving the printer to a different location, remove the printheads and store them in the containers provided for the purpose.
3. Make sure that no paper is loaded in any drawer.
4. Turn off the power using the **Power** key on the front panel.
5. Also turn off the power switch at the rear of the printer.
6. Disconnect any cables connecting the printer to a network, a computer, a scanner, or any other accessory.
7. Never turn the printer upside down or on its side.
8. For correct environmental storage conditions, see [Environmental specifications on page 210](#).

 **NOTE:** The printheads have their own environmental specifications, separate from those of the printer. However, they are best stored in the printer.

 **NOTE:** If the printer or ink cartridges are moved from a cold location to a warm and humid location, water from the atmosphere can condense on the printer parts and cartridges and can result in ink leaks and printer errors. In this case, HP recommends that you wait at least 3 hours before turning on the printer or installing the ink cartridges, to allow the water to evaporate.


Move or store the high-capacity stacker

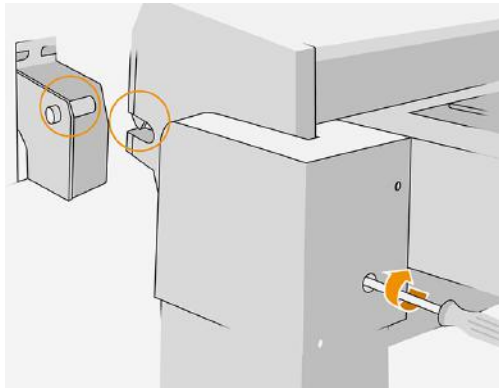
Move the stacker on its own wheels only over smooth, flat surfaces and do not attempt to go up or down steps.

A minimum door or corridor width of 130 cm is required when moving the stacker. If the tray needs to be disassembled to pass through doors or corridors, call your service representative. This should be done by trained service personnel.

Disconnect the cable before moving or storing the stacker. Reconnect the cable before using the stacker again.

If you will be using the stacker again with the same printer, its height does not need to change. If you attach it to a different printer, you may need to adjust the height. To adjust the height, turn the screw clockwise on both sides of the stacker (as shown below) to move the stacker up, or counterclockwise to move it down. Then connect the stacker to the printer.

 **NOTE:** There is a line in the center of the printer and another in the center of the stacker to help you.



Move or store the folder

Move the folder on its own wheels only over smooth, flat surfaces and do not attempt to go up or down steps.

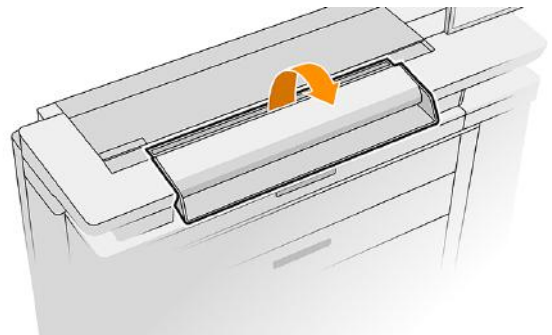
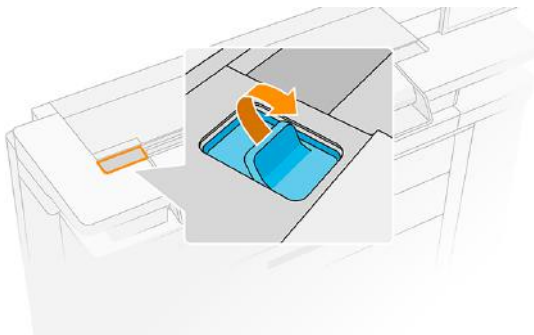
Disconnect the cable before moving or storing the folder.

Before using the folder again, adjust its height and reconnect the cable.

Clean the scanner's glass plate (MFP only)

You are recommended to clean the scanner's glass plate periodically, depending on how often you use the scanner.

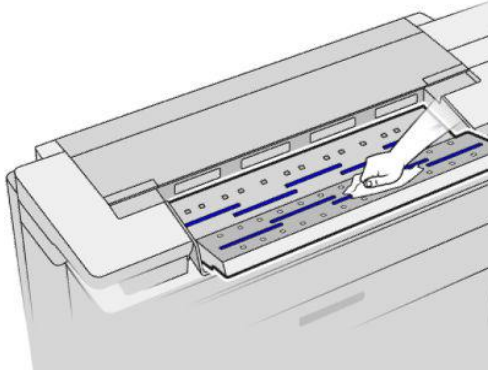
1. Turn off the printer using the **Power** key at the front, then also turn off the power switch at the rear and disconnect the power cable.
2. There is a small lever at the left of the scanner. Slide the lever up and open the scanner cover.



⚠ WARNING! Do not lift the scanner while the scanner cover is open. Your fingers or hand may be trapped or crushed.

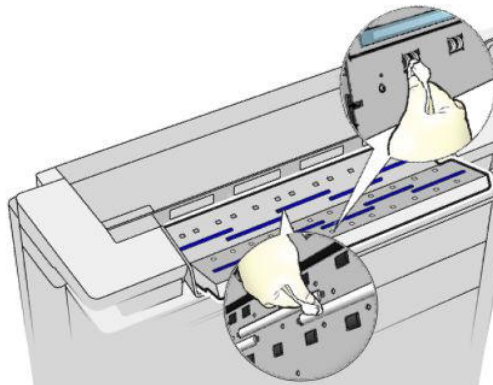
3. Gently wipe the glass plate and the surrounding area with a lint-free cloth dampened with water and then wrung dry. A suitable cloth is provided with the printer.

⚠ CAUTION: Do not use abrasives, acetone, benzene or fluids that contain these chemicals. Do not spray liquids directly onto the scanner glass plate or anywhere else in the scanner.

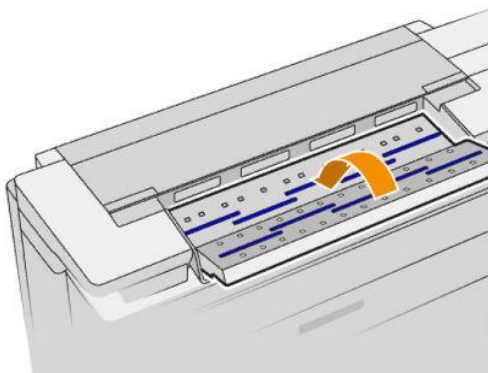


Do not worry about tiny droplets of water left on the glass: they will evaporate.

4. Optionally, for more thorough cleaning:
 - Remove the glass plate and clean it on both sides. See [Replace the scanner's glass plate \(MFP only\) on page 188](#).
 - Clean the pressure rollers and the feed rollers.



5. Close the scanner cover and gently push it down to lock it into place.



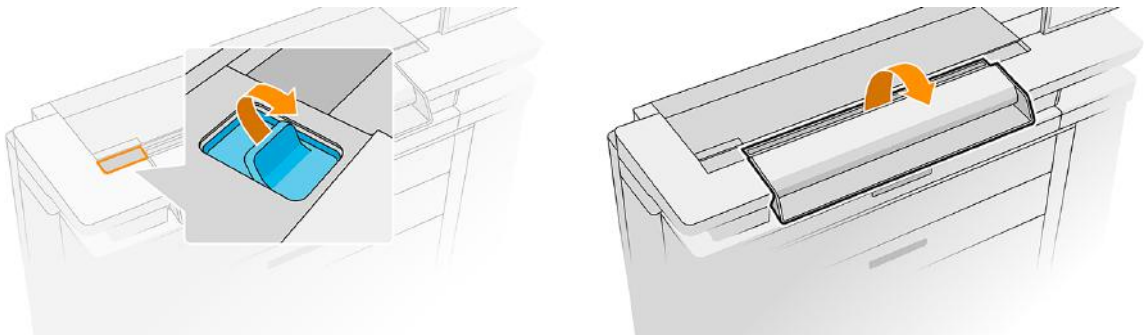
6. Clean the area immediately in front of the scanner, where the scanned sheet rests before scanning.
7. Reconnect the printer's power cable, turn on the power switch at the rear, and turn on the printer using the **Power** key.

