

# Lexmark Cloud Services

New and Changed Functionality

Version A for Lexmark Cloud Services, July 2021



Lexmark™

# Fleet Management

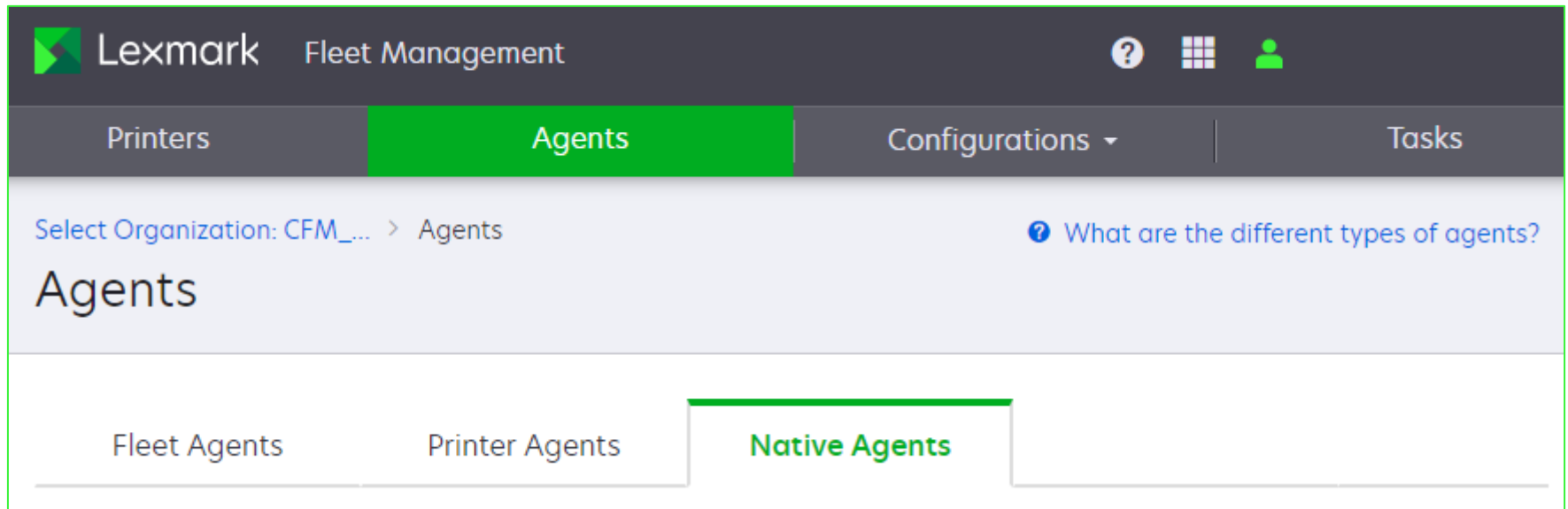


Lexmark™


# Fleet Management: Native Agent



- The Native Agent is a new Fleet Management agent for managing printers through Cloud Fleet Management.
  - ▶ Joins the Fleet Agent and Printer Agent.



# Fleet Management: Agent Types

- The Native Agent 
  - ▶ Is included as part of the firmware for Lexmark printers that are Internet of Things (IoT) capable. When enabled, it can enroll the Lexmark printer to Lexmark Cloud Services (LCS). To enroll multiple printers with native agents simultaneously, use the Printer Enrollment Tool (PET). A pre-enrollment option is also available.
- The Fleet Agent
  - ▶ Is an application configured and installed on a dedicated on-site computer system with high availability. It enrolls one or more printers from Lexmark and other manufacturers to LCS.
- The Printer Agent
  - ▶ Is an application configured and installed on a Lexmark printer to enroll that printer to LCS. To use a printer agent, the Lexmark printer must support eSF applications. Use the PET to enroll a printer with a Printer Agent.

# Fleet Management: Native Agent



- The Native Agent works with Internet of Things (IoT)–ready Lexmark printers.
  - ▶ This capability is available on current generation of printers with xxxx.075.xxx or later firmware.
  - ▶ Current generation printers manufactured since September 2019 support a Cloud-based pre-enrollment option as well as a printer-based enrollment option.
- Using the Native Agent, you can:
  - ▶ Remotely retrieve printer information
  - ▶ Manage printers
  - ▶ Update firmware
  - ▶ Deploy applications and configurations.

