Lexmark Cloud Services

Administrator's Guide

October 2025

www.lexmark.com

Contents

Change history

Change history

October 2025

Added the following information:

- **Fleet Management**
    - Updated information about unavailability of Local Agent x86 installer package.

September 2025

Added the following information:

- **Print Management**
    - Added information on creating assignment with Lexmark Print Management Client 3.6.0.
    - Added information on advanced hybrid storage assignment.
- **Fleet Management**
    - Added information on assigning configuration to Lexmark printers enrolled through a Fleet Agent, Native Agent, and Printer Agent.

August 2025

Added the following information:

- **Fleet Management**
    - Updated information on Local Agent installer package.
- **Solution Quota Manager**
    - Added information on managing the distribution of quotas in child organizations.

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August 2025

Added the following information:

- **Print Management**

- Added information on Lexmark Print Management Client 3.6.x.

- **Fleet Management**
  - Added information on importing variable settings file for creating a configuration.
- **Solution Quota Manager**
  - Added information on managing the distribution of quotas in child organizations.
- **Solution Center**
  - Added information on Advanced Match for Redaction.

June 2025

Added the following information:

- **Account Management**
  - Updated instructions on setting up a federation.
- **Print Management**
  - Added information on client policies.

May 2025

Added the following information:

- **Fleet Management**
  - Added information on assigning and deploying speed upgrade.
- **Print Management**
  - Updated information on Organizational settings page.
- **Analytics**
  - Added information on Full Data Export report in Analytics 2.0.
  - Updated information on generating Organization, User, and Department level reports.

April 2025

Added the following information:

- **Fleet Management**
  - Updated information on Importing Settings bundle.
- **Analytics**
  - Added information on All Organization Report and Single Organization Report.
- **Solution Center**
  - Updated information on Solution Center eSF application.

March 2025

Added the following information:

- **Solution Center**
  - Added information on Solution Center eSF application.
  - Added information on supported printer models for Cloud Solution Center.
- **Analytics**

- Updated information on generating reports.

January 2025

Added the following information:

- **Print Management**
  - Added information on Advanced Hybrid.
  - Added information on Offline print.
- **Solution Center**
  - Added information on Solution Center.
- **Scan Management**
  - Updated information on scan file size.

December 2024

Added the following information:

- **Fleet Management**
  - Updated information on creating a configuration.
- **Print Management**
  - Updated information on LPMC version 3.5.0 or later.

November 2024

Added the following information:

- **Account Management**
  - Updated information on additional claims.
- **Analytics**
  - Updated information on feedback function.

October 2024

Added the following information:

- **Account Management**
  - Updated information on adding optional claims.
  - Updated information on deleting organization.
  - Updated information on copying organization ID.

September 2024

Added the following information:

- **Fleet Management**
  - Added information on scheduling recurring tasks.
  - Added information on new Cloud Fleet Management roles.
- **Analytics**

- Added information on categorization of Cloud Fleet Management Reports and Cloud Print Management Reports.

July 2024

Added the following information:

- **Account Management**
  - Updated information on setting up attributes and claims.
- **Print Management**
  - Updated information on Lexmark Print Management Client.

June 2024

Added the following information:

- **Fleet Management**
  - Added information on managing filters.
  - Updated information on creating a notification.

April 2024

Added the following information:

- **Fleet Management**
  - Added feature on updating applications and firmware for all organizations.
- **Solution Quota Manager**
  - Added information on Solution Quota Manager.

March 2024

Added the following information:

- **Account Management**
  - Added information on configuring Microsoft Entra ID with SAML Federation.
- **Print Management**
  - Updated information on the Organizational Settings page.
- **Fleet Management**
  - Added information on assigning and enforcing conformance.
- **Analytics**
  - Added information on the Print Summary report.

February 2024

Added the following information:

- **Fleet Management**
  - Added support for configuration versioning.
  - Added support for importing printer settings from VCC files.

December 2023

Added the following information:

- **Fleet Management**
  - Updated information on adding applications while configuring printer settings.
  - Added information on Apps management.
- **Print Management**
  - Updated information on Direct Print

November 2023

Added the following information:

- **Fleet Management**
  - Updated information on configuring a printer settings
- **Scan Management**
  - Updated information on scan destination
- **Translation Assistant**
  - Updated source and target languages in Translation Assistant.

September 2023

Added the following information:

- **Account Management**
  - Configuring Azure Active Directory (AD) with OIDC Federation
- **Fleet Management**
  - If you have the Fleet Management Administrator role in all partner organizations and have child organization access, then you can update agents across multiple organizations.
  - Updated information on Policy type.
- **Print Management**
  - Added information on printing on a specific day and time
  - Added information on viewing details of a print policy
  - Updated information on Lexmark™ Print Management Client
- **Analytics**
  - Added information on the Print Outlier report

August 2023

Added the following information:

- **Print Management**
  - The Lexmark Mobile Print application is now known as the Lexmark Print application.
- **Scan Management**
  - Box connector support
  - Update on the known limitations
- **Translation Quota**

Added the following custom roles:

  - Translation Assistant Administrator
  - Translation Assistant User
  - Solutions Quota Administrator

Added information on the following Translation Quota cards:

  - My Translation Quota Remaining
  - Translation Pages Remaining
  - Translation Distribution Status

June 2023

Added the following information:

- **Fleet Management**
  - Updating applications through the Printers page
  - Failed printer registration in the Printer Eligibility Status
- **Lexmark Cloud Services Infrastructure**
  - Added URLs for North American data center and European data center

What's new

This section summarizes the new features, improvements, and other updates to Lexmark Cloud Services.

October 2025 release

Fleet Management

- While downloading installer package for Local Agent, you can no longer download the 32-bit version. Only the Windows x64 installer package for Local Agent is downloaded. For more information, see Downloading the Local Agent on page 122.

September 2025 release

Print Management

- With the release of LPMC 3.6.0 version, you can create assignment with printer allotment and user assignment. The rule-based printer assignment and user assignment helps to create allotment with specific printers and for specific users. For more information, see Using Direct Print on page 204.
- You can now create advanced hybrid storage assignment for organization, cost center, personal, and department. For more information, see Creating advanced hybrid storage assignments on page 219. Using the advanced hybrid storage assignment list, you can view, edit, or delete these assignments. For more information, see Using the advanced hybrid storage assignment list on page 220.

Fleet Management

- You can now assign configuration to Lexmark printers enrolled through a Fleet Agent, Native Agent, and Printer Agent. For more information, see Assigning a configuration on page 157.

August 2025 release

Print Management

- Lexmark Print Management client has a new update in the version 3.6.x. For more information, see Downloading the Lexmark Print Management Client on page 184.

Fleet Management

- While creating a configuration, you can configure printer settings by importing a variable settings file. For more information, see Creating a configuration on page 146.

Solution Quota Manager

- While creating a distribution for child organization, you can set the **Distribution Duration** to either **Perpetual** or **Custom**. This allows you more flexibility for setting quotas for the various services as well as setting the billing cycle. For more information, see Managing the distribution of quotas in child organizations on page 292.

Solution Center

- You can now configure custom text for redaction with an **Advanced Match** option. This feature works on the principle of regular expressions (regex). For more information, see Creating a solution workflow on page 224.

June 2025 release

Account Management

- Updated instructions for setting up a federation. For more information, see Configuring Lexmark Cloud Services on page 90.

Print Management

- Client policies are rules that govern how LPMC behaves that you can assign and enforce to users and groups based on organization, department or cost center and personal. For more information, see Creating client policies on page 190.

May 2025 release

Fleet Management

- Use speed kit upgrade feature to increase the pages per minute output of your printer. You can just use the upgrade code to upgrade your printer. For more information, see Assigning and deploying speed upgrade on page 155.

Print Management

- The various organizational settings are now grouped under broad categories to help users navigate through the various organizational settings. For more information, see Configuring organizational settings on page 170.

Analytics

- Full Data Export report is now available in Analytics 2.0. In Analytics 2.0, this report is available only for Cloud Print Management reports. For more information, see Accessing the Analytics web portal on page 244.

  For Organization, User, and Department level reports, you have now the option to select either Analytics 1.0 or Analytics 2.0. For more information, see Generating reports on page 273.

April 2025 release

Fleet Management

- Import Settings bundle feature allows you to import **Printer Settings** and **Login Methods**. On importing the VCC file, you can either import **Printer Settings** or **Login Methods** or both. For more information, see the "Importing settings bundle" section in Creating a configuration on page 146.

Analytics

- Availability of Cloud Solution Center Reports help users to get organization-based and user-based reports in the form of All Organization Report and Single Organization Report respectively. All Organization report provide organization-based reports for actions like Translation, Redaction and OCR. For more information on All Organization Report, see Accessing the All Organization report on page 280. Single Organization Report provides user-based reports for action like Translation, Redaction and OCR. For more information on Single Organization Report, see Accessing the Single Organization report on page 281.

Solution Center

- For Solution Center eSF application, certain values in the printer must be set for data validation. For more information, see Installing the application on page 232.

March 2025 release

Solution Center

- Solution Center eSF application available on Lexmark printers and multifunction products (MFPs). It allows users to view and execute workflows that have been configured through the Lexmark Cloud Services portal. The Solution Center eSF application does not create or customize solutions. For more information on Solution Center eSF application, see Installing the application on page 232. For more information on supported printer models, see Supported printer models for Solution Center on page 57.

Analytics

- On the Analytics 2.0 page, you can view the reports based on your user role. The reports are categorized into Cloud Print Management Reports, Cloud Fleet Management Reports, and Cloud Solution Center Reports. For more information, see Accessing the Analytics web portal on page 244.

January 2025 release

Print Management

- The Offline Print feature is a way to allow users to print even when there are connectivity issues with the Lexmark Cloud Services. The feature acts as a perfect alternate to hybrid cloud services or direct print. For more information, see Using Offline Print on page 209.
- Advanced hybrid storage feature uses additional storage locations for their print jobs without letting the print job move out of the customer network. This feature stores the user's print job in alternate storage locations outside of their workstation. For more information, see Understanding advanced hybrid storage on page 210.

Solution Center

- Solution Center is an application that lets you create or customize your workflows depending on your roles in an organization. Using Solution Center, you can create a solution to capture, process, and route a document. For more information, see Overview on page 223.

December 2024 release

Fleet Management

- While creating a configuration, you can now configure Login Methods for printers with eSF version 5.0 or later. For more information, see Creating a configuration on page 146.

Print Management

- LPMC 3.5.0 release supports the previous configuration.xml files and converts them for you to the new JSON format on installation. For more information, see Installing the Lexmark Print Management Client.

November 2024 release

Account Management

- You can view all the required and additional claims listed under the **Attributes & claims** section. For more information, see Setting up attributes and claims on page 87.

Analytics

- You can provide your valuable feedback about reports by clicking **Feedback** on the right side of the screen in any generated report. For more information, see Accessing the Analytics web portal on page 244.

October 2024 release

Account Management

- Users who are members of a Child Organization Access Group that has the Organization Administrator role can create and delete child organizations. For more information, see Deleting organizations on page 95.
- The Organization page now has a copy button beside the organization ID. For more information, see Overview on page 61.
- While configuring claims, you must click **Home > Enterprise applications** to include the additional claims. For more information, see Configuring claims on page 77.

September 2024 release

Fleet Management

- You can schedule recurring tasks and configure them according to the requirement. Recurring tasks can only be created for individual organization. For more information, see Managing tasks on page 166.
- In Cloud Fleet Management, the Fleet Management Viewer role has some basic roles like viewing the list of printers, printer details page, and applications. For more information, see Understanding roles on page 62.

Analytics

- On accessing Analytics 2.0, you can view that reports are categorized into Cloud Fleet Management Reports and Cloud Print Management Reports. For more information, see Accessing the Analytics web portal on page 244.

July 2024 release

Account Management

- For setting up attributes and claims, the navigation to initiate the process has changed. On the SAML-based Sign-on page, in the Attributes & Claims section, click **Edit** to start with. For more information, see Setting up attributes and claims on page 87.

Print Management

- To be able to use the LPMC version 3.4.x, make sure that you have installed Microsoft .NET Framework version 6.2 or later. For more information, see Installing the Lexmark Print Management Client.

June 2024 release

Fleet Management

- On the printer listing page, you can save searches or filters. You can create, modify, and delete the saved filters. For more information, see Managing filter groups on page 126.
- You can create a notification policy for Fleet Agents. On creating a policy, recipients are notified when the conditions of the policy are met. For more information, see Creating a notification policy on page 158.

April 2024 release

Fleet Management

- Cloud Fleet Management offers remote device monitoring and management. For more information, see "Fleet Management" chapter.

Solution Quota Manager

- Solution Quota Manager manages distribution of pages and sets quotas for organizations and users. For more information, see "Solution Quota" chapter.

March 2024 release

Account Management

- Network administrators can configure Microsoft Entra ID for Security Assertion Markup Language (SAML) federation with the Lexmark Cloud Services. For more information, see "Configuring Microsoft Entra ID with SAML Federation" group.

Fleet Management

- You can assign a configuration to a printer. Once you assign a configuration, you can check conformance, and if required, you can enforce the assigned configuration. For more information, see "Performing configuration policy conformance and enforcement" group.

Print Management

- On the Organizational Settings page ,you can now enable e-mail submission. For more information, see Configuring organizational settings.

Analytics

- You can now access the Print Summary report to understand the printing trends in your organization. The key performance indicators are also available for department and user level. The report also provides valuable insights into the printing pattern of your organization or department. For more information, see Understanding the Print Summary report on page 277.

February 2024 release

Fleet Management

- In Lexmark Cloud Services, you can now use configuration versioning to ensure that only published versions are deployed, set as default, or applied as configuration policies. You can also deploy draft configurations to a single device for testing before publishing. For more information, see Managing configurations on page 153.
- While creating a configuration, you can now import printer settings from existing VCC files. For more information, see Creating a configuration on page 146.

December 2023 release

Fleet Management

- While creating a configuration, you can modify the pluggable authentication module to make Cloud Authentication the main authentication application. For more information, see Creating a configuration on page 146.
- In Lexmark Cloud Services, you can manage all the applications installed in various enrolled printers. To access the Apps page, from the Fleet Management web portal, click **Printers > Apps**. For more information, see Managing installed applications on page 141.

Print Management

- From the Fleet Management portal, we recommend updating the Printer name (optional) field on the Printer details page. It is not mandatory to update this field. For Direct Print, if you want to change the print queue name as it appears to the end user, then enter a value in the Printer name (optional) field. If no value is entered, then the print queue appears as the default or custom prefix followed by the IP address of the printer. For more information, see Using Direct Print.

November 2023 release

Fleet Management

- While creating a configuration, you can configure various printer settings. For more information, see Creating a configuration on page 146.

Scan Management

- You can now select Dropbox as one of the scan destinations. For more information, see Managing scan destinations on page 239.

September 2023 release

Account Management

- You can now configure Azure AD federation to enable OpenID Connect (OIDC) federation with the Lexmark Cloud Services. For more information, see "Configuring Azure Active Directory (AD) with OIDC Federation" group.

Fleet Management

- If you have the Fleet Management Administrator role in all partner organizations and have child organization access, then you can update agents across multiple organizations. For more information, see Updating agents for multiple organizations on page 105.
- While creating a supplies notification policy, you can select several options from the Policy type. For more information, see Creating a notification policy on page 158.

Print Management

- In the Print Policy, you can now configure the time and date during which printing is to be allowed. You can also see the policy details by clicking a particular policy. For more information, see Creating and assigning print policies on page 177.
- You can enable automatic updates for Lexmark Print Management Client. For more information, see Enabling automatic updates for Lexmark Print Management Client.
- To manage Lexmark Print Management Client, you can check for updates, identify the version, and log out from the Lexmark Print Management Client. For more information, see "Managing the Lexmark Print Management Client" group.

Analytics

- You can access the Print Outliers report to view information related to printing patterns in an organization. Using this report, you can also access department-level or user-level information. For more information, see Understanding the Print Outliers report on page 274.

August 2023 release

Translation Assistant

- You must have available translation quota to use Translation Assistant. You must have the applicable user roles to use the Translation Quota cards and distribute or edit translation quota for users and cost centers or departments.

Print Management

- Lexmark Mobile Print application is now known as Lexmark Print application.

Overview

Understanding Lexmark Cloud Services

Lexmark™ Cloud Services is a fully featured and integrated cloud-based website that supports access, configuration, and management of the Print Management solution. The following web portals provide capabilities that support a complete Print Management experience:

- **Account Management**—Supports the management of users and their access to the system.
  - Assign organizational roles.
  - Manage access control and user identity.
  - Import and register user badges.
  - Configure system permissions.
- **Fleet Management**—Supports the discovery, configuration, and management of printers.
  - Initiate printer discovery and enrollment.
  - Enroll printers on the Lexmark Cloud Services website.
  - Manage and deploy configurations on printers in the Lexmark Cloud Print Management and the Lexmark Cloud Print Management Hybrid environments.
  - Configure printers to communicate with the cloud server continuously for configuration updates and apply configuration changes automatically.
  - Create tags, and then assign them to printers.
  - Customize the printer listing view.
  - Monitor the status of printer supplies and alerts.
  - Track the page counts.
  - Update the printer firmware levels.
  - Deploy applications and settings files.
  - Add files to the resource library.
  - Send notifications to the printer control panel.
  - Send email notifications for toner levels and printer information.
  - Customize a printer home screen.
- **Print Management**—Supports management of print queues, delegates, and user quotas.
  - Manage the Lexmark Cloud Print Management print queues.
  - Delegate print jobs.
  - Define and assign department, cost center, and user quotas.
  - View user quota status.
  - Configure document retention.
  - Configure organizational policies.
  - Configure print policies.
  - Manage the Lexmark Cloud Print Management Hybrid print queues.
  - Create and download the Lexmark Print Management Client installation package.
  - Download the Lexmark Cloud Print Management for Chrome extension.
- **Scan Management**—Supports management of scanning documents, scan destinations, and scan settings.
  - Configure Scan Management settings.
  - Create scan destinations using the Microsoft OneDrive, SharePoint, Google Drive™, Box, and Dropbox cloud service providers.

- Customize scan settings for each scan destination.
- **Solution Center**—Lets you create or customize your workflows depending on your roles in an organization.
  - Create a solution workflow.
  - Using the solution from the Lexmark Cloud Services portal.
  - Using the solution from a printer.
- **Analytics**—Supports reporting on usage and printer activity.
  - Generate reports.
  - Export custom reports for a specific organization or user.
  - Generate a full data export that lets users customize a date range that can be monthly or up to 31 days for report generation.

This document provides instructions on how to configure, use, and troubleshoot the website.
This document is intended for partner administrators and organization administrators. For more information on the features available for users, see the *Lexmark Cloud Services User's Guide*.

Getting started

Accessing the Lexmark Cloud Services dashboard

1. From a web browser, depending on your Lexmark Cloud Services agreement, go to either https://na.cloud.lexmark.com or https://eu.cloud.lexmark.com.
2. Type your e-mail address and password.

   > **Note:** If the system is configured to have federated access, then you are redirected to the login page of your organization.

3. Click **Log In**.

Available options

Depending on the role or roles that are assigned to you, one or more cards appear on the Lexmark Cloud Services dashboard. These cards are links to services within the Lexmark Cloud Services web portals or to reports or other information.

To access the dashboard or open another Lexmark Cloud Services portal, click on the upper-right corner of the page.

Managing the dashboard

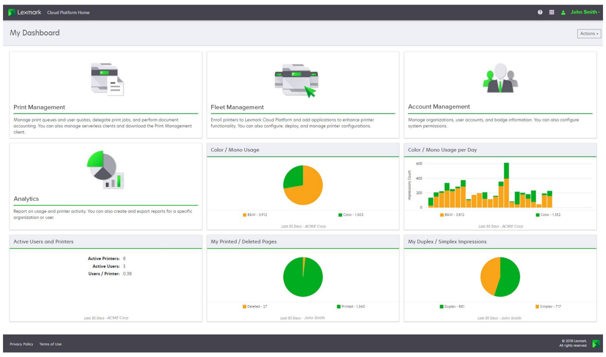
The dashboard provides quick access to the web portals and the cards that contain usage and status information. You can create and customize up to 10 dashboards, and each dashboard can contain up to 24 cards. The dashboard view is customizable. You can add, hide, move, or rename the cards.

The available web portals and cards depend on your assigned role. For more information on the roles, see Understanding roles on page 62.

The following screenshots are examples of the dashboards for the different user account roles.

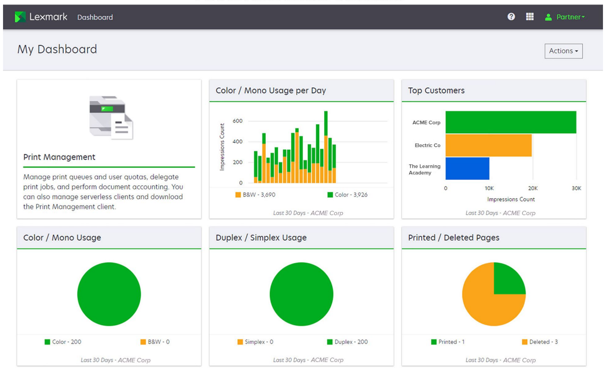
> **Note:** Refresh the cards by clicking . The cards on the dashboard automatically refresh after every five minutes.

Organization Administrator Dashboard



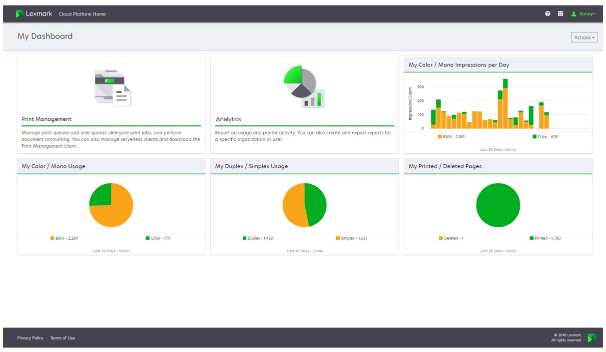
Organization administrators can add cards that are specific to the organization, such as active users and printers. They can also add cards showing their own print usage, Fleet Agent status. printer communication status, and fleet status.

Partner Administrator Dashboard



Partner administrators can add cards that are specific to a particular partner organization. For example, cards can show their top customers based on print usage.

User Dashboard



Users can view their own printer usage.

Creating a dashboard

> **Note:** You can create up to 10 dashboards.

1. From the dashboard, click **Actions**.
2. Click **Create Dashboard**.
3. Type a unique dashboard name.
4. Click **Create**.

Setting a default dashboard

> **Note:** You cannot delete a dashboard that is set as default.

1. From the dashboard, click the dashboard menu, and then select the dashboard that you want to set as default.
2. Click **Actions › Set as Default**.
3. Click **Set as Default**.

Renaming a dashboard

1. From the dashboard, click the dashboard menu, and then select the dashboard that you want to rename.
2. Click **Actions › Rename Dashboard**.
3. Type the new dashboard name.
4. Click **Rename**.

Deleting a dashboard

1. From the dashboard, click the dashboard menu, and then select the dashboard that you want to delete.
2. Click **Actions › Delete Dashboard**.
3. Click **Delete Dashboard**.

Managing cards

Add cards

> **Notes**
>
> - You can add up to 24 cards.
> - The dashboard view is not updated automatically when the user is given access to a new web portal. The web portal card must be added manually.

1. From the dashboard, click **Actions**.
2. Click **Add Card**.
3. Select a card type.
4. Update the card name.
5. If you are a partner administrator, then select an organization.
6. Click **Add Card**.

Edit cards

1. From the dashboard, click **Actions**.
2. Click **Edit Cards**.

3. Do any of the following:
    - Add cards.
    - Edit the card properties.
    - Move cards.
    - Delete cards.

    > **Note:** You can switch to a different dashboard when editing cards, and all changes made in the dashboards are saved.

4. Click **Done**.

Change the view

Mouse over the Change View menu, and then select the number of columns.

Preparing for configuration

Deployment readiness checklist

- You have any of the following web browsers to access the Lexmark™ Cloud Services website and its web portals:
  - Microsoft Edge version 125 or later
  - Mozilla Firefox version 126 or later
  - Google Chrome™ version 126 or later
  - Apple Safari version 17 or later
- You have any of the following operating systems to run or install some Lexmark Cloud Services applications:

  Lexmark Print Management Client

  - Windows 11
  - Windows 10
  - macOS version 14 or later
  - Ubuntu version 22.04 LTS

  Note: To be able to use the LPMC version 3.4.x, make sure that you have installed Microsoft .NET Framework version 4.6 or later. To be able to use the LPMC version 3.5.x, make sure that you have installed Microsoft .NET Framework version 4.8 or later.

  Printer Enrollment Tool

  - Windows 11
  - Windows 10
  - macOS version 13 or later
  - Ubuntu version 22.04 LTS
  - Windows server 2016
  - Windows server 2019
  - Windows server 2022

  Note: For computers running on Windows operating systems, Windows .NET Framework v4.6.2 must be installed.

  Fleet Agent

  - Windows Server 2016
  - Windows server 2019
  - Windows server 2022
  - Windows 11
  - Windows 10
  - Ubuntu 22.04 LTS
  - Debian 11
  - Red Hat Enterprise Linux 8

  Note: Fleet Agent 32-bit is no longer supported by any operating system.

> **Note:** Select the agent or agents that fit the environment of your organization and the printers to manage. For more information, see Choosing an agent on page 101.

- If you use the Fleet Agent to discover and add printers to the Fleet Management portal, then the server must have the following specifications:
  - 1GHz dual-core processor
  - 2GB RAM or greater
  - 32GB storage capacity or greater

  > **Note:** The Fleet Agent requires 12GB of storage.

- The printers are configured properly so that they can be discovered and enrolled in the system.
  - There are no unresolved errors, such as paper jams or incorrect email configuration.
  - The date and time are configured correctly.
  - The HTTP and HTTPS ports are turned on.
  - The SNMP community strings are configured correctly.
  - The SNMP v3 must be enabled but there is no need to configure it.
  - The printer firmware is the latest version. For information on viewing the printer firmware version, see Viewing the printer firmware version on page 58.
  - The network and firewall or proxy settings in the printer are configured correctly.
  - The firewall or proxy settings are configured to allow printers to communicate with Lexmark Cloud Services.
  - Translation Assistant and Cloud Scan cannot coexist with Device Quotas application. Having these applications installed in the printer with Device Quotas causes an Invalid user error.

  > **Note:** To use Translation Assistant and Cloud Scan, make sure that you have disabled the Device Quotas application in your printer.

> **Notes**
> - For more information, see the *Embedded Web Server Administrator's Guide* for the printer.
> - For more information on resolving printer errors, see the printer *User’s Guide*.

Solution Center

- Make sure that the printers are supported. For more information on supported printers, see Supported printer models for Solution Center on page 57.
- The printer firmware is running on 081.xxx or later.
- The printer is enrolled in Lexmark Cloud Services.
- Lexmark Cloud Services accounts have been set up for all users.
- Solution Center is enabled for your organization.

Firewalls and proxy servers

If a firewall or proxy server is used, then the host names listed below must be added to the Allow List. All Cloud communications use port 443. Add the following host names to make sure that the printer can communicate with Cloud Fleet Management.

Hosts for the EU data center

Function	Used by	Host
Identity Provider	All customers	idp.eu.iss.lexmark.com
Identity Provider	All customers	login.microsoftonline.com
Identity Provider	All customers	lexmarkb2ceu.b2clogin.com
Identity Provider	All customers	lexmarkb2c.b2clogin.com
Identity Provider	All customers	b2ccustomizationsprodsa .blob.core.windows.net
API	All customers	api.eu.iss.lexmark.com
APIS	All customers	apis.eu.iss.lexmark.com
CFM	All customers	eu.iss.lexmark.com
CFM	All customers	prod-westeu-lex-cloud-iot .azure-devices.net
CFM	Native Agent only	apis.iss.lexmark.com
CFM	Native Agent only	iss.lexmark.com
CFM	Native Agent only	prod-lex-cloud-iot.azure-devices.net
CFM	Native Agent only	global.azure-devices-provisioning.net
CFM	All customers	prodwesteulexcloudk8s54 .blob.core.windows.net
CCS	All customers	ccs.lexmark.com
CDN	All customers	ccs-cdn.lexmark.com
CPM	CPM only	prodwesteulexcloudk8s199 .blob.core.windows.net

Hosts for the U.S. data center

Function	Used by	Host
Identity Provider	All customers	idp.us.iss.lexmark.com
Identity Provider	All customers	login.microsoftonline.com
Identity Provider	All customers	lexmarkb2c.b2clogin.com

Function	Used by	Host
Identity Provider	All customers	b2ccustomizationsprodsa .blob.core.windows.net
API	All customers	api.us.iss.lexmark.com
APIS	All customers	apis.us.iss.lexmark.com
CFM	All customers	us.iss.lexmark.com
CFM	All customers	prod-lex-cloud-iot.azure-devices.net
CFM	Native Agent only	apis.iss.lexmark.com
CFM	Native Agent only	iss.lexmark.com
CFM	Native Agent only	global.azure-devices-provisioning.net
CFM	All customers	prodlexcloudk8s239 .blob.core.windows.net
CFM	All customers	prodlexcloudk8s239.iss.lexmark.com
CCS	All customers	ccs.lexmark.com
CDN	All customers	ccs-cdn.lexmark.com
CPM	CPM only	prodlexcloudk8s19 .blob.core.windows.net

Printer models information

Supported printer models

Cloud Fleet Management

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark B2338	X	✓	✓	X
Lexmark B2865	X	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark B3340	X	✓	✓	✓
Lexmark B3442	X	✓	✓	✓
Lexmark C2132[3]	✓	✓	X	✓
Lexmark C2240	✓	✓	✓	✓
Lexmark C2325	X	✓	✓	X
Lexmark C2326	X	✓	✓	X
Lexmark C3224	X	✓	✓	✓
Lexmark C3326	X	✓	✓	✓
Lexmark C3426	X	✓	✓	✓
Lexmark C3426dw	X	✓	✓	X
Lexmark C4150	✓	✓	✓	✓
Lexmark C6160	✓	✓	✓	✓
Lexmark C748	✓	✓	X	✓
Lexmark C792	✓	✓	X	✓
Lexmark C796	✓	✓	X	✓
Lexmark C9235	✓	✓	✓	✓
Lexmark C925	✓	✓	X	✓
Lexmark C950	✓	✓	X	✓
Lexmark CS310dn	X	✓	X	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark CS331	X	✓	✓	✓
Lexmark CS410d	X	✓	X	✓
Lexmark CS421	X	✓	✓	✓
Lexmark CS431dw	X	✓	✓	✓
Lexmark CS510de, CS517de[3]	✓	✓	X	✓
Lexmark CS521	X	✓	✓	✓
Lexmark CS622	✓	✓	✓	✓
Lexmark CS720, CS725, CS727, CS728	✓	✓	✓	✓
Lexmark CS748	✓	✓	X	✓
Lexmark CS820, CS827	✓	✓	✓	✓
Lexmark CS921, CS923, CS927	✓	✓	✓	✓
Lexmark CS921de	✓	✓	✓	✓
Lexmark CS923de	✓	✓	✓	✓
Lexmark CX310dn	X	✓	X	✓
Lexmark CX331	X	✓	✓	✓
Lexmark CX331adwe	X	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark CX410, CX417[3]	✓	✓	X	✓
Lexmark CX421	X	✓	✓	✓
Lexmark CX431	X	✓	✓	✓
Lexmark CX431adw	X	✓	✓	✓
Lexmark CX510de, CX517de[3]	✓	✓	X	✓
Lexmark CX522, CX522de	✓	✓	✓	✓
Lexmark CX622, CX622ade, CX625, CX625ade, CX625adhe	✓	✓	✓	✓
Lexmark CX725, CX725ade, CX727	✓	✓	✓	✓
Lexmark CX730de, CX735de	✓	✓	✓	✓
Lexmark CX820, CX820de, CX825, CX825de, CX827, CX860	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark CX920, CX920de, CX921, CX821de, CX922, CX922de, CX923, CX923dte, CX923dxe, CX924, CX924dte, CX924dxe, CX927, CX931dse, CX931dtse	✓	✓	✓	✓
Lexmark M1246	X	✓	✓	✓
Lexmark M1342	X	✓	✓	✓
Lexmark M3150[3]	✓	✓	X	✓
Lexmark M3250	✓	✓	✓	✓
Lexmark M5155[3]	✓	✓	X	✓
Lexmark M5163[3]	✓	✓	X	✓
Lexmark M5170[3]	✓	✓	X	✓
Lexmark M5255	✓	✓	✓	✓
Lexmark M5265	✓	✓	✓	✓
Lexmark M5270	✓	✓	✓	✓
Lexmark MS310dn	X	✓	X	✓
Lexmark MS312dn	X	✓	X	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark MS315dn	X	✓	X	✓
Lexmark MS321dn	X	✓	✓	✓
Lexmark MS410d	X	✓	X	✓
Lexmark MS415dn	X	✓	X	✓
Lexmark MS510dn	X	✓	X	✓
Lexmark MS610dn	X	✓	X	✓
Lexmark MS710dn	X	✓	X	✓
Lexmark MS711dn	X	✓	X	✓
Lexmark MS810dn	X	✓	X	✓
Lexmark MS811dn	X	✓	X	✓
Lexmark MS911de	✓	✓	X	✓
Lexmark T654dn	X	X	X	X
Lexmark X544dn	X	X	X	X
Lexmark MB2236adw	X	✓	✓	✓
Lexmark MB2236adwe	X	✓	✓	✓
Lexmark MB2338	X	✓	✓	✓
Lexmark MB2442	✓	✓	✓	✓
Lexmark MB2546	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark MB2650	✓	✓	✓	✓
Lexmark MB2770	✓	✓	✓	✓
Lexmark MB3442	X	✓	✓	✓
Lexmark MC2535	✓	✓	✓	✓
Lexmark MC2640	✓	✓	✓	✓
Lexmark MC3224dwe	X	✓	✓	✓
Lexmark MC3224adwe	X	✓	✓	✓
Lexmark MC3224i	X	✓	✓	✓
Lexmark MC3326	X	✓	✓	✓
Lexmark MC3326i	X	✓	✓	✓
Lexmark MC3426	X	✓	✓	✓
Lexmark MC3426adw	X	✓	✓	✓
Lexmark MC3426i	X	✓	✓	✓
Lexmark MS331	X	✓	✓	✓
Lexmark MS421	X	✓	✓	✓
Lexmark MS431	X	✓	✓	✓
Lexmark MS521 dn	X	✓	✓	✓
Lexmark MS610de[3]	✓	✓	X	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark MS621	X	✓	✓	✓
Lexmark MS622	✓	✓	✓	✓
Lexmark MS725	X	✓	✓	✓
Lexmark MS810de, MS812de[3]	✓	✓	X	✓
Lexmark MS821	X	✓	✓	✓
Lexmark MS821n, MS821dn	X	✓	✓	✓
Lexmark MS823	X	✓	✓	✓
Lexmark MS823n, MS823 dn	X	✓	✓	✓
Lexmark MS825	X	✓	✓	✓
Lexmark MS825dn	X	✓	✓	✓
Lexmark MS822, MS826	✓	✓	✓	✓
Lexmark MS911de[3]	✓	✓	X	✓
Lexmark MX321adn	X	✓	✓	✓
Lexmark MX331adn	X	✓	✓	✓
Lexmark MX410de	✓	✓	X	✓
Lexmark MX417de[3]	✓	✓	X	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark MX421	✓	✓	✓	✓
Lexmark MX431	X	✓	✓	✓
Lexmark MX431adn	X	✓	✓	✓
Lexmark MX510de, MX511de, MX517de[3]	✓	✓	X	✓
Lexmark MX521de, MX522	✓	✓	✓	✓
Lexmark MX610de, MX611de, MX611dhe, MX617de[3]	✓	✓	X	✓
Lexmark MX622ade	✓	✓	✓	✓
Lexmark MX6500, 6500	✓	✓	X	✓
Lexmark MX710, MX711, MX717, MX718[3]	✓	✓	X	✓
Lexmark MX721, MX722, MX725	✓	✓	✓	✓
Lexmark MX810, MX811, MX812[3]	✓	✓	X	✓
Lexmark MX822, MX826	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark MX910de, MX911, MX912 [3]	✓	✓	X	✓
Lexmark T656, TS656[4,5]	X	X	X	✓
Lexmark X548	✓	✓	X	✓
Lexmark X651, X652, X654, X656, X658[4,5]	X	✓	X	✓
Lexmark X734, X736, X738[4,5]	X	✓	X	✓
Lexmark X746, X748	✓	✓	X	✓
Lexmark X792	✓	✓	X	✓
Lexmark X860, X862, X864[4,5]	X	✓	X	✓
Lexmark X925[5]	✓	✓	X	✓
Lexmark X950, X952, X954	✓	✓	X	✓
Lexmark XC2132[3]	✓	✓	X	✓
Lexmark XC2235, XC2240	✓	✓	✓	✓
Lexmark XC2326	X	✓	✓	✓
Lexmark XC4140, XC4150	✓	✓	✓	✓
Lexmark XC4143	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark XC4240	✓	✓	✓	✓
Lexmark XC6152, XC6153	✓	✓	✓	✓
Lexmark XC6153de	✓	✓	✓	✓
Lexmark XC8155, XC8160, XC8163	✓	✓	✓	✓
Lexmark XC9225, XC9235	✓	✓	✓	✓
Lexmark XC9245, XC9255, XC9265	✓	✓	✓	✓
Lexmark XM1140, XM1145[3]	✓	✓	X	✓
Lexmark XM1242, XM1246	✓	✓	✓	✓
Lexmark XM1342	X	✓	✓	✓
Lexmark XM3150[3]	✓	✓	X	✓
Lexmark XM3250	✓	✓	✓	✓
Lexmark XM5163, XM5170[3]	✓	✓	X	✓
Lexmark XM5263, XM5270[3]	✓	✓	X	✓
Lexmark XM5365, XM5370	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark XM7155, XM7162, XM7163, XM7170[3]	✓	✓	X	✓
Lexmark XM7263, XM7270[3]	✓	✓	X	✓
Lexmark XM7355, XM7370	✓	✓	✓	✓
Lexmark XM7355b	✓	✓	✓	✓
Lexmark XM9145[3]	✓	✓	X	✓
Lexmark XM9155, XM9165[3]	✓	✓	X	✓
Lexmark XS651, XS652, XS654, XS656, XS658	X	X	X	✓
Lexmark XS748	✓	✓	X	✓
Lexmark XS796	✓	✓	X	✓
Lexmark XS860, XS862, XS864	X	X	X	✓
Lexmark XS925	✓	✓	X	✓
Lexmark XS950, XS955	✓	✓	X	✓
Lexmark CX635	✓	✓	✓	✓
Lexmark CX532	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark CS632	✓	✓	✓	✓
Lexmark CS531	X	✓	✓	✓
Lexmark XC2335	✓	✓	✓	✓
Lexmark C2335	X	✓	✓	✓
Lexmark MX632	✓	✓	✓	✓
Lexmark MX532	✓	✓	✓	✓
Lexmark MS632	✓	✓	✓	✓
Lexmark MS631	X	✓	✓	✓
Lexmark MS531	X	✓	✓	✓
Lexmark XM3350	✓	✓	✓	✓
Lexmark M3350	✓	✓	✓	✓
Lexmark MC53x	X	✓	✓	✓
Lexmark MC63x	X	✓	✓	✓
Lexmark XS53x	X	✓	✓	✓
Lexmark XS63x	X	✓	✓	✓
Lexmark MX432adwe	✓	✓	✓	✓
Lexmark CX83 3	✓	✓	✓	✓

Printer models	Cloud Fleet Management			
	Printer Agent	Fleet Agent[1]	Native Agent[2]	Local Agent
Lexmark CX950, CX951, CX961, CX962, CX963	✓	✓	✓	✓
Lexmark CX737	✓	✓	✓	✓
Lexmark MX953	✓	✓	✓	✓
Lexmark XC9335, XC9445, XC9455, XC9465	✓	✓	✓	✓
Lexmark XC8355	✓	✓	✓	✓
Lexmark XC9525, XC9535	✓	✓	✓	✓
Lexmark XC9635, XC9645, XC9655	✓	✓	✓	✓
Lexmark CS963e	✓	✓	✓	✓
Lexmark XC9465	✓	✓	✓	✓
Lexmark CS739	✓	✓	✓	✓
Lexmark CS735	✓	✓	✓	✓
Lexmark CS737	✓	✓	✓	✓

Cloud Scan Management, Cloud Print Management, Authentication method, and Cloud Print Release

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark B2338	X	X	X	X	X	X
Lexmark B2865	X	X	X	X	X	X
Lexmark B3340	X	X	X	X	X	X
Lexmark B3442	X	X	X	X	X	X
Lexmark C2132[3]	X	✓	✓	✓	✓	X
Lexmark C2240	X	✓	✓	✓	✓	X
Lexmark C2325	X	X	X	X	X	X
Lexmark C2326	X	X	X	X	✓	✓
Lexmark C3224	X	X	X	X	X	X
Lexmark C3326	X	X	X	X	X	X
Lexmark C3426	X	X	X	X	X	X
Lexmark C3426dw	X	X	X	X	X	X
Lexmark C4150	✓	✓	✓	✓	✓	X
Lexmark C6160	✓	✓	✓	✓	✓	X
Lexmark C748	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Manage-ment[6]	Cloud Print Manage-ment	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark C792	✓	✓	✓	✓	✓	X
Lexmark C796	✓	✓	✓	✓	✓	X
Lexmark C9235	X	✓	✓	✓	✓	X
Lexmark C925	X	✓	✓	✓	✓	X
Lexmark C950	X	✓	✓	✓	✓	X
Lexmark CS310dn	X	X	X	X	X	X
Lexmark CS331	X	X	X	X	X	X
Lexmark CS410d	X	X	X	X	X	X
Lexmark CS421	X	X	X	X	X	X
Lexmark CS431dw	X	X	X	X	✓	✓
Lexmark CS510de, CS517de[3]	X	✓	✓	✓	✓	X
Lexmark CS521	X	X	X	X	X	X
Lexmark CS622	X	✓	✓	✓	✓	X
Lexmark CS720, CS725, CS727, CS728	X	✓	✓	✓	✓	X
Lexmark CS748	X	✓	✓	✓	✓	X

Printer models	Cloud Scan Manage-ment[6]	Cloud Print Manage-ment	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark CS820, CS827	X	✓	✓	✓	✓	X
Lexmark CS921, CS923, CS927	X	✓	✓	✓	✓	X
Lexmark CX310dn	X	X	X	X	X	X
Lexmark CX331	X	X	X	X	✓	✓
Lexmark CX331adwe	X	X	X	X	✓	✓
Lexmark CX410, CX417[3]	X	X	X	X	X	X
Lexmark CX421	X	X	X	X	X	X
Lexmark CX431	X	X	X	X	✓	✓
Lexmark CX431adw	X	X	X	X	✓	✓
Lexmark CX510de, CX517de[3]	X	✓	✓	✓	✓	X
Lexmark CX522, CX522de	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark CX622, CX622ade, CX625, CX625ade, CX625adhe	✓	✓	✓	✓	✓	X
Lexmark CX725, CX725ade, CX727	✓	✓	✓	✓	✓	X
Lexmark CX730de, CX735de	✓	✓	✓	✓	✓	X
Lexmark CX820, CX820de, CX825, CX825de, CX827, CX860	✓	✓	✓	✓	✓	X
Lexmark CX920, CX920de, CX921, CX821de, CX922, CX922de, CX923, CX923dte, CX923dxe, CX924, CX924dte, CX924dxe, CX927, CX931dse, CX931dtse	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark M1246	X	X	X	X	X	X
Lexmark M1342	X	X	X	X	X	X
Lexmark M3150[3]	X	✓	✓	✓	✓	X
Lexmark M3250	X	✓	✓	✓	✓	X
Lexmark M5155[3]	X	✓	✓	✓	✓	X
Lexmark M5163[3]	X	✓	✓	✓	✓	X
Lexmark M5170[3]	X	✓	✓	✓	✓	X
Lexmark M5255	X	✓	✓	✓	✓	X
Lexmark M5265	X	✓	✓	✓	✓	X
Lexmark M5270	X	✓	✓	✓	✓	X
Lexmark MS310dn	X	X	X	X	X	X
Lexmark MS312dn	X	X	X	X	X	X
Lexmark MS315dn	X	X	X	X	X	X
Lexmark MS321dn	X	X	X	X	X	X
Lexmark MS410d	X	X	X	X	X	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark MS415dn	X	X	X	X	X	X
Lexmark MS510dn	X	X	X	X	X	X
Lexmark MS610dn	X	X	X	X	X	X
Lexmark MS710dn	X	X	X	X	X	X
Lexmark MS711dn	X	X	X	X	X	X
Lexmark MS810dn	X	X	X	X	X	X
Lexmark MS811dn	X	X	X	X	X	X
Lexmark MS911de	X	✓	✓	✓	✓	X
Lexmark T654dn	X	X	X	X	X	X
Lexmark X544dn	X	X	X	X	X	X
Lexmark MB2236adw	X	X	X	X	X	X
Lexmark MB2236adwe	X	X	X	X	✓	✓
Lexmark MB2338	X	X	X	X	X	X
Lexmark MB2442	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark MB2546	✓	✓	✓	✓	✓	X
Lexmark MB2650	✓	✓	✓	✓	✓	X
Lexmark MB2770	✓	✓	✓	✓	✓	X
Lexmark MB3442	X	X	X	X	X	X
Lexmark MC2535	✓	✓	✓	✓	✓	X
Lexmark MC2640	✓	✓	✓	✓	✓	X
Lexmark MC3224 dwe	X	X	X	X	✓	✓
Lexmark MC3224 adwe	X	X	X	X	✓	✓
Lexmark MC3224i	X	X	X	X	✓	✓
Lexmark MC3326	X	X	X	X	x	x
Lexmark MC3326i	X	X	X	X	✓	✓
Lexmark MC3426	X	X	X	X	x	x
Lexmark MC3426 adw	X	X	X	X	✓	✓
Lexmark MC3426i	X	X	X	X	✓	✓
Lexmark MS331	X	X	X	X	X	X
Lexmark MS421	X	X	X	X	X	X

Printer models	Cloud Scan Manage-ment[6]	Cloud Print Manage-ment	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark MS431	X	X	X	X	X	X
Lexmark MS521 dn	X	X	X	X	X	X
Lexmark MS610de[3]	X	✓	✓	✓	✓	X
Lexmark MS621	X	X	X	X	X	X
Lexmark MS622	X	✓	✓	✓	✓	X
Lexmark MS725	X	X	X	X	X	X
Lexmark MS810de, MS812de[3]	X	✓	✓	✓	✓	X
Lexmark MS821	X	X	X	X	X	X
Lexmark MS821n, MS821dn	X	X	X	X	X	X
Lexmark MS823	X	X	X	X	X	X
Lexmark MS823n, MS823 dn	X	X	X	X	X	X
Lexmark MS825	X	X	X	X	X	X
Lexmark MS825dn	X	X	X	X	X	X

Printer models	Cloud Scan Manage-ment[6]	Cloud Print Manage-ment	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark MS822, MS826	X	✓	✓	✓	✓	X
Lexmark MS911de[3]	X	✓	✓	✓	✓	X
Lexmark MX321adn	X	X	X	X	X	X
Lexmark MX331adn	X	X	X	X	✓	✓
Lexmark MX410de	✓	X	✓	✓	✓	X
Lexmark MX417de[3]	X	✓	✓	✓	✓	X
Lexmark MX421	✓	✓	✓	✓	✓	X
Lexmark MX431	X	X	X	X	✓	✓
Lexmark MX431adn	X	X	X	X	✓	✓
Lexmark MX510de, MX511de, MX517de[3]	X	✓	✓	✓	✓	X
Lexmark MX521de, MX522	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark MX610de, MX611de, MX611dhe, MX617de[3]	X	✓	✓	✓	✓	X
Lexmark MX622ade	✓	✓	✓	✓	✓	X
Lexmark MX6500, 6500	X	✓	✓	✓	✓	X
Lexmark MX710, MX711, MX717, MX718[3]	X	✓	✓	✓	✓	X
Lexmark MX721, MX722, MX725	✓	✓	✓	✓	✓	X
Lexmark MX810, MX811, MX812[3]	X	✓	✓	✓	✓	X
Lexmark MX822, MX826	✓	✓	✓	✓	✓	X
Lexmark MX910de, MX911, MX912 [3]	X	✓	✓	✓	✓	X
Lexmark T656, TS656[4,5]	X	✓	✓	✓	✓	X
Lexmark X548	X	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark X651, X652, X654, X656, X658[4,5]	✓	✓	✓	✓	✓	X
Lexmark X734, X736, X738[4,5]	X	✓	✓	✓	✓	X
Lexmark X746, X748	X	✓	✓	✓	✓	X
Lexmark X792	X	✓	✓	✓	✓	X
Lexmark X860, X862, X864[4,5]	X	✓	✓	✓	✓	X
Lexmark X925[5]	X	✓	✓	✓	✓	X
Lexmark X950, X952, X954	X	✓	✓	✓	✓	X
Lexmark XC2132[3]	X	✓	✓	✓	✓	X
Lexmark XC2235, XC2240	✓	✓	✓	✓	✓	X
Lexmark XC2326	X	X	X	X	✓	✓
Lexmark XC4140, XC4150	✓	✓	✓	✓	✓	X
Lexmark XC4143	✓	✓	✓	✓	✓	X
Lexmark XC4240	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark XC6152, XC6153	✓	✓	✓	✓	✓	X
Lexmark XC6153de	✓	✓	✓	✓	✓	X
Lexmark XC8155, XC8160, XC8163	✓	✓	✓	✓	✓	X
Lexmark XC9225, XC9235	✓	✓	✓	✓	✓	X
Lexmark XC9245, XC9255, XC9265	✓	✓	✓	✓	✓	X
Lexmark XM1140, XM1145[3]	✓	✓	✓	✓	✓	X
Lexmark XM1242, XM1246	✓	✓	✓	✓	✓	X
Lexmark XM1342	✓	X	X	X	✓	✓
Lexmark XM3150[3]	✓	✓	✓	✓	✓	X
Lexmark XM3250	✓	✓	✓	✓	✓	X
Lexmark XM5163, XM5170[3]	X	✓	✓	✓	✓	X
Lexmark XM5263, XM5270[3]	✓	✓	✓	✓	✓	X
Lexmark XM5365, XM5370	✓	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark XM7155, XM7162, XM7163, XM7170[3]	X	✓	✓	✓	✓	X
Lexmark XM7263, XM7270[3]	X	✓	✓	✓	✓	X
Lexmark XM7355, XM7370	✓	✓	✓	✓	✓	X
Lexmark XM7355 b	✓	✓	✓	✓	✓	X
Lexmark XM9145[3]	X	✓	✓	✓	✓	X
Lexmark XM9155, XM9165[3]	X	✓	✓	✓	✓	X
Lexmark XS651, XS652, XS654, XS656, XS658	X	✓	✓	✓	✓	X
Lexmark XS748	X	✓	✓	✓	✓	X
Lexmark XS796	X	✓	✓	✓	✓	X
Lexmark XS860, XS862, XS864	X	✓	✓	✓	✓	X
Lexmark XS925	X	✓	✓	✓	✓	X
Lexmark XS950, XS955	X	✓	✓	✓	✓	X

Printer models	Cloud Scan Management[6]	Cloud Print Management	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark CX635	✓	✓	✓	✓	✓	x
Lexmark CX532	✓	✓	✓	✓	✓	X
Lexmark CS632	X	✓	✓	✓	✓	X
Lexmark CS531	X	X	X	X	✓	✓
Lexmark XC2335	✓	✓	✓	✓	✓	X
Lexmark C2335	X	X	X	X	✓	✓
Lexmark MX632	✓	✓	✓	✓	✓	X
Lexmark MX532	✓	✓	✓	✓	✓	X
Lexmark MS632	X	✓	✓	✓	✓	X
Lexmark MS631	X	X	X	X	✓	✓
Lexmark MS531	X	X	X	X	✓	✓
Lexmark XM3350	✓	✓	✓	✓	✓	X
Lexmark M3350	X	✓	✓	✓	✓	X
Lexmark MC53x	X	X	X	X	✓	✓
Lexmark MC63x	X	X	X	X	✓	✓
Lexmark XS53x	X	X	X	X	✓	✓
Lexmark XS63x	X	✓	✓	✓	✓	X

Printer models	Cloud Scan Manage- ment[6]	Cloud Print Manage- ment	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark MX432a dwe	✓	✓	✓	✓	✓	X
Lexmark CX833	✓	✓	✓	✓	✓	X
Lexmark CX950, CX951, CX961, CX962, CX963	✓	✓	✓	✓	✓	X
Lexmark CX737	✓	✓	✓	✓	✓	X
Lexmark MX953	✓	✓	✓	✓	✓	X
Lexmark XC9335, XC9445, XC9455, XC9465	✓	✓	✓	✓	✓	X
Lexmark XC8355	✓	✓	✓	✓	✓	X
Lexmark XC9525 XC9535	✓	✓	✓	✓	✓	X
Lexmark XC9635 XC9645 XC9655	✓	✓	✓	✓	✓	X
Lexmark CS963e	X	✓	✓	✓	✓	X
Lexmark XC9465	X	✓	✓	✓	✓	X
Lexmark CS739	X	✓	✓	✓	✓	X
Lexmark CS735	X	✓	✓	✓	✓	X

Printer models	Cloud Scan Manage-ment[6]	Cloud Print Manage-ment	Authentication method			Cloud Print Release
			Badge	User ID	PIN	
Lexmark CS737	X	✓	✓	✓	✓	X

[1] The Fleet Agent also discovers Lexmark and third-party printers that are not listed on this table. In these printers, only data collection is supported. Depending on the Management Information Base (MIB) implementation, third-party printers may have different levels of data collection capabilities.

[2] Make sure that the firmware is updated to the latest version before enrolling the printer. For more information, see Updating printer firmware from the Embedded Web Server on page 58.

[3] If these printer models are managed using the Fleet Agent, then sending notifications to the control panel is not supported.

[4] You cannot deploy applications and configurations to these printer models using the Fleet Management web portal.

[5] These printers do not support automatic print release.

[6] Printers with eSF version 5.0 or later and printers with eSF version 4.0 or earlier require updated firmware to support Cloud Scan Management. To find the current firmware version in your printer, see . For information on updating firmware in your printer, see Updating printer firmware from the Embedded Web Server on page 58. Viewing the printer firmware version on page 58

Supported printer models for Solution Center

The following printer models support Solution Center:

Lexmark CX532adwe	Lexmark CX922de	Lexmark CX960dse	Lexmark MX722ade
Lexmark CX635adwe	Lexmark CX923dte	Lexmark CX961dse	Lexmark MX722adhe
Lexmark CX522	Lexmark CX923dxe	Lexmark CX961dtse	Lexmark MX822ade
Lexmark CX622ade	Lexmark CX924dte	Lexmark CX962dse	Lexmark MX822adxe
Lexmark CX622adhe	Lexmark CX924dxe	Lexmark CX962dtse	Lexmark MX826ade
Lexmark CX625ade	Lexmark CX930dhe	Lexmark CX963dse	Lexmark MX826adxe
Lexmark CX625adhe	Lexmark CX931dse	Lexmark CX963dxse	Lexmark MX931dhe
Lexmark CX725	Lexmark CX931dtse	Lexmark MX432adwe	Lexmark MX953g

Lexmark CX730de	Lexmark CX942adhe	Lexmark MX522adhe	Lexmark MX953se
Lexmark CX735adhe	Lexmark CX943adtse	Lexmark MX532adwe	Lexmark MX963dse
Lexmark CX820	Lexmark CX944adtse	Lexmark MX622ade	Lexmark XC9525
Lexmark CX825	Lexmark CX944adxse	Lexmark MX622adhe	Lexmark XC9535
Lexmark CX833dse	Lexmark CX950g	Lexmark MX622adthe	Lexmark XM3350
Lexmark CX833dxse	Lexmark CX950se	Lexmark MX632adwe	Lexmark XM5370
Lexmark CX860	Lexmark CX951g	Lexmark MX721ade	Lexmark XM7355
Lexmark CX921de	Lexmark CX951se	Lexmark MX721adhe	Lexmark XM7370

Viewing the printer firmware version

To view firmware version on printers that support the latest interface, from the printer home screen, swipe right, and then touch **Printer Info**.

1. Open a web browser, and then type the printer IP address in the address field.

   Notes
   - View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
   - If you are using a proxy server, then temporarily disable it to load the web page correctly.

2. Click **Settings › Reports › Device › Device Information**.
3. Take note of the **Base** value.

Updating printer firmware from the Embedded Web Server

Depending on the firmware version, you may need to update the firmware before enrolling the printer.

Using the update button

1. Open a web browser, and then type the printer IP address in the address field.

> **Notes**
> - View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
> - If you are using a proxy server, then temporarily disable it to load the web page correctly.

2. Click **Device**.
3. Scroll down, and then click **Firmware Update**.
4. Depending on your printer model, click **Check for updates** or **Check for updates now**.
5. If an update is available, then click **Install now**.

   The printer restarts automatically after the update.

Using the firmware flash file (.fls)

Before you begin, make sure that you have downloaded the firmware and saved it on your computer or flash drive.

1. Open a web browser, and then type the printer IP address in the address field.

> **Notes**
> - View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
> - If you are using a proxy server, then temporarily disable it to load the web page correctly.

2. Click **Device**.
3. Scroll down, and then click **Firmware Update**.
4. In the **Update Firmware from File** section, click **Browse**.
5. Search, and then select the **.fls** file.
6. Click **Upload**.

   The printer restarts automatically after the update.

Viewing the Embedded Solutions Framework (eSF) version

The Embedded Solutions Framework (eSF) defines and identifies the software architecture for each touch-screen printer generation. Application navigation, configurations, features, and capabilities vary in the different eSF versions.

1. Open a web browser, and then type the printer IP address in the address field.

> **Notes**
> - View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
> - If you are using a proxy server, then temporarily disable it to load the web page correctly.

2. Depending on your printer model, do either of the following:

a. Click **Settings > Reports > Device > Device Information**. Take note of the Embedded Solutions value.
b. Click **Reports > Device**, and then from the Embedded Solutions section, take note of the Framework value.

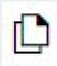
Account Management

Overview

Use the Account Management web portal to create organizations, and to organize and manage the users and the features that they are permitted to access. The web portal also lets you register and manage badges, passwords, and PINs for nonfederated organizations. For an organization that is federated to a separate identity provider, the web portal lets you configure an authentication provider.

Using the Account Management web portal, you can create and manage the following:

- **Organization**—Represents the overall account for a specific customer. Some features of the Lexmark Cloud Services website can be managed at the organizational level. A System Administrator or a Partner Administrator can create an organization. An organization administrator must be assigned to manage the organization and its users.

  > **Note:**
  >
  > - To copy an organization ID, on the **Organization Information** page, click  beside the organization ID.
  > - The **Organization Information** page also displays the list of services that a particular organization is entitled to. To view the list of active services, on the **Organization Information** page, expand **Active Lexmark Cloud Services**.

- **Group**—A collection of users that can be managed with a common set of roles or permissions.
- **Child Organization Access Group**—A group that can be used to manage an organization that has multiple child organizations. Members of this group have access to all child organizations based on the roles assigned to the group.
- **User**—An individual who has access to the Lexmark Cloud Services website. Permissions differ among roles, such as between an ordinary user and an organization administrator with full administrative privileges. Each user is a member of a specific organization. A user can also be a member of one or more groups.

Access to the features of the website is managed through the assignment of roles or permissions. Roles can be assigned at the organization, group, or individual user level. The organization administrator is responsible for determining which roles to assign and at what level. For more information on the roles, see Understanding roles on page 62.

Understanding Lexmark Cloud Services users

- **Partner administrators**—They are responsible for setting up the customer environment. Partner administrators can create organizations that represent specific customers.

  Partner administrators can do the following:

  - Create customer organizations.
  - Delete customer organizations.
  - Generate reports.
- **Organization administrators**—They are responsible for managing printers and user access to Lexmark Cloud Services. Most employees with this role have technical knowledge, such as system administrators or IT professionals.

Organization administrators can do the following:

- Manage the organization and its users.
- Manage user roles within the organization.
- Manage the printers within the organization.
- Configure authentication providers.
- Set the organization password requirements.
- Configure the printer login.
- Manage configurations.
- Generate reports.

- **Users**—They can access Lexmark Cloud Services and use the Print Management and Analytics web portal features. These users do not have administrative privileges.

Accessing the Account Management web portal

Open a web browser, access the Lexmark Cloud Services dashboard, and then do either of the following:

- From the dashboard, click the **Account Management** card.

  > **Note:** If the card is not available in the dashboard, then add the card. For more information, see Managing the dashboard on page 21.

- From your current web portal, click ▦ on the upper-right corner of the page, and then click **Account Management**.

Understanding roles

Roles are used to establish administrative permissions, and to manage access to specific features of the website. Roles can be assigned at the organization, group, or user level.

> **Note:** The following roles are applicable only if the organization is entitled to the particular solutions. For example, if an organization is entitled to a Scan Management solution, then the Scan Management Administrator or Scan Management User role is applicable.

System roles

System roles are predefined roles.

- **Help Desk**—Views users, badges, groups, applications, and organization information.
- **Organization Administrator**—Manages the organization and its users.
- **Partner Administrator**—Manages customer organizations and their users.

  > **Note:** This role is a special role for Lexmark resellers that create child organizations. Partner administrators can manage the child organizations that they have created under their parent organization. You can assign this role only to members of the Child Organization Access Group.

- **User**—Views and manages your own account information. This role is the default role.
- **User Administrator**—Manages users in the organization.

  > **Note:** The User Administrator can view and create users, groups, and badges, but can view only organization information.

Fleet Management roles

- **File Service Administrator**
    - Accesses the file management system when paired with the Fleet Management Administrator role.
    - Enrolls printers in Cloud Fleet Management.

  > **Note:** This role is required in order to download the printer log files that are requested from the Fleet Management web portal.

- **Fleet Management Administrator**
    - Discovers printers in a network.
    - Enrolls printers in Cloud Fleet Management.
    - Manages and deploys configurations to printers.
- **Fleet Management Reporting Analyst**—Accesses only the Fleet Management reporting data.

  > **Note:** This role does not let you enroll printers in their organization.

- **Fleet Management Viewer**
    - Basic view role for Cloud Fleet Management.
    - Views the printers list and the printer details page without any rights to perform actions.
    - Views installed applications without any rights to perform actions.
    - Accesses only the Standard and Quick views.

> **Note:** Accounts enrolling printers of child organizations in Cloud Fleet Management must be added as member of a **Child Organization Access Group**. They must also be assigned the **Partner Administrator**, **Fleet Management Administrator**, and **File Service Administrator roles**.

Print Management roles

- **Print Release Management Administrator**
    - Manages the organizational settings of Cloud Print Management.
    - Manages the print queue of other users.
    - Assigns delegates.
    - Sets quotas for individuals and user groups.
    - Modifies document retention settings and other organizational print settings.
    - Generates and downloads the default and custom Lexmark Print Management Client and Universal Print Driver packages.
- **Print Release Management Reporting Analyst**
    - Accesses only the Cloud Print Management reporting data.
    - Generates organizational Cloud Print Management reports but cannot release or submit print jobs.
- **Print Release Management User**—Submits, views, and manages your own print jobs. This role is the basic user role for Cloud Print Management.

