

Bulk onboarding printers to HP Workforce Experience



Successfully onboarding a printer to the HP Workforce Experience Platform requires you to complete two tasks. These steps can be complete in any order.

- Enable HP cloud connection on the printer (known as web services on some printers), which connects the printer to the HP cloud.
- Add the printer in the Workforce Experience portal by providing the printer's serial and product numbers. This step provides the platform with the printer's unique identifiers, which allows it to identify the printer on the Internet.

For an individual printer, you can connect to the printer's embedded web server to enable HP cloud connection/web services manually and then add the printer in the Workforce Experience portal. However, if you have a fleet of printers that you want to onboard, manually completing these steps for each printer can be time consuming.

To streamline this process for large number of printers, HP provides the MPS Printer Onboarding tool. This tool can discover printers on the internet and, if provided with the correct credentials, modify the printer settings to enable HP cloud connection/web services.

The MPS Printer Onboarding tool can discover printers by hostname or IP address. The easiest way to use the tool, and the method described in this guide, is to provide a range of IP addresses. Once you provide the first and last IP addresses in a range, the tool attempts to contact all the inclusive IP addresses and determines whether each contacted device is a valid HP printer that can be onboarded to Workforce Experience.

Once the tool returns the list of discovered printers, you can export that list to a CSV file that you can then upload into the Workforce Experience portal, onboarding all of them in one bulk process.

Before you begin

To enable the onboarding of your printers to the Workforce Experience Platform, the MPS Printer Onboarding tool must be able to discover your printers on the Internet as well as access and modify the printer settings. Before using the tool, you should ensure that all printers are discoverable and that the tool can perform the necessary tasks.

- **Network connectivity:** Before using the MPS Printer Onboarding tool, ensure that all printers are powered on and connected to the internet, either over Wi-Fi or ethernet.
- **Printer Identification:** To enable the MPS Printer Onboarding tool to discover your printers, you'll need to provide the range of IP address it can search. Before using the tool, make sure you have the range of addresses for your fleet available.
- **Proxy information:** If your printers are connected to the internet through a proxy server, ensure that you have the proxy information, including the Proxy hostname or IP address, the port, and the proxy server username name and password. The tool lets you enter your proxy server information, which it then uses when attempting to connect to every discovered printer.
- **Printer admin credentials:** To enable HP cloud connection/web services for each printer, the MPS Printer Onboarding tool needs to access the printer settings. HP expects that these settings are password protected on each device to prevent unauthorized changes. The tool allows you to supply the access credentials so that it can access and modify the printer settings as necessary.

Important! The MPS Printer Onboarding tool operates on the assumption that all printers in your fleet have been secured using the same username and password; the tool only allows you to enter a single Admin username and password, which it uses to connect to every discovered printer. If a printer has a different

set of admin credentials, the tool will be unable to enable HP cloud connection/web services for that printer.

Note that the printer will still be included in the exported CSV file and added to Workforce Experience when the CSV file is uploaded to the portal, but the onboarding process will be incomplete; the printer will remain in a pending state until you manually connect to the printer's embedded web server and enable the setting.

Downloading the MPS Printer Onboarding tool

If you have not already downloaded the MPS Printer Onboarding tool via the Workforce Experience portal, you can download it [here](#).