Replace the scanner's glass plate (MFP only)

Over time, the condition of the glass plate can deteriorate. Small scratches on the surface of the glass can reduce image quality.

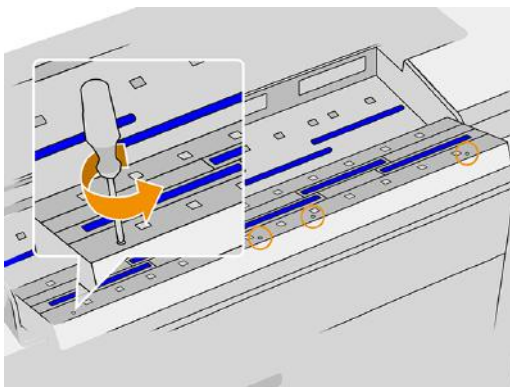
Contact your service representative (see [When you need help on page 200](#)) to order a new glass plate.

1. Turn off the printer using the **Power** key at the front, then also turn off the power switch at the rear and disconnect the power cable.
2. There is a small lever at the left of the scanner. Slide the lever up and open the scanner cover.

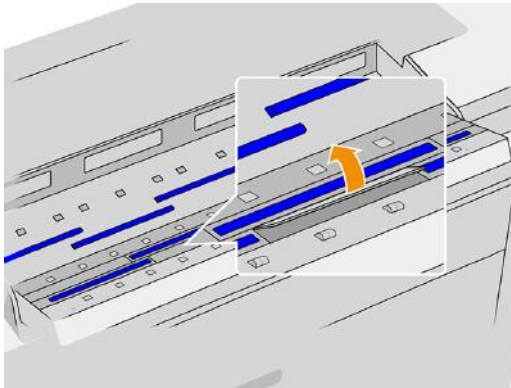
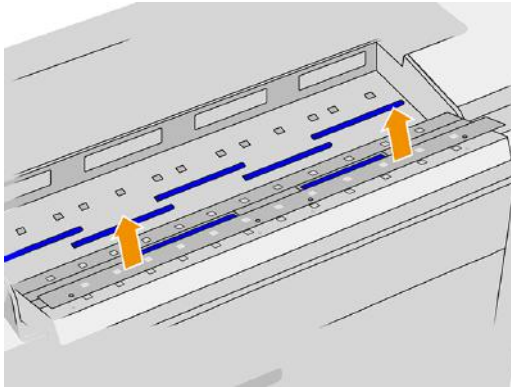


⚠ WARNING! Do not lift the scanner while the scanner cover is open. Your fingers or hand may be trapped or crushed.

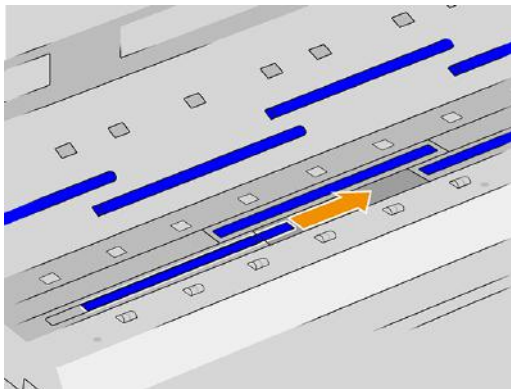
3. Unscrew 4 screws from the upper part if you intend to replace any of the three upper glasses; or unscrew the 4 screws of the lower part for the two lower glasses.



4. Remove the black metal piece (upper or lower as appropriate), and the plastic tabs next to the glass you intend to remove.

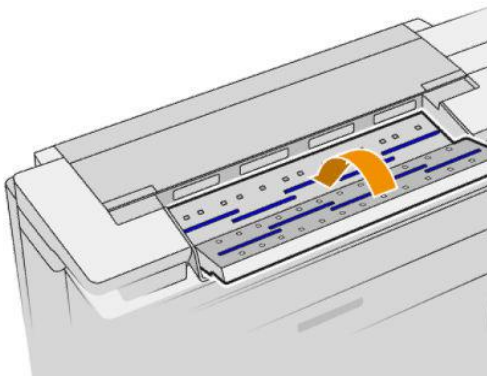


5. Slide the glass laterally to remove it.



6. Slide the new glass into place.
7. Put back the plastic tabs you removed earlier.
8. Put back and screw in the black metal piece you removed earlier.

9. Close the scanner cover and gently push it down to lock it into place.



10. Reconnect the printer's power cable, turn on the power switch at the rear, and turn on the printer using the [Power](#) key.

Calibrate the scanner (MFP only)


Your scanner has been calibrated at the factory, and theoretically CIS scanners do not need to be recalibrated during their lifetimes. Nevertheless, because of environmental changes, your scanner may start showing image defects that can be easily corrected by recalibrating the scanner.

The whole procedure takes less than 10 minutes, and you are recommended to recalibrate the scanner whenever you see some undesired artifact or a lack of quality in scanned files or copies, bearing in mind the limitations of CIS technology already explained in this guide.

If you perform calibration successfully and still have concerns about the image quality, see [Scanner troubleshooting on page 149](#); alternatively, you may want to consider buying a CCD scanner.

To calibrate the scanner

The following steps provide the complete procedure for this topic.

1. Clean the scanner. See [Clean the scanner's glass plate \(MFP only\) on page 186](#).
2. Go to the front panel and tap the Settings icon , then **Scanner preferences > Calibrate scanner**.
3. Follow the instructions in the front panel.

If calibration fails

The following steps provide the complete procedure for this topic.

The supplied maintenance sheet required to perform scanner calibration looks like this:



Load the maintenance sheet into the scanner face up, centered and with as little skew as possible. Once the calibration is finished, the maintenance sheet should be carefully placed into its solid cover, and saved in a fresh and dry place. Otherwise, it could be damaged, which could affect the operation of your scanner in the future. Check that the maintenance sheet is not dirty, wrinkled, scratched or folded before calibrating the scanner. If necessary, call your service representative and ask for a new maintenance sheet.

1. Ensure that the printer is turned on and ready for normal operation.
2. Ensure that the scanner is working correctly. To test it, scan a small document to file.
3. Ensure that the scanner is clean before calibration. If in doubt, clean the scanner and restart the calibration process.
4. Eject and reload the calibration sheet, checking that it is clean, in good condition, face up and perfectly centered in the scanner.
5. If the above steps do not help, eject the sheet and restart the printer (turn off and on). When the system has restarted, repeat the calibration.
6. If you cannot perform the calibration successfully in three consecutive attempts, call your service representative and report the error code that appears in the front panel.

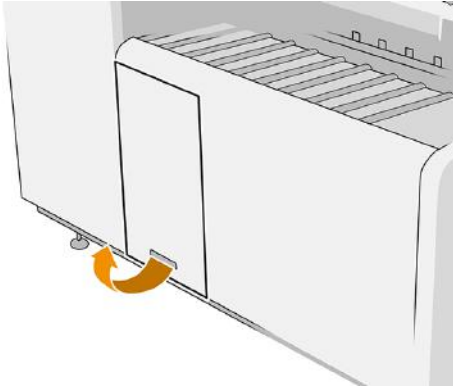
Replace the folder's tab reel

Follow these steps if you need to replace your folder's tab reel.

