



PrinterOn Agent for HP Printers

Setup Guide

Version 1.0



mobile printing solutions | enterprise | education | public printing locations

Contents

Chapter 1: Introduction	4
Overview: Setting up the PrinterOn Agent for HP	5
PrinterOn service prerequisites	5
PrinterOn for HP Agent workflows	6
Walk-up release workflow	6
Mobile release workflow	8
 Chapter 2: Registering the HP printer	 10
Registering the HP printer with HP Connected	10
Registering with HP Connected	11
Enabling Cross-Origin Resource Sharing	13
Installing the Amazon Root CA certificate	13
Locating the printer's serial number	14
Registering with the PrinterOn service	15
Creating the printer listing for the HP printer	16
Configuring the printer identity	18
Configuring the printer driver	18
Configuring the release settings	19
Enabling the PrinterOn Agent software	20
Adding a new PDS to your PrinterOn Service	20
Configuring the PrinterOn Agent software	21
Attaching the printer listing to the PrinterOn Agent	22

Chapter 3: Installing the PrinterOn Agent for HP	24
Before you begin	24
Installing the PrinterOn Agent	25
Chapter 4: Printing to your HP printer using the PrinterOn service	28
Submitting a print job to your HP printer	28
Printing using the Mobile printing workflow	29
Releasing print jobs	31
Chapter 5: Configuring and customizing the PrinterOn Agent	36
Restricting printer access	37
Enabling authentication for the PrinterOn agent	37
Adding the printer to a Secure Release Anywhere pool	39
Appendix A: Installing the PrinterOn Agent for HP on multiple printers	40
Before you begin	40
Installing the PrinterOn Agent on multiple printers	41
Creating the CSV file	41
Sample printer list	42
Running the installation script	42
Appendix B: Supported HP printers/MFPs	44

1

Introduction

The PrinterOn Agent for HP Printers lets you turn your HP printer or MFP into a cloud print solution. By installing the PrinterOn Agent software on an HP printer that has been registered with your PrinterOn service, you can make your printer available to anybody, using just about any device, even if they are not connected to the same network as your printer.

For example, with the PrinterOn Agent enabled and configured, a user can submit a document to your HP printer in a number of ways:

- through any web browser, by uploading it to your PrinterOn web print portal.
- from their mobile device, through the PrinterOn Mobile App for iOS or Android.
- by emailing the document directly to a printer-specific email address.

The PrinterOn solution balances access, convenience, and security. For example, you can:

- leverage PrinterOn's security features to restrict printer access to only authorized users
- require users to enter release codes at the printer before their documents are printed.

With a bit of configuration, you can have the PrinterOn Agent for HP installed and ready to receive and manage print jobs. This document will lead you through the steps you'll need to complete to get set up, and then show you how to print to your new cloud-enabled printer.

The PrinterOn Agent for HP supports the PrinterOn Enterprise Managed Cloud solution.

1.1 Overview: Setting up the PrinterOn Agent for HP

To set up the PrinterOn Agent for your HP printer, you'll need to complete the following tasks:

1. **Purchase PrinterOn Enterprise Managed Cloud service.** To use the PrinterOn service to extend your HP printer beyond your local network, you must first have a PrinterOn Enterprise Managed Cloud license.

For more information about purchasing PrinterOn Enterprise Managed Cloud, please contact your local dealer or reseller, or contact PrinterOn directly at:

- Email: sales@printeron.com
 - Website: www.printeron.com/company/contact-us.html
2. **Register the HP printer with your PrinterOn service.** Registering your printer associates the printer with your PrinterOn Enterprise service.
 3. **Install** the PrinterOn Agent for HP software on the HP printer/MFP.
 4. **Print using the PrinterOn service and your HP printer.** With your printer installed, you're ready to take the PrinterOn service for a test run.
 5. **Customize your printer settings and PrinterOn service.** Control access to your printer. Use your HP printer to route print jobs to other printers. Add the printer to a Secure Release Anywhere printer pool. Or configure any of the many other settings to take advantage of other features offered by the PrinterOn Service.

1.2 PrinterOn service prerequisites

To use the PrinterOn Agent with your HP printer/MFP, you must meet the following prerequisites.

Prerequisite	Description
Printer compatibility	Your printer must be capable of running firmware or application software that is compatible with the PrinterOn for HP agent. For a list of compatible devices, see Supported HP printers/MFPs .
PrinterOn license	You must have a valid PrinterOn license and an instance of PrinterOn Enterprise Managed Cloud service set up for you by HP PrinterOn support. The PrinterOn Agent for HP is designed to work with a PrinterOn service that has already been set up and configured for use. Please note that the HP printer does not include or provide an additional PrinterOn license. The HP printer will be associated with an existing PrinterOn license.

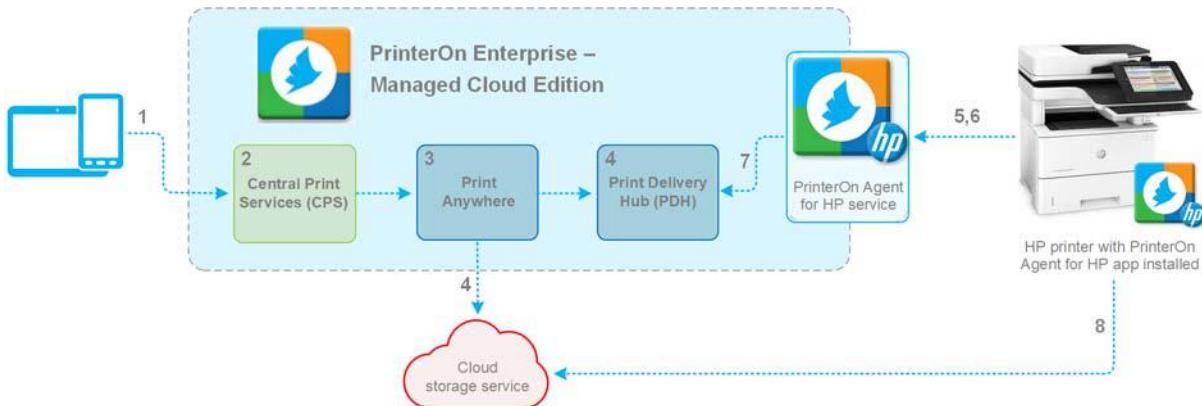
Prerequisite	Description
Network connectivity	The printer must be connected to the Internet, either directly or through a local proxy server.
Administrator privileges	You must be an administrator of the PrinterOn Enterprise service to register the HP printer.

1.3 PrinterOn for HP Agent workflows

This section outlines two workflows or the PrinterOn Agent for HP:

- **Walk-up release:** This release workflow requires the user to be physically present at the printer and to log in to the PrinterOn Agent for HP app, either by entering their credentials at the display panel, or by swiping their card.
- **Mobile release:** This release workflow allows the user to release the print job from their mobile device, without logging into the printer directly.

1.3.1 Walk-up release workflow



Note: All communication in the process flow occurs over port 443.

A walk-up release follows the following sequence of steps:

1. The user submits a print job to a printer with the PrinterOn Agent for HP client app installed.
2. The print job is received by the PrinterOn Enterprise Managed Cloud service. The CPS processes the print job, then passes it on to PrintAnywhere for rendering.