# Native Agent: Enrolling Printers



- Printers can be enrolled with the Native Agent by:
  - ▶ Printer Enrollment Tool (PET)
    - Can enroll multiple printers at once.
    - Can enroll all Native Agent-capable printers regardless of the manufacture date.
  - ▶ Directly from the Cloud and Printer
    - These methods are only available for printers manufactured since September 2019.
    - Cloud-based (Pre-enrolling)
      - Enter printer serial number(s) in the Fleet Management portal to obtain an organization-specific Enrollment Code.
      - Apply the Enrollment Code manually to the printer(s).
    - Printer-based
      - Obtain device-specific Enrollment Code from a printer.
        - Each printer enrolled with this method will have a different Enrollment Code.
      - Apply the Enrollment Code in the Fleet Management portal.

# Native Agent: Enrolling Printers using the PET



- To enroll printers using the Printer Enrollment Tool (PET):
  - ▶ Download the latest PET from the CFM portal.
  - ▶ Extract and run the PET.
- The agent type for each discovered printer is shown.
  - ▶ Native Agent-capable printers will be enrolled using the Native Agent.

<input type="checkbox"/>	Address	Model	Serial Number	Agent Type	Info
<input type="checkbox"/>	192.168.86.22	Lexmark CS725	50285510100T1	Native	
<input type="checkbox"/>	192.168.86.29	Lexmark MX410de	7015207200004	Printer	

- ▶ The printer's Native Agent is associated with the organization selected in the PET.

# Native Agent: Cloud-Based Enrollment (Pre-Enrolling)



- Printers can be pre-enrolled in the Cloud by:

- ▶ Entering the serial number of a printer(s).

Pre-enroll Printers

Pre-enrollment is only available for printers that support native agents.

Manually input printer serial numbers

50285510100T1 x

Type a serial number and then press 'ENTER' or comma. You can enter up to 7 serial numbers.

E-mail address (Optional)

The organization's enrollment code will be sent to this e-mail address along with detailed instructions on how to finish enrollment.

Cancel Pre-enroll Printers

- ▶ The pre-enrolled printers will be shown by their serial number on the Native Agents list.

Agents

Fleet Agents Printer Agents **Native Agents**

Enrollment Update Access Credentials Agent Status

1 total item

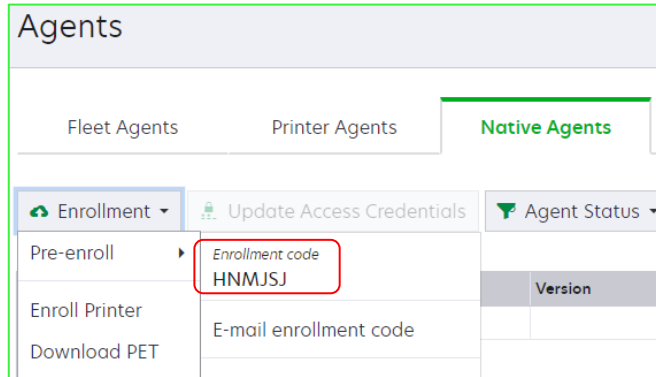
	Native Agent	Version
<input type="checkbox"/>	50285510100T1	



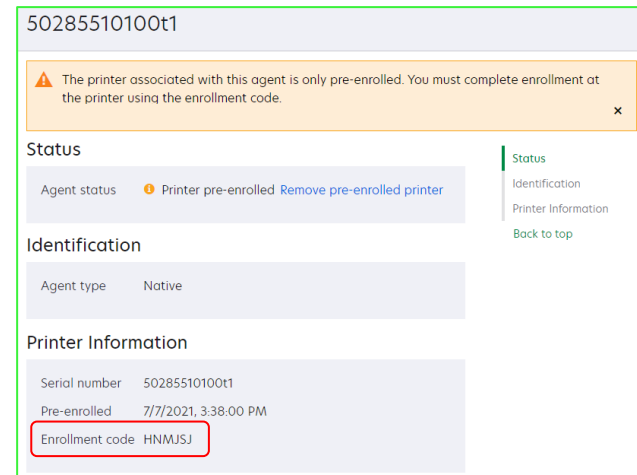
# Native Agent: Cloud-Based Enrollment (Pre-Enrolling)