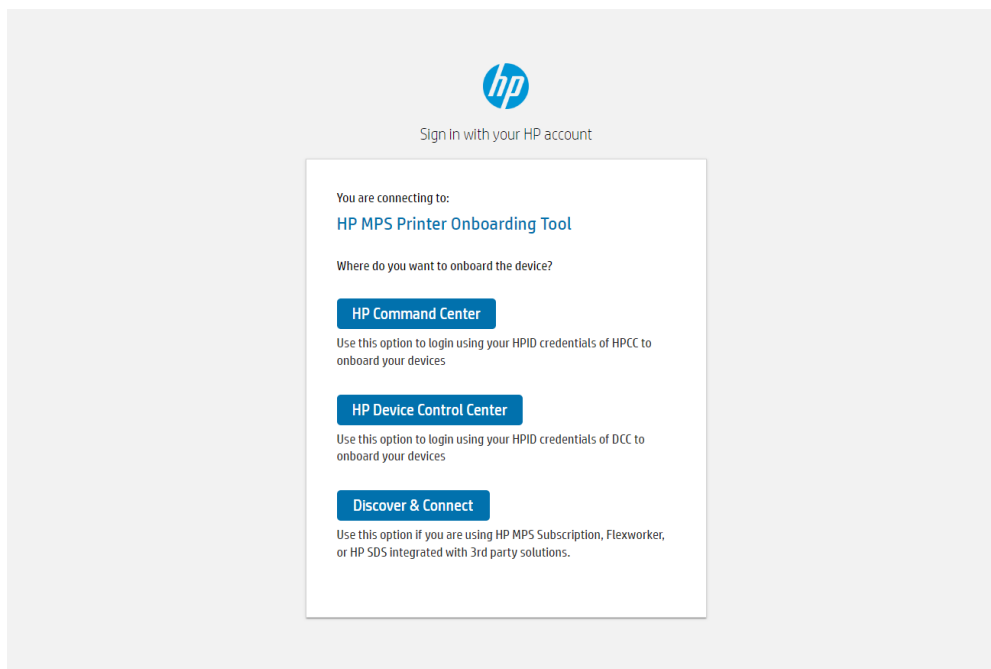
Using the MPS Printer Onboarding tool

To use the MPS Printer Onboarding tool:

1. On your computer, navigate to the folder where you downloaded the MPS Printer Onboarding tool and double-click the following file to install and run the tool:

`hp-mps-printer-onboarding-tool-<version>-<platform>.exe`

2. For the onboarding method, choose **Discover & Connect**.



The MPS Printer Onboarding tool Devices page appears.

3. On the Devices page, from the list on the left, select **IP Range Discovery**.

4. Enter the beginning and ending IP addresses of a range.

4. If necessary, set the SNMP version and credentials:
- Select the SNMP Version toggle between v1/v2 and v3.
 - Select **Configure** to change the credentials:
 - If you selected SNMP v1/v2, set the following value:

Setting	Description
Community Name	The community string (password) used by the printer to restrict access to the device.

- If you selected SNMP v3, set the following values:

Setting	Description
Username	The security username.
Context Name	The context string (password) used by the printer to restrict access to the device.
Auth Protocol	The authentication protocol used by the device. You can choose either MD5 or SHA .
Auth Key	The password used for authentication purposes.
Privacy Protocol	The privacy protocol used by the device. You can choose either DES or AES .
Privacy Key	The password used for privacy purposes.

5. Click **Discover**. The tool attempts to contact each device in the specified range to determine if:
 - a) it is reachable
 - b) it is a printer
 - c) It is running compatible firmware.

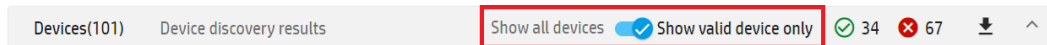
After some time, the tool displays the results in the lower portion of the window.

Devices(101)		Device discovery results						Show all devices		Show valid device only		34	67		
<input type="checkbox"/>	Host Name/IP ...	Re...	Is ...	Model	Serial Number	Firmware Check	Firmware								
<input type="checkbox"/>	123.45.67.136	✓	✓	HP OfficeJet Pro X...	CN28L7P029	✓ Good	LNP1CN1548AR								
	123.45.67.137	✓	✗	NA	NA	✗ Not Supported	NA								
<input type="checkbox"/>	123.45.67.138	✓	✓	HP PageWide MF...	MY7335E003	✓ Good	LIMOFWMP2A006...								
<input type="checkbox"/>	123.45.67.139	✓	✓	HP Color LaserJet...	MTFMB10031	✓ Good	2504171_023881								
<input type="checkbox"/>	123.45.67.140	✓	✓	HP OfficeJet Pro ...	TH2AR1Z260	✓ Good	6.26.0.4985e697...								
	123.45.67.141	✓	✗	NA	NA	✗ Not Supported	NA								
<input type="checkbox"/>	123.45.67.142	✓	✓	HP LaserJet color...	MX2CD7B0PG	✓ Good	2411226_066602								
	123.45.67.143	✓	✓	HP LaserJet CP15...		✗ Not Supported									

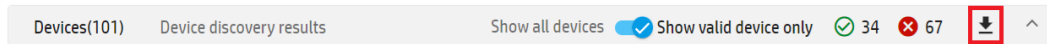
6. Export the discovered printers to a CSV file. Later, you can upload this CSV file to the Workforce Experience portal to add the printers to the platform.