3. PrintAnywhere renders the print job based on the print options defined by the user.
4. The PrinterOn service stores the rendered print job in a cloud storage service and passes it on to a Print Delivery Hub to await a request from the printer.
5. At the printer, the user logs into the PrinterOn Agent for HP app using their credentials or by swiping the required ID card on a card reader connected to the printer.

The PrinterOn Agent for HP software on the printer verifies the credentials with the HP-PrinterOn service to determine whether the user has access to the PrinterOn service.

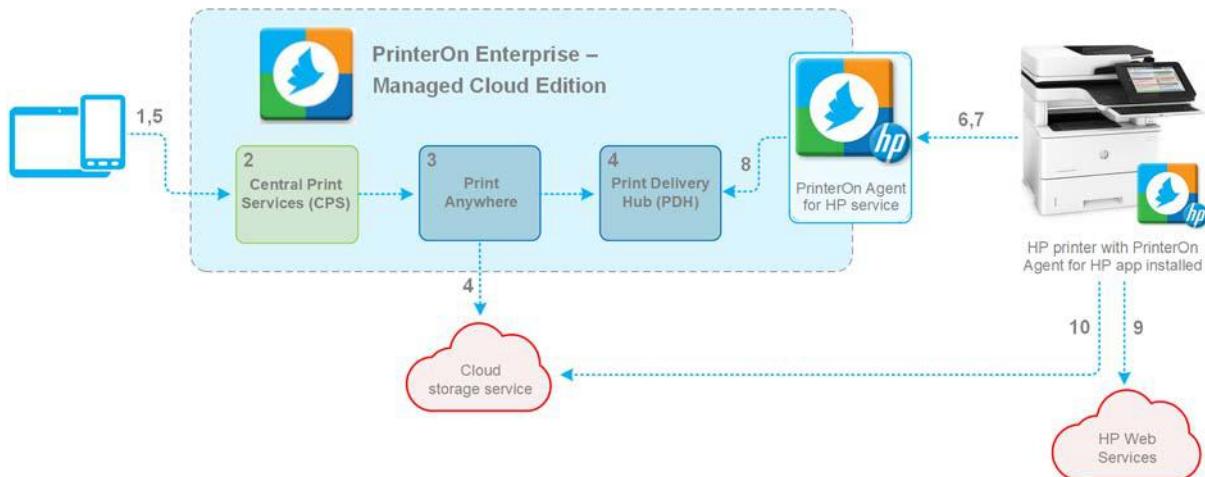
6. The PrinterOn Agent app submits a query to the PrinterOn Agent service for available print jobs for the authenticated user.
7. The PrinterOn Agent for HP service polls the Print Delivery Hub to determine if print jobs exist for the user. If so, the list of jobs is retrieved and passed back to the PrinterOn Agent app to be displayed to the user, who can then select one or more jobs to print.

The list of print jobs provides metadata about each available job, including the print job details and information about where the job data is stored in the cloud storage service.

8. The PrinterOn Agent for HP app retrieves the selected print job from the cloud storage service and prints it.

1.3.2 Mobile release workflow

Note: To support the mobile release workflow, the printer must be connected to HP Web Services. When connected to HP Web Services, the PrinterOn service is able to communicate securely with the printer on behalf of the user, without requiring the user to log into the PrinterOn Agent for HP on the printer itself, enabling the user to release a print job from the PrinterOn Mobile App directly.



Note: All communication in the process flow occurs over port 443.

Between the HP printer and HP Web Services, communication occurs over port 443, on both the TCP and UDP protocols.

A mobile release follows the following sequence of steps:

1. The user submits a print job to a printer with the PrinterOn Agent for HP client app installed.
2. The print job is received by the PrinterOn Enterprise Managed Cloud service. The CPS processes the print job, then passes it on to PrintAnywhere for rendering.
3. PrintAnywhere renders the print job based on the print options defined by the user.
4. The PrinterOn service stores the rendered print job in a cloud storage service and passes it on to a Print Delivery Hub to await a request from the printer.
5. On their mobile device, the user logs into the PrinterOn Mobile App using their credentials.
6. The PrinterOn Agent app submits a query to the PrinterOn Agent service for available print jobs for the authenticated user.

7. The PrinterOn Agent for HP software on the printer verifies the credentials with the PrinterOn service to determine whether the user is authorized to use the service.
If the user is authorized, the service returns a list of print jobs to the Mobile App for that authorized user.
8. The PrinterOn Agent for HP service polls the Print Delivery Hub to determine if print jobs exist for the user. If so, the list of jobs is retrieved and passed back to the PrinterOn Mobile App to be displayed to the user, who can then select one or more jobs to print.
9. When the user selects a print job, the job ID is passed back to the PrinterOn Agent for HP app on the printer, which notifies the HP Web Services that a job is ready to be downloaded and printed.
The HP Web Services then passes the job information, including the cloud storage location details, back to the HP printer.
10. The printer downloads the selected print job from the cloud storage service and prints it.

2

Registering the HP printer

Before you can install the PrinterOn Agent software on your HP printer/MFP, you must first register your printer/MFP with both HP Connected and with the PrinterOn service.

- [Registering with HP Connected](#): HP Connected supports web-connected printing services. If you don't already have an HP Connected account, you'll need to [create one](#).
Registering with HP Connected associates your HP printer with your HP Connected account.
- [Registering with the PrinterOn service](#): This process designates your HP printer as a valid print destination for your PrinterOn Enterprise Managed Cloud service.

These registration tasks must be completed before you install the PrinterOn Agent software on the HP printer.

2.1 Registering the HP printer with HP Connected

If your printer is not already registered with HP Connected, you'll need to register it before installing the PrinterOn Agent software on the device. Registering the device enables HP Connected to issue an email address and printer code for the device, which the PrinterOn service uses to identify it on the Internet.

Registration with HP Connected is matter of enabling HP Web Services on your printer. You can perform this task through the printer's Embedded Web Server (EWS), which lets

you access the printer configuration settings remotely from any computer that is connected to the same network as the printer.

Note: To remotely connect to the printer's Embedded Web Server, you'll need to know the printer's IP address and have administration privileges for that printer.

In addition to the registration step, you must also ensure that the printer is properly configured to communicate successfully with external cloud services. The tasks below outline how to ensure these settings are properly configured as well.

To register the printer and configure additional required settings:

1. In a web browser, navigate to the HP printer's IP address:

`http://<printer_ip>`

The EWS web page opens.

2. Log into the printer's web interface using your administrator credentials.
3. Perform the following tasks, if necessary:
 - [Register the printer with HP Connected](#).
 - [Enable Cross-Origin Resource Sharing](#).
 - [Install the Amazon Root CA certificate](#).
4. In addition, while the EWS web page is open, [locate and record the printer's serial number](#). You'll need this value to register the printer with the PrinterOn service later.

Once you have completed the process of registering with HP Connected, you can [register with the PrinterOn service](#).

2.1.1 Registering with HP Connected

If your printer is not already registered with HP Connected, you'll need to register it now.