- Printers are enrolled by applying the Enrollment Code of the organization.
- The Enrollment Code can be found two ways:
  1. Agents->Native Agents->Enrollment->Pre-enroll, or



2. Click a printer serial number, scroll to the Printer Information section.



# Native Agent: Cloud-Based Enrollment (Pre-Enrolling)



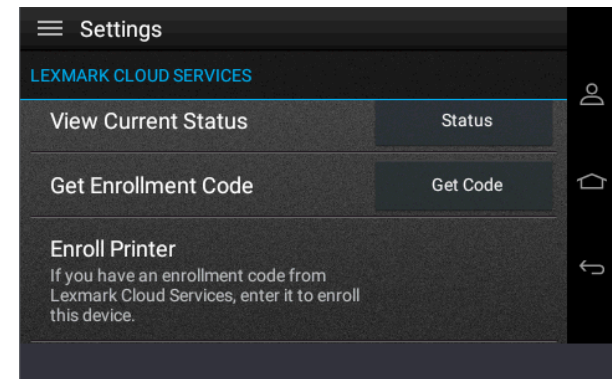
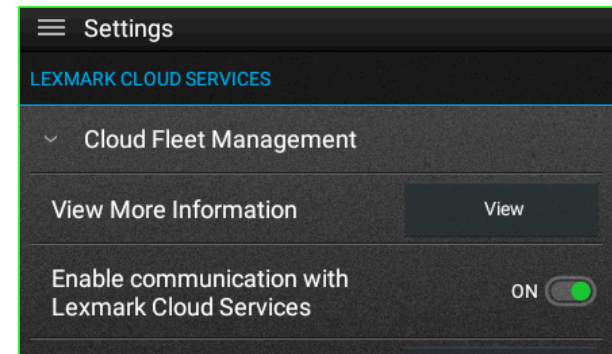
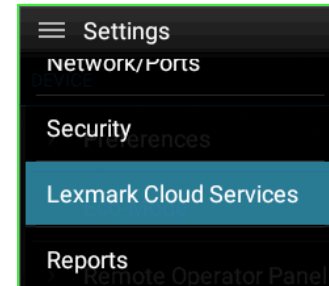
- The organization's Enrollment Code must be applied to the printer(s).
- The Enrollment Code can be applied through either
  - ▶ The printer's Operator Panel
  - or
  - ▶ The printer's Embedded Web Server (EWS)

# Native Agent: Cloud-Based Enrollment (Pre-Enrolling)



## Applying the Enrollment Code through the printer Operator Panel

- Access the Settings menu and click the “Lexmark Cloud Services” entry.
- Set “Enable communications with Lexmark Cloud Services” to “On”.
- Click “Enroll Printer” and enter the organization’s Enrollment Code



# Native Agent: Cloud-Based Enrollment (Pre-Enrolling)



## Applying the Enrollment Code through the printer's EWS

1. Click the “Lexmark Cloud Services” entry under the “Settings” menu.
  2. Check “Enable communications with Lexmark Cloud Services”.
  3. Enter the organization’s Enrollment Code and click “Enroll Printer”.
- ▶ Enrollment can be verified from the CFM portal.

The screenshot shows the Lexmark Cloud Services settings page. On the left is a navigation menu with options like Status, Settings, Address Book, and Site Map. The 'Lexmark Cloud Services' option is highlighted with a red box and a '1'. The main content area is titled 'Lexmark Cloud Services' and includes a 'More Info' link, a checkbox for 'Enable communication with Lexmark Cloud Services' which is checked and highlighted with a red box and a '2', and a 'Status' section stating 'Device is ready to be enrolled in Lexmark Cloud Services.' Below this are 'Refresh' and 'Get Enrollment Code' buttons. A section for entering an enrollment code is highlighted with a red box and a '3', containing an 'Enrollment Code' input field and an 'Enroll Printer' button. At the bottom are 'Save' and 'Reset' buttons.

