

Open Enterprise Server 2015 SP1 iPrint for OES Administration Guide

May 2017

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About This Guide

This guide describes how to install, configure, and customize *iPrint for OES* on Open Enterprise Server 2015 SP1.

- ♦ [Chapter 1, “Overview,” on page 7](#)
- ♦ [Chapter 2, “What’s New in iPrint for OES,” on page 11](#)
- ♦ [Chapter 3, “Installing and Configuring iPrint for OES,” on page 15](#)
- ♦ [Chapter 4, “Configuring iPrint for OES with Novell Cluster Services,” on page 23](#)
- ♦ [Chapter 5, “Managing iPrint for OES,” on page 27](#)
- ♦ [Chapter 6, “Mobile Device Management \(MDM\),” on page 41](#)
- ♦ [Appendix A, “Troubleshooting iPrint for OES,” on page 47](#)
- ♦ [Appendix B, “iPrint for OES Support Matrix,” on page 51](#)

Audience

This guide is intended for OES administrators, or anyone who is involved in installing and managing *iPrint for OES*.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the [comment on this topic](#) link at the bottom of each page of the online documentation.

Documentation Updates

For the most recent version of the *iPrint for OES Administration Guide*, visit the [Open Enterprise Server Documentation web site](#).

Additional Documentation

For information about other OES products, see the [OES 2015 SP1 Documentation web site](#).

For information about Novell iPrint, see the [OES 2015 SP1: iPrint Administration Guide](#).

1 Overview

The organizational needs of printing have changed from traditional desktop printing to printing from mobile devices, email-enabled devices, and so on.

All these features and much more are available with Micro Focus iPrint Appliance, a standalone version of iPrint. For more information, see [Micro Focus iPrint Appliance Feature Tour](#).

With iPrint for OES we are making some of these features available for our OES customers. The existing desktop printing features continues to work with Novell iPrint.

iPrint for OES along with Novell iPrint offers a single, scalable solution for managing all of your printing across multiple office locations from any device. It lets the users print quickly, easily, and more securely. The highlights are:

- ♦ **Works with everything:** iPrint provisions print services for nearly every device you have, including desktops, laptops, smart phones, and tablets. It works whether users are printing from Mac or Windows. It works on iOS, Android, and Windows Mobile.
- ♦ **WalkUp printing:** Print jobs sent by the users are put on hold and can be released to a desirable printer.
- ♦ **Mobile device printing:** Users of iOS, Android, and Windows mobile devices can download apps that allow them to print from their mobile devices directly to any of your organization's printers.

iPrint for OES provides all of the necessary document rendering and conversion.

- ♦ **Email print jobs to any iPrint printer:** Any email-enabled device can print to any iPrint printer by sending the print job in the body of the email or as an attachment.
- ♦ **Chromebook printing:** Provides secure enterprise print services for Chromebook users.
- ♦ **Samsung KNOX certified:** Enhanced security for Android devices while maintaining user-friendly, secure mobile printing in your corporate environment.
- ♦ **QR Code Support:** Scan a QR code to quickly connect your mobile device to a specific printer.

For detailed information about the new features, see [Chapter 2, "What's New in iPrint for OES," on page 11](#).

Benefits of iPrint

The following benefits continue from Novell iPrint:

Self-service printing: Users can print from their desktops, laptops, or mobile devices without waiting for the help desk to set-up a printer.

From desktops or laptops, users can print by selecting printers on a map using a web browser.

From mobile devices, users can print to any organizational printer using an iPrint app or email.

Expand your horizons: Users can print any time, from anywhere, using almost any device. Click to send a print job to any printer irrespective of the location of the printer.

Simplified enterprise printing: Micro Focus iPrint connects all your organization's workstations and mobile devices to your current printers. iPrint scales exceptionally well, reducing the server infrastructure you need to maintain hundreds or thousands of printers and thus lowering your network bandwidth costs.

Secure printing: You can secure your data before it goes to the printer, provisioning print services based on user, group and container membership.

Works in heterogeneous environments: Saves IT time and money by significantly reducing the management burden required for mixed fleets of Mac or Windows desktops. It works across the major mobile platforms as well, meaning IT only has to manage a single print solution for all your organization's endpoints.

Leverages your current directory service: Micro Focus iPrint makes secure printing easy by integrating its data store with your identity directory. It works with lightweight directory access protocol (LDAP) such as Micro Focus eDirectory.

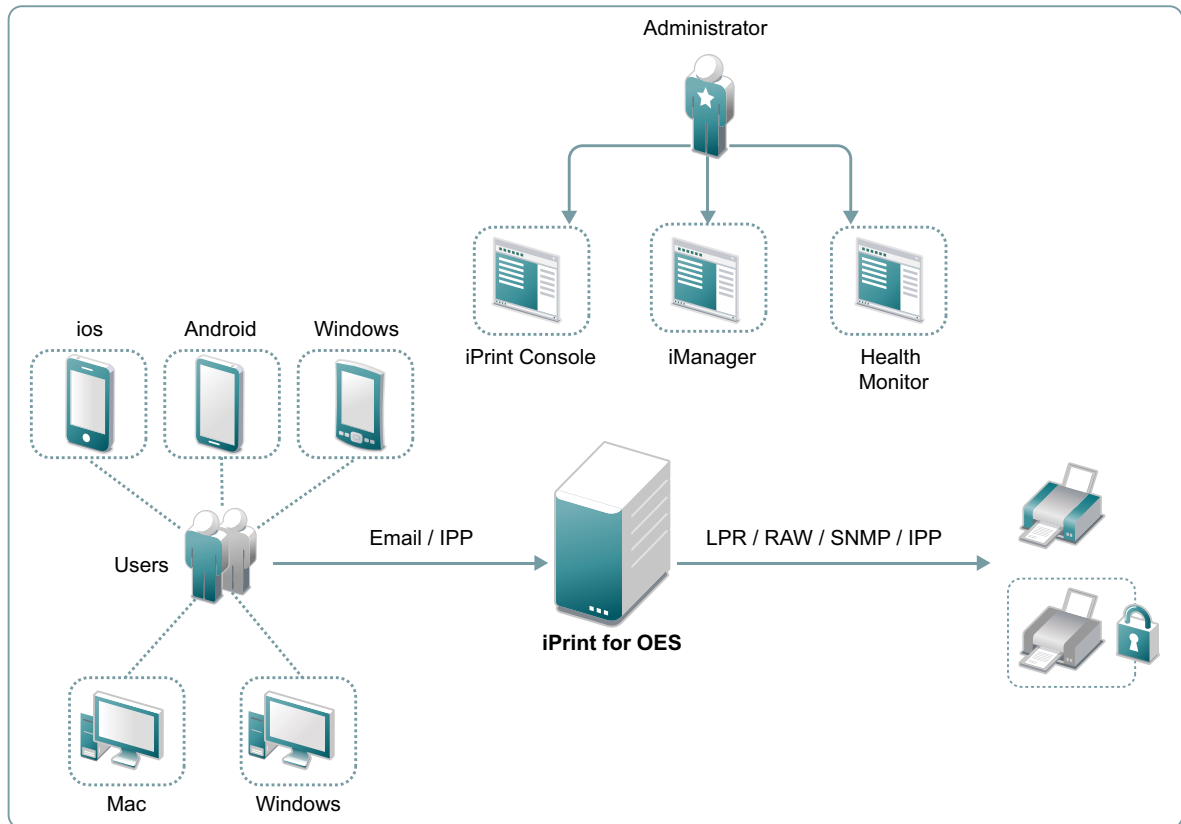
Works with legacy printers: Mobilize your existing fleet of printers rather than buying new. It works with what you have now and what you may want going forward.