To register the printer with HP Connected:

1. In the EWS, click **HP Web Services**.

2. In the Web Services Setup page, check the **Web Services Status**.

Web Services Status	Enabled
Printer connected to HP Connected	Connected

- If the current Web Service Status is **Enabled**, then the printer is already registered. You can proceed to [Enable Cross-Origin Resource Sharing](#).
 - If the current status **Not Enabled**, click [Enable HP Web Services](#).
3. Accept the Terms of Use, then click **Next**. The printer attempts to contact the HP Connected services.
 4. Once successful, you should be taken back to the HP Web Services Setup page. The Web Services Status should now be **Enabled**, and an email address and printer code should be assigned for your printer.

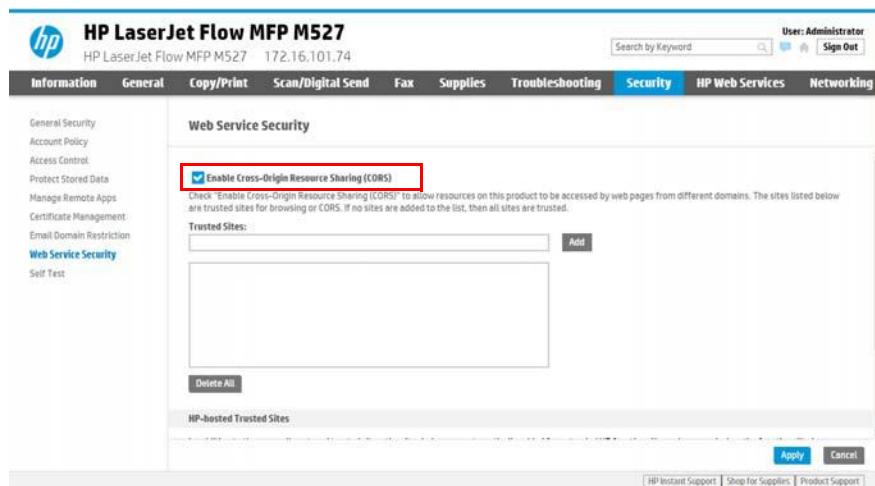
Web Services Status	Enabled
Printer connected to HP Connected	Connected

2.1.2 Enabling Cross-Origin Resource Sharing

The PrinterOn Agent for HP requires support for cross-origin resource sharing. Cross-origin resource sharing allows the agent to communicate with a physically connected badge reader. If cross-origin resource sharing is not enabled, the agent cannot initialize the badge reader.

To enable cross-origin resource sharing:

1. In the EWS, from the top menu, click **Security**.
2. From the left navigation pane, click **Web Service Security**.
3. If **Enable Cross-Origin Resource Sharing** is disabled, enable it.



4. Click **Apply**.

2.1.3 Installing the Amazon Root CA certificate

The PrinterOn Agent for HP uses TLS to communicate securely with Amazon's Web Services. To support this secure communication, you'll need to ensure that the printer has the Amazon CA root certificate installed on it.

To install the Amazon certificate on your printer:

1. Download the Amazon CA root certificate from the following location:
www.amazontrust.com/repository/AmazonRootCA1.pem
2. In the EWS, from the top menu, click **Security**.

- From the left navigation pane, click **Certificate Management**.

The screenshot shows the 'Certificates' tab selected in the 'Certificate Management' section. A sub-section titled 'CA Certificates' is displayed, containing a note about validating server identity and a 'Choose File' button for uploading a certificate file.

- Scroll down to the CA Certificates section on the page, click **Choose File**.
- Browse to and select the AmazonRootCA1.pem file, then click **OK**.
- Click **Install** to install the Amazon certificate.

The screenshot shows the 'CA Certificates' section after a certificate file has been uploaded. The 'Install' button is now active and highlighted in blue, indicating it can be clicked to install the certificate.

2.1.4 Locating the printer's serial number

To [Integrate the PrinterOn Agent with your PrinterOn service](#), you'll need to have the serial number for your HP printer on hand. PrinterOn uses the serial number to validate the license information and to connect the physical printer hosting the agent software with the PrinterOn service.

You can locate the serial number at any time on the Configuration page of the printer's EWS.

To locate the serial number:

1. In the EWS, from the top menu, click **Information**.
2. From the left navigation pane, click **Configuration Page**.
3. Locate the **Product Serial Number** on the page.

The screenshot shows the 'Information' tab selected in the HP EWS interface. On the left, there's a sidebar with links like Device Status, Configuration Page, Supplies Status Page, Event Log Page, Usage Page, Device Information, Control Panel Snapshot, Printable Reports and Pages, and Open Source Licenses. The main content area is titled 'Configuration Page'. It contains two sections: 'Device Information' and 'Memory'. The 'Device Information' section includes fields for Product Name (HP LaserJet Flow MFP M527), Nickname (HP LaserJet Flow MFP M527), Model Number (F2A70V), DC Controller Version (1.19), and Product Serial Number (40U3HUVB0). The 'Memory' section shows Total RAM (1792 MB) and an 'Event Log' table with three recent entries. The table has columns for Number, Cycles, and Event, with values 75, 2058, 33.02.02; 74, 2054, 33.02.02; and 73, 2054, 33.02.02. At the bottom right of the page, there are links for HP Instant Support, Shop for Supplies, and Product Support, along with a copyright notice: © Copyright 2010-2018 HP Development Company, L.P.

4. Record this number for use later.

2.2 Registering with the PrinterOn service

Registering your printer essentially requires you to create a Printer listing within your PrinterOn service that points to the IP address of the HP printer.

This process connects your HP printer with your PrinterOn service, which allows PrinterOn to communicate with the PrinterOn agent on your printer. It also makes the HP printer available in your PrinterOn Enterprise directory, which means that users can select it as their destination printer when they print using one of the enabled printing workflows.

Registering your HP printer with your PrinterOn Enterprise service is a manual process that you perform in the PrinterOn Configuration Manager.

To register your HP printer, complete the following tasks:

1. [Create the printer listing for the HP printer](#).
2. [Integrate the PrinterOn Agent with your PrinterOn service](#).
3. Once these steps are completed, restart your HP printer. The configuration changes you made will be applied to the PrinterOn agent.

2.3 Creating the printer listing for the HP printer

The first step in the registration is to add a printer listing to your PrinterOn Enterprise service for your HP printer. This section shows how to link your HP Printer with your PrinterOn service, as well as how to define some additional useful configuration settings.

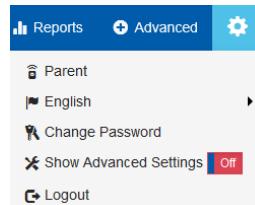
Note: If you are installing the PrinterOn Agent on a printer that is already registered (that is, has a printer listing) with your PrinterOn service, you can skip this task and proceed directly to [Enabling the PrinterOn Agent software](#).

To add a new PrinterOn printer:

1. Launch and log into the PrinterOn Configuration Manager. For details, see "Exploring the Configuration Manager" in the *PrinterOn Enterprise Configuration Guide*.
2. To properly configure the printer listing, you'll need to access some Advanced settings. These settings are hidden by default.

To display the Advanced settings:

- a) In the Configuration Manager, click the **Settings** button ().
- b) Click **Show Advanced Settings** to toggle advanced settings on.