> **Note:** The **Print Release Management User** must be assigned to any user that requires access to Print Release basic features. Users can manage their own print queue and delegate their own print jobs to other users. If the organizational settings allow, then users can also download the default print driver packages.

- **Print Management Guest User**—Unregistered users who can submit print jobs through email only.

Hybrid Print Management roles

- **Hybrid Print Management Administrator**
  - Manages the organizational settings of Hybrid Print Management.
  - Manages the print queue of other users.
  - Sets quotas for individuals and user groups.
  - Modifies document retention settings and other organizational print settings.
  - Generates and downloads the default and custom Lexmark Print Management Client and Universal Print Driver packages.
- **Hybrid Print Management User**—Views and manages your own print jobs. This role is the basic user role for Hybrid Print Management.

Direct Print Management roles

- **Direct Print Management Administrator**
  - Manages configuration and access for Direct Print users.
  - Channel partners who manage printers in the customer organizations must be members of a **Child Organization Access Group**. The group must have the **Direct Print Management Administrator** role assigned to it.
- **Direct Print Management User**—Submits print jobs via Direct Print.

Scan Management roles

- **Scan Management Administrator**—Enables and manages scan destination across the organization.
- **Scan Management User**—Uses the scan-to-destinations feature.

Translation Assistant roles

- **Translation Assistant Administrator**—Manages Translation Assistant settings.
- **Translation Assistant User**—Uses Translation Assistant for the entitled organization.

Solution Center roles

- **Solution Center Administrator**—Creates personal and shareable solutions with their own organization.

> **Note:** A Solution Center Administrator who is also a Partner Administrator can create and share solutions with child organizations.

- **Solution Center Advanced User**—Creates personal solutions.
- **Solution Center User**—Executes solutions.

Solution Quota roles

- **Solutions Quota Administrator**—Uses the Solution Quota web portal to manage solution quota configurations for the organization.

Redaction Assistant roles

- **Redaction Assistant User**—Uses Redaction Assistant for the entitled organization.

Announcement Center roles

- **Announcement Center Author Admin**—Manages and writes announcements for the Announcement Center.

Organization administrator

Managing the organization

This topic outlines the required tasks that the organization administrator must do when setting up the organization for the first time.

1. Assign organization roles.

   All users in the organization inherit the roles assigned at the organization level. Assign only the roles that are applicable at end-user level, such as the Print Release Management User role. For more information on the roles, see Understanding roles on page 62.

2. For an organization that has multiple child organizations, create a Child Organization Access Group, and then assign the group roles.

   A Child Organization Access Group can be used to manage user access to all the child organizations. For more information, see Managing the Child Organization Access Group on page 66.

3. Create groups within the organization, and then assign the group roles.

   Groups can be created to manage the users in the organization and establish a common set of roles. Members of the group inherit the roles and permissions that are assigned to a group. For more information, see Managing groups on page 67.

4. Set the password requirements.
5. Create users, import users, or configure the authentication provider to generate users automatically.

   The Account Management web portal lets you create individual users. For organizations with many users, a batch import can be done using a CSV file. For more information, see Managing users on page 69.

6. Add users to a group.
7. Assign user roles.

The organization administrator can also do the following:

- Configure an authentication provider.
- Configure the printer login.
- Manage badges and PINs.

Managing the Child Organization Access Group

This feature is available only in organizations that have been enabled for the creation of child organizations. From the parent organization, you can create the Child Organization Access Group, assign group roles, and add members. The members have access to all child organizations based on the roles assigned to the group.

This feature lets you manage user access to multiple child organizations easily. For example, if the Child Organization Access Group is assigned with the Fleet Management Administrator role, then all the members in that group are fleet management administrators in all the child organizations.

1. From the Account Management web portal, select the parent organization.
2. Click **Groups**.
3. From the Child Organization Access tab, do any of the following:

Create a group

1. Click **Create Group** or **Create**, and then type a unique group name.

   > **Note:** We recommend naming the group as Child Organization Access Group to distinguish it from the regular groups created from the Groups feature. For more information on creating regular groups, see Managing groups on page 67.

2. Click **Create Group**.

Delete groups

1. Select one or more groups, and then click **Delete**.

   > **Note:** You can also search for groups using the search bar.

2. Click **Delete Groups**.

Add members to a group

1. Click a group name.
2. From the **Members** tab, click **Add Members** or **Add**, and then select one or more users.

   > **Note:** You can also search for groups using the search bar.

3. Click **Add Members**.

Remove group members

1. Click a group name.
2. From the **Members** tab, select one or more users, and then click **Remove**.
3. Click **Remove Members**.

Assign group roles

Note: All users in the group inherit all the roles assigned to the group.

1. Click a group name.
2. From the **Group Roles** tab, click **Assign Roles** or **Assign**.
3. Select one or more roles.

   Note: For more information, see Understanding roles on page 62.

4. Click **Assign Roles**.

Remove group roles

1. Click a group name.
2. From the **Group Roles** tab, select one or more roles, and then click **Remove**.
3. Click **Remove Roles**.

Assigning organization roles

Organization roles are specific roles assigned to an organization. For more information, see Understanding roles on page 62. All users that belong to the organization inherit the organization roles. For example, if an organization is assigned with the Print Release Management User role, then all users in the organization can use the Cloud Print Management feature.

1. From the Account Management web portal, click **Organization > Organization Roles**.
2. Click **Assign**, and then select one or more roles.
3. Click **Assign Roles**.

Removing organization roles

1. From the Account Management web portal, click **Organization > Organization Roles**.
2. Select one or more roles, and then click **Remove**.
3. Click **Remove Roles**.

Understanding the password requirements

Passwords must be at least 8 characters long and contain the following:

- A lowercase character
- An uppercase character
- A number (0–9)
- A special character (~ ! @ # $ % ^ & * _ - + = ` | \ ( ) { } [ ] : ; " ' < > , . ? /)

Managing groups

A group is a collection of users that can be managed with a common set of roles or permissions.

The following groups are predefined, and are assigned with specific roles:

- Admin—This group consists of roles with organizational administrator rights.
- Fleet Management Admins—This group consists of members with role for Fleet Management Administrator, File Service Administrator, and Fleet Management Reporting Analyst.
- Fleet Management Viewers—This group consists of members with role for Fleet Management Viewer and File Service Administrator.
- Help Desk—This group consist of members who can view users, badges, groups, applications, PINs, and organization information.
- Reporting—This group consists of members with role of reporting analysts.

1. From the Account Management web portal, click **Groups**.
2. Do any of the following:

Create a group

1. Click **Create**, and then type a unique group name.
2. Click **Create Group**.

Delete groups

Deleting a group does not delete the users from the organization. The users are disassociated from the group, and then the group is removed from the system.

1. Select one or more groups, and then click **Delete**.

   > **Note:** You can also search for groups using the search bar.

2. Click **Delete Group** or **Delete Groups**.

Add members to a group

1. Click a group name.
2. From the Members tab, click **Add Members**, and then select one or more users.

   > **Note:** You can also search for users using the search bar.

3. Click **Add Members**.

Remove group members

1. Click a group name.
2. From the Members tab, select one or more users, and then click **Remove**.
3. Click **Remove Members**.

Assign group roles

All users in the group inherit all the roles assigned to the group.

1. Click a group name.
2. From the Group Roles tab, click **Assign Roles** or **Assign**.
3. Select one or more roles.
4. Click **Assign Roles**.

Remove group roles

1. Click the group name.
2. From the Group Roles tab, select one or more roles, and then click **Remove**.
3. Click **Remove Roles**.

Managing users

Create a user

1. From the Account Management web portal, click **Users**.
2. Click **Create**.
3. Type the email address, first name, last name, and display name of the user.
4. Type the department and cost center name where the user belongs.
5. Set the password manually, or email a link to the user to change the password.
6. Click **Create User**.

Edit a user

1. From the Account Management web portal, click **Users**.
2. Click a user email address.
3. Do any of the following:

    - Edit the personal information.
    - Change the user password.
    - Assign user roles.
    - Register a badge.
    - From the Printer Login section, click Edit beside Badge Login.
    - Add the user to a group.
    - Set the user PIN.

      > **Note:** This setting is available only when the printer login is set to **PIN Login** or **Badge + PIN as second factor**. The PIN generation must be set to **Administrator manually set**.

      1. From the Printer Login section, click **Set PIN** or **Reset PIN**.
      2. Enter the PIN, and then click **Generate PIN**.

Delete users

1. Select one or more users, and then click **Delete**.

   > **Notes**
   > - You can also search for users using the search bar.
   > - The activities of a deleted user are still shown in the Analytics web portal, but the name and email address are removed from all the reports.

2. Click **Delete Users**.

Import users

The Import feature lets you create, update, and delete multiple users in an organization using a CSV or TXT file. You can also create user groups, and then assign a user to those groups.

> **Note:** The import log is sent to your email address.

1. Click **Import Users** or **Import**, and then browse to the CSV or TXT file.
2. If necessary, email a link to the user to change the password.
3. Click **Import Users**.

Sample CSV format

EMAIL,OPERATION,PASSWORD,FIRST_NAME,LAST_NAME,DISPLAY_NAME,SHORTNAME,GROUPS,
CUSTOM_ATTRIBUTES,COST_CENTER,DEPARTMENT
jdoe@company.com,CREATE,,John,Doe,Johnny,jdoe,Group 1,"{'key1':'value1','key2':'value2'}"
llane@company.com,UPDATE,password2,Lois,Lane,Lois,llane,, ckent@company.com,DELETE,,,,,,,

The import file header line must be the following and is case-sensitive:
EMAIL,OPERATION,PASSWORD,FIRST_NAME,LAST_NAME,DISPLAY_NAME,SHORTNAME,GROUPS,CUSTOM_ATTRIBUTES,COST_CENTER,DEPARTMENT

Line values and their conditions

- **EMAIL**—Required for all users. EMAIL values that are in uppercase in the file are converted to lowercase before the operation is performed. For example, JDOE@company.com is converted to jdoe@company.com.
- **OPERATION**—Required for all users.
  Valid OPERATION values
  - **CREATE**—Creates a user identified by the EMAIL value with the corresponding properties on the line.
  - **UPDATE**—Updates the existing user identified by the EMAIL value with the corresponding properties on the line. You can use the [delete] action string to remove the first name, last name, display name, and short name.
  - **DELETE**—Deletes the existing user identified by the EMAIL value.
- **PASSWORD**—Not required for any OPERATION, and can be empty only when “E-mail a link to change the password” option is selected when importing.

  > **Note:** Enable the “E-mail a link to change the password” option only when importing files with the CREATE operation.

- **FIRST_NAME**—Not required for any OPERATION, and can be empty. The first name of the user. For example, John.
- **LAST_NAME**—Not required for any OPERATION, and can be empty. The last name of the user. For example, Doe.
- **DISPLAY_NAME**—Not required for any OPERATION, and can be empty. The name of the user that is sometimes used in display prompts or log reports. The DISPLAY_NAME value can be the full name with middle initial or any string. For example, John A. Doe. The DISPLAY_NAME value is not directly associated with the FIRST_NAME and LAST_NAME values.
- **SHORTNAME**—Not required for any OPERATION, and can be empty. The SHORTNAME value is used when the organization has a shortname string that also identifies the user in the organization. For example, jdoe.
- **GROUPS**—Not required for any OPERATION, and can be empty. Separate multiple groups by using commas and enclosing them in double quotation marks. For example, "Group1,Group2,Group3". GROUPS values that do not exist in the organization are created, and then added to the organization automatically.

  > **Note:** A group name must not contain the following characters: ! @ # $ % ^ & * ; + ? / \ [ ]. If these characters are used, then they are replaced with an underscore (_).

- **CUSTOM_ATTRIBUTES**—Not required for any OPERATION, and can be empty. The CUSTOM_ATTRIBUTES value is a specially formatted JSON string for user metadata that is stored with the user. The value must be enclosed in double quotation marks. For example, "{'key1':'value1','key2':'value2'}"
- **COST_CENTER**—Not required for any OPERATION, and can be empty. The COST_CENTER value is used for quota assignments and cost-center-level reporting in the Analytics web portal.
- **DEPARTMENT**—Not required for any OPERATION, and can be empty. The DEPARTMENT value is used for quota assignments and department-level reporting in the Analytics web portal.

> **Notes**
>
> - All lines must have the same number of values as the header, including the commas. Follow empty values with commas. For example, jdoe@company.com,DELETE,,,,,,
> - The file size must not exceed 1MB.
> - Importing a file with CREATE and UPDATE operations with more than one group assignment can take a few minutes.
> - If any line value contains a comma, such as the names, password, groups, or custom attributes, then the value must be enclosed in double quotation marks. For example, llane@company.com,UPDATE,"pass,word2",Lois,Lane,"Lois,Lane",llane,"Group1,Group2",

Assigning user roles

Assigning user roles gives a particular user access to a particular task or function that is not appropriate to assign as a group or organization role. Groups or organizations that the user belongs to do not inherit the user role. For more information, see Understanding roles on page 62.

1. From the Account Management web portal, click **Users**, and then click the user e-mail address.
2. From the Assigned Roles section, click **Edit**.

3. From the User Roles tab, click **Assign**, and then select the roles.
4. Click **Assign Roles**.

Removing user roles

For more information, see Understanding roles on page 62.

1. From the Account Management web portal, click **Users**, and then click the user e-mail address.
2. From the Assigned Roles section, click **Edit**.
3. Select one or more roles, and then click **Remove**.
4. Click **Remove Roles**.

Configuring Microsoft Entra ID with OIDC Federation

Configuring Microsoft Entra ID federation for OIDC overview

This document provides guidance for network administrators on configuring Microsoft Entra ID to enable OpenID Connect (OIDC) federation with the Lexmark Cloud Services. For more information, contact the Lexmark Professional Services team.

Prerequisites

Before you begin, make sure that you have administrator access to the following portals:

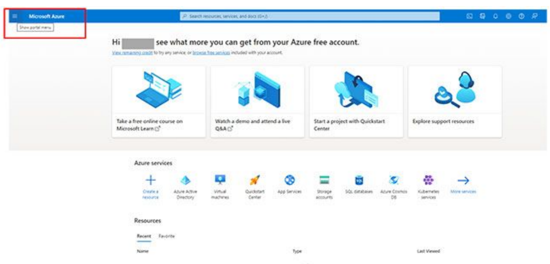
- Microsoft Entra ID
- Lexmark Cloud Services

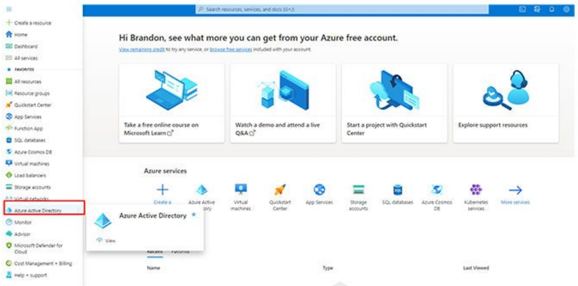
Understanding federation

After implementing OIDC for federation, when accessing the Lexmark Cloud Services portal for the first time, users are prompted to enter their email address. They are then redirected to their identity provider (IDP) to complete the login procedure.

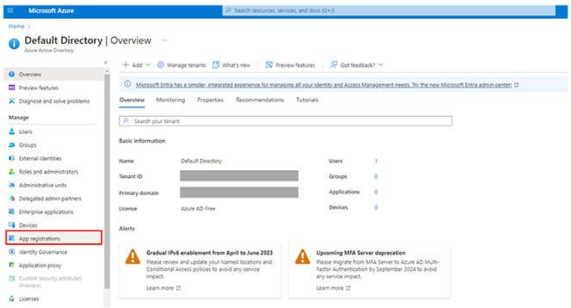
Registering a web application

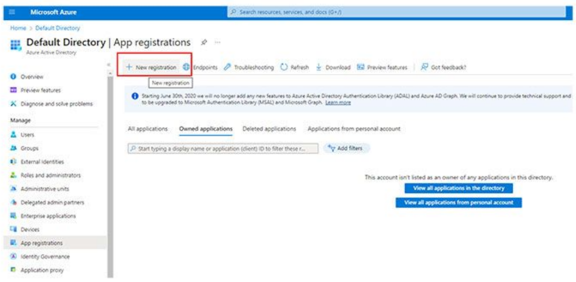
1. From the Azure portal, navigate to the **Microsoft Entra ID**.





2. In the Manage section, select **App registrations**.
3. Click **New registration**.





4. Provide a name for the application.
5. Select the supported account types for the application registration.

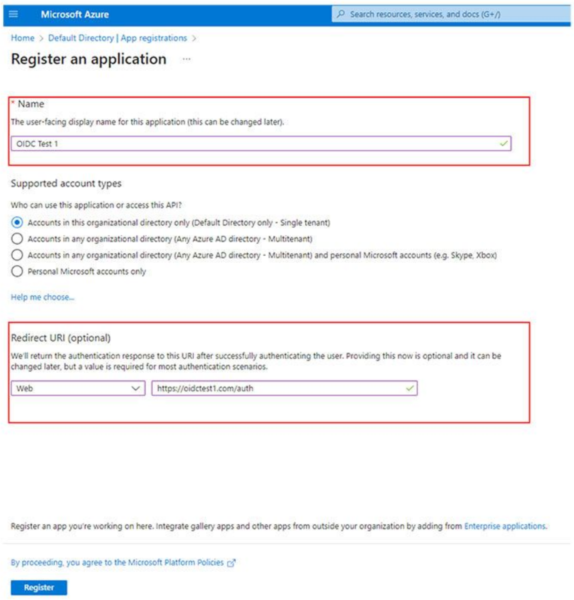
   - **Microsoft only – Single tenant**—All user and guest accounts within your directory can use the application or API. Select this option if your target audience is internal to your organization.
   - **Any Azure AD directory – Multitenant**—Users with work or school accounts from Microsoft, including Office 365 users, can use the application or API. Select this option for business or educational customers and to enable multitenancy.
   - **Any Azure AD directory – Multitenant and personal Microsoft accounts**—Users with work or school accounts, as well as personal Microsoft accounts, can access the application or API. These users include Office 365 users and individuals using services like Xbox and Skype. Select this option to target a wide range of Microsoft identities and enable multitenancy.
   - **Personal Microsoft accounts only**—Allows access only to personal Microsoft accounts used for services like Xbox and Skype. Select this option to target the broadest range of Microsoft identities.

6. In the Redirect URL menu, select **Web**.
7. Type the redirect URL or reply URL for your portal in the provided text box.

> **Note:** The authorization server routes the user to the redirect URL after successfully authorizing and granting an authorization code or access token.

- The redirect URL must begin with the scheme https unless you use a localhost redirect URL.
- The redirect URL is case-sensitive. Its case must match the URL path of your running application.
- Make sure that the redirect URL includes or excludes the trailing forward slash according to your application.
- The redirect URLs for U.S. and EU regions are as follows:
  - US—https://lexmarkb2c.b2clogin.com/lexmarkb2c.onmicrosoft.com/oauth2/authresp
  - EU—https://lexmarkb2ceu.b2clogin.com/lexmarkb2ceu.onmicrosoft.com/oauth2/authresp

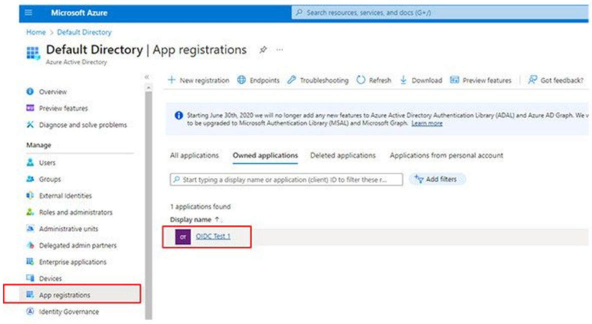
8. Select **Register**.



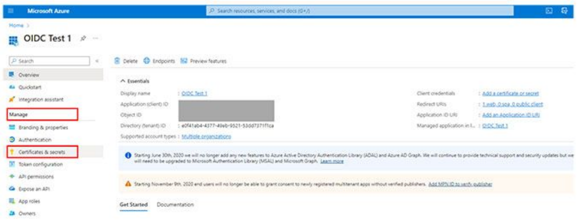
Creating a client secret

The client secret, also referred to as the application password, allows your application to exchange an authorization code for an access token

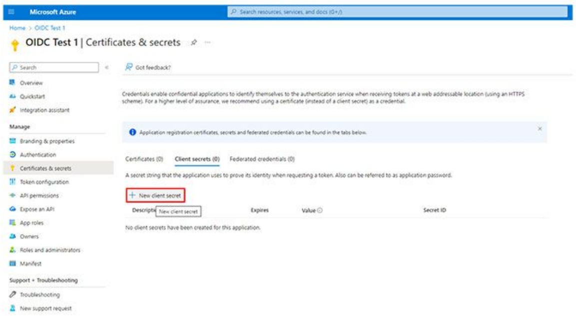
1. From the Manage section, select **App registrations**.
2. Select the application that you created (for example, OIDC Test 1).



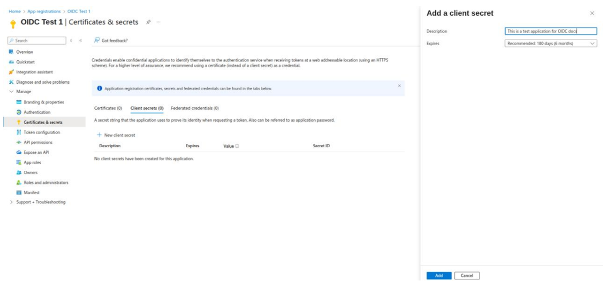
3. In the Manage section, select **Certificates and secrets**.



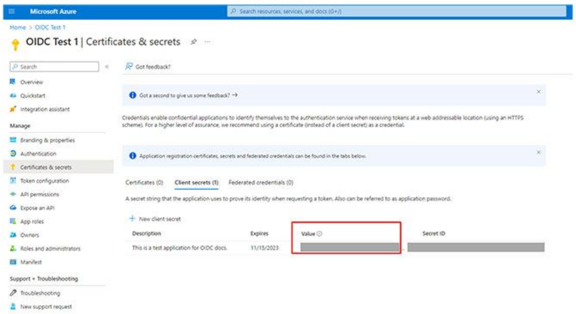
4. Click **New client secret**.



5. Provide a description.
6. Set an expiry date.
7. Click **Add**.

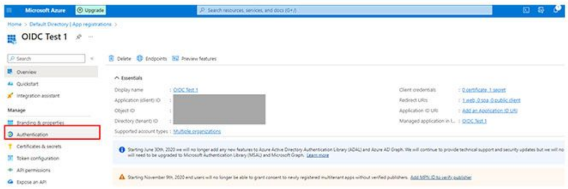


8. Save the client secret for later use in this guide.



Enabling implicit grant and hybrid flows

1. From the Manage section, select **App registrations**.
2. Select the application that you created (for example, OIDC Test 1).
3. In the **Manage** section, select **Authentication**.

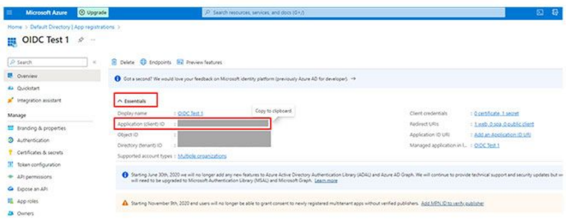


4. In the Implicit grant and hybrid flows section, select **ID tokens**.
5. Click **Save** .

> **Note:** IdP initiated flow is not supported.

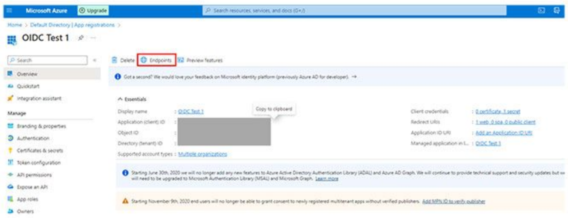
Retrieving the application (client) ID

1. From the Microsoft Azure navigation menu on the upper-left corner of the page, select **Microsoft Entra ID**.
2. In the Manage section, select **App registrations**.
3. Select the application that you created (for example, OIDC Test 1).
4. In the Essentials section, duplicate the application (client) ID.
5. Save this ID for later use in this guide.

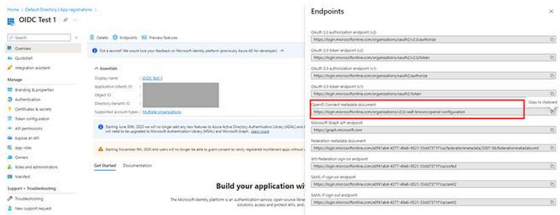


Retrieving the OpenID Connect metadata document

1. From the current screen, select **Endpoints**.

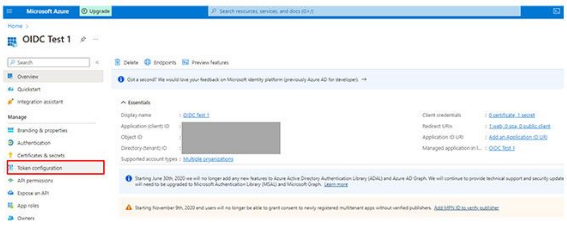


2. In the Endpoints section, locate **OpenID Connect metadata document**.
3. Save the URL for later use in this guide.

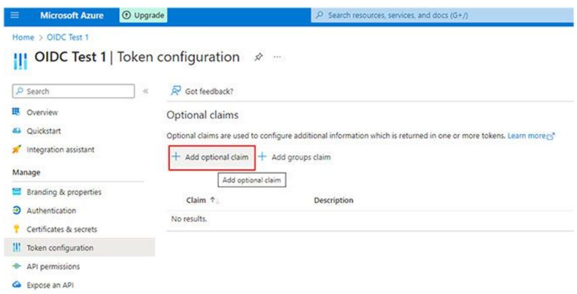


Configuring claims

1. From the Azure portal, navigate to the **Microsoft Entra ID**.
2. In the Manage section, select **App registrations**.
3. Select the application that you created (for example, OIDC Test 1).
4. In the Manage section, select **Token configuration**.

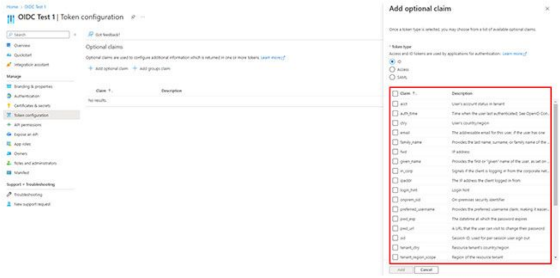


5. Click **Add optional claim**.



6. Under Token type, select **ID**.

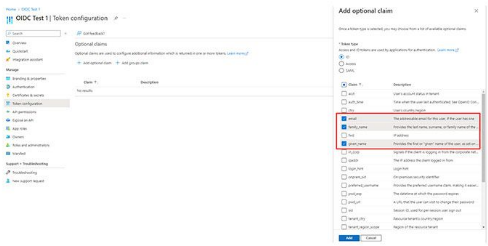
7. From the list that appears, select the claims that you want to add.



You can select three claims and four additional claims based on the preferences and business use cases.

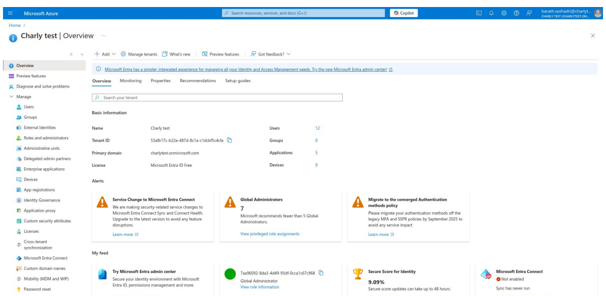
- Required claims:
  - **email**
  - **family_name**
  - **given_name**

8. Click **Add**.



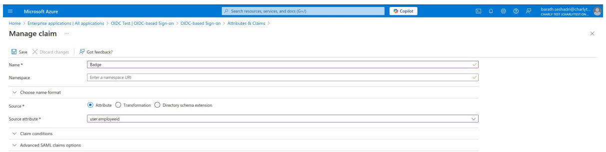
9. To include additional claims, click **Home › Microsoft Entra ID**.

> **Note:** If you use additional claims, then make sure that you set the **acceptMappedClaims** property to **true** in the application manifest. For more information, see Updating manifest to support custom claims on page 80.



10. On the navigation pane, click **Manage › Enterprise applications › select your application**.
11. From the **Manage** menu, click **Single Sign-on**.

12. In the **Attributes & Claims** section, click **Edit**.
13. On the **Attributes & Claims** page, click **Add new claim**.
14. On the **Manage claim** page, do the following:



> **Note:**
> - If you want to add additional Attributes & Claims, then on the **Manage claim** page, you may add Badge, PIN, Costcenter, and Department as additional optional claims.
> - For more information on setting up claims and attributes, see Setting up attributes and claims on page 87.

a. In the **Name** field, type Badge.

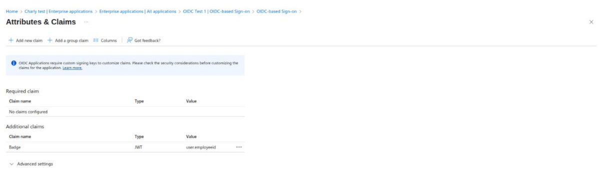
> **Note:** In this example, we are adding Badge as one of the additional claims.

b. Select **Attribute** as the source.

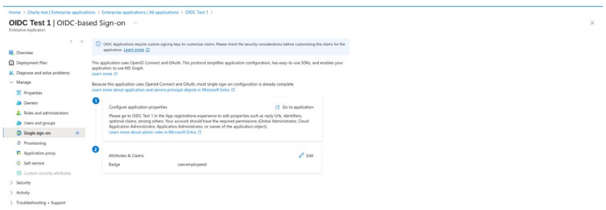
c. From the **Source attribute** menu, select the **user.employeeid**.

> **Note:** For the **Source attribute** menu, you can select according the requirement. In this example, as we are adding Badge as one of the additional claims, so we have used **user.employeeid** as the **Source attribute**.

d. Click **Save**.



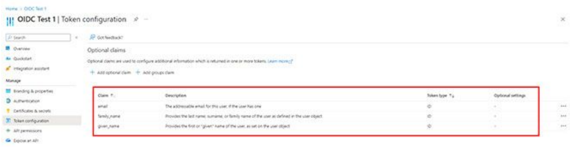
e. Click **x** on the top right to close.



> **Note:**
> - On the **Manage claim** page, repeat the steps for adding each additional claim.
> - If you are using a different identity provider, make sure that the claims are named exactly as shown.

15. From the menu that appears, select **Turn on the Microsoft Graph email, profile permission (required for claims to appear in the token)**, and then click **Add**.

> **Note:** The selected claims appear under your application.



Updating manifest to support custom claims

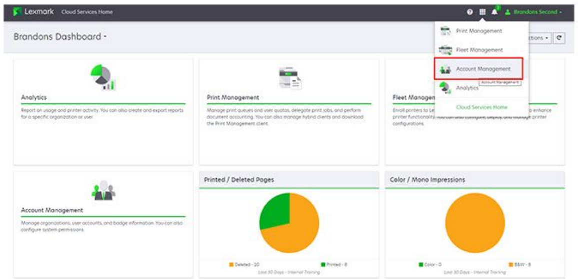
For single tenant apps, you can set the **acceptMappedClaims** property to **true** in the application manifest. This allows an application to use claims mapping without specifying a custom signing key.

> **Warning**
> Do not set the **acceptMappedClaims** property to **true** for multi-tenant apps. This can allow malicious actors to create claims-mapping policies for your application.

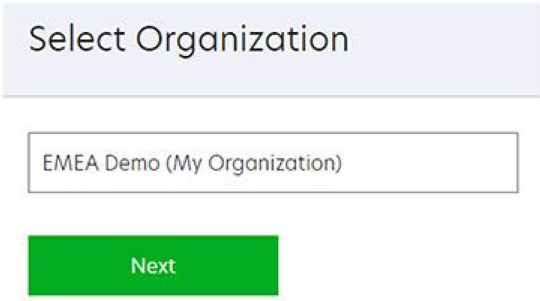
1. Open your application from **App Registrations**.
2. From the navigation menu, select **Manifest**.
3. Update the property **acceptMappedClaims** to **true**.
4. Click **Save**.

Configuring Lexmark Cloud Services

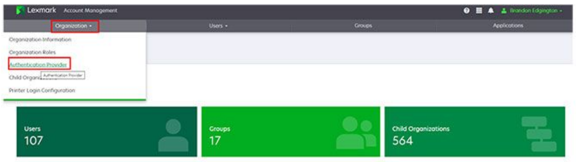
1. Log in to Lexmark Cloud Services.
2. From the navigation menu on the right side of the screen, select **Account Management**.



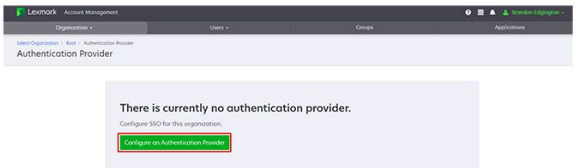
3. If necessary, select your organization, and then click **Next**.



4. In the Organization section, select **Authentication Provider**.



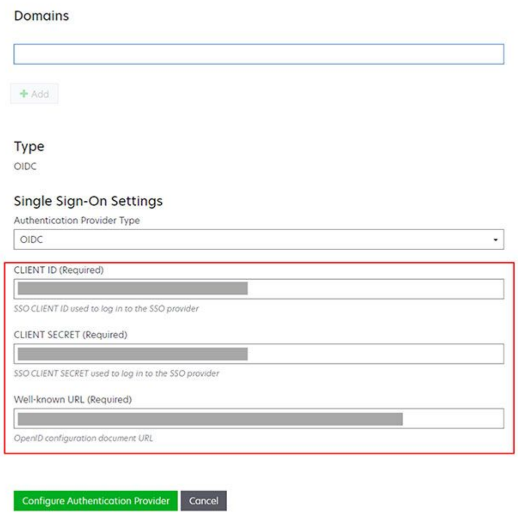
5. Click **Configure on Authentication Provider**.



6. From the Authentication Provider Type menu, select **OIDC**.
7. Enter the required information copied from Azure AD:
    - Client ID (Application client ID)
    - Client Secret (Client secret value)
    - Well-known URL (OpenID Connect metadata document URL)

    > **Note:** The Domains field allows Lexmark Cloud Services to automatically establish a new user account after the user logs in. Listing each organization's domain is not required. If no domain is set, then the new users must be manually added to the organization before they log in.

8. Click **Configure Authentication Provider**.



Note: Once authentication configuration is completed, you will receive an email on configuration status. In case of configuration failure, contact your Lexmark representative.

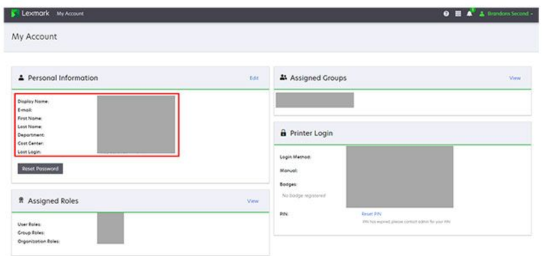
Testing a federation

Note: Do not log out or close the current browser until the federation is successfully set up and verified.

1. From the same workstation, open an incognito browser window or a different browser window.
2. From a different workstation, open a new browser window.
3. Log in to Lexmark Cloud Services from either workstation.

   Instead of the default Lexmark Cloud Services login page, you are directed to your IDP.

4. Log in with your credentials.
5. Validate the claim details in the My Account page of Lexmark Cloud Services.



Configuring Microsoft Entra ID with SAML Federation

Configuring Microsoft Entra ID federation for SAML overview

This section is intended to help network administrators configure Microsoft Entra ID for Security Assertion Markup Language (SAML) federation with the Lexmark Cloud Services. For more information, contact the Lexmark Professional Services team.
Prerequisites

Before you begin, make sure that you have administrator access to the following portals:

- Microsoft Azure portal
- Lexmark Cloud Services

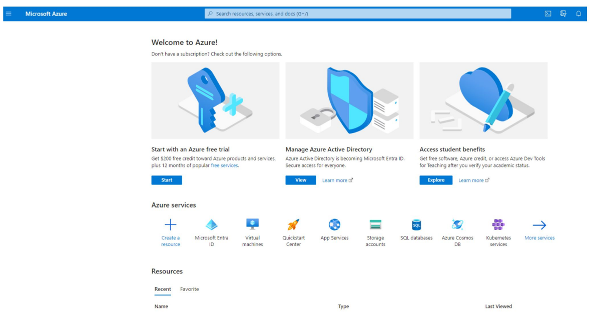
Understanding the user experience for CIAM organization

After federation with SAML is complete, first-time users must provide their email address in the Lexmark Cloud Services portal. Then they are redirected to their identity provider to complete the login process.
If the user has never signed into their identity provider, they are prompted for their username and password. On completing that sign-in process, the user is then redirected back to the Lexmark Cloud Services portal.

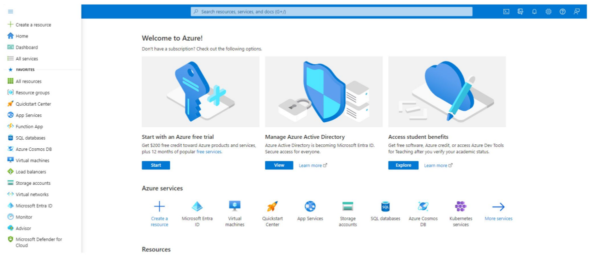
Configuring Microsoft Entra ID

The screenshots may vary depending on the latest release
Creating an enterprise application

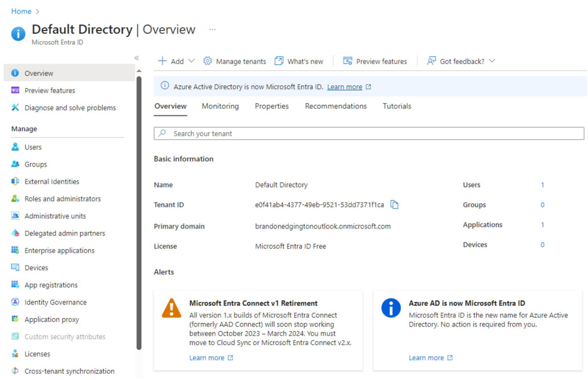
1. Log in to the Microsoft Azure portal.
2. Select **Microsoft Azure**.

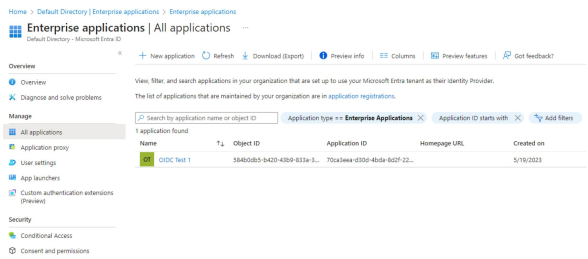


3. Select **Microsoft Entra ID**.

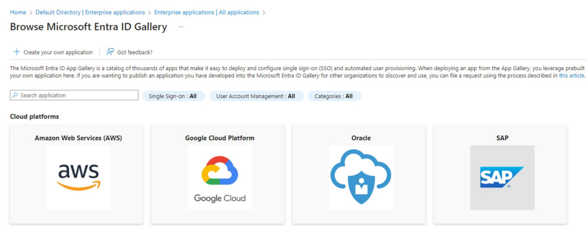


4. In the Manage section, click **Enterprise applications > New application**.

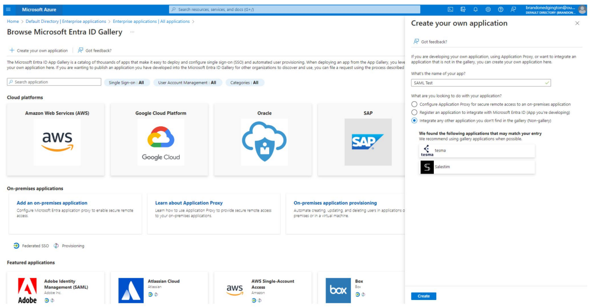




5. Click **Create your own application**.



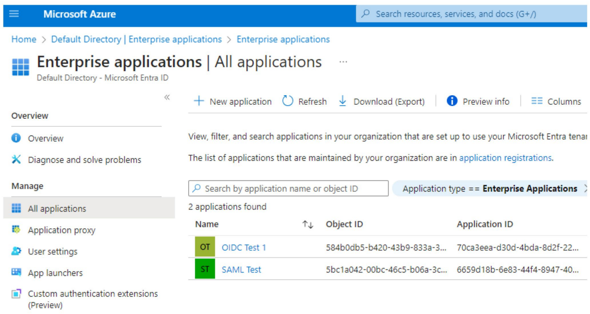
6. On the Create your own application window, in the What’s the name of your app? field, type the name of your new enterprise application.
7. Select **Integrate any other application you don’t find in the gallery (Non-gallery)**.
8. Click **Create**.



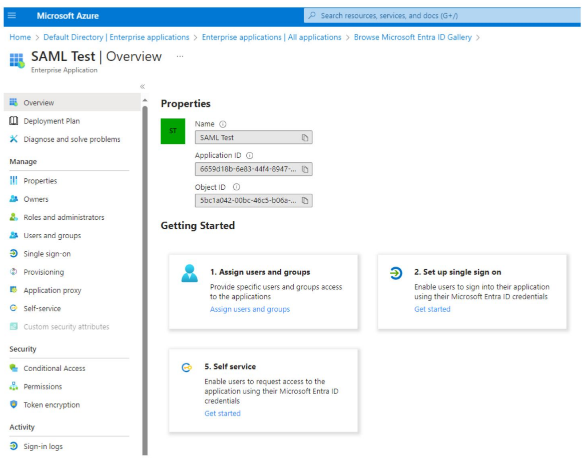
Setting up basic SAML configuration

The screenshots may vary depending on the latest release

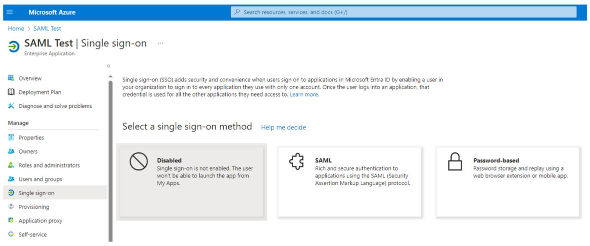
1. Select **Microsoft Azure**.
2. Select **Microsoft Entra ID**.
3. In the Manage section, click **Enterprise applications**.
4. Select the application that you have created.



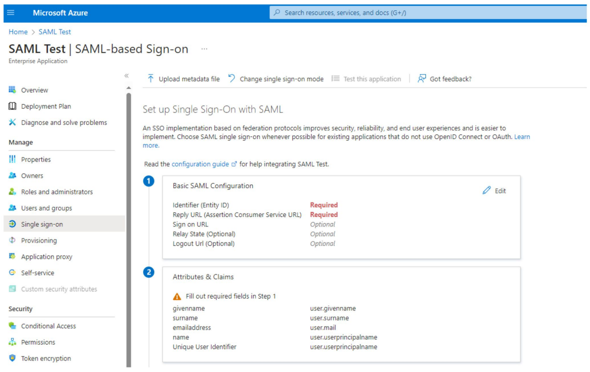
5. On the application overview page, in the Getting Started section, select **Set up single sign on**.



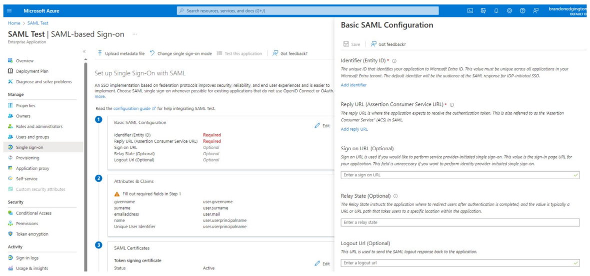
6. Select **SAML**.



7. In the Basic SAML Configuration section, click **Edit**.



8. In the Basic SAML Configuration window, do the following:



   a. In the Identifier (Entity ID) section, click **Add Identifier**.
   b. In the Add identifier field, depending on your location, type either of the following entity IDs:

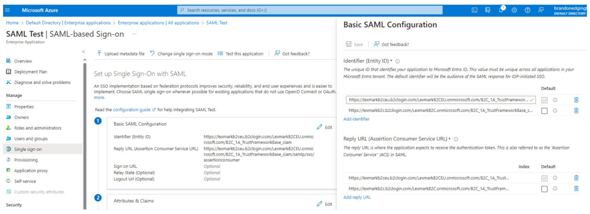
      - For EU: https://lexmarkb2ceu.b2clogin.com/LexmarkB2CEU.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam
      - For US: https://lexmarkb2c.b2clogin.com/LexmarkB2C.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam

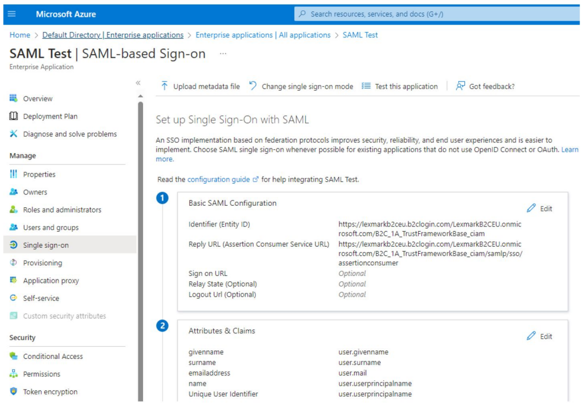
   c. In the Reply URL (Assertion Consumer Service URL) section, click **Add reply URL**.
   d. In the Add reply URL field, depending on your location, type either of the following reply URLs:

      - For EU: https://lexmarkb2ceu.b2clogin.com/LexmarkB2CEU.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam/samlp/sso/assertionconsumer
      - For US: https://lexmarkb2c.b2clogin.com/LexmarkB2C.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam/samlp/sso/assertionconsumer

   e. Click **Save**.

> **Note:** IdP initiated flow is not supported.

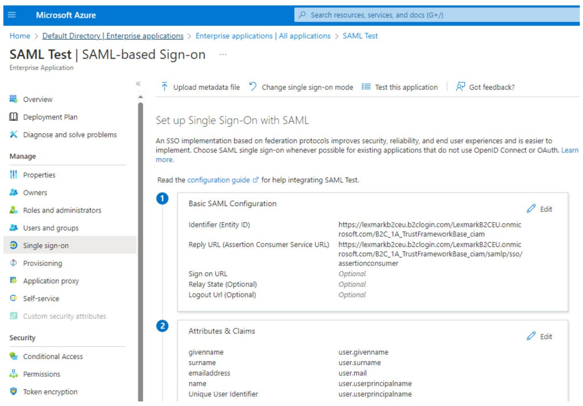




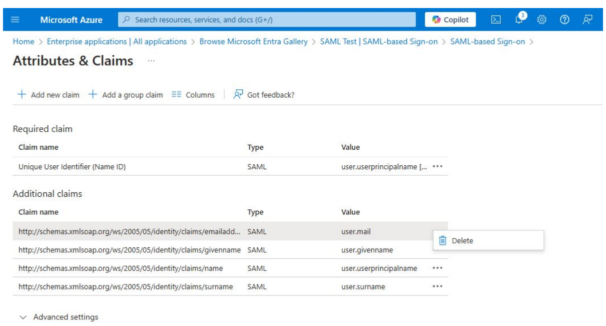
Setting up attributes and claims

The screenshots may vary depending on the latest release

1. On the SAML-based Sign-on page, in the Attributes & Claims section, click **Edit**.



2. Delete the additional claims. To delete additional claims, click ••• for that particular claim, and then click **Delete**.



> **Note:** Repeat this step to delete all the additional claims.

3. Click **Add new claim**.
4. Add the following required claims and their respective source attributes:

Claim Name	Source Attribute
Unique User Identifier (Name ID)	user.userprincipalname
Email	user.mail
Givenname	user.givenname
Surname	user.surname

> **Note:** To add the above mentioned required claims, repeat the following steps for each claim

   1. On the Attributes & Claims page, click **Add new claim**.
   2. On the Manage Claim page, in the **Name** field, type the name of the required claim.
   3. Leave the **Namespace** field blank.
   4. For the **Source**, select **Attribute**.
   5. From the **Source attribute** menu, select the appropriate attribute.

Setting up optional attributes and claims

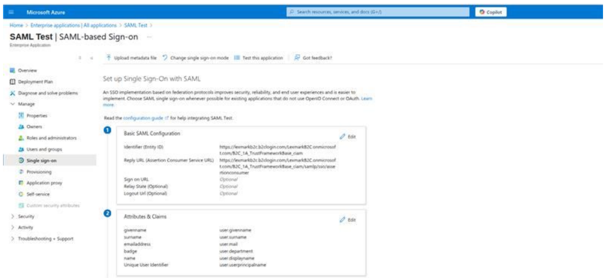
1. On the Attributes & Claims page, click **Add new claim**.
2. On the Manage Claim page, in the **Name** field, type the name of the additional claim.
3. Leave the **Namespace** field blank.
4. For the **Source**, select **Attribute**.

> **Note:** You can either select a user attribute or apply a transformation to the user attribute before setting it as a claim.

5. From the **Source attribute** menu, select the appropriate attribute.
6. Click **Save**.

> **Note:**
> - Repeat the above steps to add each additional claim
> - If you are using a different identity provider, make sure that the claims are named exactly as shown.

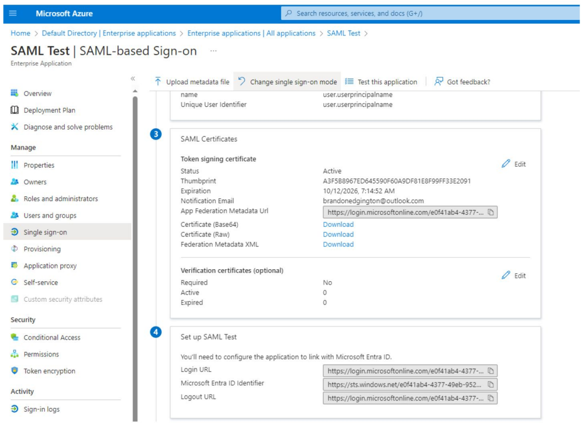
Make sure that all the required and additional claims are listed in the **Attributes & Claims** section.



Downloading certificates and copying URLs

The screenshots may vary depending on the latest release.
After adding your claims, do the following steps:

1. On the SAML-based Sign-on page, in the SAML Certificates section, click **Download** to download the Certificate (Base64).
2. Copy and retain the App Federation Metadata Url.
3. In the application setup section, copy and retain the values for Login URL and Logout URL.



Notes

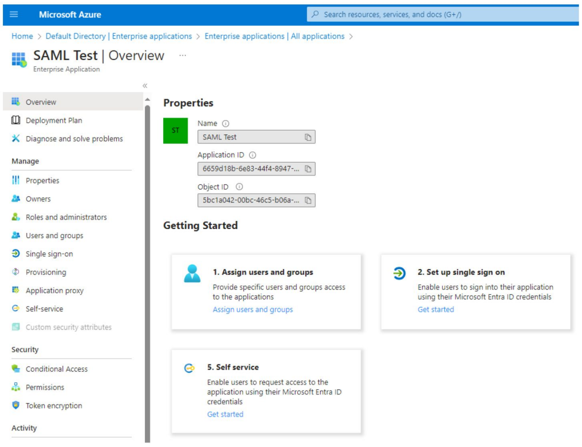
- Lexmark SAML federation with ADFS currently does not support token encryption.
- The App Federation Metadata Url, Login URL, and Logout URL are required for configuring the Lexmark Cloud Services portal.

Assigning groups and users

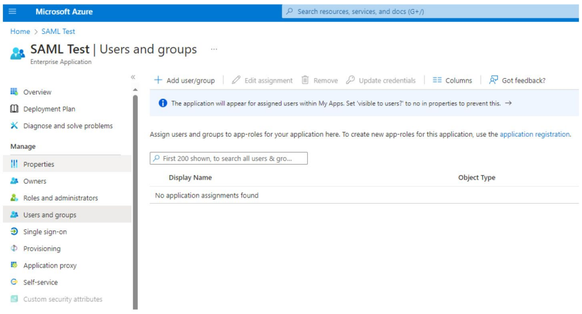
The screenshots may vary depending on the latest release
Depending on the Azure configuration, you are required to either assign users to the new enterprise application, or specify that user assignment is not required.

1. Select **Microsoft Azure**.
2. Select **Microsoft Entra ID**.
3. In the Manage section, click **Enterprise applications**.
4. Select the application that you created.

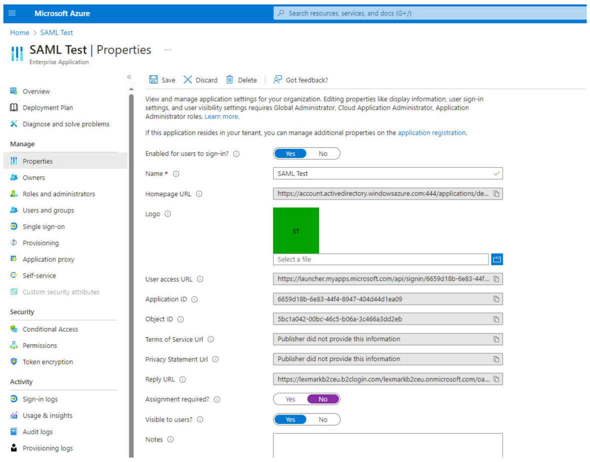
5. On the application overview page, in the Getting Started section, select **Assign users and groups**.



6. In the Manage menu, select **Properties**.



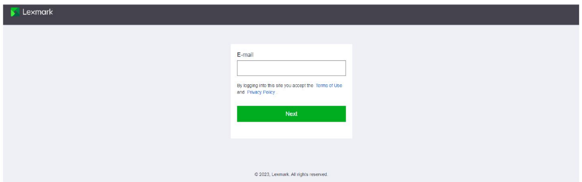
7. On the Properties page, in the Assignment required? section, select **Yes** or **No**.



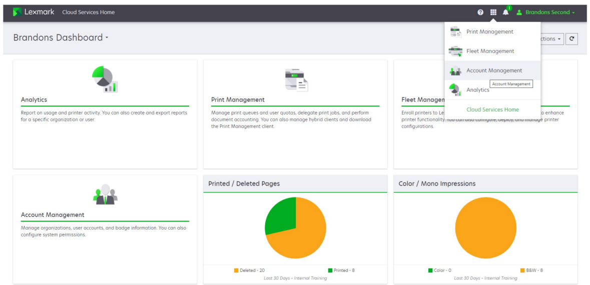
Configuring Lexmark Cloud Services

The screenshots may vary depending on the latest release.

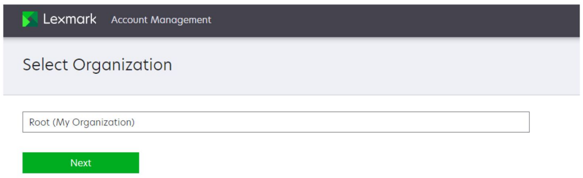
1. Log in to Lexmark Cloud Services.



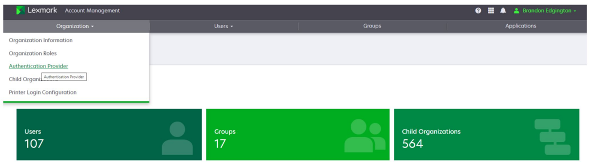
2. From the navigation menu on the right side of the screen, select **Account Management**.



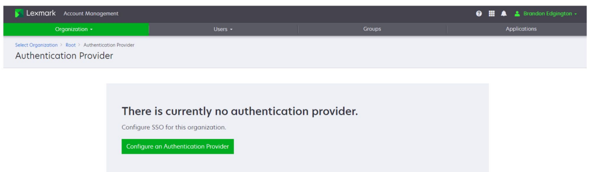
3. If necessary, select your organization, and then click **Next**.



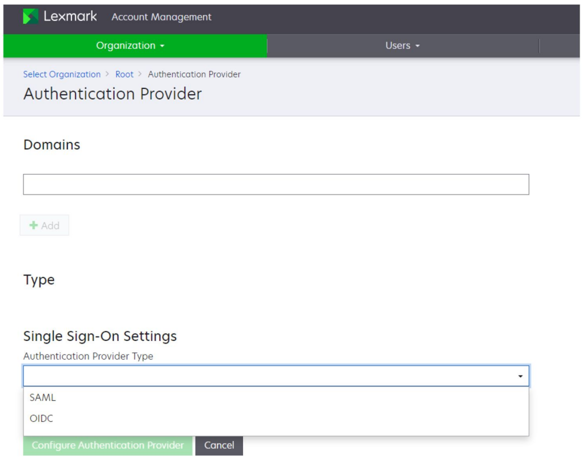
4. From the Organization menu, select **Authentication Provider**.



5. Click **Configure on Authentication Provider**.



6. From the Authentication Provider Type menu, select **SAML**.



> **Note:** The Domains field allows Lexmark Cloud Services to establish a new user account after the user logs in. Listing each organization domain is not required. If no domain is set, then the new users must be manually added to the organization before they log in.

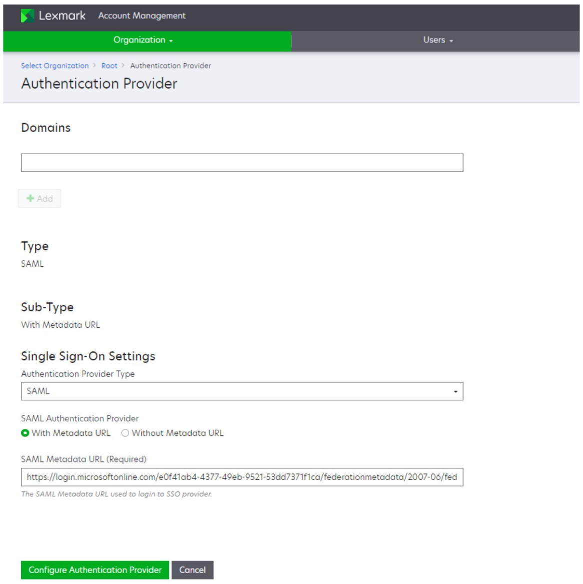
7. In the SAML Authentication Provider section, select either **With Metadata URL** or **Without Metadata URL**.

> **Note:** We recommend selecting With Metadata URL for a shorter process.

With Metadata URL

If you want to configure the SAML Authentication Provider section with Metadata URL, then perform the following steps:

1. In the SAML Authentication Provider section, select **With Metadata URL**.



2. In the SAML Metadata URL (Required) field, paste the App Federation Metadata Url that you have previously copied and retained.

> **Note:** For more information on App Federation Metadata Url, see Downloading certificates and copying URLs on page 89

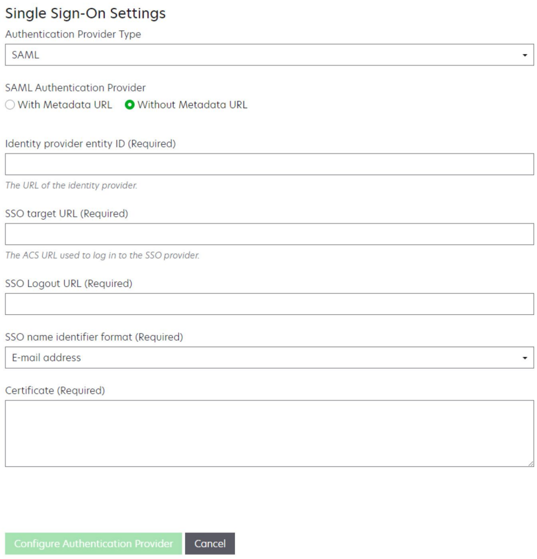
.

3. Click **Configure Authentication Provider**.

Without Metadata URL

If you want to configure the SAML Authentication Provider section without Metadata URL, then perform the following steps:

1. In the SAML Authentication Provider section, select **Without Metadata URL**.



2. In the Identity provider entity ID (Required) field, depending on your location, type either of the following:

    - For EU: **https://lexmarkb2ceu.b2clogin.com/LexmarkB2CEU.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam**
    - For US: **https://lexmarkb2c.b2clogin.com/LexmarkB2C.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam**

> **Note:** The URLs must be same to the URLs entered in Microsoft Entra ID.

3. Enter the required information copied from Azure AD:.

    - SSO target URL (Required)
    - SSO Logout URL (Required)
    - Certificate (Required)

> **Note:** Make sure that you include the header and the footer for the certificate.

4. Click **Configure Authentication Provider**.

> **Note:** Once authentication configuration is completed, you will receive an email on configuration status. In case of configuration failure, contact your Lexmark representative.

Note: Make sure that you do not exit the Lexmark Cloud Services portal or allow the portal to time out. It is time to test your SAML connection, and you may be unable to log in to correct any problems discovered during testing. For more information on testing the federation, see Testing a federation on page 94.

Testing a federation

The screenshots may vary depending on the latest release.

Note: Do not log out or close the current browser until the federation is successfully set up and verified.

1. From the same workstation, open an incognito browser window or a different browser window.

   Note: The browser should be opened in either private or incognito mode.

2. From a different workstation, open a new browser window.
3. Log in to Lexmark Cloud Services from either workstation.

4. Depending on your location, use either of these URLs:
   - For EU: https://lexmarkb2ceu.b2clogin.com/LexmarkB2CEU.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam
   - For US: https://lexmarkb2c.b2clogin.com/LexmarkB2C.onmicrosoft.com/B2C_1A_TrustFrameworkBase_ciam

   Note: The user is prompted to log in to Azure rather than to Lexmark Cloud Services.

5. Check their My Account page to verify the details.

Partner administrator

Partner administrators can use the Account Management web portal to create child organizations.

Creating an organization

Partner administrators can set up their customer's environment using the Child Organizations feature.

> **Note:** The Partner Administrator role is required in creating child organizations.

1. From the Account Management web portal, select the parent organization.
2. Click **Create**, and then type a unique organization name.

   > **Note:** Special characters are not supported.

3. Click **Create Child Organization**.

Deleting organizations

Deleting an organization deletes all the users, groups, applications, and badges that are associated with the organization.

1. From the Account Management web portal, select the parent organization.
2. Click the name of the child organization, you want to delete.

   > **Notes**
   > - You can delete only one child organization at a time. Use this feature with caution. When you delete an organization, all the users, groups, applications and badges that are associated with the organization are also deleted.
   > - You can also search for child organizations using the search bar.

3. On the **Organization Information** page, click **Delete Organization**.

   > **Note: Delete Organization** remains deactivated for the following reasons:
   > - If the organization is in pending deletion state
   > - If the organization has MPS Express enabled

4. On the **Delete Organization** window, click **Continue**.
5. On the **Delete Organization** window, type the name of the child organization to be deleted, and then click **Delete**.

   > **Note:** Only users who are members of a Child Organization Access Group that has the Organization Administrator role can create and delete child organizations.

Managing printer logins

Configuring printer login

The Account Management web portal lets you configure the user authentication settings of the printers enrolled in your organization. Changing the settings in the Account Management web portal overrides the authentication settings that are configured on the printers.

Configure the standard authentication

You can set the printers to authenticate users using their permanent or temporary badge, a PIN, or user credentials.

