



Microsoft Universal Print Support in HP FutureSmart 5.8.1.1

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Microsoft Universal Print requirements

Microsoft Universal Print requires an HP supported printer device (see the **Supported printers** section in this document) that is running HP FutureSmart firmware version 5.8.1.1 or newer.

HP for Universal Print application requirements

HP FutureSmart firmware uses an Enterprise application named **HP for Universal Print** in Microsoft Entra ID to integrate with **Microsoft Universal Print**.

The application will be added to Entra ID as part of the set up in the printer's Embedded Web Server (EWS) when an organization's first printer is configured. For the application to function, tenant-wide administrator consent to the permissions requested by the application is required. For additional Microsoft application permission details, see <https://learn.microsoft.com/en-us/universal-print/hardware/universal-print-oem-app-registration>.

This can be completed during the setup process in the EWS or directly in Entra ID (Enterprise Applications - HP for Universal Print - Permissions). After the HP for Universal Print application has been added to Entra ID and administrator consent has been granted, then the setup of subsequent printers requires only the permissions specific to Microsoft Universal Print described below.

Microsoft Entra ID requirements

HP recommends that the user performing the setup of the initial printer has the Global Administrator role in Entra ID, as well as a Universal Print license.

Users setting up additional printers only require the Printer Administrator role or equivalent permissions, and a Universal Print license must be assigned to the user. See the Microsoft Universal Print Requirements described below.

NOTE: In situations where a Universal Print license cannot be assigned to the Global Administrator user, that user can complete the initial part of the setup to add the Enterprise Application and grant administrator consent, and then the Printer Administrator user can complete the final part. In practice, this is done by the former user cancelling out of the setup after granting administrator consent, and then the latter user completing the setup process from scratch.

For organizations with strict separation of duties in Entra ID, multiple users may be required to complete the setup. For reference, the roles required for each part of the process are as follows:

- Adding the HP for Universal Print Enterprise Application
 - Application Administrator, Cloud Application Administrator or Global Administrator
- Granting admin consent
 - Privileged Role Administrator or Global Administrator
- Managing printers in Universal Print
 - Printer Administrator or Global Administrator

Always refer to Microsoft Entra ID documentation for the latest information or additional information on roles and permissions.

Microsoft Universal Print feature requirements

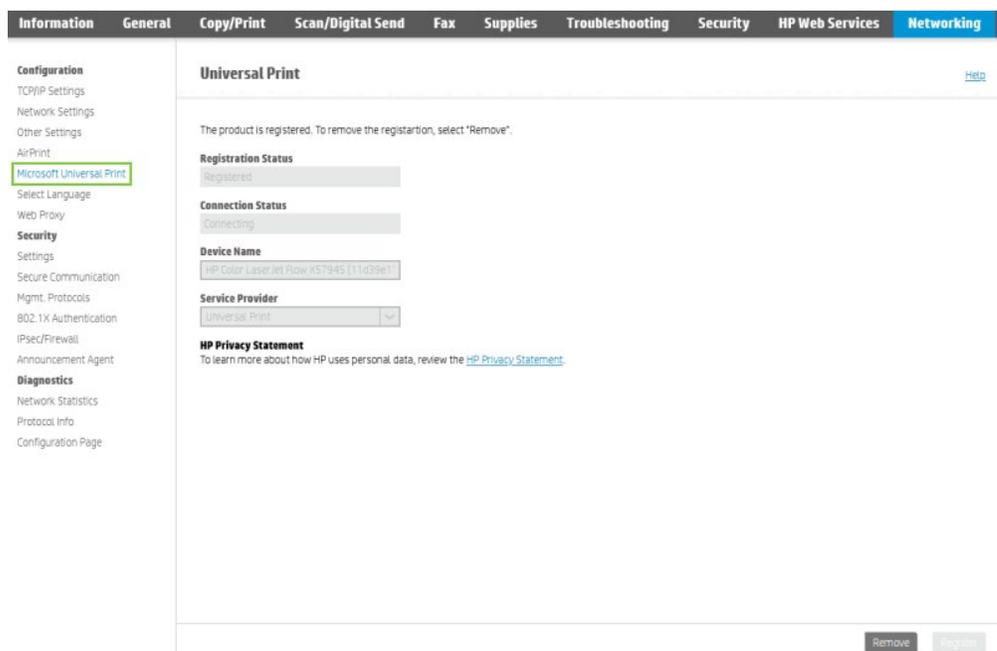
Microsoft's prerequisites for Microsoft Universal Print are as follows:

- A Universal Print-eligible license is assigned to the user by a Global Administrator or any other license administrator.
- To configure and manage Universal Print, an administrator must be assigned either of the following two Entra ID roles: Printer Administrator or Global Administrator.
- To configure and manage Universal Print, the corresponding administrator must also have a Universal Print-eligible license assigned.
- A client device (to install and print from Universal Print) running Windows client OS, version 1903 or later. Using the latest OS release will provide the best user experience.
- Alternatively, users can print from a cloud application (like OneDrive for Business in web browser).
- An Internet connection

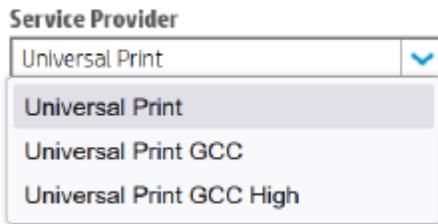
Register the printer with Microsoft Universal Print

To configure Microsoft Universal Print on the printer, follow these steps:

1. In a supported browser, open the printer's EWS page using the printer's host name or IP address.
2. On the top navigation bar, click the **Networking** tab.
3. In the left pane, click **Microsoft Universal Print**.