3. From the top menu of the Configuration Manager, click **Printers**. The Printers tab appears, displaying a list of your existing PrinterOn printers.

Enabled	Printer Name	Output Destination	Guest	Approval	GCP	Discovery
●	Auto-generated Printer 1	\\PC\Users\user\Desktop\Output\Printer 1	●	●	●	●
●	Auto-generated Printer 2	LPT2	●	●	●	●
●	Auto-generated Printer 3	LPT3	●	●	●	●
●	Ricoh C410S Printer	tcp://172.16.100.4:9100	●	●	●	●

- Locate the **Add Printer** button below the printers list and click it. A new auto-generated printer is added to the printers list. You'll configure this printer listing to associate it with your HP printer.



- In the PrinterOn Printers list, click next to the new printer listing. The printer actions appear.

Enabled	Printer Name	Output Destination
	Auto-generated Printer 1	file:///C:/Users/user/Desktop/printer 1
	Auto-generated Printer 2	LPT2

- Click **Configure**. The Printer Configuration dialog appears.



- The Printer Configuration dialog lets you configure all the printer settings and supported behavior. Settings are grouped into logical categories. You can expand each of the sections to configure the relevant settings.

Auto-generated Printer 1

Printer Number: 805095298231
PrinterOn Name: generate-0-printer-1

QR Code

Show Direct Print QR Code

Printer Configuration

- Printer Location Information
- Printer Driver
- Output Location
- Workflow Options
- Labels
- Job and User Information
- Releasing Print Jobs
- Finishing Options
- Paper Sizes
- Printing Prices
- Authorizing Users

Apply Settings Cancel

- Complete the following configuration tasks:

- [Configure the printer identity](#).
- [Configure the printer driver](#).
- [Configure the release settings](#).

- Once you complete these tasks, click **Apply Settings**.

With the printer listing created, you can now [add the PrinterOn agent to your PrinterOn Enterprise service](#).

2.3.1 Configuring the printer identity

By default, when you add a printer to the printer list, it is given a generic name, such as Auto-generated Printer 1. You should rename the printer to something more meaningful.

To modify the printer name:

1. In the Printer Configuration dialog, expand the **Printer Configuration Settings**.
2. Configure the following settings:

Setting	Description
Printer Description	A descriptive label that describes the printer to users. This is the value that users see when searching for a printer, so the value should be unique and descriptive. Note: PrinterOn does not enforce uniqueness on this value, but recommends that you set this value to a simple and easy-to-understand label for the printer.
PrinterOn Name	A unique printer queue name used throughout the software to both identify and organize printers. This value is combined with the email domain to create the email address for the printer, to which users can email print jobs. For example: warehouse-printer-1@emailprint.com

2.3.2 Configuring the printer driver

The printer driver is used to convert documents into a format understood by the printer. Although you can use the universal PrinterOn printer driver selected by default, for best results, you should use the printer driver specific to your printer.

To configure the printer driver:

1. In the Printer Configuration dialog, expand the Printer Driver section. The Printer Driver settings appear.

2. In the **Printer Driver** field, select the printer driver that the PrinterOn Server uses to process any jobs sent to the printer. Printer drivers are sorted by manufacturer.
 - If an HP driver is listed, select **HP** from the upper list.
 - If no HP driver is listed, you can use the PrinterOn PrintSpot Universal (64 bit) driver.

Note: If multiple servers are being used for document processing, ensure that the same driver is installed on all servers.

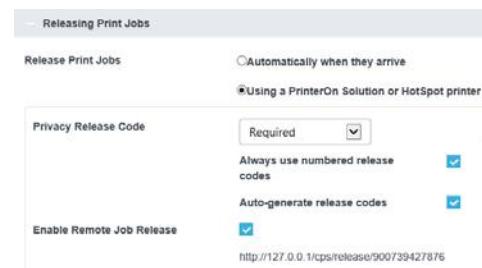
2.3.3 Configuring the release settings

By default, the PrinterOn server is configured to automatically release print jobs to the computer. For security reasons, it is strongly recommended that you modify this setting to force users to enter a release code or their credentials before the printer prints the job.

This section outlines how to configure the printer to require release codes to print the job. This release setting is supported by all HP printers.

To configure the printer to require release codes:

1. In the Printer Configuration dialog, expand the **Releasing Print Jobs** section. The **Releasing Print Jobs** settings appear.
2. For the **Release Print Jobs** setting, select **Using a PrinterOn Solution or HotSpot Printer**.
3. In the **Privacy Release Code** drop-down, select **Required**, then enable the following settings:



Setting	Description
Always use numbered release codes	When checked, generated Release Codes contain only numbers.
Auto-generate release codes	When checked, the server creates unique Release Codes for jobs and supplies them to the user.
Enable Remote Job Release	When checked, indicates that Secure Remote Release is enabled for this printer, allowing users release print jobs without being present at the printer. Remote job release is supported by the Web, Mobile, and Email Print workflows.

4. Click **Apply Settings**.

With the printer listing completed, you can now [add the PrinterOn Agent to your PrinterOn Enterprise service](#).

2.4 Enabling the PrinterOn Agent software

When you add a printer listing for your HP printer, your are creating a link between the printer and the PrinterOn service; you can now send print jobs to the printer through the PrinterOn service, but you can not yet access the added functionality of the agent software, such as the ability to manage print jobs at the printer.

To enable the PrinterOn Agent software, you must add the agent as a component to your PrinterOn Enterprise service.

To integrate the PrinterOn Agent software with the PrinterOn service, you need to complete the following tasks in the Configuration Manager:

1. [Add a new PDS component to your PrinterOn service](#).
2. [Configure the PrinterOn agent software](#).
3. [Attach your HP printer listing to the PrinterOn Agent](#).

2.4.1 Adding a new PDS to your PrinterOn Service

The PrinterOn Agent functions as a built-in Print-Delivery Station (PDS) that receives jobs for the HP printer on which it is installed, so you'll need to add a new PDS instance.

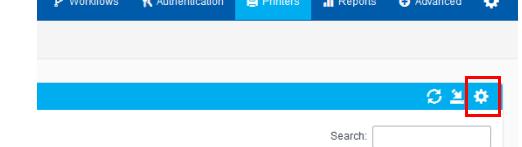
To add a PDS instance for your PrinterOn agent:

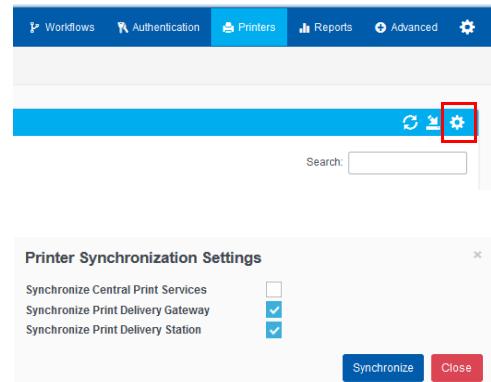
1. In the Configuration Manager, click **Home > Serial Numbers**. The Serial Numbers tab appears.
2. Scroll to the bottom of the page and click **Add Print Delivery Station**.


3. In the Add Print Delivery Station dialog, enter the **Server Description** for the PrinterOn Agent.



You'll use this description to identify the PrinterOn Agent when you [configure the PrinterOn agent software](#), so you should make the description meaningful.