1. From the Account Management web portal, click **Organization › Printer Login Configurations**.
2. Click **Standard authentication**, and then select one or more of the following:

    - **Badge**—Authenticate users using their permanent or temporary badge.
    - **PIN**—Authenticate users using a PIN.
    - **Secure Login**—Authenticate users using their user credentials.
3. Click **Save Changes**.

Configure Badge + PIN as second factor

You can configure the printers to authenticate users using both their permanent or temporary badge and a PIN.

1. From the Account Management web portal, click **Organization › Printer Login Configurations**.
2. Click **Badge + PIN as second factor**.
3. From the PIN Details section, configure the PIN details.
4. If necessary, to let users log in to the printers using their user credentials, select **Secure Login**.
5. Click **Save Changes**.

Configuring the PIN settings

1. From the Organization PIN Details section, do any of the following:

    - **Specify the PIN length**
    - **Select a PIN generation option**

        - **Automatically generate and email**—An automatically generated PIN is sent to the user’s e-mail address.

          If this setting is selected, an automatically generated PIN is sent to the user’s email address once the administrator or user Set or Reset the PIN, which will then trigger the email.
        - **Administrator manually set**—You can set the PIN manually from the Account Management web portal.

For more information, see Managing users on page 69.

You can also import the PINs using a CSV or text file. For more information, see Managing PINs on page 98.

  - **User set**—Users can set their own PIN manually.
- **Set the PIN expiration**

> **Note:** This feature is available only when the PIN generation option is set to Administrator manually set or User set.

  - **Never expires**—The default setting for the PIN expiration.
  - **Expires after**—Set the number of hours or days that the PIN can be used.

2. Click **Save Changes**.

Obtaining secure login code

> **Notes**
>
> - The secure login code appears on the Generate Login Code page.
> - You can click **Refresh** to refresh the code. The login code automatically refreshes after every 15 minutes.
> - Use this login code to log into the printer. The login code cannot be reused.

1. Open a web browser, and then type the address of Lexmark Cloud Services server.

   > **Note:** Depending on the location of the data center, go to either https://us.iss.lexmark.com or https://eu.iss.lexmark.com.

2. Log in to the Lexmark Cloud Services website.
3. In the browser address field, replace the web address https://<env>.iss.lexmark.com with https://<env>.iss.lexmark.com/device.

   > **Note:** Depending on the location of the data center, <env> can be either us or eu. To determine the value of <env>, see the address on the browser address field.

Managing badges

The Account Management web portal lets administrators register badges to the system. If badges are not registered using the Account Management web portal, then users must register their badge when they first log in to the printer.

Organization administrators and user administrators can register a permanent or temporary badge on behalf of a user.

Register a badge

1. From the Account Management portal, click **Users › Badge/PIN**.
2. From the Badges tab, click **Register Badge** or **Register**, and then type the user e-mail address, badge ID, and description.

> **Notes**
> - To make the badge ID visible, select **Show badge ID**.
> - To register the badge as temporary, select **Temporary Badge**. Temporary badges expire after 24 hours.
> - Federated users who have their badge numbers in the Active Directory are not prompted to register their badge.

3. Click **Register Badge**.

Delete badges

1. Select one or more badges, and then click **Delete**.

> **Note:** You can also search for badges using the search bar. Make sure to type the complete e-mail address or badge ID.

2. Click **Delete Badges**.

Import badges

For information on creating a CSV file, see Sample CSV formats on page 99.

1. Click **Import Badges** or **Import**, and then browse to the CSV or TXT file.
2. Click **Import Badges**.

> **Note:** You can also register or delete badges for users. For more information, see Managing users on page 69.

Managing PINs

Depending on the printer login configuration, organization administrators and user administrators can generate, delete, or import PINs on behalf of the users.

> **Notes**
> - To access the **Printer Login Configuration** page, from the Account Management web portal, select an organization, and then click **Organization > Printer Login Configuration**.
> - If the **PIN generation** option is set to **Automatically generate and email**, then click **Generate PIN**. An automatically generated PIN is sent to the user's e-mail address.
> - If the **PIN generation** option is set to **Administrator manually set**, then enter the PIN, and then click **Generate PIN**.

1. From the Account Management web portal, select an organization.
2. Click **Users > Manage Badge/PIN**.
3. From the **PINs** tab, do any of the following:

    a. To generate a PIN, click **Generate**, type the user email address, and then click **Generate PIN**.

b. To delete PINs, select the users, and then click **Delete › Delete PINs**.
c. To import PINs, click **Import PINs** or **Import**, browse to the CSV or TXT file, and then click **Import PINs**.

> **Note:**
> - For information on creating a CSV file, see Sample CSV formats on page 99.
> - The user accounts must exist before their PINs can be imported.

Sample CSV formats

Depending on the printer login configuration, the CSV format can be any of the following:

Badge only

```
BADGE,OPERATION,EMAIL,TEMPORARY,PIN
20171a,CREATE,jdoe@company.com,true,
20172b,CREATE,llane@company.com,true,
20173c,DELETE,ckent@company.com,false,
```

PIN only

```
BADGE,OPERATION,EMAIL,TEMPORARY,PIN
,CREATE,jdoe@company.com,,123456
,CREATE,llane@company.com,,234567
,DELETE,ckent@company.com,,345678
```

Badge and PIN

```
BADGE,OPERATION,EMAIL,TEMPORARY,PIN
20171a,CREATE,jdoe@company.com,true,123456
20172b,CREATE,llane@company.com,true,234567
20173c,DELETE,ckent@company.com,false,345678
```

You can also change the order of the operations. For example, PIN only can be formatted as:

PIN only

```
PIN,OPERATION,EMAIL,BADGE,TEMPORARY
123456,CREATE,jdoe@company.com,,
234567,CREATE,llane@company.com,,
345678,DELETE,ckent@company.com,,
```

Line values and their conditions

- **BADGE**—The badge ID of the user. If a BADGE value contains commas, then the value must be enclosed in double quotation marks. For example, “20171a,2a,3a”

  The value must not be empty when the printer login is set to **Badge Login** or **Badge + PIN as second factor**.
- **OPERATION**—Required for all badges and PINs.

  Valid OPERATION values

  - **CREATE**—Creates a badge identified by the BADGE value for the user specified by the EMAIL value.
  - **DELETE**—Deletes the existing badge identified by the BADGE value.
- **EMAIL**—Required for the CREATE operation. Badge import does not create a user. The user must exist before a badge can be created. EMAIL values that are in uppercase are

converted to lowercase before the operation is performed. For example, JDOE@company.com is converted to jdoe@company.com.
- **TEMPORARY**—Determines whether the badge is temporary or permanent. The TEMPORARY value is either true or false.
- **PIN**—The PIN of the user. The value must not be empty when the printer login is set to **PIN Login** or **Badge + PIN as second factor**.

Notes

- All lines must have the same number of values as the header, including the commas. For example, 20171a,DELETE,
- The file size must not exceed 1MB.

Fleet Management

Overview

Cloud Fleet Management offers remote device monitoring and management. It minimizes disruption and eliminates estimations in maintaining a well-running fleet. Cloud Fleet Management automatically collects page counts, toner levels, and supplies status to provide a comprehensive view of your devices and how they are performing. It also lets you view device information and receive communications directly through the Cloud Fleet Management web portal. Calling and reporting meter readings or low supplies is unnecessary.
Printers must be enrolled in the Lexmark Cloud Services website before you can manage them. To enroll printers, you can use the Fleet Agent, Native Agent, Local Agent, or Printer Agent. The Native Agent is a firmware agent that allows Lexmark printers to communicate with Lexmark Cloud Services. The Fleet Agent is an application that runs on a server in the customer network. The Local Agent is an application that runs on a host computer. This agent type is used to enroll USB-connected printers. The Printer Agent is an eSF application that runs on a printer.

Choosing an agent

Select one or more agents that fit the environment of your organization and the printers to manage from the following:
Fleet Agent

The Fleet Agent is an application that is configured and installed on an on-site server or host computer with high availability. It enrolls one or more printers from Lexmark and third-party manufacturers in Lexmark Cloud Services.

- Requires a stable server or host computer with a constant Internet connection.
- Supports data collection from all Lexmark printers. For more information, see Supported printer models on page 28.
- Supports configuration for Lexmark printers with eSF version 2.0 or later.
- Supports data collection only for third-party printers.
- The Fleet Agent scans the printers according to the interval set in the Refresh Printer Information Task setting of the Scheduled Tasks section. The data is sent to the Lexmark Cloud Services server only if there is an alert change or toner level decrement. The data is not sent to the cloud server if there is only a page count change. However, even if there are no alert changes or page count changes, the data is sent to the cloud server once every 24 hours.

Native Agent

The Native Agent is a firmware agent that allows Lexmark Internet of Things (IoT)–ready printers to communicate with Lexmark Cloud Services. When enabled, it can enroll the Lexmark printer in Lexmark Cloud Services.

- Supports data collection and configuration for Lexmark IoT-ready printers. For more information on supported printer models, see Supported printer models on page 28.
- Make sure that the printer firmware version is 075.272 or later.
- Other printer applications and on-site software installations are not required.
- Enroll printers using the following:
    - Printer Enrollment Tool (PET)
    - Cloud-based pre-enrollment
    - Printer-based enrollment

- To enroll multiple printers with native agents simultaneously, use the Printer Enrollment Tool (PET). A pre-enrollment option is also available.

Printer Agent

The Printer Agent is an application configured and installed on a Lexmark printer to enroll that printer in Lexmark Cloud Services.

- Requires running the Printer Enrollment Tool in a network-connected computer to discover and enroll printers.
- Supports data collection and configuration in Lexmark printers with eSF version 3.0 or later (touch-screen models). For more information on supported printer models, see the .Supported printer models on page 28

Local Agent

The Local Agent is an application configured and installed on a host computer to enroll USB-connected printers in Lexmark Cloud Services.

- Supports data collection of the enrolled printers.
- Configuration deployment is not supported in printers enrolled through Local Agent.
- Does not support printer firmware update from Lexmark Cloud Services.
- Does not support reporting devices in Analytics.

Notes

- You cannot delete or deactivate an agent that is associated with printers that are enrolled in MPS Express or pending enrollment.
- If managing Lexmark printers with eSF version 3.0 or later (touch-screen models), then use either the Printer Agent or the Fleet Agent.
- If managing touch-screen or non-touch-screen models with firmware version 075.272 or later, then you can use Native Agent.
- If managing a group of Lexmark printers that include models that the Printer Agent, and Native Agent do not support, then use the Fleet Agent.
- If managing a group of Lexmark and third-party printers, then use the Fleet Agent.
- In the printer listing page, you can filter printers based on agent type.
- You can use only one agent to manage a printer.
- You can use the Native Agent, Fleet Agent, Printer Agent, and Local Agent to manage your fleet of printers. However, multiple agents cannot manage a printer at the same time.
- Local Agent supports Lexmark printers only.
- Local Agent can be installed in the Microsoft Windows operating system only.

Accessing the Fleet Management web portal

Open a web browser, access the Lexmark Cloud Services dashboard, and then do either of the following:

- From the dashboard, click the **Fleet Management** card.

  > **Note:** If the card is not available in the dashboard, then add the card. For more information, see Managing the dashboard on page 21.

- From your current web portal, click the grid icon on the upper-right corner of the page, and then click **Fleet Management**.

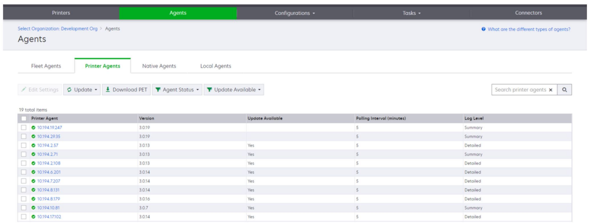
Understanding the Agents tab

The Agents tab of the Fleet Management portal lets you manage the agents that you use to discover and enroll printers in Lexmark Cloud Services.
The Agents tab has three sections.

- **Printer Agents**—Use this section to manage the Printer Agents that run on your printers.
- **Fleet Agents**—Use this section to manage the Fleet Agents that run on a server or host computer.
- **Native Agents**—Use this section to manage the Native Agents.
- **Local Agents**—Use this section to manage the Local Agents.

Managing the Printer Agents section

1. From the Fleet Management web portal, select an organization.
2. Click **Agents > Printer Agents**.



3. Do one or more of the following:

> **Note:** If no printer is enrolled, then enroll printers using the Printer Enrollment Tool. For more information, see Enrolling printers using the Printer Enrollment Tool on page 111.

- To edit the agent settings, select an agent, and then click **Edit Settings**.
- To update the Printer Agent, select an agent, and then click **Update > Update agent version**.

> **Note:** We recommend updating the Printer Agent to the current version to support all Cloud Fleet Management features.

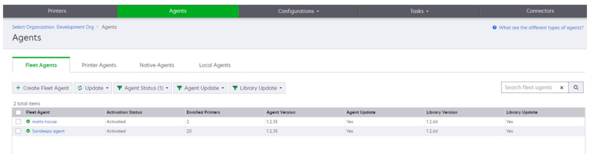
- To update the printer administrator credentials for the agent, select an agent, and then click **Update > Update agent access credentials**.

> **Notes**
> - This setting is also available when enrolling printers. For more information, see Enrolling printers using the Printer Enrollment Tool on page 111.
> - You can also update the agent credentials using the Embedded Web Server. For more information, see Accessing the Printer Agent on page 113.

- To download the Printer Enrollment Tool, click **Download PET**.
- To view printer agents with a specific status, click **Agent Status**, and then select a status filter.
- To view printer agents that require version update, click **Update Available > Yes**.

Managing the Fleet Agents section

1. From the Fleet Management web portal, select an organization.
2. Click **Agents > Fleet Agents**.



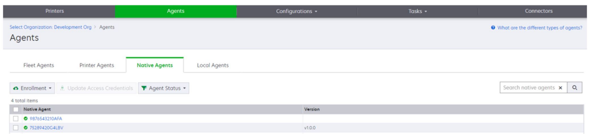
3. Do one or more of the following:

 > **Note:** If no agent is listed, then create a Fleet Agent. For more information, see Creating a Fleet Agent on page 114.

 - To create another Fleet Agent, click **Create Fleet Agent**.
 - To change the settings of a Fleet Agent, click the name of the Fleet Agent.
 - To update the Fleet Agent in your server, select a Fleet Agent, and then click **Update > Fleet Agent**.
 - To update the Fleet Agent with the latest supported printers, select a Fleet Agent, and then click **Update > Printer support library**.
 - To view Fleet Agents with a specific status, click **Agent Status**, and then select a status filter.
 - To view Fleet Agents that require update, click **Agent Update > Yes**.
 - To view Fleet Agents that require supported printers library update, click **Library Update > Yes**.

Managing the Native Agents section

1. From the Fleet Management web portal, click **Agents > Native Agents**.



2. Do one or more of the following:

 > **Note:** If no agent is listed, then enroll printers. Depending on the firmware version, enroll printers using either the Printer Enrollment Tool or the Native Agent enrollment process. For more information, see either "Using the Native Agent" section or Enrolling printers using the Printer Enrollment Tool on page 111.

 - To enroll a supported printer with a printer-generated enrollment code, click **Enrollment > Enroll Printer**, and then type the enrollment code.
 - To pre-enroll a supported printer, click **Enrollment > Pre-enroll > Pre-enroll printers**.

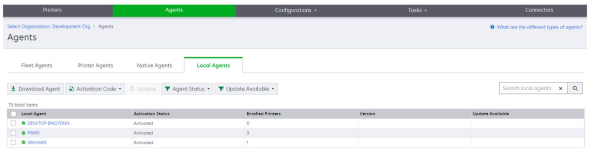
   - To view the enrollment code, click **Enrollment > Pre-enroll**.

     > **Note:** Lexmark Cloud Services assigns one pre-enrollment code for your fleet.

 - To update the printer administrator credentials, select a printer, and then click **Update Access Credentials**.
 - To view Native Agents with a specific status, click **Agent Status**, and then select a status filter.

Managing the Local Agents section

1. From the Fleet Management web portal, click **Agents > Local Agents**.



2. Do one or more of the following:

   > **Note:** If no local agent is listed, then download, install, and activate it.

   - To view the activation code, click **Activation Code > Generate activation code**.

     > **Note:** You can set the number of agents that can be code-activated.

   - To filter local agents based on their status, click **Agent Status**, and then select a status.
   - To identify local agents that have available updates, click **Updates Available > Yes**.
   - To update a local agent, select the agent, and click **Update**.

Updating agents for multiple organizations

The Agents tab of the Fleet Management portal also lets you update Printer Agents, Fleet Agents, and Local Agents across multiple organizations. If you have the Fleet Management Administrator role in all partner organizations and have child organization access, then you can update agents across multiple organizations.

> **Note:** You cannot include Native Agents while updating agents across multiple organizations.

To update one or more types of agents across multiple organizations, do the following:

1. From the Fleet Management web portal, select **All organizations**, and then click **Next**.
2. Click the **Agents** tab.
3. Click the various types of agents tab as required, and then select one or more agents from each of the types.

   > **Notes**
   > - Updating agents across all organizations is not supported for Native Agents.
   > - On the agents page, in the Organization column, you can view the organization to which each of the agents belong to.

4. Click **Update**.

   > **Note:** On updating agents across multiple organizations, it creates a bulk action task. For such bulk action tasks, the task status page shows Multiple in the Organization column. On clicking the Task ID of a bulk action task, you can view the page listing with all the printers, their respective organization, and their single organization Task ID.

Updating applications for all organizations

1. From the Fleet Management web portal, select **All organizations**, and then click **Next**.
2. From the printer listing page, select **Communicating**.

   > **Note:** A list of all printers communicating from all the organizations appears.

3. Select the IP address of all the connected printers, and then click **Apps**.
4. Update the applications.
5. To check the status of the update, click the Task tab.

> **Note:** You can filter the list of organizations and track the specific tasks for each organization.

Updating the firmware for all organizations

1. From the Fleet Management web portal, select **All organizations**, and then click **Next**.
2. From the printers tab, click **filter**, and then select **Firmware Update**.
3. From the list of printers, select **Communicating**.
4. From the list of printers, select the IP address of all the connected printers, and then click **Configure**.
5. Select **Update Firmware**.

> **Note:** You can choose when the firmware update starts. You can start it immediately or schedule it.

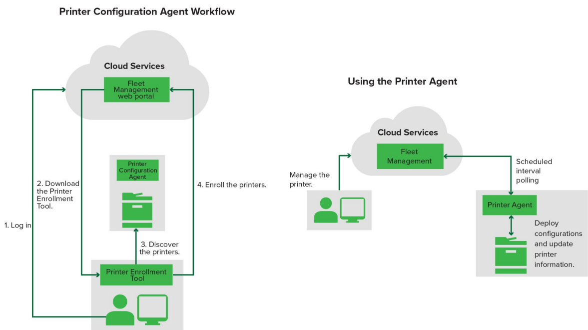
6. To check the status of the update, click the **Task** tab.

> **Notes**
> - You can filter the list of organizations and track the specific tasks for each organization.
> - Updating agents across multiple organizations creates a bulk action task. For such bulk action tasks, the task status page shows Multiple in the Organization column. Click the task ID of a bulk action task to view the page listing with all the printers, their respective organizations, and their single-organization task ID.

Adding printers

Implementation outline

The following workflow shows the general process for setting up printers in the Fleet Management web portal:



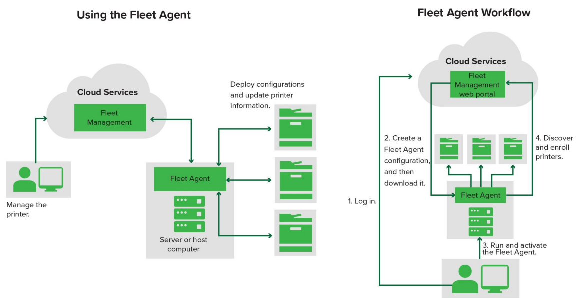
Using the Printer Enrollment Tool

1. Log in to the Lexmark Cloud Services website.
2. Download and run the Printer Enrollment Tool.
3. Discover the printers in your network.

4. Enroll the printers.
5. The printers are shown in the Fleet Management web portal.

Notes

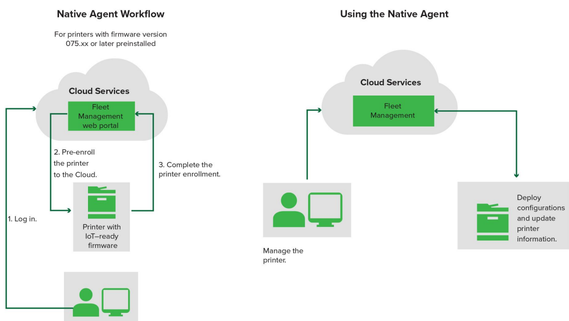
- For printers with firmware version 074.xx or earlier, the system installs the Printer Agent application in the printer. The Printer Agent polls the Lexmark Cloud Services website regularly to monitor configuration changes or other requests.
- For printers with firmware version 075.xx or later, the system uses the Native Agent to communicate with Lexmark Cloud Services.
- For more information on the firmware version, see Viewing the printer firmware version on page 58.



Using the Fleet Agent

1. Log in to the Lexmark Cloud Services website.
2. Create a Fleet Agent, and then download it.
3. Run and activate the Fleet Agent.
4. Discover and enroll printers.

Note: The Fleet Agent uses an open connection to Lexmark Cloud Services.



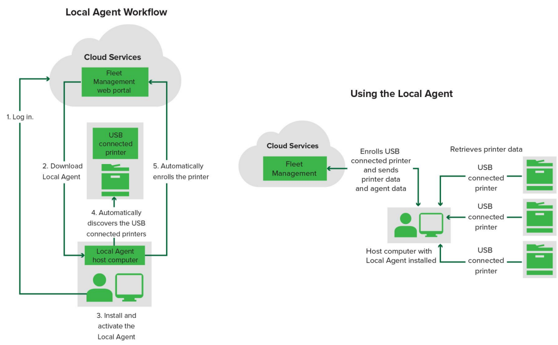
Using the Native Agent

Note: This workflow applies only to supported printers with firmware version 075.xx or later preinstalled in the factory. Printers manufactured in late 2019 or later that are not preinstalled with version 075.xx in the factory must be later upgraded to version 075.xx or later. For more information on supported printer models, see Supported printer models on page 28.

1. Log in to the Lexmark Cloud Services website.
2. Pre-enroll the printers.
3. From the Embedded Web Server or the printer control panel, enter the enrollment code to complete the enrollment.

Notes

- One enrollment code per organization is assigned for all supported printers.
- To skip the pre-enrollment process, obtain the enrollment code from the Embedded Web Server. For more information, see Enrolling printers from the Embedded Web Server on page 121.



Using the Local Agent

1. Log in to the Lexmark Cloud Services website.
2. Download the Local Agent.
3. Run and install the Local Agent.
4. Get the activation code from the Lexmark Cloud Services website and activate the Local Agent.

Note: When installed and activated, the Local Agent automatically enrolls the printers connected through USB.

After enrollment, the enrolled printers are listed on the Fleet Management web portal home page. The IP addresses appearing on the Fleet Management home page are the IP addresses of the host computers. From the Fleet Management web portal, you can create and deploy printer configurations, view printer information, and request printer logs.

Note: You cannot create and deploy configurations, and request printer logs for printers enrolled through Local Agent.

Using the Printer Enrollment Tool

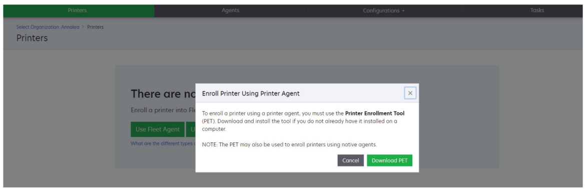
Downloading the Printer Enrollment Tool

Use the Printer Enrollment Tool (PET) to discover and enroll printers in the Lexmark Cloud Services website. Depending on the printer firmware version, the PET installs the Printer Agent application in the printer or uses the Native Agent.

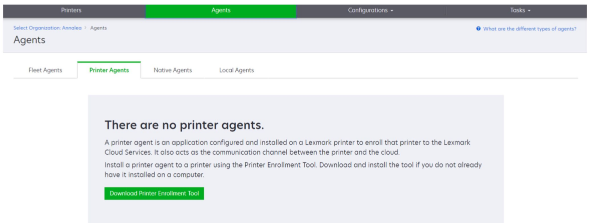
1. From the Fleet Management web portal, do one of the following:

   If you are enrolling devices in Lexmark Cloud Services for the first time, then you can download the PET by following the steps:

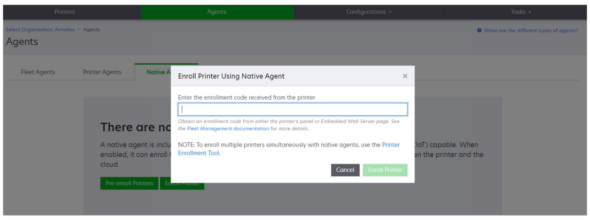
   - Click **Use Printer Agent > Download PET**.



- Click **Agents > Printer Agents > Download Printer Enrollment Tool**.

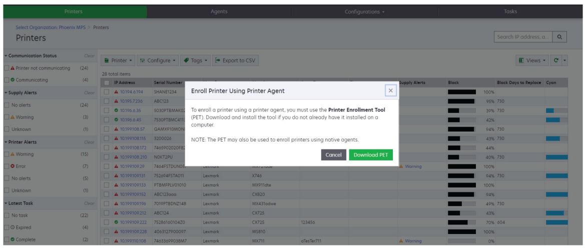


- Click **Agents > Native Agents > Enroll Printer >** use the **Printer Enrollment Tool**.

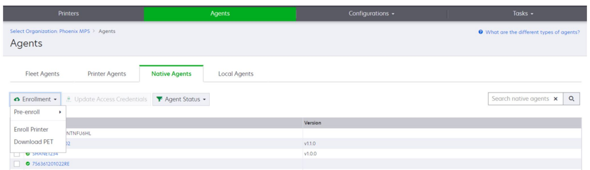


If you already have some devices enrolled, then you can download the PET by following the steps:

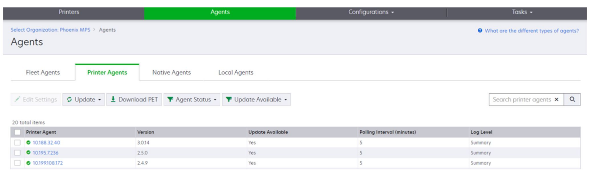
- Click **Printer > Enroll printer using > Printer agent > Download PET**.



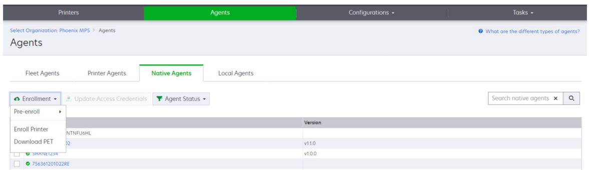
- Click **Printer > Enroll printer using > Native agent > Enrollment > Download PET**.



- Click **Agents > Printer Agents > Download PET**.



- Click **Agents > Native Agents > Enrollment > Download PET**.



2. Accept the End-User License Agreement (EULA).
3. Extract the zipped folder, and then locate the Printer Enrollment Tool launcher.

Configuring the Printer Enrollment Tool settings

The Printer Enrollment Tool is configured with the default settings. In some instances, there may be differences in the customer environment that require changes to the default configuration.

1. Run the Printer Enrollment Tool launcher.
2. A new browser window opens. Type the same e-mail address and password used to connect to the Lexmark Cloud Services website, and then click **Log In**.

> **Note:**
> - If you are already logged into Cloud Fleet Management, the new browser opens with the **E-mail** field already auto-filled with the details of the logged in user. Click **Next** to log in.
> - If there is any update available for the Printer Enrollment Tool, you have to update before proceeding further. For more information on updating the Printer Enrollment Tool, see "Updating the Printer Enrollment Tool" section.

3. Click on the upper-right corner of the page.
4. From the Discover and enroll native agent-capable printers using menu, select either **Printer agent** or **Native agent**.

> **Notes**
> - Native agent is selected by default.
> - Use Native agent to enroll IoT-capable printers, when enrolling printers of different models.
> - Use the Printer agent to enroll eSF-capable printers, which are not IoT-capable.

5. Specify the printer discovery and printer enrollment timeouts.
6. From the Logging detail section, select either **Summary** or **Detailed**.

> **Note:** Click **View current log** to view the current log details.

7. In the SNMP Settings menu, select a version.

> **Note:** The Printer Enrollment Tool uses mDNS for discovery. The SNMP settings are applied only when mDNS is disabled on the devices that are being discovered.

- For Versions 1 and 2c, select a community string type. To set a custom community string, select **Custom value**, and then type the string.
- For Version 3, select a security level, an authentication mode, and a privacy type.

8. From the Community String section, select **‘public’** or **Custom value**.

> **Note:** Enter the strings in the Custom value field.

9. Click **Save Settings**.

Updating the Printer Enrollment Tool

1. Run the Printer Enrollment Tool launcher.
2. Type the same e-mail address and password used to connect to the Lexmark Cloud Services website, and then click **Log In**.
3. On the Update Available window, click **Download New Version**.

> **Note:** The Update Available window appears only if there is a new version available.

4. On the Downloading Update window, click **Close Application**.

> **Note:** The update is downloaded in ZIP format.

5. Locate the ZIP folder, and extract the zipped folder.
6. Run the Printer Enrollment Tool launcher.
7. Type the same e-mail address and password used to connect to the Lexmark Cloud Services website, and then click **Log In**.

Enrolling printers using the Printer Enrollment Tool

The printers must be enrolled in the Lexmark Cloud Services website before you can manage them.

1. Run the Printer Enrollment Tool launcher.

> **Note:** For more information, see Downloading the Printer Enrollment Tool on page 108.

2. Type the same e-mail address and password used to connect to the Lexmark Cloud Services website, and then click **Log In**.
3. If you are managing multiple child organizations, then select an organization.

> **Note:** If only one organization is assigned to your account, then it is preselected.

4. Click **Next**, and then from the Printer Discovery section, select a discovery type.

- To search for all printers in your local network, select **Search local network**.
- To search for a specific IP address, subnet, range, or fully qualified domain name (FQDN), select **Advanced search**.

> **Notes**
> - The entries are not saved after the Printer Enrollment Tool is closed. To save your advanced search list, click **Export**. The list is saved in a CSV format.
> - To use an existing CSV file, click **Import**.

5. Click **Discover Printers**.

> **Notes**
> - If the settings are configured with SNMP v3 with authentication, then you are prompted for the SNMP credentials
> - If a firewall prompt appears, then click **Allow access**.

6. View the information, and then close the Printer Discovery dialog box.
7. From the Printer Enrollment section, select one or more printers.

> **Notes**
> - Printers from the Enrolled tab can be re-enrolled. Re-enroll the printer when it is not responding, or when the printer must be unenrolled from a different organization and enrolled in the current organization.
> - The Printer Enrollment Tool discovers Fleet Agent–managed printers, but they cannot be selected for enrollment.
> - The Printer Enrollment Tool discovers Native Agent–managed printers, but Native devices, enrolled in the current organization, cannot be selected for enrollment.
> - Depending on the firmware version, the printer may be enrolled using either the Printer Agent or Native Agent. For more information, see the Agent Type column.
> - We recommend using Lexmark Cloud Services to unenroll printers from their current organization before enrolling them in a new organization.

8. Click **Enroll Printers**.
9. In the Authentication for Secured Printers dialog box, do either of the following:
   - For secured printers, select the authentication type, enter the printer credentials, and then click **Apply Credentials**.
   - For unsecured printers, click **Skip This Step**.

> **Note:** Some printer models may have different authentication credentials configurations. Make sure that the authentication type set during enrollment in the Printer Enrollment Tool matches the authentication type configured in the printer. If the authentication types do not match, then the printer is not enrolled.

10. Close the Printer Enrollment Tool.

Notes

- Printers that have down-level firmware cannot be enrolled. The firmware on those printers must be updated manually. For more information, see Updating printer firmware from the Embedded Web Server on page 58.
- The enrollment process may take a few minutes to complete.
- The enrolled printers are added to the printer list on the main page of the Fleet Management web portal.
- It may take a few minutes for the enrolled printers to appear in the Fleet Management web portal.
- For more information on the unenrolled printers, click ⓘ.

Accessing the Printer Agent

The Printer Agent can be accessed from the printer's Embedded Web Server. You can view the enrollment status of the printer and poll for new events immediately without waiting for the polling interval to elapse.

Note: To access the printer Embedded Web Server, make sure that you are on the same network as the printer.

1. From the Fleet Management web portal, click **Printers**.
2. From the printers list, click the printer identifier.

   Note: For more information on setting the printer identifier, see Managing views on page 128.

3. From the Identification section, click **Open the printer's Embedded Web Server (EWS)**.
4. Depending on your printer model, from the Embedded Web Server, click **Applications** or **Apps**.
5. Click **Printer Configuration Agent**.
6. Do either of the following:
   - Click **Poll Now** to poll for new updates.
   - Click **Test Agent Connection** to check the following:
     - Network connectivity between the Printer Agent and Lexmark Cloud Services
     - Login access to the printer
     - Function access controls and permissions
   - Click **Update Credentials** to provide login credentials for secured printers.

   Note: We recommend running the **Test Agent Connection** to make sure that the agent can communicate to the Lexmark Cloud Services. If a connectivity issue is encountered, then see the Troubleshooting section.

Editing a printer agent

1. From the Fleet Management web portal, click **Agents > Printer Agents**.
2. Select one or more agents, and then click **Edit Settings**.
3. Set the polling interval and the log level.
4. Click **Save Settings**.

Updating the Printer Agent

Make sure that the printer has no unresolved errors, has no pending jobs, is in ready state, and is not being used.

1. From the Fleet Management web portal, click **Agents > Printer Agents**.
2. Select one or more agents, and then click **Update > Update agent version**.
3. Click **Continue**.

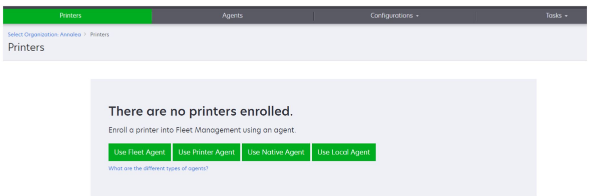
Using the Fleet Agent

Creating a Fleet Agent

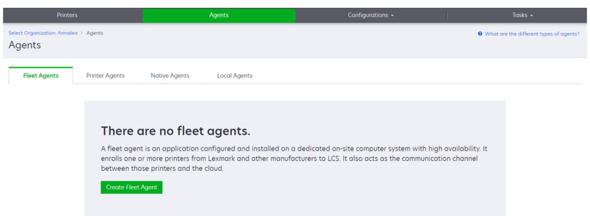
The Fleet Agent discovers and enrolls printers in the Lexmark Cloud Services website.

> **Note:** The Fleet Agent requires a server with high availability and constant Internet connection.

1. From the Fleet Management web portal, do either of the following:
    - Click **Use Fleet Agent > Create Fleet Agent**.



    - Click **Agents > Fleet Agents > Create Fleet Agent**.



2. Type a unique name and description.
3. From the Discovery Criteria tab, do one or more of the following:
    - To prevent the Fleet Agent from taking over the management of enrolled printers, disable **Transfer management of discovered printers that are already enrolled through another agent**.

> **Notes**
> - If the setting is enabled, then polling information from the Printer Agent is stopped.
> - The Printer Agent application remains in the printer.

- To search for all printers in your local network, set Search Type to **Search Local Network**.
- To search for or exclude a specific IP address, subnet, range, or fully qualified domain name (FQDN), set Search Type to **Advanced search**. Do one or more of the following:

  - From the Include tab, click **Add Discovery Criteria to Include**, and then type the printer information.
  - From the Include tab, click **Import**, and then browse to the csv or txt file.

    > **Notes**
    > - To view a sample file, click **Download sample file**.
    > - To overwrite the existing IP address, subnet, range, or FQDN in the discovery criteria, enable **Overwrite existing "included" discovery criteria**.

  - From the Exclude tab, click **Add Discovery Criteria to Exclude**, and then type the printer information.
  - From the Exclude tab, click **Import**, and then browse to the csv or txt file.

    > **Notes**
    > - To view a sample file, click **Download sample file**.
    > - To overwrite the existing IP address, subnet, range, or FQDNs in the discovery criteria, enable **Overwrite existing "excluded" discovery criteria**.

  You can also export or delete discovery criteria. From either Export or Import tab, select one or more addresses, and then click either **Export** or **Delete**.
- Select an SNMP profile.

4. From the SNMP Profile tab, create an SNMP profile. Do the following:
   a. Click **Create**, and then type a unique profile name.
   b. Select an SNMP version.

   > **Notes**
   > - For Versions 1 and 2c, type a community name.
   > - For Version 3, select a security level, an authentication mode, and a privacy type.

   c. Set the discovery timeout and number of retries.
   d. Click **Create SNMP Profile**.
5. From the Scheduled Tasks tab, set the Printer Discovery Task and Refresh Printer Information Task intervals.

> **Notes**
> - The Fleet Agent discovers and enrolls printers based on the Printer Discovery Task interval
> - The Fleet Agent scans the printers according to the interval set in the Refresh Printer Information Task setting of the Scheduled Tasks section. The data is sent to the Lexmark Cloud Services server only if there is an alert change or toner level decrement. The data is not sent to the cloud server if there is only page count change. However, even if there are no alert changes or page count changes, the data is sent to the cloud server once every 24 hours.

6. From the Other Settings tab, configure the Log level and Network utilization delay settings.

> **Notes**
> - Setting the Network utilization delay value below 250 (default) may impact the network performance. We do not recommend setting the value to zero.
> - The larger the delay, the longer the discovery takes to complete.

7. Click **Create Agent**.

Downloading the Fleet Agent

Before you begin, make sure that you have created a Fleet Agent. For more information, see Creating a Fleet Agent on page 114.

1. From the Fleet Management web portal, click **Agents > Fleet Agents**.
2. Click the Fleet Agent name, and then click **Installation Package > Download**.

> **Note:** To send the installation package link using e-mail, click **Installation Package > Email**, and then type an e-mail address.

3. Select an installation package type, and then click **Download Package**.

> **Notes**
> - Take note of the activation code.
> - The activation code is valid for 72 hours. If it expires before activating the agent, then generate a new activation code. From the Fleet Management portal, click **Agents > Fleet Agents >** select a Fleet Agent **> Generate activation code**.

Installing the Fleet Agent

Make sure that the Fleet Agent server and the printers are on the same network. The Fleet Agent also requires a server or host computer with high availability.

1. From a server or host computer, run the Fleet Agent installation package.
2. Accept the End-User License Agreement (EULA).

3. Enter the port number.

> **Notes**
> - The default port number is 80.
> - If port 80 is not available, then enter any available port, such as 8080 or 8088.

4. Click **Finish** to close the installation window, and launch the Fleet Agent on a web browser.

> **Note:** The Launch Lexmark Fleet Agent in Your Browser option is selected by default.

5. From the Fleet Agent page in the browser, enter the activation code.
6. If necessary, select **Use Proxy Settings**, and then provide the proxy information.
7. Click **Continue**, and then, if necessary, type an agent password.

> **Note:** If you provided an agent password, then the password is required to access the installed Fleet Agent.

8. Select **Discover and enroll printers immediately after activating this agent**.

> **Note:** The printers are automatically discovered and enrolled after activating the agent.

9. Click **Activate Agent**.

> **Note:** You can change the security setting, proxy settings, or agent password later by clicking on the upper-right corner of the Fleet Agent home screen. For more information, see Configuring the Fleet Agent server settings on page 117.

Configuring the Fleet Agent server settings

1. From a server or host computer, open the Fleet Agent. Do either of the following:
   - Click the Fleet Agent shortcut.
   - Open a web browser, and then type localhost.

   > **Note:** If the Fleet Agent uses a port other than port 80, then type localhost:*x* , where *x* is the port number.

2. From the home screen, do one or more of the following:
   - To configure the proxy settings, click **> Proxy Configuration**.
   - To protect the Fleet Agent with a password, click **> Create Password**.
   - To allow remote access to this Fleet Agent, click **> Update Security Setting**.

> **Note:** In the security setting, the Allow local host access only (Recommended) option is selected by default. This option prevents other computers on the network from accessing the Fleet Agent. Clear the option to grant access to other computers on the network.

Managing a Fleet Agent

1. From the Fleet Management web portal, click **Agents > Fleet Agents**.
2. Click a Fleet Agent, and then do one or more of the following:
    - To edit the Fleet Agent, click **Edit Agent**. For more information, see Editing the Fleet Agent on page 118.
    - To initiate printer discovery and enrollment, click **Discover & Enroll Printers**.
    - To download the installation package, click **Installation Package > Download**.
    - To refresh all printer information before the scheduled refresh task, click **More > Refresh all printer information**.
    - To deactivate the Fleet Agent, click **More > Deactivate Agent**.
    - To delete the Fleet Agent, click **More > Delete Agent**.
    - To request Fleet Agent logs, from the Log section, click **Request**.

> **Note:** It may take time for the logs to generate and make them available for download.

Editing the Fleet Agent

If there are changes to your discovery criteria, task schedule, log level, or server delay settings, then edit the Fleet Agent.

1. From the Fleet Management web portal, click **Agents > Fleet Agents**.
2. Click the agent name, and then click **Edit Agent**.
3. Configure the settings, and then click **Save Changes**.

Updating the Fleet Agent

1. From the Fleet Management web portal, click **Agents > Fleet Agents**.
2. Select one or more Fleet Agents, and then click **Update > Fleet Agent**.
3. Click **Continue**.

Using the Native Agent

Pre-enrolling printers

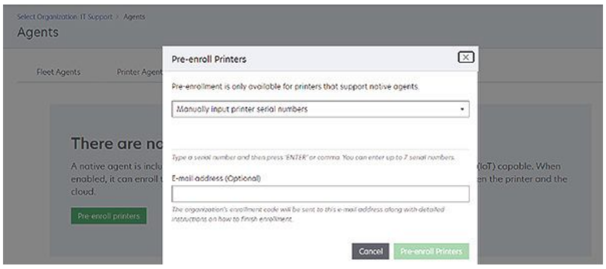
These instructions apply only to printers with firmware version is 075.xx or later preinstalled in the factory.

Note: To determine the printer firmware version, see Viewing the printer firmware version on page 58.

1. From the Fleet Management web portal, do one of the following:

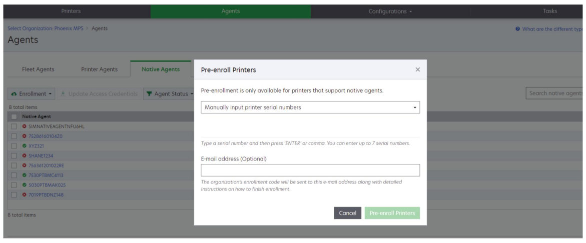
   If no devices are enrolled:

   - Click **Agents > Native Agents > Pre-enroll Printers**.

   If devices are already enrolled:

   - Click **Agents > Native Agents > Enrollment > Pre-enroll > Pre-enroll printers**.

2. From the Pre-enroll Printers dialog, do one of the following:

   - Select **Manually input serial number**, type the printer serial number, and then press **Enter**.
   - Select **Import printer serial number from file**, and then browse to the CSV or TXT file.

   Note: To receive the enrollment code and the complete enrollment instructions using e-mail, type your e-mail address.

3. Click **Pre-enroll Printers > Enrollment > Pre-enroll**.
4. Copy the organization’s enrollment code.

Note: For pre-enrolled devices, complete the enrollment process either from the Embedded Web Server or from the printer control panel.

Completing the printer enrollment from the Embedded Web Server

1. From the Embedded Web Server, do one of the following:

- Click **Settings > Cloud Services > Cloud Services Enrollment**.
- Click **Settings > Lexmark Cloud Services > Cloud Fleet Management**.

> **Note:** Make sure that Enable communication with Lexmark Cloud Services is selected.

2. In the Enrollment Code field, enter the enrollment code, and then click **Enroll Printer**.

Completing the printer enrollment from printer control panel

1. From the printer home screen, do one of the following:
    - Touch **Settings > Cloud Services > Cloud Services Enrollment**.
    - Touch **Settings > Lexmark Cloud Services > Cloud Fleet Management**.
2. From the Enable communication with Lexmark Cloud Services menu, touch **On**.
3. In the Enroll Printer field, enter the enrollment code, and then touch **OK**.

Enrolling printers from the printer control panel

These instructions apply only to the following conditions:

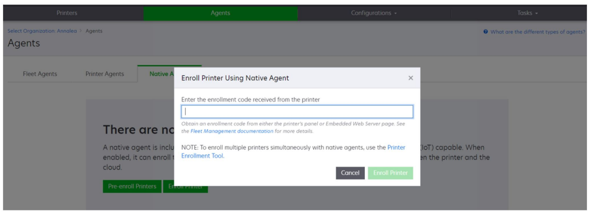
- You have not pre-enrolled the printer.
- You have not enrolled the printer using the Native Agent.
- The printer is manufactured and shipped with firmware 075.001 or later.
- The recommended firmware is 081.215 or later.

> **Note:** To determine the printer firmware version, see Viewing the printer firmware version on page 58.

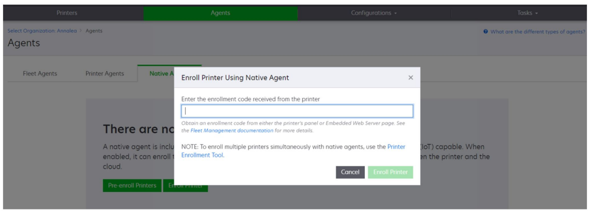
1. From the printer home screen, do one of the following:
    - Touch **Settings > Cloud Services > Cloud Services Enrollment**.
    - Touch **Settings > Lexmark Cloud Services > Cloud Fleet Management**.

> **Note:** To make the Cloud Services Enrollment option available, click **Security > Device Management > Cloud Services Enrollment**.

2. From the Enable communication with Lexmark Cloud Services menu, touch **On**.
3. From the Get Enrollment Code menu, touch **Get Code**, copy the enrollment code, and then touch **OK**.
4. From the Fleet Management web portal, do one of the following:
    - Click **Use Native Agent**, enter the enrollment code, and then click **Enroll Printer**.



- Click **Agents > Native Agents > Enroll Printer**, enter the enrollment code, and then click **Enroll Printer**.



Enrolling printers from the Embedded Web Server

These instructions apply only to the following conditions:

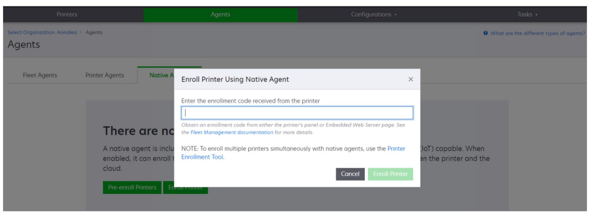
- You have not pre-enrolled the printer.
- You have not enrolled the printer using the Native Agent.
- The printer is manufactured and shipped with firmware 075.001 or later.
- The recommended firmware is 081.215 or later.

> **Note:** To determine the printer firmware version, see Viewing the printer firmware version on page 58.

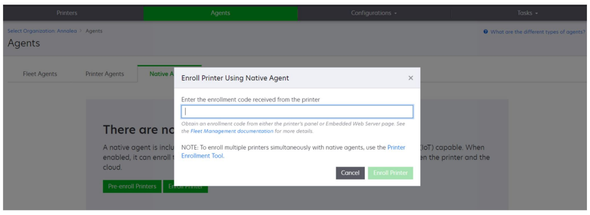
1. From the Embedded Web Server, do one of the following:
   - Click **Settings > Cloud Services > Cloud Services Enrollment**.
   - Click **Settings > Lexmark Cloud Services > Cloud Fleet Management**.

> **Note:** To make the Cloud Services Enrollment option available, click **Security > Device Management > Cloud Services Enrollment**.

2. Select **Enable communication with Lexmark Cloud Services**, and then click **Refresh**.
3. Click **Get Enrollment Code**, and then take note of the code.
4. From the Fleet Management web portal, do one of the following:
   - Click **Use Native Agent > Enroll Printer**, enter the enrollment code, and then click **Enroll Printer**.



- Click **Agents > Native Agents > Enroll Printer**, enter the enrollment code, and then click **Enroll Printer**.



Removing pre-enrolled printers

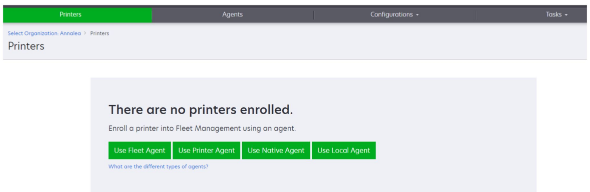
1. From the Fleet Management web portal, do either of the following:
    - Click **Agents > Native Agents > Enrollment > Pre-enroll > Remove pre-enrolled printers**.
    - Click **Printers > Select a specific printer > Remove pre-enrolled printers**.
2. Click **Remove**.

> **Note:** To remove an enrolled printer, see Unenrolling printers on page 141.

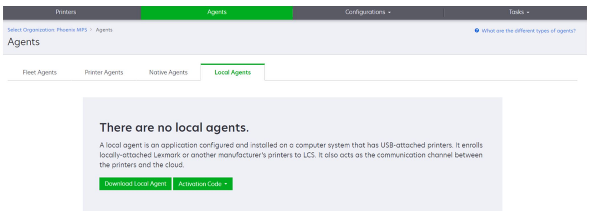
Using the Local Agent

Downloading the Local Agent

1. From the Fleet Management web portal, do either of the following:
    - Click **Use Local Agent**.



    - Click **Agents > Local Agents**.



2. Click **Download Agent**.
3. Select **Generate activation code.**

> **Notes**
> - Take note of the activation code.**Agents Local AgentsActivation CodeGenerate activation code**.
> - You can set the number of agents to be activated by the code.

4. Click **Download Agent**.

   > **Note:** This downloads the Windows x64 installer package.

5. To accept the End User License Agreement (EULA), click **Accept and Download**.

Installing the Local Agent

1. Unzip the installation package.
2. From the host computer, run the Local Agent installation package.
3. Accept the End-User License Agreement (EULA).
4. Click **Finish** to close the installation window.
5. From the Start menu, launch the Lexmark Local Agent application, and then enter the activation code.
6. Click **Activate Agent**.

> **Note:** After activation, the Local Agent starts collecting the details about the USB-connected printers. These printers get automatically enrolled in the Lexmark Cloud Services web portal.

Silent activation for Local Agent

Silent activation is used for mass installation of Local Agent.

1. Unzip the installation package.
2. Open the LocalAgentConfig.ini file.
3. Under the [IOT_HUB] block, add the CS_ACTIVATION_CODE parameter.
4. Enter the activation code generated from Lexmark Cloud Services as the value of the parameter.

   Sample code:

   ```
   [IOT_HUB]
      CS_ACTIVATION_CODE=ab23ftcd-12dt-edte-123hdtdk-ttrbd
   ```

5. Perform the installation steps. For more information, see Installing the Local Agent on page 0.

Refreshing printer information using the Local Agent

You can refresh printer information using the Local Agent. The printer must be communicating with the Local Agent through USB, and the Local Agent must be sending the printer information to Lexmark Cloud Services.

1. From the Fleet Management web portal, select the **Printers** tab.
2. From the Filters menu, click **Agent Type > Local**.
3. Select a printer.
4. Click **Printer > Refresh printer information**.

Notes

- Clicking **Refresh printer information** creates a task. To view the status of the task, click **Tasks > Status**.
- To know the details about a failed task, click the task ID, and then click the **Failed** hyperlink under the Status column.

Editing the Local Agent

You can edit the local agent to configure it, deactivate it, or delete it.

1. From the Fleet Management web portal, click **Agents > Local Agents**.
2. Click the name of the local agent, and then do any of the following:

   Edit an agent

   a. To edit a local agent, click **Edit Agent**.
   b. From the Log Level menu, select either **Summary** or **Detailed**.
   c. From the Polling interval menu, set the interval at which the Local Agent sends data to the cloud server.
   d. Click **Save Changes**.

   Deactivate an agent

   a. To deactivate a local agent, click **Deactivate Agent**.
   b. Click **Deactivate Agent**.

   Delete an agent

   a. To delete a local agent, click **Delete Agent**.
   b. Click **Continue**.

Editing multiple local agent settings from the Local Agents tab

1. From the Fleet Management web portal, click **Agents > Local Agents**.
2. Select one or more local agents.
3. Click **Edit Settings**.

> **Note:** If any of the selected local agents is not communicating, then a warning appears. Click **Continue** to apply the settings for the communicating agents only.

4. rom the Log Level menu, select either **Summary** or **Detailed**.
5. rom the Polling interval menu, set the interval at which the Local Agent sends data to the cloud server.

> **Note:** If you select multiple local agents, then by default, the log level value is Detailed and the polling interval value is 180.

6. Click **Save Changes**.

> **Notes**
>
> - A task is created in the Task inventory. The Local Agent must be connected to the cloud server to complete this task.
> - If any of the local agents is not communicating, then the task gets completed with errors. The configuration settings apply to the communicating agents only.

Updating the Local Agent

1. From the Fleet Management web portal, click **Agents > Local Agents**.
2. From the Updates Available menu, select **Yes**.
3. From the list that appears, select one or more Local Agents, and then click **Update**.

> **Notes**
> - You can also update the agent by clicking the agent name and then **Update agent version** in the Identification section.
> - A task is created in the Task inventory. The Local Agent must be connected to the cloud server to complete this task.

Requesting log collection for a Local Agent

1. From the Fleet Management web portal, select the **Agents** tab.
2. Click an activated Local Agent.
3. From the Log section, click **Request**.

> **Note:** An Upload local agent logs task is created.

4. Click **Download** to download the log file.

> **Notes**
> - The log file is downloaded in ZIP format.
> - The information included in the log files depends on the settings of the Local Agent.

Sample log file:

```
Thursday,January27 06:20:02 : tid=6936 :
UninstallLPMAService(139) : error=1060
Thursday,January27 06:21:13 : tid=10636 : LPMAMain(352) :
Lexmark Local Agent Service is started
Thursday,January27 06:24:57 : tid=10636 : LPMAMain(360) :
Lexmark Local Agent Service is stopped
Thursday,January27 06:25:51 : tid=7024 : LPMAMain(352) :
Lexmark Local Agent Service is started
Thursday,January27 06:27:06 : tid=7024 : LPMAMain(360) :
Lexmark Local Agent Service is stopped
Thursday,January27 06:27:11 : tid=14108 : LPMAMain(352) :
Lexmark Local Agent Service is started
Thursday,January27 11:41:08 : tid=3984 : LPMAMain(352) :
Lexmark Local Agent Service is started
Saturday,January29 01:45:02 : tid=4100 : LPMAMain(352) :
Lexmark Local Agent Service is started
```

Managing enrolled printers

Accessing the aggregate printer data view

The aggregate view shows all the enrolled printers of the Lexmark partner and all printers of the partner's customers. This feature is available only to partner administrators who are members of a Child Organization Access group which has the Fleet Management Administrator role.

Note: If you have the Fleet Management Administrator role in all partner organizations and have child organization access, then you can update agents across multiple child organizations. For more information, see Updating agents for multiple organizations on page 105.

1. From the Fleet Management web portal, in the Select Organization page, click **All organizations (view only)**.
2. Do any of the following:
    - Export the printer data. For more information, see Exporting fleet information on page 141.
    - Customize printer data shown using the left pane filters or the Views feature.
    - View and manage printers of the individual child organizations. From the Organization column, click the organization name. This link redirects you to the individual organization's Fleet Management web portal.

Managing filter groups

You can save searches or filters in the printer listing page for repetitive use.

Creating a filter group

1. From the Fleet Management web portal, select an organization.
2. On the printer listing page, select one or more filters.
3. Click **Save**.
4. In the Create Filter Group window, in the Filter group name field, type the name of the group, and then click **Save**.

> **Note:** After creating one or more filter groups, you can view the groups under the Select filter group menu.

Modifying an existing filter group

1. From the Fleet Management web portal, select an organization.
2. On the printer listing page, from the Select filter group menu, select the filter group that you want to modify.
3. Modify the existing filters.

   > **Note:** To modify an existing filter group, you can add more filters, remove existing filters, or do both.

4. Click **Save**.
5. In the Create Filter Group window, click **Save** to save the changes.

   > **Note:** To modify the name of a filter, type the name of the filter group in the Filter group name field, and then click **Save**.

Deleting an existing filter group

1. From the Fleet Management web portal, select an organization.
2. On the printer listing page, from the Select filter group menu, select the filter group that you want to delete.
3. Click **Delete**.
4. In the Delete Filter Group window, click **Delete**.

Changing the printer listing view

For more information, see Managing views on page 128.

1. From the Fleet Management web portal, click **Printers**.
2. Click **Views**, and then select a view.

   > **Note:** The selected view becomes the default view, and does not change when you log out from Lexmark Cloud Services.

Using Quick View

1. From the Fleet Management web portal, click **Printers**.
2. Click **Views**.
3. From the Quick View tab, in the Column 1 (printer identification) menu, select the identifier column.
4. From the Additional columns section, select the information that you want to show as a column.
5. Click **Apply**.

> **Note:** Quick views are not saved. The default view is applied when the user logs in again in Lexmark Cloud Services.

Managing views

You can customize the information that appears in the printer listing page. The following views are system generated. These views can be copied, but cannot be edited or deleted.

- **Configurations**—Shows configuration-related information such as last configuration, availability of firmware update, current firmware version, and last communication.
- **Meters**—Shows the Days to Replace column for supply items, which is calculated based on usage and predicts when the supply item must be replaced.
- **Operations**—Shows the serial number, model information, manufacturer, agent version, communication status, and task-related details for the printers.
- **Standard**—Shows standard information like model number, attached tags, asset tags, and supply alerts.
- **Supplies**—Shows the scan, copy, and fax counts. If you are using a color printer, then the copy count also distinguishes between mono and color counts.
- **Supplies coverage**—Shows supply-related information like lifetime coverage of each of the cartridge colors.
- **Managed**—Shows the printers that are managed by Lexmark, the supplies delivery contacts, and the business names.

Creating a view

1. From the Fleet Management web portal, click **Printers › Views**.
2. Click **Create view**.
3. Type a unique view name.
4. In the **Column 1 (printer identification)** menu, select the identification type.
5. From the **Available columns** section, select the information that you want to show as a column, and then click **>**.

   > **Note:** You can also add or remove columns from the **Selected columns** list by clicking and dragging the column into or out of the list.

6. To rearrange the column order, click **^** or **v**.
7. Click **Create View**.

   > **Note:** The created view is applied automatically, and becomes the default view.

Editing a view

1. Click **Manage views**.
2. Click a view name, and then configure the settings.
3. Click **Save Changes**.

> **Note:** You cannot edit system-generated views. The view that is created from this page does not become the default view.

Deleting views

1. Click **Manage views**.
2. Select one or more views, and then click **Delete**.
3. Click **Delete Views**.

> **Note:**
> You cannot delete system-generated views.
>
> If the current view is deleted, then the Standard system-generated view becomes the default view.
>
> Views are shared across child organizations, and a default view is stored for each user. If user A uses a view and user B deletes the view, then user A defaults back to the Standard system-generated view.

Copying a view

1. Click **Manage views**.
2. Select a view, and then click **Copy**.
3. Configure the settings.
4. Click **Create View**.

Viewing printer information

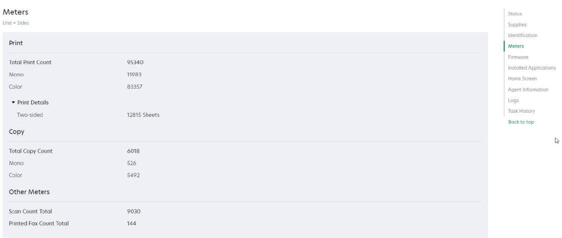
1. From the Fleet Management web portal, click **Printers**.
2. From the printers list, click the printer identifier.

> **Notes**
> - In the default view, the IP address is the printer identifier. For more information on setting the printer identifier, see Managing views on page 128.
> - To update the printer information, click **Refresh Information**.
> - To view the report on printer hardware statistics, click **View Report**.
> - To restart the printer, click **Restart**.
> - To show a notification on the printer control panel, click **Notifications**. For more information, see Sending notifications to the printer control panel on page 132.
> - To remove the printer from your organization, click **Unenroll**.

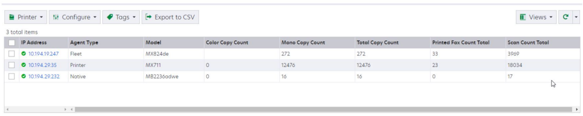
3. View the following printer information:

    - The date and time of the last poll or sync
    - The date and time that the printer was last restarted
    - The current printer status
    - Scan, copy, and fax counts

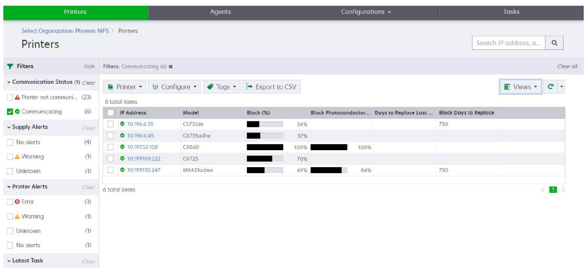
    > **Note:** The Meters section of the printer details page includes information related to scan, copy, and fax page counts.

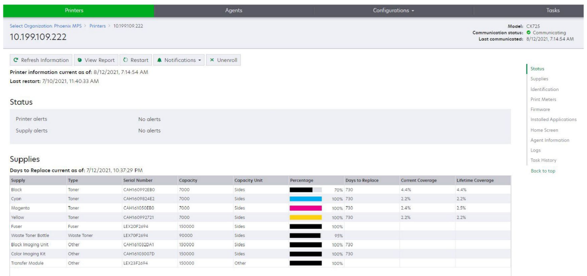
    > **Note:** In the printer listing page, you can include columns on color and mono copy count, total copy count, total scan count, and total printed fax count.

    - The current supplies status

        - You can create and customize the dashboard to view printer alerts and printer status by adding the Printer Communication Status card. Click the links on this card to access Cloud Fleet Management. You can view details about printers that are not communicating, agents that are not communicating, and agents that need credentials.
        - The printer listing page features several important information related to Days to  Replace.
        - Predictions are available for toner cartridges, and photoconductors.
        - The prediction is available for devices that are sending their data to Lexmark Cloud Services. The prediction date is based on the last data that were uploaded to the cloud.
        - No prediction data appears if there is no communication between the printer and Lexmark Cloud Services or if the Printer Agent version is outdated. Make sure that you update the Printer Agent to version 3.0 or later for this feature to work. If your device is enrolled with Native IoT Agent, make sure that you update to the latest firmware version.
        - Prediction for Days to Replace runs once a day, and is supported for Lexmark printers only. For a newly enrolled printer, it may take up to 48 hours for a prediction to be available.

- The Supplies section of the printer details page features a Days to Replace column for supply items. The values in the Days to Replace column are calculated based on usage and predicts when the supply item must be replaced. The prediction is available for all assets managed by Printer Agent, Fleet Agent, Native IoT Agent, and Local Agent in the Cloud Fleet Management.



- The printer identification information
  - To view and configure the printer using the Embedded Web Server, click **Open the printer’s Embedded Web Server (EWS)**.
  - To change the asset tag, location, contact information, printer name, and description, click **Edit**.
- The printer lifetime page counts

> **Note:** Printers reporting through a Fleet Agent now include blank pages in their mono page counts.