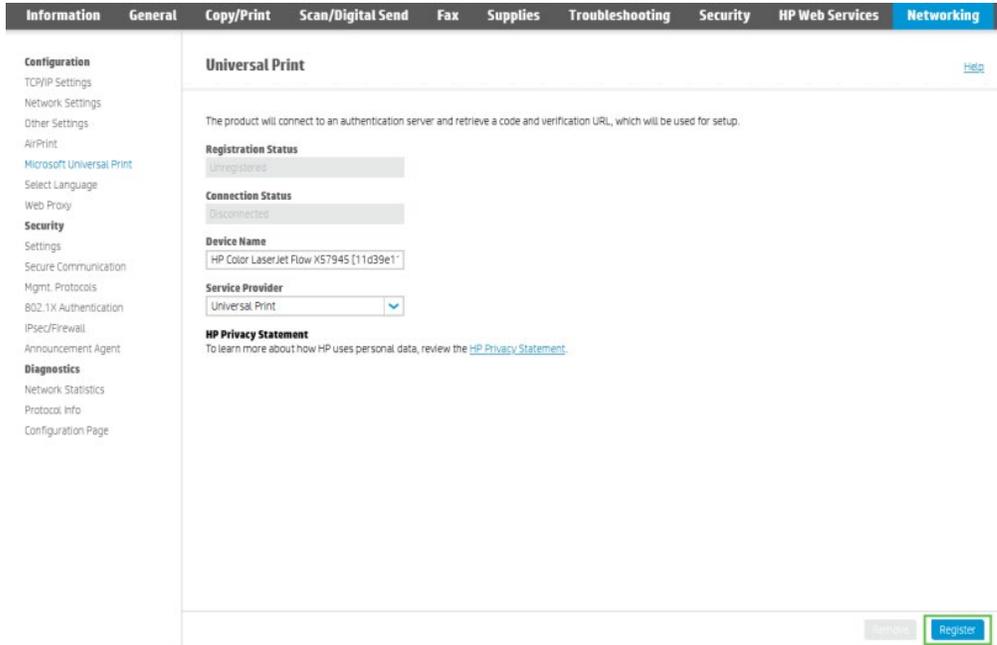


4. If using Microsoft Government Community Cloud (GCC) or GCC High, click the **Service Provider** drop-down menu and select the provider.



data, review the [HP Privacy Statement](#).

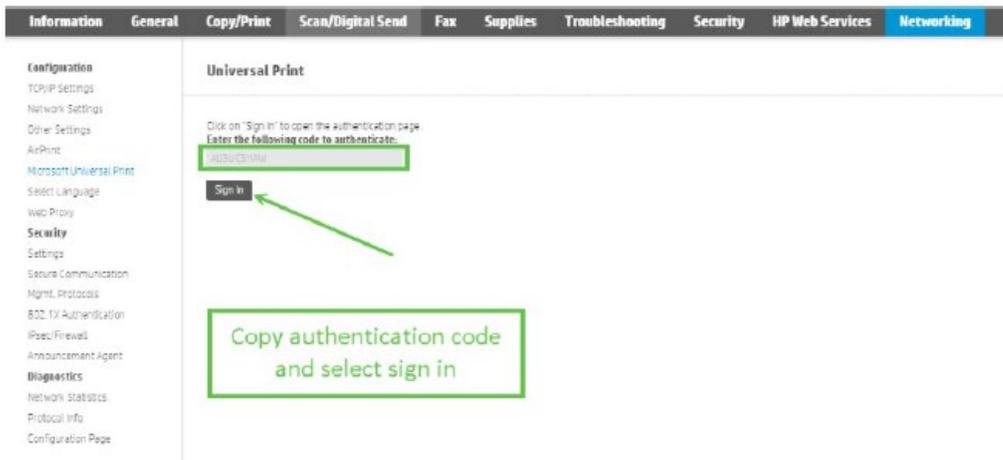
5. Click **Register**.



The printer will generate an authentication code.



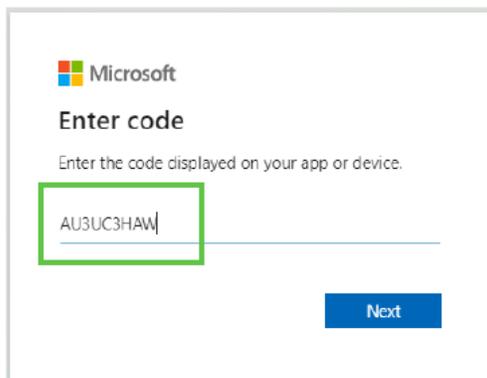
6. Copy the authentication code, and then click **Sign In**.



The EWS will redirect the browser to register the printer for Universal Print with Microsoft Entra ID.

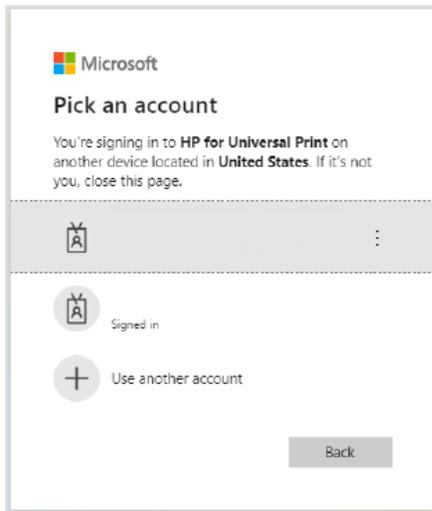


7. When prompted, paste the authentication code (that you copied from the printer's EWS), and then click **Next**.



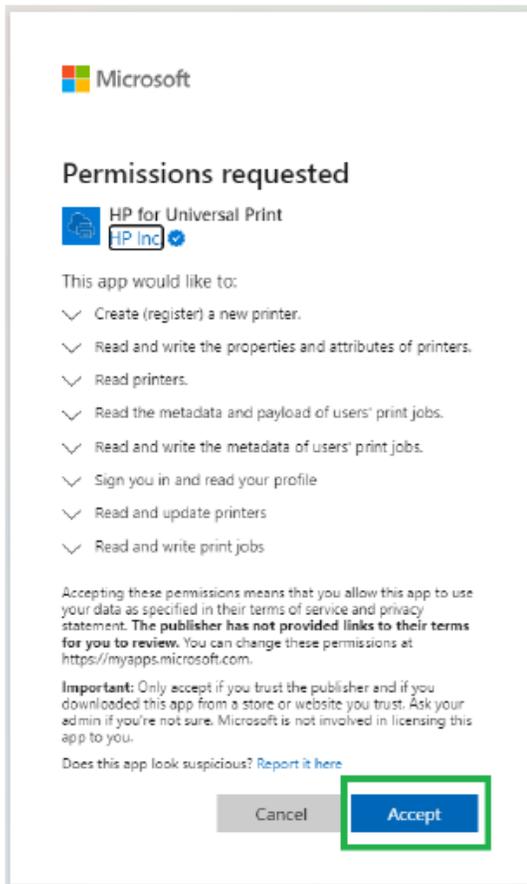
8. When prompted to pick an account, click the Entra ID user with the proper role(s) and Universal Print licensing (as noted in the HP for Universal Print application requirements).

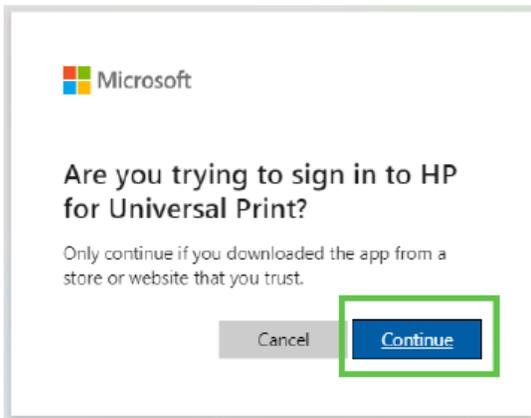
NOTE: If this is the first time setting up this feature, HP recommends selecting a user with Global Administrator privileges.