4. Click **Add**.
5. In Configuration Manager, click **Printers**.
The Printers tab appears.
6. On the Printers tab, above the list of printers, click the Configure Sync icon ().
The Printer Synchronization Settings dialog appears.
7. Check **Synchronize Central Print Services**, then click **Synchronize**.



You have now added a new PDS component to your PrinterOn service. Next, you'll [configure the PrinterOn Agent software](#), to associate your new PDS instance with the PrinterOn agent.

2.4.2 Configuring the PrinterOn Agent software

To configure a Print Delivery Station:

1. In the Configuration Manager, click **Printers > Servers**. The Servers tab appears.
2. In the **Print Delivery Software** panel, select the PrinterOn agent's PDS instance. If necessary, you can search a specific PDS instance using the **Search** field.
3. In the **Configure Software** panel, for the **PDS Type**, choose **PrinterOn Agent for HP**.

Print Delivery Software	
Display <input type="button" value="10"/> records per page	Search: <input type="text"/>
Label	Serial Number
EmbeddedAgent-Samsung	HH-0F-4KD-J-NP0F
Print Delivery Station 2	KKHC-S60K-WA01
Showing 1 to 1 of 1 entries	
<input type="button" value="Previous"/> 1 <input type="button" value="Next"/>	

Configure Software	
Serial Number	4HMD-4M5W-51AG
PDS Type	<input type="button" value="PrinterOn Agent for HP"/>
Description	<input type="text" value="Back Office PDS"/>
Machine ID	<input type="text"/>
PDH Password	<input type="password" value="*****"/>
Enable Card Authentication	<input type="checkbox"/>
<input type="button" value="Save"/>	<input type="button" value="Link Printers"/>

The Configure Software panel is updated to display settings specific to a PrinterOn Agent on an HP printer.

4. In the Configure Software panel, configure the following settings:

Setting	Description
Serial Number	The serial number supplied by PrinterOn for this PDS instance. Each PDS instance that you add, regardless of type, is assigned a unique PrinterOn serial number.
PDS Type	The type of Print Connector used for this PDS instance. Select PrinterOn Agent for HP .
Description	A description of the PrinterOn agent to help you differentiate it from other PDS instances in a deployment. The description is a searchable value.
Machine ID	<p>The serial number or machine identifier of the physical printer or MFP on which the PrinterOn agent is installed. PrinterOn uses this value to validate the license and connect to the physical printer/MFP.</p> <p>You can get the serial number of the printer on the Configuration page of the printer's EWS. For more information, see Locating the printer's serial number.</p>
PDH Password	<p>The password required to connect to the PDH server.</p> <p>This password is configured in the PDH server software and must be supplied by the PDH server administrator.</p>
Enable Card Authentication	When selected, the PrinterOn Agent embedded on the printer should look for and use a card reader for authentication information.

5. Click **Save** to save the PrinterOn agent configuration.

Next, you'll [attach the printer listing you created earlier to the PrinterOn Agent](#).

2.4.3 Attaching the printer listing to the PrinterOn Agent

The last step of the registration process is to attach the PrinterOn printer listing for the HP printer to the PrinterOn Agent on the printer. Attaching the printer listing to the agent allows the PrinterOn agent to manage all print jobs submitted to the PrinterOn printer listing.

To attach a printer to the PrinterOn Agent:

1. At the bottom of the **Configure Software** panel of the Servers tab, click **Link Printers**. The Link Printers dialog appears.



2. In the **Available Printers** list, locate the printer listing for your HP printer.
3. Select the printer listing in the **Available Printers** list and move it to the **Linked Printers** list.
4. Click **Apply Settings**.

2.5 Next steps

Once you have successfully registered your HP printer with PrinterOn, you can now complete the following tasks:

1. [Install the PrinterOn Agent for HP software](#) on your HP printer/MFP.
2. [Print using the PrinterOn service and your HP printer](#). With your printer installed, you're ready to take the PrinterOn service for a test run.
3. [Customize your printer settings and PrinterOn service](#).

3

Installing the PrinterOn Agent for HP

This chapter describes how to install the PrinterOn Agent for HP on to your HP printer or MFP. Once installed, you'll be able to access the PrinterOn Agent from the home screen of the printer's display panel.

When you successfully install the PrinterOn Agent, the first time you launch the agent, it will automatically contact and sync with your PrinterOn service, and will download any available print jobs.

Note: This chapter describes how to install a PrinterOn Agent onto a single HP printer. If you have a fleet of HP printers, you can install the PrinterOn Agent onto multiple HP printers using a PowerShell script (available from the HP PrinterOn Support team) and a CSV file containing the required information for each of the target printers.

For more information, see [Appendix A: Installing the PrinterOn Agent for HP on multiple printers](#).

3.1 Before you begin

Before installing the PrinterOn Agent software on your HP printer/MFP, ensure that you have:

- Administrative privileges on the target HP printer.
- [Registered the printer with HP Connected](#).
- [Registered the printer with your PrinterOn service](#).

3.2 Installing the PrinterOn Agent

In a cloud deployment of PrinterOn, it's necessary to install the PrinterOn Agent for HP directly on your printer. The PrinterOn Agent for HP is, essentially, the Print Delivery Station software that allows the printer to poll a connected PDH for print jobs and connects your HP printer to your PrinterOn service across disparate networks.

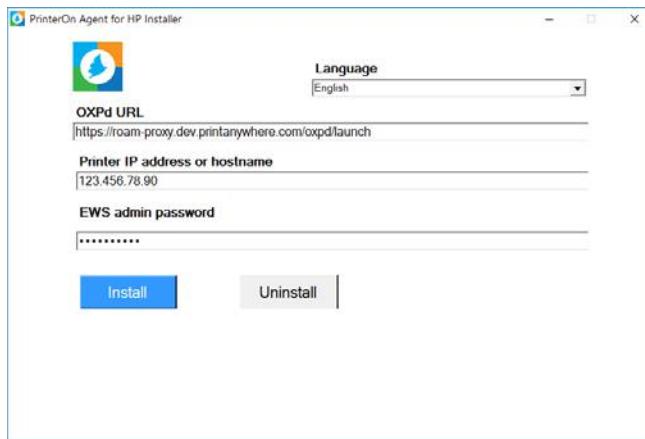
To install the PrinterOn Agent for HP on your printer:

1. Download the following file and extract the PrinterOn Agent for HP installer:

<http://dl.printeron.com/oxpdbutton/PrinterOnAgentInstaller.zip>

Note: This URL is case sensitive.

2. Launch the PrinterOnEmbeddedInstaller.exe.



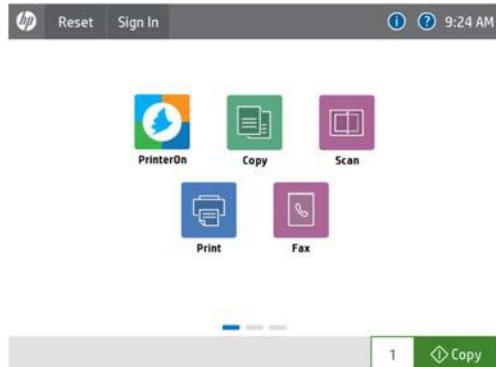
3. If necessary, change the **Language** you want the installer appear in. You can choose between English, French, German, Italian and Spanish.
4. In the **OXPd URL** field, specify the location of your HP printing service.