- The printer firmware version

> **Note:** To update the firmware version, click **Update available**. This option appears only when a firmware update is available. For more information, see Updating the printer firmware on page 139.

- The installed applications

> **Note:** You can start, stop, or uninstall applications. For more information, see Managing applications on page 136.

- The agent information
- The printer logs
  - To generate a log, click **Request > Request Log**.
  - You can request History Log, Embedded Solutions Log, Security Log, Fax Log, Last 10 Fax Logs, Last 10 Fax Error Logs, GZIP Logs, and MIB Walk.
  - Use MIB Walk for investigating missing data from non-Lexmark printers. This option is available only for printers reporting through a Fleet Agent.
- The event history information, such as the event type, date, time, duration, and status

Understanding diagnostic events

When the diagnostics events functionality is enabled for a partner fleet, Cloud Fleet Management services start collecting health data from printers regularly. This data is used to predict future failure and service actions to avoid printer downtime and avoid end-customer impact.

Note: The diagnostic events functionality is available only on request from Lexmark. This feature is not available for all.

Notes

- Diagnostic events are generated when there is a printer-related or supply-related alert. Even if the alert that triggered the event is resolved, the diagnostic event appears in the Cloud Fleet Management portal until expiry. If the alert is not resolved until the expiry, a new diagnostic event is triggered for the same alert.
- The printer listing page features a Diagnostic event column with warning links to the details.
- The printer details page also lists all the diagnostic events generated by the alerts. You can view the details about the diagnostic events in the Status section of the printer details page.

Viewing supplies and printer alerts

View errors and warnings about the printers and their supplies from the printer listing page.

1. From the Fleet Management web portal, click **Printers**.
2. From the printer listing page, view the supplies and printer alerts using the following:
    - Supply Alerts and Printer Alerts filters on the left navigation pane
    - Supplies view
    - Custom view containing the Supply Alerts and Printer Alerts columns

Note: To view more information about the alert, click the error or the warning from the Supply Alerts and Printer Alerts columns.

Sending notifications to the printer control panel

You can set any of the following notifications to appear on the printer control panel:

- Service has been scheduled
- Toner cartridge delivered
- Toner cartridge ordered
- Toner cartridge shipped

The notification appears on the printer control panel for 48 hours, or until the user clears it or another notification is sent.

Note: This feature is available only in some printer models. For more information, see Supported printer models on page 28.

1. From the Fleet Management web portal, click **Printers**.
2. Select one or more printers.

> **Note:** You can also configure individual printers using the printer information page. For more information, see Viewing printer information on page 129.

3. Click **Printer > Send notification to panel**.
4. Select a notification.
5. Click **Send Notification**.

Clearing notifications

1. From the Fleet Management web portal, click **Printers**.
2. Select one or more printers.
3. Click **Printer > Clear notification**.
4. Click **Clear Notification**.

> **Note:** Clearing notifications only clears the messages sent from Cloud Fleet Management.

Creating tags

A tag is a custom text that you can assign to printers. When you filter a search using a tag, only printers with that tag are shown.

1. From the Fleet Management web portal, click **Printers > Tags > Create tag**.
2. Type a unique tag name.
3. Click **Save**.

Assigning tags to printers

1. From the Fleet Management web portal, click **Printers**, and then select one or more printers.
2. Click **Tags**, and then select one or more tags.

   > **Note:** If no devices are selected, then the available tags are disabled.

3. Click **Apply**.

Using file import to tag printers

Users can import multiple IP addresses or serial numbers of associated printers in an organization and assign single or multiple tags to them. This feature helps users later identify and group devices in the portal based on customer requirements.

1. From the Fleet Management web portal, click **Printers**.
2. From the Tags menu, select **Tag printers using file import**.
3. From the Tag Printers Using File Import dialog box, do the following:

- Type the name of the tag in the Search text box, or select one or more tags from the list.
- Click Choose File to browse to the file that contains the printer serial numbers or IP addresses.

> **Notes**
> - The file size must not exceed 200KB.
> - The file must be in TXT or CSV format.
> - The file must have either IP Address or Serial Number as the header. The headers are not case-sensitive.
> - The file must have relevant data along with the required header.
> - The file must have valid IP addresses.
> - The file must not have blank lines.

Sample data for IP Address header

```
IP Address
10.195.2.10
10.4.5.100
10.194.8.182
```

Sample data for Serial Number header

```
Serial Number
50621094752gk
502706946HRCD
DUNES104SRL23
```

4. Click **Tag Printers**.

> **Notes**
> - If the list of IP addresses contains printers from both inside and outside the organization, then the Tag Printers Results Summary dialog box appears. The dialog box shows the number of printers that are tagged (inside the organization) and not tagged (outside the organization).
> - If the list of IP address contains printers only from the organization, then the Tag Printers Results Summary dialog box does not appear.
> - Even if a printer is already tagged, you can still add more tags to it.

Removing assigned tags

1. From the Fleet Management web portal, click **Printers**.
2. Select one or more printers.
3. Click **Tags**, and then clear one or more tags.
4. Click **Apply**.

Managing tags

1. From the Fleet Management web portal, click **Printers**.
2. Click **Tags > Manage tags**.
3. Do either of the following:
   - To delete tags, select one or more tags, and then click **Delete**.
   - To edit a tag, click a tag name, edit the tag, and then click **Save**.

Updating agent access credentials

If the enrolled printer communication status is Agent needs credentials, then update the agent access credentials.

Note: If the printers are managed using the Printer Agent, then the agent access credentials can be updated using the Embedded Web Server. For more information, see Accessing the Printer Agent on page 113.

The following steps are only applicable for Fleet Agent.

1. From the Fleet Management web portal, select a printer.
2. Click **Printer > Update agent access credentials**.
3. Select the authentication type for the printer administrator account, and then provide the credentials.
4. Click **Update Credentials**.

Deploying files to printers

You can upload VCC bundles (.zip), UCF settings files (.ucf), and eSF application files (.fls) to printers.

The Virtual Configuration Center (VCC) is a feature component of the device firmware that assists in managing device settings. It allows users to export settings from one device and then import that settings package into a different device. A user can also export a settings bundle, edit that package, and then import the modified settings bundle to a new device.

You can export or import a UCF file using the application interface.

Notes

- The file size must not exceed 50MB. For VCC bundles, the file size must not exceed 32MB.
- Firmware flash files are not supported.
- File and configuration deployment are not supported in some printer models. For more information, see Supported printer models on page 28.

1. From the Fleet Management web portal, click **Printers**.
2. Select one or more printers.
3. Click **Configure > Deploy apps and settings file**, and then browse to the file.
4. Click **Done**.

Notes

- To cancel the file upload, click **Cancel**.
- VCC bundles support settings files, certificates, licenses, and eSF applications. However, we do not recommend deploying eSF applications through VCC bundles.
- If the deployment of a VCC bundle fails, then update the printer information to make sure that Lexmark Cloud Services contains the latest information. From the printers list, select one or more printers, and then click **Printer > Refresh printer information**.
- After configuring a device, you can export the configuration file (VCC or UCF files) and then import it in Lexmark Cloud Services to deploy it to printers. The passwords which are part of the configuration file get stripped during export. You must edit the configuration file manually to add the passwords before importing them to Lexmark Cloud Services.

Managing applications

The Fleet Management web portal lets you manage the applications that are installed on the printers. Applications can be started, stopped, updated, or uninstalled.

Managing applications from the printer details page

1. From the Fleet Management web portal, click **Printers**.
2. From the printers list, click the printer identifier.

Note: For more information on setting the printer identifier, see Managing views on page 128.

3. From the Installed Applications section, select one or more applications.
4. Do any of the following:
   - To start the applications, click **Start > Start App**.
   - To stop the applications, click **Stop > Stop App**.
   - To remove the applications, click **Uninstall > Uninstall App**.
   - To update the applications, click **Update > Update**.

Notes

- Build-in application, or applications that came with the printer, cannot be removed or uninstalled using Lexmark Cloud Services.
- Only started applications can be stopped, and only stopped applications can be started.

Managing applications from the printer listing page

1. From the Fleet Management web portals, select two or more printers.
2. Click **Apps**, and then do any of the following:

Start applications

a. Click **Start > Continue**.
b. From the Start Apps window, select one or more applications.
c. Click **Start Apps**.

Stop applications

a. Click **Stop > Continue**.
b. From the Stop Apps window, select one or more applications.
c. Click **Stop Apps**.

Update applications

a. Click **Update > Continue**.
b. From the Update Apps window, select one or more applications.
c. Click **Update Apps**.

Uninstall applications

a. Click **Uninstall > Other apps > Continue**.
b. Do either of the following:
    - To uninstall Cloud Print Management applications, click **Cloud Print Management**.
    - To uninstall specific applications, click **Other apps**, and then select one or more applications.
c. From the Uninstall Apps window, select one or more applications.
d. Click **Update Apps**.
e. Click **Uninstall Apps**.

Notes

- Build-in application, or applications that came with the printer, cannot be removed or uninstalled using Lexmark Cloud Services.
- Depending on the printer model, applications may have different names but perform the same function.

Configuring the printer proxy settings

If the organization is using an authenticated proxy server for communication, then configure the proxy server settings and credentials in the printer Embedded Web Server.

Note: The proxy credentials setting is available only in some printer models.

1. From the Embedded Web Server, do either of the following:

    Note: For more information on identifying the printer eSF version, see Viewing the Embedded Solutions Framework (eSF) version on page 59.

For printers with eSF version 5.0 or later

1. Click **Apps > App Framework Configuration**.

2. From the Framework Configuration section, clear **Use printer's proxy settings**.
3. From the HTTPS: section, type the proxy server host name or IP address.
4. From the Proxy Credentials section, type the user name and password.
5. Save the settings.

For printers with eSF version 4.0 or earlier

1. Depending on your printer model, do any of the following:
    - Click **Settings > Apps > Apps Management > System > Configure**.
    - Click **Settings > Device Solutions > Solutions (eSF) > System > Configure**.
    - Click **Settings > Embedded Solutions > System > Configure**.
2. Clear **Use printer's proxy settings**.
3. From the HTTPS section, type the proxy server host name or IP address.
4. From the Proxy Credentials section, type the user name and password.
5. Save the settings.

Customizing the printer home screen

Note: Make sure that the printer firmware is updated to the latest version. Also, make sure that you have updated to the latest version Printer Agent or Fleet Agent.

1. From the Fleet Management web portal, click **Printers**.
2. Click the printer IP address, and then from the Home Screen section, do one or more of the following.
    - To view the current application arrangement, click **View home screen**.
    - To restore the default home screen view, click **Restore**.
    - To customize the home screen applications, do the following:
        1. Click **Customize**, and then do one or more of the following:
            - To add an application, click , select an application, and then click **Add**.

              Note: To search for an application, in the Search field, type the application name.
            - To move up an application, select an application, and then click .
            - To move an application as first in the list, select an application, and then click .
            - To move down an application, select an application, and then click .
            - To move an application as last in the list, select an application, and then click .
            - To move an application to another page, select an application, and then click .

> **Note:** When the application is moved to another page, the application is added at the bottom of the destination page.

- To add a space between two applications, click ➕ **> -BLANK SPACE- > Add**, and then move the space to its location.

> **Notes**
> - You can move the space the same way you move the applications.
> - While using Solution Composer in older Lexmark models, some workflows may appear at the end of the eSF applications list in the printer home screen. The home screen has the correct placement of the workflow, but Customize Home Screen and View Home Screen show the workflows at the end of the list. This issue is due to a firmware limitation so currently, there is no solution.

- To hide an application from the home screen, select an application, and then click 🗑.
- To manage the application on the succeeding page, click **Other Pages**.
- To restore the default home screen, click ↶ **> Reset**.

2. Click **Save Home Screen**.

> **Notes**
> - Depending on your printer model, each home screen page can have up to 4, 8, 10, or 15 items. An item can be an application or a space.
> - If the number of items exceeds the limit, then the items are added on the succeeding page.
> - You can add -BLANK SPACES- to fill in a page, and have an application move to the succeeding page.

Updating the printer firmware

You can update the firmware version of the printers in your organization. The Fleet Management web portal uses a product service that communicates with Lexmark Cloud Services to check for new firmware releases. The system checks for firmware updates daily. When a new firmware version is found, it is compared against the actual firmware installed on the printers, and then the firmware status is updated.

Using the printer listing page

1. From the Fleet Management web portal, click **Printers**.
2. Select one or more printers.
3. Click **Configure > Update firmware**.
4. In the Update Firmware dialog, do either of the following:

> **Note:** The Update Firmware dialog shows the number of printers that have firmware updates available.

  - Select **Now**.
  - Select **Specific date and time**.

1. Make sure that **Specific date and time** is selected.
2. In the Scheduled task name field, type the name of the task.
3. Configure the start date and start time.
4. Select the time zone.
5. In the Task window section, configure the time window for starting the task of all the selected printers.

5. Click **Update Firmware**.

> **Notes**
>
> - The task window guarantees that no new firmware update jobs are submitted after the window expires. However, if an existing firmware update job started before the end of the window, then it will not be stopped and will be allowed to complete.
> - Any firmware update job that gets launched in the specified window will expire.
> - If you are updating firmware for many printers, then make sure that the task window is large enough.
> - When you schedule a firmware update, a task is created. You can view the details of the task in the Tasks section.

Using the printer details page

1. From the Fleet Management web portal, click **Printers**.
2. Click the printer IP address.
3. From the Firmware section, click **Update available**.

   > **Note:** This setting is available only when a firmware update is available.

4. Click **Update Firmware**

Exporting eSF application versions

Using this feature, administrators can export a report listing all the eSF applications installed and corresponding versions for a fleet. The fleet can be from a single organization or all organizations. Customers can determine eSF application version for an entire fleet and use Cloud Fleet Management to update the eSF applications or bundle.

1. From the Fleet Management web portal, click **Printers**.
2. From the Export to CSV menu, select **Export the installed application versions**.

> **Note:** You can open the CSV file in Microsoft Excel. The sheet contains static columns listing the versions of the various applications installed in the fleet. The report contains all the applications that the device reported to the Lexmark Cloud Services.

Unenrolling printers

1. From the Fleet Management web portal, click **Printers**.
2. Select one or more printers, and then click **Printer > Unenroll printers**.
3. Click **Unenroll printers**.

Notes

- Unenrolled printers are removed from the Fleet Management web portal printer listing.
- If the printer is enrolled using the Fleet Agent and is online, then unenrolling the printer removes it from the printer listing page. On the next scheduled Fleet Agent discovery, the printer is enrolled again. To remove the printer from the printer listing page permanently, delete the printer from the Include tab or exclude the printer from the discovery criteria.
- If the printer is enrolled using the Local Agent, then unenrolling the printer removes it from the printer listing page. On the next scheduled polling, the printer is enrolled again. To remove the printer permanently, unenroll the printer from the printer listing page or printer details page. Also, unplug the device from the Local Agent host computer.
- If the printers are enrolled using the Printer Agent, then the Printer Agent remains installed on the unenrolled printers.
- Any configuration that is deployed remains installed after unenrolling the printers.
- If Cloud Print Management applications are installed, then they remain installed and continue to work after the printer is unenrolled.
- Unenrolling of printers cannot be stopped. For more information, see Managing tasks on page 166.

Exporting fleet information

1. From the Fleet Management web portal, select a view, or filter the printer information.
2. Click **Export to CSV**.

Note: This feature exports all information present in the current view and current filters that are applied.

Apps Management

Managing installed applications

In Lexmark Cloud Services, you can manage all the applications installed in various enrolled printers. To access the Apps page, from the Fleet Management web portal, click **Printers > Apps**.

In the Apps page, you can use the following filters:

- **Available**—Filters the applications that have available updates.
- **No update available**—Filters the applications that have no updates.
- **Required**—Filters the applications that require immediate update.

To export the application report in CSV format, click **Export App Version**.

Notes

- In the Apps page, the Printers column shows the number of printers that have the applications installed.
- The Built-in On Printers column shows the number of printers that have the applications already built-in.
- The App Update column shows whether an application has an available update. It also shows if an application requires an immediate update.
- The Printers With Update column shows the number of printers that have an update available or require an immediate update.

Managing an application from the Apps page

1. From the Apps page, select an application.
2. From the applications details page, select one or more printers.

   Note: The application details page lists the printers where the application is installed.

3. Do any of the following:
   - **Start**—Starts the application.
   - **Stop**—Stops the application.
   - **Uninstall**—Uninstalls the application.
   - **Update**—Updates the application.
   - **Export to CSV**— Exports the report of the application in CSV format.

   Notes
   - In the application details page, the App Update column shows whether an associated printer has an available update. It also shows whether a printer requires an immediate update.
   - The Installed Version column shows the version number of the application installed in a particular printer.
   - The App Update Version column shows the version number of the available application update.
   - The Minimum Version column shows the minimum version of an application required by the printer.

Using a mobile device

Accessing the Cloud Fleet Management portal

You may access the portal using one of the following supported mobile web browsers:

- Apple Safari version 13 or later
- Google Chrome version 83 or later
- Samsung Internet version 9.2 or later

1. From your mobile device, open a supported web browser.
2. Access the Lexmark Cloud Services website.
3. Type your e-mail address and password.

> **Note:** If the system is configured to have federated access, then you are redirected to the login page of your organization.

4. Tap **Fleet Management**, and then, if necessary, select an organization.

Navigating the home page

> **Note:** Some features of the Fleet Management portal are not available on the mobile version. To enable all features, view the portal on a web browser for desktop.

- To change the organization, depending on the screen size, tap either **Select Organization** or **> Select Organization**.

  > **Note:** This feature is available to Partner Administrators and Organization Administrators that manage multiple organizations.

- To view all managed printers, do one of the following:
  - Tap **Managed Printers**.
  - Depending on the screen size, tap either **Printers** or **> Printers**.
- To view printers with communication errors, tap **Communication Errors**.
- To view printers with alerts, tap **Printer Alerts**.
- To view printers with supply alerts, tap **Supply Alerts**.
- To view printers that require firmware updates, tap **Firmware Updates**.
- To send your comments or suggestions, depending on the screen size, tap either **Feedback** or **> Feedback**.
- To view the desktop version of the portal, depending on your web browser, do one of the following:
  - On the upper-left corner of the display, tap AA **> Request Desktop Website**.
  - On the lower-right corner of the display, tap **> Request Desktop Site**.

Managing printers

1. From the Cloud Fleet Management portal, tap **Managed Printers**.

> **Notes**
> - The mobile device screen resolution determines the number of columns shown.
> - Rotating your mobile to landscape, depending on the screen size, shows up to eight columns.
> - To sort the printer list, tap the column name.
> - To configure the information to show for each column, tap .

2. Tap a printer, and then tap **Details**.

   To narrow down the list, do one of the following:

   - In the Search field, type a printer IP address, and then tap .
   - Tap , and then select one or more filters.

3. Do one or more of the following:

   - View printer identification, communication status, page counts, and event history.
   - Refresh the printer information.
   - Reboot a printer.
   - View printer and supply alerts.
   - Send a panel notification. From the Panel Notifications section, select a notification, and then tap **Send Notification**.
   - Clear panel notifications.
   - View agent information. For printers that are managed using a Fleet Agent, tap **Go to Fleet Agent** to manage the Fleet Agent. For more information, see Managing Fleet Agents on page 144.

Managing Fleet Agents

1. From the Cloud Fleet Management portal, tap **> Fleet Agents**.

   To narrow down the list, do one of the following:

   - In the Search field, type a Fleet Agent name, and then tap .
   - Tap , and then select one or more filters.

2. Tap a Fleet Agent, and then tap **Details**.
3. Do one or more of the following:

   - View agent status, version information, agent settings, and system host.
   - To initiate printer discovery and enrollment, tap **Discover & Enroll Printers**.
   - To update the Fleet Agent or the printer support library, from Version Information section, tap **Update Available > OK**.

     > **Note:** The Update Available button shows only if an update is available.

   - View printer discovery schedule.
   - View event history.

Updating the firmware

1. From the Cloud Fleet Management portal, tap **Firmware Updates**.
2. Tap the printer, and then tap **Details**.
3. From the Identification section, tap **Update Firmware > Update Firmware**.

Managing resources and configurations

Adding files to the resource library

The resource library is a collection of firmware files, UCF files, printer settings, and applications that are imported to Fleet Management. These files can be associated with one or more configurations.

1. From the Fleet Management web portal, click **Configurations**.
2. Click **Resource Library > Create** or **Create Resource**.
3. Type the resource name and description.
4. Select the resource type.
    - **UCF file**

      Click **Choose File**, and then browse to the file.
    - **Settings bundle**

      Click **Choose File**, and then browse to the file.
    - **Firmware**

      Type the URL link or the build name, and then click **Verify**.

      > **Note:** To obtain the URL link or the build name, contact the Lexmark Customer Support Center.
    - **Imported app**

      Click **Choose File**, and then browse to the file.
5. Click **Create Resource**.

Managing the Resource Library

Editing a Resource

> **Note:** You cannot edit resources that are assigned to a configuration.

1. From the Fleet Management web portal, click **Configurations › Resource Library**.
2. Click a resource name, and then edit the name or description.
3. Click **Save Changes**.

Deleting Resources

> **Note:** You cannot delete resources that are assigned to a configuration. If the configuration that references the resource is deleted, then the resource can be deleted.

1. From the Fleet Management web portal, click **Configurations › Resource Library**.
2. Select one or more resources, and then click **Delete**.
3. Click **Delete Resources** to confirm.

Downloading Resources

Note: To view resources by type, click **Type**, and then select the resource type.

1. From the Fleet Management web portal, click **Configurations › Resource Library**.
2. To download an application resource, click the resource name, and then click **Download the imported app** for this resource.
3. To download printer settings, click the resource name, and then click **Download the Settings bundle** for this resource.

Creating a configuration

A configuration is composed of firmware, applications, and printer settings (UCF or settings bundle) that can be deployed to a printer or a group of printers. When you create a configuration, that new configuration is universal and could apply to all printer models. Lexmark Cloud Services determines what elements of a component apply to each printer model, except for settings files that are deployed to all printer models.

1. From the Fleet Management web portal, click **Configurations > Configurations**, and then click **Create** or **Create Configuration**.
2. Type a unique configuration name and description.
3. Do any of the following:

Add firmware

- To use the recommended firmware for all printer models, from the Firmware tab, select **Update all models to the recommended firmware version**.
- To use firmware from the resource library, click **Select Firmware**, select one or more firmware resources, and then click **Select Firmware**.

  Note: For more information, see Adding files to the resource library on page 145

- To upload firmware, do the following:

  1. Click **Upload Firmware**.
  2. Type the resource name and description.
  3. Type the URL or the build name, and then click **Verify**.

     Note: To obtain the URL or the build name, contact the Lexmark Customer Support Center.

  4. Click **Upload Firmware**.
  5. Do either of the following:

     - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
     - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

       Note: To cancel the configuration, click **Cancel**.

You can set the firmware component to **Update all models to the recommended firmware version** and also contain one or more specific firmware resources. A specific firmware resource applies only to a small set of printers. When using multiple firmware resources, the following behaviors can be observed:

- If a configuration contains only the **Update all models to the recommended firmware version** setting, then printers with firmware older than the recommended level are updated. Printers with firmware at the recommended version or newer are not updated.
- If, aside from the setting, a configuration also contains specific firmware resources, then all printers that match the models in the specific firmware are updated. All other printers are updated to the recommended firmware version.
- If a configuration contains only specific firmware resources, then all printers that match the models in the specific firmware are updated. All other printers are not updated.

Note: If a specific firmware resource is a downgraded version, then all the eSF applications are removed. The built-in applications are restored to the requested down-level firmware. The Printer Agent is also deleted, and the printer must be enrolled again in Cloud Fleet Management.

Add applications

- To add applications, do the following:

  1. From the Apps tab, click **Select Apps**.
  2. Select one or more applications, and then click **Next**.

     Notes
     - To view the information about the application, click **More Info**.
     - If Cloud Scan Management and Translation Assistant are coexisting along with Card Authentication, then these applications must be selected in the Card Authentication permissions. This action makes the applications accessible from the printer control panel.
     - When creating a configuration for Cloud Print Management, Translation Assistant, or Cloud Scan Management applications, make sure that you configure the Pluggable Authentication Module setting properly. If the printer is not managed by another authentication application, then enable this setting. This action allows Cloud Authentication to be used as the main authentication application that manages the printer security.
     - If the printer has another authentication application managing its security, then make sure to disable the Pluggable Authentication Module setting.
     - The Cloud Print Management applications may not work with some authentication applications. For more information on the limitations, see the *Cloud Authentication Readme File*.

  3. Click **Done**.
  4. If necessary, click the application name, and then configure the application settings.

     Note: Some application settings cannot be modified from the Fleet Management web portal. To configure these settings manually, access the configuration page for the application from the printer Embedded Web Server. For more information, see the Administrator's Guide for the application. If you select Cloud Print Management, then you must configure the Pluggable Authentication Module setting to make Cloud Authentication as the primary authentication application.

     a. Expand **Cloud Print Management** settings.

b. rom the Basic settings section, select **Enable pluggable authentication module**.

5. Do either of the following:

    - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
    - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

    > **Note:** To cancel the configuration, click **Cancel**.

- To upload applications, do the following:

    1. From the Apps tab, click **Upload App**.
    2. Type the resource name and description.
    3. Click **Choose File**, and then browse to the file.
    4. Click **Upload App**.
    5. Do either of the following:

        - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
        - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

        > **Note:** To cancel the configuration, click **Cancel**.

Add printer settings files

- To use printer settings from the resource library, do the following:

    1. From the **Printer Settings Files** tab, click **Select Settings File**.
    2. Do either of the following:

        - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
        - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

        > **Note:** To cancel the configuration, click **Cancel**.

- To upload printer settings, do the following:

    1. From the **Printer Settings Files** tab, click **Upload Settings File**.
    2. Type the resource name and description.
    3. Select a resource type.
    4. Click **Choose File**, and then browse to the file.
    5. Click **Upload Settings File**.
    6. Do either of the following:

        - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.

- **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

  > **Note:** To cancel the configuration, click **Cancel**.

> **Note:** To change the order of the settings deployment, drag the setting up or down the list. This function is applicable only for settings in a nondeployed configuration.

Configure printer settings

Importing Variable Settings File

1. From the **Variable Settings File** menu, select **Import**.

   > **Notes**
   > - From the **Variable Settings File** menu, you can also **Export** or **Remove** an existing CSV file.
   > - To export, from the **Variable Settings File** menu, select **Export**. This downloads the existing CSV file in your local folder.
   > - To remove, from the **Variable Settings File** menu, select **Remove**, and then click **Remove File**. This disables all the settings that was configured by the CSV file.

2. Browse for the CSV file, and click **Open**.
3. On successful import, the **Printer Settings** section displays a summary of the CSV file, which includes **Total asset records**, **Total variables**, and **Asset Identifier**.

   > **Notes**
   > - If the CSV file is not valid, then the **Import Variable Settings CSV File**. window displays the validation results. The window provides a detailed information about each of the errors.
   > - If a variable setting is deployed to a setting of a printer which is not mentioned in the CSV file, then the particular setting will have the default value activated.
   > - If you try to import a variable setting CSV file in a configuration which already has one, any missing column is flagged on the **Import New Variable Settings CSV file** window. You may **Cancel** the import or **Turn Off and Continue** with the import of the new CSV file.
   > - On selecting **Turn Off and Continue**, the setting for the particular column head is reverted to the default value.
   > - A single configuration only supports one CSV file. If you have more than one CSV file with different assets, we recommend you to merge the CSV files and import a single one.
   > - If variable settings is selected and the printer is included in the CSV file, then the variable settings will be deployed successfully. However, if the same configuration is deployed to a printer, not listed in the CSV file, then the system will apply the value that was manually appended in the **Printer Setting** field instead.

4. Navigate to the particular settings, and select it.

   > **Note:** You can configure one or more settings using the CSV file.

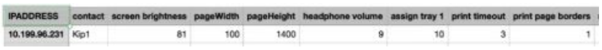
5. Click  for the particular setting.

> **Note:** If the CSV file is not imported successfully, then remains disabled.

6. From the **Select a variable setting from the list** menu, select a value, click **Continue**.

   > **Notes**
   >
   > - Before selecting a value, we recommend you to click for a particular setting to learn about the default value and the value range.
   > - The drop-down list features the name of the column-head of the CSV file.
   > - The CSV file must either have a column head named as **IPADDRESS**, **HOSTNAME**, or **SERIALNUMBER**. These column heads acts as asset identifier. Each subsequent column in the header row of the variable file is a user-defined replacement variable setting name. The name must only consist of alphabet, space, underscore, and hyphen.
   > - On selecting a value from the drop-down list, you are actually mapping the value of the column to a particular **IPADDRESS** or **SERIALNUMBER**, **HOSTNAME** of a printer.

   Sample CSV file for variable settings

IPADDRESS	contact	screen brightness	pageWidth	pageHeight	headphone volume	assign tray 1	print timeout	print page borders
10.199.96.231	Kip1	81	100	1400	9	10	3	1

   Consider a scenario in which for **Asset Tag** setting, you select **control** from the **Select a variable setting from the list** menu. In this scenario, the printer with the **IPADDRESS 10.199.96.231** will have **Kip1** as the **Asset Tag**.
7. Do either of the following:

   - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
   - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

     > **Note:** To cancel the configuration, click **Cancel**.

Creating a configuration without importing a Variable Settings File

- To modify the printer settings according to the requirements of the configuration, do the following:

  1. From the **Printer Settings** tab, select .
  2. Expand the settings category to navigate to a particular setting.

     > **Note:** To search for a particular setting, type the name of the setting in the search box. The search result shows all the paths in the tree that navigate to the particular string.

  3. Select or enter the values for the settings.

     > **Note:** To view the summary of the modified settings, click .

4. Do either of the following:

    - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
    - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

    > **Note:** To cancel the configuration, click **Cancel**.

Login Methods

> **Note:**
>
> - For Login Methods, the minimum recommended version of Fleet Agent must be 2.1.7 or later.
> - The Login Methods settings are supported by printers with eSF version 5.0 or later.

1. From the **Login Methods** tab, select **Activate Login Methods**.
2. Click **Public Permissions**.
    a. In the **Public Permissions** section, configure the following:

    > **Note:** You must create at least one login method before removing Public Access Controls.

    - **Function Access**—Select the printer functions to be given access.
    - **Administrative Menus**—Select the administrative features to be given access.
    - **Device Management**—Select the device management features to be given access.
    - **Apps**—Select the printer applications to be given access.
3. Click **Local Methods**.
    a. In the **Local Methods** section, configure the following:
    - **Add Login Methods**—From the **Add Login Methods** menu, select any of the following:

        > **Note:** Configure each of the following as required.

        - **Username and Password**
        - **Username**
        - **Password**
        - **Pin**
    - **Add New Group**
        - You can add a new group and provide access controls as per the requirement.
        - To edit an existing group, click the name of the group name.
        - To delete an existing group, click for that particular group.
4. Click **Network Methods**.
    a. In the **Network Methods** section, configure the following:
    - **Add Login Methods**—From the **Add Login Methods** menu, select any of the following:

        > **Note:** Configure each of the following as required.

        - **LDAP**—Configure the following:
            - **Setup Name**
            - **Required User Input**
            - **Server Address**
            - **Server Port**
            - **Permissions**
        - **LDAP+GSSAPI (Kerberos required)**—Configure the following:
            - **Setup Name**
            - **Server Address**
            - **Server Port**
            - **Permissions**
        - **Kerberos 5**—Select any of the following and configure accordingly:
            - **Generate Simple Kerberos File**
            - **Import Kerberos File**
            - **Disable Reverse IP Lookups**
            - **Kerberos Permissions**

5. Click **Other Methods**.
    a. In the **Other Methods** section, configure the following:
        - **Cloud Authentication**—Selects cloud authentication as the authentication method for the groups.
        - **Card Authentication**—Selects card authentication as the authentication method for the groups.
6. Click **Additional Settings**.
    a. In the **Additional Settings** section, configure the following:
        - **Set Default Login Methods**
        - **Login Restrictions**
        - **Miscellaneous**

    b. Click **Accept**.

    > **Note:** Click **Reset to Default** to restore the values to default values.

7. Do either of the following:

    - **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
    - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.

    > **Note:**
    > - To cancel the configuration, click **Cancel**.
    > - For more information on each of the settings, see *Embedded Web Server Administrator's Guide*.
    > - For **Login Methods**, make sure the firmware version is 2.1.x or later.
    >
    > .

- If a configuration contains only the **Update all models to the recommended firmware version** setting, then printers with firmware older than the recommended level are updated. Printers with firmware at the recommended version or newer are not updated.
- If, aside from the setting, a configuration also contains specific firmware resources, then all printers that match the models in the specific firmware are updated. All other printers are updated to the recommended firmware version.
- If a configuration contains only specific firmware resources, then all printers that match the models in the specific firmware are updated. All other printers are not updated.

> **Note:** If a specific firmware resource is a downgraded version, then all the eSF applications are removed. The built-in applications are restored to the requested down-level firmware. The Printer Agent is also deleted, and the printer must be enrolled again in Cloud Fleet Management.

Importing a settings bundle

You can import a settings bundle that contains information on **Printer Settings** or **Login Methods**, or both.

1. On the **Create Configuration** page, click **Import Settings Bundle**.
2. Select either of the following sources:
   - **File upload**—Choose a settings bundle from your disk.

     > **Note:** The file must be in ZIP format.

   - **Resource Library**—Select a settings bundle from the Resource Library.

     > **Note:** For more information on adding resources to the resource library, see Adding files to the resource library on page 145

3. Click **Continue**.
   The bundle is validated, and the **Import Settings Bundle** window categorizes information based on the type of configuration.

   > **Note:**
   > - Only new settings and existing settings with a different value will be imported to the configuration.
   > - For Login Methods, only new settings and existing settings with different values are imported.
   > - Settings that are unsupported or have invalid values are not imported. Click the links to view the detailed reports.
   > - For each type of configuration, you can click the messages to view the reports.
   > - Based on the validation, you can clear **Printer Settings** or **Login Methods** to exclude it from the configuration.

4. Click **Import Settings Bundle**.

> **Note:** If the settings bundle that you export from the Embedded Web Server contains invalid account details with special characters, then Lexmark Cloud Services will exclude these user details during the import process.

Managing configurations

1. From the Fleet Management web portal, click **Configurations**.
2. Click **Configurations**.
3. To delete configurations, select one or more configurations, and then click **Delete > Delete Configurations**.

   > **Note:** Deleting configurations does not remove them from printers to which they are already deployed.

4. To copy a configuration, do the following:

a. Select a configuration, and then click **Copy**.
b. Type a unique configuration name.
c. Select the organization where you want to copy the configuration to.

> **Note:** This setting is available only when you are managing multiple organizations.

d. Select **Edit configuration after copy**.

> **Note:** This setting is available only when you are copying to the same organization.

e. Click **Copy Configuration**.
f. Configure the settings.
g. Click **Save Changes**.

> **Notes**
> - Deployed configurations cannot be edited, but can be copied and saved as a new editable configuration.
> - If a configuration contains resources, such as firmware, applications, and settings files, and is copied to the same organization, then those existing resources are used. If the configuration is copied to a different organization, then those resources are copied to the destination organization.

5. To set a default configuration, select a configuration, and then click **Set as Default**. The default configuration is assigned to newly enrolled printers automatically. To remove the configuration as the default configuration, select the configuration, and then click **Remove Default**.
6. On the Configurations page, view the following columns:
   - **Last Editor**—Shows the user who last edited the configuration
   - **Latest Published Version**—Shows the latest published version of the configuration.
   - **Publisher**—Shows the name of the user who published the configuration.
   - **Date Published**—Shows the date when the configuration was published.

Editing or copying a published configuration

1. From the Fleet Management web portal, click **Configurations**.
2. Select the configuration that you want to edit or copy.
3. Do either of the following:

   Create a draft

   a. Click **Create New Draft > Create New Draft**
   b. Edit the details.
   c. Do any of the following:
      - **Save as Draft**—Save a draft version of the configuration. A configuration in its draft status cannot be deployed to a printer.
      - **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.
      - **Delete**

   > **Note:** To cancel the configuration, click **Cancel**.

Copy a configuration

a. Click **Copy Configuration**.
b. From the Copy Configuration window, type the name of the configuration and select the configuration of the organization that you want to copy.
c. Click **Copy Configuration**.
d. If necessary, from the new configuration page, edit the details.
e. Do any of the following:

- **Save as Draft**—Save a draft version of the configuration. A configuration in draft status cannot be deployed to a printer.
- **Publish**—Publish a configuration. In the Publish Configuration window, type the version notes, and then click **Publish Configuration**.
- **Delete**

> **Note:** To cancel the configuration, click **Cancel**.

Deploying configurations to printers

Deploying a configuration to printers sends the configuration to the cloud server, and updates the printer during the next scheduled poll or sync.

> **Note:** Configuration deployment may not be supported in some printer models. For more information, see Supported printer models on page 28.

1. From the Fleet Management web portal, click **Printers**, and then select one or more printers.
2. Click **Configure > Deploy configuration**.
3. From the Deploy Configuration window, select a configuration, and then click **Deploy Configuration**.

> **Notes**
>
> - You can only deploy the published configurations.
> - The list of configurations is sorted according to the last modified date, with the most recent configurations listed at the top of the list.
> - Published configurations cannot be edited, but can be copied and saved as a new draft.
> - When a configuration is deployed, there is an implicit order of deployment to the printer. Firmware is deployed first. Applications are deployed second, in the same order that they appear in the configuration. Settings files are deployed last, in the same order that they appear in the configuration.
> - If the configuration contains applications and the organization is using an authenticated proxy server, then configure the printer proxy server settings. For more information, see Configuring the printer proxy settings on page 137.

Assigning and deploying speed upgrade

You can upgrade the speed of your printer (pages per minute) by purchasing a speed upgrade kit. Apart from upgrading the speed, all other functionalities remain the same.

Notes

- Firmware version 230.347 or later is required.
- To access the speed upgrade feature, you have to be a partner administrator and a Fleet Management administrator.
- Fleet Agent version 2.1.18 or later is supported.
- Upgrading the speed is not supported by Local Agent.

The following speed upgrades are available:

- 25 ppm **>** 35 ppm
- 35 ppm **>** 45 ppm
- 35 ppm **>** 55 ppm
- 45 ppm **>** 55 ppm

1. From the Fleet Management web portal, click **Printers**, and then select one printer.
2. Click **Configure > Assign and deploy speed upgrade**.

   Note: If your printer does not meet the requirements of a speed upgrade, you may encounter one or more of the following error messages:
   - **Agents need credentials**
   - **Agent is not communicating**
   - **The printer does not support the task**
   - **The agent does not support the task**
   - **Printer Firmware out of date. Update before continuing.**
   - **The printer does not supports the task because it is managed or pending management.**
   - **<Fleet, Native, Printer> agent out of date**

3. On the **Deploy Speed Upgrade** window, in the **Upgrade code** field, enter the code, and then click **Next**.

   Notes
   - To access the speed upgrade code, contact your Lexmark representative.
   - In the **Deploy Speed Upgrade** window, you can view the serial number and model name of the printer that you are upgrading.
   - When you click **Next**, the **Deploy Speed Upgrade** window also displays upgrade details like new model name and new speed.

4. Click **Deploy**.

Notes

- After deployment, a task is created. The task appears as **Speed upgrade** under the **Type** column.
- To view more details about the task and the code, click **Speed upgrade** under the task type.

Performing configuration policy conformance and enforcement

Assigning a configuration

You can assign a configuration to one or more printers.

1. From the Fleet Management web portal, click **Printers**, and then select one or more printers.
2. Click **Configure > Assign Configuration**.
3. In the Assign Configuration window, search for the configuration, and then click **Assign Configuration**.

> **Notes**
> - You can assign configuration only to Lexmark printers enrolled through a Fleet Agent, Native Agent, and Printer Agent.
> - The Fleet Agent must be version 1.3.49 or later. The Native Agent firmware must be version 230.216 or later. The Printer Agent must be version 4.1.4 or later.
> - After assigning a configuration, you can see the name of the configuration under the Assigned Configuration column.

Unassigning a configuration

1. From the Fleet Management web portal, click **Printers**, and then select one or more printers.
2. Click **Configure > Unassign Configuration**.
3. From the Unassign Configuration window, click **Unassign Configuration**.

Checking the conformance of a printer

You can check the conformance of a printer against an assigned configuration.

1. From the Fleet Management web portal, click **Printers**, and then select one or more printers.
2. Click **Configure > Check conformance**.

> **Note:** A task is created. The Status column shows the result of the conformance check.

Enforcing assigned configuration

If a conformance check fails, then you can still enforce an assigned configuration to one or more printers.

1. From the Fleet Management web portal, click **Printers**, and then select one or more printers.
2. Click **Configure > Enforce assigned configuration**.

Note: A task is created. The Status column shows the result of the conformance check.

Managing notifications

Creating a notification policy

You can create notification policies for printers. Users receive an email when the policy requirement is met. The notification email includes printer toner details, asset tag, fleet agent information, and other relevant details.

1. From the Fleet Management web portal, click **Notifications > Notification Policies**.
2. Select **Supplies**, **Printer Information**, or **Fleet Agents**.

   For supplies

   a. On the Notification Policies page, click **Create**.
   b. Configure the following:

      - In the Policy name field, type the name of the policy.
      - In the Policy type menu, select one of the following:
        - **Toner**
        - **Fuser**
        - **Transfer Module**
        - **Waste Toner Bottle**
        - **Maintenance Kit**
        - **Photoconductor**
      - In the “Notify when percentage remaining is of” section, set the percentage at which the notification is sent.
      - In the Applies To section, select either of the following:
        - **All printers in this organization**—Apply the policy to all printers in the organization.
        - **Only printers with specific tags**—Apply the policy to printers with specific tags applied from Cloud Fleet Management.
          - In the “Apply the policy to printers with the following tags” field, type the tags, and then click **Add**.
      - In the “Notify the following email addresses when the conditions of this policy are met” field, type the recipient email addresses, and then click **Add**.

        Notes
        - Make sure that the email address is valid.
        - You can type an email address from outside your organization.
      - In the “Additional information to include in the email notification (Optional)” field, type the additional information that you want to include in the email.
      - Select **Include notification data in a .json file as an attachment** to include the JSON file in the email.

   c. Click **Create Policy**.

> **Note:** The JSON file attached to the notification email helps partners to use email processing automation to process the attachment for any existing workflow.

For printer information

a. On the Notification Policies page, click **Create**.
b. Configure the following:

- In the Policy name field, type the name of the policy.
- In the Policy type menu, select **Last data refresh** or **Last communicated**.
- In the “Notify when data has not been refreshed after” or “Notify when a printer has not communicated for” section, set the number of days to send the notification.
- In the Applies To section, select either of the following:

    - **All printers in this organization**—Apply the policy to all printers in the organization.
    - **Only printers with specific tags**—Apply the policy to printers with specific tags applied from Cloud Fleet Management.

        > **Note:** You can add up to 10 tags.

- In the “Notify the following email addresses when the conditions of this policy are met” field, type the recipient email addresses, and then click **Add**.

    > **Notes**
    > - You can add up to 10 email addresses.
    > - Make sure that the email address is valid.
    > - You can type an email address from outside your organization.

- In the “Additional information to include in the email notification (Optional)” field, type the additional information that you want to include in the notification email.
- Select **Include notification data in a .csv file as an attachment** to include the CSV file in the notification email.

c. Click **Create Policy**.

> **Notes**
> - Policies related to printer information are executed during the daily batch process.
> - The body of the notification email can contain information about 15 printers only. For more than 15 printers, download the CSV file that is attached with the notification email.
> - For notifications for more than 15 printers, the CSV file is attached to the notification email, even if the user has not selected the “Include notification data in a .csv file as an attachment” option.

For fleet agents

a. On the Notification Policies page, click **Create**.
b. Configure the following:

- In the Policy name field, type the name of the policy.
- In the Policy type menu, select **Last communicated**.
- In the “Notify when an agent has not communicated for” section, set the number of days to send the notification.

- In the “Notify the following email addresses when the conditions of this policy are met” field, type the recipient email addresses, and then click **Add**.

  > **Notes**
  > - You can add a maximum number of 10 email addresses.
  > - Make sure that the email address is valid.
  > - You can type an email address from outside your organization.

- In the “Additional information to include in the email notification (Optional)” field, type the additional information that you want to include in the notification email.
- Select **Include notification data in a .csv file as an attachment** to include the CSV file in the notification email.

c. Click **Create Policy**.

Duplicating a notification policy

1. On the Notification Policies page, select an existing notification policy.
2. Click **Duplicate**.
3. On the Create Notification Policy page, enter the details.

   > **Note:** For more information on configuring the notification policy, see Creating a notification policy on page 0.

4. Click **Create Policy**.

> **Note:** Apart from the policy name, make sure that you edit other details on the Create Notification Policy page. You cannot create a duplicate of an existing policy just by changing the policy name and keeping the other deciding parameters the same.

Deleting a notification policy

1. On the Notification Policies page, select the policy that you want to delete.
2. Click **Delete > Delete Policy**.

Viewing the notification history

Notification history is a rolling 30-day history of all email notifications sent to a particular organization.

1. From the Fleet Management web portal, click **Notifications > Notification History**.
2. Select **Supplies** or **Printer Information**.
3. Use the following filters for the notification history.

   For supplies

   - Model
   - Policy Type
   - Supply

For printer information

- Policy Type
- Model

Note: You can search for notifications using the printer serial number, asset tag, and email address.

Understanding MPS Express

Adding printers to MPS Express

MPS Express is a program that allows partners to sign up with Lexmark for consumables maintenance. For more information on Managed Print Services offerings, contact your Lexmark representative.
Before you begin, make sure that:

- The printers are enrolled in Lexmark Cloud Services. For more information on fleet management and enrolling printers, see "Fleet Management" chapter.
- The printers meet the eligibility criteria for MPS Express. For more information on eligibility criteria, see Adding printers to MPS Express on page 0.

Scenario 1: The Child Organization does not have the MPS Express entitlement

- The child organization is created for MPS Express.
- The child organization is not yet entitled to MPS Express.

Solution
Entitle the child organization to MPS Express. For more information, see Adding printers to MPS Express on page 0.
Scenario 2: The supply delivery contact does not exist

- Child organization is entitled to MPS Express.
- No existing supplies delivery contact.

Solution
Create a supplies delivery contact and assign it to the appropriate printers. For more information, see Adding printers to MPS Express on page 0.
Scenario 3: The supplies delivery contact is not yet assigned

- Child organization is entitled to MPS Express.
- Required supplies delivery contact exists.
- Supplies delivery contact not assigned to printers.

Solution
Assign a supplies delivery contact to the appropriate printers. For more information, see Adding printers to MPS Express on page 0.
Entitle child organization to MPS Express

entitling-child-organization-mps-server

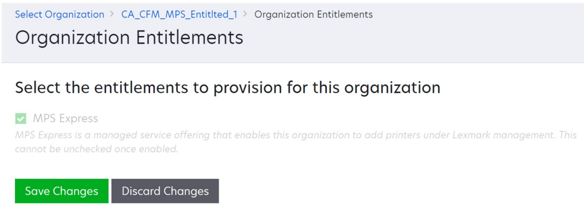
1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Account Management** card.

> **Note:** If the card is not visible on the dashboard, then click on the upper-right corner of the page, and then click **Account Management**.

3. Select the parent organization which contains the child organization, and then click **Next**.
4. Click the **Child Organizations** tab.
5. Click the child organization name that you want to entitle to MPS Express.

> **Note:** For more information on managing child organization, see Managing the Child Organization Access Group on page 66.

6. From the Organization menu, click **Organization Entitlements**.
7. Select MPS Express, and then click **Save Changes**.



Important Note: You cannot undo organization entitlement to MPS Express. Contact your Lexmark Customer Operations Specialist or MPS Offer Manager to remove the MPS entitlement from a child organization.

Managing contacts

manage-contact-mps

1. From the Fleet Management web portal, click **Printer > Managed Print Services > Manage Contacts**.
2. On the Contacts page, do any of the following:

Create a contact

a. On the Contacts page, click **Create**.
b. Complete the contact details form, and then click **Create Contact**.

Import a contact

a. On the Contacts page, click **Import**.

> **Note:** If there are no existing contacts, then click **Import Contacts**.

b. From the Import Contacts window, click **Choose File** to browse for the contact file.

Notes

- The contact file must be either a CSV or a TXT file. Even if the file is a TXT file, the data must be in CSV format.
- You can download the sample file to view the format.
- The contact file must have all the columns and in the same sequence as mentioned in the sample file. If there is no data for a particular column, then you can leave it blank. Do not delete any column.
- The data for each of the columns must be valid. For instance, the Country code must not have any symbols. It only supports numerics. If you are using a text editor to edit the CSV file, then you must enclose data within " " to insert a comma in between. For instance, if you want to insert a comma between two values which are A and B, then it must be “A, B”. This is not required if you are using a spreadsheet to edit the data as spreadsheet saves the file in the applicable format.
- In a single file, you can import a maximum of 300 contacts.
- You must save the CSV file in UTF8 format to handle different non-ASCII characters.

c. Click **Import Contacts**.

Note: If the data in the contact file is valid, then the Import Contacts Results window displays **Contacts imported** Contacts are added one after another in sequence. Depending on the number of contacts, the upload process can take several minutes to complete.

Error messages

If the data in the contact file is not valid, an Import Contacts Results window appears. This window displays the error messages. On clicking the error messages, you can get the details of the error. The following are the types of errors messages:

- **Contacts already exists**—Shows the row number, first name, and last name of each contact that already exists in the organization.
- **Contacts not imported**—Shows the row number range of the contacts that are not imported because of either System error or Import canceled.
  - **System error**—Occurs when there is an error incurred by the system.
  - **Import canceled**—Occurs when the user cancels the upload process.
- **Contacts with missing or invalid information**—Shows the row number, column, and reason for not importing the contact.

Edit a contact

a. On the Contacts page, click the name of an existing contact.
b. Edit the contact information.
c. Click **Update Contact**.

Duplicate a contact

a. On the Contacts page, select a contact.
b. Click **Duplicate**.
c. Click **Create Contact**.

Delete a contact

a. On the Contacts page, select a contact.
b. Click **Delete**.

c. Click **Delete Contact**.

> **Note:** You cannot delete a contact that is assigned to a printer.

Create and assign a supplies delivery contact

create-and-assign-supply-delivery-contact-list

1. From the Fleet Management web portal, select one or more printers.
2. Click **Printer > Managed Print Services > Create and assign new supplies delivery contact**.
3. In the Create and Assign Supplies Delivery Contact window, enter the name, contact information, and shipping address details of the new contact.
4. Click **Create and Assign**.

Assign supplies delivery contact

assign-supply-delivery-contact

1. From the Fleet Management web portal, select one or more printers.
2. Click **Printer > Managed Print Services > Assign supplies delivery contact**.
3. In the Assign Supplies Delivery Contact window, search for the contact name.

   > **Note:** You can filter or search by business name or city.

4. Select the contact from the search results.
5. Click **Assign Contact**.

Add printers to MPS Express

1. From the Fleet Management web portal, select one or more printers.
2. Click **Printer > Managed Print Services > Add to MPS Express**.

   Printer Eligibility Status

   The eligibility information is provided:

   - **Eligible**—Shows the number of printers eligible for MPS Express.

     > **Note:** You can add printers only if their status is Eligible. Printers with any other eligibility status cannot be added to the MPS Express program.

   - **Printer already managed**—Shows the number of printers that are already managed.
   - **Printer pending management**—Shows the number of printers that already have a pending management request.
   - **Printer failed registration**—Shows the number of printers that failed to register with Lexmark Cloud Services. You must contact Lexmark Technical Support for assistance.
   - **Model not supported**—Shows the number of printer models that are not supported. For help, contact your Lexmark Customer Operations representative.
   - **Lifetime page count exceeds maximum allowed**—Shows the number of printers which have exceeded the maximum lifetime page count limit to qualify for MPS Express. For help, contact your Lexmark Customer Operations representative.
   - **Lifetime page count missing**—Shows the number of printers with an unknown lifetime page count. These printers are missing a lifetime page count value for verifying eligibility for MPS Express. To fix this issue, you can update the associated agent or

the printer firmware, or unenroll and re-enroll the printer. If the lifetime page count is still missing, contact Lexmark Technical Support for help.
    - **No supplies delivery contact assigned**—Shows the number of printers which have no supplies delivery contact assigned.
    - **Associated with down-level fleet agent**—Shows the number of printers which have lower versions of fleet agent than the required version. You must upgrade your Fleet Agent from the agents tab before adding these printers to the MPS Express program.

> **Note:** On clicking the printer eligibility statuses, you can view the serial numbers and models of the non-eligible printers.

3. Click **Continue**.
4. Accept the terms of service.
5. Click **Add to MPS Express**.

> **Notes**
>
> - In the printer listing page, you can use the Business name, Lexmark Managed, and Supplies Delivery Contact columns for information related to entitled organizations. You can also enable all these columns by selecting the Managed view from the Views menu.
> - If you are part of the parent organization, then you cannot access Add to MPS Express. You can only add printers to MPS Express which are enrolled in a child organization. Please create a supplies delivery contact and assign to the printer, and try enrolling into MPS Express again.

Important Note: You cannot undo MPS Express enrollment. Contact your Lexmark Customer Operations Specialist to delete or unenroll printers.

Limitations of unenrolling printers managed by MPS Express

From the Cloud Fleet Management portal, you cannot unenroll printers that are already enrolled in MPS Express or have a pending enrollment request.
You also cannot delete or deactivate agents that have enrolled these printers.

What happens if you try to unenroll MPS Express managed printers from the printer listing page?

From the printer listing page, if you try to unenroll a combination of MPS Express and MPS Express (Pending) printers, an error message appears. If you try to unenroll a combination of MPS Express, MPS Express (Pending), and unmanaged printers, then the task will be completed with an error. Only the unmanaged printers will be unenrolled. You can find more details about the error by clicking the Task ID.

The printer listing page features a Lexmark Managed column that identifies printers that are already enrolled in MPS Express or have a pending enrollment request. Printers that are already enrolled in MPS Express are identified as MPS Express. Printers that are pending enrollment are identified as MPS Express (Pending).

What happens if you try to unenroll MPS Express managed printers from the printer details page?

From the printer details page, you cannot unenroll printers that are already enrolled in MPS Express or have a pending enrollment request.

Notes

- The printer details page of a printer that has the Lexmark Managed status of either MPS Express or MPS Express (Pending) will not have the Unenroll option.
- The printer details page also identifies the printer as Lexmark Managed and MPS Express or MPS Express (Pending).

What happens if you try to unenroll MPS Express managed printers from the agents tab?

If an agent is associated with MPS Express or MPS Express (Pending) printers, then the agent details page shows the number of MPS Express managed printers associated with the agent. This feature helps you to identify an agent that is associated with MPS Express or MPS Express (Pending) printers. You cannot delete or deactivate these agents.

Note: You cannot unenroll a printer by deleting it from the **Add Discovery Criteria to Include** section of the agents details page. The printer will still appear on the printer listing page, but will have a noncommunicating status. To get the printer communicating, add its IP address in the **Add Discovery Criteria to Include** section of the agents details page.

Even if an agent is uninstalled at the operating system level, the printer listing page will still retain the managed printer's details.

Managing tasks

Tasks are any printer management activities performed in the Fleet Management web portal, such as configurations deployment. The Tasks page shows information on the running tasks and the completed tasks. A task can contain one or more jobs.
From the Fleet Management web portal, click **Tasks**.
Understanding the task status

- **Completed**—All jobs are successfully completed or stopped.
- **Completed with info**—All jobs are successfully completed.
- **Completed with warning**—All jobs are completed, but some have warnings.
- **Completed with errors**—A combination of successfully stopped and failed jobs.
- **Failed**—At least one job has failed or expired.
- **Printer is not communicating**—The jobs are not submitted because the printer cannot communicate with the Fleet Management web portal. For more information, see The printer is not communicating with the agent on page 298.
- **Not supported**—The jobs are not supported in the printer.

Viewing the task information

1. From the Tasks page, click the task ID.

2. Do either of the following:

    - To filter the list according to the job status, click **Status**, and then select one or more statuses.

        - **Pending**—The job is waiting for the Printer Agent to respond. The default timeout for undelivered jobs is one week. The job expires automatically after the timeout has elapsed.
        - **In progress**—The job is ongoing. The default timeout for in-progress jobs is 24 hours. The job expires automatically after the timeout has elapsed.
        - **Completed**—The job is successfully executed.
        - **Failed**—The job is unsuccessful.
        - **Stopped**—The user stopped the job while it is in the Pending state.
        - **Expired**—The job exceeded the timeout.
    - To export the list, click **Export to CSV**.

        Note: Only the filtered jobs are exported.

Stopping tasks

Do either of the following:

- Stop a task.

    From the Tasks page, click **Stop** beside the task status.

    Notes
    - Only pending tasks for a printer can be stopped.
    - Unenrolling of printers cannot be stopped.

- Stop individual jobs.

    From the Tasks page, click a task ID, and then click **Stop** beside the job status.

    Note: Only pending jobs can be stopped.

Scheduling tasks

Scheduling recurring tasks can be done only for performing configuration policy conformance and enforcement. For more information on performing configuration policy conformance and enforcement, see "Performing configuration policy conformance and enforcement" group.

Note: While selecting an organization, if you select an individual organization, only then you can create a recurring task.

1. From the Fleet Management web portal, click **Tasks > Schedule**.
2. On the Schedule page, click **Create**.
3. On the Create Scheduled Task page, configure the following:

    a. In the Name field, type the name of the task.
    b. From the Task type menu, select **Check conformance** or **Enforce assigned configuration**.

c. From the Run task for these printers menu, select any of the following:

- **All printers**—Creates a task for all printers.
- **Tags**—Creates a task for the printers grouped under the selected tags.

> **Note:** Make sure that you select the tags, and then click **Save**. For more information on tags, see Assigning tags to printers on page 133.

- **Filter group**—Creates a task for the printers under the selected group.

> **Note:** Make sure that you select the filter group, and then click **Save**. You can select one filter group only. For more information on filter groups, see Managing filter groups on page 126.

d. In the Date and Time section, configure the following:

- **Start date**—Set the start date for the recurrence task.
- **End date**—Set the end date for the recurrence task.
- **Start time**—Set the start time for the recurrence task.
- **Select time zone**—Select the time zone according to which the start date, end date, and start time work.

e. In the Recurrence section, select one of the following:

- **Once**—The task is executed only once as configured in the Date and Time section.
- **Daily**—The task is executed once daily during the entire duration, as configured in the Date and Time section.
- **Weekly**—This task is executed on specified days of a week. You can select one or more days in a week. The weekly recurrence continues for the duration and time, as configured in the Date and Time section.
- **Monthly**—The task is executed once every month and continues as configured in the Date and Time section. For the monthly option, you can set the exact date on which the task is executed every month. You can also specify the exact day of a month on which the task is executed every month. Make sure that when you specify a date or a day, that particular day, or date is covered within the duration, specified in the Date and Time section.

4. Click **Save**.

Notes

- After a task is created, you can view it on the Schedule page. Click the icon to view task details like task name, task type, number of impacted printers, and schedule details. The icon appears for recurring tasks only.
- To edit a scheduled task, click the task name, and then you can edit the task details on the Edit Scheduled Task page. After editing the details, click **Save**.
- On the Schedule page, you can also view details such as the frequency of the task and the last run time.
- On the Schedule page, you can filter tasks by type, submitter, and organization.
- To delete a task, under the Actions column, click **> Yes**.

Print Management

Overview

Note: The screenshots may vary depending on the latest release.

Use the Cloud Print Management web portal to do the following:

- Configure organizational policies.
- Define and assign user quotas.
- Manage print queues.
- Delegate print jobs.
- Download the Lexmark Print Management Client for Windows, macOS, and Ubuntu operating systems.
- Create a custom Lexmark Print Management Client package.
- Download the Lexmark Cloud Print Management for Chrome web browser extension.
- View user quota status.

The Print Management web portal also works with the following applications:

- **Print Release (eSF application)**—An enterprise-grade printing solution for managing print jobs from the printer. For more information, see the *Print Release Administrator's Guide*.
- **Lexmark Print Management Client**—A computer application for submitting print jobs securely to Cloud Print Management.
- **Lexmark Print**—An application for sending documents directly to network-connected Lexmark printers and servers from a mobile device running on the Android™ platform or iOS operating system. For more information, see the *Lexmark Print User's Guide* for your mobile device.
- **Lexmark Cloud Print Management for Chrome**—A browser extension that lets users send print jobs to Cloud Print Management using the Chrome OS™ operating system.

Accessing the Print Management web portal

Open a web browser, access the Lexmark Cloud Services dashboard, and then do either of the following:

- From the dashboard, click **Print Management**.

  Note: If the card is not available in the dashboard, then add the card. For more information, see Managing the dashboard on page 21.

- From your current web portal, click on the upper-right corner of the page, and then click **Print Management**.

Administrative tasks

The Administration tab is available to Cloud Print Management administrators. This feature lets you configure the print job delegation, e-mail submission, quotas, print job retention, and print job history.

Configuring organizational settings

On the **Organizational Settings** page, you can configure the features related to Print Management.

1. From the Print Management web portal, click **Administration > Organizational Settings**.
2. To configure features related to print clients, expand **Print Clients**, and then configure the following:

   > **Note:** The icon appears beside the group and setting that you are updating. If there is an invalid input or error on the page, then the same icon is also displayed

   - **Access**—This section lets you configure access to the Print Clients page. The **Enable Print Clients page** setting lets you navigate to the Print Clients page. For more information, see Downloading the Lexmark Print Management Client.
   - **Update**—This section lets you configure automatic update for installed print clients. The **Enable automatic updates for installed print clients** setting lets users configure the Lexmark Print Management Client for automatic updates to the latest version when available. In this section, you can also configure the exact timing for the update. For more information, see Enabling automatic updates for Lexmark Print Management Client.

     Advanced Hybrid Storage—The **Enable advanced hybrid storage** setting lets you create advanced hybrid storage options. You can keep a maximum of three copies of a job, apart from the default copy on the submission workstation. There is no limitation on the number of storage devices, but the number must be greater than the selected number of copies. In this section, you can also choose between Windows, Linux, and Optra as the hybrid job storage type.

     > **Notes**
     > - Depending on the selected hybrid storage type, the Client Overview page features only the relevant storage devices. For instance, if you select Windows from the hybrid storage type, then the storage list features only the Windows storage devices.
     > - Changing the value of the previously saved Hybrid Job Storage Type notifies the administrator that the existing Advanced Hybrid Storages and Storage Assignment are deleted.
     > - For more information on advanced hybrid storage, see Understanding advanced hybrid storage on page 210.

3. To configure features related to print jobs, expand **Print Jobs**, and configure the following:
   - **Delegation**—The **Enable print job delegation** setting lets you delegate print jobs to other users, allowing them to release the jobs for you. For more information, see Managing delegates on page 182.
     - **Enable delegate e-mail notification**—Sends an email notification to a delegate when the delegate is added or removed. If an expiry date is set for the particular delegate, then the email contains the information related to the expiry date and time as well.
   - **Release**:
     - **Enable changing the number of copies before release**—Lets you change the number of copies before releasing a print job. For more information, see Releasing print jobs using the eSF application on the printer on page 198.

       This feature requires the following versions of the Print Release eSF application:

        - **For e-Task v5 or later**: 5.10.x or later
        - **For e-Task v4 or earlier**: 2.6.x or later
    - **Enable print and keep**—Lets you retain a print job in the print queue after releasing it.