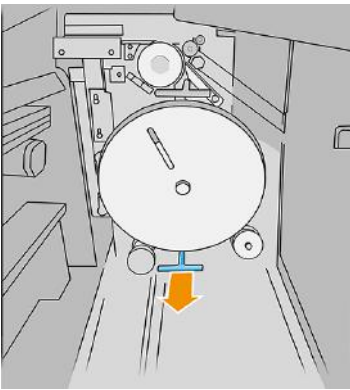


See video: <http://www.hp.com/go/pagewidexl/replace-the-tab-reel/>.

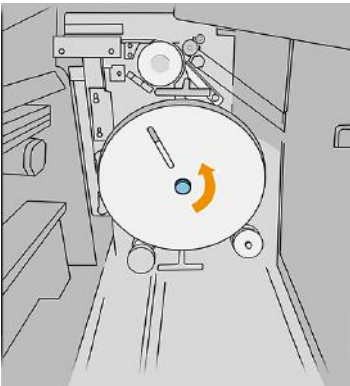
1. Open the door.



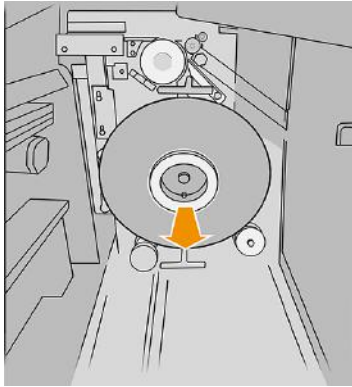
2. Pull the lower lever.



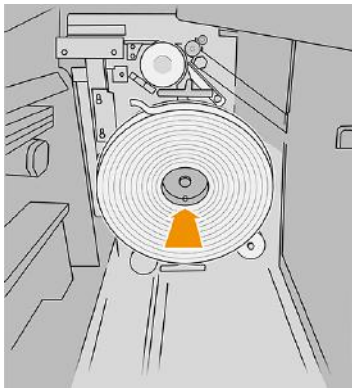
3. Rotate the tab protector to remove it.



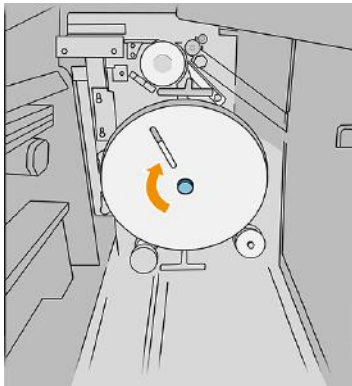
4. Remove the empty tabs.



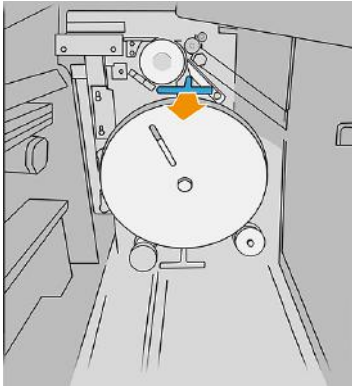
5. Place the new tab reel.



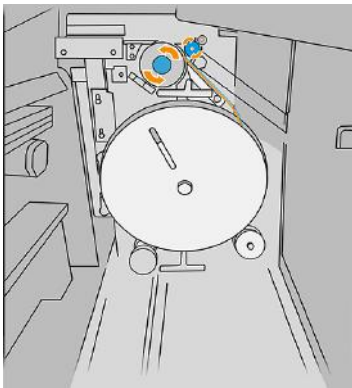
6. Put back the tab protector.



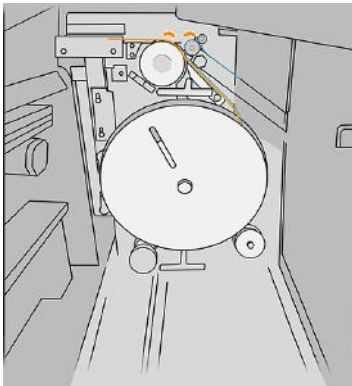
7. Pull the upper lever.



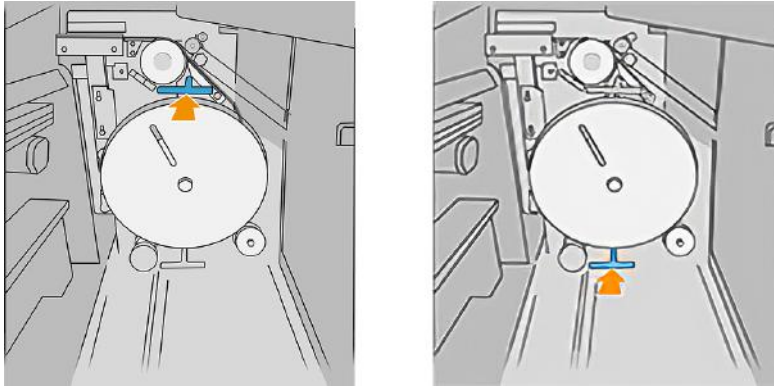
8. Pass the tab between the wheels.



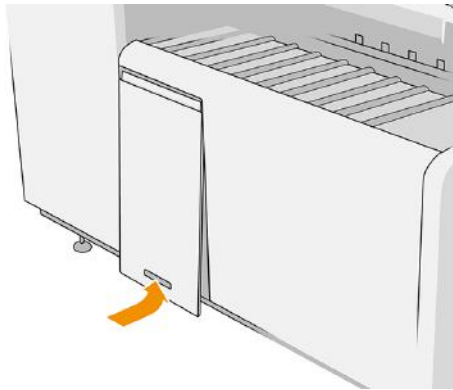
9. Pass the tab reel by the path shown in the image.



10. Push back the two levers.



11. Close the door.



 **NOTE:** If you have asked for tabs but they do not appear on the folded jobs, open the cover and check that they are properly installed and that no problem has occurred.

Update the firmware

The printer's various functions are controlled by firmware that resides in the printer. From time to time firmware updates are available from HP.

These updates increase the printer's functionality, enhance its features, and may correct minor problems.

 **IMPORTANT:** You are strongly recommended to update the firmware periodically in order to take advantage of the latest developments.

There are various ways of downloading and installing firmware updates; you can choose whichever you find most convenient. They can be divided into two categories: automatic and manual updates.

 **NOTE:** The firmware includes a set of the most commonly used paper presets. Extra paper presets can be downloaded separately.

Automatic firmware updates

Automatic firmware updates are a convenience that is possible with HP-connected printers. Your printer can automatically download the latest firmware release and install it for you.

Important notes

- Your printer must be connected to the Internet; see [Configure your connectivity on page 25](#).
- To configure automatic firmware updates, you can use the front panel or the Embedded Web Server; see [Configure your connectivity on page 25](#).
- A firmware update package can be large; you may want to consider whether there are any implications for your network or Internet connection.
- A firmware update is downloaded in the background: the printer can be printing at the same time. However, it cannot be installed in the background: printing must stop.

Manual firmware updates

Manual firmware updates can be performed in various ways.

- Using the Embedded Web Server, click the **Setup** tab and then **Firmware update**. Click **Browse** to select a firmware file (.fmw) that you have already downloaded to your own computer.
- Using HP Web Jetadmin, with which you can make manual firmware updates or request automatic updates.
- Using a USB flash drive: Download the firmware file from <http://www.hp.com/go/pagewidexlseries/support/software/> (according to your printer model) into the USB flash drive and insert it into the Hi-Speed USB host port in the front panel. A firmware update assistant will appear on the front panel to guide you through the update process.



Secure File Erase

The printer's hard disk is used as a temporary storage area for print jobs. Secure File Erase can erase your temporary files from the hard disk to protect them from unauthorized access.