Understanding iPrint for OES

For OES users, iPrint for OES provides the following new features.

Addition	iPrint for OES (In addition to Novell iPrint, following is available with iPrint for OES)
Devices supported	Mobile phones Tablets Chromebook
Management interfaces	iPrint Console
Printing with	Mobile apps Chromebook Email WalkUp

Figure 1-1 Overview



- ◆ “Users” on page 9
- ◆ “Devices” on page 9
- ◆ “Protocols” on page 10
- ◆ “Administration” on page 10
- ◆ “Accounting With Third-party Solutions” on page 10
- ◆ “Renderers” on page 10
- ◆ “Printers” on page 10

Users

Users can submit print jobs from their mobile, email-enabled devices, or Chromebook to both new and legacy printers from all the major print vendors, without worrying about print drivers.

Devices

Supports printing from desktops, laptops, or mobile devices.

Desktops and laptops: Clients for Windows and Mac workstations. Also, supports Chromebook.

Mobile Devices: Apps for iOS, Android, Windows, and Amazon Kindle devices.

Protocols

IPP: Desktop and mobile apps uses IPP (Internet Printing Protocol) to submit the print job.

IPP/LPR/RAW/SNMP: Supports printer communications using the IPP, Line Printer Remote (LPR), RAW, or SNMP protocols.

Administration

You can add and manage printers, check the printer status, create printer maps, and monitor the iPrint server.

iPrint Console: A new console is available to manage items such as WalkUp printers, mobile printing, email printing, renderers, and so on.

iManager: Manager allows you to set up and manage your print environment. You can create printers, printer drivers, profiles, and users. A new task as **iPrint Console** is listed in **Roles and Tasks**. For this release, the task only provides information and no functionality is available.

iPrint Health Monitor: Monitors your iPrint environment. You can view status of WalkUp print jobs and generate audit reports that show details of who printed and how much.

iPrint Map Designer: Use this tool to create map displaying the location of printers. Users can identify and install printers that are nearest to their location.

Accounting With Third-party Solutions

iPrint for OES integrates with the third-party print accounting solution to provide support for accounting print jobs sent by email and from mobile devices to the printers.

To install and configure third-party print accounting solution, refer to their documentation.

Renderers

- ♦ [“Local Renderer” on page 10](#)

Local Renderer

iPrint for OES is bundled with an in-built document renderer (local renderer). The local renderer converts documents to the PDF format, then converts them to the print ready format. The renderer supports Open Office, Microsoft Office and image formats.

Printers

Users can send print jobs through their devices to both new and legacy printers from all the major print vendors.

2 What's New in iPrint for OES

The highlights are:

- ♦ “WalkUp Printing” on page 11
- ♦ “Mobile Device Printing” on page 12
- ♦ “Printing from Chromebook” on page 12
- ♦ “Email Printing” on page 12
- ♦ “DSfW Support” on page 13

WalkUp Printing

WalkUp printing allows users to put print jobs on hold and releases them to a desired printer.

WalkUp is a virtual print queue that includes group of physical printers. The jobs sent to a WalkUp printer are put on hold by the iPrint for OES server and can be released to a desirable printer.

Benefits:

- ♦ **Flexibility to print from any printer:** Allows users to print documents to any printer. Even if a printer is unavailable, user can select another printer and collect the printout.
- ♦ **Simplified User Printing:** User no longer needs to install multiple printers. Installing a single WalkUp printer will allow the user to release documents to multiple printers.
- ♦ **Saves Paper:** Many times a user gives print and forgets to collect the documents from the printer. WalkUp printing prevents such accidental and unwanted prints by putting the job on hold and also automatically deletes any dormant jobs. The users can now print or cancel the hold job as per their convenience.
- ♦ **Enhanced Security:** Users have to authenticate and then only the documents can be released. This ensures confidentiality of the document is maintained and only the owner collects the document.

For more information about creating and managing WalkUp printer, see “WalkUp Printers” on page 33.

iPrint Release Portal

A web-based portal that allows the users to print jobs (that are on hold) to a desired printer from devices such as mobiles, tablets, laptops, and so on.

The release portal displays the list of jobs that are put on hold, the submission time, and the expiry time of the job.

To launch the Release Portal in a web browser, specify the server address/username (`https://<iPrint for OES server address>/user`).

For more information, see “Release Portal for Users” on page 36.

Mobile Device Printing

Users of iOS, Android, and Windows mobile devices can download the Micro Focus iPrint app from their respective mobile stores. The iPrint app allows you to print from the mobile devices directly to the printers in your organization. The iPrint server includes the necessary document rendering and conversion for printing from mobile devices. Your users can select the printer from a list and adjust all the basic print specifications through a simple touch-screen–friendly interface. The common mobile app benefits are:

- ◆ Simplified and intuitive GUI
- ◆ Flexibility to print WalkUp jobs and release the jobs when you are near the printer
- ◆ Print documents on any iPrint enabled corporate printer and print infrastructure
- ◆ Print securely using access restrictions
- ◆ Scan a QR code to quickly connect your mobile device to a specific printer

Printing from iPrint iOS App

iPrint provides secure enterprise print services for your iPhone and iPad users. The additional benefit specific to iOS app is:

- ◆ Supports printing using the iPrint App extension

Printing from iPrint Android App

iPrint provides secure enterprise print services for Android and Amazon users. The additional benefit specific to Android apps are:

- ◆ Share document from any application and print using iPrint app
- ◆ Print from any application that supports native Android printing

Printing from iPrint Windows App

iPrint provides secure enterprise print services for your Windows phone.

Printing from Chromebook

iPrint extension provides secure enterprise print services for Chromebook users.

- ◆ Prints documents to any iPrint-enabled printers, anywhere and anytime.
- ◆ Supports on-premises deployment. Data never travels through the cloud.
- ◆ You no longer need any cloud service for printing.

You can download the extension from the Chrome Web Store.

Email Printing

Users can print from any email-enabled device by sending an email to iPrint. You can set up a single email address for the organization's printing, or one for each printer.

DSfW Support

iPrint for OES is now supported in a DSfW environment.

3 Installing and Configuring iPrint for OES

This section describes how to install and configure iPrint for OES.

- ◆ [“iPrint for OES RPM Packages” on page 15](#)
- ◆ [“Planning Your Environment” on page 15](#)
- ◆ [“Installing and Setting Up iPrint for OES” on page 16](#)
- ◆ [“Registering the Server in the Micro Focus Customer Center” on page 18](#)

iPrint for OES RPM Packages

Table 3-1 iPrint for OES RPMs

RPM Name	Description
novell-iprint-common-utilities	Contains telemetry related scripts and common utilities required for mobility
novell-iprint-mobile	iPrint Mobile server enables printing from mobile devices to existing iPrint Printers (IPP) or LPR printers. It enables client-less and driver-less printing for the Mobile as well as Desktop platforms. It also supports email as a job submission mechanism.
novell-iprint-mobility-welcome	This rpm updates the OES welcome page with a link to connect to iPrint Console.
novell-iprint-releaseportal	A web-based portal for releasing of WalkUp jobs.
novell-iprint-stellent	A library to convert document to PDF format.
novell-iprint-webapps	iPrint Console provides management of mobility tasks.
novell-telemetry-client-logger	Client for telemetry
orientdb	The database used by iPrint for OES to store printers, jobs, and other related data.