      This feature requires the following versions of the Print Release eSF application:

        - **For e-Task v5 or later**: 5.10.x or later
        - **For e-Task v4 or earlier**: 2.6.x or later
    - **Enable automatic print release**—Lets you release print jobs automatically after logging in to a printer. For more information, see Printing jobs using automatic print release on page 199.
    - **Keep print job file names for reporting**—Lets you store the file name of a print job for organizational reporting.
    - **List and auto-release oldest print jobs first** —Lets you show and release the print jobs in order from oldest to newest.

      Update the eSF applications to the following version to use this feature:

        - For eSF version 5 or later:
            - Cloud Authentication version 5.6.30
            - Print Release version 5.10.19
            - Device Usage version 2.4.19
        - For eSF version 4 or earlier:
            - Cloud Authentication version 2.6.23
            - Print Release version 2.6.24
            - Device Usage version 2.4.19
  - **Retention**—From the **Print Job Retention** section, specify the length of time before released and unreleased jobs are deleted.

    Note: You can configure the duration for Print Job Retention by specifying the number of days or hours.

  - **History**—From the **Print Job History** section, specify the period of the print job history.

    Notes

    - You can configure the duration for Print Job History by specifying the number of days or hours.
    - You can view the print job history information from the Print Job History tab. For more information, see Viewing the print job history on page 183.
    - This setting determines the included dates when generating the history of submitted print jobs. The specified period has no association with the Analytics web portal.

4. To configure email submission related settings, click **Email Submission**, and configure the following:
  - **Enable e-mail submission** —Lets you email documents to Lexmark Cloud for release. For more information, see Sending print jobs using e-mail on page 193. The email address appears next to the Enable e-mail submission option.

Notes

- The email address is linked to the environment that you are logged in to.
- The email address also appears as a banner on the Print Queue page.
- In the **E-mail documents to the following custom address** field, type an organization-specific username.
- The email address is *<organization-specific username>*@print.lexmark.com.
- When email submission is enabled for the first time, the email address can take up to 24 hours to be available.
- A notification appears when the email address becomes accessible for users to submit print jobs.

- **Enable e-mail body submission**—Lets you submit the email body to Lexmark Cloud for release. To enable email body submission, you must enable email submission.

  Note: If **Enable e-mail body submission** is not selected, only the email attachment is printed.

- **Allow guests to use e-mail submission**—Lets unregistered guest users email their documents to Cloud Print Management. To allow guest print submission, you must enable email submission. For more information, see Configuring the Guest Print feature on page 199.

  - **Limit the number of pages allowed per job**—Lets you set the maximum number of pages allowed per job for unregistered guest users.

    Note: Each attachment in the email is treated as an individual job. The body of the email is also treated as an individual job.

- **Assign guests to cost center or department**—This feature lets you assign guests to a specific cost center or department for applying quotas and reporting. From the **Assign guests to cost center or department**menu, select any of the following:

  - **Do not assign**—Use this option if you are not assigning guests to any cost center or department.
  - **Cost center**—Type the name of the cost center.
  - **Department**—Type the name of the department.

5. To configure features related to quotas, click **Quotas**, and then configure the following:
   - **Print Quotas**—The **Enable print quotas** setting lets you set printing quotas. You can define the default quota for the organization, or set a custom quota.
6. To configure features related to policies, expand **Policies**, and then configure the following:
   - **Print**—The **Enable print policies** setting lets you create and assign print policies to the users and groups in your organization.
     - **Cost center or personal**—Lets you create a policy, and then assign it to cost centers or individual users.
     - **Department or personal**—Lets you create a policy, and then assign it to departments or individual users.
     - **Personal only**—Lets you create a policy, and then assign it to individual users.

     Note: For more information on creating and assigning print policies, see Creating and assigning print policies on page 177.

   - **Client**—The **Enable client policy** setting lets you create rules to manage Print Clients for an organization.
7. To configure features related to print assignments, click **Print Assignments**, and configure the following:
   - **Enable print assignments**—Lets you create, edit, and delete print assignments that specify printers to which a user may print in this organization.
     From the **Use print assignment with** menu, select any one of the following:
     - **Direct Print**— Enables the Direct Print feature for departments, cost centers, and users. This feature allows you to track jobs that are sent to network attached printers, enrolled in Cloud Fleet Management.

       > **Note:** For more information on creating a direct print package, see Using Direct Print on page 204.

     - **Offline Print**—Lets you send print jobs even when connectivity to Lexmark Cloud Service is lost. Print analytics data is held in the client workstation until connection to the Lexmark Cloud Service is restored.
     - **Direct and offline print**—Lets you utilize the capabilities of both Direct Print and Offline Print.

     > **Note:** For more information on Offline Print, and Direct and Offline Print, see Using Offline Print on page 209.

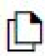
8. To configure Universal Print, click **Universal Print Integration**, and configure the following:
   - **Enable Universal Print**—This feature registers the Cloud Print Management as a Microsoft Universal Print (MUP) virtual printer in the Microsoft Entra ID.
     - **Printer name**—In the **Printer name** field, type the name of the Cloud Print Management virtual printer.
     - **Printer share name**—In the **Printer share name** field, type the printer share name.

       > **Note:** The printer name and printer share name can be the same, but the printer share name must be unique.

   Before enabling Universal Print Integration with Cloud Print Management, make sure that the following prerequisites are met:

   - The operating system of the client workstation must have Windows 10 version 1903 or later.
   - For macOS, the client workstation must have version 13.3 or later.
   - The organization is federated, with users registered on Microsoft Entra ID.
   - The client machine is configured and connected to the Microsoft Entra ID tenant.

   You must set up MUP beyond the actual federation setup with Lexmark Cloud Services and make sure that the Azure tenant has a valid MUP subscription.

   - The user setting up the virtual printer from the Cloud Print Management portal must have the Printer Administrator role in Azure.
   - Setting up Cloud Print Management and MUP integration involves more activities beyond the virtual printer setup. You must fetch the Azure tenant details so that they can be mapped to a Lexmark Cloud Services organization ID. To copy an organization ID on the **Organization Information** page, click  beside the organization ID.

   - For more information on the permission required for the user, go to https://learn.microsoft.com/.
   - The Lexmark Universal Print application must have the following administrator permissions granted:

      - User.Read,Organization.Read.All
      - PrintJob.ReadBasic / PrintJob.Read / PrintJob.ReadBasic.All

> **Notes**
> - After Universal Print is enabled, and if Azure administrator rights are available, a shared printer is created in the MUP tenant of Microsoft Entra ID. With Microsoft Entra ID administrator rights available, save the changes and select an administrative account.
> - The printer name and printer share name are automatically created in the MUP tenant of Microsoft Entra ID. The printer registration process takes a few minutes to complete.
> - In Analytics, the submission type is reported as Microsoft Universal Print.

9. Click **Save Changes**.

Sharing the registered printer to allow access to users

1. From the Universal Print Microsoft Entra ID portal, select the registered printer.
2. Click **Access control**.
3. Enable **Allow access to everyone in my organization**.
4. Click **Share Printer**.

Defining quotas

You can create quota definitions, and then assign them to specific departments, cost centers, or users.

This feature is available only when quota assignment is enabled in the organizational policies. For more information, see Configuring organizational settings.

1. From the Print Management web portal, click **Administration > Quota Definitions**.
2. Do any of the following:

Set a fixed quota

1. Click **Create**, and then type a unique quota definition name.
2. In the Specify quota limits menu, select **Same limits for each month**.
3. Specify the total quota for each month.

   - **Allow unlimited printing**
   - **Set custom quota**—Specify a printing limit.
   - **Disable all printing**

> **Notes**
> - You can also allow, disallow, or set a color printing limit.
> - The color printing limit is part of the total quota limit. If this limit is reached, then users can no longer print in color but can still use the remaining total quota for black and white printing.

4. Click **Create Quota Definition**.

Set a custom quota for each month

1. Click **Create**, and then type a unique quota name.
2. In the Specify quota limits menu, select **Custom limits for each month**.
3. Select one or more months.
4. Click **Set Quota Limits**, and then specify the quota.
    - **Allow unlimited printing**
    - **Set custom quota**—Specify a printing limit.
    - **Disable all printing**

> **Notes**
> - You can also allow, disallow, or set a color printing limit.
> - The color printing limit is part of the total quota limit. If this limit is reached, then users can no longer print in color but can still use the remaining total quota for black and white printing.

5. Click **Set Quota Limits**.
6. Click **Create Quota Definition**.

Setting the default quota for the organization

The default quota applies to all users in the organization, unless a custom quota is assigned to the department, cost center, or individual user. The custom quota overrides the default quota.

1. Click  beside Default Quota.
2. Set a fixed quota or a custom quota for each month.

Assigning quotas

This feature is available only when quota assignment is enabled in the organizational policies. For more information, see Configuring organizational settings.

> **Note:** The available tabs may vary depending on the organizational settings. If the setting is only allowing quota assignments by **Personal only**, then no other tabs are available.

Assigning a cost center quota

> **Note:** The Cost Center tab is available only when the policy is set to assign quotas by Cost center or personal.

1. From the Print Management web portal, click **Administration › Quota Assignments** .
2. From the Cost Center tab, click **Assign Quota**.
3. Type the cost center name.

   > **Note:** The cost center name must match a cost center found in Account Management for the organization.

4. Select a quota definition.
5. Click **Assign Quota**.

Assign a department quota

> **Note:** The Department tab is available only when the policy is set to assign quotas by Department or personal.

1. From the Print Management web portal, click **Administration › Quota Assignments**.
2. From the Department tab, click **Assign Quota**.
3. Type the department name.

   > **Note:** The cost center name must match a cost center found in Account Management for the organization.

4. Select a quota definition.
5. Click **Assign Quota**.

Assign a user quota

1. From the Print Management web portal, click **Administration › Quota Assignments**.
2. From the Personal tab, click **Assign Quota**.
3. Type the user email address.
4. Select a quota definition.
5. Click **Assign Quota**.

Viewing user quota status

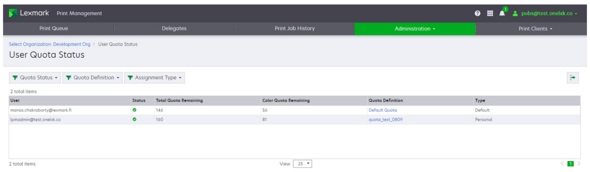
The User Quota Status feature shows you where the users are within their quota in a given month. Administrators can monitor and identify users who may be exceeding their quota.

> **Note:** This feature is available only for Print Release Management administrators.

The user quota status table contains the following information:

- **User**—The e-mail address of the user.
- **Status**—The status of a user's quota.
  - **OK (green circle check mark)**—The user's quota is between 11% and 100% for both their total quota and color quota.
  - **Warning (yellow warning triangle)**—The user's quota is 10% or below for either their total quota or color quota.
  - **Exceeded (red circle exclamation)**—The user's quota is 0 or below for either their total quota or color quota.

- **Total Quota Remaining**—The total print quota remaining for the user for both mono and color print jobs.
- **Color Limit Remaining**—The amount of color printing left for the user.
- **Quota Definition**—The quota definition that is assigned to a user.
- **Type**—The category assigned to a user's quota. It can be Personal, Cost center, or Default.



1. From the Print Management web portal, click **Administration > User Quota Status**.
2. Do any of the following:

   - Filter the user quota status table by Quota Status, Quota Definition, and Assignment Type.
   - Export the user quota status table into a CSV file by clicking on the upper-right corner of the table.

Creating and assigning print policies

Policies are rules that you can assign and enforce to users and groups on Cloud Print Management. These rules are enforced for the specified users or groups on Cloud Print Management.

> **Note:** Make sure to enable the print policy settings. For more information, see Configuring organizational settings on page 170.

1. From the Print Management portal, click **Administration > Print Policies**.

   > **Note:** You can modify the Default Print Policy by clicking . For more information, see Creating and assigning print policies on page 0.

2. Do any of the following:

   - **Create a print policy**

     1. Click **Create**.

        > **Note:** If there is no existing print policy, then click **Create Print Policy**.

     2. In the Policy name field, type the name of the policy.
     3. Configure the settings:

        Print Policy settings

        - **Force color jobs to mono**—Print mono jobs only.

          - Select **Only jobs with at least a specific number of pages** to set the minimum number pages to apply this policy.
        - **Force jobs to use two-sided printing**—Print on both sides.

        - **Two-sided printing**—Select either **Long edge binding** or **Short edge binding**.
        - **All print jobs**—Set the minimum number of pages to apply this policy. Select **Only mono jobs with at least a specific number of pages** and **Only color jobs with at least a specific number of pages**.
        - **Mono print jobs**—Select **Only mono jobs with at least a specific number of pages** to set the minimum number of pages to apply this policy.
        - **Color print jobs**—Select **Only color jobs with at least a specific number of pages** to set the minimum number of pages to apply this policy.
    - **Limit printing to specific days and times**—Print only during specific days and times.

        - **Select days**—Select a day or days on which to allow printing.

            - **All days**—Allow printing on all days but only within a specific time. Set the values for Start time and End time.
            - **Monday-Friday**—Allow printing only on Mondays through Fridays within a specific time. Set the values for Start time and End time.
            - **Custom**—Allow printing on specific days. Set the values for Start time and End time for each of the specific days that you select.

        > **Notes**
        > - If the value for the End time field is beyond 11:59 PM, the schedule will end the next day.
        > - The Start time and End time refers to the user's local time on the printer.

    4. Click **Create Policy**.
- **Duplicate a print policy**

    1. Select an existing policy,
    2. Click **Duplicate.**
    3. Type a unique name for the policy.
    4. Click **Create Policy**.
- **Delete a print policy**

    1. Select an existing policy.
    2. Click **Delete**.
    3. Click **Delete Print Policy**.

> **Notes**
>
> - A print policy on page count does not apply to number of copies. For example, a policy may limit a user to three pages for a single print job. But the user can still print two copies of a two-page print job.
> - Cloud Print Management renders the job before the printer does, so cloud services cannot interpolate if the job is color or one-sided. Hence, Lexmark Cloud Services renders any job uploaded to the portal as color and one-sided and applies policies related to color and one-sided printing.

Assigning a print policy

1. From the Print Management portal, click **Administration > Print Policy Assignments**.
2. Select **Cost Center**, **Personal**, or **Department**.

   > **Note:** The available tabs vary depending on the organizational settings. For more information, see Configuring organizational settings.

   Assigning to a cost center or department

   a. Select an existing cost center or department.

      > **Note:** You can also select a cost center or department by typing its name in the Cost center name field or Department name field in the Assign Policy window.

   b. Click **Assign Policy**.
   c. From the Select print policy menu, select the policy.
   d. Click **Assign Print Policy**.

   Assigning to a user

   a. Select an existing user.

      > **Note:** You can also select a user by typing the email address of the user in the E-mail field in the Assign Print Policy to User window.

   b. Click **Assign Policy**.
   c. From the Select print policy menu, select the policy.
   d. Click **Assign Print Policy**.

> **Notes**
>
> - To remove a print policy, select a print policy, and then click **Remove Policy > Remove Print Policy**.
> - To view or filter the cost center or department to which a print policy is assigned, from the Print Policy Assigned menu, select the policy.
> - User-based policies override cost center- or department-based policies.
> - To view the details of a print policy, click the item in the Select print policy.

Obtaining the client ID and client secret

The Identity application containing the client ID and client secret of an organization is found in the Account Management page in the Cloud Services portal. A user account with the Organization Administrator role is required.

> **Note:** The client ID and client secret are sensitive information. Do not share this information without appropriate consent.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Account Management** card.

   > **Note:** If the card is not visible on the dashboard, then click on the upper-right corner of the page, and then click **Account Management**.

3. Select the organization, and then click **Next**.
4. Click the **Applications** tab.
5. In the Search applications field, type either Device Authentication, or Card Auth App, or CPM Advanced Hybrid Storage, and then press **Enter**.
6. From the Application Name list, click the application name.
7. Obtain the client ID and client secret from the OAuth Settings section.

> **Note:** From the application page, in the Permission section, make sure that badges-auth is listed under Scopes.

Managing print queues

The print queue shows the print jobs submitted to Cloud Print Management using the following submission methods:

- **Cloud Print Management**—The print jobs are submitted to the Lexmark Cloud print queue.

  Users can send print jobs using the following sources:

  - **Web**—The file is uploaded directly to the Print Management web portal.
  - **LPMC**—The print job is sent from the user's workstation using the Lexmark Print Management Client configured for Cloud Print Management.
  - **Chrome Print Extension**—The print job is submitted from the Google Chrome web browser.
  - **Mobile**—The print job is submitted from the Lexmark Print application.
  - **E-mail**—The print job is e-mailed to *<organization-specific user name>*@print.lexmark.com.
- **Hybrid Print Management**—The print jobs are held locally on the user’s workstation rather than being submitted to the Lexmark Cloud print queue. The print queue shows the print jobs being held for release on the workstation. The workstation uses the Lexmark Print Management Client that is installed in Hybrid mode to communicate with Cloud Print Management.

> **Note:** From the print queue, you can also change the layout, paper, and finishing options. However, depending on the submission method, print driver settings, and document processor settings, some options may not be available.

1. From the Print Management web portal, click **Print Queue**.

2. Click the Print Queue header.
3. Search for or select a user.
4. Do any of the following:

Upload files

1. Click **Upload File**.
2. Drag one or more files, or click **Choose Files**, and then browse to them.
3. Click **Done**.

Delete print jobs

1. Select one or more jobs.
2. Click **Delete > Delete Print Jobs**.

Set print settings for a specific print job

1. Click a print job.
2. If necessary, from the General section, type a description for the print job.
3. Do any of the following:

   > **Note:** Depending on the submission method, print driver settings, and document processor settings, some layout, paper, and finishing options may not be available.

   Adjust the layout

   - **Copies**—The number of copies to be printed.
   - **Collate**—Keep the pages of a print job stacked in sequence, particularly when printing multiple copies of the job.
   - **Two-sided printing**—When you print on both sides of the paper, the paper flips either on the short-edge or on the long-edge side. To use the printer default setting, select **Use printer setting**.
   - **Pages per side**—Multiple pages of the document are printed on one side of the paper.
   - **Orientation - Pages per side**—The orientation of the pages when printing multiple pages per side (N-up).

   Adjust the paper and finishing options

   - **Paper size**—The size of the paper.
   - **Paper source**—The tray that is the source of paper.
   - **Paper type**—The type of paper.
   - **Output bin**—The collection point for paper that has exited from the printer.
   - **Staple**—The stapling position in the paper.
   - **Hole punch**—The number of holes to be punched.
   - **Fold**—The way the paper is folded.
   - **Change the quality**—Select a color mode.
4. Click **Save Changes**.

Set default print settings for all incoming print jobs

1. Click **Set Default Print Settings**.
2. Do any of the following:

   > **Note:** Depending on the submission method, print driver settings, and document processor settings, some layout, paper, and finishing options may not be available.

   Adjust the layout

   - **Copies**—The number of copies to be printed.
   - **Collate**—Keep the pages of a print job stacked in sequence, particularly when printing multiple copies of the job.
   - **Two-sided printing**—When you print on both sides of the paper, the paper flips either on the short-edge or on the long-edge side. To use the printer default setting, select **Use printer setting**.
   - **Pages per side**—Multiple pages of the document are printed on one side of the paper.
   - **Orientation - Pages per side**—The orientation of the pages when printing multiple pages per side (N-up).

   Adjust the paper and finishing options

   - **Paper size**—The size of the paper.
   - **Paper source**—The tray that is the source of paper.
   - **Paper type**—The type of paper.
   - **Output bin**—The collection point for paper that has exited from the printer.
   - **Staple**—The stapling position in the paper.
   - **Hole punch**—The number of holes to be punched.
   - **Fold**—The way the paper is folded.
   - **Change the quality**—Select a color mode.
3. Click **Save Changes**.

Uploading files to the Print Management web portal

1. From the Print Management web portal, click **Print Queue**.
2. Click **Upload File**, and then drag one or more files or browse to them.
3. Click **Done**.

Managing delegates

A delegate is a user who is allowed to print jobs by another user. For example, an administrative assistant can print jobs submitted by an executive.

This feature is available only when print job delegation is enabled in the organizational policies. For more information, see Configuring organizational settings.

Notes

- Delegates can view all print jobs submitted by another user, but can print only Cloud Print Management print jobs.
- Delegates cannot print Hybrid Print Management print jobs.
- Even if delegates are set up in Lexmark Cloud Services, devices that support Cloud Print Release cannot release delegated jobs. Delegated jobs can only be released on devices with the Cloud Print Management applications installed.

1. From the Print Management web portal, click **Delegates**.
2. Click the **Delegates** header.
3. Do either of the following:

Add delegates

1. Click **Add**.
2. Select a user.
3. From the Enable delegate expiration section, select either of the following:
    - **Never expires**—Do not set an expiry date for delegates.
    - **Expires after**—Set the number of days after which the delegates expire.
4. Click **Add Delegate**.

Remove delegates

1. Select one or more delegates.
2. Click **Remove**.

Note: To notify delegates about their addition, removal, and expiration, select **Enable delegate e-mail notification** on the Organizational Settings page. For more information on enabling delegate e-mail notification, see Configuring organizational settings.

Viewing the print job history

From the Print Management web portal, click **Print Job History**.
The print job history contains the following information:

- **Impressions**—A side of a sheet of paper that contains toner.
- **Released From**—Shows the printer IP address where the print job is released.
- **Job Name**
- **Job Source**
- **Color Mode**—Shows whether the print job is monochrome or color.
- **Two-Sided Printing**—Shows whether the print job is printed on both sides of the paper.
- **Released**—Shows when the print job is released.
- **Released By**—Shows the delegate who released your print job. This column appears only when a delegate has released one of your print jobs.

Downloading the Lexmark Print Management Client

Note: For more information on LPMC legacy versions, see Lexmark Print Management Client 3.4.0 or earlier Configuration Guide PDF or Lexmark Print Management Client 3.5.0 or later Configuration Guide PDF.

The Lexmark Print Management Client is a software package deployed to computers to provide secure release of print jobs.

You can download the Lexmark Print Management Client package configured for either of the following environments:

Before you begin, make sure that you always update your operating system to maintain optimal security and performance of your LPMC. Regular updates protect your system from the latest vulnerabilities and provide secured connections through encrypted data transfers.

- **Cloud Print Management**—Print jobs are stored on the Lexmark Cloud print queue until they are released from a printer installed with the Print Release application.
- **Hybrid Print Management**—Print jobs are stored on the user's workstation or advanced hybrid storage until they are released from a printer installed with the Print Release application.
- **Direct Print**—Print jobs are never held for release, but are sent and printed immediately to a configured printer.

1. From the Print Management web portal, click **Print Clients**.
2. From the **Select client** menu, select an operating system.
3. For ChromeOS™, iOS, and Android™ operating systems, select the link that appears, and then click **Leave Site**.
4. For Windows, macOS, and Ubuntu operating systems, do any of the following:
   - **For the Cloud Print Management package type:**
     1. From the **Select package type** menu, select **Cloud Print Management.**
     2. Click **Download Client**.
   - **For the Hybrid Print Management package type:**
     1. From the **Select package type** menu, select **Hybrid Print Management.**
     2. Click **Download Client**.
   - **For the Direct Print Management package type:**
     1. From the **Select package type** menu, select **Direct Print.**
     2. Click **Download Client**.
   - **For the custom package type:**
     1. From the **Select package type** menu, select **Custom Package**.
     2. Click **Create Package**.
     3. From the **Global Configuration Settings** section, specify whether to show the print submission status notification.
     4. If you have a Lexmark Cloud Print Management environment, then do the following:
        a. From the **Cloud Print Management** section, select **Enable Cloud Print Management**.
        b. From the **Print queue name** section, select **Use default name [Cloud Print Management]** or **Set custom name**.
     5. If you have a Lexmark Hybrid Print Management environment, then do the following:
        a. From the **Hybrid Print Management** section, select **Enable Hybrid Print Management**.

b. From the **Print queue name** section, select **Use default name [Hybrid Print Management]** or **Set custom name**.

> **Notes**
> - For custom print queue names, type the name of the print queue in the Set custom name field. The print queue name must be at least three characters and must not include special characters.
> - By using the Set custom name option, you can name the print queue for users.

6. If you have a Lexmark Direct Print environment, then do the following:
   a. From the **Direct Print Management** section, select **Enable Direct Print**.
   b. Select **Use default name [Direct Print Management]** or **Set custom name**.
7. From the **Print Driver Type** section, select a print driver to include in the package.
8. From the **Set Default Printer** section, select which environment to use by default.
9. Click **Create**.
10. Download the package.

Installing the Lexmark Print Management Client

For Microsoft Windows operating system

1. From your computer, run the package.
2. Follow the instructions on the screen.

> **Notes**
> - The executable files are saved in the Program Files folder.
> - For custom packages, the configuration file is included in the downloaded compressed file. Make sure that the installer and the configuration file are in the same folder.
> - The 3.6.0 release supports the previous configuration.xml files and converts them for you to the new JSON format on installation.
> - The configuration and the log files are saved in the **%allusersprofile%\LPMC** folder after installation.
> - To be able to use the LPMC version 3.6.x, make sure that you have installed Microsoft .NET Framework version 4.8 or later.

After the installation, you can access Lexmark Cloud Print Management, Lexmark Hybrid Print Management, or Lexmark Direct Print.

For macOS operating system software

1. From your computer, run the package.
2. Follow the instructions on the screen.

> **Notes**
> - When installing a Custom Package, if the installer requests access to a folder, select yes, so that the installer can access the configuration file.
> - The executable files are saved in the **/Library/Lexmark/PrintManagementClient** folder.
> - The configuration file, and the SSL certificates are saved in the **/var/Lexmark/PrintManagementClient** folder.
> - The SSL certificates are saved in **/var/Lexmark/PrintManagementClient/TrustCerts**.
> - The log file is saved in **/var/Lexmark/PrintManagementClient/Logs** as **lpmc.log**.
> - For the custom package, the configuration file is included in the downloaded compressed file. Make sure that the installer and the configuration file are in the same folder.
> - The 3.6.0 release supports the previous configuration.xml files and converts them for you to the new json format on installation.

Uninstalling LPMC for macOS operating system software

1. Open the terminal from **/Library/Lexmark/PrintManagementClient** folder.
2. Execute the **sudo./uninstall.sh** file.

For Ubuntu operating system

> **Note:** For Ubuntu 20.04 or later, to make the LPMC SysTray icon visible, install AppIndicator and enable it in GNOME.

1. Download the package.
2. Unzip and run the .SH file.

> **Notes**
> - Installation is not permitted without Sidecar.
> - The executable files are saved in the **/usr/share/Lexmark/PrintManagementClient** folder.
> - The configuration file is saved in the **/etc/Lexmark/PrintManagementClient** folder.
> - The SSL certificates are saved in **/var/Lexmark/PrintManagementClient/TrustCerts**.
> - The log file is saved in **/var/Lexmark/PrintManagementClient/Logs/lpmc.log**.

Uninstalling LPMC for Ubuntu operating system

1. Open the terminal from **/usr/share/Lexmark/PrintManagementClient** folder.
2. Execute the **uninstaller.sh** with sudo or run the following:
    - **sudo dpkg -r lexmark-print-management-client**
    - **sudo dpkg --purge lexmark-print-management-client**

> **Note:** We recommend not running antivirus scans on the **Lexmark/PrintManagementClient** and **%allusersprofile%\LPMC** folders and any of its subfolders. **Antivirus scans may result in locking essential files, blocking access to configuration files, and preventing print job file creation.**

Applying the driver configuration

For Windows operating system, the LPMC installer supports the use of LDC files from the Printer Driver Configuration Utility. During installation, the system looks for specific file names for the LDC files.

> **Notes**
>
> - To apply a driver configuration when the LPMC is installed, save the LDC file in the same folder as the LPMC installer.
> - For Ubuntu and macOS, the LPMC installer does not support the use of LDC files.

Use the **PrintQueueConfiguration.ldc** file name for Cloud Print Management print queue, Hybrid Print Management print queue and for Direct Print Management print queue.

Sample LDC file

```
<?xml version="1.0" encoding="UTF-8"?>
<ConfigurationProfiles>
 <PrinterProfiles version="1.2">
 <PrinterProfile name="Lexmark Universal v2" version="1.0">
   <PrinterObject value="Cloud Print Management - PCLXL"></
PrinterObject>
   <PrinterModel value="Lexmark Universal v2"></PrinterModel>
   <DataStream value=""></DataStream>
   <LongDescription value=""></LongDescription>
   <ProfileData>
    <PrinterProperties locksupport="global">
     <InstallableOptions>
      <Trays>
       <Tray2 value="Installed" locked="unlocked"></Tray2>
       <Tray3 value="Installed" locked="unlocked"></Tray3>
       <Tray4 value="Installed" locked="unlocked"></Tray4>
       <Tray5 value="Installed" locked="unlocked"></Tray5>
       <MPFeeder value="Installed" locked="unlocked"></MPFeeder>
       <ManualEnvelope value="Installed" locked="unlocked"></
ManualEnvelope>
       <ManualFeeder value="Installed" locked="unlocked"></
ManualFeeder>
       <EnvelopeFeeder value="Installed" locked="unlocked"></
EnvelopeFeeder>
       <RFIDTray value="Installed" locked="unlocked"></RFIDTray>
      </Trays>
      <DuplexUnit value="Installed" locked="unlocked"></DuplexUnit>
      <Flash value="Installed" locked="unlocked"></Flash>
      <HardDisk value="Installed" locked="unlocked"></HardDisk>
      <Bins>
       <Bin1 value="Installed" locked="unlocked"></Bin1>
       <Bin2 value="Installed" locked="unlocked"></Bin2>
```

```
        <Bin3 value="Installed" locked="unlocked"></Bin3>
        <Bin4 value="Installed" locked="unlocked"></Bin4>
        <Bin5 value="Installed" locked="unlocked"></Bin5>
        <Bin6 value="Installed" locked="unlocked"></Bin6>
        <Bin7 value="Installed" locked="unlocked"></Bin7>
        <Bin8 value="Installed" locked="unlocked"></Bin8>
        <Bin9 value="Installed" locked="unlocked"></Bin9>
        <Bin10 value="Installed" locked="unlocked"></Bin10>
        <Bin11 value="Installed" locked="unlocked"></Bin11>
        <Bin12 value="Installed" locked="unlocked"></Bin12>
       </Bins>
       <FinishingOptions>
        <Offset value="Installed" locked="unlocked"></Offset>
        <Staple value="Installed" locked="unlocked"></Staple>
        <HolePunch value="Installed" locked="unlocked"></HolePunch>
        <Fold value="Installed" locked="unlocked"></Fold>
       </FinishingOptions>
       <Fax value="Installed" locked="unlocked"></Fax>
       <FaxOnly value="Installed" locked="unlocked"></FaxOnly>
      </InstallableOptions>
     </PrinterProperties>
     <PrinterDefaults locksupport="all">
      <PostScript>
       <PSPassthrough value="On" locked="unlocked"></PSPassthrough>
      </PostScript>
      <ImageCompression>
       <JobImageCompression value="True" locked="unlocked"></
JobImageCompression>
       <JobImageCompressionMethods value="JPEG" locked="unlocked"></
JobImageCompressionMethods>
       <JobImageCompressionQualityValue value="90"
locked="unlocked"></JobImageCompressionQualityValue>
      </ImageCompression>
     </PrinterDefaults>
     <PrintingPreferences locksupport="none">
      <PostScript>
       <PSPassthrough value="On"></PSPassthrough>
      </PostScript>
      <ImageCompression>
       <JobImageCompression value="True"></JobImageCompression>
       <JobImageCompressionMethods value="JPEG"></
JobImageCompressionMethods>
       <JobImageCompressionQualityValue value="90"></
JobImageCompressionQualityValue>
      </ImageCompression>
     </PrintingPreferences>
    </ProfileData>
  </PrinterProfile>
  </PrinterProfiles>
</ConfigurationProfiles>
```

The LDC configuration must use the following value for the print queue:

```
<PrinterObject value="Print queue name"></PrinterObject>
```

"Print queue name" varies between Cloud Print, Hybrid Print, and Direct Print. You can also set a custom print queue name.

You can also use the following generic values for the printer profile and printer model:

```
<PrinterProfile name="Lexmark Universal v2" version="1.0">
<PrinterModel value="Lexmark Universal v2"></PrinterModel>
```

Upgrading the LPMC version

User can select one of the following settings when upgrading to the latest version of LPMC:

- **Keep User Setting**—To maintain your current settings, do the following:
  1. Run the LPMC package installer with your existing **configuration.json** or **configuration.xml** file.
  2. Place a copy of the **configuration.json** or **configuration.xml** file in the directory of the new LPMC package installer.
- **New User Setting**—To modify the existing settings, do the following:
  1. Download and edit the **configuration.json** or **configuration.xml** file.
  2. Place the edited files in the same directory as the existing LPMC package installer.
- **Default Setting**—If no **configuration.json** or **configuration.xml** file is attached to the LPMC installer package, then the default configuration settings provided by the downloaded LPMC installer package apply.

Notes

- If the legacy version of LPMC is installed on your workstation, then you can upgrade to the latest version of LPMC (version 3.6.x).
- Unreleased hybrid jobs are not retained. It is highly recommended not to have any pending jobs before the upgrade.
- Enabling automatic updates is supported only in the latest version of LPMC.

Managing the Lexmark Print Management Client

Checking for updates for the Lexmark Print Management Client

1. From your computer, in the system tray or the menu bar, click the Lexmark Print Management Client icon.
2. Click **Check for Updates**.

   Note: The LPMC service checks for updates every 4 hours after service restart.

Identifying the version of Lexmark Print Management Client

1. From your computer, in the system tray or the menu bar, click the Lexmark Print Management Client icon.
2. Click **About Print Management Client**.

Identifying the version of Lexmark Print Management Client from the Client Status page

1. From the Print Management web portal, click **Print Clients › Client Status**.
2. Locate the LPMC version in the Client Version column.

Logging out from the Lexmark Print Management Client

Logging out from Lexmark Print Management Client deletes all Hybrid print jobs stored on your computer, making them no longer available for release. However, the print jobs that are already sent to the Lexmark Cloud print queue remain available.

Note: The following steps apply to Microsoft Windows, macOS, and Ubuntu operating systems.

1. From your computer, in the system tray or menu bar, right-click the Lexmark Print Management Client icon.
2. Click **Log out from Print Management**.
3. Click **Log out**.

Note: After you log out, your authentication credentials are deleted. When you print again, you are prompted for your user credentials.

Managing client policies

Creating client policies

Client policies are rules that govern how LPMC behaves that you can assign and enforce to users based on organization, department or cost center and personal. These rules are enforced for the specified users or groups on Cloud Print Management.

Note: Make sure to enable the client policy settings. For more information, see Configuring organizational settings on page 170.

1. From the Print Management portal, click **Print Clients › Client Policies** .
2. Click the **Definitions** tab.
3. Click **Create**.

   Note: If there is no existing client policy, then click **Create Client Policy Definition**.

4. On the **Create Client Policy** page, do the following:

   a. In the **Policy name** field, type the name of the policy.
   b. In the **Description** field, type a brief description of the policy.
   c. From the **Configure print client version update mode** menu, select one of the following:
      - **Set to the current version**
      - **Enable automatic updates of print client**
      - **Restrict print client from updating**

d. From the **Print client update should occur** menu, select one of the following:

> **Note:** If you select **Restrict print client from updating** from the **Configure print client version update mode** menu, then this setting is unavailable.

- **As soon as possible**
- **Within specific time period**

> **Note:** On selecting **Within specific time period**, make sure that you specify the **Time period**. The time period ranges from 1-7 days.

e. Click **Create Policy**.

Deleting a client policy

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Definitions** tab.
3. Select an existing policy.
4. Click **Delete › Delete Policy**.

Setting a default client policy

1. From the Print Management portal, click **Print Clients › Client Policies** .
2. Click the **Definitions** tab.
3. Select an existing policy.
4. Click **Set as Default › Set as Default**.

Removing a default client policy

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Definitions** tab.
3. Select the existing default client policy.
4. Click **Remove Default › Remove Default** .

Editing a client policy

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Definitions** tab.
3. Click the name of an existing client policy.
4. On the client policy page, edit the policy.
5. Click **Save Changes**.

Assigning client policies

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Assignments** tab.
3. Click **Assign Policy**.

4. On the **Create Assignment** window, do the following:
   a. From the **Assign client policies by** menu, select one of the following:
      Cost center—Type the name of the cost center in the **Cost center name** field.

      > **Note:** If you select **Cost center**, then you can use only cost center and personal for the next assignments.

      - **Department**—Type the name of the department in the **Department name** field.

        > **Note:** If you select **Department**, then you can use only department and personal for the next assignments.

      - **Personal**—If you select **Personal**, then type the user's email address in the **E-mail** field.

        > **Notes**
        > - If you select **Personal**, then you can continue using one of the categories until you select department and cost center.
        > - While assigning a personal policy, you can add a user who is part of a cost center or department. If the same cost center or department is already assigned with a client policy, then the personal assignment overrides the cost center or department client policy.

   b. From the **Select client policy** menu, select any of the available client policies.
   c. Click **Create Assignment**.

Unassigning a policy

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Assignments** tab.
3. Select an existing assignment.
4. Click **Unassign Policy › Unassign Client Policy**

Using the policy assigned filter

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Assignments** tab.
3. From the **Client Policy Assigned** menu, select the client policy.

Using the views filter

1. From the Print Management portal, click **Print Clients › Client Policies**.
2. Click the **Assignments** tab.
3. From the **Views** menu, select any one of the following:
   - **Assign policies by personal**
   - **Assign policies by cost center**
   - **Assign policies by department**

Assigning policy from the client status page

1. From the Print Management portal, click **Print Clients › Client Status**.
2. On the **Client Status** page, select a client.
3. Click **Assign Policy**.
4. From the **Select a client policy to assign to selected clients** menu, select an existing client policy.
5. Click **Assign Policy**.

> **Note:** Assigning a client policy from the **Client Status** page overrides any existing policy for that particular client. The order of precedence for client policy are: **Client assignment › Personal client policy › Cost center or department client policy › Default client policy**.

Sending print jobs to Lexmark Cloud Services

Sending print jobs from your computer

1. Open a file or image.
2. Select the print option, and then select the Lexmark Cloud Services print release queue.
3. Click **Print**.
4. If prompted, type your e-mail address and password.

   > **Note:** If you cannot authenticate within three minutes, then the session expires and the submitted job gets deleted.

Sending print jobs using e-mail

This feature is available only when e-mail submission is enabled in the organizational policies. For more information, see Configuring organizational settings.

From your e-mail client, send the e-mail or attachment to the following:

- For users of the North American data center, <*organization-specific user name*>@print.lexmark.com.
- For users of the European data center, <*organization-specific user name*>@print.lexmark.com.

Sending print jobs from web portals

1. From the Print Management web portal, click **Print Queue**.
2. Click **Upload File**, and then drag one or more files or browse to them.
3. Click **Done**.

Downloading the Lexmark Cloud Print Management for Chrome extension

Add the Lexmark Cloud Print Management for Chrome extension so that you can send print jobs to Cloud Print Management using the Chrome OS operating system.

1. From the Print Management web portal, click **Print Clients**.
2. From the Select client menu, select **Chrome**.
3. Click the **Available in the Chrome Web Store** link that appears.
4. Click **Leave Site**.
5. Using the Chrome OS browser, from the Chrome Web Store, add the Lexmark Cloud Print Management for Chrome extension.

Sending print jobs from the Chrome OS operating system

> **Note:** For Chromebook™ computers and other computers running on the Chrome OS operating system, add the **Lexmark Cloud Print Management for Chrome** extension to your web browser. For more information, see Downloading the Lexmark Cloud Print Management for Chrome extension on page 194.

1. From the Google Chrome™ browser, open a file, image, or web page.
2. Select a print option, and then select **Lexmark Cloud Print Management for Chrome**.
3. If necessary, change the print settings. To change other settings, click **More settings > Advanced settings**, and configure the following:
    - **Two-sided printing**—When you print on both sides of the paper, the paper flips either on the short-edge or on the long-edge side. To use the printer default setting, select **Use printer setting**.
    - **Pages per side**—Multiple pages of the document are printed on one side of the paper.
    - **Pages per side orientation**—The orientation of the pages when printing multiple pages per side.
    - **Staple Location**—The stapling position on the page.
    - **Fold**—The way the paper is folded.
    - **Hole punch**—The number of holes to be punched.
    - **Paper source/tray**—The paper source or the tray to be used for the print job.

    > **Note:** Depending on the printer model, these settings may vary.

4. Click **Apply**.
5. Click **Print**.

> **Note:** In the LPMC Chrome extension, the document file cannot be previewed, and is unable to print using . This limitation is in Microsoft 365.

Mobile printing

Adding a Lexmark Cloud Print Management server using a mobile device for version 3.x

This feature lets you send print jobs to the Lexmark Cloud Print Management using the Lexmark Print application version 3.x. For more information on sending print jobs using the Lexmark Print application, see Sending print jobs using a mobile device on page 195.

1. From your mobile device, launch the Lexmark Print application.
2. From the application home screen, tap **Add a Device**.
3. Tap **Lexmark Cloud Print Management**.
4. From the Data Center menu, select any one of the following:
    - **Auto Detect**—Set your data center automatically as determined by your location.
    - **Americas**—Use the North American data center as determined by your Lexmark Cloud Services agreement.
    - **Europe**—Use the European data center as determined by your Lexmark Cloud Services agreement.

Sending print jobs using a mobile device

For more information on the Lexmark Print application, see the *Lexmark Print User's Guide* for your mobile device.

For devices using the Android platform

1. Launch the Lexmark Print application.
2. From the Print From section of the application home screen, tap a source, and then follow the instructions on the screen.

    > **Note:** If prompted, allow the application to access the camera and the storage.

3. Select the Lexmark Cloud Services queue.

    > **Note:** If prompted, log in to the server.

4. If necessary, change the print settings.
5. Tap .

For devices using the Apple iOS operating system

1. Launch the Lexmark Print application.
2. From the PRINT FROM section of the application home screen, tap a source, and then follow the instructions on the screen.

    > **Note:** If prompted, allow the application to access the camera and the photos.

3. Select the Lexmark Cloud Services queue.

   Note: If prompted, log in to the server.

4. If necessary, change the print settings.
5. Tap **Print**.

Sharing documents to the print queue server using your mobile device

For more information on the Lexmark Print application, see the *Lexmark Print User's Guide* for your mobile device.

For devices using the Android platform

1. From your mobile device, select a document from the file manager.

   Notes
   - Make sure that the mobile device supports the document file type.
   - Make sure that the printer supports the file type. For the list of supported file types, see the printer *User's Guide*.

2. Share the document to Lexmark Print.
3. Select the Lexmark Cloud Services queue, and if necessary, change the print settings.
4. Tap .

For devices using the Apple iOS operating system

1. From your mobile device, select a document from the file manager.

   Notes
   - Make sure that the mobile device supports the document file type.
   - Make sure that the printer supports the file type. For the list of supported file types, see the printer *User's Guide*.

2. Tap **> Lexmark Print**.
3. Select the Lexmark Cloud Services queue, and if necessary, change the print settings.
4. Tap **Print**.

Printing documents from your mobile device

For more information on the Lexmark Print application, see the *Lexmark Print User's Guide* for your mobile device.

For devices using the Android platform

1. Launch the Lexmark Print application.
2. From the Print Release section, select the server.

> **Note:** If you are prompted to log in to the server, then type your credentials, and then tap **LOGIN**.

3. Select the user with jobs to print.
4. Select one or more jobs.

> **Note:** To select all jobs, tap .

5. Tap .
6. Select the Lexmark Cloud Services queue, and if necessary, change the print settings.
7. Tap .

> **Notes**
>
> - You can add a printer to the list.
> - To delete the selected jobs after printing, select **Delete this Document after Printing**.

For devices using the Apple iOS operating system

1. Launch the Lexmark Print application.
2. From the Print Release section, select the server.

> **Note:** If you are prompted to log in to the server, then type your credentials, and then tap **OK**.

3. Select the user with jobs to print.
4. Select one or more jobs.
5. Tap .
6. Select the Lexmark Cloud Services queue, and if necessary, change the print settings.
7. Tap **Print**.

> **Notes**
>
> - You can add a printer to the list.
> - To select all jobs, tap .
> - To delete the selected jobs after printing, select **Delete from queue after printing**.

Choosing an application for releasing print jobs

- **Automatic Print Release**—Lets you release print jobs automatically after logging in to the printer. To use this feature, make sure that you enable Automatic Print Release from the Organizational Settings. For more information on enabling Automatic Print Release, see Configuring organizational settings.
- **Cloud Print Release**—Lets you release print jobs from 2.8-inch touch-screen printers. For more information on configuring Cloud Print Release, see Configuring Cloud Print Release on page 201.
- **Print Release eSF application**—Lets you release print jobs from 4.3-inch or bigger touch-screen printers.

- **Guest Print**—Lets guest users print documents without requiring the administrator to create an account in the organization. For more information on Guest Print, see Configuring the Guest Print feature on page 199.

Releasing print jobs using the eSF application on the printer

Use the Print Release eSF application to release print jobs from the printer. For more information, see the *Print Release Administrator's Guide*.

Note: Depending on your configuration, you may need to register at first use. Follow the instructions on the printer display.

1. From the printer home screen, touch the icon for the Print Release application.
2. Select one or more print jobs.

    Note: To print the jobs that are delegated to you, touch ≡. If necessary, select a user name, and then select the print jobs.

3. If necessary, change the print settings. Select a job, touch ⋮ beside the Print button, touch **Change Print Settings**, and then do any of the following:

    Note: Depending on the submission method, print driver settings, and document processor settings, some layout, paper, and finishing options may not be available.

    - Touch **Settings**, and then adjust one or more of the following:
        - **Number of copies**
        - **Color**

            Note: You cannot change black-and-white print jobs to color at the printer for some file formats.

        - **Sides**—Specify whether the print jobs are printed on one side only or on both sides of the paper.
    - Touch **Finishing Options**, and then adjust either of the following:
        - **Staple**—Specify whether to staple the printed jobs.
        - **Hole punch**—Specify whether to punch holes on the printed jobs.

4. Touch **Print**.

Note: For 4.3-inch or bigger touch-screen printers, use Print Release eSF applications to release print jobs. For 2.8-inch touch-screen printers, use the Cloud Print Release application to release print jobs. For more information on Cloud Print Release, see Configuring Cloud Print Release on page 201.

Printing jobs using automatic print release

Automatic print release is an organizational setting that lets users release their print jobs automatically after logging in. This setting prevents users from interacting directly with the printer when releasing print jobs. If enabled, then all print jobs in the user's queue are released. After authenticating, a message appears that lets you cancel the automatic print release function. To release one or more print jobs selectively, see Releasing print jobs using the eSF application on the printer on page 198.

Notes

- Make sure that automatic print release is enabled. For more information, see Configuring organizational settings.
- Only the print jobs of the authenticated user are released.
- This setting applies only in Print Release.

1. Log in to the printer.
2. Do either of the following:
   - Tap **Cancel** to stop the automatic print release.
   - Wait for the printer to release all your pending print jobs.

Configuring the Guest Print feature

Guest Print is a feature that lets guest users print documents without requiring the administrator to create an account in their organization.
The guest composes an e-mail from an e-mail client, attaches the documents to be printed, and sends it to a predefined e-mail address. An administrator or an organizational representative provides the e-mail address that the guest can send their documents. After sending the e-mail to the specified e-mail address, the guest receives a confirmation e-mail with a PIN. Using the PIN, the guest can proceed to the printer specified by the organizational representative, and print.

Notes

- The guest must have an e-mail client to be able to send the document.
- A unique identifier is automatically created in the identity provider for guest print. This unique identifier can be used to generate reports related to guest print activity.
- The supported file formats are CSV, DOC, DOCX, GIF, HTML, JPG, ODP, ODS, ODT, PDF, PPT, PPTX, RTF, TIFF, TXT, XLS, and XLSX. If a user attaches an unsupported file format, then the user receives an e-mail indicating the supported formats.
- Lexmark retains information related to the print job only but does not retain any e-mail-related information.
- Each e-mail attachment is treated as a separate print job.

Enabling Guest Print

1. From the Print Management web portal, click **Administration > Organizational Settings**.

   Note: E-mail submission must be enabled before enabling guest print submission. For more information on enabling e-mail submission, see Configuring organizational settings.

2. From the General section, select **Allow guests to use e-mail submission**.

> **Notes**
> - Select **Limit the number of pages allowed per job** to set the maximum number pages to be printed per job. Jobs greater than a specified number of pages are not processed.
> - PIN authentication must be enabled for guest print submission to work. If PIN authentication is not enabled, then you are prompted to enable it. For more information on configuring PIN authentication, see Configuring printer login on page 96.
> - You can assign guests to a specific cost center or department for applying quotas and reporting. For more information, see Configuring organizational settings.

3. Click **Save Changes**.

> **Notes**
>
> - An organizational administrator can configure settings related to print job retention, PIN length, and PIN expiration. The organizational settings applies to the PIN received by the guest user.
> - The validity of the guest print job depends on the value set in Print Job Retention or “PIN Expires after,” whichever is lesser. For instance, if Print Job Retention is set as 6 hours and “PIN Expires after” as 7 hours, then the jobs get deleted after 6 hours.

Releasing guest print jobs

After receiving the PIN through e-mail, the guest can proceed to the printer specified by the representative, and perform the following steps:

1. From the printer control panel, touch **PIN Login**.
2. Enter the PIN that you have received in your e-mail, and then touch **OK**.
3. Touch **Print Release**.
4. Select the print job, and then touch **Print**.

> **Notes**
> - If you send multiple print jobs, then all those print jobs are listed.
> - Each attachment is represented as an individual print job.
> - To print the body of the e-mail, select **Enable e-mail body submission**. If this option is enabled, then the body of the e-mail is represented as an individual print job.
> - The number of pages allowed per print job depends on the organizational settings. If any of the print jobs exceeds the specified number of pages, then the job is not processed at all. For more information, see Configuring organizational settings.

> **Notes**
>
> - In a scenario, where a Guest Print user sends two emails, they go to the same queue. If the PIN hasn't expired already, they'll get the same PIN in response to the second email submission. In such a case, a one-way hash of the email is stored permanently.
> - Before the ability to route later jobs to the same queue is lost, the account is retained for 14 days.
> - Standard PIN expiration duration can be either configured for the organization or 14 days (when the user is deleted), whichever is sooner.

Configuring Cloud Print Release

You can configure a printer for Cloud Print Release by deploying the configuration or by importing the settings through the printer EWS. Users can also manually edit the settings to configure Cloud Print Release.

Cloud Print Release is available in 2.8-inch-screen printers only. For more information on printers that support Cloud Print Release, see Supported printer models on page 28.

Notes

- Cloud Print Release is available in printers with firmware version 075.287 or later. For more information, see Viewing the printer firmware version on page 58.
- Users can use Cloud Print Release using a PIN or secure login code only. For more information on secure login code, see Configuring printer login on page 96.
- Cloud Print Release releases all prints jobs in a print queue. Individual print job selection is not supported in Cloud Print Release.
- Cloud Print Release does not support hybrid print jobs or delegated jobs.

Configuring Cloud Print Release using a settings bundle

Administrators can configure the server address, client ID, and client secret using a settings bundle.

1. From the Embedded Web Server, click **Export Configuration › All Settings**.

   Note: The settings bundle is downloaded in ZIP format.

2. Extract the files from the ZIP folder.
3. Open the bundle.xml file with a text editor.
4. Modify the <deviceSettings> section of the settings bundle to:

```
<deviceSettings>

<setting
name="cloud.services.address">api.<env>.iss.lexmark.com</
setting>
<setting name="cloud.services.client.id">CLIENT_ID_FROM_APP</
setting>
<setting
name="cloud.services.client.secret">CLIENT_SECRET_FROM_APP</
setting>
</deviceSettings>
```

   Notes
   - Depending on the location of the data center, the *<env>* can be us or eu. To determine the value of *<env>* , see the address on the browser address field.
   - For more information on getting the client ID for CLIENT_ID_FROM_APP and the client secret for CLIENT_SECRET_FROM_APP, see Obtaining the client ID and client secret on page 180.

5. From the settings bundle, you can also modify the security_settings.xml to add Cloud Print Release in the Public permission section. To modify the security_settings.xml, open the file with a text editor.
6. Add the <name>cloud print release</name> line to the <public_permissions> section.

   Sample Code for <public_permissions> section

```
<public_permissions>

<name> cancel jobs</name>
<name>change languages</name>
<name>cloud connector management</name>
<name>cloud print release</name>
<name>cloud services enrollment</name>
<name>cloud services menu</name>
```

7. Save the file.
8. Send the XML file into a ZIP folder.

   > **Note:** You can add this settings bundle to the resource library. For more information, see Adding files to the resource library on page 145

9. Deploy the settings bundle from the Lexmark Fleet Management portal, or import the settings in the printer by using the Embedded Web Server. For more information, see Deploying files to printers on page 135.

Configuring Cloud Print Release using the Embedded Web Server

1. Before you begin, in the Embedded Web Server, click **Security**.
2. From the Public section, click **Manage Permissions**.
3. Expand the **Device Management** section, and then select **Cloud Print Release**.

   > **Note:** The Cloud Print Release option is available only with appropriate firmware installed.

4. From the Embedded Web Server, click **Settings › Cloud Services › Cloud Print Release**.
5. In the Server Address field, type the address of the cloud server.

   > **Note:** The server address is https://api.<*env*>.iss.lexmark.com, where <*env*> can be us or eu. To determine the value of <*env*> , see the address on the browser address field.

6. Type the client ID and client secret.

   > **Note:** The client ID and client secret are organization-specific. For more information, see Obtaining the client ID and client secret on page 180.

7. Click **Save**.

Releasing print jobs using Cloud Print Release

1. Send print jobs to the Lexmark Cloud print queue. For more information on print queue, see Managing print queues on page 180.
2. From the printer that has the Cloud Print Release feature, in the printer home screen, touch **Cloud Print Release**.
3. Depending on the printer login configuration of your organization, log in to the printer using any of the authentication methods:
    - PIN only
    - Secure login code

    Note: Cloud Print Release login is based on the printer login configuration set in Account Management by the organization administrator. For more information on configuring printer login, see "Managing printer logins" group.
4. Enter the PIN or secure login code, and click **OK**.
5. Wait for the printer to release all pending print jobs.

    Note: Jobs that are successfully printed are deleted from the print queue. Jobs that are canceled or not successfully printed are not deleted from the print queue.

Printing jobs from third-party printers using Cloud Print Management

For third-party printers and Lexmark printers that are not Lexmark solutions enabled, customers can use the Third-party Print feature to release print jobs using Cloud Print Management.
To enable third-party printing using Cloud Print Management, Lexmark provides a bundle which includes the ELATEC badge reader and the ELATEC TCP3 device. The TCP3 devices are connected to the wall and the printer through an Ethernet cable. The device is also connected to the badge reader through USB.
API endpoints in the Lexmark Cloud Print Management are used by the ELATEC device to connect securely. The base firmware on the TCP3 device includes the specific API calls and open authorization workflows to connect to Cloud Print Management. The firmware on the TCP3 device must be version 3.0.3.1 or later.

Notes

- Hybrid jobs are not supported.
- There are no file size limits as the jobs are not stored in the TCP3 device.
- You can configure the maximum number of jobs allowed at one time. For instance, if the maximum number of jobs configured is 10, then the first 10 jobs submitted are printed. If there are more than 10 jobs in the queue, swipe your badge again to release the remaining print jobs.
- Job submission through Lexmark Cloud Print Management portal using Lexmark Universal Print Driver does not modify the print output. However, job submission using Lexmark Universal Print Driver to a non-Lexmark device may not yield the intended print output. The third-party printer may interpret the print job commands incorrectly independent of the Cloud Print Management system. We recommend using the PostScript emulation driver if third-party devices are to be used with Lexmark-solutions-enabled devices for release.
- The TCP3 device does not report on metadata at the time of release. Relevant data like mono or color is captured at the time of submission.
- ELATEC feeds the Lexmark Cloud Services with printer information like IP address and Serial Number of the third-party printer. However, for the MAC address, it provides the MAC address of the ELATEC TCP3 device. Also, there is some information which the ELATEC TCP3 device is unable to retrieve from the third-party printer. This information is marked as unknown in Lexmark Cloud Services.

For more information on configuring the ELATEC TCP3 device, see the TCP3 Configuration Guide.

Using the Mobile Enhanced Solutions

Understanding Mobile Enhanced Solutions for Print Management

Mobile Enhanced Solutions is a cloud-based solution offered by Lexmark Cloud Services. It allows you to connect to your printers and perform cloud-based tasks with a mobile phone or tablet. To use Mobile Enhanced Solutions, your printers must be managed with Cloud Fleet Management using the Native Agent. This action allows Lexmark Cloud Services to communicate with the printer using IoT commands. Also, your printer firmware must support Mobile Enhanced Solutions, and Mobile Enhanced Solutions must be enabled from the administrator options of the printer.

Note: Mobile Enhanced Solutions is available only in printers with 2.8-inch touch-screen displays.

Using Direct Print

The Direct Print feature helps to track jobs that are directly sent to Lexmark printers for users in Lexmark Cloud Services. Using Direct Print, these jobs do not go through a global queue and are not released through the Print Release application. When Lexmark Print Management Client (LPMC) is installed in a workstation, users submitting jobs must enter credentials. LPMC sends the user-level data to the Lexmark Cloud Services portal. This data helps Lexmark Cloud Services to track print activities for users in Lexmark Cloud Services. The print job never leaves the customer network and is never held for release, but is sent and printed immediately to the designated printer. The Direct Print installation package includes a configuration XML (or JSON for LPMC 3.5.0 or newer) file that contains the printer profile information to ensure jobs are sent to the specified printers.

The Direct Print installation package includes a configuration XML file that contains the printer profile information to ensure jobs are sent to the specified printers.

To let users select which printer to send their job directly, do the following:

- Install the required settings in your workstation along with the LPMC software.
- Assign the direct printers in the cloud.
- Deploy the Direct Print configuration to the user workstation.

Direct Print can be used with cloud and hybrid submissions as well, allowing more flexibility in the allowable end-user print endpoints and workflows.

Before you begin, make sure that:

- Direct Print is enabled for the organization. For more information on enabling Direct Print, see Configuring organizational settings on page 170.
- LPMC Windows version 2.3.1145.0 with proper configuration is available.
- LPMC macOS version 3.3.0 or later in installed.
- Ubuntu version 3.3.0 or later in installed.
- Device Usage version 2.4.32 is installed.
- The printer is enrolled in Cloud Fleet Management and is attached to a network.
    - For Lexmark eSF enabled printers, make sure that the Cloud Print Management application bundle is installed on the device.
    - For Lexmark eSF printer or a non-eSF printer, make sure that Lexmark Universal Print Driver must be installed with the LPMC.
- The client workstation is connected to the network and access to port 9100 is enabled.
- Direct Print roles are defined. For more information on defining roles, see "Organization administrator" group. The Direct Print roles are as follows:

  Direct Print administrator

    - Provides access to Direct Print users
    - Create configurations using Cloud Fleet Management tags
    - Downloads configurations from Print Clients page

  Direct Print user

    - Downloads personal Direct Print installation package from Print Clients page
    - Submits print jobs using Direct Print

> **Note:** When the Direct Print feature is enabled by a Direct Print administrator, configuration settings become available. Depending on whether they set Direct, Offline, or Direct and offline feature, Print Release Administrator and Hybrid Print Administrator also have the rights to configure these features.

Creating a print assignment

Before you begin, make sure that **Enable print assignments** is selected on the Organizational Settings page. For more information on enabling Direct Print, see Configuring organizational settings on page 170.

You must have an administrator role in Cloud Print Management and Cloud Fleet Management to configure the Direct Print feature. To configure print assignments, you must create assignments. Assignments act as a bridge between a user and a set of printers. Creating an assignment helps a user or a group to use the Direct Print or Offline Print feature on a particular set of printers.

> **Note:** From the Fleet Management portal, we recommend updating the **Printer share name (optional)** field on the **Printer details** page. It is not mandatory to update this field. If you want to change the print queue name as it appears to the end user, then enter a value in the **Printer share name (optional)** field. LPMC has a single direct print queue. If Printer Name is not configured in Cloud Fleet Management, then it displays Printer manufacturer and Model name.

1. From the Print Management web portal, click **Administration › Print Assignments**.
2. Click **Create**.
3. On the **Create Print Assignment** page, do the following:
    a. In the **General** section, do the following:
        - **Assignment name**—Type the name of the assignment.
        - **Description**—Type a brief description of the assignment.

    b. In the **Printer Allotment** section, do the following:
        - **Unassigned Printer Access**—Select **Enable unassigned printer access** to allow users to print to printers that are not assigned to them.
        - **Printer Assignment**—In this section, you can add printers for the assignment based on various rules.

        > **Notes**
        > - To add a rule for printer assignment, click **Add Rule**.
        > - For the rule condition, you can select either **And** or **Or**.
        > - You can configure rules based on following conditions: .
        >   - **Assign by**—For this condition, you can select **Tag**, **Subnet**, or **IP**.
        >   - For already created Print Assignments with tags, if new printers are added or existing printers are removed from that existing Tag, then the change does not take effect immediately. It may take up to 24 hours to take effect.
        >   - You can add multiple tags to each unique printer.
        >   - You can view the total number of unique printers that are tagged.
        >   - **Operator**—For this condition, you can select **Equals**, **Not Equals**, **In**, or **Not In**. The availability of these options depends on what you have selected in **Assign by**. For instance, if you select **Tag** in **Assign by**, then the **Not Equals** and **Not In** options are not available.
        >   - **Identifier**—In this text box, type the printer identifier depending on what you have selected in **Assign by**.
        > - You can add multiple rules with **And** or **Or** conditions. Click **Add** to add a particular rule.
        > - To delete a rule, click  .

    c. In the **Printer Properties** section, select **Allow print settings changes** to allow users to modify printer settings before printing. The users are defined in the **User Assignment** section.

        > **Note:** This option lets you modify the **Default Print Settings**.

    d. In the **User Assignment**, select any one of the following:
        - **Universal Assignment**—This makes the printer assignment available to all users.
        - **Custom Assignment**—This helps to define rules to select users for assignment.

    e. Click **Save Changes**.

Notes

- To add a custom rule or group for user assignment, click **Add Rule** or **Add Group** respectively.
- For both rule and group conditions, you can select either **And** or **Or**, and a combination of both.
- You can configure rules based on following conditions: .
  - **Assign by**—For this condition, you can select **Subnet**, **Department**, **Cost center**, or **Personal**.
  - **Operator**—For this condition, you can select **Equals**, **Not Equals**, **In**, and **Not In**.
  - **Identifier**—In this text box, type the user identifier depending on what you have selected in **Assign by**.
- You can add multiple rules or groups with **And** or **Or** conditions. Click **Add** to add a particular rule or group.
- To delete a rule or a group, click .

Note:

- To edit an assignment, on the **Print Assignments** page, click , make the necessary changes, and then click **Save Changes**.
- In a scenario, where assignments are created for cost center, department, default (organization), personal and client status, the following order of priority is applied. Starting from the least, the order would be **Default (Organization) › Cost Center/ Department › Personal › Client Status**.
- For Print Assignments, essentially there is no conflict. If an user has multiple eligible assignments, then the printers across those assignments will be aggregated (union).