It begins to do so as soon as you turn it on, but old temporary files that were already on the hard disk are not erased retroactively. If you want to erase the old files too, see [Disk Wipe on page 197](#).

Secure File Erase provides three different levels of security:

- **Non-Secure:** all pointers to the information are erased. The information itself remains on the hard disk until the disk space it occupies is needed for other purposes, and it is then overwritten. While it remains on the disk, it is difficult for most people to access, but may be accessed using software designed for the purpose. This is the normal method in which files are erased on most computer systems; it is the fastest method but the least secure.
- **Secure Fast Erase (1 pass):** all pointers to the information are erased, and the information itself is also overwritten with a fixed character pattern. This method is slower than Non-Secure, but more secure. It may still be possible to access fragments of the erased information by using special tools to detect residual magnetic traces.
- **Secure Sanitizing Erase (5 passes):** all pointers to the information are erased, and the information itself is repetitively overwritten using an algorithm designed to eliminate any residual traces. This is the slowest method, but the most secure. Secure Sanitizing Erase meets the US Department of Defense 5220-22.m requirements for clearing and sanitization of disk media. This is the default security level when using Secure File Erase.

While files are being erased, the printer's performance may be affected.

The Secure File Erase configuration can be changed from Web JetAdmin or the Embedded Web Server (**Security** > **Security settings**).

Secure File Erase is one of the facilities provided by Web JetAdmin, which is HP's free Web-based print management software: see <http://www.hp.com/go/webjetadmin>.

If you have difficulty in using Secure File Erase from Web JetAdmin, contact your service representative: see [When you need help on page 200](#).

Disk Wipe

Disk Wipe erases all temporary files, including old ones.

In other respects, it is the same as Secure File Erase (see [Secure File Erase on page 196](#)).

The Disk Wipe configuration can be changed from Web JetAdmin or the Embedded Web Server (**Setup** > **Security**).



NOTE: If you choose to erase the whole hard disk, you may be asked to restart the printer several times during the process, which will take about 6 hours with Secure Fast Erase or 24 hours with Secure Sanitizing Erase.

12 Accessories

You can purchase accessories to add extra features to your printer.

How to order

Contact your service representative, and check that what you want is available in your area.

See [When you need help on page 200](#).

The rest of this chapter lists the available supplies and accessories, and their part numbers, at the time of writing.

List of accessories

These are the HP accessories available for your printer.

Software

- HP SmartStream
- HP SmartTracker

Scanners

- HP DesignJet SD Pro 44-in Scanner (G6H50B)
- HP DesignJet HD Pro 42-in Scanner (G6H51B)

Stackers

- HP PageWide XL High-Capacity Stacker (CZ319A and CZ319B)
For the 3920 and 4x00 only, requires the accessory upgrade kit
- HP PageWide XL Top Stacker (CZ320A)

Folders

- HP F70 Folder Solution (8SF70A)
- HP F70 Folder with Tab Applicator (8SF71A)

- HP F60 Folder with Tab Applicator (8SF61A)
- HP PageWide XL Folder Upgrade Kit for Long Plots, compatible with HP Folders F60 and F70 (8SB09A)
- HP F40 Folder (8SF40A)

For the 3920 and 4x00 only, all folders require the accessory upgrade kit.

In addition, legacy folders compatible with previous HP PageWide XL printer models remain compatible with the new equivalent HP PageWide XL 3920/4200/4700/5200/8200 Printer Series. This applies to all folder models:

- HP F70 Folder (K5H75A)
- HP F70 Folder with Tab Applicator (L3M58B)
- HP F60 Folder with Tab Applicator (1EX00B)
- HP F40 Folder (3JJ54A)

Others

- HP PageWide XL 4200 Speed Upgrade Kit (8SB08A) (not available in America) (4200 only)
- HP PageWide XL PostScript/PDF Upgrade Kit (8SB07A)

The PostScript upgrade enables the printer to print PDF and PostScript files. The PostScript upgrade can be plugged into the printer's USB host port. It is not necessary to leave it permanently connected: just plug it in once, and the printer is upgraded forever.

- HP PageWide XL Drawer (8SB02A)
- HP Accessory Upgrade Kit (1AT07B) (3920 and 4x00 only)

Non-HP accessories

You may be able to use non-HP accessories with your printer.

Install

To install a non-HP accessory, first ensure that it is connected to the printer (with cable and hooks) and turned on. Then go to the front panel.

Tap , then **Output destination > Install non-HP accessory**.

Configure

A few settings are available for non-HP accessories.

- **Minimum gap between sheets.** Range from 100 to 3000 milliseconds.
- **Maximum supported speed.** Range from 2 to 15 inches per second.
- **Minimum page length supported.** Range from 180 to 1000 millimeters.

13 When you need help

The following sections provide details for this topic.

Request support

Support is provided by your service representative: usually from the company from which you bought the printer.

If this is not the case, contact HP Support on the Web: <http://www.hp.com/go/pagewidexlseries/support/>.

Before calling your service representative, prepare for the call as follows:

- Review the troubleshooting suggestions in this guide.
- Review your software documentation, if relevant.
- Check that you have the following information ready:
 - The product and serial numbers of the printer you are using.
 - If there is an error code on the front panel, make a note of it. See [Front-panel error messages on page 212](#).
 - The name and version number of your software.
 - If you have a print-quality problem, the name and product number of the paper, and the name and origin of the paper preset that you used to print on it.

HP support is available by chatting with the Virtual Agent or by telephone.

HP's Virtual Agent is there to troubleshoot issues with you at any time of day or night.



<http://www.hp.com/go/pagewidexlseries/VA/>

Customer Self-Repair

HP's Customer Self-Repair program offers our customers the fastest service under either warranty or contract. It enables HP to ship replacement parts directly to you (the end user) so that you can replace them.

Using this program, you can replace parts at your own convenience.

Convenient and easy to use

- Your service representative will diagnose and assess whether a replacement part is required to address a defective hardware component.

For more information about Customer Self Repair, see <http://www.hp.com/go/selfrepair/>.

Service information

The printer can produce on request a list of many aspects of its current status, some of which may be useful to a service engineer trying to fix a problem.

There are two different ways to request this list:

- In the Embedded Web Server (see [Embedded Web Server on page 16](#)), click the **Support** tab and then **Service support > Service information**. You are recommended to request the whole list (click **All pages**).
- From any computer with Internet access, enter the URL of your printer into a Web browser, followed by `/hp/device/webAccess/allServicePlot.htm`. For instance, if the URL of your printer is `http://123.123.123.123`, enter:

`http://123.123.123.123/hp/device/webAccess/allServicePlot.htm`

If you need to send the list by email, you can save the page as a file from your Web browser, and later send the file. Alternatively, from Internet Explorer you can send the page directly: click **File > Send > Page by email**.

14 Retrieving printer usage information

You can collect and analyze data on the usage of your printer.

Get printer accounting information

This topic explains the concepts involved in this subject.

There are different ways of getting accounting information from your printer.

- View printer usage statistics for the whole lifetime of the printer, see [Check usage statistics on page 202](#).
- View ink and paper usage for each of your recent jobs, see [Check usage statistics for a job on page 205](#).
- Use a third-party application to request printer status, printer usage or job accounting data from the printer through the Internet. The printer provides data in XML to the application whenever requested. HP provides a Software Development Kit to facilitate the development of such applications.

Check usage statistics

There are two ways to display printer usage information: from the front panel, and from the Embedded Web Server.

Check usage from the front panel

Tap **127** on the front panel to display the usage information.