# Native Agent: Printer-Based Enrollment



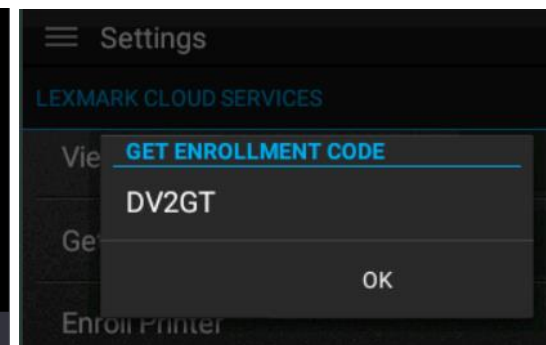
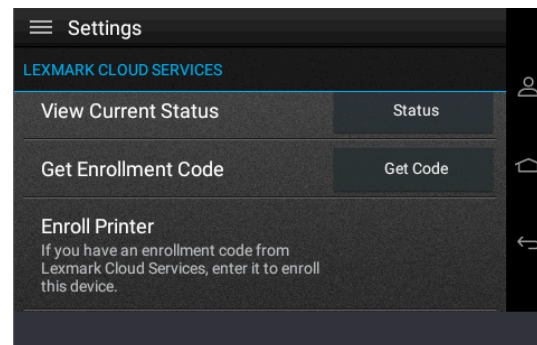
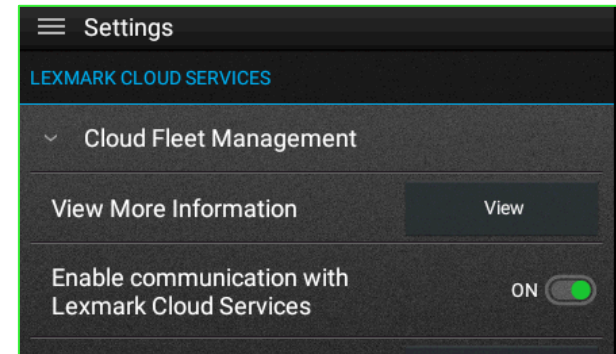
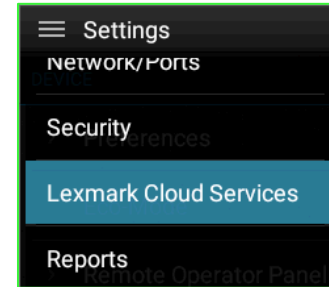
- The printer's Enrollment Code can be obtained from
  - ▶ Embedded Web Serveror
  - ▶ Operator Panel

# Native Agent: Printer-Based Enrollment



## Obtaining the printer's Enrollment Code from the Operator Panel

- Access the Settings menu and click the “Lexmark Cloud Services” entry.
- Set “Enable communications with Lexmark Cloud Services” to “On”.
- Click “Get Enrollment Code”.
  - ▶ Copy the Enrollment Code



# Native Agent: Printer-Based Enrollment



## Obtaining the printer's Enrollment Code from the Embedded Web Server

1. Click the “Lexmark Cloud Services” entry under the “Settings” menu.
2. Check “Enable communications with Lexmark Cloud Services”.
3. Click “Get Enrollment Code”
4. Copy the Enrollment Code.

The screenshot shows the Lexmark Cloud Services settings page. The left sidebar contains a menu with 'Lexmark Cloud Services' highlighted (1). The main content area shows 'Enable communication with Lexmark Cloud Services' checked (2). Below this, the 'Status' section indicates the device is ready for enrollment and features a 'Get Enrollment Code' button (3). A callout box (4) displays the enrollment code 'OZIV1' and provides a URL for logging in to Lexmark Cloud Services.

Settings > Lexmark Cloud Services

Lexmark Cloud Services

Cloud Fleet Management

More Info

2 Enable communication with Lexmark Cloud Services

Status

Device is ready to be enrolled in Lexmark Cloud Services.

Refresh Get Enrollment Code

3

4 Log in at Lexmark Cloud Services and enter the enrollment code to enroll this device.  
<https://qa.iss.lexmark.com/cfm/asset>  
OZIV1  
This code expires in 1 hours and 0 minutes.

If you have an enrollment code from Lexmark Cloud Services, enter it here.