9. If prompted, review the requested permissions, and then click **Accept**. Or, if permissions are already granted, click **Continue** to sign in to HP for Universal Print.

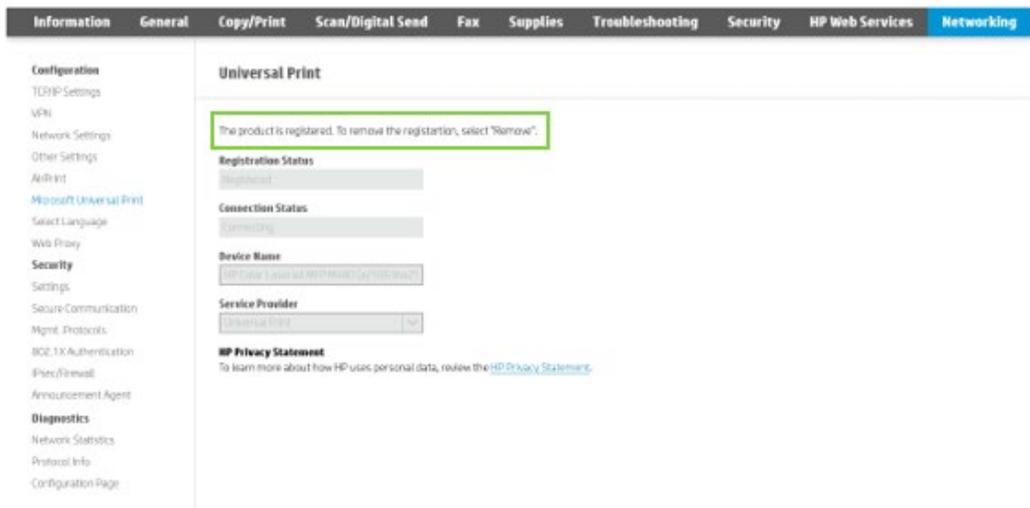
NOTE: IF this is the first printer enabled, then permissions may be requested after signing in to add the HP for Universal Print Enterprise Application to Entra ID and grant administrator consent. If the organizational policy prevents administrator consent from being granted, then have the appropriate user grant consent via the Azure portal.





When the printer is successfully registered, a confirmation message displays indicating that the printer is signed in to HP Universal Print, and the EWS indicates a successful registration.

NOTE: For Microsoft Entra ID issues, contact Microsoft support.



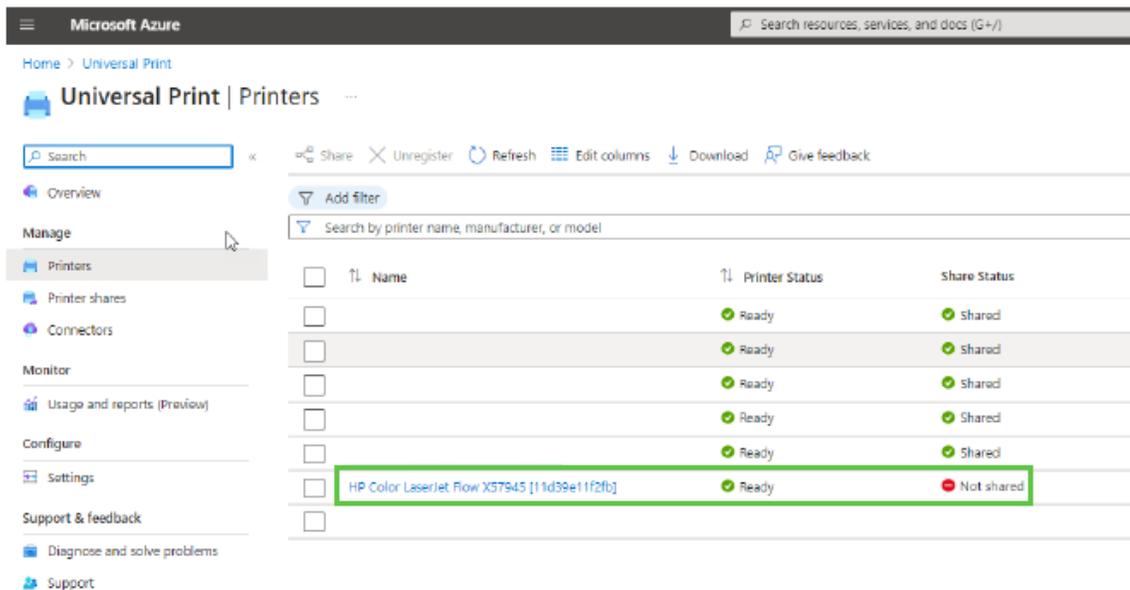
Share the printer on the Microsoft Azure Portal

To complete the Microsoft Universal Print set up and allow your organization's users to use the printer, follow the steps below.

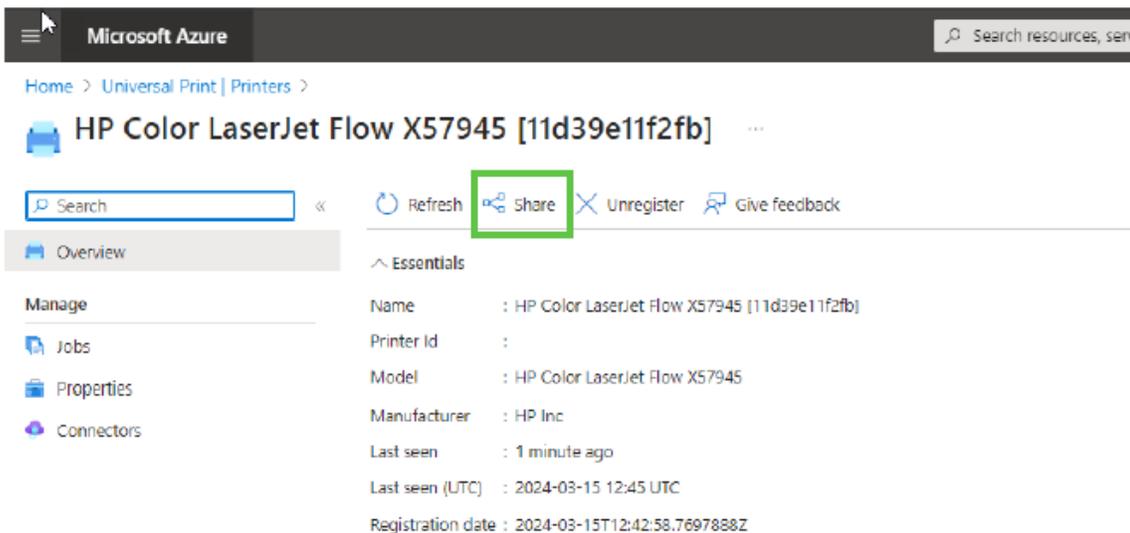
1. Log into Microsoft Azure and click **Universal Print**.