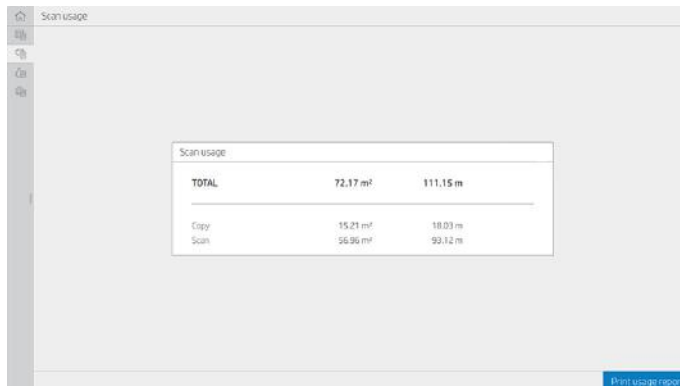


The screenshot shows a printer's front panel display with a menu on the left and a table titled 'Print categories usage' in the center. The table lists various print categories and their corresponding ink, paper area, and paper length usage. A 'Print usage report' button is visible at the bottom right of the screen.

	Ink (ml)	Paper area (m ²)	Paper length (m)
Monochrome	21.87	48.89	61.82
Color lines	73.61	36.81	46.64
Low density image	62.8	118.07	159.89
High density image	437.52	48.74	59.92
Blueprint	0	0	0
Grid	6.48	3.31	5.5
TOTAL	622.27	256.66	333.77

The following information can be retrieved:

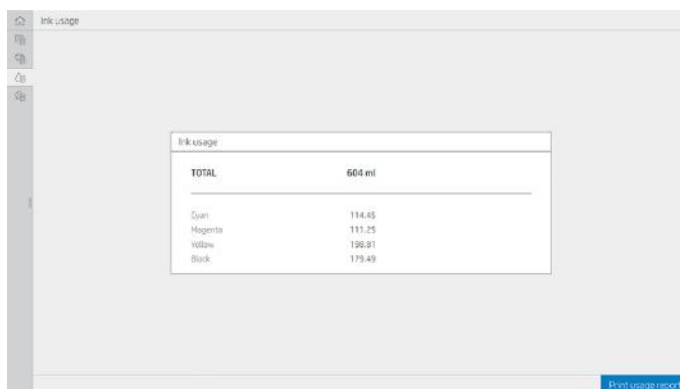
- In the tab **Print categories usage**, you can see the ink, paper area, and paper length usage divided into categories:
 - Mono lines: Between 0% and 10% of non-white pixel coverage, printed on standard paper, with less than 1% of color pixel coverage
 - Color lines: Between 0% and 10% of non-white pixel coverage, printed on standard paper, with more than 1% of color pixel coverage
 - Low density image: Between 10% and 50% of non-white pixel coverage printed on standard paper
 - High density image: Over 50% of non-white pixel coverage printed on standard paper
 - Premium quality image: Any content type printed on premium paper
 - Blueprint: Any content type printed on blueprint paper
 - Rigid: Any content type printed on rigid sheets
- **Scan usage:** The copy and scan usage in m², and the total amount:



TOTAL	72.17 m²	111.15 m
Copy	15.21 m²	18.03 m
Scan	56.96 m²	93.12 m

[Print usage report](#)

- **Ink usage:** The ink consumed by each cartridge in ml, and the total amount of ink consumed.



TOTAL	604 ml
Cyan	114.65
Magenta	111.25
Yellow	196.81
Black	179.49

[Print usage report](#)

- **Paper usage:** Amount of paper used and the total at the top, divided into paper categories or families.
Usage can be seen at each level.



Paper usage		
TOTAL	283.88 m²	370.8 m
Coated Paper	34.58 m²	42.11 m
HP Universal Heavyweight Coated Paper, 3-in Core	33.48 m²	39.82 m
Heavyweight Coated Paper (>120 g/m²)	0.5 m²	0.05 m
Coated Paper (90-100 g/m²)	0.63 m²	1.44 m
Plain Paper	236.22 m²	312.03 m
Plain Paper (>90 g/m²)	225.10 m²	310.58 m
Plain Paper (<110 g/m²)	1.03 m²	1.85 m
Cardstock	13.09 m²	16.66 m
Plain/Uncoated Cardstock	13.09 m²	16.66 m

When you tap the **Print usage report** button, a message is displayed: **The usage report was sent to the job queue and will be printed soon.**

All the values can be displayed in English or metric units.

Print the usage information

There are two different ways to print the usage information from the front panel's home screen:

- Tap  to launch the usage information screen, then tap the **Print usage report** button.
- Tap , then **Internal prints** > **User information prints** > **Print usage report**.

Check usage from the Embedded Web Server

The same information can be retrieved from the Embedded Web Server as from the front panel.

1. Access the Embedded Web Server, see [Embedded Web Server on page 16](#).
2. In the menu at the side, click **Usage**.


The usage page shows all the printer usage information separated into various tables:

- **Summary:** The total ink usage and the total paper usage (in units of area and length).
- **Print categories usage:** The ink and paper usage and the number of pages printed for the different print categories (content type, such as mono lines, color lines, premium quality image, blueprint paper). This table information is shown only if the **Show application categories** printer setting is enabled. There are further conditions depending on the following settings:
 - The paper printed usage is shown if the **Paper area used and paper area printed** setting is enabled.
 - The blueprint category is shown if the **Enable the blueprint category** setting is enabled.
 - The premium quality image category is shown only if the **Enable the premium quality image category** setting is enabled.
 - If the printed-paper column information is shown, the paper area used field changes the string to "Paper area (m² used)". Otherwise, the string shown is "Paper area (m²)".
- **Ink usage:** The ink usage for the whole life of the printer (with approximate values). The ink consumption table lists the ink consumed in each color, ignoring the product number of the cartridge.

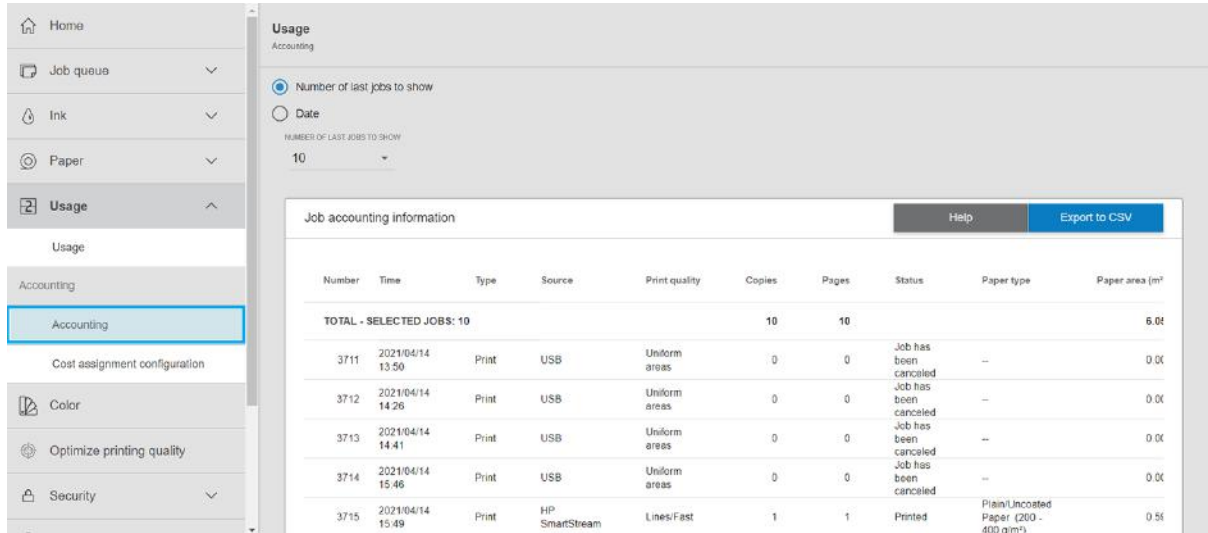
- **Paper usage:** All the papers that have been used throughout the life of the printer.