Downloading the Direct Print installation package

The download option is available only if **Enable print assignments** is selected, and **Use print assignment with** is set to **Direct Print** or **Direct and offline print**.

1. From the Print Management web portal, click **Print Clients**.
2. From the **Select client** menu, select an operating system.
3. From the **Select package** type menu, select **Direct Print**.
4. Click **Download Client**.

Sample configuration file (LPMC version 3.6.0 or later)

```
{
  "loggerSettings" : {
    "loggingLevel" : "info",
    "logIpAddresses" : false,
    "redactPrivateInformation" : true
  },
  "serverSettings" : {
```

```
    "apiVersion" : "3.0",
    "idpServerUrl" : "https://idp.us.iss.lexmark.com",
    "cpmServerUrl" : "https://apis.us.iss.lexmark.com/cpm"
  },
  "directPrintSettings" : {
    "queueName" : "Direct Print Management - PCLXL",
    "loopbackPort" : 9169,
    "printSettings" : [ ],
    "allowSecurePrintOnly" : false,
    "preferSecurePrintUsingPrintCryption" : false
  },
  "uiSettings" : {
    "authenticationMode" : "DefaultBrowser",
    "displayNotifications" : true,
    "displayConnectionErrorMessageBoxes" : true
  },
  "certificateValidationSettings" : {
    "certificateValidationSwitch" : true,
    "certificateValidationDebugMode" : false,
    "certificateRevocationMode" : 0
  },
  "webProxySettings" : {
    "enabled" : true,
    "address" : ""
  },
  "networkInterfaceSelectorSettings" : {
    "prioritizeVirtualAdapters" : false,
    "filterAutoIpAddresses" : false,
    "subnetFilter" : {
      "include" : [ ],
      "exclude" : [ ]
    }
  },
  "scheduleSettings" : {
    "ipChangeMonitorIntervalInSeconds" : 60,
    "proxyCacheResetIntervalInSeconds" : 60
  },
  "listenerPortSettings" : {
    "universalServicePort" : 9443
  },
  "driverName" : "Lexmark Universal v2 XL",
  "defaultQueueName" : "Direct Print Management - PCLXL",
  "printJobFileNameFormat" : "%d_%i.prn",
  "userFolderDirectoryMode" : "Programdata"
}
```

Note: For more information on configuration, see the *Lexmark Print Management Client Configuration Guide*.

Installing the Direct Print installation package

1. From the Direct Print installation package, run the Installer file.
2. Accept the End-User License Agreement.
3. Click **Install**.
4. Click **Finish**.

Using Offline Print

The Offline Print feature is a way to allow users to print even when there are connectivity issues with the Lexmark Cloud Services. This feature works with conventional Cloud, Hybrid, Direct print which requires connectivity to Lexmark Cloud but makes sure that users can continue printing even when connectivity to Lexmark Cloud Services is lost.

To use Cloud, Hybrid, or Direct print, uninterrupted connectivity to the cloud server is required. Unlike Cloud, Hybrid, or Direct print, Offline Print allows users to send print jobs without requiring connectivity to the cloud server. Moreover, the Offline Print feature also stores analytics data in the client workstation during offline mode, and then sends it to the cloud server, when connectivity to the cloud server is restored.

On initiating a cloud or hybrid print job during offline mode, the user has to select the printer destination. They can either select from the list of configured printers or directly enter the IP or Hostname of the printer. When printing to a direct print queue during offline mode, it proceeds normally. In Analytics, the print activity is reported as Offline Print.

Printing jobs using the printer hostname depends on the configured hostname resolution in the user's network. Hostname resolution is the process of converting a hostname into an IP address. Depending on the hostname resolution, either hostname or hostname with domain works.

Prerequisites

- **Enable print assignments** must be enabled on the **Organizational Settings** page, and **Use print assignment with** must be set to **Offline Print** or **Direct and offline print**. For more information on enabling print assignments, see Configuring organizational settings on page 170.
- For submission from registered Lexmark Cloud Service, any combination of queues present on the workstation - cloud or hybrid or direct.
- User must be currently logged into the LPMC.

User experience in different modes

The following scenarios are based on the assumption that **Direct and offline print** is enabled on the **Organizational Settings** page. For more information on creating print assignments, see the "Creating a print assignment" section in Using Direct Print on page 204.

- For direct print submissions, the user's workflow is not affected.
- For cloud or hybrid submissions, the user experiences the following:
  - Users will be notified every time they print in offline mode.
  - If the administrator had created print assignments, the list of printers will be displayed for the user to select a printer to release the print job.
  - The user can also enter the IP address or hostname of the printer to release the print job.
  - The user can click **Cancel** to cancel the print activity.
  - If Lexmark Cloud Services connectivity is restored, then the user is notified about the restoration of normal print workflow.
- In offline mode, analytics data is stored in the client machine until it can stream back to the cloud. The offline analytics data is sent to cloud server during the next print job after connection is restored.
- Supported by Windows, Mac, and Ubuntu LPMC clients.

Limitations

- Mobile is not supported
- Chrome extension is not supported
- No prompt for Offline Print is shown while there is an ongoing job.
- Offline Print job pages are not shown in Analytics 2.0.

Note: For offline printing to work, LPMC requires a prior download of settings from Lexmark Cloud Services. This download happens automatically every four hours or when you select **Check for Updates** from the system tray. The system tray icon shows your connection status.

Using Advanced Hybrid storage

Understanding advanced hybrid storage

Notes

- To use advanced hybrid storage feature, your administrator must enable this feature. For more information, see Configuring organizational settings on page 170.
- On enabling this feature, an application is created for your organization. This application credentials are needed in all storage devices where the service runs. To get the advanced hybrid storage application credentials, see Obtaining the client ID and client secret on page 180.
- LPMC version 3.5.1 or later is required.

Advanced Hybrid Storage Feature

The advanced hybrid storage feature uses additional storage locations for print jobs without allowing them to move out of the customer network. This ensures that the user's print job remains within the network while being stored in locations outside their workstation.

Supported Storage Types:

- Windows systems
- Ubuntu systems
- Optra Edge devices

Feature overview:

This feature is designed to ensure high availability of print jobs, even when the workstation from which the job is submitted is offline. Although the cloud server stores metadata like the job location, the actual print job is stored in a hybrid storage environment.

Administrator options:

Administrators can choose to create one to three additional replicas of their print job. However, they cannot select the specific device where the job is stored.

To ensure higher availability, the job is stored in alternate locations equal to the number of copies selected in the organization settings.

Print release process:

During a print release, the printer first checks the primary storage location (submission workstation) for the print jobs.

If the primary location is unreachable, it then checks the alternate locations. When the print job is successfully released, it is removed from all storage devices.

> **Note:**
>
> - For every storage client, you must reserve a certain amount of disk space so that the service has enough disk space for processing operations like Change print settings.
> - Storage services reserve the space based on the available disk space. The minimum reserved space is 20 GB.

Setting up Optra Edge devices

Before you begin, make sure that you register your Optra Edge devices in the Optra portal.

> **Note:** For more information on registering Optra Edge devices, see https://optra.com/getting-started.

We recommend using VZ5000 models.

1. Go to www.portal.optra.com, and then log in.
2. Create a workflow using advanced hybrid storage skill from Optra market place.

> **Note:**
>
> - For Optra, common and additional variables are required to be set as environment variables for the device.
> - For more information on the steps to set up an Optra Edge device, see User's Guide.

Setting up advanced hybrid storage for Windows and Ubuntu systems

Supported operating systems

- Windows Server 2022 Datacenter (AMD64)
- Ubuntu 22.04 (AMD64)
- Ubuntu 24.04 (AMD64)

Installing the advanced hybrid package

Before you begin, you must enable the additional hybrid storage option from the Organizational Settings page. For more information, see Configuring organizational settings on page 170.

1. Depending on your requirement, get the Windows installation package or the Ubuntu installation package.

   > **Notes**
   >
   > For more information on accessing the installation packages, contact your Lexmark representative.

2. Unzip the installation package.
3. Open the Windows PowerShell as an administrator.

4. Run the installer script file with the following command line options:

    ◦ **For Windows and Ubuntu operating system**:

      $clientSecret = ConvertTo-SecureString "client_secret_value" -AsPlainText -Force$proxyPassword = ConvertTo-SecureString "proxy_password_value" -AsPlainText -Force

    ◦ **For Windows operating system**—install.ps1

      Basic installation:

      & .\install.ps1 -DATA_CENTER "<data-center>" -CLIENT_ID "<client-id>" -CLIENT_SECRET $clientSecret

      Advanced installation:

      & .\install.ps1 -DATA_CENTER "<data-center>" -CLIENT_ID "<client-id>" -CLIENT_SECRET $clientSecret -JOB_PATH "<job-path>" -INSTALLATION_DIR "<install-path>" -SERVER_PORT "<server-port>" -ENABLE_HOSTNAME "<enable-hostname>" -DEVICE_NAME "<device-name>" -HTTPS_PROXY "http://<proxy_host>:<proxy_port>" -PROXY_USER "<username>" -PROXY_PASSWORD $proxyPassword -LOG_REDACT_PRIVATE_INFORMATION "<log-redact-private-information>" -LOG_IP_ADDRESSES "<log-ip-addresses>"

    ◦ **For Ubuntu operating system**—installer.sh

      Basic installation:

      bash installer.sh DATA_CENTER=<data-center> CLIENT_ID=<client_id> CLIENT_SECRET=<client_secret>

      Advanced installation:

      bash installer.sh DATA_CENTER=<data-center> CLIENT_ID=<client_id> CLIENT_SECRET=<client_secret> JOB_PATH=</path/to/store/jobs> INSTALLATION_DIR=</path/to/installation/ directory> PROXY_USER=<proxy_username> PROXY_PASSWORD=<proxy_password> LOG_REDACT_PRIVATE_INFORMATION=<log-redact-private-information> LOG_IP_ADDRESSES=<log-ip-addresses>

> **Notes**
> - For more information on common variables, see Common variables.
> - For more information on additional variables related to Windows and Ubuntu, see Additional optional variables for Windows and Ubuntu.

Uninstalling advanced hybrid storage

For Windows operating system

1. Open Windows PowerShell in administrator mode.
2. Navigate to installation directory.
3. Make sure that the uninstall.ps1 file is present in the directory.
4. Execute the uninstall.ps1 file.

For Ubuntu operating system

1. Open terminal.
2. Navigate to Installation Directory
3. Make sure that the uninstaller.sh file is present in the directory.
4. Execute the uninstaller.sh file with elevated access.

Upgrading advanced hybrid storage

For Windows operating system

1. Download the desired package.
2. Open the Windows PowerShell as an administrator.
3. Execute the install.ps1 file without any arguments.

For Ubuntu operating system

1. Download the desired package.
2. Open terminal.
3. Execute the installer.sh file without any arguments.

Understanding the installation parameter information

Common variables

Name	Value	Description
DATA_CENTER **Note:** For Optra, instead of DATA_CENTER, set SPRING_PROFILES_ACTIVE.	Select one of the following that matches your data-center location: • us • eu	This variable is used by the application to connect to the data center where the Lexmark Cloud Services organization is located.
CLIENT_ID **Note:** For Optra, instead of CLIENT_ID, set EDGE_CLIENT_ID.	1. From the Account Management portal, click **Applications** tab. 2. In the search bar, search for CPM Advanced Hybrid Storage. 3. Click the application name. 4. On the CPM Advanced Hybrid Storage page, in the OAuth Settings section, identify <client_ID> and <client_secret>.	The value is used to register and authenticate with the Cloud Print Management.

Name	Value	Description
CLIENT_SECRET **Note:** For Optra, instead of CLIENT_SECRET , set EDGE_CLIENT_SECRET.	Same as CLIENT_ID.	Same as CLIENT_ID.

Optional variables

Name	Value	Description
SERVER_PORT	Any port	The application listens on this port. The default port is 9443.
DEVICE_ID	Custom device name of Windows or Ubuntu servers	Unique Identifier to identity a particular advanced storage device. The default value is server's hostname.
CLEAN_UP_SCHEDULE	Cron expression	This value determines how often the application checks to determine if a job should be removed from this storage device. The default value is 30 minutes.
ENABLE_HOSTNAME	True or False	The value determines whether the printer connects to this device using the host name or the IP address. The preferred and default value is False because due to network configurations, the host name may not be discoverable by the printer.
STATUS_SCHEDULE	Cron expression	The value is how often the application updates its information (IP, disk space, etc.) to Cloud Print Management. The default value is one minute.
LOG_REDACT _PRIVATE_INFORMATION	True or False	This value determines if we should remove private information from the logs. The default value is True.
LOG_IP_ADDRESSES	True or False	The value determines whether to log the IP addresses. The default value is False.

Name	Value	Description
LOGGING_LEVEL _COM_LEXMARK	DEBUG/ INFO/ ERROR/ WARN	The default value is INFO. To change the logging level: **For Windows operating system:** 1. From the installation directory, edit the value of the environment variable in lexmark-print-management-advanced-hybrid-service.xml.. 2. Restart the service **For Ubuntu operating system:** 1. Run lexmark-print-management-advanced-hybrid-service. 2. Run lexmark-print-management-advanced-hybrid-service .

Additional optional variables for Windows and Ubuntu

Name	Value	Description
JOB_PATH **Note:** For Optra, JOB_PATH needs to be defined only if using external hard drive. For example, JOB_PATH = /media/sda1/jobs.	Fully qualified path to the directory where hybrid jobs are to be stored.	The following are the default values: • For Windows, the path is C:\ProgramData\Lexmark\Hybrid\Jobs. • For Ubuntu, the path is /var/Lexmark/Hybrid/Jobs.

Name	Value	Description
INSTALLATION_DIR	Fully qualified path to the wanted installation directory.	The following are the default values: • For Windows, the path is C:\Program Files\Lexmark\Hybrid Storage Edge Service. • For Ubuntu, the path is /opt/Lexmark/HybridStorageEdgeService.
DEVICE_NAME	A name to uniquely identify each device where the service is running.	A unique identifier from Cloud Print Management to identity a particular device.

Name	Value	Description
HTTPS_PROXY	http://<proxy_host>:<proxy_port>	• If the server is behind proxy, we will detect the system proxy. You can override the system proxy by setting the HTTPS_PROXY variable during installation. • You can also add or modify the proxy setting after installation. • In Windows: Update the HTTPS_PROXY variable in the lexmark-print-management-advanced-hybrid-service.xml file located in the installation folder. • For Ubuntu, perform the following steps: 1. Update the variable in the service manager. 2. Run sudo systemctl edit lexmark-print-management-advanced-hybrid-service. 3. Add the following lines: [Service] Environment ="https_proxy=http:// <proxy_address> :<proxy_port>". 4. Save and exit the editor.

Name	Value	Description
		5. Run sudo systemctl daemon-reload. 6. Run sudo systemctl restartlexmark-print-management-advanced-hybrid-service.
PROXY_USER		If a proxy needs authentication, then it is encrypted and stored in a local file system.
PROXY_PASSWORD		
DNS_TIMEOUT **Note:** This is only required for Optra.	The default value is 3000 ms.	if you observe intermittent failure to sync jobs, then set this variable.

Disabling storage clients

1. From the Cloud Print Management portal, click **Print Clients > Client Status**.
2. Click the **Advanced Hybrid Storage Client** tab.
3. Select one or more devices.
4. Click **Disable > Disable Storage Client** or **Disable Storage Clients**.

Deleting storage clients

1. From the Cloud Print Management portal, click **Print Clients > Client Status**.
2. Click the **Advanced Hybrid Storage Client** tab.
3. Select one or more devices.
4. Click **Delete > Delete Storage Client** or **Delete Storage Clients**.

Note: It may take some time for the deletion to take effect.

Configuring proxy settings

For Optra:

1. Connect the device to a computer through the USB device port to access the Embedded Web Server (EWS).

2. Open a web browser, and in the **Address** field, type the IP Address of Optra device.
3. In the **Password** field, type the Optra serial number.
4. Click **Proxy** tab, and then enter the proxy information.

For Windows and Ubuntu:

The service is configured to read the proxy set at the system level for the user who installed the service.

Installing certificates

For Optra:

Installing certificates is not supported for Optra.

For Windows:

The advanced hybrid storage service uses the Windows-Root Trust Store. As a result, any certificates installed in Windows-Root trust store is honoured by the service.

For Ubuntu

1. From the Installation directory execute the script: **update-ssl-proxy.sh**.
2. From the Syntax, do the following:

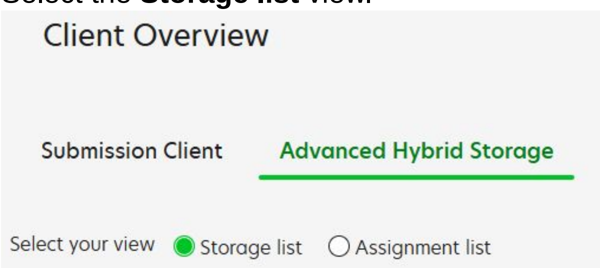
    - Import—**sh update-ssl-proxy.sh <*cert_path*> <alias> import**
    - Delete—**sh update-ssl-proxy.sh <*cert_path*> <alias> delete**

Managing Advanced Hybrid storage assignments

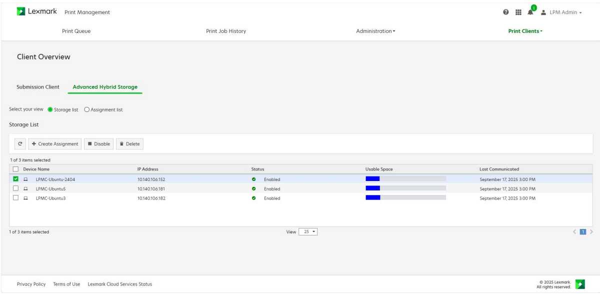
Creating advanced hybrid storage assignments

Before you begin, make sure that **Enable advanced hybrid storage** on the **Organizational Settings** page is selected. For more information, see Configuring organizational settings on page 170.

1. From the Print Management web portal, click **Print Clients › Client Overview**.
2. Click the **Advanced Hybrid Storage** tab.
3. Select the **Storage list** view.



4. From the **Device list**, select one or more devices, and then click **Create Assignment**.



5. On the **Create Assignment** window, from the **Assign by** menu, select any one of the following:
    - **Organization**—When an organizational advanced hybrid storage assignment is created, the **Assign by** menu no longer features the **Organization** option.
    - **Cost Center**—Type the name of the cost center in the **Cost center name** field.
    - **Department**—Type the name of the department in the **Department name** field.
    - **Personal**—Type the email ID of the member for whom the assignment is created.
6. Click **Create Assignment**.
   To confirm the creation of each type of assignment, select **Assignment list** view.

Notes

- In the **Storage list** view, you can disable advanced hybrid storage devices. Select one more devices, and then click **Disable › Disable Storage Client**.
- In the **Storage list** view, you can delete advanced hybrid storage devices. Select one more devices, and then click **Delete › Delete Storage Client**.
    - If an assignment has only one storage client and that client is deleted, then the assignment is also deleted.
    - If an assignment has multiple storage clients and one is deleted, then only that client is removed. The assignment stays.
    - If a storage client is deleted but not part of any assignment, then nothing changes in the **Assignment List** page.

Using the advanced hybrid storage assignment list

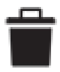
Organizational Advanced Hybrid Storage Assignment

When you have created an Organizational Advanced Hybrid Storage Assignment, you can view it in the assignment list. On this list, you can view or delete the assignment.

To edit an Organizational Advanced Hybrid Storage Assignment, do the following:

1. In the **Organizational Advanced Hybrid Storage Assignment** section, click  .
2. On the **Edit Organizational Assignment** window, you can add devices and remove the existing ones.
3. Click **Save Changes**.

To delete an Organizational Advanced Hybrid Storage Assignment, do the following:

1. In the **Organizational Advanced Hybrid Storage Assignment** section, click  .
2. On the **Delete Organizational Assignment** window, click **Delete Assignment**.

> **Note:** This deletes the Organizational Advanced Hybrid Storage Assignment and unassigns all the assigned devices under the organization.

Cost center, department, and personal assignments

In the **Assignment List** section, you can view, delete, or edit advanced hybrid assignments. Click **Views**, and then filter the assignments by cost center, department, or personal.

> **Note:** The **Views** filters are available only for the type of assignments you have created. For instance, if the assignment list does not have a personal advanced hybrid assignment, then the **Assignment by personal** option will not be available in the **Views** filter.

Deleting an assignment

In the **Assignment List** section, you can delete a cost center, department, or personal assignment.

To delete the assignment, do the following:

1. From the **Assignment List**, select one or more assignments.
2. Click **Delete Assignment › Delete**.

Editing an assignment

In the **Assignment List** section, you can edit a cost center, department, or personal assignment.

To edit an assignment, do the following:

1. From the **Assignment List**, select the assignment.
2. Click **Edit Assignment**.
3. On the **Edit Assignment** window, add or remove devices.
4. Click **Save Changes**.

> **Notes**
>
> - You can use the **Device Name** filter to search for assignments associated with a particular device. The **Device Name** filter results are a subset of the **Views** filter. For example, an administrator may select **Assignments by personal** option in the **Views** filter, and a particular device in the **Device Name** filter. In that scenario, personal assignments associated with the particular device are listed.
> - If a user has multiple assignments, then their print job is mirrored to the storage with the most available disk space.

Understanding various scenarios for advanced hybrid storage

Scenario 1

In this scenario, a storage device (**Storage A**) is assigned to a department (**DPT**) with multiple users (**User 1 and User 2**). In such case, the following happens:

- **Storage A** is assigned to department **DPT**.
- **User 1 and User 2** both belongs to department **DPT**.
- The print jobs for both **User 1 and User 2** are stored in **Storage A**.

Scenario 2

In this scenario, a device is assigned to multiple storage locations. The various storage devices have different storage capacity. In this case, the following happens:

- A storage device can be assigned to the Organization, Cost Center, Department and Personal at the same time but the print job will be saved based on:
  - Where the user is assigned
  - Which one has the most storage
  - The number of desired replicas.
- If a user has multiple assignments (Organization, Cost Center, Department, Group, and Personal), their print job is mirrored to the storage with the most available disk space.

Solution Center

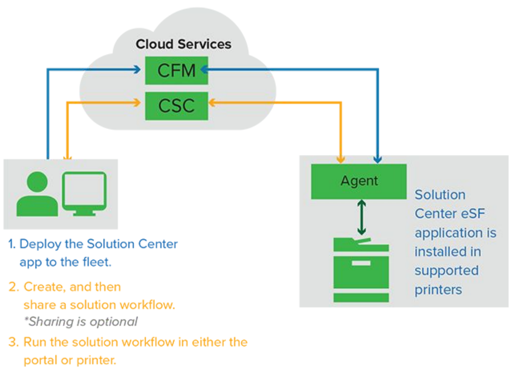
Overview

Cloud Solution Center lets you create or customize your workflows depending on your roles in an organization. You can create a workflow to capture, process, and route a document. After selecting Solution Center card from the dashboard or from the on the upper-right corner of the page, you can view a list of available solutions based on your role.

There is also a Solution Center eSF application available on Lexmark printers and multifunction products (MFPs). It allows users to view and execute workflows that have been configured through the Lexmark Cloud Services portal. For steps that are kept unlocked in the Lexmark Cloud Services portal, users can still edit or customize them through the eSF application.

> **Note:** For more information on printer models that support Solution Center, see Supported printer models for Solution Center on page 57.

Flow chart of using Solution Center



1. Deploy the Solution Center eSF application to the fleet.
2. Create, and then share a solution workflow. For more information on creating a solution workflow, see Creating a solution workflow on page 224.
3. Use the Cloud Solution Center from the Lexmark Cloud Services portal. For more information on using a solution workflow, see Using the Cloud Solution Center on page 228.
4. Use the Solution Center application from the printer. For more information on using Solution Center application, see Accessing the application on page 233.

Solution Center Roles

- **Solution Center Administrator**—Creates personal and shareable solutions with their own organization.

  > **Note:** A Solution Center Administrator who is also a Partner Administrator can create and share solutions with child organizations.

- **Solution Center Advanced User**—Creates personal solutions.
- **Solution Center User**—Executes solutions.

To be able to use the various actions for Solution Center, the following roles are required:

- **Translation Assistant User**—Uses Translations for the entitled organization.
- **Redaction Assistant User**—Uses Redactions for the entitled organization.
- **OCR User**—Uses Optical Character Recognition for the entitled organization.

Limitations

For more information on limitations of Solution Center, see Solution Center e6 ReadMe v1.1.1.

Creating a solution workflow

Note: You must have Advanced User role in an organization to create a solution.

Before you begin, make sure that the organization and its users have appropriate page allocations. For more information, see the "Solution Quota Manager" chapter.

1. From a web browser, access the Lexmark Cloud Services dashboard, and then do either of the following:
   - Click the **Solution Center** card.

     Note: If the card is not available in the dashboard, then add the card. For more information, see Managing the dashboard on page 21.
   - Click ▦ on the upper-right corner of the page, and then click **Solution Center**.
2. Click **Create**.
3. In the **Solution** name field, type the name of the solution workflow.
4. In the **Description (Optional)** field, type a short description about the solution workflow.
5. Select **Share with my organization** to share this solution workflow with your organization.

   Notes
   If the solution workflow is not shared, then only the creator has the access to that workflow. So if the currently logged in user is not the creator, then that user cannot see the solution workflow.

   Types of solution workflows

   - **Personal**—Only available for the creator of the workflow
   - **Organizational**—Available for all the users from the current entitled organization
   - **Shared**—Available for all the users of the specific child organization with which the solution is shared
6. From the **Scan Settings** section, click **Edit Scan Settings**.

   Note: The **Scan Settings** are only applicable when the solution is run from the printer. The **Scan Settings** appear on the printer panel only if **Show scan settings** on the printer panel is enabled in **Edit Scan Settings**.
7. From the **Steps** section, click **Add Step**.

> **Notes**
> - The steps must include at least one destination and can include one or multiple actions.
> - You can include up to 10 steps per workflow.
> - Solutions that are combinations of actions and destinations must end with a destination.

8. From the **Add Step** window, select the action and destination.

   For Action items, select one or more of the following:

   - **Extract Text using OCR**—Optical Character Recognition (OCR) is a service used to extract text from a document that is converted to machine-readable format.

     > **Note:**
     > - OCR is always executed first, regardless of the sequence in which it was added while creating the solution.
     > - Using the OCR service consumes the OCR entitlement quota.

     - From the **Select the output file type** menu, select one of the following:
       - **Portable Document Format (.pdf)**
       - **Word document (.docx)**
       - **Plain text (.txt)**

     .
   - **Translate**—Allows you to Upload a file in a source language and translate it to one or more target languages.

     > **Note:** The Translation Assistant service uses Microsoft Azure Cognitive Services.

     1. Select the language of the document to translate.

        > **Note:** This feature detects the source language automatically by default. For more information on supported formats and languages, see Understanding Translation Assistant on page 282.

     2. Select a target language.

        > **Note:**
        > - Using the Translation Assistant service uses the Translation entitlement quota.
        > - You can select up to five target languages.

     > **Note:** For more information on the translate action, see the "Translation Assistant" chapter.

   - **Redact**—Allows you to Censor part of a text for security purposes.

     > **Note:**
     > - The redact action consumes Redaction quota.
     > - The redact service uses Microsoft Azure Cognitive Services.

     1. Select the language of the document to redact.

> **Note:** Make sure that the document format selected in **Scan Settings** is DOCX.

2. From the **Select the information you want to redact from the file** menu, configure the following:

    - Select **Personally Identifiable Information (PII)** to redact personally identifiable information.

        - Select the available PII or select from the available country-based PII.

        > **Note:** For more on available PII, see Available country-based PII on page 228.

        - To move a selected PII between the **Available PII** and **Selected PII** lists, click or , or drag it between the lists. You can also double-click it and select an option.
    - Select **Custom text** to redact specific text from the file.

        - In the **Specify custom text to redact** field, type the text to be redacted.
        - From the menu, select **Whole word only**, **Contains**, **Exact match** or **Advanced Match**.

        > **Notes**
        > - Select **Whole word only** to redact only a specific entire word.
        > - Select **Contains** to redact both an entire word and any word that contains it.
        > - Select **Exact Match** to redact words exactly as you capitalized them.
        > - For **Custom text**, the maximum limit is 20 words.
        > - For **Advanced Match**, the maximum limit is 512 characters. Advanced Match works on the principle of regular expressions (regex), which are a way to define search operations based on a sequence of characters.
        >   - Regular expressions with trailing spaces and strings before or after the patterns are valid entries.
        >   - Depending on how the DOCX input file is parsed, the resulting regular expression for a particular text input may or may not match. This may result to some unredacted strings.

3. Click **Add Text**.

- **Insert Footer**—To add a footer to the page, type the text in the **Footer** text field.

> **Note:** Make sure that the document format selected in **Scan Settings** is DOCX.

For Destination items, select one or more of the following:

- **Email**—Send the document to the specified email addresses.

1. In the **Send document to the following email addresses** field, type the email addresses.

   > **Note:**
   > - You can add up to 50 email addresses as long as their combined length does not exceed 255 characters.
   > - The email addresses must be separated by commas.

2. If you want to receive a copy of the email, then select **Send me a copy**.

   > **Note:**
   > - Selecting **Send me a copy** lets you run a solution even if the **Send document to the following email addresses** field is left blank.
   > - You can also run a solution even without selecting **Send me a copy** if **Send document to the following email addresses** is unlocked.

- **Download**—Download a copy of the document to your device.

  > **Note:** This step can be performed only from the Lexmark Cloud Services portal.

- **Send to Cloud Print Queue**—Send the document to your Cloud Print Management queue.

  > **Note:** This option is available only to users who have the Print Management User role.

- **Print**—Print the document.

  > **Note:** This step can be executed from a printer only.

- **Send to Cloud Storage**—From the **Send to** menu, select the cloud storage provider.

  > **Note:** Cloud storage providers include Box, Dropbox, OneDrive, SharePoint, and Google Drive. You can select any of these storage providers from **Solution Center Settings**.

9. Click **Create Solution**.

Note:

- To add more than one action, click **Add Step** each time you select an action.
- Click to lock the values of the actions or destinations so that the values cannot be changed during execution. Make sure that you enter a value for the actions and destinations before you lock it.
- If an action or a destination is not locked during execution, then the user is prompted to select a value from the available options.
- Click to unlock a value.
- You can configure the storage providers and set account domains from the **Solution Center Settings** page. To access the **Solution Center Settings** page, click .
- Users must have a Microsoft, Google, Box, or Dropbox account to access the cloud storage services.
- For more information on managing scan destinations, see Managing scan destinations on page 239.
- You may encounter error messages for the following reasons:
    - The selected account is signed out.
    - No cloud storage account is selected and all storage accounts are signed out.
    - The cloud storage account is disabled in global setting.
    - A duplicate folder is created.
    - A folder name exceeds the maximum length.
    - A path is invalid due to an inaccessible or deleted folder.
- To add more than one destination, click **Add Step** each time you select a destination.

Using the Cloud Solution Center

On creating the solution workflow, users can run these solutions based on the entitlement.

On the Solutions page, you can use the **Quotas** menu to view the remaining quota for Translation, Redaction, and OCR.

Note:

- To duplicate a solution, click .
- To use a solution, click to run a solution.
- To delete a solution, click .
- To edit a solution, click .

Available country-based PII

The following are the country-based Personally Identifiable Information (PII) available for redact:

- **General**
  - Person
  - Phone Number
  - Organization
  - Address
  - Email
  - URL
  - IP
  - Date
  - Age
  - ABA routing number
  - SWIFT code
  - Credit card
  - International Banking Account Number (IBAN)
- **Argentina**
  - Argentina National Identity (DNI) Number
- **Austria**
  - Austria identity card
  - Austria tax identification Number
  - Austria Value Added Tax (VAT) Number
- **Australia**
  - Australia bank account Number
  - Australian business Number
  - Australia Company Number
  - Australia driver's license
  - Australia medical account Number
  - Australia passport Number
  - Australia tax file Number
- **Belgium**
  - Belgium national Number
  - Belgium Value Added Tax (VAT) Number
- **Brazil**
  - Brazil legal entity Number (CNPJ)
  - Brazil CPF Number
  - Brazil National ID card (RG)
- **Canada**
  - Canada bank account Number
  - Canada driver's license Number
  - Canada health service Number
  - Canada passport Number
  - Canada social insurance Number
- **Chile**
  - Chile identity card Number
- **China**
  - China Resident Identity Card (PRC) Number

- **European Union (EU)**
  - EU debit card Number
  - EU driver's license Number
  - EU GPU coordinates
  - EU national identification Number
  - EU passport number
  - EU Social Security Number (SSN) or equivalent ID
  - EU Tax Identification Number (TIN)
- **France**
  - France driver's license Number
  - France health insurance Number
  - France national ID card (CNI)
  - France passport Number
  - France Social Security Number (INSEE)
  - France tax identification Number (NumeroSPI)
  - France Value Added Tax (VAT) Number
- **Germany**
  - German Driver's License Number
  - Germany Identity Card Number
  - Germany passport number
  - Germany Tax Identification Number
  - Germany Value Added Tax Number
- **Hong Kong**
  - Hong Kong Identity Card (HKID) Number
- **Hungary**
  - Hungary Personal Identification Number
  - Hungary Tax Identification Number
  - Hungary Value Added Tax Number
- **India**
  - India Permanent Account Number (PAN)
  - India Unique Identification (Aadhaar) Number
- **Indonesia**
  - Indonesia Identity Card (KTP) Number
- **Ireland**
  - Ireland Personal Public Service (PPS) Number
  - Ireland Personal Public Service (PPS) Number v2
- **Israel**
  - Israel National ID
  - Israel Bank Account Number
- **Italy**
  - Italy Driver's License ID
  - Italy Fiscal Code Italy
  - Value Added Tax Number
- **Japan**

  - Japan Bank Account Number
  - Japan Driver’s License Number
  - Japan “My Number” (personal)
  - Japan “My Number” (corporate)
  - Japan Resident Registration Number
  - Japan Residence Card Number
  - Japan Social Insurance Number (SIN)
  - Japan Passport Number
- **Luxembourg**
  - Luxembourg National Identification Number (Natural persons)
  - Luxembourg National Identification Number (Non-natural persons)
- **Malta**
  - Malta Identity Card Number
  - Malta Tax Identification Number
- **New Zealand**
  - New Zealand Bank Account Number
  - New Zealand Driver’s License Number
  - New Zealand Inland Revenue Number
  - New Zealand Ministry of Health Number
  - New Zealand Social Welfare Number
- **Philippines**
  - Philippines Unified Multi-Purpose ID Number
- **Portugal**
  - Portugal Citizen Card Number
  - Portugal Tax Identification Number
- **Singapore**
  - Singapore National Registration ID card (NRIC) Number
- **South Africa**
  - South Africa Identification Number
- **South Korea**
  - South Korea Resident Registration Number
- **Spain**
  - Spain DNI
  - Spain Social Security Number (SSN)
  - Spain Tax Identification Number
- **Switzerland**
  - Swiss Social Security Number AHV
- **Taiwan**
  - Taiwan National ID
  - Taiwan Resident Certificate (ARC/TARC)
  - Taiwan Passport Number
- **United Kingdom**
  - U.K. Driver’s License Number

  - U.K. Electoral Roll Number
  - U.K. National Health Service (NHS) Number
  - U.K. National Insurance Number (NINO)
  - U.K. or U.S. Passport Number
  - U.K. Unique Taxpayer Reference Number
- **United States**
  - U.S. Social Security Number (SSN)
  - U.S. Driver's License Number
  - U.S. or U.K. Passport Number
  - U.S. Individual Taxpayer Identification Number (ITIN)
  - U.S. Drug Enforcement Agency (DEA) Number
  - U.S. Bank Account Number

Understanding the Solution Center eSF application

Getting started

Installing the application

Before you begin, make sure that you have checked the deployment readiness checklist for Solution Center. For more information on deployment readiness, see the **"Solution Center"** section in Deployment readiness checklist on page 25.

The installation and deployment of this application is done in Cloud Fleet Management. To install Solution Center, create a configuration and then deploy the configuration to the printer.

For more information on creating and deploying an application, see the following:

- "Add applications" section in Creating a configuration on page 146 .
- Deploying configurations to printers on page 155.

Make sure that values for the following information are set in the printer:

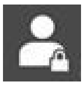
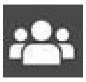
- Device serial number
- Device IP address
- Device MAC Address
- Device Model Name
- TCP/IP hostname
- TCP/IP domain name

> **Note:** Absence of these information leads to application failure as these information are required for database validation.

Using the application

Accessing the application

Viewing solutions

1. From the printer home screen, touch **Solution Center**.
2. From the **Solutions List** page, select any of the following:
    - **Personal** 
    - **Organizational** 
    - **Shared** 

    > **Note:** Some solutions may not appear. These are referred to as non-executable solutions, as they might involve steps that the printer is not able to execute. For example, the Download step is not supported in printers. A solution created in Cloud Solution Center that includes a Download step will not be visible in the Solution Center eSF application.

3. To view the details of a specific solution, touch ⋮ › **View Details**.

> **Note:**
>
> - The details include solution name, description, type, steps, and default file name.
> - Relaunch the application to refresh the solution list.

Using a quick run

- The quick run feature executes a solution immediately with all steps preconfigured and locked from the portal.
- To run a solution using quick run, select a solution and then, click **Next**.

Viewing quotas

1. From the Solution Center, navigate to the Solutions List screen.
2. Click ⋮ › **View Quotas**.
    - The Quotas dialog shows the number of pages used.
    - If you have quotas for Translation, Redaction, and OCR, then the pages used for these actions appear.

> **Note:** On the Quotas screen, you can also view the details about pages used in Translation, Redaction, and OCR.

Navigating through the steps of the application

- The Steps screen lets you navigate through steps. You can only modify settings that are unlocked in the portal.
- On every step, fields can be disabled or enabled in the panel based on the unlock/lock settings configured in the portal. If a step is locked in the portal, the step screen does not appear on the panel.
- Users must have the appropriate roles and access permissions to execute actions like Translations, Redactions, and OCR.

1. From the Solution Center, navigate to the Solutions List screen.
2. Select a solution, and then click **Next**.

Note:

- The Steps screen shows the configured steps for each selected solution.
- On the Steps screen, users can move through the steps by clicking the **Next** button, up to the Summary step.
- Clicking the **Next** button on any step initiates validation for the current step. If there are validation issues, users cannot proceed to the next step until the issues are resolved.
- You can navigate back to previous steps, if required.

Extracting text with OCR

Optical character recognition (OCR) lets you convert scanned documents into editable text.

1. From the printer home screen, touch **Solution Center**, and then select a workflow with an OCR step.
2. On the OCR step, select the output format from the list of options.

   Note: Scan Settings on printer side offer limited options in terms of file extensions.

3. Click **Next** to apply the settings.

Translating a document

This step lets you scan a file in a source language and translate it to a target language.

Selecting languages

1. From the printer home screen, touch **Solution Center**, and then select a workflow with a Translate step.
2. On the Translate step, select the language of the document that you want to translate.
3. Select one or more target languages.

Note: You can select up to five target languages.

Redacting information

The Redact feature lets you automatically remove any confidential information such as Personally Identifiable Information (PII) from documents.

Configuring redact

1. From the printer home screen, touch **Solution Center**, and then select a workflow with a Redact step.
2. On the Redact step, click **Add Text to Redact**.
3. Select any one of the following:
    - **Preset**—Select predefined redaction settings based on common PII types (for example, phone numbers, social security numbers) or specific country regulations.
    - **Custom**—Select custom text only if you want to redact specific texts from the file. Do any of the following:
        - In the **Specify custom text to redact** field, type the text to be redacted.
        - From the menu, select **Whole word only**, **Contains**, or **Exact Match**.

        > **Note:** If a solution created in the Lexmark Cloud Services portal, consists of **Advanced Match**, then you can only delete the custom text from the eSF application. You cannot edit or add custom text for **Advanced Match** from the eSF application.

> **Note:**
>
> - Users can add up to 20 custom texts only.
> - If a solution includes a Redact step but does not include an OCR step, then the input file type must be DOCX.
> - If a solution includes both Redact and OCR steps, then the supported input file types are image files (such as JPEG or PNG) and PDF.

Sending emails

1. From the printer home screen, touch **Solution Center**, and then select a workflow with an Email step.
2. On the Email step, type the email address.
3. To receive a copy of the email, select **Send me a copy**.

> **Note:**
>
> - The email address has a limit of 255 characters.
> - Users can proceed to the next step only if at least one email address is added.
> - If no email addresses are entered, the solution can still run if **Send me a copy** is enabled.

Adding a footer

1. From the printer home screen, touch **Solution Center**, and then select a workflow with an Footer step.
2. In the Footer field, type the text that you want to appear as the footer of the page.
3. Click **Next** to save changes.

Note:

- Users can input up to 512 characters in the footer.
- The input to the Footer step must be DOCX format.

Configuring cloud storage

The Cloud Storage feature allows you to send documents directly to various cloud platforms.

1. From the printer home screen, touch **Solution Center**, and then select a workflow with a cloud storage step.
2. Select a cloud platform from the following:
   - **Microsoft OneDrive**
   - **Dropbox**
   - **Box**
   - **Google Drive**
   - **Microsoft SharePoint**
3. Configure the following platform-specific settings:
   - For OneDrive, Box, and Dropbox, specify the destination folder by setting the Send To and Path options.
   - For Google Drive, set the Drive Name option.
   - For SharePoint, set the Site Name and Path options.

Note: An error message appears in the following scenarios:

- The selected account is signed out.
- No cloud storage is selected, and all storage accounts are signed out.
- A cloud storage account is disabled in global settings.
- A duplicate folder is created.
- The folder name exceeds the allowed maximum length.
- The path is invalid due to an inaccessible or deleted folder.

Using cloud print queue

- The cloud print queue feature allows user to send print jobs directly to the Cloud Print Management queue.
- Once a print job is uploaded to the cloud, it remains securely stored until the user releases it at a physical printer with Print Release application.

Printing

The Print feature within the Solution Center allows users to print from a connected device.

Users can configure the number of copies to be printed directly from the printer panel.

Editing a file name or file type

> **Note:** You can edit the file name and file type on the panel only if **Allow entering a file name from the printer panel** and **Show scan settings on the printer panel** are selected in the Lexmark Cloud Services portal, respectively.

1. From the printer home screen, touch **Solution Center**, and then select a workflow.
2. In the **File** screen, click the file name or file type to edit it, and then click **OK**.

Viewing a summary

1. From the printer home screen, touch **Solution Center**, and then select a workflow.
2. In the **Summary** screen, you can view the overview of all configured steps.

Executing the application

After configuring all the steps and completing the scan step, click **Send** to run the solution.

File size limits for scanned steps:

- The general file size limit is 50MB.
- If the solution includes a Translate step, then the file size limit is reduced to 40MB.
- If the solution includes an Email step, then the file size limit is reduced to 25MB.

Scan Management

Overview

Use the Cloud Scan Management web portal to do the following:

- Configure Scan Management settings.
- Create scan destinations using the Microsoft OneDrive, SharePoint, Google Drive™, Box, and Dropbox cloud service providers.
- Customize scan settings for each scan destination.

The Scan Management web portal also works with the Cloud Scan application.
Cloud Scan is an eSF application that lets users scan documents using Lexmark™ printers to destinations set in the Lexmark Cloud Services by the Scan Management Administrator.

> **Note:** This feature is available only in some printer models. For more information, see Supported printer models on page 28.

Accessing the Scan Management web portal

Open a web browser, and then do either of the following:

- From the dashboard, click **Scan Management**.

  > **Note:** If the card is not available in the dashboard, then add the card. For more information, see Managing the dashboard on page 21.

- From your current web portal, click on the upper-right corner of the page, and then click **Scan Management**.

Configuring the Scan Management settings

As an administrator, you can configure the Scan Management settings.

1. From the Scan Management web portal, click on the upper-right corner of the page.
2. Configure the following settings:
   - **Enable Scan Management for your organization**—Allow users to access Scan Management from Lexmark Cloud Services.
   - **Allow users to create personal scan destinations**—Allow users to create private scan destinations that only they can access.
   - **Select at least one cloud storage provider for this organization**—Select one or more of the following: **Microsoft (SharePoint and OneDrive)**, **Google (Google Drive)**, **Box**, and **Dropbox**.
   - **Account domains associated with the cloud storage providers (Optional)**—Specify the list of account domains supported by your organization for your users.

> **Note:** Make sure to select **Enable Scan Management for your organization**.

- **Enable option to choose folder from the printer panel**—Allow users to select a folder from the control panel.

3. Click **Save Settings**.

Managing a cloud storage account

Make sure that you have a Microsoft, Google™, Box, or Dropbox account to create, edit, or use scan destinations.

Selecting an account

1. From the Scan Management web portal, do either of the following:
   - Click **Cloud Storage Account > Select an account > Continue**.

     > **Note:** Depending on the requirement, select an account from the Microsoft, Google, Box, or Dropbox section. This feature is available only if you are not logged in to an account.

   - Click **Select an account > Continue**.
2. Sign in to your account.

Changing an account

> **Note:** This feature is available only if you are logged in to your account.

1. From the Scan Management web portal, click **Cloud Storage Account**.
2. From the Microsoft, Google, Box, or Dropbox section, click **Change account**.
3. Sign in to your account.

Forgetting an account

> **Note:** This feature is available only if you are logged in to your account.

1. From the Scan Management web portal, click **Cloud Storage Account**.
2. From the Microsoft, Google, Box, or Dropbox section, click **Forget this account > Forget Account**.

Managing scan destinations

A scan destination is a cloud storage service to which a user can send scanned documents. A Scan Management Administrator enables and manages the scan destination in the Lexmark Cloud Services.

The following cloud storage services are used for scan destinations:

- Microsoft OneDrive
- Microsoft SharePoint
- Google Drive™
- Box

- Dropbox

> **Note:** Make sure that you have a Microsoft, Google, Box, or Dropbox account to access cloud storage services and to manage scan destinations.

Creating a scan destination

1. From the Scan Management web portal, select either **Organizational** or **Personal**.

   > **Notes**
   > - The Personal tab is available only if the administrator enables **Allow users to create personal scan destinations**. For more information, see Configuring the Scan Management settings on page 238.
   > - If you want to create a private scan destination, then select **Personal**.

2. Click **Create**.
3. Configure the settings.

   General

   - **Scan Destination Name**
   - **Description (Optional)**
   - **Cloud storage service**—Configure either of the following:

     - **Google Drive**

       1. From the Drive name menu, select the destination Google Drive.
       2. From the Scan location folder section, click **Choose Folder > Select the folder > Choose Folder** to select the destination Google Drive folder.
     - **OneDrive**—This option is private to each user's account, and the configuration is setting the structure for file storage in their account only. When an organizational OneDrive scan destination is executed, the path and folder structure is created on the user's OneDrive account.

       > **Notes**
       > - The administrator account does not have access to the user's folders.
       > - The users of the configuration do not have access to the administrator's account folders. When a user tries to access the Organizational profile from the control panel and then clicks the folder navigation icon, an error message appears. The user must select another folder in the drive to scan to that location.

       1. From the Scan location folder section, click **Choose Folder** to browse to the scan destination folder.

          > **Notes**
          > - If the folder structure does not exist, then it is created.
          > - Administrators who need a structure beyond root drives can use the folder structure of their OneDrive account as a template.

       2. Select the folder, and then click **Choose Folder** to select the destination OneDrive folder.
     - **SharePoint**

1. From the Site or library name menu, select the destination SharePoint site or library.
2. From the Scan location folder section, click **Choose Folder > Select the folder > Choose Folder** to select the destination SharePoint folder.

- **Box**

1. From the Scan location folder section, click **Choose Folder** to browse to the scan destination folder.
2. Select the folder, and then click **Choose Folder** to select the destination Box folder.

> **Note:** Only personal scan destinations are supported in Box.

- **Dropbox**

1. From the Scan location folder section, click **Choose Folder** to browse for the scan destination folder
2. Select the folder, and then click **Choose Folder** to select the destination Dropbox folder.

> **Note:** Only personal scan destinations are supported in Dropbox.

> **Note:** To discard a folder, click **Cancel**.

- **File name**—Specify the file name for the scanned image.
- **Append a date-time stamp to the file name**—Add the date and time to the name of the scanned file.
- **Allow entering a file name from the control panel**—Let the user specify a file name before the scan job starts.
- **Show scan settings on the control panel**—Show the scan settings before the scan job starts.
- **Allow changing the folder from the control panel**—Let the user choose the folder from the control panel.

Scan Settings

- **Use default scan settings**—Use the default printer settings.
- **Use custom scan settings**—Configure the scan settings of the printer.

> **Note:** Some settings are available only in some printer models.

- **Enable scan preview if supported by the printer**
- **Color mode**
- **Content type**
- **Original size**
- **Sides**—Specify the page orientation of text and graphics when scanning a two-sided document.
- **Resolution**
- **File Format**—Select the file format from TIFF, JPEG, and PDF.

> **Note:** If Show Scan settings on the control panel is enabled, then you can change the file type.

- **Enable custom scan job**
- **Contrast**

4. Click **Create Destination**.

Editing a scan destination

1. From the Scan Management web portal, in the list of scan destinations, select a scan destination.
2. Configure the settings.
3. Click **Save Changes**.

Deleting a scan destination

1. From the Scan Management web portal, in the list of scan destinations, select one or more scan destinations.
2. Click **Delete > Delete Destination**.

Sending scan jobs using the Cloud Scan application

Notes

- You can scan to up to 50 destinations.
- Only administrators can create destinations.
- Scanning to multiple destinations is not supported.
- If the Device Quotas application is running in your printer, then stop or uninstall it when scanning to a destination.

You can deploy scan configuration to printers. Administrators can deploy Cloud Scan Management configuration from the Cloud Fleet Management applications catalog so that the Cloud Scan and Cloud Authentication applications are installed to the printer. For more information on deploying configurations to printers, see Deploying configurations to printers on page 155.

1. Load a document into the automatic document feeder or on the scanner glass.
2. From the printer home screen, touch **Cloud Scan**.
3. Select a scan destination, and then touch **Next**.

> **Notes**
> - Make sure that you are logged in to your cloud account. If necessary, touch **E-mail** to send instructions to your email on how to log in.
> - In some older printer models, some text may scroll very fast while navigating the scan details.
> - In some older printer models, some text may appear bigger for lengthy scan details.
> - In some models, the Scan Destination page and Scan settings page may display inconsistent translated text.
> - If the printer has hard drive, you can upload a JPEG file with a maximum file size of 50MB.
> - For printers with eSF version 4.0 or earlier, Cloud Scan Management application performance is slower as compared to printers with eSF version 5.0 or later.

4. Type the file name, and then touch **Next**.

> **Notes**
> - Make sure that **Allow entering a filename from the control panel** is selected on the Cloud Scan Management portal.
> - If needed, you can update the folder location in the panel.

5. If necessary, change the scan settings.

> **Notes**
> - Make sure that **Show scan settings on the control panel** is selected on the Cloud Scan Management portal.
> - The maximum file size is 50MB.
> - If you want to scan a multi-page document, then select **Scan The Next Page**.

6. Touch **Send**.

Analytics

Use the Analytics web portal to generate reports on usage and printer activity.

Accessing the Analytics web portal

> **Note:** The screenshots may vary depending on the latest release.

Open a web browser, access the Lexmark Cloud Services dashboard, and then do either of the following:

- From the dashboard, click the **Analytics** card.

  > **Note:** If the card is not available, then add the card. For more information, see Managing the dashboard on page 21.

- From your current web portal, click on the upper-right corner of the page, and then click **Analytics**.

> **Notes**
>
> - To access **Analytics 2.0** from the Analytics web portal, click **Check out the new Beta Analytics 2.0 here**. On the Analytics 2.0 page, you can view the reports. The reports are categorized into **Cloud Print Management Reports**, **Cloud Fleet Management Reports**, and **Cloud Solution Center Reports**. You can only access and generate reports based on your entitlement and user role.
> - If you have partner administrator rights, then you must select the organization to access **Analytics 2.0**.

Accessing the Full Data Export report

Full Data Export report is now available in Analytics 2.0. This report is available only for Cloud Print Management Reports.

To access the Full Data Export report, do the following:

1. From the Analytics web portal, click **Check out the new Beta Analytics 2.0 here**.
2. If accessing Analytics 2.0 for the first time, accept the terms of use.
3. Select the organization, and then click **Next**.
4. Click **Full Data Export**.
5. In the **Full Data Export** window, do the following:
   a. From the **Reporting Period** menu, select the period for which you want the report.

b. Click **Send Report**.

Note: The report is sent to your email address.

Feedback

You can provide your feedback about reports by clicking **Feedback** on the right side of the screen in any generated report. On the Feedback window, you can rate your experience and provide your feedback. Click **Submit** to send your feedback.

Understanding reports

Reports can include dates up to two years before the current date.

Notes

- An impression is a side of a sheet of paper that contains toner.
- A page is a digital area where content is printed.
- A sheet is a piece of paper.

<table>
<tr><th>Report Level</th><th>Report type</th><th>Report items</th></tr>
<tr><td>Organization

Note: For Organization level report, you have the option of selecting either Analytics 1.0 or Analytics 2.0.</td><td>Organization Overview—Shows an overview of the printer activities of the organization over the specified date range.</td><td>Total
Impressions—The total number of impressions that are printed.
Sheets—The total number of sheets that are printed.
Printed Jobs—The total number of printed jobs.
Total Jobs In Queue Now—The total number of jobs that are currently in the Lexmark Cloud Services print queue.
Printed / Deleted (Pages)—A graph that shows the number of pages that are printed and the number of pages that are deleted, based on the number of submitted pages. Pages that are deleted are expired or were removed manually.
Job Size (Number of Jobs)—A graph that shows a distribution of the job size based on the number of submitted pages for each job.
Paper Size (Pages)—A graph that shows the number of pages that are printed per paper size.</td></tr>
</table>

<table>
<tr><th>Report Level</th><th>Report type</th><th>Report items</th></tr>
<tr>
<td>Department

Note: For Department level report, you have the option of selecting either Analytics 1.0 or Analytics 2.0.</td>
<td>Department Overview—Shows an overview of the printer activities of the selected department over the specified date range.</td>
<td>
Paper Type (Pages)—A graph that shows the number of pages that are printed per paper type.
Color / Mono Usage (Impressions)—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed.
Duplex / Simplex Usage (Impressions)—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs.
Print Usage (Impressions)—A graph that shows the daily print usage over the specified date range.
Submitted Jobs
Submission Methods (Pages)—A graph that shows the number of pages submitted per submission method, such as web browser, e-mail, or mobile device.
</td>
</tr>
</table>

Report Level	Report type	Report items
Cost Center	**Cost Center Overview**—Shows an overview of the printer activities of the selected cost center over the specified date range.	◦ **Document Type (Pages)**—A graph that shows the number of pages submitted per job type, such as text or image. • **Most Used Printers**—A table that lists the printers with the highest usage. The list shows the last known IP address and model name of the printers, and are sorted based on the number of printed impressions. • **Top Users**—A table that lists the users with the highest usage. The list shows the user name and e-mail address of the users, and are sorted based on the total number of printed impressions per user.
Full Data Export	**Full Data Export**—The feature allows users to select monthly or up to 31 days of data in the custom date range for report generation. It sends an e-mail with links to download reports with all user level transactional data captured by Cloud Print Management. The e-mail contains links to download two reports, one for submission, and the other for release.	

<table>
<tr><th>Report Level</th><th>Report type</th><th>Report items</th></tr>
<tr><td>Full Data Export</td><td>Notes
The e-mail is sent to the e-mail address of the logged-in user.
The e-mail has information like the organization and duration for which the report is generated, and expiry time of the link.
The Full Data Export report in Analytics 2.0 also has information like last data sync time.
For PRINTJOBNAMES, the report supports English file names only. For more information on getting the correct file name for other languages, see Report does not show the correct file name on page 309.
Full Data Export report is now available in Analytics 2.0. In Analytics 2.0, this report is available only for Cloud Print Management Reports. For more information on Full Data Export report in Analytics 2.0, see Accessing the Analytics web portal on page 244.</td><td>Total
Impressions—The total number of impressions that are printed.
Sheets—The total number of sheets that are printed.
Printed Jobs—The total number of printed jobs.
Total Jobs In Queue Now—The total number of jobs that are currently in the Lexmark Cloud Services print queue.
Printed / Deleted (Pages)—A graph that shows the number of pages that are printed and the number of pages that are deleted, based on the number of submitted pages. Pages that are deleted are expired or were removed manually.
Job Size (Number of Jobs)—A graph that shows a distribution of the job size based on the number of submitted pages for each job.
Paper Size (Pages)—A graph that shows the number of pages that are printed per paper size.</td></tr>
</table>

Report Level	Report type	Report items
User **Note:** For **User** level report, you have the option of selecting either Analytics 1.0 or Analytics 2.0.	**User Overview**—Shows an overview of the printer activities of the selected user over the specified date range.	• **Paper Type (Pages)**—A graph that shows the number of pages that are printed per paper type. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed. • **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Print Usage (Impressions)**—A graph that shows the daily print usage over the specified date range. • **Submitted Jobs** ◦ **Submission Methods (Pages)**—A graph that shows the number of pages submitted per submission method, such as web browser, e-mail, or mobile device.

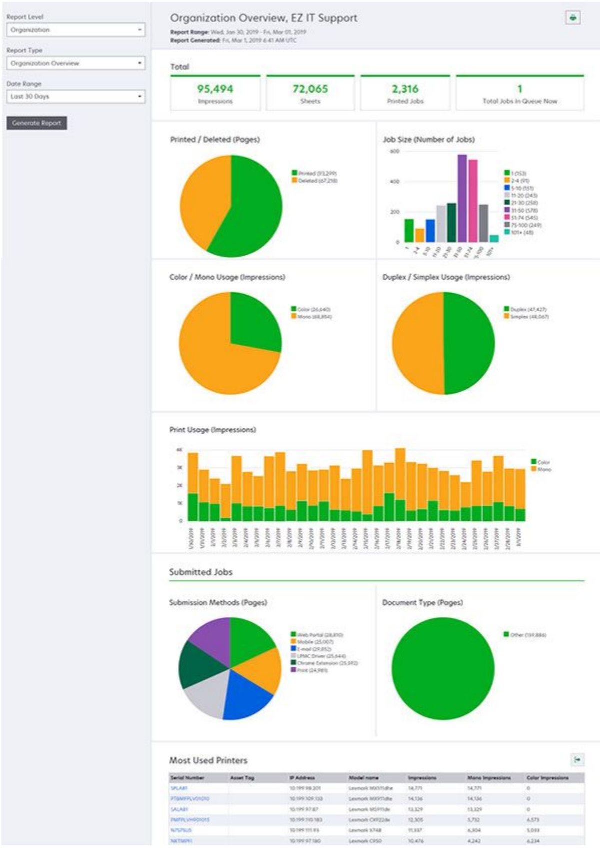
		◦ **Document Type (Pages)**—A graph that shows the number of pages submitted per job type, such as text or image. • **Most Used Printers**—A table that lists the printers with the highest usage. The list shows the last known IP address and model name of the printers, and are sorted based on the number of printed impressions. • **Top Users**—A table that lists the users with the highest usage. The list shows the user name and e-mail address of the users, and are sorted based on the total number of printed impressions per user.

Report Level	Report type	Report items
Client Version Export	**Client Version Export**—Downloads a report of every user's last print job submission details. The report captures submission through the LPMC or Google Chrome extension client only. The report also contains the version number of the client that is used during the last job submission. **Note:** If a user uses two different versions of the same client, then the report captures only the latest version of the client.	• **Total** ◦ **Impressions**—The total number of impressions that are printed. ◦ **Sheets**—The total number of sheets that are printed. ◦ **Printed Jobs**—The total number of printed jobs. ◦ **Total Jobs In Queue Now**—The total number of jobs that are currently in the Lexmark Cloud Services print queue. • **Printed / Deleted (Pages)**—A graph that shows the number of pages that are printed and the number of pages that are deleted, based on the number of submitted pages. Pages that are deleted are expired or were removed manually. • **Job Size (Number of Jobs)**—A graph that shows a distribution of the job size based on the number of submitted pages for each job. • **Paper Size (Pages)**—A graph that shows the number of pages that are printed per paper size.

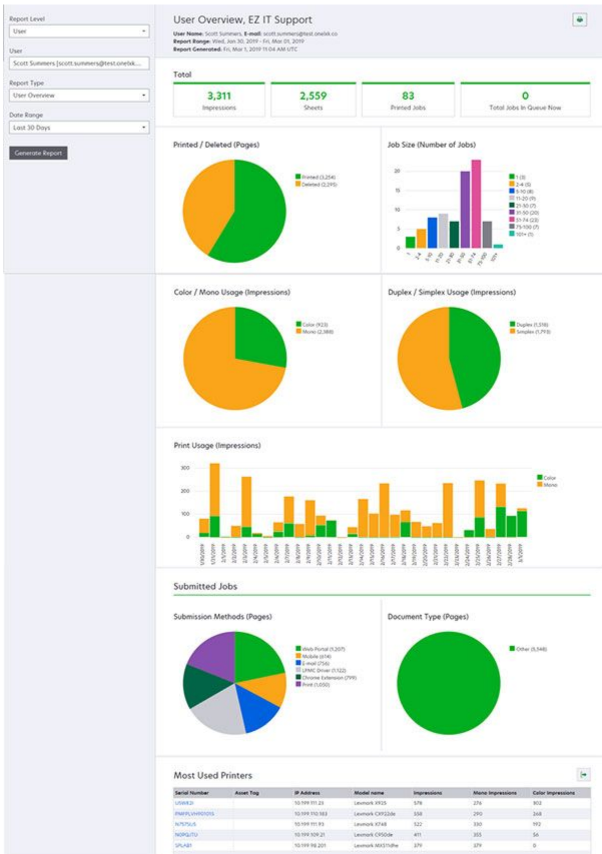
Report Level	Report type	Report items
		• **Paper Type (Pages)**—A graph that shows the number of pages that are printed per paper type. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed. • **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Print Usage (Impressions)**—A graph that shows the daily print usage over the specified date range. • **Submitted Jobs** ◦ **Submission Methods (Pages)**—A graph that shows the number of pages submitted per submission method, such as web browser, e-mail, or mobile device.

Report Level	Report type	Report items
		◦ **Document Type (Pages)**—A graph that shows the number of pages submitted per job type, such as text or image. • **Most Used Printers**—A table that lists the printers with the highest usage. The list shows the last known IP address and model name of the printers, and are sorted based on the number of printed impressions. • **Top Users**—A table that lists the users with the highest usage. The list shows the user name and e-mail address of the users, and are sorted based on the total number of printed impressions per user.

Sample Organization Overview report



Sample User Overview report



Report Level	Report type	Report items
Printer	**Printer Overview**—Shows an overview of the Lexmark Cloud Services tracked usage of the selected printer, based on the printer serial number.	• **Total** ◦ **Impressions**—The total number of impressions that are printed. ◦ **Sheets**—The total number of sheets that are printed. ◦ **Printed Jobs**—The total number of printed jobs. ◦ **Users**—The total number of users that are using the selected printer. • **Job Size (Number of Jobs)**—A graph that shows a distribution of the job size based on the number of submitted pages for each job. • **Paper Size (Pages)**—A graph that shows the number of pages that are printed per paper size. • **Paper Type (Pages)**—A graph that shows the number of pages that are printed per paper type. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed.