Enrollment Code

Enroll Printer

Save Reset

# Native Agent: Printer-Based Enrollment

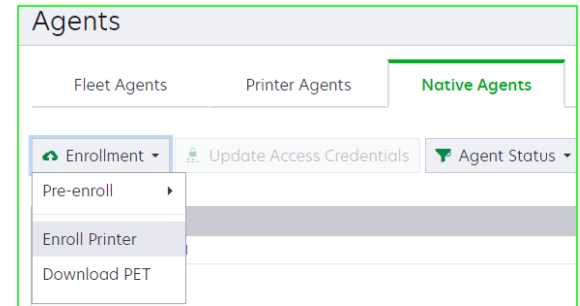
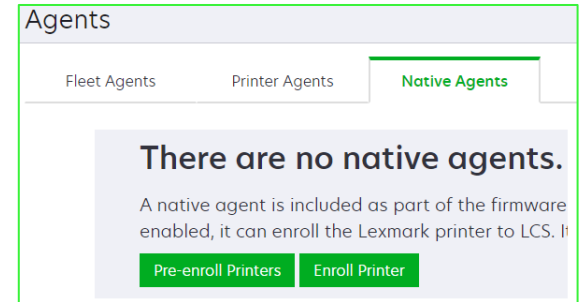


## Applying the printer's Enrollment Code

- In the CFM portal, navigate to Agents->Native Agents
- Click the “Enroll Printer” button

or

- Expand the “Enrollment” dropdown and select “Enroll Printer”
- Enter the Enrollment Code from the printer.



Enroll Printer Using Native Agent

Enter the enrollment code received from the printer

Obtain an enrollment code using Settings > Lexmark Cloud Services > Fleet Management from either the printer's panel or Embedded Web Server page.

NOTE: To enroll multiple printers simultaneously with native agents, use the [Printer Enrollment Tool](#).

Cancel Enroll Printer



# Fleet Management: Other Supplies



- Additional Supplies percent levels are now available on the Printer Listing page.
  - ▶ In addition to being shown on the Printer Details page.

IP Address	Model	Black (%)	Black Imaging Unit (%)	Color Imaging Kit (%)	Cyan (%)	Fuser (%)
✓ 10.194.2.57	XC4140	19%	80	100	29%	100
✓ 10.194.2.181	CX922de	0%	92	99	79%	99
✓ 10.194.10.21	MS911de	100%	90			90
✓ 10.194.10.72	CX860	91%	97	74	46%	42

# Fleet Management: Other Supplies



- Custom Views can be created that include the percent levels of the additional supplies.

	Supply
	Black
	Black Current Coverage (%)
	Black Developer
	Black Imaging Unit
	Black Lifetime Coverage (%)
	Coating Roller
	Color Imaging Unit
	Cyan
	Cyan Current Coverage (%)
	Cyan Developer
	Cyan Lifetime Coverage (%)
	Fuser
	Hole Punch Box
	Imaging Unit
	Magenta
	Magenta Current Coverage (%)
	Magenta Developer
	Magenta Lifetime Coverage (%)

	Supply
	Maintenance Kit
	Maintenance Kit 2
	Maintenance Kit 3
	Pick Roller
	Separator Rod
	Staples
	Staples 2
	Staples 3
	Transfer Module
	Waste Toner Bottle
	Yellow
	Yellow Current Coverage (%)
	Yellow Developer
	Yellow Lifetime Coverage (%)

# Home Screen Customization

- The ability to customize icon locations on the printer's home screen has been added to CFM.
  - ▶ A Home Screen option added to the Printer Details page.

The screenshot shows the printer details page for a printer with IP 192.168.86.22. The page includes a navigation bar with tabs for Printers, Agents, Configurations, and Tasks. Below the navigation bar, there is a section for printer information, including the model (CS725) and communication status. A right-hand navigation bar is visible, listing various sections: Status, Supplies, Identification, Print Meters, Firmware, Installed Applications, and Home Screen. The Home Screen option is highlighted with a blue box, and a callout box on the right shows the Home Screen customization options, including a 'Home Screen' button.

- ▶ Scroll or use the right-hand navigation bar to jump the Home Screen section.

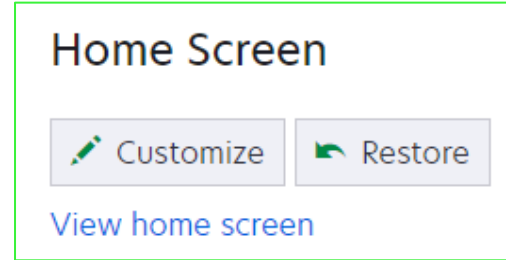
The screenshot shows the Home Screen customization options. It includes a 'Home Screen' title, a 'Customize' button with a pencil icon, a 'Restore' button with a left arrow icon, and a 'View home screen' link.