Note: You should receive the OXPd URL value from the HP PrinterOn Support team after purchasing a PrinterOn Agent for HP license.

5. Specify the **Printer IP address or hostname** of the printer on which you are installing the agent.
6. In the **EWS admin password** field, specify the administrator account password for the printer on which you are installing the agent.
7. Click **Install**. The installer connects to the HP printer, installs the software and registers itself with the PrinterOn service.

8. Restart the printer.

With the agent installed, a PrinterOn application is added to the Home Screen of the printer panel.



You can ensure that the agent is properly registered and communicating with your PrinterOn Enterprise Managed Cloud service in the Configuration Manager. On the Printers > Servers tab, locate the Configure Software panel. The panel shows when the agent last communicated with the PrinterOn service to validate its license.

The image shows the 'Configure Software' panel in the Configuration Manager. It has a blue header bar with the title 'Configure Software'. Below the header, a message states 'Last communicated and validated its license information at 4/10/2019, 6:17:00 PM'. The panel contains several input fields and dropdown menus:

- Serial Number:** 4HMD-4M5W-51AG
- PDS Type:** PrinterOn Agent for HP (selected)
- Description:** Back Office PDS
- Machine ID:** (empty input field)
- PDH Password:** (password field with dots)
- Enable Card Authentication:** (checkbox)

At the bottom, there are two buttons: 'Save' (green) and 'Link Printers' (blue).

3.3 Next steps

Once you have installed and registered the PrinterOn Agent, it is ready to use. You can now:

1. [print using the PrinterOn service and your HP printer.](#)

2. [Customize your printer settings and PrinterOn service.](#)

4

Printing to your HP printer using the PrinterOn service

Now that your PrinterOn Agent is installed on your HP printer or MFP and registered with your PrinterOn service, you can now use the PrinterOn service to print to your printer.

This chapter describes how to submit a print job using the PrinterOn Mobile App and to release it using the PrinterOn Agent you installed on the HP printer.

4.1 Submitting a print job to your HP printer

PrinterOn supports a number of different document submission workflows. By default, when you register your HP printer with your PrinterOn service, the printer is configured to support the following print workflows:

- **Mobile Printing:** Users locate printers and print via the PrinterOn service using the PrinterOn Mobile App on their smartphone or tablet. The PrinterOn Mobile App is available for both iOS and Android.
- **Web printing:** Users submit print jobs using any connected web browser. Users upload their documents to the Web Print portal and can choose the printer to which to submit the job.
- **Email printing:** Users email the printer directly using the printer's email address (assigned by PrinterOn when you add a new printer to your service) to print email messages or attachments.

With PrinterOn Enterprise, you can also configure your service to support the following print workflows:

- **Google Cloud Print:** Users submit print jobs via the Google Cloud. You'll need to add your HP printer as a Google Cloud printer, then share it to allow other users to print to it. For more information, see "Configuring the Google Cloud Print workflow" in the *PrinterOn Enterprise/Express Configuration Guide*.
- **PrinterOn Queue Management System (PQMS):** Users print to their standard Windows print queues, which are mapped to PrinterOn printers. For more information, see "Configuring the PrinterOn Queue Management System (PQMS) workflow" in the *PrinterOn Enterprise/Express Configuration Guide*.
- **IPP and Native iOS/MacOS printing:** Users print using either IPP printers that are mapped to PrinterOn printers, or using native iOS or MacOS printing. For more information, see "Configuring IPP and native iOS/MacOS print workflows" in the *PrinterOn Enterprise/Express Configuration Guide*.

Detailing how to print using each of these workflows is beyond the scope of this guide. In this guide, we'll focus on the [Mobile printing workflow](#) only.

4.1.1 Printing using the Mobile printing workflow

You can print directly to your printer using the PrinterOn Mobile App for iOS or Android.

To print using the mobile workflow:

1. Download and install the PrinterOn Mobile app. There are two ways you can download the app onto your mobile device:
 - On your device, search your app store for PrinterOn. The PrinterOn Mobile App is identified by the PrinterOn logo. Select the latest version and download the app.
 - From the browser on your mobile device, browse to www.printeron.com/apps.html, then choose the app for your OS from there.
2. Once it's installed, launch the PrinterOn Mobile App.



3. Connect the mobile app to the HP printer. A simple way to do this is to use the mobile app to scan the printer's QR code, displayed in the Configuration Manager:

- a) On the Mobile App Home screen, tap the QR code icon. Scanning a QR code generated by PrinterOn quickly configures the app with printer information.



- b) Log in to the PrinterOn Configuration Manager, open the Printers tab, and display the Configuration dialog for the HP printer/MFP (as described in [Creating the printer listing for the HP printer](#)).
- c) At the top of the dialog, notice the QR code.

Scan the [QR code](#) displayed in the Configuration Manager. The app is configured with the printer information.



4. Print your document. For this example, we'll show how to print a photo.

- a) On the Mobile App home screen, tap **Photos**.



- b) Select the photo you want to print.

- c) Tap the Printer icon in the top right corner. A preview of the job is displayed.

- d) To select copies and page range where applicable, tap in the top right corner.

- e) Tap **Print** to submit your job.

Note: You can tap **Print History** to view the progress of your print job.

5. If necessary, [enter your credentials or the Secure Release Code](#) on the printer to release your documents for printing.

4.2 Releasing print jobs

Users who have submitted print jobs to the printer can release them for printing using the PrinterOn Agent app on the printer panel.

Depending on the PrinterOn configuration settings for the printer and agent, the user can view a list of their pending print jobs in one of three ways:

- **Entering their user credentials:** If authentication has been set up for the PrinterOn service, the user can type in their user credentials at the printer panel.
- **Entering a Secure Release Code:** If release codes have been set up for the printer, after printing, the user receives a Secure Release Code which they can enter at the printer panel. By default, the code is valid for 72 hours following the submission of the print request. All print jobs with that release code are displayed.
- **Using card authentication:** If the printer has a card reader and card authentication has been enabled for the agent, the user can tap their card on the card reader.

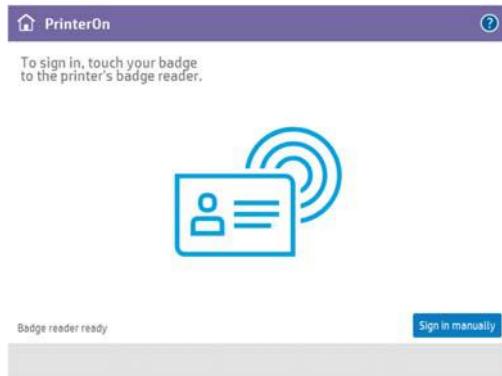
Note: Before using their card to authenticate, the user must manually register their card at the printer. For more information see [Registering a card with the PrinterOn Agent](#).