Planning Your Environment

Ensure that your system meets the following requirements:

- ◆ [“Server Requirements” on page 16](#)
- ◆ [“Open Enterprise Server 2015 SP1” on page 16](#)
- ◆ [“Novell iPrint” on page 16](#)
- ◆ [“iPrint for OES ISO” on page 16](#)
- ◆ [“iPrint for OES Desktop Activation Key and License” on page 16](#)

Server Requirements

- ♦ **Memory:** 4 GB RAM or higher is recommended.
- ♦ **Hard Disk:** 40 GB. This disk stores the configuration details and all the WalkUp jobs. Depending on the usage, decide the space required on the disk.

Open Enterprise Server 2015 SP1

iPrint for OES runs on OES 2015 SP1 servers. For information about installing and configuring OES 2015 SP1, see the [OES 2015 SP1: Installation Guide](#).

Ensure that the OES 2015 SP1 server is patched with the latest patch.

The OES 2015 SP1 May 2017 and later patches includes iPrint for OES - Enabler Patch (oes2015sp1-iPrint-for-OES-Enabler-Patch). This patch installs the necessary files required for the infrastructure to be created before installing iPrint for OES.

Novell iPrint

Novell iPrint must be installed and configured on OES 2015 SP1 server. For information about installing and setting up iPrint, see the [OES 2015 SP1: iPrint Administration Guide](#).

Ensure iPrint is applied with the latest patches.

iPrint for OES ISO

Download the ISO from [Micro Focus Customer Center](#). On installing this ISO, you can manage the advanced desktop and mobile printing features.

iPrint for OES Desktop Activation Key and License

Login to the [Micro Focus Customer Center](#). Click Software > Entitled Software > Novell iPrint > Novell iPrint for OES (2015 SP1).

Activation Code: Click Keys. Note the activation code adjacent to iPrint for OES 2015 SP1 Update Channel. The activation code is required when registering iPrint for OES through YaST.

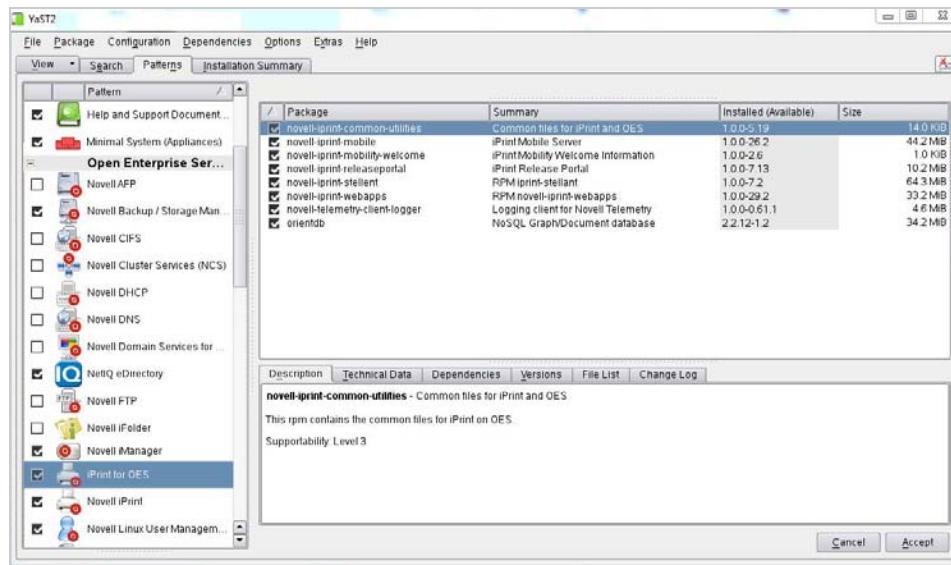
License File: Download the NP-iPrint-Desktop.xml file. All the OES customers are entitled to use the desktop features under this license. Using ipcon, upload the license file to continue using the advanced desktop features provided by iPrint for OES. For more information about licenses, see ["License" on page 39](#).

Installing and Setting Up iPrint for OES

On applying the iPrint for OES - Enabler Patch on OES 2015 SP1 server, continue with the following steps:

- 1 To launch YaST, run the command `yast2 add-on`.
- 2 In the Installed Add-On Products page, click **Add**.
- 3 In the Media Type, select **Local ISO Image**.
- 4 Browse and select the iPrint for OES ISO, then click **Next**.

- 5 Accept the EULA Agreement, then click **Next**.
- 6 Select the pattern **iPrint for OES**, then click **Accept**.



iPrint for OES requires CUPS service, which will run on port 3017 instead of port 631.

- 7 Continue with the on-screen prompts.
- 8 After iPrint for OES is successfully installed, a message is displayed for restarting Apache. You can only configure mobility after restarting Apache, so click **Yes**.
- 9 In Novell Customer Center Configuration screen, select **Configure Now** and click **Next**. Register your iPrint for OES server. For more information, see [“Registering the Server in the Micro Focus Customer Center” on page 18](#).
- 10 To configure mobility in a cluster environment, continue with [“Clustering on a NSS File System” on page 31](#).

or

In a non-cluster environment, continue with the next step.

- 11 (Conditional) In a DSfW environment, do the following:
 - 11a Add the LDAP port parameters in the `/etc/opt/novell/iprintmobile/conf/iprintmobile.conf` as follows:

```
#LDAP Port
ldap_port = 1389

#LDAP Secure Port
ldap_secure_port = 1636
```

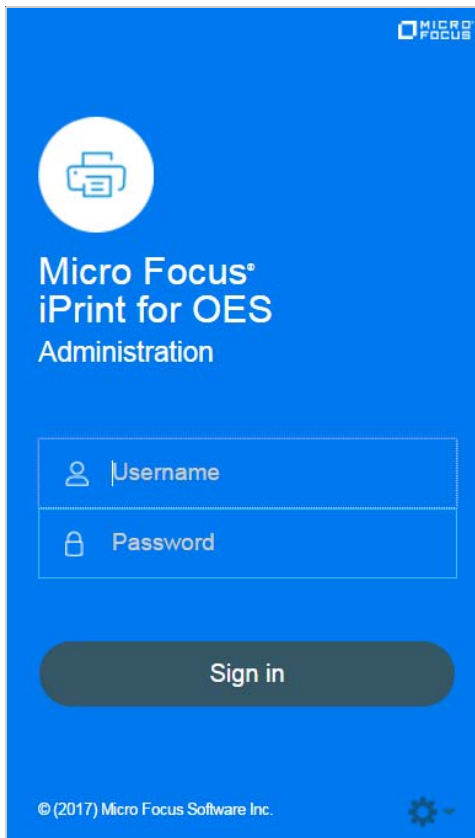
- 11b Restart mobile server:

```
systemctl restart novell-iprint-tomcat.service
```

- 12 Launch iPrint Console in a web browser. Using iPrint Console, you can manage email and mobile features of the printers.


IMPORTANT: Ensure that the Driver Store and Print Manager are running.

Specify `https://<IP Address or host name of iPrint for OES server>/ipcon/`



12a Specify the name and password of the OES administrator who has rights to manage the print manager.

- ♦ If the user is unique in the tree, then use CN to login. For example, admin.
- ♦ If there are multiple users with the same name in different containers, then specify FQDN in LDAP format. For example, cn=admin,o=microfocus.

For more information, see [Chapter 6, “Managing iPrint for OES,” on page 41](#). Each of the page in iPrint Console includes an help icon . The help includes information for enabling the features.

Registering the Server in the Micro Focus Customer Center

Before you can patch an OES server with updates from Micro Focus, you must register the server either during installation or later by using the instructions in this section.

If you register through evaluation codes for `iPrint for OES`, your server can receive patches for only 60 days, at which time the codes expire.