**Important:** The latest versions of printer firmware, Printer Configuration Agent, and Fleet Agent are required.

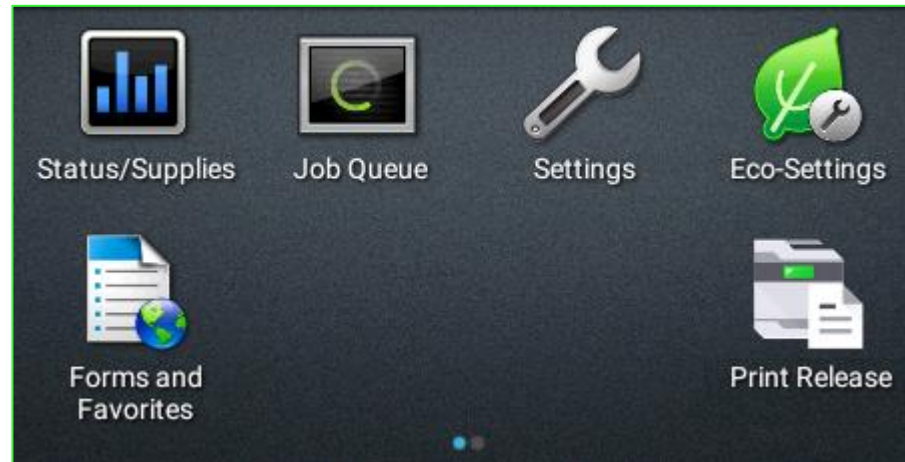
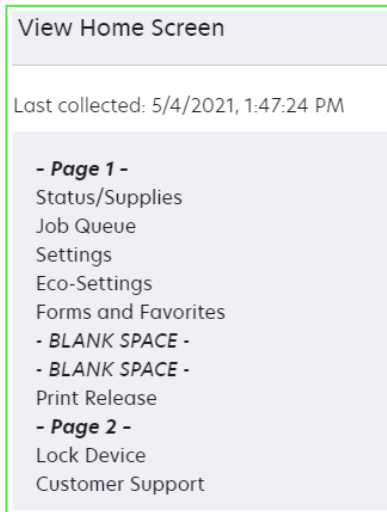
# Home Screen Customization

- The current home screen configuration can be:

- ▶ Viewed,
- ▶ Customized, or
- ▶ Restored to the factory default.

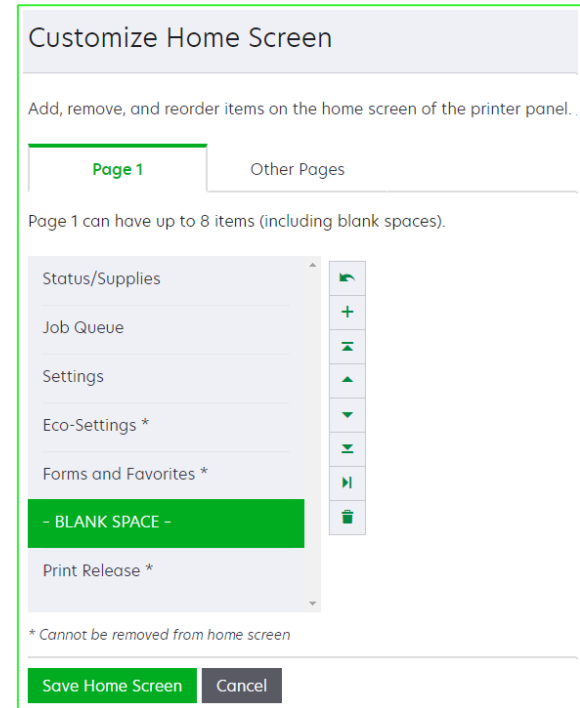


- Clicking **View home screen** shows the current home configuration.