Check usage statistics for a job

The following steps provide the complete procedure for this topic.

 **NOTE:** The accuracy of the usage statistics is not guaranteed.

1. Access the Embedded Web Server, see [Embedded Web Server on page 16](#).
2. In the menu at the side, click **Usage > Accounting**.

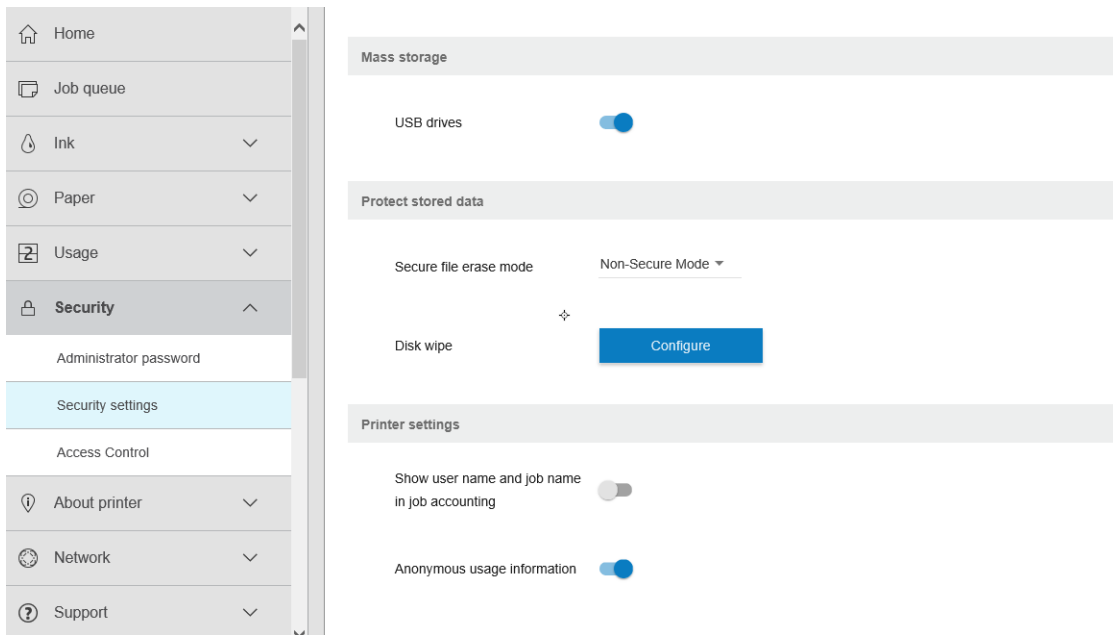


Number	Time	Type	Source	Print quality	Copies	Pages	Status	Paper type	Paper area (m²)
TOTAL - SELECTED JOBS: 10					10	10			6.00
3711	2021/04/14 13:50	Print	USB	Uniform areas	0	0	Job has been canceled	—	0.00
3712	2021/04/14 14:26	Print	USB	Uniform areas	0	0	Job has been canceled	—	0.00
3713	2021/04/14 14:41	Print	USB	Uniform areas	0	0	Job has been canceled	—	0.00
3714	2021/04/14 15:46	Print	USB	Uniform areas	0	0	Job has been canceled	—	0.00
3715	2021/04/14 15:49	Print	HP SmartStream	Lines/Fast	1	1	Printed	Plain/Uncoated Paper (200 - 400 g/m²)	0.56

The accounting page shows a table of the latest printed jobs, with the following information per job (not per page):

- **Name:** The name of the job

The job name is shown only if the **Show user name and job name in job accounting** setting is enabled for users under **Security > Security settings**.



- **Number:** The number of the job
- **Time:** The date and time when the job was completed
- **User:** The name entered by the person who submitted the job (this item is present only if the corresponding security setting is enabled)

The user name is shown only if the **Show user name and job name in job accounting** setting is enabled for users under **Security > Security settings**.

- **Type:** The type of job (print)
- **Source:** The source of the job: USB, network, and so on
- **Print quality:** The print quality used to print the job
- **Copies:** The number of copies requested (cumulative after reprints)
- **Pages:** The number of pages completed
- **Status:** The status of the job: printed, canceled by user, and so on
- **Total cost:** The total cost of the job (visible if cost assignment is enabled)
- **Paper type:** The paper type used for the job
- **Paper area:** The used paper area of the job
- **Paper length:** The used paper length of the job
- **Ink used:** The volume of ink consumed by the job

A job is considered completed when all its pages have been printed, or canceled by the user, or canceled by the printer itself. An ongoing job (waiting for printing, being printed, being canceled, on hold for preview, and so on) will not appear on this list.

You can filter the jobs shown on the accounting page by using a drop-down control available on the same page. This control just changes the view, the job accounting information is not deleted in the printer. Essentially, this page will report the last N jobs (or fewer if there are not enough completed jobs), where N is the value of this configuration parameter. By default, N is 10.

Two buttons appear in the accounting table:

- **Help:** This button opens a window displaying help information.
- **Export to CSV:** This button opens a window with a progress bar, and generates and downloads a CSV file. The downloaded file contains similar information to the accounting page, in CSV format. If the cost assignment is enabled, the CSV displays more detailed information about the cost of the job.

Check cost assignment

The following steps provide the complete procedure for this topic.



NOTE: The accuracy of the usage statistics is not guaranteed.

1. Access the Embedded Web Server, see [Embedded Web Server on page 16](#).
2. Click **Usage > Cost assignment configuration**.

The cost assignment page allows you to enable or disable the cost assignment setting, using the checkbox next to **Enable accounting assignment configuration** at the top of the page. If the setting is enabled, you can insert or modify the cost of the following sections.



NOTE: At least one of these sections must be enabled in order to save the configuration.

- **Units**
 - **Currency:** Enter any three-letter currency code.
 - **Paper usage:** Select the units, English or metric.
- **Print categories cost:** Can be enabled or disabled. When enabled, you can assign a cost to each category, and select the units of the cost (per millimeter, or the option selected in the previous **Units** section). The cost is a number with two decimal digits of precision. Disabled categories are displayed grayed out.
- **Ink usage cost:** Can be enabled or disabled. Allows you to apply a cost to ink usage, and displays the available inks with a field to indicate the cost.
- **Paper usage cost:** Can be enabled or disabled. Allows you to apply a cost to the papers displayed. You can add papers from the list of supported papers. The costs can be removed or edited; they cannot be empty, but may be 0 (zero). The units selection is the same as for print categories.
- **Fixed cost:** Can be enabled or disabled. Allows you to add a fixed cost to all print, scan, and copy jobs.

Enabling the cost assignment setting causes the total cost column to appear in the accounting information, and detailed information is added to the exported CSV.

15 Printer specifications

You can consult this chapter for factual details and measurements of all aspects of your printer.

Functional specifications

Specifications of the functional characteristics of the printer.