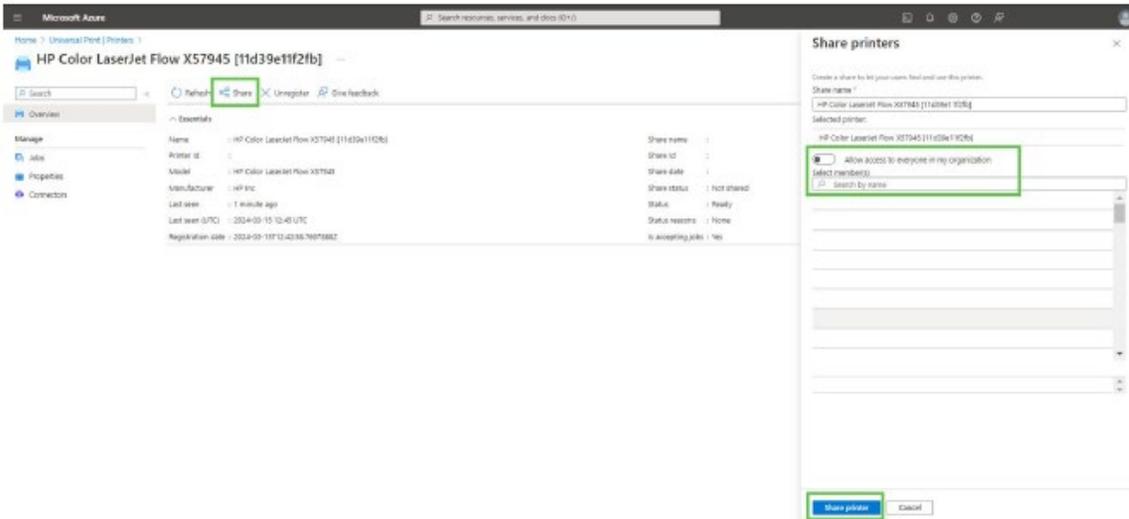
2. Click the name of the HP printer registered with Microsoft Universal Print.



3. Click Share.



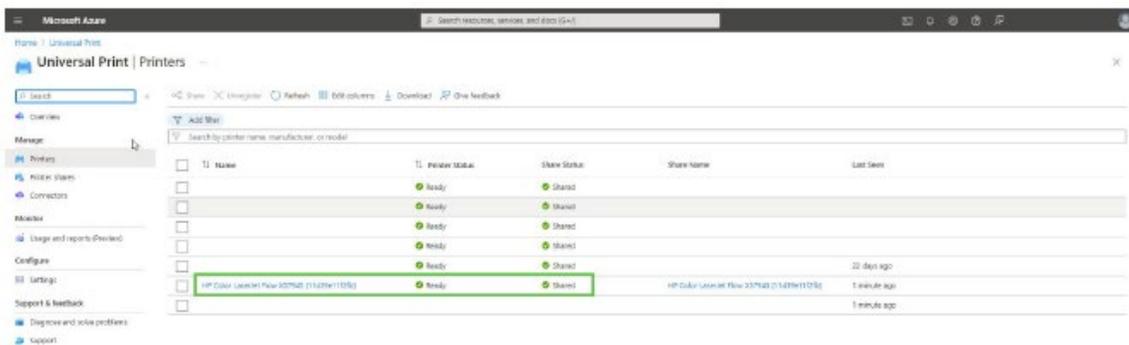
- Under **Share Printers** in the right pane, either toggle the option to **Allow access to everyone in my organization** or use the search field to find and add specific users or groups that can access the printer, and then click **Share Printer**.



On the printer's Overview page, the **Share status** for the printer changes to **Shared** and the printer configuration is complete.



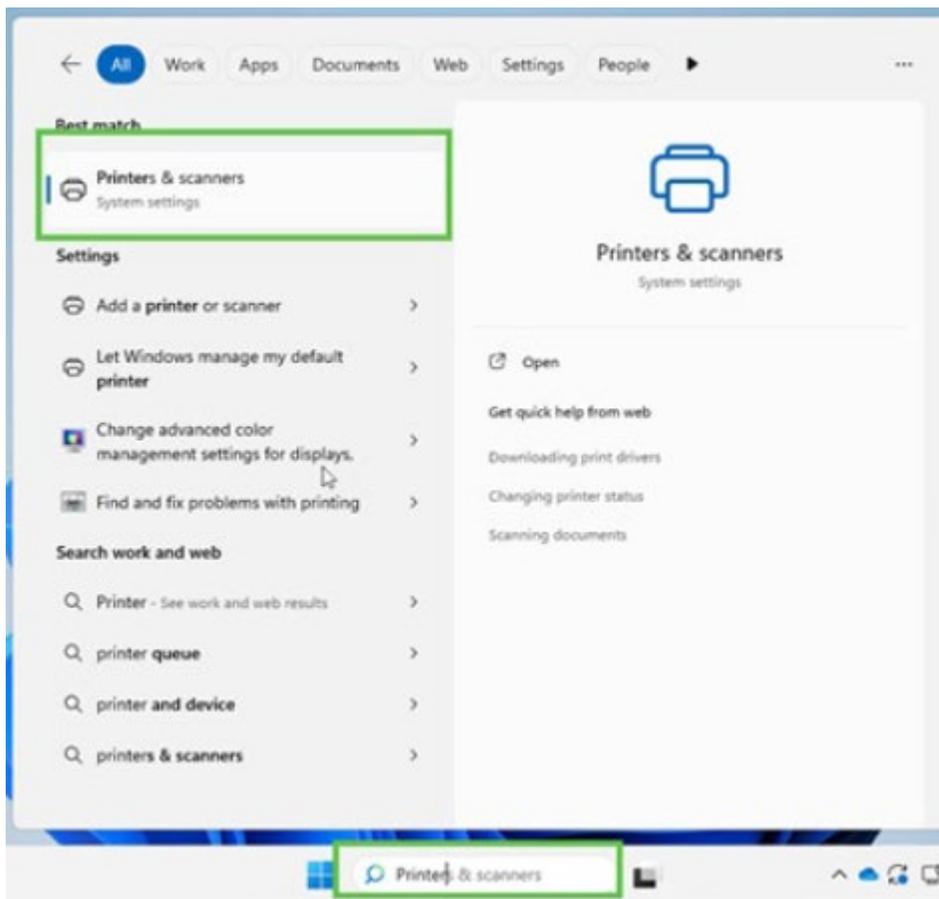
On the Printers page, the **Share Status** for the printer changes to **Shared**.