# Home Screen Customization

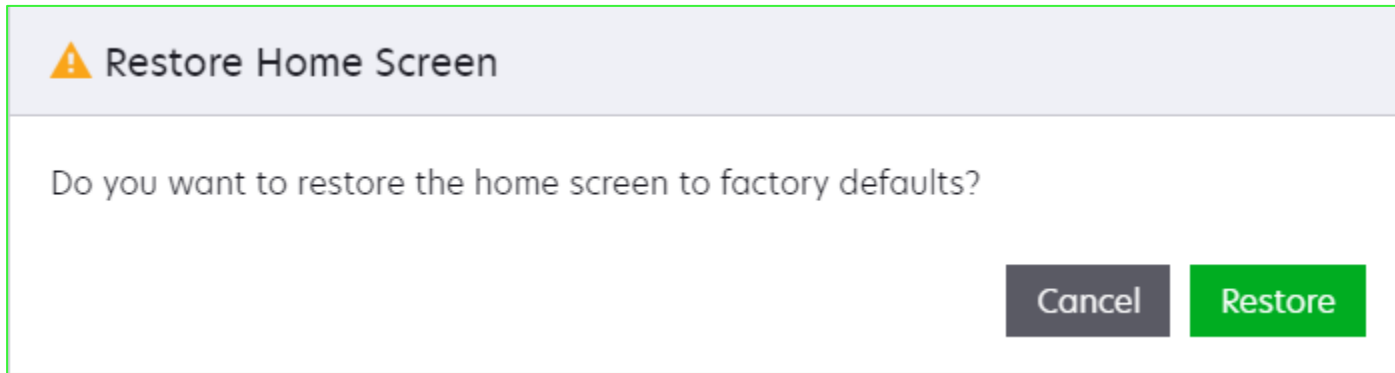
- Clicking **Customize** allows home screen icons to be added, moved deleted or reset to their factory default configuration.
  - ▶ Select an item then use the “action” controls to customize the home screen layout.
  - ▶ Click **Save Home Screen** update printer’s home screen configuration.



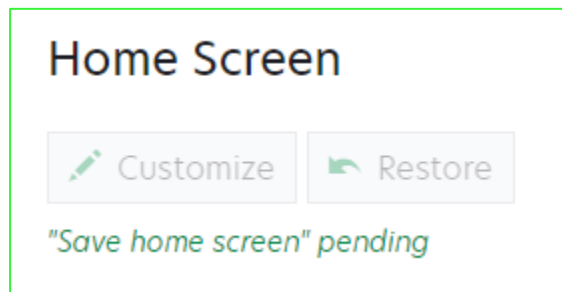
Note: Some items cannot be deleted from the home screen.

# Home Screen Customization

- Clicking **Restore** returns the home screen to the default factory configuration.



- The Home Screen customization options are disabled while the home screen configuration on the printer is being updated.




# Lexmark Cloud Services Infrastructure



# Lexmark Cloud Services Infrastructure: URLs

## EU Data Center URLs

- If a firewall is used, these URLs must be included in the Allow List.
  - ▶ All URLs use port 443.


Function	Used by	URLs for the EU Data Center
Identity Provider	All customers	idp.eu.iss.lexmark.com
API	All customers	api.eu.iss.lexmark.com
APIS	All customers	apis.eu.iss.lexmark.com
CFM File Storage	All customers	prodwesteucloudk8s54.iss.lexmark.com
CCS	All customers	ccs.lexmark.com
CDN	All customers	ccs-cdn.lexmark.com
CFM	Fleet and Native Agents	prod-westeu-lex-cloud-iot.azure-devices.net
 CFM	Fleet and Native Agents	prod-lex-cloud-iot.azure-devices.net
CFM	Native Agent only	global.azure-devices-provisioning.net
CPM File Storage	CPM only	prodwesteucloudk8s199.iss.lexmark.com
LPM	Legacy CPM only	lpm.eu.iss.lexmark.com



# Lexmark Cloud Services Infrastructure: URLs

## US Data Center URLs

- If a firewall is used, these URLs must be included in the Allow List.
  - ▶ All URLs use port 443.

Function	Used by	URLs for the US Data Center
Identity Provider	All customers	idp.us.iss.lexmark.com
API	All customers	api.us.iss.lexmark.com
APIS	All customers	apis.us.iss.lexmark.com
CFM File Storage	All customers	prodlexcloudk8s239.iss.lexmark.com
CCS	All customers	ccs.lexmark.com
CDN	All customers	ccs-cdn.lexmark.com
CFM	Fleet and Native Agents	prod-westeu-lex-cloud-iot.azure-devices.net
 CFM	Fleet and Native Agents	prod-lex-cloud-iot.azure-devices.net
CFM	Native Agent only	global.azure-devices-provisioning.net
CPM File Storage	CPM only	prodlexcloudk8s19.iss.lexmark.com
LPM	Legacy CPM only	lpm.us.iss.lexmark.com