You need to register each server with the Micro Focus Customer Center only once. After you have registered the server, you can update the server at any time. This includes replacing evaluation codes with purchased codes. You can use the desktop interface (GUI) or the command line to accomplish this task.

This section contains the following information:

- ◆ “Prerequisites” on page 19
- ◆ “Registering the Server in the Micro Focus Customer Center Using the Command Line” on page 19
- ◆ “Registering the Server in the Micro Focus Customer Center Using the GUI” on page 20

Prerequisites

To complete these procedures, you must have the following:

- ◆ A Micro Focus Customer Center account or access to an account.
For more information about creating a Micro Focus Customer Center account, see “Frequently Asked Questions (<https://www.novell.com/cchelp/ncc-faq.html>)”. This is the same account that you use for Bugzilla.
- ◆ The activation codes for iPrint for OES that you received when you purchased your product.
- ◆ An established connection to the Internet.

Registering the Server in the Micro Focus Customer Center Using the Command Line

To register a new server or to replace evaluation activation codes with standard codes.

- 1 Log in to the server as `root` or `su` to `root`
- 2 At the command line, enter

```
suse_register -a email=email_address -a regcode-  
iprint=iPrint_registration_code
```

For example:

```
suse_register -a email=joe@example.com -a regcode-iprint=4adab769abc68
```

IMPORTANT: If you are replacing evaluation codes with purchased codes, simply enter the codes. No further action is required.

- 3 Verify that the server is registered by checking whether you have the service types and catalogs needed for updates:

- 3a To verify the service type, enter

```
zypper ls
```

The results should be similar to the following:

```
iprintfores:~ # zypper ls
```

#	Alias	Name	Enabled	GPG Check	Refresh	Type
1	Open-Enterprise-Server-2018	Open-Enterprise-Server-2018	Yes	(r) Yes	Yes	yast2
2	SLES12-SP2-12.2-0	SLES12-SP2-12.2-0	Yes	(r) Yes	Yes	yast2
3	iPrint for OES2018 3.0-0	iPrint for OES2018 3.0-0	Yes	(r) Yes	No	yast2

The URIs you see for the ZYPP type differ based on your installation source.

- 3b To verify the catalogs, enter

```
zypper lr
```

The results should be similar to the following:

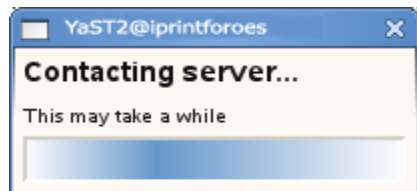
```
iPrintforoes :~ # zypper lr
```

#	Alias	Name	Enabled	GPG Check	Refresh
1	Open-Enterprise-Server-2018	Open-Enterprise-Server-2018	Yes	(r) Yes	Yes
2	SLES12-SP2-12.2-0	SLES12-SP2-12.2-0	Yes	(r) Yes	Yes
3	iPrint for OES2018 3.0-0	iPrint for OES2018 3.0-0	Yes	(r) Yes	No

Registering the Server in the Micro Focus Customer Center Using the GUI

- 1 In the **YaST Control Center**, click **Other** > **Novell Customer Center Configuration**.
- 2 On the Novell Customer Center Configuration configuration page, select all of the following options, then click **Next**.
 - ♦ **Configure Now:** Proceeds with registering this server and the iPrint for OES with the customer center.
 - ♦ **Hardware Profile:** Sends information to the customer center about the hardware that you are installing SLES 11 SP4 and OES 2015 SP1 on.
 - ♦ **Optional Information:** Sends optional information to the customer center for your registration.
 - ♦ **Registration Code** Makes the registration with activation codes mandatory.
 - ♦ **Regularly Synchronize with the Customer Center:** Keeps the installation sources for this server valid. It does not remove any installation sources that were manually added.

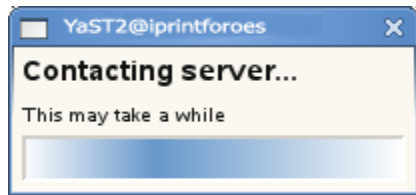
After you click **Next**, the following message is displayed. Wait until this message disappears and the Manual Interaction Required page is displayed.



- 3 On the Manual Interaction Required page, note the information that you will be required to specify, then click **Continue**.
- 4 On the Novell Customer Center Registration page, specify the required information in the following fields:
 - ♦ **Email Address:** The e-mail address for your Novell Login account.
 - ♦ **Confirm Email Address:** The same e-mail address for your Novell Login account
 - ♦ **SUSE Linux Enterprise Server 11 SP4 (optional):** This displays the activation code provided by you for SLES 11 SP4.
 - ♦ **Open Enterprise Server 2015 SP1 (optional):** This displays the activation code provided by you for OES 2015 SP1.
 - ♦ **iPrint for OES (optional):** Specify your purchased or 60-day evaluation registration code for the iPrint for OES product.
 - ♦ **System Name or Description (optional):** The hostname for the system is specified by default.
- 5 Click **Submit**.

- 6 When the message to complete the registration displays, click **Continue**.

After you click **Continue**, the following message is displayed with the Manual Interaction Required page. Wait until this message disappears and the Novell Customer Center Configuration Was Successful page is displayed.



- 7 When you see the message that the Novell Customer Center was successful, click **OK**.

When the registration is successful, the server is registered in the Novell Customer Center and the installation sources for patches are configured on the server.

4 Configuring iPrint for OES with Novell Cluster Services

This section describes how to cluster iPrint for OES using Novell Cluster Services.

Planning for iPrint for OES in a Cluster

Open Enterprise Server 2015 SP1

The OES 2015 SP1 server must be patched with the `iPrint for OES - Enabler Patch` (`oes2015sp1-iPrint-for-OES-Enabler-Patch`).

Ensure that each node in the cluster is running the same release version of OES 2015 SP1.

Novell Cluster Services

Ensure that each node is running the same release version of Novell Cluster Services with the latest patches applied. For information on installing Novell Cluster Services, see [Installing, Configuring, and Repairing Novell Cluster Services](#) in the [OES 2015 SP1: Novell Cluster Services for Linux Administration Guide](#).

Novell iPrint

iPrint service is configured in a cluster environment on a NSS file system. Ensure that each node in cluster where you plan to install iPrint for OES, is running with Novell iPrint. For more information, see [Configuring iPrint with Novell Cluster Services](#) in the [OES 2015 SP1: iPrint Administration Guide](#).

Driver Store and Print Manager

Ensure Driver Store and Print Manager is running in the cluster environment.

NSS File System

`iPrint for OES` supports only NSS file system.

Clustering on an NSS File System

- 1 Identify the node where pool resource is running.
- 2 Install `iPrint for OES` service using YaST on the node where the pool resource is running.
- 3 Identify all the other nodes to host the `iPrint for OES` service. Install iPrint for OES service on those nodes.

IMPORTANT: Ensure iPrint for OES is installed on the node before migrating the pool resource to that node.

- 4 Run the `iprint_nss_relocate` script located at `/opt/novell/iprint/bin` on the node where the pool resource is running.

For more details on this script, see [Running the iprint_nss_relocate script.](#)

- 5 Stop the Mobile and CUPS service by executing the following commands:

```
rcnovell-iprint-mobile stop
rccups stop
```

- 6 Migrate the pool resource to the next identified node. For more information, see [Cluster Migrating Resources to Different Nodes](#) in the [OES 2015 SP1: Novell Cluster Services for Linux Administration Guide](#).

- 7 Repeat [Step 4](#) to [Step 6](#) on all the iPrint cluster nodes.