To export to a CSV file:

- a) Filter the results list to display only valid printers by toggling the switch above the list to **Show valid devices only**.



- b) Click the Export button above the list.



- c) Select a folder and enter a filename, then click **Save**.

This file

7. In the Results list, select all valid printers by checking the box at the top left of the list, then select **Next**.

HP MPS Printer Onboarding Tool

Home About [→]

1 Device(s) selected 2 Settings Provide proxy & credentials 3 Cloud Enablement

Single Device
Bulk Upload Devices
IP Range Discovery
WS* Discovery

Discover Next

SNMP Version v1/v2 v3 Configure

IP Range Discovery

From IP address
123.45.67.89

To IP address
123.45.67.189

IP Range Discover
Provide the start and end of the IP range so that the tool can communicate with the devices and obtain the necessary data to be used in the later stages for onboarding.

Devices(101) Device discovery results Show all devices Show valid device only 34 67

<input checked="" type="checkbox"/>	Host Name/IP	Re...	Is ...	Model	Serial Number	Firmware Check	Firmware	Firmware Date
<input checked="" type="checkbox"/>	123.45.67.131	✓	✓	HP LaserJet Flow ...	CN11S8W07H	✓ Good	2508385_053962	20241116
<input checked="" type="checkbox"/>	123.45.67.133	✓	✓	HP Digital Sender...	CN6CF1201W	✓ Good	2410028_055011	20191224
<input checked="" type="checkbox"/>	123.45.67.134	✓	✓	HP LaserJet MFP ...	CN41M1N022	✓ Good	2507405_000233	20240504
<input checked="" type="checkbox"/>	123.45.67.137	✓	✓	HP LaserJet Pro ...	CN2KM189LK	✓ Good	TETONXXXXN002...	20250317
<input checked="" type="checkbox"/>	123.45.67.139	✓	✓	HP Color LaserJet...	JPBG800018	✓ Good	2507252_046154	20240129
<input checked="" type="checkbox"/>	123.45.67.141	✓	✓	HP Color LaserJet...	CNCRQ6R64Y	✓ Good	2508206_000355	20240823
<input checked="" type="checkbox"/>	123.45.67.142	✓	✓	HP Color LaserJet...	CNCR1C4ST	✓ Good	CLRWTRXXXN00...	20250317
<input checked="" type="checkbox"/>	123.45.67.145	✓	✓	HP Color LaserJet...	CN5MM2P6L1	✓ Good	CLRWTRXXXN00...	20240712

The Settings page appears.

8. On the Settings page, complete the following steps as necessary.

- a) If your printer is behind a proxy, select **Is your device behind proxy?**

The panel expands to display fields for you to enter the **Proxy** (host name or IP address), the **Port**, **Proxy Server Username**, and **Proxy Server Password**.

☒ Is your device behind proxy?

Proxy

Port

Proxy Server UserName

Proxy Server Password

- b) If your printer requires credentials, select **Does device need admin credentials to access?**

The panel expands to display fields for you to enter **EWS Username** and **EWS Password / Device PIN**.

☒ Does device need admin credentials to access?

EWS Username
admin

EWS Password / Device PIN

9. Select **Next**. The Cloud Enablement page appears.

HP MPS Printer Onboarding Tool

Home About [→]

1 Device(s) selected Settings Provide proxy & credentials Cloud Enablement

Start **Reset**

Onboard Devices help

If the selections and data from step 1 and 2 are correct, to proceed with the actual Cloud Enablement process press Start button. This action will enable the Web Services and provide Identity data of the device to the user. If the previous steps need to be revised, Reset button will redirect user again to step 1. Use Export button to store locally the resulting data of this Cloud Enablement step.

10. Select **Start** to enable web services on the selected printers.

The MPS Printer Onboarding tool attempts to enable web services and register the printer(s) with the HP cloud. Once complete, an onboarding report appears in the lower portion of the page showing whether the enablement succeeded or failed.

HP MPS Printer Onboarding Tool

Home About [→]

1 Device(s) selected Settings Provide proxy & credentials Cloud Enablement

Redo **Export** **Reset**

Onboard Devices help

If the selections and data from step 1 and 2 are correct, to proceed with the actual Cloud Enablement process press Start button. This action will enable the Web Services and provide Identity data of the device to the user. If the previous steps need to be revised, Reset button will redirect user again to step 1. Use Export button to store locally the resulting data of this Cloud Enablement step.