HP ink supplies

Type	Description
Printheads	Eight CMYK printheads, each containing 25344 nozzles spaced at 1200 nozzles per inch
Ink cartridges	Cartridges containing 500 ml of ink: black, cyan, magenta, yellow

Roll paper sizes

-	Minimum	Maximum
Roll width	279 mm (11 in)	1016 mm (40 in)
Roll diameter	-	177 mm (7 in)
Roll core diameter	-	76 mm (3 in)
Roll weight	-	18 kg (40 lb)
Sheet width (for scanner)	-	914 mm (36 in)
Sheet length (for scanner)	-	Up to 15 m (49.21 ft), depending on file type
Roll paper thickness	-	0.4 mm (0.016 in)
Paper weight	70 g/m ²	200 g/m ²

Printing resolutions

Print quality	Rendering resolution (ppi)	Halftone resolution (dpi)	Printing resolution (dpi)
Lines/Fast	600 × 600	600 × 600	1200 × 1200
Uniform areas	600 × 600	600 × 600	1200 × 1200
High detail	600 × 600	1200 × 1200	1200 × 1200

Margins: 3 mm (0.012 in)

Maximum printable width: 1000 mm (39.37 in)

Scanner resolution (MFP only): Up to 1200 ppi

Maximum scanner width (MFP only): 914 mm (36 in)

Mechanical accuracy

±0.1% of the specified vector length or ±0.2 mm (whichever is greater) at 23°C (73°F), 50-60% relative humidity, on E/A0 polypropylene in high-detail or uniform-areas mode.

Graphic languages supported

Printer	Languages
PostScript	PostScript, PDF, TIFF, JPEG
Non-PostScript	HP-GL/2, PCL 3 Win, TIFF, JPEG

Physical specifications

Specifications of the physical characteristics of the printer.

Printer physical specifications

-	8200	5200/4700/4200/3920
Width	1955 mm (76.97 in)	
Depth	785 mm (30.91 in)	
Depth with basket folded	951 mm (37.44 in)	
Depth with basket unfolded	1226 mm (48.27 in)	
Height with front panel	1637 mm (64.45 in)	1414 mm (55.67 in)

Memory specifications

Specifications of the memory capacity of the printer.

Memory specifications

Type	Specifications
Physical DRAM	8 GB
Hard disk	500 GB

Power specifications

Specifications of the power-supply requirements of the printer.

Printer power specifications

-	8200	5200	4700/4200/3920
Input voltage	200–240 V ±10% Two wires + PE	~100–127/200–240 V ±10% Two wires + PE	
Input frequency	50/60 Hz		
Maximum load current	8 A	10/5 A	7/3.5 A
Power consumption (printing)	1.2 kW	0.9 kW	0.7 kW

5200 printer with dryer accessory power specifications

Type	Specifications
Input voltage	200–240 V \pm 10% Two wires + PE
Input frequency	50/60 Hz
Maximum load current	12 A
Power consumption (printing)	2.0 kW

Environmental specifications

Specifications of the environmental effects of the printer.

Printhead environmental specifications

Type	Specifications
Storage temperature	5 to 40°C (41 to 104°F)
Storage humidity	20 to 80% RH, depending on paper type

Printer environmental specifications

Type	Specifications
Operating temperature	5 to 40°C (41 to 104°F)
Recommended operating temperature for best performance	15 to 35°C (59 to 95°F), depending on paper type
Storage temperature	–25 to 55°C (–13 to 131°F)
Recommended operating humidity	20 to 80% RH, depending on paper type
Storage humidity	< 90% RH

Printer environmental specifications (continued)

Type	Specifications
Altitude	0 to 3000 m (10000 ft)

Acoustic specifications

Specifications of the acoustic characteristics of the printer.

Acoustic specifications

-	8200/5200/4700	4200	3920
Printing acoustic pressure	≤ 60 dB(A)	≤ 58 dB(A)	≤ 55 dB(A)
Printing acoustic power	≤ 7.8 B(A)	≤ 7.6 B(A)	≤ 7.3 B(A)
Ready acoustic pressure	≤ 36 dB(A)		
Ready acoustic power	≤ 5.5 B(A)		
Sleep acoustic pressure	≤ 20 dB(A)		
Sleep acoustic power	≤ 3.5 B(A)		

Speed specifications (Lines mode)

Specifications of the printing speed of the printer.

8200: 30 D/A1 pages per minute

5200: 20 D/A1 pages per minute

4700: 15 D/A1 pages per minute

4200: 10 D/A1 pages per minute (15 D/A1 pages/min with speed update kit)

3920: 6 D/A1 pages per minute

16 Front-panel error messages

The printer may occasionally display a system error, consisting of a numerical code of 12 digits followed by the recommended action that you should take.

In most cases you will be asked to restart the printer, because when the printer starts it can diagnose the issue better and may be able to fix it automatically. If the problem persists after restarting, you should contact your service representative and be ready to give the numerical code from the error message.

If the error message contains some other recommended action, follow the printer's instructions.

Glossary

Bonjour

Apple Computer's trade name for its implementation of the IETF Zeroconf specification framework, a computer network technology used in Apple's macOS from version 10.2 onwards. It is used to discover services available on a local area network. It was originally known as Rendezvous.

Color accuracy

The ability to print colors that match the original image as closely as possible, bearing in mind that all devices have a limited color gamut and may not be physically capable of matching certain colors precisely.

Color consistency

The ability to print the same colors from a particular print job from print to print and from printer to printer.

Color model

A system of representing colors by numbers, such as RGB or CMYK.

Color space

A color model in which each color is represented by a specific set of numbers. Many different color spaces can use the same color model: for instance, monitors generally use the RGB color model, but they have different color spaces, because a particular set of RGB numbers results in different colors on different monitors.

Cutter

A printer component that slides back and forth across the platen to cut the paper.

ESD

ElectroStatic Discharge. Static electricity is common in daily life. It is the spark when touching the car door, or the cling of clothing. Although controlled static electricity has some useful applications, uncontrolled electrostatic discharges are one of the main hazards to electronic products. Therefore, to prevent damage some precautions are needed when setting up the printer, or handling ESD sensitive devices. This type of damage may reduce the life expectancy of the device. One way to minimize uncontrolled ESDs, and therefore reduce this type of damage is by touching any exposed grounded part of the printer (mainly metal parts) before handling ESD sensitive devices (such as the printhead or ink cartridges). Additionally, to reduce the generation of electrostatic charge in your body try to avoid working in a carpeted area, and keep your body movements to a minimum when handling ESD sensitive devices. Also, avoid working in low humidity environments.

Ethernet

A popular computer networking technology for local area networks.

Fast Ethernet

An Ethernet network capable of transferring data at up to 100,000,000 bits/second. Fast Ethernet interfaces are capable of negotiating slower speeds when required for compatibility with older Ethernet devices.

Firmware

Software that controls your printer's functionality and is stored semi-permanently in the printer (it can be updated).

Gamut

The range of colors and density values reproducible on an output device, such as a printer or monitor.

Gigabit Ethernet

An Ethernet network capable of transferring data at up to 1,000,000,000 bits/second. Gigabit Ethernet interfaces are capable of negotiating slower speeds when required for compatibility with older Ethernet devices.

Hi-Speed USB

A version of USB, sometimes called USB 2.0, that can run 40 times faster than original USB, but is otherwise compatible with original USB. Most personal computers today use Hi-Speed USB.

HP-GL/2

HP Graphics Language 2: a language defined by HP to describe vector graphics.

HP-RTL

HP Raster Transfer Language: a language defined by HP to describe raster (bitmap) graphics.

I/O

Input/Output: this term describes the passing of data between one device and another.

ICC

The International Color Consortium, a group of companies that have agreed on a common standard for color profiles.

Ink cartridge

A removable printer component that stores ink of a particular color and provides it to the printhead.

IP address

May mean an IPv4 address (most likely) or an IPv6 address.

IPSec

A sophisticated mechanism for providing network security by authenticating and encrypting IP packets sent between nodes on a network. Each network node (computer or device) has an IPSec configuration. Applications are usually unaware whether IPSec is being used or not.

IPv4 address

A unique identifier that identifies a particular node on an IPv4 network. An IPv4 address consists of four integers separated by full stops. Most networks in the world use IPv4 addresses.