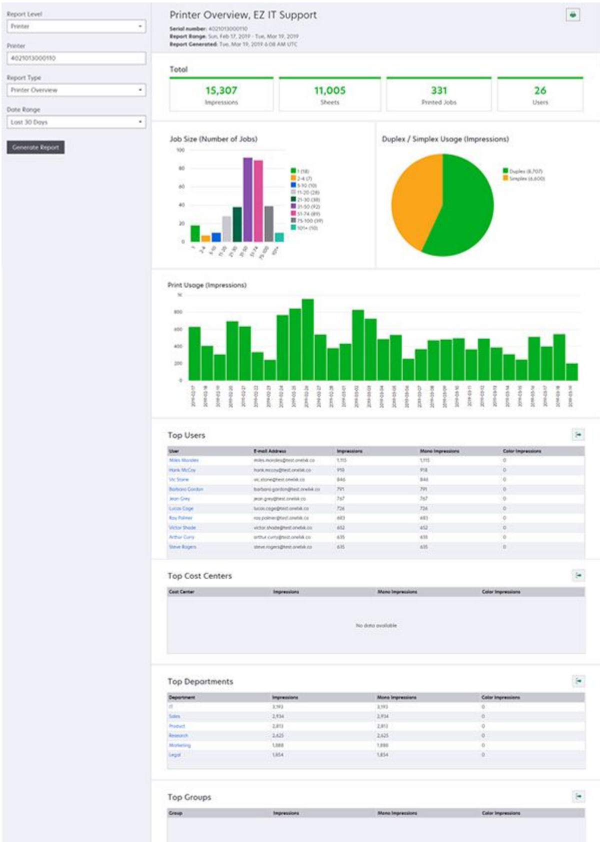
Report Level	Report type	Report items
		Note: This report appears only for color printers. • **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Print Usage (Impressions)**—A graph that shows the daily print usage over the specified date range. • **Scan Usage (Pages)**—A graph that shows the total number of pages scanned per job type. **Note:** This report appears only if the selected printer is an MFP. • **Top Users**—A table that lists the users with the highest usage. The list shows the user name and e-mail address of the users, and are sorted based on the total number of printed impressions per user. • **Top Cost Centers**—A table that lists the cost centers with the highest usage. • **Top Departments**—A table that lists the departments with the highest usage.

Report Level	Report type	Report items
	Print Job History—Shows the print jobs of the selected printer.	A table that lists all the print jobs of the selected printer. The list also shows the details per print job, such as the release time, impressions, page count, user, e-mail address, department, and cost center where the user belongs.
	Printer Supplies History—Shows the printer supplies used.	A table that lists the supplies used in the selected printer while it was enrolled in Lexmark Cloud Services.

Report Level	Report type	Report items
Printer	**Printer Hardware Statistics**—Shows the lifetime page counter information and the toner supply levels of the selected printer.	• **Total** ◦ **Impressions**—The total Lifetime Page Count of the selected printer over the specified date range. ◦ **Lifetime Impressions to Date**—The most recent Lifetime Page Count of the selected printer. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that were printed over the specified date range. • **Coverage Tiers**—A chart that shows the tiered color usage. The amount of color toner on the page determines whether the page falls into the Highlight Color tier, Business Color tier, or Graphics Color tier. **Note:** This report appears only in some printer models.

Report Level	Report type	Report items
		• **Lifetime Impressions to Date**—A chart that shows the increasing Lifetime Page Count over the specified date range. • **Cartridge Usage**—A graph that shows the cartridge usage over the specified date range.

Sample Printer Overview report



Report Level	Report type	Report items
Organization, **Cost Center**, **Department**	**Usage Analysis**—Shows a detailed report on the printer usage of the organization, or department over the specified date range. This report also shows some analysis on the fleet usage, such as potential savings and environmental impact.	• **Total** ◦ **Number of Active Users**—The total number of users that have printed or scanned. ◦ **Number of Active Printers**—The total number of printers that are used in printing or scanning. ◦ **Impressions**—The total number of impressions that are printed. ◦ **Sheets**—The total number of sheets that are printed. ◦ **Number of Printed Jobs**—The total number of printed jobs. • **Printed / Deleted (Pages)**—A graph that shows the number of pages that are printed and the number of pages that are deleted, based on the number of submitted pages. Pages that are deleted are expired or were removed manually.

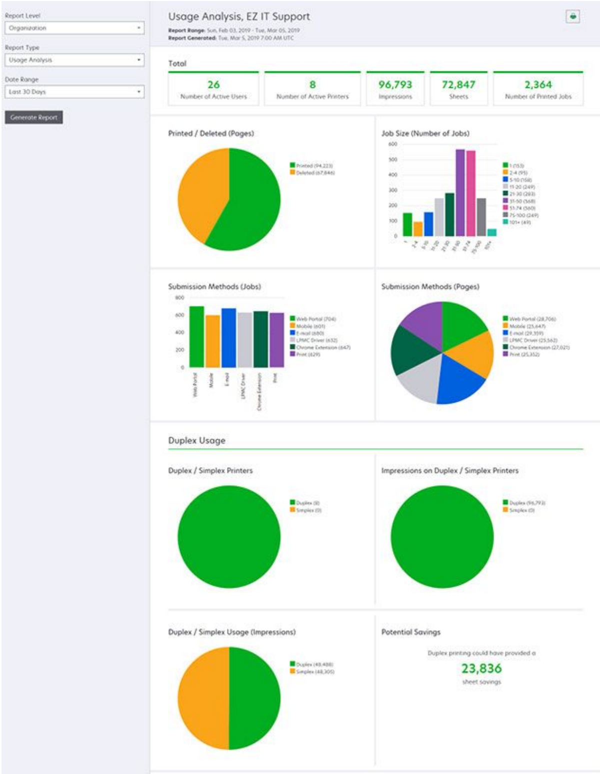
Report Level	Report type	Report items
		• **Job Size (Number of Jobs)**—A graph that shows a distribution of the job size based on the number of submitted pages for each job. • **Submission Methods (Jobs)**—A graph that shows the number of jobs submitted per submission method, such as web browser, e-mail, or mobile device. • **Submission Methods (Pages)**—A graph that shows the number of pages submitted per submission method, such as web browser, e-mail, or mobile device. • **Duplex Usage** ◦ **Duplex / Simplex Printers**—A graph that shows the number of printers that have a two-sided printing feature, and the number of printers that can do only one-sided printing.

Report Level	Report type	Report items
		◦ **Impressions on Duplex / Simplex Printers**—A graph that shows the number of impressions printed on printers that have a two-sided printing feature, and the number of impressions printed on printers that can do only one-sided printing. ◦ **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. ◦ **Potential Savings**—The number of sheets of paper that could be saved when all jobs are printed as two-sided jobs. • **Color Usage**

Report Level	Report type	Report items
		◦ **Color / Mono Printers**—A graph that shows the number of color printers and the number of black-and-white printers that have printed or scanned. ◦ **Impressions on Color / Mono Printers**—A graph that shows the number of impressions printed on color printers and the number of impressions printed on black-and-white printers. ◦ **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed.

Report Level	Report type	Report items
Organization, **Cost Center**, **Department**	**Usage Analysis**—Shows a detailed report on the printer usage of the organization, or department over the specified date range. This report also shows some analysis on the fleet usage, such as potential savings and environmental impact.	• **Top Users**—A table that lists the users with the highest usage. The list shows the user name and e-mail address of the users, and are sorted based on the total number of printed impressions per user. • **Most Used Printers**—A table that lists the printers with the highest usage. The list shows the last known IP address and model name of the printers, and are sorted based on the number of printed impressions. • **Least Used Printers**—A table that lists the printers with the lowest usage. The list shows the last known IP address and model name of the printers, and are sorted based on the number of printed impressions. • **Environmental Impact**—The computed environmental impact based on the amount of printing done. This computation uses the Environmental Paper Network Paper Calculator version 3.2.1. For more information, go to the Environmental Paper Network website.

Sample Usage Analysis report



Report Level	Report type	Report items
Organization, **Cost Center**, **Department**, **User**	**Printer Activity**—Shows the summary of the print and scan activities of all the printers of the organization, department, or user.	**Print Activity**—A table that lists the printers and shows their last known IP address, model name, and serial number. The list also shows the total number of printed impressions, and the breakdown of the sources of the impressions. **Scan Activity**—A table that lists the printers and shows their last known IP address, model name, and serial number. The list also shows the total number of scanned pages.

Report Level	Report type	Report items
Organization, **Cost Center**, **Department**, **User**	**Printer Activity Detail**—Shows a detailed Printer Activity report. The list shows all the jobs and more information about each job. When using Direct Print submission, if the printer does not have the correct version of Device Usage eSF application installed, then analytics data is not presented the same way as other user-related print data. In this case, the data differs in the following ways: • The user print job details are displayed in the Printer Activity Detail report. • The IP address column shows <x.y.z.y>(Direct), where <x.y.z.y> is the IP address of the printer. • Page numbers and other metadata reflected for the print job details represent the user intent of the submission and may not represent the actual print output. For instance, a user may send a four-page color job to a mono printer without the correct version of the eSF application. In this case, the job details show that a four-page color job was printed.	**Print Activity**—A table that lists all the print jobs, and shows their owner information, time stamp, job type, and printer information. The list also shows the number of printed impressions on each print job with a breakdown of the sources of the impressions. **Scan Activity**—A table that lists all the print jobs, and shows their owner information, time stamp, job type, and printer information. The list also shows the number of scanned pages.

Report Level	Report type	Report items
Organization, **Cost Center**, **Department**	**User Usage**—Shows the print usage of all the users in the organization, department, or cost center.	• **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black and white impressions that are printed. • **Print Activity**—A table that lists all the users in the organization, department, or cost center, and the number of impressions printed per user.

Report Level	Report type	Report items
Organization	**Customer Usage**—Shows the print usage of all the child organizations. **Note:** This report type is available only to partner administrators.	• **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed. • **Print Activity**—A table that lists all the child organizations, and shows the total number of impressions printed per child organization.

Report Level	Report type	Report items
Organization	**Department Usage**—Shows the print usage per department.	• **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed. • **Print Activity**—A table that lists all the departments in the organization, and shows the total number of impressions printed per department.

Report Level	Report type	Report items
Organization	**Cost Center Usage**—Shows the print usage per cost center.	• **Duplex / Simplex Usage (Impressions)**—A graph that shows the total number of impressions printed as two-sided jobs and the total number of impressions printed as one-sided jobs. • **Color / Mono Usage (Impressions)**—A graph that shows the total number of color impressions and the total number of black-and-white impressions that are printed. • **Print Activity**—A table that lists all the cost centers in the organization, and shows the total number of impressions printed per cost center.
Organization	**Customer Usage Detail**—Shows a detailed Customer Usage report containing the print and scan activities. **Note:** This report type is available only to partner administrators.	**Print Activity**—A table that lists all child organizations, and shows the total number of impressions printed per child organization. **Scan Activity**—A table that lists all child organizations, and shows the total number of scanned pages per child organization.

Report Level	Report type	Report items
Organization	**Department Usage Detail**—Shows a detailed Department Usage report containing the print and scan activities.	**Print Activity**—A table that lists all the departments in the organization, and shows the total number of impressions printed per department. **Scan Activity**—A table that lists all the departments in the organization, and shows the total number of scanned pages per department.
Organization	**Cost Center Usage Detail**—Shows a detailed Cost Center Usage report containing the print and scan activities.	**Print Activity**—A table that lists all the cost centers in the organization, and shows the total number of impressions printed per cost center. **Scan Activity**—A table that lists all the cost centers in the organization, and shows the total number of scanned pages per cost center.
Organization	**Printer Hardware Detail**—Shows the hardware statistics for all the printers in the organization.	A table that lists all the printers in the organization. The list includes the serial numbers, IP addresses, model names, asset tags, and page counts.
Organization	**Customer Printer Hardware Detail**—Shows the hardware statistics for all the printers in all child organizations. **Note:** This report is available only for partner administrators when the partner organization is selected.	A table that lists all the printers in all child organizations. The list includes the organization names, serial numbers, IP addresses, model names, asset tags, and page counts.

Report Level	Report type	Report items
Organization	**Users**	A table that lists all the users of the organization defined in the Account Management web portal that existed during the selected date range of the report. The list includes the membership information for departments and cost centers, including when they were added or removed from departments or cost centers.
Organization, **Cost Center**, **Department**, **User**	**Detailed Submitted Job Activity**—Shows all the jobs submitted to Lexmark Cloud Services for print release by the selected organization, department, or user.	A table that lists all the documents submitted for print release and the user information for that document.
User	**Print Job History**—Shows all the print jobs of the selected user.	A table that lists all the print jobs of the selected user. The list also shows the number of pages and impressions of the job, the job properties, and the printer used.

Generating reports

1. From the Analytics web portal, select a report level.

   Notes
   - The Report Level options vary depending on your role.
   - A partner administrator and a Fleet Management Reporting Analyst can select from the list of customer organizations, and can generate reports at the organization level.
   - An organization administrator and a Print Release Management Reporting Analyst can select a specific user, cost center, or department within the organization. They can also generate their corresponding usage reports. These options are also applicable to the Print Release Management Administrator role.
   - Users can generate only their own usage reports.

2. Do either of the following:
   - For the User, Cost Center, Department, or Printer reports, do the following:
     1. Type the user, cost center, department name, or printer serial number.
     2. Select a report type.

    3. Select a date range.
- For the Organization reports, select a report type and date range.

> **Note:** To show users that were removed from the organization, cost center, or department, select **Show Deleted Users**.

3. Click **Generate Report**.

> **Notes**
>
> - When you generate reports for an Organization, User, or Department, a confirmation message appears. Select either **Continue with Analytics 1.0** or **Go to Analytics 2.0**.
> - You can also generate reports using the report cards from the dashboard.

Exporting reports

1. Do either of the following:
    - From the Analytics web portal, generate a report.
    - From the dashboard, click a card.
2. Click on the upper-right corner of the table that you want to export.

> **Notes**
>
> - The report is saved in a CSV file.
> - To print the reports with a formatted layout, click .

Understanding the Cloud Print Management reports

Understanding the Print Outliers report

1. From the Analytics web portal, click **Check out the new Beta Analytics 2.0 here**.
2. Accept the acknowledgement terms.

> **Note:** You have to accept the acknowledgement terms only when you are accessing Analytics 2.0 for the first time.

3. Select the organization, and then click **Next**.

> **Notes**
>
> - You must have the Print Management administrator role to access the Print Outlier report. If you are in a partner set-up, then you can select a child organization.
> - You can set the time period for which you need the report. The maximum range is a one-year window within the prior two years.
> - By default, the outlier report shows top 30 departments or users in the relevant report. You can disable the **Show Only Top 30** option to view all the departments or users in the reports.
> - If there are users not associated with any departments, then they are grouped under alias. The group is termed as No department associated.
> - The reports are now categorized into Cloud Print Management Reports, Cloud Fleet Management Reports, and Cloud Solution Center Reports.

4. From the report menu, select **Print Outliers (beta)**.
5. On the **Cloud Print Management Reports - Outliers (beta)** window, do the following:
   a. In the **Report Options** section, select **Show deleted users** to include deleted users in the report.
   b. From the **Reporting Period** menu, select the time period for the report.
6. Click **Generate Report**

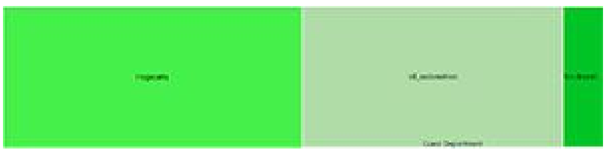
Key performance indicators report

On the top-left part of the screen, from the reports menu, you can select other reports to which you have access.

The key performance indicators for print usage include the following:

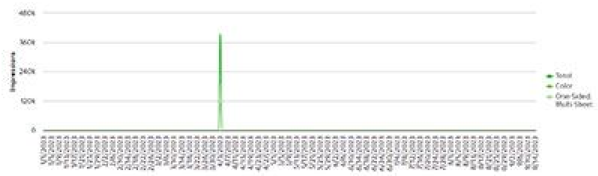
- **Total**—Shows the total number of print impressions.
- **Color**—Shows the total number of color print impressions.
- **One Sided, Multi Sheet**—Shows the total number of one-sided print impressions on two or more sheets. This data does not include single-page print impressions.

Tree map report



The tree map shows the distribution of print impressions across departments under a particular organization or child organization. On clicking each of the departments in the tree map report, you can get the outlier details of that particular department. In the department outlier, on clicking each of the users, you can get the outlier details of a particular user.

Print history



The graph shows the trend in total, colored, and one-sided multi-sheet print impressions across the organization.

Top departments in an organization

The section shows the list of departments and their corresponding print impressions. You can use the Total, Color, and One Sided, Multi Sheet tabs to view the respective print impressions in each category.

Note: You can search for a particular department by typing the name of the department in the Search Departments text field.

Top users in an organization

The section shows the list of users and their corresponding print impressions. You can use the Total, Color, and One Sided, Multi Sheet tabs to view the respective print impressions in each category.

Notes

- You can search for a particular user by typing the name of the user in the Search Users text field.
- You can view the top users in an organization and a department.
- You can view each department in the list to view department level data. For instance, once you navigate to the department summary page, you can see the top users in that particular department.
- You can click each username to view the user summary page. You can navigate back to the organization-level data from the menu itself.

Understanding the Print Summary report

If you are entitled to Cloud Print Management, then you can access the Print Summary report.

> **Note:** The Print Summary report is updated every 24 hours and reflects all print activity up to that time.

1. From the Analytics web portal, click **Check out the new Beta Analytics 2.0 here**.
2. If you are accessing Analytics 2.0 for the first time, then accept the terms of use.
3. Select the organization, and then click **Next**.

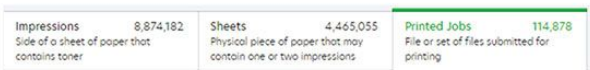
   > **Notes**
   > - You must have the Print Management administrator role to access the Print Summary report. If you are in a partner setup, then you can select a child organization.
   > - You can set the period for which you need the report. The maximum range is a one-year window within the prior two years.
   > - If there are users not associated with any departments, then they are grouped under alias. The group is termed as No department associated.
   > - The reports are now categorized into Cloud Print Management Reports, Cloud Fleet Management Reports, and Cloud Solution Center Reports.

4. From the report menu, select **Print Summary (beta)**.
5. On the **Cloud print management Reports - Summary Report (beta)** window, do the following:
   a. In the **Report Options** section, select **Show deleted users** to include deleted users in the report.
   b. From the **Reporting Period** menu, select the time period for the report.
6. Click **Generate Report**

Insights

On the top-left part of the screen, from the reports menu, you can select other reports to which you have access. In the insights section, you can view the key highlights on print usage of an organization or a department. It not only highlights key printing patterns but also suggests a probable solution to increase efficiency.

Using the filters for key performance indicators



The key performance indicators for print usage can be filtered based on the following:

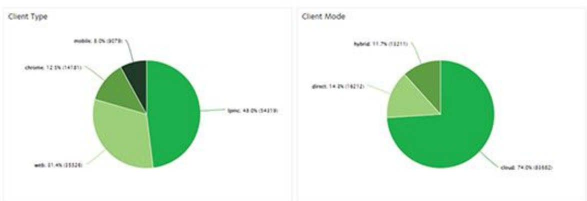
- **Impressions**—Shows the total number of impressions. Filters the print usage report based on the side of a sheet of paper that contains toner.
- **Sheets**—Shows the total number of sheets used. Filters the print usage report based on a physical piece of paper that contains one or two impressions.
- **Printed Jobs**—Shows the total number of print jobs. Filters the print usage report based on the file or set of files submitted for printing.

Key performance indicators report

The key performance indicators for print usage include the following:

- **One Sided, Multi Sheet**—Shows impressions, sheets, or printed jobs in one-sided printed jobs of two or more sheets.
  - For Impressions, the indicator shows the total number of one-sided print impressions on two or more sheets out of the total number of impressions. The one-sided print impressions data does not include single-page print jobs.
  - For Sheets, the indicator shows the total number of sheets used for simplex printing against the total number of sheets used for printing. The data related to sheets used for simplex printing does not include single-page print jobs.
  - For Printed Jobs, the indicator shows the total number of simplex print jobs against duplex print jobs.
- **Color**—Shows impressions or printed jobs in color.
  - For Impressions, the indicator shows the total number of colored and mono impressions.
  - For Sheets, color sheets are not reported.
  - For Printed Jobs, the indicator shows total number of color print jobs against mono print jobs.
- **Deleted**—Shows sheets or printed jobs that are deleted.
  - For Impressions, deleted impressions are not reported.
  - For Sheets, the indicator shows total number of deleted sheets against the total number of sheets used for printing.
  - For Printed Jobs, the indicator shows total number of deleted print jobs against the total number of print jobs. Here, print jobs are the ones that are submitted for print release. All print jobs may not be actually printed as some of them may be deleted before print release. Printed jobs are ones that were actually printed.

Client type and client mode



The Client Type chart shows the share for each type of Cloud Print Management submission types. For more information on various types of Cloud Print Management submission, see Managing print queues on page 180.

The Client Mode chart shows the share for each type of submitting and releasing print jobs. For more information on various types of submitting and releasing print jobs, see Overview on page 169.

Notes

- The Client Type and Client Mode charts can be filtered based on Impressions, Sheets, and Printed Jobs.
- If any of the charts shows a certain share for Unspecified, then it signifies unavailability of data from the Cloud Print Management server.

Details about print jobs

The key performance indicators for print jobs can be viewed from the following:

- **Printed Jobs**—Shows the total number of printed jobs in an organization.
- **Impressions/Printed Jobs**—Shows the average number of impressions per print job in an organization.
- **Sheets/Printed Job**—Shows the average number of sheets used per print job in an organization.
- **Largest Printed Jobs in Organization**—Shows a list of users with the largest print jobs in terms of impressions or sheets. This data is available only if you select either the Impressions or the Sheets filter.

Details about printed job size and paper size

- **Printed Job Size**—Shows the percentage of print jobs within a certain range of impression count.
- **Paper Size**—Shows the percentage of print jobs using various paper sizes.

Top departments in an organization

The section shows the list of departments and their corresponding data. The data depends on the filter you have selected. It can be Impressions, Sheets, or Printed Jobs.

Note: You can click each department name to view the department summary page. You can navigate back to the organization-level data from the menu itself.

Top users in an organization

The section shows the list of users and their corresponding data. The data depends on the filter you have selected. It can be Impressions, Sheets, or Printed Jobs.

Notes

- You can view the top users in an organization and a department.
- You can view each department in the list to view department level data. For instance, once you navigate to the department summary page, you can see the top users in that particular department.
- You can click each username to view the user summary page. You can navigate back to the organization-level data from the menu itself.

Understanding the Cloud Solution Center reports

Accessing the All Organization report

In the All Organization report, you can access the relevant information for the parent and its child organization.

1. From the Analytics web portal, click **Check out the new Beta Analytics 2.0 here**.
2. If accessing Analytics 2.0 for the first time, accept the acknowledgment terms.
3. Select the organization, and then click **Next**.

   Note: You must have the Cloud Solution Center administrator role for the parent and child organization. Additionally, you must have a child organization with Cloud Solution Center transactions to be able to generate the relevant report.

4. From the **Select a Report** menu, expand **Cloud Solution Center Reports**, and then click **Solution Center Summary (beta)**.
5. On the **Cloud Solution Center Reports - Summary (beta)** window, do the following:
   a. From the **Reporting Period** menu, select the period for the report.
   b. Click **Generate Report**.

Understanding the All Organization report

The All Organization report contains the following information:

- **Usage Summary**—Lists the total number of actions for **Translations**, **Redactions**, **OCR**, and **Unique Printers**. In the All Organization report, the total number for each of the actions include all the actions from each of the child organizations.
- **Export CSV**—Exports a comprehensive report that includes data from all the child organizations. The report includes organization-based information for **Usage Date**, **Action**, **Page Count**, **Department**, **Cost Center**, **User Email**, and **Client Type**.

  Note:
  - The report only includes Translation, Redaction, and OCR actions and their relevant page count. For all other actions, the **Action** or **Page Count** is reported as **unknown**.
  - For **Client Type**, the report indicates whether the action was performed from a printer or a browser.

- **Search Organization**—In the All Organization report, type the name of the particular child organization to search information specific to it.

- The report categorizes page counts for Translation, Redaction, and OCR for each of the child organization. It also provides number of unique printers used to perform each of the actions for each of the child organization.

  > **Note:** You can click the name of the child organization to access the Single Organization report for the particular child organization.

Accessing the Single Organization report

In the Single Organization report, you can access the relevant information for the child organization to which you have access.

1. From the Analytics web portal, click **Check out the new Beta Analytics 2.0 here**.
2. If accessing Analytics 2.0 for the first time, accept the acknowledgment terms.
3. Select the organization, and then click **Next**.

   > **Note:** You must have the administrator role for the child organization to access the report.

4. From the **Select a Report** menu, expand **Cloud Solution Center Reports**, and then click **Solution Center Summary (beta)**.
5. On the **Cloud Solution Center Reports - Summary (beta)** window, do the following:
   a. From the **Reporting Period** menu, select the period for the report.
   b. Click **Generate Report**.

Understanding the Single Organization report

The Single Organization report contains the following information:

- **Usage Summary**—Lists the total number of actions for **Translations**, **Redactions**, **OCR**, and **Unique Printers**. In the Single Organization report, the total number for each of the actions include all the actions for each of the users in the child organization.
- **Export CSV**—Exports a comprehensive report that includes data from all the users. The report includes user-based information for **Usage Date**, **Action**, **Page Count**, **Department**, **Cost Center**, **User Email**, and **Client Type**.

  > **Note:**
  > - The report only includes Translation, Redaction, and OCR actions and their relevant page count. For all other actions, the **Action** or **Page Count** is reported as **unknown**.
  > - For **Client Type**, the report indicates whether the action was performed from a printer or a browser.

- **Search User Email**—In the Single Organization report, type the email ID of a user to search information specific to the user.
- The report categorizes page counts for Translation, Redaction, and OCR for each of the users. It also provides number of unique printers used to perform each of the actions for each of the users.

Translation Assistant

Understanding Translation Assistant

Translation Assistant is a subscription service offered by Lexmark Cloud Services. This solution allows you to upload a file in a source language and translate it to a target language. You can then download or email the translated file. For Customer Identity and Access Management (CIAM) organizations, subscribe to Cloud Print Management to send the translated file to your cloud print queue.

Note: Lexmark also offers the Translation Assistant eSF application. This application lets you scan a document in a source language and translate it to a target language. You can then print or email the translated document. For more information, see the *Translation Assistant Administrator's Guide*.

Supported source file formats

- PDF
- CSV
- HTML, HTM
- XLF
- MARKDOWN, MDOWN, MKDN, MD, MKD, MDWN, MDTXT, MDTEXT, RMD
- XLSX, XLS
- PPTX, PPT
- DOCX, DOC
- ODT
- ODP
- ODS
- RTF
- TSV, TAB
- TXT

Notes

- Some file formats may be converted during translation.
- The maximum source file size is 40MB.
- Translation Assistant supports adding a footer text to all pages of the translated files. If this feature is enabled, then the Translation Assistant supports only DOCX files.
- If the source language is French Canadian, then DOCX files are not supported as an output file format.

Supported source and target languages

Afrikaans	Fijian	Kannada*	Pashto*	Sesotho
Albanian	Filipino	Kazakh	Persian*	Sesotho sa Leboa

Amharic*	Finnish	Kinyarwanda	Polish	Lower Sorbian
Arabic*	French	Khmer*	Brazilian Portuguese	Latin Swahili
Armenian*	Canadian French	Korean	Portuguese	Swedish
Assamese*	Galician	Konkani	Punjabi*	Tahitian
Latin Azerbaijani	Georgian*	Central Kurdish*	Queretaro Otomi	Tamil*
Basque	German	Northern Kurdish	Romanian	Latin Tatar
Bangla*	Greek	Cyrillic Kyrgyz	Russian	Telugu*
Bashkir	Gujarati*	Lao*	Latin Samoan	Thai*
Latin Bosnian	Haitian Creole	Latvian	Cyrillic Serbian	Tibetan*
Bulgarian	Hausa	Lithuanian	Latin Serbian	Tigrinya*
Traditional Cantonese	Hebrew*	Macedonian	Slovak	Tongan
Catalan	Hindi*	Malagasy	Slovenian	Turkish
Literary Chinese	Latin Hmong Daw	Latin Malay	Arabic Somali	Latin Turkmen
Simplified Chinese	Hungarian	Malayalam*	Spanish	Ukrainian
Traditional Chinese	Icelandic	Maltese	Rundi	Upper Sorbian
ChiShona	Indonesian	Maithili	Russian	Urdu*
Croatian	Inuinnaqtun	Maori	Cyrillic Serbian	Arabic Uyghur*
Czech	Igbo	Marathi*	Latin Serbian	Latin Uzbek
Danish	Inuktitut	Cyrillic Mongolian	Sindhi	Vietnamese
Dari*	Latin Inuktitut	Traditional Mongolian*	Sinhala	Welsh
Divehi*	Lingala	Myanmar*	Slovak	Xhosa
Dutch	Luganda	Nepali*	Slovenian	Yoruba
English	Irish	Norwegian	Arabic Somali	Yucatec Maya
Estonian	Italian	Nyanja	Spanish	Zulu

Faroese	Japanese	Odia*	Setswana	Bhojpuri
Bodo	Dogri	Kashmiri		
*Printing DOCX files is not supported in these languages.				

Supported auto-detect source languages

Translation Assistant can automatically detect the following languages on uploaded source documents:

Afrikaans	Divehi	Hebrew	Central Kurdish	Persian	Latin Swahili
Albanian	Dutch	Hindi	Lao	Polish	Swedish
Arabic	English	Hungarian	Latvian	Brazilian Portuguese	Tahitian
Armenian	Estonian	Icelandic	Lithuanian	Romanian	Thai
Bulgarian	Finnish	Indonesian	Macedonian	Russian	Turkish
Catalan	French	Inuktitut	Latin Malay	Cyrillic Serbian	Ukrainian
Simplified Chinese	Georgian	Irish	Maltese	Latin Serbian	Urdu
Traditional Chinese	German	Italian	Traditional Mongolian	Slovak	Latin Uzbek
Croatian	Greek	Japanese	Myanmar	Slovenian	Vietnamese
Czech	Gujarati	Khmer	Norwegian	Arabic Somali	Welsh
Danish	Haitian Creole	Korean	Pashto	Spanish	Yucatec Maya

Using Translation Assistant

Note: You must have the Translation Assistant User role in an organization that is subscribed to Translation Assistant.

1. Open a web browser, access the Lexmark Cloud Services dashboard, and then do either of the following:

- From the Lexmark Cloud Services dashboard, click the **Translation Assistant** card.

  > **Note:** The Translation Assistant card appears in the dashboard by default for new users. If the card is not available in the dashboard, then add the card. For more information, see Managing the dashboard on page 21.

- From your current web portal, click on the upper-right corner of the page, and then click **Translation Assistant**.

2. Accept the terms of use.

   > **Note:** You must accept the terms of use every time you access the Translation Assistant.

3. Upload a source document.

   > **Note:** For more information, see Understanding Translation Assistant on page 282.

4. Select the source language of the source document.

   > **Note:** Translation Assistant detects the source language automatically by default. For more information, see Understanding Translation Assistant on page 282.

5. Select a target language.

   > **Note:** You can select up to five target languages.

6. Select how you want to receive your document.

   - To save the document to your local folder, click **Download**.
   - To send the document to your registered Lexmark Cloud Services email address, click **Email**.

     > **Note:** Some email services limit the file attachment size. If the file size of the document exceeds 10MB, then we recommend downloading it.

   - For CIAM organization, to send the document to your Lexmark Cloud Services Print Management queue, click **Send to cloud print queue**.

     > **Note:** You must be subscribed to Cloud Print Management to enable this option.

7. Click **Translate File**, and then wait for the translation to complete.

   > **Note:** For **Send to cloud print queue**, if the output is set to DOCX, some languages may print with garbage characters due to font limitations of the languages.

Appending a footer text to each translated page

> **Note:** Only users with the Translation Assistant Administrator role can enable this feature. If this feature is enabled, then it applies to all Translation Assistant users in the organization. The footer only applies to the Translation Assistant web portal. It is not applicable to eSF application.

1. From the Translation Assistant web page, click on the upper-right corner of the page.
2. Select **Append footer text to each page of translated file**.

   > **Note:** This option supports only DOCX files.

3. Type the footer text.
4. To translate the footer along with the document, select **Translate the footer text**.
5. Click **Save Settings**.

Translation Quota

You must have available translation quota to use Translation Assistant. Contact your administrator if you have exceeded your translation quota.

Managing the distribution of translation quotas in child organizations

Partner users that possess the Solutions Quota Administrator role in the Child Organization Access group can manage the distribution of translation quotas in child organizations.

> **Note:** You cannot distribute more pages than you have purchased.

Distributing translation quotas to child organizations

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Solution Quota Manager** card.
3. From the Distributions tab, click **Distribute Pages**.
4. Type the name of the child organization, and then specify their translation quota.
5. If necessary, select the **Send notification when distribution is nearly empty** check box.
6. Click **Distribute Pages**.

Updating existing quota distributions

If a child organization runs out of their translation quota, partner organizations can edit the existing distribution of the child organization.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Solution Quota Manager** card.
3. From the Distributions page, click the name of the child organization in the Distribution column.
4. Click **Edit**, and then update the number of translation pages.
5. Click **Save Changes**.

Using Solution Quota Manager to set translation quotas

If you are a Solutions Quota Administrator, then you can set the default translation quota for users. You can also set custom quotas for users and cost centers or departments. By default, all Translation Assistant users share the entire quota.

> **Note:** Quota decrements may vary depending on the number of characters in a page. The system counts the number of characters, not the pages.

Set the default translation quota for users

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Do either of the following:
    - Click the **Solution Quota Manager** card.
    - Click , and then click **Solution Quota Manager**.
3. Click **Edit** beside Default Quota.
4. From the Edit Default User Quota window, set the default translation quota for users, and then click **Save Changes**.

Set a custom translation quota for a user

The default quota applies to all Translation Assistant users in the organization, unless a custom quota is assigned to the department, cost center, or individual user. The user's custom quota overrides the default quota of the organization, cost center, or department.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Do either of the following:
    - Click the **Solution Quota Manager** card.
    - Click , and then click **Solution Quota Manager**.
3. From the Custom Quotas tab, click **Create**.
4. From the Type list, select **Personal**.
5. Type the user's email address, and then set their translation quota.

    > **Note:** Users must be registered in the organization before you can assign a custom quota to them.

6. Click **Create Quota**.

> **Note:** You can click the Usage tab on the Quotas page to check the custom or default quota usage of the user. You can also use the Percent Remaining option to filter users and how much quota they still possess.

Set a custom translation quota for a cost center or department

The default quota applies to all users in the organization, unless a custom quota is assigned to the department, cost center, or individual user. The custom quota overrides the default quota.

> **Note:** Custom quotas can be set only for either a cost center or a department, but not both. After setting the first custom quota for a cost center or department, you can no longer set the custom quota for the other option.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Do either of the following:
    - Click the **Solution Quota Manager** card.
    - Click , and then click **Solution Quota Manager**.
3. From the Custom Quotas tab, click **Create**.
4. From the Type list, select **Cost center** or **Department**.
5. Type the name of the cost center or department, and then set its translation quota.
6. Click **Create Quota**.

Notes

- You can edit existing custom quotas. To do so, click the name of the cost center or department from the Custom Quotas tab, set the translation quota, and then click **Save Changes**.
- You can click the Usage tab on the Quotas page to check the custom or default quota usage of the users. You can also use the Percent Remaining option to filter users and how much quota they still possess.

Updating the child organization account

As a partner administrator, you can edit the translation quota of a child organization. You can also revoke or suspend their quota distribution.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Solution Quota Manager** card.
3. From the Distributions tab, click the name of the child organization in the Distribution column.
4. Click any of the following:
    - **Edit**—Edit the translation quota of the child organization.
    - **Suspend**—Pause the translation activities of an organization temporarily.
    - **Resume**—Resume the translation activities for a suspended organization.
    - **Revoke**—Cancel any available translation pages of an organization. Click **Continue**, type the name of the organization to confirm revocation, and then click **Revoke**.

    Note: The translation quota or unused pages of the child organization are returned to the partner organization.

Mobile Enhanced Solutions

Understanding Mobile Enhanced Solutions

Mobile Enhanced Solutions is a cloud-based solution offered by Lexmark Cloud Services. It allows you to connect to your printers and perform cloud-based tasks from your mobile device. If this solution is available on your multi-function printer, you will see a QR code on the control panel. On scanning this QR code, the Lexmark Cloud Solutions authentication page opens. Once authenticated, you can access the Mobile Enhanced Solutions on your mobile device's web browser.

> **Note:** Mobile Enhanced Solutions is available only in printers with 2.8-inch touch-screen displays.

Enabling Mobile Enhanced Solutions in the printer

Before you begin, make sure that your printer is running on firmware version 8.1, enrolled in Lexmark Cloud Services, and managed by the Native Agent.

1. Open a web browser, and then type the printer IP address in the address field.
2. From the Embedded Web Server, click **Cloud Services**.
3. Click **Mobile Enhanced Solutions > Enable**.

   > **Note:** This setting appears only if the printer is successfully enrolled and communicating with Lexmark Cloud Services.

4. Click **Save**.

Accessing Mobile Enhanced Solutions

1. Do either of the following:

   - From the printer screen, scan the QR code using your mobile device.
   - From the printer home screen, touch the **Notification Center**, then touch **Access Mobile Enhanced Solutions**, and then scan the QR code using your mobile device.

   > **Note:** Depending on your mobile device, a QR code scanner application may be required.

2. Log in using your Lexmark Cloud Services e-mail address and password.

> **Note:** Only one user can use Mobile Enhanced Solutions on a printer at a time.

Using My jobs

If you are a Cloud Print Management user, then My Jobs solution is available to you. My Jobs allow you to release print jobs from your Cloud Print Management print queue.

Note: Before you begin, make sure that you have sent print jobs to your Lexmark Cloud Services print release queue. For more information, see the "Sending print jobs to Lexmark Cloud Services" group .

Releasing print jobs

1. From the application home screen, select the jobs that you want to print.
2. Tap **Print Selected**, and then wait for the print job to complete.

    Notes
    - To print all jobs, tap **Print All**.
    - After the jobs are completed, the print jobs are automatically removed from the print queue.

Managing print jobs

1. From the application home screen, select the job that you want to manage.

    Note: You can manage only one print job at a time.

2. Tap .
3. If necessary, change the print settings.
4. Tap **Save**.

Deleting print jobs

1. From the application home screen, select the jobs that you want to delete.
2. Tap .
3. From the Delete Selected Jobs window, tap **Yes**.

Note: After you are done releasing print jobs, you are encouraged to end your session. On ending your session, Mobile Enhanced Solutions get freed up for the next user.

Logging out of Mobile Enhanced Solutions

1. From the upper-left corner of the screen, touch .
2. Touch **Log Out**.

Announcement Center

Understanding the Announcement Center

The Announcement Center lets you view announcements about Lexmark Cloud Services features and other updates based on your user role. For Announcement Center, there are no settings available for administrators.

Viewing an announcement

You can view only the announcements that are applicable to your user role, and you cannot delete the announcements. If the announcement is not available in the language of your web browser, then you will see the announcement in English.

1. From your current web portal, click .

   > **Note:** The notification icon shows a badge indicating the number of unread announcements.

2. Click the announcement that you want to view.

   > **Note:** To view all announcements, click **View All**. Viewing all announcements lets you filter the read, unread, and high-priority announcements.

3. Click **Close**.

> **Notes**
>
> - The most recent announcements appear first. Expired announcements no longer appear.
> - High-priority announcements are indicated with .

Solution Quota Manager

Understanding the Solution Quota Manager

Solution Quota Manager is used to distribute pages and set quotas for organizations and users. You can set **Unlimited** quota for the various services. The billing is done based on usage.

Solution Quota

Managing the distribution of quotas in child organizations

Partner users who have the Solutions Quota Administrator role in the Child Organization Access group can manage the distribution of quotas in child organizations.

On the **Quotas** page, you can edit the default user quota. On the **Distributions** page, you can view the details about the billing cycle.
Distributing quotas to child organizations

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Solution Quota Manager** card.
3. From the **Distributions** tab, click **Create Distribution**.
4. In the **Organization** field, type the name of the child organization, and then select the organization from the suggestion list.

   > **Notes**
   > - Partner Administrators must specify a child organization when creating distributions for these organizations. Quota Administrators do not need to specify a child organization if their organization has none.
   > - You can specify the number of pages to be distributed for the services.

5. In the **Distribution Duration** section, select either of the following:

   > **Note:** By default, the **Perpetual** option is selected. If you want to select **Custom**, then you have to confirm the change by clicking **Confirm Change**.

   - **Perpetual**—On selecting **Perpetual**, you can configure the page limit without quota expiry date. The page limits remain active until exhaustion irrespective of the duration for which it is used. As a partner administrator, you can proceed with billing even if the page limit is not exhausted.

     > **Note:** By default, the **Perpetual** option is selected. If you want to select **Custom**, then you have to confirm the change by clicking **Confirm Change**.

1. In the **Page Limits** section, you can configure **Set Translation Page Limit**, **Set Redaction Page Limit**, and **Set OCR Page Limit**.

- **Custom**—On selecting **Custom**, you can set both the quota expiry date and the page limit. However, the distribution expires based on the time limit you have set even if you have pages remaining.
    1. In the **Expires On** section, set the date of expiry.
    2. In the **Page Limits** section, you can do the following:.
        - **For Translation**—You can either select **Unlimited Translation Page** or configure **Set Translation Page Limit**.
        - **For Redaction**—You can either select **Unlimited Redaction Page** or configure **Set Redaction Page Limit**.
        - **For OCR**—You can either select **Unlimited OCR Page** or configure **Set OCR Page Limit**.

6. If necessary, select **Send notification when distribution is nearly depleted**.

> **Notes**
> - On selecting **Send notification when distribution is nearly depleted**, enter the email address in the text field. Click **Add** to add the email address.
> - You can add a maximum of ten email addresses.
> - On enabling this feature, a notification is sent to all the added email addresses when the distribution is about to be depleted.

7. Click **Create Distribution**.

> **Notes**
> - Once a distribution is created, on the **Distributions** page, you can view the details of the distribution for each of the child organizations. The details include organization name, last modified, pages remaining, and expiry details.
> - The **Expiration** column specifically includes details like expiry date, if it is **Custom**. The column also mentions if it is **Perpetual**.
> - If you are logged in as partner administrator, then on the **Distributions** page, you can view details of the billing cycle.
> - If you navigate to the **Quotas** page of a child organization with **Custom** quota settings, then **Distribution End Date** is displayed.
> - If you navigate to the **Quotas** page of a child organization with **Perpetual** quota settings, then the **Distribution End Date** is not displayed.

Updating existing quota distributions

If a child organization runs out of their quota, then partner organizations can edit the existing distribution of the child organization.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Solution Quota Manager** card.
3. From the **Distributions** page, click the name of the child organization in the **Distribution** column.
4. Click **Edit**, and then update the number of pages for the existing solutions.
5. Click **Save Changes**.

Using Solution Quota Manager to set quotas

If you are a Solutions Quota Administrator, then you can set the default quota for users. You can also set custom quotas for users and cost centers or departments.

> **Note:** Quota decrements vary depending on the number of characters in a page. The system counts the number of characters, not the pages.

Set the default quota for users

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Do either of the following:
    - Click the **Solution Quota Manager** card.
    - Click , and then click **Solution Quota Manager**.
3. Click **Edit** beside Default Quota.
4. From the Edit Default User Quota window, set the default quota for users, and then click **Save Changes**.

    > **Note:** You can also select **Unlimited** quota for each of the services.

Set a custom quota for personal

The default quota applies to all users in the organization, unless a custom quota is assigned to the department, cost center, or individual user. The user’s custom quota overrides the default quota of the organization, cost center, or department.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Do either of the following:
    - Click the **Solution Quota Manager** card.
    - Click , and then click **Solution Quota Manager**.
3. From the **Custom Quotas** tab, click **Create**.
4. From the **Type** menu, select **Personal**.
5. Type the user’s email address, and then set the quota for the available solutions.

    > **Note:** Users must be registered in the organization before you can assign a custom quota to them.

6. Click **Create Quota**.

> **Note:** To check the custom or default quota usage of the users, from the Quotas page, click the **Usage** tab. You can filter the user list for personal and default.

Set a custom quota for a cost center or department

The default quota applies to all users in the organization, unless a custom quota is assigned to the department, cost center, or individual user. The custom quota overrides the default quota.

Note: Custom quotas can be set only for either a cost center or a department, but not both. After setting the first custom quota for a cost center or department, you can no longer set the custom quota for the other option.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Do either of the following:
    - Click the **Solution Quota Manager** card.
    - Click , and then click **Solution Quota Manager**.
3. From the **Custom Quotas** tab, click **Create**.
4. From the **Type** menu, select **Cost center** or **Department**.
5. Type the name of the cost center or department, and then set the quota for reach of the available solutions.
6. Click **Create Quota**.

Notes

- To edit custom quotas, from the **Custom Quotas** tab, click the name of the cost center or department, set the quota, and then click **Save Changes**.
- To check the custom or default quota usage of the users, from the Quotas page, click the **Usage** tab.

Updating the child organization account

As a partner administrator, you can edit the quota of a child organization. You can also revoke, resume, or suspend their quota distribution.

1. Open a web browser, and then access the Lexmark Cloud Services dashboard.
2. Click the **Solution Quota Manager** card.
3. From the **Distributions** tab, click the name of the child organization.
4. Click any of the following:
    - **Edit**—Edit the distribution quota of the child organization.
    - **Suspend**—Pause the translation, redaction, or OCR activities of an organization temporarily.
    - **Resume**—Resume the translation, redaction, or OCR activities for a suspended organization.
    - **Revoke**—Cancel any available translation, redaction, or OCR pages of an organization. Click **Continue**, type the name of the organization to confirm revocation, and then click **Revoke**.

    Note: The distribution quota or unused pages of the child organization are returned to the partner organization.

Using the My Quota Pages Used card

- The **My Quota Pages Used** card shows you the number of pages utilized against the given quota for your usage. If you have quotas for Translation, Redaction, and OCR, then the pages utilized for each of these solutions are shown.

For **Perpetual** distribution, the card shows the date for **Distribution expiration**.
- This quota can be shared with other users in the organization.

Using the Organization Distribution Status card

- Only users with the Solutions Quota Administrator role can access this card.
- This card shows the number of pages used against the total number of pages allotted to the organization. If your organization is entitled to Translation, Redaction, and OCR solutions, then the card shows the details for all the solutions.

  For **Perpetual** distribution, the card shows the date for **Distribution expiration**.

Note:

- For partner administrators, the card shows the pages used for your child organization as well as the overall page usage details of the main organization.
- Click this card to access the Solution Quota Manager. For more information on adding/ editing cards, see the **Managing cards** section in Managing the dashboard on page 21.

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Using the Organization Quota Status card

- Only users with the Partner Administrator role can access this card.
- This card shows the number of pages used by the child organization. If your organization is entitled to Translation, Redaction, and OCR solutions, then the card shows the details for all the solutions.
- The card also shows the details about **Current billing cycle** and **Upcoming billing cycle**.

Troubleshooting

Account Management troubleshooting

Cannot access the Account Management web portal

Make sure that the user roles are assigned appropriately
For more information, contact your organization administrator.
Contact the Lexmark Customer Support Center

User is prompted to re-register badge

Make sure that the badge ID in the Account Management web portal is typed correctly
For more information, see Managing badges on page 97.

Make sure that the e-mail address is typed correctly
The e-mail address is case sensitive.

Make sure that the card reader is configured to read the characters correctly
The card reader must be able to read hex or decimal values. The card reader installed on the printer may be configured with a start delimiter or end delimiter, or set to remove characters. For more information, see the documentation for your card reader.
Make sure that new badges are registered

Cannot find badge when using the badges search box

Make sure to type the complete e-mail address or badge ID

Fleet Management troubleshooting

Cannot access the Fleet Management web portal

Make sure that the user roles are assigned appropriately
For more information, contact your organization administrator.
Contact the Lexmark Customer Support Center

Printer is not enrolled

Make sure that the printer is in ready state
For more information, see Deployment readiness checklist on page 25.

Make sure that the authentication type set during enrollment matches the authentication type configured in the printer
Some printer models may have different authentication credentials configurations. For more information, see Updating agent access credentials on page 135.

Printer enrollment fails

Try one or more of the following:

- Make sure that the Dynamic Host Configuration Protocol (DHCP) setting is enabled and that the auto-configuration of the Domain Name System (DNS) setting is allowed.
- From the Embedded Web Server, click **Settings › Network/PortsSettings › Ethernet** and then, from the IPv4 section, select **Enable DHCP**.
- If you use a static IP address, then make sure that you set the static IP address only after the DNS setting is auto-configured
- Make sure that the printer date and time settings match those of the network.
- Make sure that correct printer credentials are provided in the Printer Enrollment Tool.
- Make sure that sufficient access controls are enabled.
- For printers with eSF version 5.0 or later, the following access controls must be enabled:

Access Controls group	Access Control settings
Administrative Menus	SE Menus
Device Management	Remote Management
Device Management	Firmware Updates
Device Management	App Configurations

- For printers with eSF versions 3.0 and 4.0, the following access controls must be enabled:

eSF version	Access Controls group	Access Control settings
eSF version 3.0 and 4.0	Administrative Menus	SE Menus
eSF version 3.0 and 4.0	Device Management	Remote Management
eSF version 3.0 and 4.0	Device Management	Firmware Updates
eSF version 4.0	Device Management	App Configurations

> **Note:** For more information on identifying the printer eSF version, see Viewing the Embedded Solutions Framework (eSF) version on page 59.

- Contact the Lexmark Customer Support Center.

Printer Agent update fails

Enroll the printer again
For secure printers, make sure that the correct printer credentials are provided during enrollment. For more information, see Enrolling printers using the Printer Enrollment Tool on page 111.

The printer is not communicating with the agent

Try one or more of the following:

- Make sure that the printer is connected to the network.
- Make sure that the printer is not enrolled in another organization.

  Unenroll the printer from the organization, and then enroll it again in the organization where you want it to be managed.
- Make sure that the Printer Agent is installed and running.

  Do either of the following:
  - If the Printer Agent is not installed, then enroll the printer using the Printer Enrollment Tool.
  - If the Printer Agent is stopped or disabled, restart or enable it in the Embedded Web Server.
- Make sure that the printer network settings are updated.

  1. Access the Embedded Web Server.
  2. Depending on your printer model, click Applications or Apps.
  3. Click **Printer Configuration Agent › Test Agent Connection**.
     - If the Test Agent Configuration button is missing, then enroll the printer again using the Printer Enrollment Tool.
     - If a Connection Failed! dialog with printer login error appears, then update the printer login credentials. Click **Update Credentials**, and then provide the printer administrator credentials.
     - If a Connection Failed! dialog with Internet connection error appears, then the printer network settings do not match the user network settings.
  4. If a firewall is in place, then make sure that the Lexmark Cloud Services domains are allowed to use port 443.

     The domains depend on the Lexmark Cloud Services data center. To determine the data center for your organization, use the web address of the login screen. For more information, see the Lexmark Cloud Services New and Changed Functionality document.

     North American Data Center—The web address of the login screen starts with https:\\idp.us.iss.lexmark.com.

     - idp.us.iss.lexmark.com
     - login.microsoftonline.com
     - lexmarkb2c.b2clogin.com
     - b2ccustomizationsprodsa.blob.core.windows.net
     - api.us.iss.lexmark.com
     - apis.us.iss.lexmark.com
     - us.iss.lexmark.com
     - prod-lex-cloud-iot.azure-devices.net
     - apis.iss.lexmark.com
     - iss.lexmark.com
     - global.azure-devices-provisioning.net
     - prodlexcloudk8s239.blob.core.windows.net
     - prodlexcloudk8s239.iss.lexmark.com
     - ccs.lexmark.com
     - ccs-cdn.lexmark.com
     - prodlexcloudk8s19.blob.core.windows.net

     European Data Center—The web address of the login screen starts with https:\\idp.eu.iss.lexmark.com.

    - idp.eu.iss.lexmark.com
    - login.microsoftonline.com
    - lexmarkb2ceu.b2clogin.com
    - ilexmarkb2c.b2clogin.com
    - b2ccustomizationsprodsa.blob.core.windows.net
    - api.eu.iss.lexmark.com
    - apis.eu.iss.lexmark.com
    - eu.iss.lexmark.com
    - prod-westeu-lex-cloud-iot.azure-devices.net
    - apis.iss.lexmark.com
    - iss.lexmark.com
    - prod-lex-cloud-iot.azure-devices.net
    - prodwesteulexcloudk8s54.blob.core.windows.net
    - ccs.lexmark.com
    - ccs-cdn.lexmark.com
    - prodwesteulexcloudk8s199blob.core.windows.net
    - global.azure-devices-provisioning.net
- Make sure that sufficient access controls are enabled.

  For printers with eSF version 5.0 or later, the Lexmark_PCA_User account must have access to the Administrative Menus access control.

  For printers with eSF versions 3.0 and 4.0, the Lexmark_PCA_User account must have to the following access controls:

eSF version	Access Controls group	Access Control setting
eSF versions 3.0 and 4.0	Administrative Menus	Service Engineer Menus Remotely
eSF versions 3.0 and 4.0	Device Management	Remote Management
eSF versions 3.0 and 4.0	Device Management	Firmware Updates
eSF version 3.0	Device Management	Configuration File Import / Export

  Note: For more information on identifying the printer eSF version, see Viewing the Embedded Solutions Framework (eSF) version on page 59.

- Contact the Lexmark Customer Support Center.

Printer cannot communicate with the Cloud Fleet Management portal after deployment

Try one or more of the following:

- Make sure that the Dynamic Host Configuration Protocol (DHCP) setting is enabled and that auto-configuration of the Domain Name System (DNS) setting is allowed.

  From the Embedded Web Server, click **Settings › Network/Ports › Ethernet**, and then, from the IPv4 section, select **Enable DHCP**.

- If you use a static IP address, then make sure that you set the static IP address only after the DNS setting is auto-configured.
- If a firewall is in place, then make sure that the Lexmark Cloud Services domains are allowed to use port 443.

The domains depend on the Lexmark Cloud Services data center. To determine the data center for your organization, use the web address of the login screen. For more information, see the Lexmark Cloud Services New and Changed Functionality document.

North American Data Center—The web address of the login screen starts with https:\\idp.us.iss.lexmark.com.

Hosts for the U.S. data center

Function	Used by	Host
Identity Provider	All customers	idp.us.iss.lexmark.com
Identity Provider	All customers	login.microsoftonline.com
Identity Provider	All customers	lexmarkb2c.b2clogin.com
Identity Provider	All customers	b2ccustomizationsprodsa .blob.core.windows.net
API	All customers	api.us.iss.lexmark.com
APIS	All customers	apis.us.iss.lexmark.com
CFM	All customers	us.iss.lexmark.com
CFM	All customers	prod-lex-cloud-iot.azure-devices.net
CFM	Native Agent only	apis.iss.lexmark.com
CFM	Native Agent only	iss.lexmark.com
CFM	Native Agent only	global.azure-devices-provisioning.net
CFM	All customers	prodlexcloudk8s239 .blob.core.windows.net
CFM	All customers	prodlexcloudk8s239.iss.lexmark.com
CCS	All customers	ccs.lexmark.com
CDN	All customers	ccs-cdn.lexmark.com
CPM	CPM only	prodlexcloudk8s19 .blob.core.windows.net

European Data Center—The web address of the login screen starts with https:\\idp.eu.iss.lexmark.com.

Hosts for the EU data center

Function	Used by	Host
Identity Provider	All customers	idp.eu.iss.lexmark.com
Identity Provider	All customers	login.microsoftonline.com
Identity Provider	All customers	lexmarkb2ceu.b2clogin.com
Identity Provider	All customers	lexmarkb2c.b2clogin.com
Identity Provider	All customers	b2ccustomizationsprodsa .blob.core.windows.net
API	All customers	api.eu.iss.lexmark.com
APIS	All customers	apis.eu.iss.lexmark.com
CFM	All customers	eu.iss.lexmark.com
CFM	All customers	prod-westeu-lex-cloud-iot .azure-devices.net
CFM	Native Agent only	apis.iss.lexmark.com
CFM	Native Agent only	iss.lexmark.com
CFM	Native Agent only	prod-lex-cloud-iot.azure-devices.net
CFM	Native Agent only	global.azure-devices-provisioning.net
CFM	All customers	prodwesteulexcloudk8s54 .blob.core.windows.net
CCS	All customers	ccs.lexmark.com
CDN	All customers	ccs-cdn.lexmark.com
CPM	CPM only	prodwesteulexcloudk8s199 .blob.core.windows.net

- Make sure that the printer firmware is updated to support Transport Layer Security (TLS) version 1.2.
- Contact the Lexmark Customer Support Center.

Fleet Management tasks fail but the printer status is On schedule

Make sure that the current printer configuration task is completed before sending new tasks
Importing a configuration bundle to the printer may cause the printer to stop responding.

Cannot open the Fleet Agent application

Make sure that the server or browser allows connection to localhost
If the Fleet Agent uses a port other than port 80, then the browser must allow connection to localhost:*x* , where *x* is the port number.
Contact your administrator

Some printers are missing during discovery

Make sure that you can communicate to the printer
Open a web browser, and then type the printer IP address. If the printer Embedded Web Server appears, then the printer is online.
Make sure that the SNMP community strings are set correctly

The Printer Enrollment Tool freezes

Disable the proxy server of your web browser or operating system
For more information, see the documentation that came with your web browser or operating system.

Enable the "Bypass proxy server for local addresses" feature of your web browser or operating system
For more information, see the documentation that came with your web browser or operating system.

Cannot update printer credentials

Unenroll, and then enroll the printer again
Make sure that the correct printer credentials are provided during enrollment.

Make sure that the agent is updated
From the Fleet Management web portal, do either of the following:

- Click **Agents > Fleet Agents >** select a Fleet Agent configuration **> Update > Fleet Agent**.
- Click **Agents > Printer Agents >** select a printer agent **> Update > Update agent version**.

Make sure that the Lexmark_PCA_User account is added to the Admin group
For more information, contact your Lexmark representative.

Make sure that the permissions and function access controls for the Admin group are configured correctly
Depending on your printer model, the following permissions and function access controls are required:

- Import / Export All Settings or Configuration File Import / Export
- Apps Configuration
- Security Menu
- SE Menu
- Firmware Updates
- Remote Management

Note: For more information, see the *Embedded Web Server Administrator's Guide* for the printer.

A blank space appears on the display, and an application ID appears in Customize Home Screen and View Home Screen

Restore the home screen to defaults settings Run the eSF applications

A blank space appears on the display when adding a hidden function in Customize Home Screen

Restore the home screen to defaults, and do not include the hidden item Remove -BLANK SPACE- in the home screen, and apply new layout

Non–Cloud Authentication eSF application does not work if Cloud Authentication is installed with Idle Screen enabled (using Translation Assistant or Cloud Scan Management)

Try one or more of the following:

- Make sure that a third party authentication is installed and Pluggable Authentication Module is not selected.
- If Idle Screen is disabled, then redeploy Translation Assistant or Cloud Scan Management with the pluggable authentication module disabled.
- Reboot your printer.

Note: For more information on limitations, see *Cloud Authentication ReadMe*.

Print Management troubleshooting

Cannot install the Lexmark Print Management Client

Uninstall the previous versions of the Lexmark™ Universal Print Driver Contact your administrator

Cannot access the Print Management web portal

Make sure that the user roles are assigned appropriately
For more information, contact your organization administrator.
Contact the Lexmark Customer Support Center

Printing error

Make sure that the user exists in the Account Management web portal
For more information, see Managing users on page 69.

Make sure that the Print Release Management User role is granted to the user

For more information, see Assigning organization roles on page 67.

Make sure that the Lexmark Print Management Client is configured correctly
For more information, see Downloading the Lexmark Print Management Client.

Some settings are unavailable on the Print Management web portal

Make sure that you have sufficient permission.

For more information on assigning roles, see "User accounts" chapter.

Cannot send e-mail to the print queue server

Make sure that the e-mail address is correct Make sure that you have sufficient permission
For more information on assigning roles, see "Account Management" chapter.

An error appears when sending print jobs using the Lexmark Cloud Print Management for Chrome extension

Make sure that your credentials are correct In Microsoft 365, use **Ctrl** + **P** instead

Sending print jobs using ≡ is not supported in Microsoft 365. Use **Ctrl** + **P** to print instead.

A warning appears when downloading the Lexmark Print Management Client

Accept the warning
Some browsers warn users of the risk associated with downloading EXE files.

For Windows 10, disable the SmartScreen® feature temporarily
For more information, see the documentation for your operating system.

CSV-formatted reports show incorrect UTF-8 or have missing non-ASCII characters

For Microsoft Excel, import the file to a new document, and then specify its file origin to UTF-8
For more information, see the documentation for the application.

For Notepad, save the document as a new file, and then specify the encoding menu to UTF-8
For more information, see the documentation for the application.

Custom settings from a LPMC installation do not appear

- **For versions 3.4.0 or earlier**—Make sure that you have created a **configuration.xml** file.
- **For versions 3.5.0 or later**—Make sure that you have created a **configuration.json** file.

Make sure that you have created an configuration.xml file Make sure that the installer and the configuration files are in the same folder

- Download the installer (EXE) file from the Print Management portal.

Custom print driver settings do not appear

Make sure that you have created an external LDC file
Create the LDC file from the Printer Driver Configuration Utility.

Make sure that the installer and the configuration files are in the same folder

1. Download the installer (EXE) file from the Print Management portal.
2. Make sure that the installer and the LDC files are in the same directory.

Lexmark Cloud Print Management print queues do not appear on client workstations

Make sure that the C:\ProgramData\LPMC\configuration.xml file has the correct modes Uninstall, and then install the package
Lexmark Print Management Client only enables modes defined in the configuration file during installation.

Installation with an LDC file is not working (Windows only)

Make sure to use the correct file names
During installation, the system looks for specific file names for the LDC files.

Use the following file names:

LPMSaaSPrintQueueConfiguration.ldc for the Cloud Print Management print queue
LPMServerlessPrintQueueConfiguration.ldc for the Hybrid Print Management print queue
Make sure to use the correct names for the print queue
The LDC configuration must use the following value for the print queue:

```
<PrinterObject value="Cloud Print Management - PCLXL"></
PrinterObject>
```

> **Note:** If a custom name is used for the print queue, then the value in PrinterObject must be the custom name of the print queue.

You can also use the following generic values for the printer profile and printer model:

```
<PrinterProfile name="Lexmark Universal v2" version="1.0">
<PrinterModel value="Lexmark Universal v2"></PrinterModel>
```

No analytics or configuration data for Detail Printer activity for Offline print

In macOS, analytics data is not available for Detail Printer activity for Offline print

For certain users, printer configuration data is not available for Detail Printer activity for Offline print
Make sure the communication between the printer and the cloud server is working to ensure transmission of Device Usage data.

To make sure that the LPMC features are functioning properly, check for the corresponding printer icon in the system tray.