To release a print job:

1. On the Home Screen of the HP printer panel, tap the PrinterOn icon to launch the PrinterOn Agent app.



2. If you have enabled card authentication for the agent, the agent will ask you to tap the card reader to sign in.

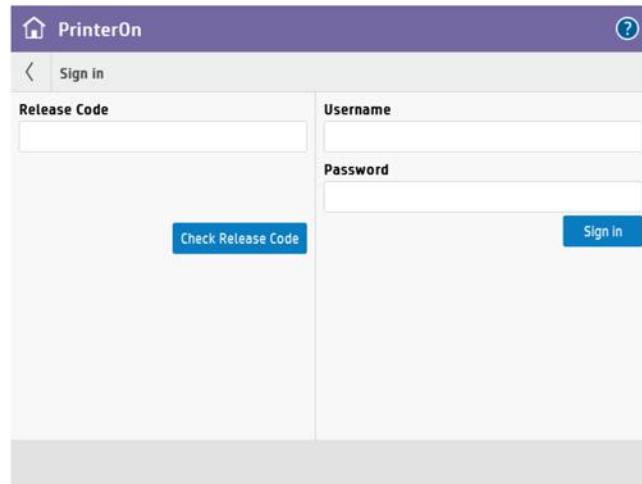


Do one of the following:

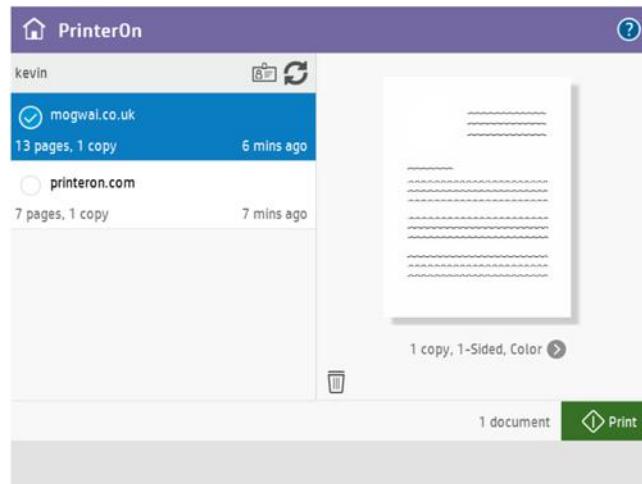
- If you have already registered your card with the PrinterOn Agent, tap the card on the card reader. After authenticating, a list of all your pending print jobs appears. [Proceed to Step 4.](#)

Note: If you haven't yet registered your card at the printer, you'll first need to sign in manually and [register your card](#).

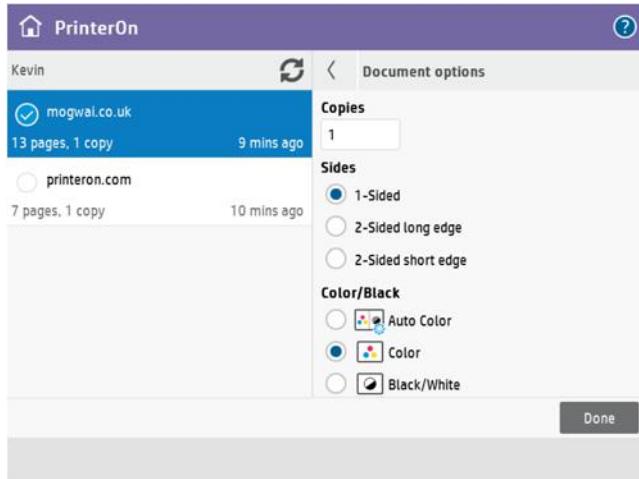
3. On the PrinterOn sign in page, you can sign in using one of the following methods:
 - **Release Code:** Enter the **Release Code** that you received when you submitted the print job, then click Check Release Code. A list of all pending print jobs with the provided release code appears.
 - **User credentials:** Enter your PrinterOn **Username** and **Password**, then click **Sign in**. After authenticating, a list of all your pending print jobs appears.



4. From the list of jobs in the left pane, select the job you want to print.



5. If you want to change the print options before printing, click the > button below the job preview, configure the options as necessary, then click **Done**.



6. To release the job to the printer for printing, tap **Print**.
7. Collect your print job.

Registering a card with the PrinterOn Agent

Before you can use card authentication to log into the PrinterOn Agent, you must first register your card with the agent.

To register your card:

1. On the Home Screen of the HP printer panel, tap the PrinterOn icon to launch the PrinterOn Agent app.
2. If you have enabled card authentication for the agent, the agent will ask you to tap the card reader to sign in. Instead, tap **Sign in manually** to choose an alternate method of authentication.



3. Enter your user credentials, then tap **Sign in**.
4. On the Job List page tap the Register Card button (- 5. Tap your card on the card reader. The PrinterOn agent registers the card and associates it with your user credentials.

The next time you print to this printer, you can sign in using your card to view your list of print jobs.

4.3 Next steps

Now that you have successfully tested the printer with your PrinterOn service, you can [customize your printer settings and PrinterOn service](#).

5

Configuring and customizing the PrinterOn Agent

After completing the registration process, your PrinterOn service is automatically updated with a new PrinterOn printer and PrinterOn Print Delivery Station, which are both associated with your HP printer.

At this point, you can begin to configure and customize the printer settings and your PrinterOn service using the Configuration Manager.

When you install the PrinterOn Agent, the default settings are sufficient for most situations. However, you may want to adjust some settings, if, for example, you want to charge users to use your printer, or you want to change release behavior.

There are also a number of more advanced features you may want to make use of with your PrinterOn agent:

- [Restricting printer access](#)
- [Adding the printer to a Secure Release Anywhere pool](#)

Note: Each time you configure the PrinterOn service in Configuration Manager, you must restart your printer to apply the changes to the PrinterOn agent.

5.1 Restricting printer access

You can restrict access to your HP printer by enabling authentication on the PrinterOn Agent and using your existing authentication method, such as LDAP or a third-party identity management service, to control who can access the printer. Those users who have permission to access the printer must provide their credentials in order to access the PrinterOn Agent UI.

When authentication is supported and properly configured, you can also configure settings to control the authentication workflow.

To enable authentication, you need to complete the following tasks:

1. In the Configuration Manager, configure your Authentication method. See “Configuring Authentication Settings” in the *PrinterOn Enterprise/Express Configuration Guide* for details on how to configure these settings.
2. [Enabling authentication for the PrinterOn agent](#).
3. Restart the printer.

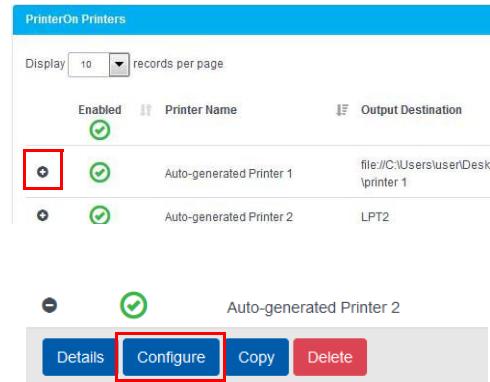
5.1.1 Enabling authentication for the PrinterOn agent

To add security to your print solution, you can enable authentication for PrinterOn Agent. When Authentication is enabled, the user must enter their user credentials before they are permitted to access the printer.