- 8 Edit the unload script (to add Mobile service and CUPS service) for the Cluster Pool. Add the following lines to the existing unload script after the `ignore_error rcnovell-idsd stop` statement:

```
ignore_error rcnovell-iprint-mobile stop
ignore_error rccups stop
```

For information on editing an unload script, see [Modifying the Load, Unload, and Monitor Scripts](#).

Changes do not take effect until you take the resource offline, and bring it online again.

- 9 Edit the load script (to add Mobile service and CUPS service) for the Cluster Pool. Add the following lines to the existing load script before the `exit 0` statement.

```
exit_on_error rcnovell-iprint-mobile start
exit_on_error rccups start
```

Changes do not take effect until you take the resource offline, and bring it online again.

For information on editing a load script, see [Modifying the Load, Unload, and Monitor Scripts](#).

- 10 (Conditional) In a DSfW environment, do the following:

- 10a Add the LDAP port parameters in the `/etc/opt/novell/iprintmobile/conf/iprintmobile.conf` as follows:

```
#LDAP Port
ldap_port = 1389

#LDAP Secure Port
ldap_secure_port = 1636
```

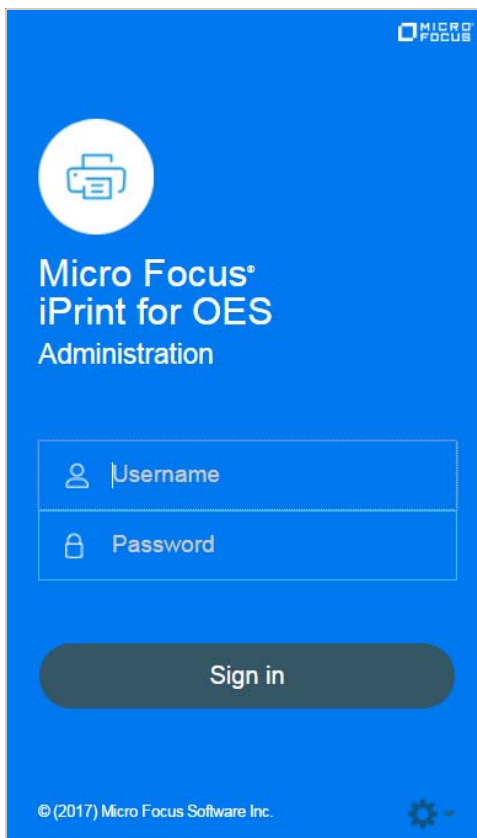
- 10b Restart mobile server:

```
systemctl restart novell-iprint-tomcat.service
```

- 11 To configure mobility, launch iPrint Console in a web browser. Using iPrint Console, you can manage email and mobile features of the printers.

NOTE: Ensure that the Driver Store and Print Manager are running.

https://<Resource_server_address_of_iPrint_for_OES_server>/ipcon/

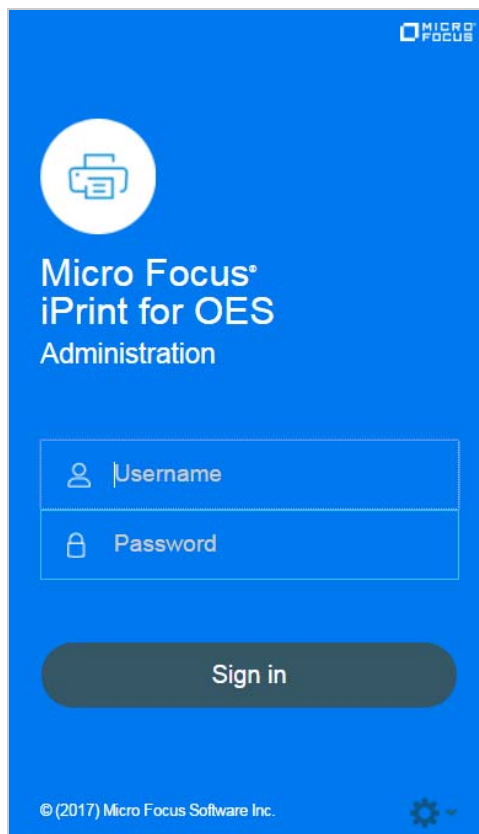


- 11a** Specify the name and password of the OES administrator who has rights to manage the print manager.
- ◆ If the user is unique in the tree, then use CN to login. For example, admin.
 - ◆ If there are multiple users with the same name in different containers, then specify FQDN in LDAP format. For example, cn=admin,o=microfocus.
- 12** If you add a new node to the cluster later, change the file as follows:
- 12a** Install `Novell iPrint` and `iPrint for OES` on the new node.
 - 12b** Comment out the load and unload scripts for the Print Manager, Driver Store, Mobile server, and CUPS service.
 - 12c** Migrate the resource to the new node.
 - 12d** Run the `iprint_nss_relocate` script on the new node.
 - 12e** Remove the comment tag from the load and unload scripts.

5 Managing iPrint for OES

iPrint Console is used to manage the features provided by iPrint for OES. To access iPrint Console (ipcon), specify either the host name or the IP address of iPrint for OES server and in case of cluster setup, specify the resource IP. For example, `https://iprintforoes.example.com/ipcon` or `https://10.0.0.1/ipcon`.

Figure 5-1 iPrint Console (ipcon)



Specify the name and password of the OES administrator who has rights to manage the print manager.

- ◆ If the user is unique in the tree, then use CN to login. For example, admin
- ◆ If there are multiple users with the same name in different containers, then specify FQDN in LDAP format. For example, cn=admin,o=microfocus.

On logging in to the iPrint Console, the local Print Manager is selected in the **Connected to** drop-down box. All the data is displayed of the server where the selected Print Manager is running on.

The **Connected to** field displays all the active Print Managers of the connected tree.

iPrint Console allows you to manage the following:

- ◆ [“Printers” on page 28](#)
- ◆ [“WalkUp Printers” on page 33](#)
- ◆ [“Configuration” on page 36](#)
- ◆ [“Renderers” on page 38](#)
- ◆ [“Printer Map” on page 38](#)
- ◆ [“Product Improvement” on page 38](#)
- ◆ [“License” on page 39](#)

Printers

Lists all printers managed by the active Print Manager. You can enable a printer for mobile and email printing. Creating and modifying the printer details can only be done by using iManager.

Enabling Mobile Printing

Select a printer or printers, click the **Mobile** menu, then click **Enable**. On enabling the printer for mobile, you can print to that printer from your mobile devices.

When the mobile license expires, the **Mobile** option is disabled and the iPrint features on the mobile device are not available.

Email Printing

Using email printing, you can print documents from any device capable of sending emails. You can print emails by specifying email printing commands in the subject line of the email. You can also print documents by emailing them to your printer as attachments. When configured for email printing, iPrint server becomes a client to an email server.

When you enable email printing, the email address you provide becomes the global print email address. You can also configure a printer for private email printing by providing a specific email address to each printer.

The difference between global email printing and private email printing is:

- ◆ **Global Email Printing:** When you enable email printing, you are prompted to specify an email address. This email address is the global print email address. When configured for email printing, iPrint server becomes a client to an email server. The global email account inbox is polled for incoming print jobs, which are then routed to the intended printer.
- ◆ **Private Email Printing:** With private email printing, you can assign a specific email address to each printer. When a user sends an email printing request, the print job is sent directly to the printer. Users do not need to specify any print commands in the subject line of the email.