IPv6 address

A unique identifier that identifies a particular node on an IPv6 network. An IPv6 address consists of up to 8 groups of hexadecimal digits separated by colons. Each group contains up to 4 hexadecimal digits. Only a few new networks in the world use IPv6 addresses.

LED

Light-Emitting Diode: a semiconductor device that emits light when electrically stimulated.

MAC address

Media Access Control address: a unique identifier used to identify a particular device on a network. It is a lower-level identifier than the IP address. Thus, a device may have both a MAC address and an IP address.

Network

A network is a set of connections that pass data between computers and devices. Every device is able to communicate with every other device in the same network. This allows data to be moved between computers and devices, and allows devices such as printers to be shared between many computers.

Nozzle

One of many tiny holes in a printhead through which ink is deposited onto the paper.

Paper

A thin, flat material made to be written or printed on; most commonly made from fibers of some kind which are pulped, dried and pressed.

Platen

The flat surface within the printer over which the paper passes while it is being printed on.

Printer driver

Software that converts a print job in a generalized format into data suitable for a particular printer.

Printhead

A removable printer component that takes ink of one or more colors from the corresponding ink cartridge(s) and deposits it on the paper, through a cluster of nozzles.

TCP/IP

Transmission Control Protocol/Internet Protocol: the communications protocols on which the Internet is based.

USB

Universal Serial Bus: a standard serial bus designed to connect devices to computers. Your printer supports Hi-Speed USB (sometimes called USB 2.0).

USB device port

A square USB socket found on USB devices, through which a computer can control the device. For a computer to print to your printer using a USB connection, the computer must be connected to the printer's USB device port.

USB host port

A rectangular USB socket such as those found on computers. A printer can control USB devices that are connected to such a port. Your printer has two USB host ports, which it uses to control accessories and USB flash drives.

Index

- A**
 - access control 107
 - accessories 198
 - accounting 202
 - acoustic specifications 211
 - AirPrint
 - configuration 23
- B**
 - basket 176
 - beacon 12
- C**
 - calibration
 - scanner 190
 - cartridges 79
 - caution 6
 - clean the printer 184
 - cleaning container 91
 - color uniformity calibration 180
 - components of printer 8
 - computer communication
 - printer/computer communications issues 105
 - connect the printer
 - general 20
 - macOS network 22
 - Windows network 21
 - connectivity
 - configure 25
 - copy mode 144
 - copying 144
 - cost assignment 207
 - CSR 201
 - customer self-repair 201
- D**
 - delayed printing 106
 - DHCP settings 100
 - diagnostic plot 179
 - dim mode 14
 - disk wipe 197
 - DNS settings 100
 - driver preferences 35
 - drivers 34
- E**
 - Eco-Carton ink cartridges 79
 - email address book
 - configure 32
 - email notifications 34
 - email server
 - configure 32
 - Embedded Web Server 16
 - accessibility 35
 - cannot access 105
 - cost assignment 207
 - printing job queue 133
 - scanning job queue 136
 - usage per job 205
 - usage statistics 202
 - environmental specifications 210
 - erase files securely 196
 - errors 212
- F**
 - file erase, secure 196
 - firewall status 100
 - firmware update 195
 - manual setup 26
 - folders 166
 - front panel 10
 - accessibility 35
 - job queue 127
 - language 15
 - front panel option
 - beacon 15
 - display brightness 15
 - Embedded Web Server 105
 - firmware update 15
 - height above sea level 15
 - language 15
 - minimize paper and ink alerts 15
 - notify warning alerts 15
 - prepare printer for
 - reshipment 15
 - printer logs 15
 - printer sleep 15
 - printing & management 106
 - speaker volume 15
 - unit selection 15
 - front view 8
 - front-panel option
 - account ID required 113
 - front-panel options
 - date and time options 15
 - restore factory settings 15
 - functional specifications 208
- G**
 - graphic languages 208
- H**
 - hard disk specification 209
 - help 200
 - HP DesignJet Utility
 - access 16
 - cannot access 106
- I**
 - ink
 - usage 205
 - ink cartridge
 - specification 208
 - ink cartridges 79
 - ink supplies
 - disposal 97
 - internal prints 19
 - IP address 100
 - IPSEC status 100
 - IPv6 settings 100
- J**
 - job deletion 133

- job details 131
- job queue
 - front panel 127
- job queue actions 130
- job queue options 132
- job, when to print 131

L

- labels, warning 6
- language 15
- link speed 100
- load paper
 - general advice 37

M

- maintenance cartridge 94
- margins
 - specification 208
- mechanical accuracy 208
- memory specifications 209
- monitor
 - calibrate 162
- move
 - folder 186
 - high-capacity stacker 185
 - printer 184

N

- network folder
 - cannot access 159
 - configure 27, 28, 30
- network troubleshooting 103
- networks
 - link speed 100
 - protocols 100
 - security settings 100

P

- page length accuracy 182
- paper
 - cannot load roll 47
 - jam 51
 - load roll 40
 - options 46
 - preset 48
 - protect 48
 - sizes (max and min) 208
 - status 40
 - store 46
 - supported types 38
 - unload roll 45
 - usage 205
- paper mismatch 132

- pause the queue 130
- physical specifications 209
- power
 - on/off 18
- power specifications 210
- preferences, Windows driver 35
- print & copy queue 127
- print bar 82
- print from
 - My Home Folder 123
 - network folder 122
 - USB flash drive 121
- print from driver 115
- print modes 125
- print next 131
- print quality 178
- printer calibration 180
- printer software
 - macOS uninstall 23
 - Windows uninstall 22
- printer status 184
- printer's main components 8
- printhead
 - specification 208
- printhead alignment
 - manual 182
- printhead cleaner
 - specification 208
- printheads 82
 - enhanced recovery 181
- printing job queue
 - Embedded Web Server 133
- printing preferences
 - default 133
- printing resolutions 208
- protocols, network 100
- Proxy Server settings 100

Q

- quicksets 137

R

- rear view 9
- reprint job 131
- roll policies 131

S

- safe mode 97
- safety labels 6
- safety precautions 1
- scan queue 129

- scan-quality problems
 - color differences between CIS modules 152
 - color fringing 154
 - damaged original 157
 - down-scaling 158
 - edge detection 158
 - ghosting 157
 - inaccurate colors 153
 - line discontinuities 151
 - paper advance 155
 - random vertical lines 150
 - too much skew 158
 - variable line thickness 153
 - vertical black band 20 cm wide 156
 - vibration effect 155
 - wrinkles or folds 150
- scanner
 - calibration 190
 - can't access network folder 159
 - clean glass plate 186
 - diagnostic plot 160
 - low-contrast blueprints 159
 - low-contrast thin lines 160
 - optimize 149
 - replace glass plate 188
 - slow scan 159
 - troubleshooting 149
- scanning 138
- scanning job queue
 - Embedded Web Server 136
- secure file erase 196
- security 107
 - network settings 100
- service information 201
- sleep mode 15
- specifications
 - acoustic 211
 - environmental 210
 - functional 208
 - graphic languages 208
 - hard disk 209
 - ink supplies 208
 - margins 208
 - mechanical accuracy 208
 - memory 209
 - paper size 208
 - physical 209
 - power 210
 - printing resolutions 208
 - speed 211
- speed specifications 211
- stacker
 - high-capacity 164

- top 163
- statistics
 - cost assignment 207
 - usage 202
 - usage per job 205
- store
 - folder 186
 - high-capacity stacker 185
 - printer 184
- support 200
- system errors 212

T

- tab reel
 - replace 191
- TCP/IP settings 100
- top stacker 163

W

- warning 6
- warning labels 6