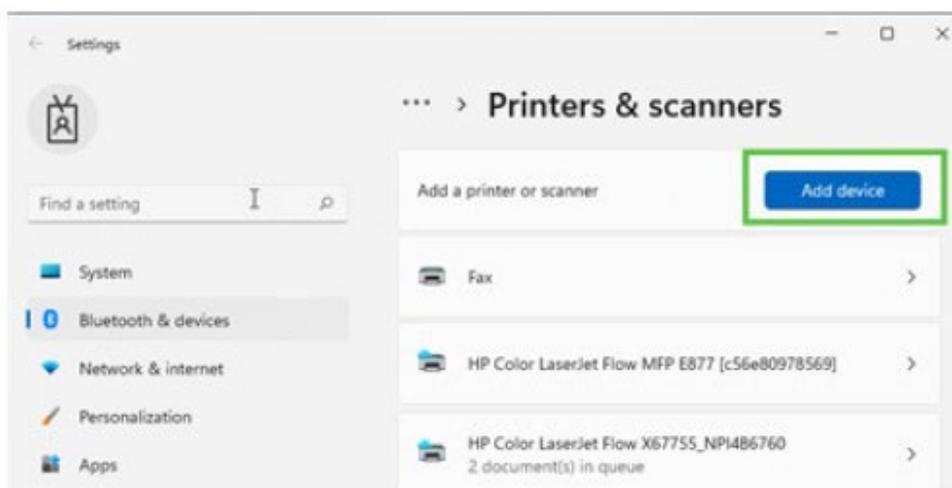
Configure a Windows Workstation for Microsoft Universal Print

The Microsoft quick start guide provides details for enabling Universal Print and setting up a printer. See <https://learn.microsoft.com/en-us/universal-print/fundamentals/universal-print-getting-started>.

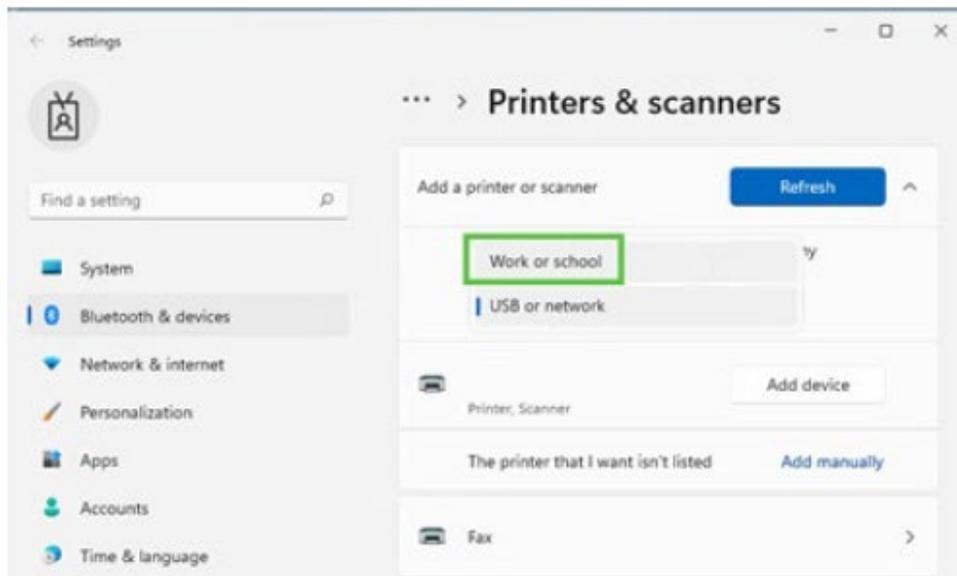
1. In the search box in the Windows taskbar, type “Printers” and then click **Printers & scanners**.



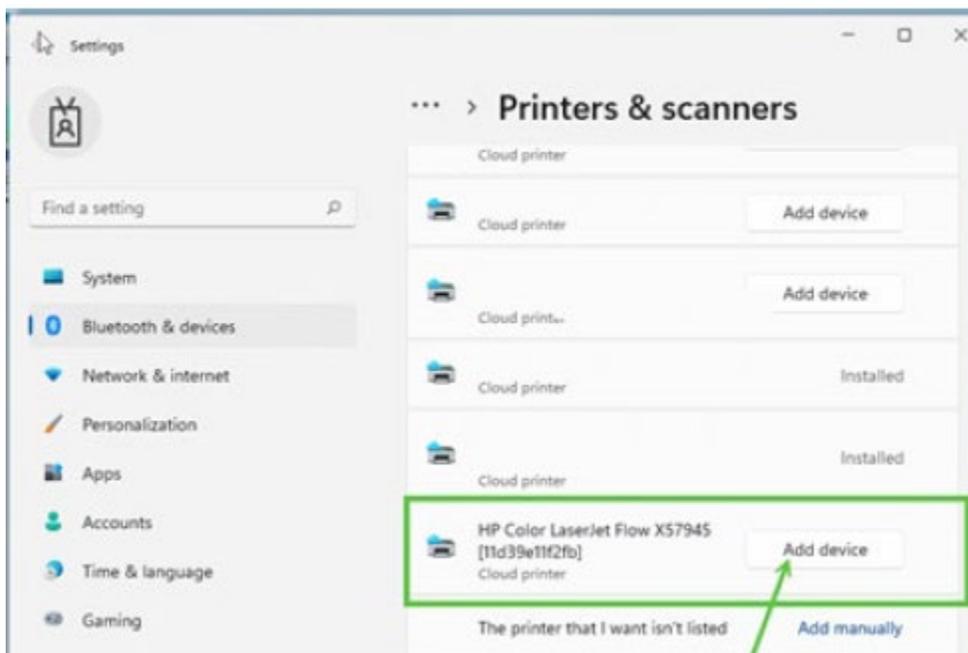
2. Click **Add device**.



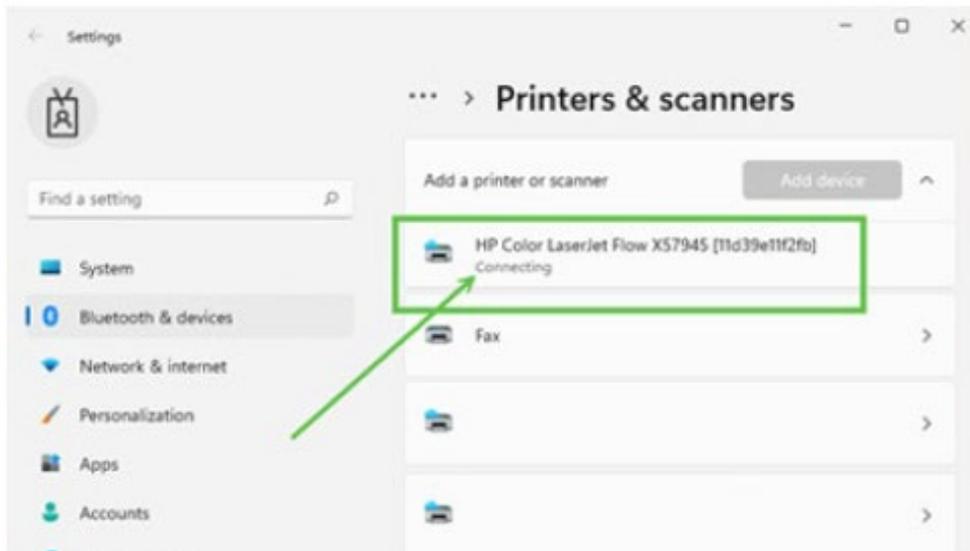
3. Click **Work or school**.