Email printing is not enabled by default. You can enable email printing through the iPrint Console. You must create a unique email address for iPrint server to receive and process print requests. For more information on enabling Email, see [“Global Email Settings” on page 37](#) and [“Enabling Private Email Printing” on page 32](#).

IMPORTANT: If you enable auditing for email print jobs, the email address of the user is logged in the iPrint audit logs. If the same email address is populated for the user object in the LDAP source, then the user FDN is logged instead of email address. This is important if you are using an accounting software to ensure that jobs are tracked or accounted correctly.

- ◆ [“Enabling Email Printing” on page 29](#)
- ◆ [“Email Printing Commands” on page 29](#)
- ◆ [“Printing Using Email” on page 32](#)

Enabling Email Printing

To enable email printing, you must ensure to meet the following:

- ◆ Configure [global email settings](#)
- ◆ Email accounts are created and functional

After configuring the global email settings, do the following:

Select a printer or printers, click the **Email** menu, then click **Enable**.

On enabling the printer for email, you can print to that printer from any device capable of sending emails.

Email Printing Commands

You can print the body of the email and the attachments by using a few simple print commands in the subject line of your email.

- ◆ [“Basic Print Commands” on page 29](#)
- ◆ [“Additional Print Commands” on page 30](#)

Basic Print Commands

help

Provides information on email printing commands.

list printers

To get the names of the available printers, send an email to the iPrint server address (for example, `iprint@example.com`) with the subject line `list printers`.

print printer=<printer_name>

Prints your email and its attachments to the specified printer. For example, `print printer=hp#Test Mail`.

If you print to a specific printer by using the printer’s email address, the `print printer` command is ignored.

hold printer=<printer_name>

Queues your email along with its attachments and sends you the job ID as acknowledgment.

resume

Resumes the printing of a job that you put on hold. There are two ways to print a job on hold:

- ◆ Send an email with subject `resume` followed by the job ID. For example, `resume 10`
- ◆ Send an email with the original subject line prefixed with `resume`. For example, `resume#Test Mail`

cancel

Cancels a job that you put on hold. There are two ways to cancel a job on hold:

- ◆ Send an email with subject `cancel` followed by the job ID. For example, `cancel 10`
- ◆ Send an email with the original subject line prefixed with `cancel`. For example, `cancel#Test Mail`

status

Displays the status of a job. There are two ways to check the status of a job:

- ◆ Send an email with subject `status` followed by the job ID. For example, `status 10`
- ◆ Send an email with the original subject line prefixed with `status`. For example, `status#Test Mail`

move

Moves a job to a new printer. There are two ways to move a job to a new printer:

- ◆ Send an email with subject `move`, the job ID, and the name of the new printer. For example, `move 10 printer=<PrinterName>`
- ◆ Send an email with the original subject line prefixed with `move`, the name of the new printer, and #. For example, `move printer=<PrinterName>#Test Mail`

list jobs

Lists the details of the held jobs.

default printer

Displays the default printer.

default printer=<PrinterName>

Sets a particular printer as your default printer. After you set the default printer, you do not need to include the printer name while printing to the default printer. You only need to use the `print` command followed by the email subject. For example, `print#Test Mail`.

Note

- ◆ If a printer name contains spaces, enclose the printer name within double (") or single (') quotes. For example, `print printer='HP PRINTER'`.
- ◆ To separate the email subject from the command, use #. For example, `print printer=hp#Test Mail`.

Additional Print Commands

In addition to the basic print commands listed above, you can use these commands to refine your printing:

portrait [portrait=yes/portrait=y (or) portrait=no/portrait=n]

Prints your email content in portrait orientation. For example, `print printer=hp portrait=y#Test Mail`

landscape [landscape=yes/landscape=y (or) landscape=no/landscape=n]

Prints your email content in landscape orientation. For example, `print printer=hp landscape=y#Test Mail`

color [color=yes/color=y (or) color=no/color=n]

Prints your email content in color. For example, `print printer=hp landscape=y color=y#Test Mail`.

pages

Prints a given range of pages in your email. For example, the command `print printer=hp landscape=y color=y pages=1-3#Test Mail` prints pages 1, 2, and 3.

copies

Prints the specified number of copies of your email and its attachments. For example, the command `print printer=hp landscape=y color=y pages=1-3 copies=5#Test Mail` prints 5 copies of pages 1, 2, and 3.

duplex [duplex=yes/duplex=y (or) duplex=no/duplex=n]

Prints your email and its attachments on both sides of the printing paper. For example, the command `print printer=hp landscape=y color=y pages=1-3 copies=5 duplex=y#TestMail` prints 5 copies of pages 1, 2, and 3 in duplex mode.

media

Prints your email and its attachments with the specified paper type. The default paper type is "LETTER." You can change the default paper type by using the iPrint Console. The other available print paper types are A3, A4, and other common paper types. For example, the command `print printer=hp landscape=y color=y pages=1-3 copies=5 duplex=y media=A3#Test Mail` prints 5 copies of pages 1, 2, and 3 in duplex mode, on an A3 size paper.

mailbody [mailbody=yes/mailbody=y (or) mailbody=no/mailbody=n]

Prints either your email and its attachments or only the attachments from your email without the email body. For example, using the command `print printer=hp landscape=y color=y mailbody=n#Test Mail` prints only the email attachments in landscape mode.

NOTE: If you do not specify any of the additional commands, your print job is carried out according to the default preferences set by your administrator.

IMPORTANT: When printing to a specific printer using the printer's private email address, you do not need to specify the printer's name in the command. You can also leave the subject line empty. Printing is carried out according to the default print options set by the administrator.

However, you must specify the print command in the following scenarios:

- ◆ The administrator changes the `subject_optional_for_printer_specific_emails` to **False** in the configuration file located at `/etc/opt/novell/iprintmobile/conf/iprintmobile.conf`.
 - ◆ If you want to customize the print options, you must specify the `print` command, along with the required print options. For example, `print landscape=y color=y pages=1-3 copies=5 duplex=y media=A3#Test Mail`.
-

Printing Using Email

Using email printing, you can print documents from any device capable of sending emails. You can print emails by specifying email printing commands in the subject line of the email. You can also print documents by emailing them to your printer as attachments.

Ensure to meet the following prerequisites:

- ◆ iPrint server is configured with global or private email address. For example, `iprint@example.com`
- ◆ The users are provided with the configured email address
- ◆ List of printers configured for email printing

Perform the following steps to print using email:

- 1 Open an email. You can use any email mail box.
- 2 In the **To** field, specify the configured email address. For example, `iprint@example.com`
- 3 In the **Subject** field, specify the commands from the “[Email Printing Commands](#)” on page 29 section.

For example,

- ◆ To print from a printer named `printer1`, `print printer=printer1`
 - ◆ To view list of printers that are available to print, `list printers`
 - ◆ To view the list of commands, `help`
- 4 Specify the information to print in the body of the message or add an attachment to print.
 - 5 Click **Send**.

The document is printed and a confirmation message is received in the mail box.

Enabling Private Email Printing

You can configure a printer for private email printing by providing an unique email address for each printer.