You must also configure your Authentication method in the Configuration Manager. See “Configuring Authentication Settings” in the *PrinterOn Enterprise/Express Configuration Guide* for details.

To enable authentication:

1. In the Configuration Manager, click **Printers**. The Printers tab appears, displaying a list of currently available printers. Notice the icon to the left of each entry.
2. In the PrinterOn Printers list, click **Configure** next to the listing for your HP printer/MFP. The printer actions appear.

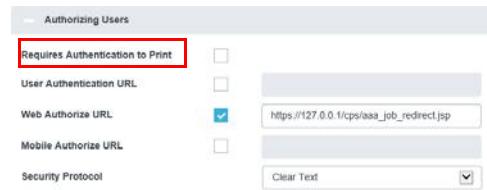


3. Click **Configure**. The Printer Configuration dialog appears.

4. Locate and expand the **Authorizing Users** settings.

5. In the Authorization settings, click **Requires Authentication to Print**.

6. Click **Apply Settings**.



5.2 Adding the printer to a Secure Release Anywhere pool

Secure Release Anywhere pools are groups of PrinterOn printers. To the user, a printer pool appears as just another printer that they select when printing. However, instead of distributing jobs to a single output destination, a printer pool can distribute print jobs to any of its member printers. Users can go to the output destination of any member printer and pull the print job down using their credentials or a secure release code.

Note: The Secure Release Anywhere functionality is included with your PrinterOn license but is disabled by default. To enable Secure Release Anywhere for your PrinterOn service, contact PrinterOn support.

A

Installing the PrinterOn Agent for HP on multiple printers

If you want to install the PrinterOn Agent on a number of HP printers, you can install the PrinterOn Agent onto multiple HP printers using a PowerShell script and a CSV file containing the required information for each of the target printers.

PrinterOn provides the required PowerShell script. The bulk installation process requires you to create a CSV text file that defines the installation parameters required by the installer for each printer that you intend to install the software on.

A.1 Before you begin

Before installing the PrinterOn Agent software on your HP printers, ensure that for each of the HP printers you intend to install the PrinterOn Agent on, you have:

- Administrative privileges.
- [Registered the printer with HP Connected](#).
- [Registered the printer with your PrinterOn service](#).

A.2 Installing the PrinterOn Agent on multiple printers

To prepare to install the PrinterOn Agent:

1. Download the PrinterOn Agent for HP installer and store it in an accessible location.
2. Download and extract the PowerShell installation script from PrinterOn and store it in an accessible location. You can find the script at the following location:

http://dl.printeron.com/oxpdbutton/oxpdinstaller_ps1.zip

Note: This URL is case-sensitive.

3. [Create a CSV file](#) that lists network connection information for each of the HP printers that you want to install the PrinterOn Agent on.
4. Lastly, once these steps completed, you can [run the installation script](#).

A.2.1 Creating the CSV file

To run the PowerShell script to install the PrinterOn Agent for HP on multiple printers, the script must have the connection and access details for each printer. To get this information, the script reads a CSV file, which you must create.

To create a CSV file with the necessary information:

1. In Microsoft Excel, or any other spreadsheet or text editor, create a new file.
2. The first line in the file contains headings for each column. You can choose to enter headers for each column if you choose. This line is ignored by the script.
3. For each line after the header line, enter the following information for each target printer:

Column	Description
PrinterLocation	The IP address or hostname of the printer on which you are installing the agent.
EwsPassWord	The administrator account password for the printer on which you are installing the agent.
OxpdURL	The location of your HP printing service.

4. Save the file as printer.csv in the same folder as the PowerShell script.

A.2.2 Sample printer list

The following sample illustrates the printer.csv file.

PrinterLocation	EwsPassWord	OxpURL
123.456.78.90	Password1	https://roam-proxy.printanywhere.com/oxpd/launch
123.456.78.91	Password2	https://roam-proxy.printanywhere.com/oxpd/launch
123.456.78.92	Password3	https://roam-proxy.printanywhere.com/oxpd/launch

A.3 Running the installation script

Once you have the installer and PowerShell script downloaded and the CSV file created, you are ready to run the script to install the agent on your printers.

To install the software from the command line:

1. From the Windows Start menu, locate the Windows PowerShell console, then right-click it and select **Run as Administrator**.
2. On the command line, navigate to the folder where you saved the PrinterOn Agent installation script (oxpdinstaller.ps1).
3. To install the agent, type the following command:

```
.\oxpdinstaller.ps1 -b "c:\Agent\printers.csv" -log  
"c:\Agent\oxpd.log"
```

4. To uninstall the agent, type the following command:

```
.\oxpdinstaller.ps1 -b "c:\Agent\printers.csv" -log  
"c:\Agent\oxpd.log" -u
```

A full description of each option is described in the table below:

Option	Description
-b	Required. Specifies path to the CSV file that contains the comma-separated list of printers on which to install/uninstall the PrinterOn Agent for HP. For example: <code>-b "printerlist.csv"</code> For information on the format of the CSV file, see Creating the CSV file .

Option	Description
-log	<p>Optional. Specifies the path and file name where log information will be stored. This log file provides installation result status for each of the printers listed in the CSV file. For example:</p> <pre>-log "c:\PONAgentLog\oxpd.log"</pre> <p>If this option is not included, the results are stored in the default location (the user's temp folder) with the file name oxpd.log. For example:</p> <pre>C:\User\jdoe\AppData\Local\Temp\oxpd.log</pre>
-u	Optional. When included, the script uninstalls the PrinterOn Agent from all printers specified in the CSV file.

B

Supported HP printers/MFPs

This appendix provides a list of the HP printer and MFP that are compatible for use with the PrinterOn Agent for HP.

Note: To ensure compatibility with the PrinterOn Agent for HP, you should update the printer/MFP firmware to the latest available version. For most of the printers listed, you can log into the printer panel using the printer's administrator credentials and update the firmware directly on the printer panel.

For details about updating firmware, refer to the documentation for your specific printer/MFP.

The PrinterOn Agent for HP supports the following HP printers/MFPs:

Product Name	Supported Models
HP Color LaserJet Enterprise	M552 M553 M652 M653 M855
HP Color LaserJet Enterprise MFP	M577 M651 M680 M681 M682 M660
HP Color LaserJet Enterprise flow MFP	M880

Product Name	Supported Models
HP Color LaserJet Managed MFP	E65050 E65060 E77822 E77825 E77830
HP Color LaserJet Pro MFP	M776
HP LaserJet Enterprise	M506 M608 (dh, dn, x) M609 (dh, dn, x) M806
HP LaserJet Enterprise MFP	M527 M630 M631 M632 M633
HP LaserJet Enterprise flow MFP	M830
HP LaserJet Enterprise 500 MFP	M525
HP LaserJet Enterprise 500 color MFP	M575
HP LaserJet Enterprise 700 color MFP	M775
HP LaserJet Managed MFP	E62555 E62565 E62575 E72525 E72530 E72535 E87640 E87650 E87660
HP OfficeJet Enterprise Color MFP	X555 X585
HP PageWide Enterprise Color MFP	556 586 (dn, f) 780
HP PageWide Managed Color MFP	E55650 E77650 P77440 P77950 P77960

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March 8 2022