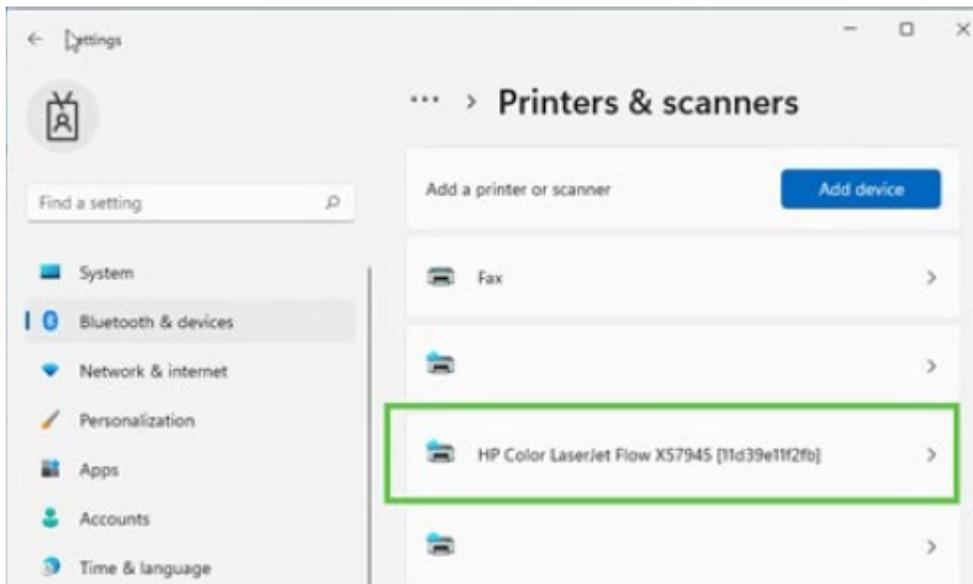
4. Locate the printer in the list or use the search feature to refine the results, and then click **Add device**.



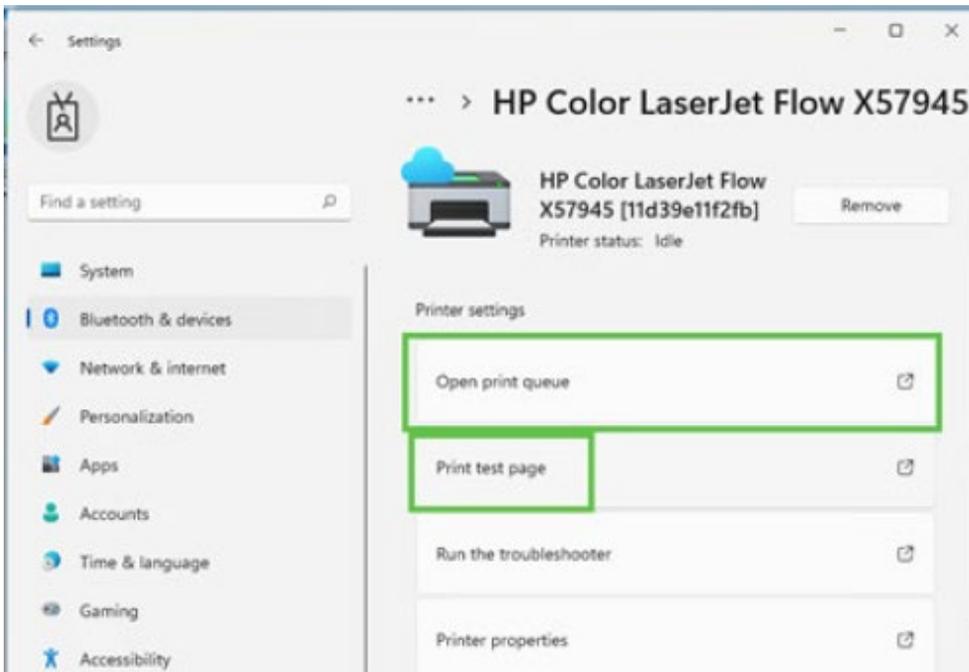
The workstation will attempt to connect to the print queue. Connection speed will vary with connection bandwidth and latency.



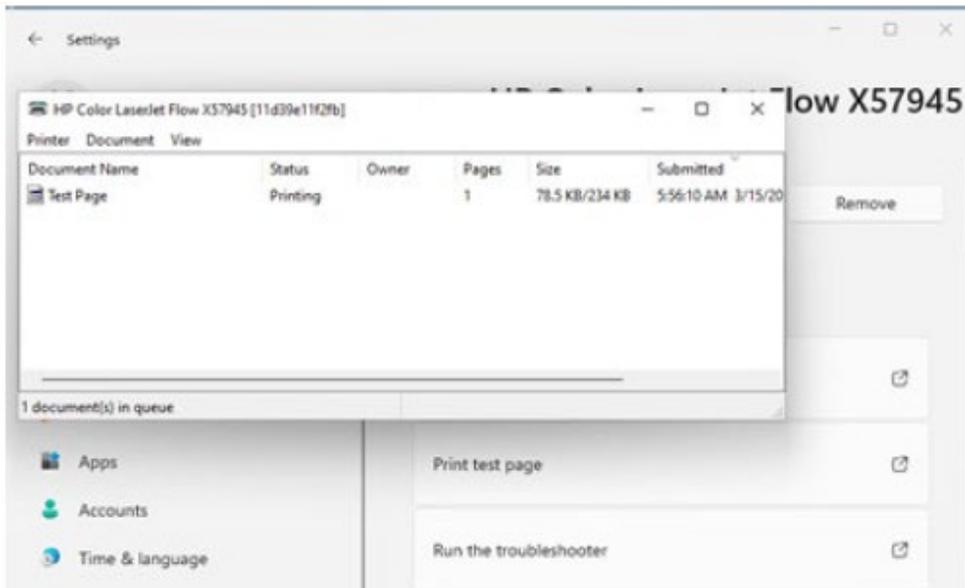
5. Click the name of the printer to open the Printer settings menu.