To enable private email printing, you must ensure to meet the following:

- ◆ Configure [global email settings](#)
- ◆ Email accounts are created and functional

To enable a private email address for the printer, do the following:

- 1 Select a printer, click the **Configure** menu, then click **Printer Email Settings**.
- 2 Specify the values as follows:

Account	<ul style="list-style-type: none">◆ Email Address: Specify the full email address of the mailbox to be polled for the print jobs. When an email-based job arrives, the print job is processed to the printer. For example, print@example.com. The email address must be unique for every server.◆ Username: Specify the user name to be used by iPrint server to log in to the email server to access the private printer email account. For example, john.◆ Password: Specify the password for iPrint server to log in to the email server to access the private printer email account.
Server	<ul style="list-style-type: none">◆ Incoming Mail Server: Specify the address of the incoming email server for the email account. For example, imap.example.com.◆ Incoming Mail Server Port: Specify the port of the incoming email server for the email account.◆ Outgoing Mail Server: Specify the address of the outgoing email server for the email account. For example, smtp.example.com.◆ Outgoing Mail Server Port: Specify the port of the outgoing email server for the email account.◆ Access Method: iPrint server supports two different protocols to poll for incoming print jobs. Select POP or IMAP depending on the protocol your email server supports.

Caveats For Email Printing

- ◆ An email address used for a particular printer (per-printer email configuration) should not be used for any other printer or service.
- ◆ If you configure a printer for private email printing and then disable the printer for email printing, the private email configuration settings are deleted. If you want to enable private email printing in future, you must specify the information manually.

Printer Rename and Printer Refresh

Select a printer, you want to rename, click the **Configure** menu, then click **Rename Printer**.

To refresh the printers list, click the **Refresh** button in the upper right corner of the window.

WalkUp Printers

WalkUp printer is a virtual print queue that includes group of physical printers. The print jobs sent to the WalkUp printer are put on hold by the iPrint server and released to a desirable printer. The jobs can be released through Release Portal or mobile app.

You must associate drivers for printers when performing desktop printing.

- ◆ [“Prerequisites” on page 34](#)
- ◆ [“Creating a WalkUp Printer” on page 34](#)

- ◆ “Editing a WalkUp Printer” on page 34
- ◆ “Deleting a WalkUp Printer” on page 35
- ◆ “Enabling Mobile Printing For a WalkUp Printer” on page 35
- ◆ “Modifying the Job Hold Time” on page 35
- ◆ “Caveats for Implementing WalkUp Printing” on page 35
- ◆ “Release Portal for Users” on page 36

Prerequisites

- ◆ Ensure that the physical printers are available before creating a WalkUp printer.
- ◆ Ensure there is enough disk space to store the WalkUp jobs.
- ◆ The users releases the jobs by using a Release Portal or a mobile app. Ensure that the user is aware of the printer location and printer names.

Creating a WalkUp Printer

The user that has logged in to the iPrint Console must have rights to create the WalkUp printer object. The WalkUp printer object is created in the active Print Manager container.

- 1 Click **New**.
- 2 Specify the name of the WalkUp (virtual) printer. This name is exposed to the user when they install printers on their desktop or mobile devices.
- 3 (Optional) Specify description for the printer.
- 4 To enable mobile users to use this printer, select **Mobile Printing**.
- 5 From the list of printers, select the printers to group under WalkUp printer. The jobs sent to the WalkUp printer are put on hold and the user has control to release those jobs to one of the grouped printer.
You must select at least one printer.
- 6 Click **Next**.
- 7 Assign platform-specific drivers for the WalkUp printer.
If Windows drivers are selected, then bi-directional communication can be set for the WalkUp printer.
 - 7a Specify the IP Address or host name from the pool of printers that you have selected for WalkUp.
- 8 Click **Finish**.
WalkUp printer object is created that includes group of printers. The jobs on hold can only be released to these printers.

Editing a WalkUp Printer

- 1 Click the printer name.
Displays the details of the printer and its drivers.
- 2 In the **Printer Details** tab, modify the details of the printer.
- 3 Click the **Drivers** tab, then reassign the drivers for the selected printers. You can also modify the IP address or host name for bi-di communication.

4 Click **Save**.

The modified settings are applicable to all jobs sent to the selected WalkUp printer.

Deleting a WalkUp Printer

Ensure all the jobs are completed before deleting the printer. On deleting this printer, all the held jobs will be automatically canceled.

Select a printer or printers, then click **Delete**.

Enabling Mobile Printing For a WalkUp Printer

Select a printer or printers, click the **Mobile** drop-down menu, then click **Enable**.

Modifying the Job Hold Time

By default, the job is put on hold for four hours, after which the job is canceled. You can modify the time duration to put the job on hold as follows:

- 1 Click **Settings**.
- 2 Modify the duration to hold a job. This change is applicable only for the jobs put on hold after the setting is modified. The existing jobs will continue to be on hold as per the earlier set duration.

Caveats for Implementing WalkUp Printing

This section lists a few pointers for avoiding common WalkUp implementation problems.

- ♦ **Using iManager:** The following management tasks for the WalkUp printer are only managed by iManager:
 - ♦ Enable auto driver or profile update
 - ♦ Assign driver profiles
 - ♦ Set Access Control
 - ♦ Enable auditing
 - ♦ Delete held jobs
- ♦ **Using iPrint status (iPrint Health Monitoring page):** The following tasks of the WalkUp printers are monitored using the iPrint Health Monitoring tool:
 - ♦ Delete held jobs
 - ♦ Enable auditing
- ♦ **Job hold time:** By default, the job is put on hold for four hours, after which the job is canceled. If a job is canceled it is no longer available in the Release Portal. The job hold time can be modified from the Management Console. For more information, see [“Modifying the Job Hold Time” on page 35](#).
- ♦ **Insufficient balance when printing in PaperCut setup:** If the user prints in spite of having insufficient balance in his account, the job is canceled even though the Release Portal displays a success message.

Release Portal for Users

The iPrint Release Portal displays the jobs that are put on hold, the time the job was submitted to the WalkUp printer, and the expiry time of the job. By default, the job is put on hold for four hours, after which the job will be canceled. If a job is canceled it is no longer available in the Release Portal.

To launch the Release Portal in a web browser, specify the iPrint server's address (<https://<iPrint for OES server address>/user> or <https://<iPrint for OES server address>/release-portal>).

Printing a WalkUp Job

- 1 Using a web browser, specify the server address (https://<iPrint for OES server address>/user) or (https://<iPrint for OES server address>/release-portal).
- 2 Specify the user authentication details.
On successful authentication, jobs are displayed.
- 3 Select the document, then click **Print**.
- 4 Select the printer, then click **OK**.
The document is printed by the selected printer.

Deleting a WalkUp Job

- 1 Using a web browser, specify the server address (https://<iPrint for OES server address>/user) or (https://<iPrint for OES server address>/release-portal).
- 2 Specify the user authentication details.
On successful authentication, jobs are displayed.
- 3 Select the document or multiple documents, then click **Delete**.
The selected jobs are deleted and no longer available to print.

Configuration

You can configure the default print options for mobile, email, and Chromebook printing.

Global Settings

Following are the default settings for all the printers when printing from the mobile, email, and Chromebook. When printing, these settings can be modified for an individual printer.

Paper Size: Select **Letter** or **A4**.

Orientation: Select between **Landscape** or **Portrait** printing.

Enable Duplex Printing: Duplex printing allows printing on both the sides of a paper. Printers without this capability can only print on a single side of paper (simplex printing).

Enable Color Printing: Color printing prints the documents in color, as opposed to monochrome (black and white) printing.

Global Email Settings

You can configure iPrint server to accept the print jobs through email messages and attachments. Using email printing, you can print documents from any device capable of sending emails. You can print emails by specifying email printing commands in the subject line of the email. You can also print documents by emailing them to your printer as attachments. When configured for email printing, iPrint server becomes a client to an email server. Email account inbox is polled for incoming print jobs, which are routed to the intended printer.

Ensure email accounts are created and functional prior to their association with the iPrint server.

Enable email-based printing: Select this option to enable email printing. A global email address is assigned for all the printers.