Onboarding Devices (6) Onboarding device report ✓ 4 ✗ 2

<input type="checkbox"/>	Host Name/IP	Model	Serial Number	Identity	Device Settings	Web Services	Status	Actions
<input type="checkbox"/>	123.45.67.136	HP LaserJet Flo...	CN11S8W07H	✓ Success		✓ Registered	✓ Success	👁
	123.45.67.138	HP Digital Send...	CN6CF1201W	✓ Success		✗ Error	✗ Error	👁
	123.45.67.139	HP LaserJet MF...	CN41M1N022	✓ Success		✗ Error	✗ Error	👁
<input type="checkbox"/>	123.45.67.140	HP LaserJet Pro...	CN2KM189LK	✓ Success		✓ Registered	✓ Success	👁
<input type="checkbox"/>	123.45.67.142	HP Color LaserJ...	JPBGB00018	✓ Success		✓ Registered	✓ Success	👁
<input type="checkbox"/>	123.45.67.148	HP Color LaserJ...	CNCRQ6R64Y	✓ Success		✓ Registered	✓ Success	👁

Troubleshooting issues

If the MPS Printer Onboarding is unable to successfully enable HP cloud connection/web services, there could be a few reasons why. For example, the printer may be unavailable due to a network issue.

The best way to get specific information about the cause of your issue is by opening the Device Details page. To view Device Details page, select the icon in the Action column of the Onboarding Results list.

Onboarding Devices (6) Onboarding device report							
<input type="checkbox"/>	Host Name/I...	Model	Serial Number	Identity	Device Settin...	Web Serv...	Status
<input type="checkbox"/>	123.45.67.136	HP LaserJet Flo...	CN11S8W07H	Success	Registered	Success	Success
<input type="checkbox"/>	123.45.67.138	HP Digital Send...	CN6CF1201W	Success	Error	Error	Error
<input type="checkbox"/>	123.45.67.139	HP LaserJet MF...	CN41M1N022	Success	Error	Error	Error
<input type="checkbox"/>	123.45.67.140	HP LaserJet Pro...	CN2KM189LK	Success	Registered	Success	Success
<input type="checkbox"/>	123.45.67.142	HP Color LaserJ...	JPBGB00018	Success	Registered	Success	Success
<input type="checkbox"/>	123.45.67.148	HP Color LaserJ...	CNCRQ6R64Y	Success	Registered	Success	Success

The Device Details page displays the steps of the enablement process, where that process failed, and provides some information on how to remediate the issue.

Device Details

Information on the each step that device has performed during the cloud enablement/onboarding process.

Host: 15.4.4.131 Device Family: HP LaserJet Flow 8601 SerialNumber: CN11S8W07H

Date: April 21, 2025

1

Communication with device

11:30:29 AM

Fetching Identity from device.

11:30:30 AM

Status Code: 401. Error message: **Authorization Required**
Please return to the Settings tab to enter the proper credentials. If the error persists, contact support.

Close

In most cases, the Device Details page provides enough information to help you resolve your issue, after which you can attempt to enable web services for the impacted printer. Review the following table to determine the appropriate steps:

Message	Troubleshooting steps
Unable to connect. Make sure the device is turned on and available.	The printer could be in a sleep state and the tool is unable to connect within the timeout. Check the printer connection status and try again.
Unauthorized: Request failed with status code 401	The printer is password protected, and either no password was provided or the provided password was incorrect. Provide the correct credentials and try again.
Error: Request failed with status code 401	Make sure the proxy information and EWS admin credentials provided in Settings page are correct.
Registration state is not valid. Status Code: 200, Message: OK, Attempt #1	Make sure the proxy information provided in the Settings page is correct.
Request failed with status code 404	Make sure the printer is connected to the network and online.
Status Code 404 Not found	Make sure the printer is connected to the network and online.

In some cases, the tool cannot be specific about the cause. In these instances, it's recommended to try to enable HP cloud connection/web services at the device or via the printer's embedded web server, rather than using the tool. For more information, see [Enabling Web Services on HP printers](#).

Note: Because the printer may be in a state in which web services were partially enabled, it may be necessary to first remove web services from the printer before attempting to re-enable them.