Scan Management troubleshooting

Cannot access the Scan Management web portal

Make sure that the user roles are assigned correctly
For more information, contact your organization administrator.
Contact the Lexmark Customer Support Center

Some settings are unavailable on the Scan Management web portal

Make sure that you have sufficient permission.

For more information on assigning roles, see "User accounts" chapter.

Cannot save Scan Management settings

Make sure that the user roles are assigned correctly
For more information on assigning roles, see "Account Management" chapter.
Refresh your web browser Contact the Lexmark Customer Support Center

Cannot communicate with Lexmark Cloud Services

Sign in to your Microsoft account again Contact your system administrator

Cannot connect to your Microsoft account

Make sure that your Microsoft account domain is supported in your organization
For more information, see Configuring the Scan Management settings on page 238
Refresh your web browser Make sure that you have a stable network connection Contact the Lexmark Customer Support Center

Cannot access the Cloud Scan application

Make sure that the user roles are assigned correctly
For more information on assigning roles, see "Account Management" chapter.
Make sure that you have a stable network connection Contact the Lexmark Customer Support Center

Error in scanning documents

Make sure that the file size of your scanned documents does not exceed 20MB

Cloud Authentication settings do not reflect after deploying Cloud Scan Management

If Cloud Scan Management and Cloud Print Management are deployed together, then two Cloud Authentication settings appear. Make sure that the two configurations are the same. If Cloud Print Management is already deployed, then make sure that you follow the same Cloud Authentication settings for Cloud Scan Management.

Printer shows Invalid user error

Make sure that the Device Quotas application is uninstalled or disabled
If the Device Quotas application is already installed in a printer, then you cannot install the Cloud Scan and Translation Assistant applications.

Analytics troubleshooting

Report shows no data available

Change the date range to include more days Select a different group, department, cost center, or user Release a print job from the Lexmark Cloud Services queue, and then generate the report for the last 30 days

Bookmarked reports do not show

Make sure that you are logged in to Lexmark Cloud Services Make sure that you have access to the reports Depending on your user role, some reports may not be available. For more information, contact your organization administrator.
See the documentation that came with your web browser

Reports do not show properly when printed

Make sure that the paper size used is either Letter or A4 Make sure that the page orientation is set to portrait

Cannot find users

Make sure that the user is not deleted Use the user name when searching

Cannot remove departments and cost centers from the reports

Select another date range where the department or cost center is not included

Reports do not show the correct period

Make sure that the specified period is based on local time
The reports are generated on a 24-hour midnight to midnight frequency in local time. The local time is based on the date and time settings of the web browser and operating system.

Report does not show the correct file name

Select Notepad++ to open the CSV file Select Microsoft Excel to open the CSV file
To open the file correctly using Microsoft Excel, do the following:

1. From Microsoft Excel, click **Data > From Text/CSV**.
2. Browse to the CSV file.
3. Click **Open**.

Report shows invalid date range

Select a start date not preceding 2 years from the current date

Direct Print A4 submissions reported as Letter in Analytics

Change the Scale Content settings in Microsoft Word
To report the correct paper size, do the following:

1. Open Microsoft Word, and then click **File > Options > Advanced**.
2. In the Print section, disable the **Scale content for A4 or 8.5 x 11” paper sizes** option.

   > **Note:** By default, the **Scale content for A4 or 8.5 x 11” paper sizes** is enabled.

3. Click **OK**.

Solution Center troubleshooting

Cannot access the Solution Center eSF application

Try one or more of the following:

- Make sure that the user roles are assigned correctly.
- Make sure that the Solution Center application is enabled for your organization.
- For more information, contact your organization administrator.

Cannot run some of the solutions

Try one or more of the following:

- If you are running a solution that contains Footer or Redact steps, the printer must have a valid OCR license and a printer hard disk is installed.
- Make sure that you have sufficient quota.
- Make sure that the user roles are assigned correctly.
- For more information, contact your organization administrator.

Appendix

Integrating Cloud Fleet Management to third-party software

The integration API provides endpoints to facilitate integrations with third-party software. Use the following methods and keys to integrate Lexmark Cloud Fleet Management to your system:

Retrieve Asset Counters

This call retrieves the counters, such as meters, for the assets in an organization and its child organizations. The organization is determined from the token specified in the Authorization header, which must be retrieved from the Retrieve Token call.

> **Note:** This endpoint is now deprecated with the introduction of the API version 1.0 endpoints.

Method	URL
GET	<INTEGRATION_SERVICE_URL>/assets/inventory/counters

Key	Value	Description
Authorization	Bearer <TOKEN>	The Retrieve Token call returns the token.

Body

None.

Return schema

```
{
    "type": "array",
    "items": {
        "type": "object",
        "required": [ "serialNumber", "dateCollected", "counters" ],
        "properties": {
            "serialNumber": { "type": "string" },
            "dateCollected": { "type": "integer" },
            "counters": {
                "type": "object",
                "properties": {
                    "lifetimeCount": { "type": "integer" },
                    "colorPrintSideCount": { "type": "integer" },
                    "colorPrintSheetCount": { "type": "integer" },
                    "monoPrintSideCount": { "type": "integer" },
                    "monoPrintSheetCount": { "type": "integer" },
                    "printSideCount": { "type": "integer" },
                    "printSheetCount": { "type": "integer" },
```

```
                    "colorCopySideCount": { "type": "integer" },
                    "colorCopySheetCount": { "type": "integer" },
                    "monoCopySideCount": { "type": "integer" },
                    "monoCopySheetCount": { "type": "integer" },
                    "copySideCount": { "type": "integer" },
                    "copySheetCount": { "type": "integer" },
                    "colorFaxSideCount": { "type": "integer" },
                    "colorFaxSheetCount": { "type": "integer" },
                    "monoFaxSideCount": { "type": "integer" },
                    "monoFaxSheetCount": { "type": "integer" },
                    "faxSideCount": { "type": "integer" },
                    "faxSheetCount": { "type": "integer" },
                    "colorSideCount": { "type": "integer" },
                    "colorSheetCount": { "type": "integer" },
                    "monoSideCount": { "type": "integer" },
                    "monoSheetCount": { "type": "integer" },
                    "totalSideCount": { "type": "integer" },
                    "totalSheetCount": { "type": "integer" },
                    "largeSideCount": { "type": "integer" },
                    "largeSheetCount": { "type": "integer" },
                    "duplexSideCount": { "type": "integer" },
                    "duplexSheetCount": { "type": "integer" },
                    "coverageTierBusinessSideCount": { "type":
"integer" },
                    "coverageTierBusinessSheetCount": { "type":
"integer" },
                    "coverageTierGraphicsSideCount": { "type":
"integer" },
                    "coverageTierGraphicsSheetCount": { "type":
"integer" },
                    "coverageTierHighlightSideCount": { "type":
"integer" },
                    "coverageTierHighlightSheetCount": { "type":
"integer" },
                },
            },
        },
    },
    "minItems": 0
}
```

Sample response

```
[
  {
    "serialNumber": "14",
    "dateCollected": 1557259523000,
    "counters": {
      "monoPrintSideCount": 262,
      "printSideCount": 262,
      "printSheetCount": 262,
      "monoCopySideCount": 40,
      "copySideCount": 40,
      "copySheetCount": 40,
      "monoFaxSideCount": 0,
      "faxSideCount": 0,
      "faxSheetCount": 0,
```

```
        "monoSideCount": 302,
        "totalSideCount": 302,
        "totalSheetCount": 302,
        "duplexSheetCount": 0
      }
    },
    {
      "serialNumber": "29",
      "dateCollected": 1557259523000,
      "counters": {
        "lifetimeCount": 139,
        "monoPrintSideCount": 139,
        "printSideCount": 139,
        "printSheetCount": 136,
        "copySideCount": 0,
        "monoSideCount": 139,
        "totalSideCount": 139,
        "totalSheetCount": 136,
        "duplexSheetCount": 3
      }
    },
    {
      "serialNumber": "36",
      "dateCollected": null,
      "counters": {
      }
    }
  ]
```


Retrieve Token

This call generates a token that is suitable for use with the Retrieve Asset Counters call.

Method	URL
POST	<IDP_URL>oauth/token

Note: <IDP_URL> is either https://idp.eu.iss.lexmark.com for an organization in the EU data center or https://idp.us.iss.lexmark.com/ for an organization in the U.S. data center.

Key	Value
Content-Type	application/json

Body

```
{
    "grant_type": "client_credentials",
         "client_id": "<CLIENT_ID>",
         "client_secret": "<CLIENT_SECRET>"
}
```

Return schema

```
{
    "properties" : {
        "access_token": {"type": "string"},
        "token_type": {"type": "string"},
        "expires_in": {"type": "integer"},
        "created_at": {"type": "integer"}
    },
    "required": ["access_token", "token_type", "expires_in",
"created_at"]
}
```

Sample response

```
{
    "access_token": "abcd1234",
    "token_type": "bearer",
    "expires_in": 7200,
    "created_at": 1572633120
}
```

Integrating Cloud Fleet Management to third-party software for version 1.0

The integration API provides endpoints to facilitate integrations with third-party software. API version 1.0 provides methods for getting all data from Cloud Fleet Management related to all assets in a partner organization and all of its children. In addition, it provides unique endpoints to retrieve subset of data such as supplies, alerts, and diagnostics events. This new API version is paged with default page size of 50 assets and a maximum page size of 200 assets at a time. A caller can specify a smaller page size if necessary. It is expected to be used by integration connectors, and therefore requires client credential tokens. Use the following methods and keys to integrate Lexmark Cloud Fleet Management to your system:

URL	Method	Description
/v1.0/assets/supplies	GET	Retrieve supplies data for a page of assets.
/v1.0/assets/diagnostics	GET	Retrieve diagnostics data for a page of assets.
/v1.0/assets/alerts	GET	Retrieve alert data for a page of assets.
/v1.0/assets/counters	GET	Retrieve counter data for a page of assets.
/v1.0/assets	GET	Retrieve all data for a page of assets.

<INTEGRATION_SERVICE_URL> is as follows:

- https://apis.eu.iss.lexmark.com/cfm/fleetmgmt-integration-service for an organization in the EU data center.
- https://apis.us.iss.lexmark.com/cfm/fleetmgmt-integration-service for an organization in the U.S. data center.

Retrieve Asset Supplies

This call retrieves the supplies containing the supply subresource in the organization and child organizations of the calling application. The organization is determined from the token specified in the Authorization header, which must be retrieved from the "Retrieve Token" section.

Method	URL
GET	<INTEGRATION_SERVICE_URL>/v1.0/assets/supplies

Key	Value	Description
Authorization	Bearer <TOKEN>	The Retrieve Token call returns the token.

Body

None.

Return Schema

```
{
    "type": "object",
    "properties": {
        "content": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "manufacturer":  { "type": "string" },
                    "modelName":  { "type": "string" },
                    "serialNumber":  { "type": "string" },
                    "accountId":  { "type": "string" },
                    "name":  { "type": ["null", "string"] },
                    "description":  { "type": ["null", "string"] },
                    "dateCreated": { "type": "number" },
                    "dateModified": { "type": "number" },
                    "lastCommunication": { "type": ["null",
"number"] },
                    "lastDataRefresh": { "type": "number" },
                    "communicating": { "type": ["null", "boolean"] },
                    "authenticated": { "type": ["null", "boolean"] },
                    "baseFirmwareLastModifiedDate": { "type":
["null", "number"] },
                    "counters":  { "type": "null" },
                    "diagnosticEvents": {
                        "type": "array",
                        "maxItems": 0
                    },
                    "supplies":   {
                        "type": "array",
                        "items": {
                            "type": "object",
```

```
                            "properties": {
                                "serialNumber": { "type": ["null",
"string"] },
                                "currentLevel": { "type": ["null",
"integer"] },
                                "color": { "type": ["null",
"string"] },
                                "description": { "type": ["null",
"string"] },
                                "maximumCapacity": { "type": ["null",
"number"] },
                                "type": { "type": ["null",
"string"] },
                                "capacityUnit": { "type": ["null",
"string"] },
                                "percentRemaining":  { "type":
["null", "integer"] },
                                "supplyState": { "type": ["null",
"string"] },
                                "status":  { "type": ["null",
"string"] },
                                "coverage":  { "type": ["null",
"number"] },
                                "installDate":  { "type": ["null",
"number"] },
                                "coverageLifetime":  { "type":
["null", "number"] },
                                "coverageLastJob":  { "type":
["null", "number"] },
                                "sidesOnSupply":  { "type": ["null",
"number"] },
                                "timestamp": { "type": ["null",
"number"] },
                                "prebate":  { "type": ["null",
"boolean"] },
                                "genuine":  { "type": ["null",
"boolean"] },
                                "daysLeft":  { "type": ["null",
"number"] },
                                "daysLeftLastUpdated":  { "type":
["null", "number"] }
                            }
                        }
                    },
                    "alerts":   {
                        "type": "array",
                        "maxItems": 0
                    }
                }
            },
            "minItems": 0
        },
        "pageable": {
            "type": "object",
            "properties": {
                "sort": {
                    "type": "object",
                    "properties": {
```

```
                        "sorted":  { "type": "boolean" },
                        "unsorted":  { "type": "boolean" },
                        "empty":  { "type": "boolean" }
                    }
                },
                "pageNumber":  { "type": "integer" },
                "pageSize":  { "type": "integer" },
                "offset":  { "type": "integer" },
                "paged":  { "type": "boolean" },
                "unpaged":  { "type": "boolean" }
            }
        },
        "totalElements":  { "type": "integer" },
        "totalPages":  { "type": "integer" },
        "last":  { "type": "boolean" },
        "sort":  {
            "type": "object",
            "properties": {
                "sorted":  { "type": "boolean" },
                "unsorted":  { "type": "boolean" },
                "empty":  { "type": "boolean" }
            }
        },
        "first":  { "type": "boolean" },
        "numberOfElements":  { "type": "integer" },
        "size":  { "type": "integer" },
        "number":  { "type": "integer" },
        "empty":  { "type": "boolean" }
    }
}
```

Sample response

```
{
"content": [
{
  "manufacturer": "Lexmark",
   "modelName": "X792e",
   "serialNumber": "123SERIALNUMBER",
   "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637", "name": null,
   "description": null, "dateCreated": 1568139701472,
   "dateModified": 1621677697123,
   "lastCommunication": 1621686886903,
   "lastDataRefresh": 1621677697129,
   "communicating": false,
   "authenticated": true,
   "baseFirmwareLastModifiedDate": null,
   "counters": null,
   "diagnosticEvents": [],
   "supplies": [
       {
        "serialNumber": null,
         "currentLevel": 100,
         "color": "none",
         "description": "Waste Toner Bottle",
```

```
            "maximumCapacity": 200000,
            "type": "Waste Toner",
            "capacityUnit": "Sides",
            "percentRemaining": null,
            "supplyState": "UNKNOWN",
            "status": "Ok",
            "coverage": null,
            "installDate": null,
            "coverageLifetime": null,
            "coverageLastJob": null,
            "sidesOnSupply": null,
            "timestamp": 1621674025052,
            "prebate": null,
            "genuine": null,
            "daysLeft": null,
            "daysLeftLastUpdated": null
        },
        {
          "serialNumber": null,
                   "currentLevel": 100,
                   "color": "none",
                   "description": "Separator Roll and Pick Assembly",
                  "maximumCapacity": 120000,
                  "type": "Other",
                  "capacityUnit": "Other",
                  "percentRemaining": null,
                  "supplyState": "UNKNOWN",
                  "status": "Ok",
                  "coverage": null,
                  "installDate": null,
                  "coverageLifetime": null,
                  "coverageLastJob": null,
                  "sidesOnSupply": null,
                  "timestamp": 1621674025053,
                  "prebate": null,
                  "genuine": null,
                  "daysLeft": null,
                  "daysLeftLastUpdated": null
                 }
                 {
                   "serialNumber": "SUPPLYSERIAL1",
                   "currentLevel": 50,
                   "color": "none",
                   "description": "Fuser",
                   "maximumCapacity": 150000,
                   "type": "Fuser",
                   "capacityUnit": "Sides",
                   "percentRemaining": null,
                   "supplyState": "UNKNOWN",
                   "status": "Intermediate",
                   "coverage": null,
                   "installDate": null,
                   "coverageLifetime": null,
                   "coverageLastJob": null,
                   "sidesOnSupply": null,
                   "timestamp":
                   1621674025055, "prebate": null,
                   "genuine": null,
```

```
                "daysLeft": null,
                "daysLeftLastUpdated": null
              },
              {
               "serialNumber": "SUPPLYSERIAL2", "color": "Yellow",
               "description": "Yellow Cartridge",
               "maximumCapacity": 20000,
               "type": "Toner",
                "capacityUnit": "Sides",
                "percentRemaining": null,
                "supplyState": "UNKNOWN",
                "status": "Low",
                "coverage": 0.028,
                "installDate": 1568701948000,
                "coverageLifetime": 6.198895,
                "coverageLastJob": 15,
                "sidesOnSupply": 31355,
                "timestamp": 1621674025056,
                "prebate": true,
                "genuine": null,
                "daysLeft": null,
                "daysLeftLastUpdated": null
               },
               {
                "serialNumber": "SUPPLYSERIAL3",
                "currentLevel": 100,
                "color": "none",
                "description": "Transfer Module",
                "maximumCapacity": 200000,
                "type": "Other",
                "capacityUnit": "Other",
                "percentRemaining": null,
                "supplyState": "UNKNOWN",
                "status": "Ok",
                "coverage": null,
                "installDate": null,
                "coverageLifetime": null,
                "coverageLastJob": null,
                "sidesOnSupply": null,
                "timestamp": 1621674025057,
                "prebate": null,
                "genuine": null,
                "daysLeft": null,
                "daysLeftLastUpdated": null
               },
               {
                "serialNumber": "SUPPLYSERIAL4",
                "currentLevel": 80,
                "color": "Magenta",
                "description": "Magenta Cartridge",
                "maximumCapacity": 6000,
                "type": "Toner",
                "capacityUnit": "Sides",
                "percentRemaining": null,
                "supplyState": "AUTHENTIC",
                "status": "Intermediate",
                "coverage": 2.872,
                "installDate": 1568701948000,
```

```
                    "coverageLifetime": 4.0110497,
                    "coverageLastJob": 11,
                    "sidesOnSupply": 177,
                    "timestamp": 1621674025073, "prebate": true,
                    "genuine": null,
                    "daysLeft": null,
                    "daysLeftLastUpdated": null
                   },
                   {
                    "serialNumber": "SUPPLYSERIAL6",
                    "currentLevel": 20,
                    "color": "Cyan",
                    "description": "Cyan Cartridge",
                    "maximumCapacity": 12000,
                    "type": "Toner",
                    "capacityUnit": "Sides",
                    "percentRemaining": null,
                    "supplyState": "UNKNOWN",
                    "status": "Intermediate",
                    "coverage": 0.194,
                    "installDate": 1568701948000,
                    "coverageLifetime": 7.331492,
                    "coverageLastJob": 21,
                    "sidesOnSupply": 4688,
                    "prebate": true,
                    "genuine": null,
                    "daysLeft": null,
                    "daysLeftLastUpdated": null
                         }
      ],
      "alerts": []
    },
     {
      "manufacturer": "Lexmark",
      "modelName": "CX825",
      "serialNumber": "12345SERIALNUMBER",
      "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
      "name": null, "description": null,
      "dateCreated": 1568139300179,
      "dateModified": 1617891557869,
      "lastCommunication": 1617891642361,
      "lastDataRefresh": 1627605287407,
      "communicating": false,
      "authenticated": true,
      "baseFirmwareLastModifiedDate": null,
      "counters": null,
      "diagnosticEvents": [],
      "supplies": [],
      "alerts": []
     }
    ],
    "pageable": {
      "sort": { "sorted": false,
      "unsorted": true,
      "empty": true
     },
      "pageNumber": 0,
      "pageSize": 50,
```

```
    "offset": 0,
    "paged": true,
    "unpaged": false
   },
   "totalElements": 2,
   "totalPages": 1,
   "last": false,
   "sort": {
   "sorted": false,
   "unsorted": true,
   "empty": true
  },
   "first": true,
   "numberOfElements": 50,
   "size": 50,
   "number": 0, "empty": false
 }
 "timestamp": 1621674025075,
```

Retrieve Asset Diagnostics

This call retrieves a page of assets containing the diagnostic subresource in the organization and child organizations of the calling application. The organization is determined from the token specified in the Authorization header, which must be retrieved from the "Retrieve Token" section.

Method	URL
GET	<INTEGRATION_SERVICE_URL>/v1.0/assets/diagnostics

Key	Value	Description
Authorization	Bearer <TOKEN>	The Retrieve Token call returns the token.

Body

None.

Return Schema

```
{
    "type": "object",
    "properties": {
        "content": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "manufacturer":  { "type": "string" },
                    "modelName":  { "type": "string" },
                    "serialNumber":  { "type": "string" },
                    "accountId":  { "type": "string" },
```

```
                    "name":  { "type": ["null", "string"] },
                    "description":  { "type": ["null", "string"] },
                    "dateCreated": { "type": "number" },
                    "dateModified": { "type": "number" },
                    "lastCommunication": { "type": ["null",
"number"] },
                    "lastDataRefresh": { "type": "number" },
                    "communicating": { "type": ["null", "boolean"] },
                    "authenticated": { "type": ["null", "boolean"] },
                    "baseFirmwareLastModifiedDate": { "type":
["null", "number"] },
                    "counters":  { "type": "null" },
                    "diagnosticEvents": {
                        "type": "array",
                        "items": {
                            "type": "object",
                            "properties": {
                                "dateCreated": { "type": "number" },
                                "alert": { "type": ["null",
"string"] },
                                "alertDttm": { "type": ["null",
"number"] },
                                "alertId": { "type": ["null",
"string"] },
                                "alertType": { "type": ["null",
"string"] },
                                "collectorId": { "type": ["null",
"string"] },
                                "errorCode": { "type": ["null",
"string"] },
                                "errorReason":  { "type": ["null",
"string"] },
                                "errorType":  { "type": ["null",
"string"] },
                                "expirationDttm":  { "type":
"number" },
                                "hostname": { "type": ["null",
"string"] },
                                "ipAddress":  { "type": ["null",
"string"] },
                                "lpc":  { "type": ["null",
"number"] },
                                "model":  { "type": ["null",
"string"] },
                                "serialNumber":  { "type": ["null",
"string"] }
                            }
                        }
                    },
                    "supplies":   {
                        "type": "array",
                        "maxItems": 0
                    },
                    "alerts":   {
                        "type": "array",
                        "maxItems": 0
                    }
                }
```

```
            },
            "minItems": 0
        },
        "pageable": {
            "type": "object",
            "properties": {
                "sort": {
                    "type": "object",
                    "properties": {
                        "sorted":  { "type": "boolean" },
                        "unsorted":  { "type": "boolean" },
                        "empty":  { "type": "boolean" }
                    }
                },
                "pageNumber":  { "type": "integer" },
                "pageSize":  { "type": "integer" },
                "offset":  { "type": "integer" },
                "paged":  { "type": "boolean" },
                "unpaged":  { "type": "boolean" }
            }
        },
        "totalElements":  { "type": "integer" },
        "totalPages":  { "type": "integer" },
        "last":  { "type": "boolean" },
        "sort":  {
            "type": "object",
            "properties": {
                "sorted":  { "type": "boolean" },
                "unsorted":  { "type": "boolean" },
                "empty":  { "type": "boolean" }
            }
        },
        "first":  { "type": "boolean" },
        "numberOfElements":  { "type": "integer" },
        "size":  { "type": "integer" },
        "number":  { "type": "integer" },
        "empty":  { "type": "boolean" }
    }
}
```

Sample response


```
{
   "content": [
      {
        "manufacturer": "Lexmark",
        "modelName": "X792e",
        "serialNumber": "123SERIALNUMBER",
        "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
        "name": null,
        "description": null,
        "dateCreated": 1568139701472,
        "dateModified": 1621677697123,
        "lastCommunication": 1621686886903,
        "lastDataRefresh": 1621677697129,
```

```
          "communicating": false,
          "authenticated": true,
          "baseFirmwareLastModifiedDate": null,
          "counters": null,
          "diagnosticEvents": [],
          "supplies": [],
          "alerts": []
        },

        {
          "manufacturer": "Lexmark",
          "modelName": "CX825",
          "serialNumber": "12345SERIALNUMBER",
          "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
          "name": null,
          "description": null,
          "dateCreated": 1568139300179,
          "dateModified": 1617891557869,
          "lastCommunication": 1617891642361,
          "lastDataRefresh": 1627605287407,
          "communicating": false,
          "authenticated": true,
          "baseFirmwareLastModifiedDate": null,
          "counters": null,
          "diagnosticEvents": [
            {
             "dateCreated": 1639077580134,
             "alert": "202.03 PAPER JAM: repeated 25 time(s) in 500
pages",
             "alertDttm": 1639077580134,
             "alertId": "61b25b2cc036774096bbef91", "alertType":
"Prescriptive",
             "collectorId": "CBR01",
             "errorCode": "202.03", "errorReason":
             "HC_REP", "errorType": "%202.03%",
             "expirationDttm": 1313123,
             "hostname": "10.99.0.60",
             "ipAddress": "10.99.0.60",
             "lpc": 505535,
             "model": "LEXMARK CX825",
             "serialNumber": "12345SERIALNUMBER"
            },
            {
             "dateCreated": 163907758999,
             "alert": "Other alert",
             "alertDttm": 163907758999,
             "alertId": "61b25b2cc036774096bbef99",
             "alertType": "Prescriptive",
             "collectorId": "CBR01",
             "errorCode": "202.03",
             "errorReason": "HC_REP",
             "errorType": "%202.03%",
             "expirationDttm": 1313123,
             "hostname": "10.99.0.60",
             "ipAddress": "10.99.0.60",
             "lpc": 505535,
             "model": "LEXMARK CX825",
             "serialNumber": "12345SERIALNUMBER"
```

```
            }
         ],
         "supplies": [],
         "alerts": []
        }
    ],
    "pageable": {
      "sort": { "
         sorted": false,
    "unsorted": true,
    "empty": true
      },
      "pageNumber": 0,
      "pageSize": 50,
      "offset": 0,
      "paged": true,
      "unpaged": false
    },
     "totalElements": 2,
     "totalPages": 1, "last": false,
     "sort": {
     "sorted": false,
     "unsorted": true,
     "empty": true
    },
     "first": true,
     "numberOfElements": 50,
     "size": 50,
     "number": 0, "empty": false
}
```


Retrieve Asset Alerts

This call retrieves the supplies containing the alerts subresource in the organization and child organizations of the calling application. The organization is determined from the token specified in the Authorization header, which must be retrieved from the "Retrieve Token" section.

Method	URL
GET	<INTEGRATION_SERVICE_URL>/v1.0/assets/alerts

Key	Value	Description
Authorization	Bearer <TOKEN>	The Retrieve Token call returns the token.

Body

None.

Return Schema

```
{
    "type": "object",
    "properties": {
        "content": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "manufacturer":  { "type": "string" },
                    "modelName":  { "type": "string" },
                    "serialNumber":  { "type": "string" },
                    "accountId":  { "type": "string" },
                    "name":  { "type": ["null", "string"] },
                    "description":  { "type": ["null", "string"] },
                    "dateCreated": { "type": "number" },
                    "dateModified": { "type": "number" },
                    "lastCommunication": { "type": ["null",
"number"] },
                    "lastDataRefresh": { "type": "number" },
                    "communicating": { "type": ["null", "boolean"] },
                    "authenticated": { "type": ["null", "boolean"] },
                    "baseFirmwareLastModifiedDate": { "type":
["null", "number"] },
                    "counters": { "type": "null" },
                    "diagnosticEvents": {
                        "type": "array",
                        "maxItems": 0
                    },
                    "supplies":   {
                        "type": "array",
                        "maxItems": 0
                    },
                    "alerts":   {
                        "type": "array",
                        "items": {
                            "type": "object",
                            "properties": {
                                "status": { "type": ["null",
"string"] },
                                "issue": { "type": ["null",
"string"] }
                            }
                        }
                    }
                }
            },
            "minItems": 0
        },
        "pageable": {
            "type": "object",
            "properties": {
                "sort": {
                    "type": "object",
                    "properties": {
```

```
                        "sorted":  { "type": "boolean" },
                        "unsorted":  { "type": "boolean" },
                        "empty":  { "type": "boolean" }
                    }
                },
                "pageNumber":  { "type": "integer" },
                "pageSize":  { "type": "integer" },
                "offset":  { "type": "integer" },
                "paged":  { "type": "boolean" },
                "unpaged":  { "type": "boolean" }
            }
        },
        "totalElements":  { "type": "integer" },
        "totalPages":  { "type": "integer" },
        "last":  { "type": "boolean" },
        "sort":  {
            "type": "object",
            "properties": {
                "sorted":  { "type": "boolean" },
                "unsorted":  { "type": "boolean" },
                "empty":  { "type": "boolean" }
            }
        },
        "first":  { "type": "boolean" },
        "numberOfElements":  { "type": "integer" },
        "size":  { "type": "integer" },
        "number":  { "type": "integer" },
        "empty":  { "type": "boolean" }
    }
}
```

Sample response


```
{
   "content": [
      {
         "manufacturer": "Lexmark",
         "modelName": "X792e",
         "serialNumber": "123SERIALNUMBER",
         "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
         "name": null,
         "description": null,
         "dateCreated": 1568139701472,
         "dateModified": 1621677697123,
         "lastCommunication": 1621686886903,
         "lastDataRefresh": 1621677697129,
         "communicating": false,
         "authenticated": true,
         "baseFirmwareLastModifiedDate": null,
         "counters": null,
         "diagnosticEvents": [], "supplies": [],
         "alerts": []
      },
      {
         "manufacturer": "Lexmark",
```

```
          "modelName": "CX825",
          "serialNumber": "12345SERIALNUMBER",
          "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
          "name": null,
          "description": null,
          "dateCreated": 1568139300179,
          "dateModified": 1617891557869,
          "lastCommunication": 1617891642361,
          "lastDataRefresh": 1627605287407,
          "communicating": false,
          "authenticated": true,
          "baseFirmwareLastModifiedDate": null,
          "counters": null,
          "diagnosticEvents": [],
          "supplies": [],
          "alerts": [
             {
                "status": "ERROR",
                "issue": "Remove paper from Standard Output Bin"
             },
             {
                "status": "ERROR",
                "issue": " [145.80A]"
             },
             {
                "status": "WARNING",
                "issue": "Standard Bin Full"
             }
         ]
      }
  ],
  "pageable":
   "sort": {
   "sorted": false,
   "unsorted": true,
   "empty": true
  },
  "pageNumber": 0,
  "pageSize": 50,
  "offset": 0,
  "paged": true,
  "unpaged": false
  },
  "totalElements": 2,
  "totalPages": 1, "last": false,
  "sort": {
     "sorted": false
     "unsorted": true,
     "empty": true
  },
  "first": true,
  "numberOfElements": 50,
  "size": 50,
  "number": 0,
  "empty": false
 }
```

Retrieve Asset Counters

This call retrieves a page of assets containing the counters subresource in the organization and child organizations of the calling application. The organization is determined from the token specified in the Authorization header, which must be retrieved from the "Retrieve Token" section.

Method	URL
GET	<INTEGRATION_SERVICE_URL>/v1.0/assets/counters

Key	Value	Description
Authorization	Bearer <TOKEN>	The Retrieve Token call returns the token.

Body

None.

Return schema

```
{
    "type": "object",
    "properties": {
        "content": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "manufacturer":  { "type": "string" },
                    "modelName":  { "type": "string" },
                    "serialNumber":  { "type": "string" },
                    "accountId":  { "type": "string" },
                    "name":  { "type": ["null", "string"] },
                    "description":  { "type": ["null", "string"] },
                    "dateCreated": { "type": "number" },
                    "dateModified": { "type": "number" },
                    "lastCommunication": { "type": ["null",
"number"] },
                    "lastDataRefresh": { "type": "number" },
                    "communicating": { "type": ["null", "boolean"] },
                    "authenticated": { "type": ["null", "boolean"] },
                    "baseFirmwareLastModifiedDate": { "type":
["null", "number"] },
                    "counters": {
                        "type": ["null", "object"],
                        "properties": {
                            "lifetimeCount": { "type": ["null",
"integer"] },
                            "lifetimeCountUnit": { "type": ["null",
"string"] },
                            "colorPrintSideCount": { "type": ["null",
"integer"] },
```

```
["null", "integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
"integer"] },
```

```
"colorPrintSheetCount": { "type":
"monoPrintSideCount": { "type": ["null",
"monoPrintSheetCount": { "type": ["null",
"printSideCount": { "type": ["null",
"printSheetCount": { "type": ["null",
"colorCopySideCount": { "type": ["null",
"colorCopySheetCount": { "type": ["null",
"monoCopySideCount": { "type": ["null",
"monoCopySheetCount": { "type": ["null",
"copySideCount": { "type": ["null",
"copySheetCount": { "type": ["null",
"colorFaxSideCount": { "type": ["null",
"colorFaxSheetCount": { "type": ["null",
"monoFaxSideCount": { "type": ["null",
"monoFaxSheetCount": { "type": ["null",
"faxSideCount": { "type": ["null",
"faxSheetCount": { "type": ["null",
"colorSideCount": { "type": ["null",
"colorSheetCount": { "type": ["null",
"monoSideCount": { "type": ["null",
"monoSheetCount": { "type": ["null",
"totalSideCount": { "type": ["null",
"totalSheetCount": { "type": ["null",
"colorLargeSideCount": { "type": ["null",
"monoLargeSideCount": { "type": ["null",
"largeSideCount": { "type": ["null",
"largeSheetCount": { "type": ["null",
"duplexSideCount": { "type": ["null",
"duplexSheetCount": { "type": ["null",
```

```
                            "coverageTierBusinessSideCount":
{ "type": ["null", "integer"] },
                            "coverageTierBusinessSheetCount":
{ "type": ["null", "integer"] },
                            "coverageTierGraphicsSideCount":
{ "type": ["null", "integer"] },
                            "coverageTierGraphicsSheetCount":
{ "type": ["null", "integer"] },
                            "coverageTierHighlightSideCount":
{ "type": ["null", "integer"] },
                            "coverageTierHighlightSheetCount":
{ "type": ["null", "integer"] },
                            "paperCounts": {
                                "type": "array",
                                "items": {
                                    "type": "object",
                                    "properties": {
                                        "paperSheetPickedCount":
{ "type": ["null", "integer"] },
                                        "paperSheetSafeCount":
{ "type": ["null", "integer"] },
                                        "paperSideColorPickedCount":
{ "type": ["null", "integer"] },
                                        "paperSideColorSafeCount":
{ "type": ["null", "integer"] },
                                        "paperSideMonoPickedCount":
{ "type": ["null", "integer"] },
                                        "paperSideMonoSafeCount":
{ "type": ["null", "integer"] },
                                        "paperSize": { "type":
["null", "string"] },
                                        "paperType": { "type":
["null", "string"] }
                                    }
                                }
                            },
                            "blankCopySideCount": { "type": ["null",
"integer"] },
                            "adfScanCount": { "type": ["null",
"integer"] },
                            "flatbedScanCount": { "type": ["null",
"integer"] },
                            "scanToLocalhostScanCount": { "type":
["null", "integer"] },
                            "copyScanCount": { "type": ["null",
"integer"] },
                            "faxScanCount": { "type": ["null",
"integer"] },
                            "simplexAdfScanCount": { "type": ["null",
"integer"] },
                            "duplexAdfScanCount": { "type": ["null",
"integer"] },
                            "monoScanCount": { "type": ["null",
"integer"] },
                            "colorScanCount": { "type": ["null",
"integer"] },
                            "totalScanCount": { "type": ["null",
"integer"] },
```

```
                            "blankFaxSideCount": { "type": ["null",
"integer"] }
                        }
                    },
                    "diagnosticEvents": {
                        "type": "array",
                        "maxItems": 0
                    },
                    "supplies":   {
                        "type": "array",
                        "maxItems": 0
                    },
                    "alerts":   {
                        "type": "array",
                        "maxItems": 0
                    }
                }
            },
            "minItems": 0
        },
        "pageable": {
            "type": "object",
            "properties": {
                "sort": {
                    "type": "object",
                    "properties": {
                        "sorted":  { "type": "boolean" },
                        "unsorted":  { "type": "boolean" },
                        "empty":  { "type": "boolean" }
                    }
                },
                "pageNumber":  { "type": "integer" },
                "pageSize":  { "type": "integer" },
                "offset":  { "type": "integer" },
                "paged":  { "type": "boolean" },
                "unpaged":  { "type": "boolean" }
            }
        },
        "totalElements":  { "type": "integer" },
        "totalPages":  { "type": "integer" },
        "last":  { "type": "boolean" },
        "sort":  {
            "type": "object",
            "properties": {
                "sorted":  { "type": "boolean" },
                "unsorted":  { "type": "boolean" },
                "empty":  { "type": "boolean" }
            }
        },
        "first":  { "type": "boolean" },
        "numberOfElements":  { "type": "integer" },
        "size":  { "type": "integer" },
        "number":  { "type": "integer" },
        "empty":  { "type": "boolean" }
    }
}
```

Sample response


```
{
    "content": [
      {
         "manufacturer": "Lexmark",
         "modelName": "X792e",
         "serialNumber": "123SERIALNUMBER",
         "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
         "name": null,
         "description": null,
         "dateCreated": 1568139701472,
         "dateModified": 1621677697123,
         "lastCommunication": 1621686886903,
         "lastDataRefresh": 1621677697129,
         "communicating": false,
         "authenticated": true,
         "baseFirmwareLastModifiedDate": null,
         "counters": {
            "lifetimeCount": 6436,
            "lifetimeCountUnit": "Sides",
            "colorPrintSideCount": 464,
            "colorPrintSheetCount": null,
            "monoPrintSideCount": 2636,
            "monoPrintSheetCount": null,
            "printSideCount": 3100,
            "printSheetCount": 3067,
            "colorCopySideCount": 175,
            "colorCopySheetCount": null,
            "monoCopySideCount": 50,
            "monoCopySheetCount": null,
            "copySideCount": 225,
            "copySheetCount": 217,
            "colorFaxSideCount": 99,
            "colorFaxSheetCount": null,
            "monoFaxSideCount": 2994,
            "monoFaxSheetCount": null,
            "faxSideCount": 3093,
            "faxSheetCount": 3093,
            "colorSideCount": 738,
            "colorSheetCount": null,
            "monoSideCount": 5680,
            "monoSheetCount": null,
            "totalSideCount": 6418,
            "totalSheetCount": 6377,
            "colorLargeSideCount": null,
            "monoLargeSideCount": null,
            "largeSideCount": null,
            "largeSheetCount": null,
            "duplexSideCount": null,
            "duplexSheetCount": 41,
            "coverageTierBusinessSideCount": null,
            "coverageTierBusinessSheetCount": null,
            "coverageTierGraphicsSideCount": null,
            "coverageTierGraphicsSheetCount": null,
            "coverageTierHighlightSideCount": null,
```

```
              "coverageTierHighlightSheetCount": null,
              "paperCounts": [
                 {
                  "paperSheetPickedCount": null,
                  "paperSheetSafeCount": 5370,
                  "paperSideColorPickedCount": 586,
                  "paperSideColorSafeCount": 700,
                  "paperSideMonoPickedCount": 2377,
                  "paperSideMonoSafeCount": 4711,
                  "paperSize": "Letter",
                  "paperType": "Plain"
                 },
                 {
                  "paperSheetPickedCount": null,
                  "paperSheetSafeCount": 3,
                  "paperSideColorPickedCount": 0,
                  "paperSideColorSafeCount": 0,
                  "paperSideMonoPickedCount": 1,
                  "paperSideMonoSafeCount": 3,
                  "paperSize": "Letter",
                  "paperType": "Custom Type 2"
                 },
                 {
                  "paperSheetPickedCount": null,
                  "paperSheetSafeCount": 23,
                  "paperSideColorPickedCount": 0,
                  "paperSideColorSafeCount": 0,
                  "paperSideMonoPickedCount": 0,
                  "paperSideMonoSafeCount": 23,
                  "paperSize": "Oficio",
                           "paperType": "Plain"
                 },
                 {
                  "paperSheetPickedCount": null,
                  "paperSheetSafeCount": 24,
                  "paperSideColorPickedCount": 0,
                  "paperSideColorSafeCount": 0,
                  "paperSideMonoPickedCount": 0,
                  "paperSideMonoSafeCount": 24, "paperSize": "Legal",
  "paperType": "Plain"
                 },
                 {
                  "paperSheetPickedCount": null,
                  "paperSheetSafeCount": 110,
                  "paperSideColorPickedCount": 0,
                  "paperSideColorSafeCount": 7,
                  "paperSideMonoPickedCount": 0,
                  "paperSideMonoSafeCount": 103,
                  "paperSize": "Executive",
                  "paperType": "Plain"
                 },
                 {
                  "paperSheetPickedCount": null,
                  "paperSheetSafeCount": 56,
                  "paperSideColorPickedCount": 0,
                  "paperSideColorSafeCount": 0,
                  "paperSideMonoPickedCount": 0,
                  "paperSideMonoSafeCount": 56,
```

```
                "paperSize": "Folio",
                "paperType": "Plain"
               },
               {
                "paperSheetPickedCount": null,
                "paperSheetSafeCount": 52,
                "paperSideColorPickedCount": 0,
                "paperSideColorSafeCount": 0,
                "paperSideMonoPickedCount": 0,
                "paperSideMonoSafeCount": 52,
                "paperSize": "JIS B5",
                "paperType": "Plain"
               },
               {
                "paperSheetPickedCount": null,
                "paperSheetSafeCount": 685,
                "paperSideColorPickedCount": 3,
                "paperSideColorSafeCount": 30,
                "paperSideMonoPickedCount": 178,
                "paperSideMonoSafeCount": 655,
                "paperSize": "A4",
                "paperType": "Plain"
               },
               {
                "paperSheetPickedCount": null,
                "paperSheetSafeCount": 45,
                "paperSideColorPickedCount": 0,
                "paperSideColorSafeCount": 0,
                "paperSideMonoPickedCount": 0,
                "paperSideMonoSafeCount": 45,
                "paperSize": "A5",
                "paperType": "Plain"
               },
               {
                "paperSheetPickedCount": null,
                "paperSheetSafeCount": 4,
                "paperSideColorPickedCount": 0,
                "paperSideColorSafeCount": 0,
                "paperSideMonoPickedCount": 0,
                "paperSideMonoSafeCount": 4,
                "paperSize": "A6",
                "paperType": "Plain"
               },
               {
                "paperSheetPickedCount": null,
                "paperSheetSafeCount": 1,
                "paperSideColorPickedCount": 0,
                "paperSideColorSafeCount": 0,
                "paperSideMonoPickedCount": 0,
                "paperSideMonoSafeCount": 1,
                "paperSize": "A4",
                "paperType": "Custom Type 2"
               },
               {
                "paperSheetPickedCount": null,
                "paperSheetSafeCount": 4,
                "paperSideColorPickedCount": 1,
                "paperSideColorSafeCount": 1,
```

```
                    "paperSideMonoPickedCount": 3,
                    "paperSideMonoSafeCount": 3,
                    "paperSize": "Letter",
                    "paperType": "Transparancy"
                  }
                ],
                  "blankCopySideCount": 1,
                  "adfScanCount": 377,
                  "flatbedScanCount": 722,
                  "scanToLocalhostScanCount": null,
                  "copyScanCount": 101,
                  "faxScanCount": 815,
                  "simplexAdfScanCount": null,
                  "duplexAdfScanCount": null,
                  "monoScanCount": null,
                  "colorScanCount": null,
                  "totalScanCount": 1099,
                  "blankFaxSideCount": 0
            },
              "diagnosticEvents": [],
              "supplies": [],
              "alerts": []
          },
{
                "manufacturer": "Lexmark",
                "modelName": "CX825",
                "serialNumber": "12345SERIALNUMBER",
                "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
                "name": null,
                "description": null,
                "dateCreated": 1568139300179,
                "dateModified": 1617891557869,
                "lastCommunication": 1617891642361,
                "lastDataRefresh": 1627605287407,
                "communicating": false,
                "authenticated": true,
                "baseFirmwareLastModifiedDate": null,
                "counters": {
                    "lifetimeCount": 30932,
                    "lifetimeCountUnit": "Sides",
                    "colorPrintSideCount": 27268,
                    "colorPrintSheetCount": null,
                    "monoPrintSideCount": 3196,
                    "monoPrintSheetCount": null,
                    "printSideCount": 30464,
                    "printSheetCount": 28872,
                    "colorCopySideCount": 447,
                    "colorCopySheetCount": null,
                    "monoCopySideCount": 2,
                    "monoCopySheetCount": null,
                    "copySideCount": 449,
                    "copySheetCount": 284,
                    "colorFaxSideCount": 0,
                    "colorFaxSheetCount": null,
                    "monoFaxSideCount": 0,
                    "monoFaxSheetCount": null,
                    "faxSideCount": 0,
                    "faxSheetCount": 0,
```

```
            "colorSideCount": 27715,
            "colorSheetCount": null,
            "monoSideCount": 3198,
            "monoSheetCount": null,
            "totalSideCount": 30914,
            "totalSheetCount": 29156,
            "colorLargeSideCount": null,
            "monoLargeSideCount": null,
            "largeSideCount": null,
            "largeSheetCount": null,
            "duplexSideCount": null,
            "duplexSheetCount": 1758,
            "coverageTierBusinessSideCount": 11373,
            "coverageTierBusinessSheetCount": null,
            "coverageTierGraphicsSideCount": 5013,
            "coverageTierGraphicsSheetCount": null,
            "coverageTierHighlightSideCount": 11327,
            "coverageTierHighlightSheetCount": null,
            "paperCounts": [],
             "blankCopySideCount": null,
             "adfScanCount": null,
             "flatbedScanCount": null,
             "scanToLocalhostScanCount": null,
             "copyScanCount": null,
             "faxScanCount": null,
             "simplexAdfScanCount": null,
             "duplexAdfScanCount": null,
             "monoScanCount": null,
             "colorScanCount": null,
             "totalScanCount": null,
             "blankFaxSideCount": null
         },
         "diagnosticEvents": [],
         "supplies": [],
         "alerts": []
      }
   ],
    "pageable": {
       "sort": {
       "sorted": false,
       "unsorted": true,
       "empty": true
       },
        "pageNumber": 0,
        "pageSize": 50,
        "offset": 0,
        "paged": true,
        "unpaged": false
    },
     "totalElements": 2,
     "totalPages": 1,
     "last": false,
     "sort": {
        "sorted": false,
        "unsorted": true,
        "empty": true
    },
     "first": true,
```

```
            "numberOfElements": 50,
            "size": 50,
            "number": 0,
                 "empty": false
}
```

Retrieve Assets

This call retrieves a page of assets containing the subresource in the organization and child organizations of the calling application. The organization is determined from the token specified in the Authorization header, which must be retrieved from the "Retrieve Token" section.

Method	URL
GET	<INTEGRATION_SERVICE_URL>/v1.0/assets

Key	Value	Description
Authorization	Bearer <TOKEN>	The Retrieve Token call returns the token.

Body

None.

Note: This API returns all data sets for all assets. It has an optional parameter to return all data for a single serial number.

Return schema

```
 {
    "type": "object",
    "properties": {
        "content": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "manufacturer":  { "type": "string" },
                    "modelName":  { "type": "string" },
                    "serialNumber":  { "type": "string" },
                    "accountId":  { "type": "string" },
                    "name":  { "type": ["null", "string"] },
                    "description":  { "type": ["null", "string"] },
                    "dateCreated": { "type": "number" },
                    "dateModified": { "type": "number" },
                    "lastCommunication": { "type": ["null",
"number"] },
                    "lastDataRefresh": { "type": "number" },
                    "communicating": { "type": ["null", "boolean"] },
                    "authenticated": { "type": ["null", "boolean"] },
                    "baseFirmwareLastModifiedDate": { "type":
```

```
["null", "number"] },
                    "counters": {
                        "type": ["null", "object"],
                        "properties": {
                            "lifetimeCount": { "type": ["null",
"integer"] },
                            "lifetimeCountUnit": { "type": ["null",
"string"] },
                            "colorPrintSideCount": { "type": ["null",
"integer"] },
                            "colorPrintSheetCount": { "type":
["null", "integer"] },
                            "monoPrintSideCount": { "type": ["null",
"integer"] },
                            "monoPrintSheetCount": { "type": ["null",
"integer"] },
                            "printSideCount": { "type": ["null",
"integer"] },
                            "printSheetCount": { "type": ["null",
"integer"] },
                            "colorCopySideCount": { "type": ["null",
"integer"] },
                            "colorCopySheetCount": { "type": ["null",
"integer"] },
                            "monoCopySideCount": { "type": ["null",
"integer"] },
                            "monoCopySheetCount": { "type": ["null",
"integer"] },
                            "copySideCount": { "type": ["null",
"integer"] },
                            "copySheetCount": { "type": ["null",
"integer"] },
                            "colorFaxSideCount": { "type": ["null",
"integer"] },
                            "colorFaxSheetCount": { "type": ["null",
"integer"] },
                            "monoFaxSideCount": { "type": ["null",
"integer"] },
                            "monoFaxSheetCount": { "type": ["null",
"integer"] },
                            "faxSideCount": { "type": ["null",
"integer"] },
                            "faxSheetCount": { "type": ["null",
"integer"] },
                            "colorSideCount": { "type": ["null",
"integer"] },
                            "colorSheetCount": { "type": ["null",
"integer"] },
                            "monoSideCount": { "type": ["null",
"integer"] },
                            "monoSheetCount": { "type": ["null",
"integer"] },
                            "totalSideCount": { "type": ["null",
"integer"] },
                            "totalSheetCount": { "type": ["null",
"integer"] },
                            "colorLargeSideCount": { "type": ["null",
"integer"] },
```

```
                             "monoLargeSideCount": { "type": ["null",
"integer"] },
                             "largeSideCount": { "type": ["null",
"integer"] },
                             "largeSheetCount": { "type": ["null",
"integer"] },
                             "duplexSideCount": { "type": ["null",
"integer"] },
                             "duplexSheetCount": { "type": ["null",
"integer"] },
                             "coverageTierBusinessSideCount":
{ "type": ["null", "integer"] },
                             "coverageTierBusinessSheetCount":
{ "type": ["null", "integer"] },
                             "coverageTierGraphicsSideCount":
{ "type": ["null", "integer"] },
                             "coverageTierGraphicsSheetCount":
{ "type": ["null", "integer"] },
                             "coverageTierHighlightSideCount":
{ "type": ["null", "integer"] },
                             "coverageTierHighlightSheetCount":
{ "type": ["null", "integer"] },
                             "paperCounts": {
                                 "type": "array",
                                 "items": {
                                     "type": "object",
                                     "properties": {
                                         "paperSheetPickedCount":
{ "type": ["null", "integer"] },
                                         "paperSheetSafeCount":
{ "type": ["null", "integer"] },
                                         "paperSideColorPickedCount":
{ "type": ["null", "integer"] },
                                         "paperSideColorSafeCount":
{ "type": ["null", "integer"] },
                                         "paperSideMonoPickedCount":
{ "type": ["null", "integer"] },
                                         "paperSideMonoSafeCount":
{ "type": ["null", "integer"] },
                                         "paperSize": { "type":
["null", "string"] },
                                         "paperType": { "type":
["null", "string"] }
                                     }
                                 }
                             },
                             "blankCopySideCount": { "type": ["null",
"integer"] },
                             "adfScanCount": { "type": ["null",
"integer"] },
                             "flatbedScanCount": { "type": ["null",
"integer"] },
                             "scanToLocalhostScanCount": { "type":
["null", "integer"] },
                             "copyScanCount": { "type": ["null",
"integer"] },
                             "faxScanCount": { "type": ["null",
"integer"] },
```

```
                            "simplexAdfScanCount": { "type": ["null",
"integer"] },
                            "duplexAdfScanCount": { "type": ["null",
"integer"] },
                            "monoScanCount": { "type": ["null",
"integer"] },
                            "colorScanCount": { "type": ["null",
"integer"] },
                            "totalScanCount": { "type": ["null",
"integer"] },
                            "blankFaxSideCount": { "type": ["null",
"integer"] }
                        }
                    },
                    "diagnosticEvents": {
                        "type": "array",
                        "items": {
                            "type": "object",
                            "properties": {
                                "dateCreated": { "type": "number" },
                                "alert": { "type": ["null",
"string"] },
                                "alertDttm": { "type": ["null",
"number"] },
                                "alertId": { "type": ["null",
"string"] },
                                "alertType": { "type": ["null",
"string"] },
                                "collectorId": { "type": ["null",
"string"] },
                                "errorCode": { "type": ["null",
"string"] },
                                "errorReason":  { "type": ["null",
"string"] },
                                "errorType":  { "type": ["null",
"string"] },
                                "expirationDttm":  { "type":
"number" },
                                "hostname": { "type": ["null",
"string"] },
                                "ipAddress":  { "type": ["null",
"string"] },
                                "lpc":  { "type": ["null",
"number"] },
                                "model":  { "type": ["null",
"string"] },
                                "serialNumber":  { "type": ["null",
"string"] }
                            }
                        }
                    },
                    "supplies":   {
                        "type": "array",
                        "items": {
                            "type": "object",
                            "properties": {
                                "serialNumber": { "type": ["null",
"string"] },
```

```
                                  "currentLevel": { "type": ["null",
  "integer"] },
                                  "color": { "type": ["null",
  "string"] },
                                  "description": { "type": ["null",
  "string"] },
                                  "maximumCapacity": { "type": ["null",
  "number"] },
                                  "type": { "type": ["null",
  "string"] },
                                  "capacityUnit": { "type": ["null",
  "string"] },
                                  "percentRemaining":  { "type":
  ["null", "integer"] },
                                  "supplyState": { "type": ["null",
  "string"] },
                                  "status":  { "type": ["null",
  "string"] },
                                  "coverage":  { "type": ["null",
  "number"] },
                                  "installDate":  { "type": ["null",
  "number"] },
                                  "coverageLifetime":  { "type":
  ["null", "number"] },
                                  "coverageLastJob":  { "type":
  ["null", "number"] },
                                  "sidesOnSupply":  { "type": ["null",
  "number"] },
                                  "timestamp": { "type": ["null",
  "number"] },
                                  "prebate":  { "type": ["null",
  "boolean"] },
                                  "genuine":  { "type": ["null",
  "boolean"] },
                                  "daysLeft":  { "type": ["null",
  "number"] },
                                  "daysLeftLastUpdated":  { "type":
  ["null", "number"] }
                              }
                          }
                      },
                      "alerts":   {
                          "type": "array",
                          "items": {
                              "type": "object",
                              "properties": {
                                  "status": { "type": ["null",
  "string"] },
                                  "issue": { "type": ["null",
  "string"] }
                              }
                          }
                      }
                  }
              },
              "minItems": 0
          },
          "pageable": {
```

```
            "type": "object",
            "properties": {
                "sort": {
                    "type": "object",
                    "properties": {
                        "sorted":  { "type": "boolean" },
                        "unsorted":  { "type": "boolean" },
                        "empty":  { "type": "boolean" }
                    }
                },
                "pageNumber":  { "type": "integer" },
                "pageSize":  { "type": "integer" },
                "offset":  { "type": "integer" },
                "paged":  { "type": "boolean" },
                "unpaged":  { "type": "boolean" }
            }
        },
        "totalElements":  { "type": "integer" },
        "totalPages":  { "type": "integer" },
        "last":  { "type": "boolean" },
        "sort":  {
            "type": "object",
            "properties": {
                "sorted":  { "type": "boolean" },
                "unsorted":  { "type": "boolean" },
                "empty":  { "type": "boolean" }
            }
        },
        "first":  { "type": "boolean" },
        "numberOfElements":  { "type": "integer" },
        "size":  { "type": "integer" },
        "number":  { "type": "integer" },
        "empty":  { "type": "boolean" }
    }
}
```

Sample response


```
{
     "content": [
        {
          "manufacturer": "Lexmark",
          "modelName": "X792e",
               "serialNumber": "123SERIALNUMBER",
          "accountId": "bf899e52-b026-46f3-9715-fe54b5dd7637",
          "name": null,
          "description": null,
          "dateCreated": 1568139701472,
          "dateModified": 1621677697123,
          "lastCommunication": 1621686886903,
          "lastDataRefresh": 1621677697129,
          "communicating": false,
          "authenticated": true,
          "baseFirmwareLastModifiedDate": null,
          "counters": {
```

```
                "lifetimeCount": 6436,
                "lifetimeCountUnit": "Sides",
                "colorPrintSideCount": 464,
                "colorPrintSheetCount": null,
                "monoPrintSideCount": 2636,
                "monoPrintSheetCount": null,
                "printSideCount": 3100,
                "printSheetCount": 3067,
                "colorCopySideCount": 175,
                "colorCopySheetCount": null,
                "monoCopySideCount": 50,
                "monoCopySheetCount": null,
                "copySideCount": 225,
                "copySheetCount": 217,
                "colorFaxSideCount": 99,
                "colorFaxSheetCount": null,
                "monoFaxSideCount": 2994,
                "monoFaxSheetCount": null,
                "faxSideCount": 3093,
                "faxSheetCount": 3093,
                "colorSideCount": 738,
                "colorSheetCount": null,
                "monoSideCount": 5680,
                "monoSheetCount": null,
                "totalSideCount": 6418,
                "totalSheetCount": 6377,
                "colorLargeSideCount": null,
                "monoLargeSideCount": null,
                "largeSideCount": null,
                "largeSheetCount": null,
                "duplexSideCount": null,
                "duplexSheetCount": 41,
                "coverageTierBusinessSideCount": null,
                "coverageTierBusinessSheetCount": null,
                "coverageTierGraphicsSideCount": null,
                "coverageTierGraphicsSheetCount": null,
                "coverageTierHighlightSideCount": null,
                "coverageTierHighlightSheetCount": null,
                "paperCounts": [
                   {
                     "paperSheetPickedCount": null,
                     "paperSheetSafeCount": 5370,
                     "paperSideColorPickedCount": 586,
                     "paperSideColorSafeCount": 700,
                     "paperSideMonoPickedCount": 2377,
                     "paperSideMonoSafeCount": 4711,
                     "paperSize": "Letter",
                     "paperType": "Plain"
                   },
                   {
                     "paperSheetPickedCount": null,
                     "paperSheetSafeCount": 3,
                     "paperSideColorPickedCount": 0,
                     "paperSideColorSafeCount": 0,
                     "paperSideMonoPickedCount": 1,
                     "paperSideMonoSafeCount": 3,
                     "paperSize": "Letter",
                     "paperType": "Custom Type 2"
```

```
                    },
                    {
                      "paperSheetPickedCount": null,
                      "paperSheetSafeCount": 23,
                      "paperSideColorPickedCount": 0,
                      "paperSideColorSafeCount": 0,
                      "paperSideMonoPickedCount": 0,
                      "paperSideMonoSafeCount": 23,
                      "paperSize": "Oficio",
                      "paperType": "Plain"
                    },
                    {
                      "paperSheetPickedCount": null,
                      "paperSheetSafeCount": 24,
                      "paperSideColorPickedCount": 0,
                      "paperSideColorSafeCount": 0,
                      "paperSideMonoPickedCount": 0,
                      "paperSideMonoSafeCount": 24,
                      "paperSize": "Legal",
                      "paperType": "Plain"
                    },
                    {
                      "paperSheetPickedCount": null,
                      "paperSheetSafeCount": 110,
                      "paperSideColorPickedCount": 0,
                      "paperSideColorSafeCount": 7,
                      "paperSideMonoPickedCount": 0,
                      "paperSideMonoSafeCount": 103,
                      "paperSize": "Executive",
                      "paperType": "Plain"
                    },
                    {
                      "paperSheetPickedCount": null,
                      "paperSheetSafeCount": 56,
                      "paperSideColorPickedCount": 0,
                      "paperSideColorSafeCount": 0,
                      "paperSideMonoPickedCount": 0,
                      "paperSideMonoSafeCount": 56,
                      "paperSize": "Folio",
                      "paperType": "Plain"
                    },
                    {
                      "paperSheetPickedCount": null,
                      "paperSheetSafeCount": 52,
                      "paperSideColorPickedCount": 0,
                      "paperSideColorSafeCount": 0,
                      "paperSideMonoPickedCount": 0,
                      "paperSideMonoSafeCount": 52,
                      "paperSize": "JIS B5",
                      "paperType": "Plain"
                    },
                    {
                      "paperSheetPickedCount": null,
                      "paperSheetSafeCount": 685,
                      "paperSideColorPickedCount": 3,
                      "paperSideColorSafeCount": 30,
                      "paperSideMonoPickedCount": 178,
                      "paperSideMonoSafeCount": 655,
```

```
            "paperSize": "A4",
            "paperType": "Plain"
          },
          {
            "paperSheetPickedCount": null,
            "paperSheetSafeCount": 45,
            "paperSideColorPickedCount": 0,
            "paperSideColorSafeCount": 0,
            "paperSideMonoPickedCount": 0,
            "paperSideMonoSafeCount": 45,
            "paperSize": "A5",
            "paperType": "Plain"
          },
          {
            "paperSheetPickedCount": null,
            "paperSheetSafeCount": 4,
            "paperSideColorPickedCount": 0,
            "paperSideColorSafeCount": 0,
            "paperSideMonoPickedCount": 0,
            "paperSideMonoSafeCount": 4,
            "paperSize": "A6",
            "paperType": "Plain"
          },
          {
            "paperSheetPickedCount": null,
            "paperSheetSafeCount": 1,
            "paperSideColorPickedCount": 0,
            "paperSideColorSafeCount": 0,
            "paperSideMonoPickedCount": 0,
            "paperSideMonoSafeCount": 1,
            "paperSize": "A4",
            "paperType": "Custom Type 2"
          },
          {
            "paperSheetPickedCount": null,
            "paperSheetSafeCount": 4,
            "paperSideColorPickedCount": 1,
            "paperSideColorSafeCount": 1,
            "paperSideMonoPickedCount": 3,
            "paperSideMonoSafeCount": 3,
            "paperSize": "Letter",
                     "paperType": "Transparancy"
          }
        ],
         "blankCopySideCount": 1,
         "adfScanCount": 377,
         "flatbedScanCount": 722,
         "scanToLocalhostScanCount": null,
         "copyScanCount": 101,
         "faxScanCount": 815,
         "simplexAdfScanCount": null,
         "duplexAdfScanCount": null,
         "monoScanCount": null, "colorScanCount": null,
         "totalScanCount": 1099,
         "blankFaxSideCount": 0
      },
       "diagnosticEvents": [
        {
```

```
                "dateCreated": 1639077580134,
                "alert": "202.03 PAPER JAM: repeated 25 time(s) in
500 pages",
                "alertDttm": 1639077580134,
                "alertId": "61b25b2cc036774096bbef91",
                "alertType": "Prescriptive",
                "collectorId": "CBR01",
                "errorCode": "202.03",
                "errorReason": "HC_REP",
                "errorType": "%202.03%",
                "expirationDttm": 1313123,
                "hostname": "10.99.0.60",
                "ipAddress": "10.99.0.60",
                "lpc": 505535,
                "model": "LEXMARK CX825",
                "serialNumber": "12345SERIALNUMBER"
              }
            ],
             "supplies": [
                {
                 "serialNumber": "SUPPLY123",
                 "currentLevel": 50,
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                  "status": "WARNING",
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  "empty": false
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March 2025

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Administrator's Guide