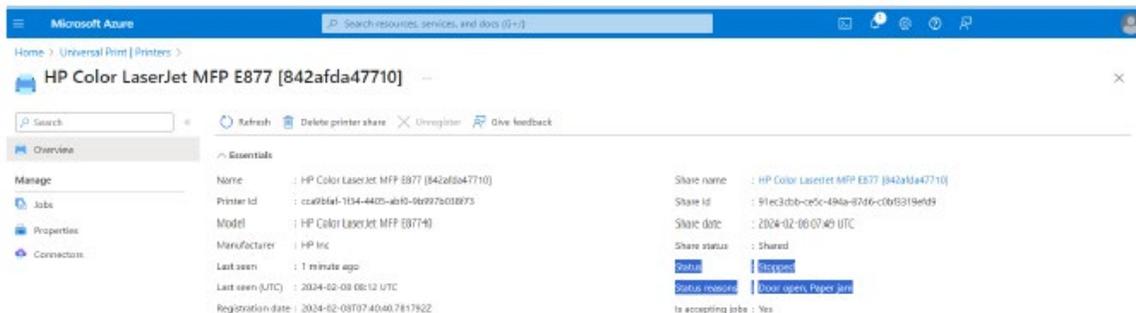
6. Click **Print test page**, then click **Open print queue**.



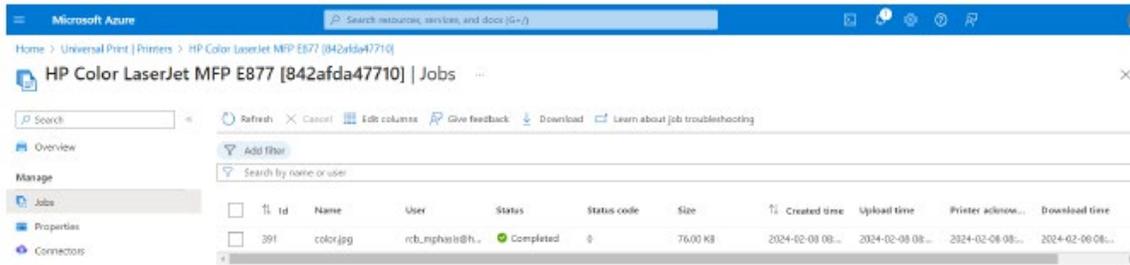
7. Verify that the print job was sent successfully to the printer through Microsoft Universal Print.



8. In Microsoft Azure, open the print queue to verify the printer status.



- In the left pane, click **Jobs** to view and verify that the print job was sent successfully to the printer through Microsoft Universal Print.



Remove the printer from Microsoft Universal Print

To unregister a printer from Microsoft Universal Print, follow the steps below.

- In a supported browser, open the printer's EWS page using the printer's host name or IP address.
- On the top navigation bar, click the **Networking** tab.
- In the left pane, click **Microsoft Universal Print**.
- Click **Remove**.
- Unregister the printer from Universal Print on the Azure Portal.

NOTE: Before resetting a printer, HP recommends following the steps above to unregister the printer from Microsoft Universal Print. If the printer is reset without unregistering it first, then remove the device on the Azure Portal before proceeding with a new registration.

Recommended Microsoft Universal Print tests

The following tests are recommended after configuring Microsoft Universal Print.

Test	Outcome
Register a Microsoft Universal Print capable HP printer.	
Configure and share a Microsoft Universal Print print queue for the registered HP printer.	
Add the Microsoft Universal Print queue for the HP printer to a Microsoft Windows client.	
Test Microsoft Universal Print direct print jobs with all applicable print options to the HP printer.	

Test	Outcome
Track jobs sent to the HP printer using Microsoft Universal Print.	
Check the HP printer status using Microsoft Universal Print.	
If the Microsoft 365 mobile app is available to users, test the Microsoft Universal Print Secure release with QR code, https://learn.microsoft.com/en-us/universal-print/fundamentals/universal-print-qr-code .	
If more than one device is available and the Universal Print anywhere preview is available, test the Microsoft pull print functionality. For more information, visit the following link: https://techcommunity.microsoft.com/t5/windows-it-pro-blog/universal-print-makes-cloud-printing-truly-universal/ba-p/3982872	
Remove or unregister the HP printer from Microsoft Universal Print.	
After removing or unregistering all HP printers, remove the HP for Universal Print Enterprise Application from Entra ID.	

Known Issues with the HP Microsoft Universal Print Solution

The following table outlines known behaviors with the HP Microsoft Universal Print solution.

Behaviors	Comment
Number of copies is not reflected correctly in Control Panel Job Log	Microsoft is investigating.
Unable to register a printer with a different device name after registering the print with the same device name as an already registered printer	Microsoft is investigating.
Job Separator Page does not print with Microsoft Universal Print, and “separator-sheets” are not supported	This is expected behavior. Microsoft is investigating.
No preview for Staple, Fold, and Punch options in driver	Expected in future HP PSA functionality.

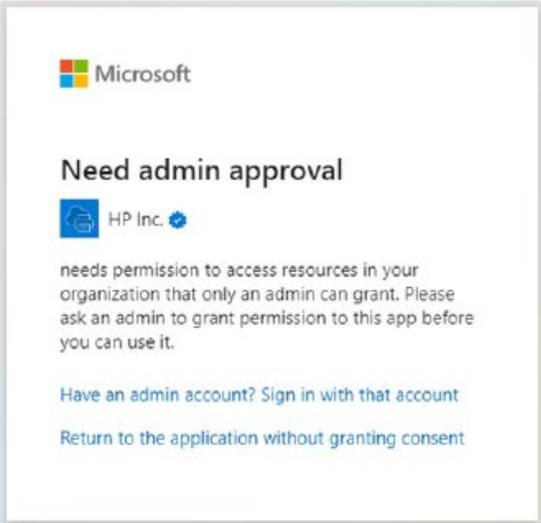
Behaviors	Comment
GCC High registration errors	HP and Microsoft are investigating.
The printer does not unregister in Universal Print when selecting Remove in the EWS	HP and Microsoft are investigating. Unregister the printer manually in Universal Print.
Users with the Printer Technician role cannot register printers	HP and Microsoft are investigating.

Troubleshooting

Below are some common issues that might occur when configuring Microsoft Universal Print, including the cause and solution for each issue.

Issue #1

Issue: 'Need admin approval' message



Cause

This occurs due to lack of permissions to add the HP for Universal Print Enterprise Application to Entra ID.

Solution

To resolve, sign in with a user with sufficient privileges. HP recommends performing the setup of the first printer using a user with the Global Administrator role in Entra ID, as the role is required to grant tenant-wide administrator consent on the application.

Issue #2

Issue: 'Waiting for user sign-in' hangs during registration

Universal Print

Click on "Sign in" to open the authentication page.

Enter the following code to authenticate:

L4KTJNRN

Sign in



Cause

This occurs because the user account does not have sufficient privileges to create the printer registration in Microsoft Universal Print but may have privileges to add the Enterprise Application and grant administrator consent.

Solution

Ensure that the user has at least Printer Administrator privileges.

Issue #3

Issue: 'Registration failed. Please try again' error message

Cause

This occurs because the user account does not have sufficient privileges to create the printer registration in Microsoft Universal Print but may have privileges to add the Enterprise Application and grant administrator consent.

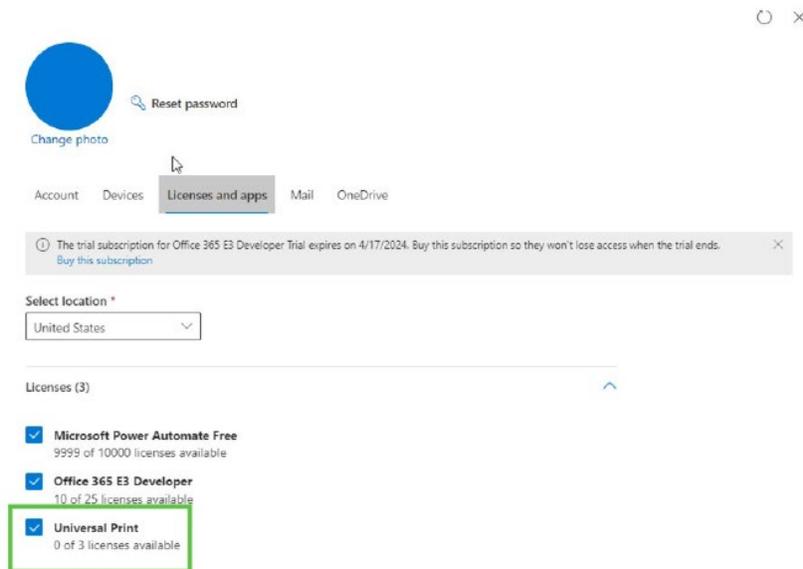
Solution

Ensure that the user has at least Printer Administrator privileges.

For more information on how to troubleshoot Microsoft Universal Print, refer to the Microsoft support Microsoft Universal Print troubleshooting guide at <https://learn.microsoft.com/en-us/universal-print/fundamentals/universal-print-troubleshooting-support-howto>.

Licenses

Microsoft Universal Print licenses can be assigned to users via the Microsoft 365 admin portal, and Printer Administrators must have a license to manage printers in Universal Print.



More support or provide feedback

If an error occurs which does not appear to be a Microsoft infrastructure error, or if you have feedback for solution improvements, please contact your HP Technical Consultant and provide the following information:

- Printer model
- Printer firmware revision and date code
- Universal Print Configuration including registration status, connection status, and service provider
- Test scenario
- Error code or description
- Observations
- Feedback
- Relevant screen capture or picture
- Diagnostic data (zipped debug information file or .jdp file, if possible)

For more information about Microsoft Universal Print including configuration and troubleshooting steps, go to Microsoft support page <https://learn.microsoft.com/en-us/universal-print/fundamentals/>.

Supported printers

The following printers support Microsoft Universal Print when running HP FutureSmart version 5.8.1.1 and newer:

HP Color LaserJet Enterprise MFP M480
HP Color LaserJet Enterprise M455
HP LaserJet Enterprise MFP M430, M431
HP LaserJet Enterprise M406, M407
HP Color LaserJet Enterprise MFP M577
HP Color LaserJet Enterprise M751
HP Color LaserJet Enterprise MFP M776
HP Color LaserJet Enterprise 5700
HP Color LaserJet Enterprise MFP 5800
HP Color LaserJet Enterprise 6700, 6701
HP Color LaserJet Enterprise MFP 6800, 6801
HP LaserJet Managed E40040
HP LaserJet Managed MFP E42540
HP Color LaserJet Managed E45028
HP Color LaserJet Managed MFP E47528
HP Color LaserJet Enterprise X55745
HP Color LaserJet Enterprise MFP X57945, X58045
HP Color LaserJet Enterprise X65455, X65465
HP Color LaserJet Enterprise MFP X67755, X67765
HP LaserJet Managed MFP E72725
HP LaserJet Managed MFP E72830
HP LaserJet Managed MFP E73025, E73030
HP LaserJet Managed MFP E73130, E73135, E73140
HP Color LaserJet Managed MFP E78122
HP Color LaserJet Managed MFP E78523, E78528
HP Color LaserJet Managed MFP E78625, E78630, E78635
HP LaserJet Managed MFP E82650, E82660, E82670
HP Color LaserJet Managed MFP E87640, E87650, E87660
HP Color LaserJet Managed MFP E87740, E87750, E87760, E87770
HP Color LaserJet Managed MFP E77422, E77428
HP Color LaserJet Managed MFP E78223, E78228
HP LaserJet Enterprise M607, M608, M609
HP LaserJet Enterprise M610, M611, M612
HP LaserJet Managed E60055, E60065, E60075
HP LaserJet Managed E60155, E60165, E60175
HP Color LaserJet Enterprise M751
HP Color LaserJet Managed E75245
HP PageWide Enterprise Color MFP 586

HP PageWide Managed Color MFP E58650
HP LaserJet Enterprise MFP M527
HP LaserJet Managed MFP M527
HP LaserJet Managed MFP E52545
HP PageWide Enterprise Color MFP 780, 785
HP PageWide Managed Color MFP E77650, E77660
HP Color LaserJet Managed MFP E57540
HP Color LaserJet Enterprise MFP M577
HP Color LaserJet Enterprise MFP M578
HP LaserJet Managed MFP E82540, E82550, E82560
HP LaserJet Enterprise MFP M528
HP LaserJet Managed MFP E52645
HP Color LaserJet Enterprise MFP M681, M682
HP Color LaserJet Managed MFP E67550, E67560
HP Color LaserJet Managed MFP E67650, E67660
HP LaserJet Enterprise MFP M631, M632, M633
HP LaserJet Managed MFP E62555, E62565, E62575
HP LaserJet Enterprise MFP M634, M635, M636
HP LaserJet Managed MFP E62655, E62665, E62675
HP Color LaserJet Managed MFP E77822, E77825, E77830
HP Color LaserJet Managed MFP E78323, E78325, E78330
HP PageWide Managed Color MFP P77440
HP PageWide Managed Color MFP P77940, P77950, P77960
HP PageWide Color MFP 774, 779
HP Color LaserJet Enterprise MFP M776
HP LaserJet Enterprise M507
HP LaserJet Managed E50145
HP Color LaserJet Enterprise M554, M555
HP Color LaserJet Managed E55040
HP PageWide Color 755
HP PageWide Enterprise Color 765
HP PageWide Managed Color E75160
HP PageWide Enterprise Color 556
HP PageWide Managed Color E55650
HP LaserJet Managed MFP E72425, E72430
HP Color LaserJet Managed MFP E87640, E87650, E87660
HP Color LaserJet Enterprise M652, M653
HP Color LaserJet Managed E65050, E65060
HP Color LaserJet Managed E65150, E65160
HP LaserJet Managed MFP E72525, E72530, E72535
HP LaserJet Managed E50045

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