The following fields are used by iPrint server to describe and access the global email account:

Email address: Specify the full email address for global print jobs. For example, print@example.com. The email address must be unique for every server.

iPrint server polls the inbox of this email address looking for print jobs. When an email-based job arrives, the subject line is parsed to determine the printer to which the job is sent.

IMPORTANT: Do not use an existing email account. If an existing email account is used, the mails in that account might get deleted, auto-replied, and so on.

Account Username: Specify the user name for iPrint server to log in to the email server to access the global email account. For example, john.

Account Password: Specify the password for iPrint server to log in to the email server to access the global email account.

NOTE: When you are modifying the global email settings, ensure to provide the account password. An error occurs if password is not provided.

Incoming Mail Server: Specify the address of the incoming mail server for the email account. For example, imap.example.com.

Incoming Mail Server Port: Specify the port number of the incoming mail server for the email account.

Incoming Server Type: iPrint server supports POP and IMAP protocols to poll for incoming print jobs. Select POP or IMAP depending on the protocol that your email server supports.

Outgoing (SMTP) Mail Server: Specify the address of the outgoing mail server for the email account. For example, smtp.example.com. iPrint server uses the SMTP protocol to send email back to users who submit email-based print jobs to report their job status. In order to support iPrint server, the email server you select must support the SMTP protocol.

Outgoing (SMTP) Mail Server Port: Specify the port of the outgoing mail server for the email account.

Message body Printing: With email-based printing, attachments are always printed. This option allows the email message body to also be printed. It is enabled by default.

Polling Interval: Specify the interval (in seconds) at which emails are fetched from the mail servers.

IMPORTANT: When using email printing, the print command in the subject line might trigger spam filters. To avoid this issue, configure your email system to allow print-specific emails. Include the approved print users in the spam filter of your email system to prevent unwanted print requests.

You can also configure a printer for private email printing by providing an email address to each printer.

Renderers

iPrint now supports printing from mobile devices that have limited abilities to convert documents into a print-ready formats. On desktop platforms, the documents are converted to a print-ready formats by the application, driver, and the spooler subsystems. This functionality is primitive or non-existent in many of the mobile devices and hence is provided by iPrint. To facilitate this, iPrint now provides rendering and conversion capabilities in the product and can convert and render most of the documents that are submitted by a mobile device, email, or other submission methods.

This conversion (rendering) is performed on the iPrint server using the built-in solution known as Local Renderer.

Use the **Edit** option to modify the local renderer's name and the default printer driver associated with the renderer.

- 1 Select the local renderer, then click **Edit**.
- 2 Modify the details, then click **Commit**.

Printer Map

You can create a printer map using the iPrint Map Designer tool. Click **Printer Map** to launch iPrint Map Designer. For more information, see [Creating Maps with iPrint Map Designer](#) in the [OES 2015 SP1: iPrint Linux Administration Guide](#).

Product Improvement

Micro Focus collects statistical data about your usage of iPrint service. This data enables us to ensure that you have the best possible experience with Micro Focus iPrint. Weekly once the data is sent to the Micro Focus server.

Data That is Collected for Product Improvement

Table 5-1 Telemetry Attributes

Telemetry Attribute	Description
Total Printers	Number of printers configured for iPrint
Mobile Enabled Printers	Number of printers that are enabled for mobile
eDirectory Users	Number of users in your eDirectory
Secure Printers	Number of printers that are secure

Telemetry Attribute	Description
WalkUp Printers	Number of iPrint printers configured for WalkUp functionality
Mobile Enabled WalkUp Printers	Number of WalkUp printers that are enabled for mobile
WalkUp Job Hold Duration (Minutes)	Job hold time for all WalkUp jobs
Global Email Configured	Displays if a global email was configured for printers
Private Email Configured For Printers	Number of printers configured with private email
Direct Printers	Number of direct printers
Audit Enabled Printers	Number of printers enabled for auditing
Accounting Enabled Printers	Number of printers enabled for accounting
IPP Enabled Printers	Number of printers enabled for IPP protocol
LPR Enabled Printers	Number of printers enabled for LPR protocol

How Server Receives the Data

After the weekly collection, the data is sent to the iPrint server. If the transfer is unsuccessful, the system attempts to send it again during the next weekly cycle. No attempts to send the data is made outside of the weekly cycles.

The data is not encrypted because no sensitive or identifying information is included.

License

This page displays information about license such as the product id, date it was issued, expiry details, and so on.

iPrint for OES ships with a 60-day trial license. The type of licenses are:

- ◆ [Trial License](#)
- ◆ [Desktop License](#)
- ◆ [Mobile License](#)

Trial License This is a 60-day license to evaluate the advanced features of desktop and the features on the mobile devices.

Desktop License The desktop features are:

- ◆ Print from Desktop (Windows and Mac)
- ◆ Print from Chromebook
- ◆ Email printing
- ◆ WalkUp printing from desktop
- ◆ Release WalkUp jobs from browser
- ◆ Release WalkUp jobs from mobile apps

It is recommended that you apply the desktop license. The license file `NP-iPrint-Desktop.xml` is available in the [Micro Focus Customer Center](#).

On expiry of the trial license, the existing OES desktop features continue to work uninterrupted.

Mobile License This license provides printing from mobile devices.

You can obtain a new license key from [Micro Focus Customer Center](#).

Updating the iPrint License

- 1 Browse and select a valid license (.xml) file to upload.
- 2 Click **Upload**.

After copying the license file, iPrint server is updated. Restarting of the services is not required.

6 Mobile Device Management (MDM)

- ♦ “Managing the iPrint App with ZENworks Configuration Management 2017” on page 41
- ♦ “Managing the iPrint App with ZENworks Mobile Management 3.2.x” on page 42
- ♦ “Configuring MobileIron to Manage the iPrint App” on page 43

Managing the iPrint App with ZENworks Configuration Management 2017

The Micro Focus iOS iPrint App 3.0.4 available in the Apple Play Store is enabled for ZENworks Configuration Management 2017. For information about provisioning iPrint iOS app, see [Provisioning Applications](#) in the [ZENworks 2017 Mobile Management Reference](#) guide.

Key-Value Pairs

Key-value pairs allow you to populate user login information and set configuration options.

Table 6-1 *iPrint Key-Value Pairs*

Key	Value
<code>server</code>	Specify the URL of your iPrint site. For example, <code>iprint.acme.com</code> .
<code>server1</code>	When specifying multiple servers, the subsequent servers will be <code>server2</code> , <code>server3</code> , and so forth. You can provide same or different user for each server.
<code>username</code>	Specify <code>\${LoginName}</code> for ZENworks to automatically populate the app with the login name of the ZENworks user. Alternatively, you can specify name of an individual user.
<code>configLocked</code>	The value is true or false. If the value is true, the app users will not be able to modify the iPrint app configuration on their devices. This value of the data type must be string and not boolean.

Examples for Key-Value Pairs

- ♦ **Multiple Servers and Same Users:** If there are two iPrint servers and you want all the app users to print through both the servers, specify the server values and `username` as the key.

Table 6-2 Multiple Servers and Same Users

Key	Value
server	iprint.acme.com
server1	iprint2.acme.com
username	\${LoginName}

- ♦ **Multiple Servers and Different Users:** If there are two iPrint servers and you want different set of app users to print through each server, specify the server values and subsequent username as the key. Use the key-value pair as `server` and `username` and `server2` and `username2`.

Table 6-3 Multiple Servers and Different Users

Key	Value
server	iprint.acme.com
username	admin
server1	iprint1.acme.com
username1	admin1

- ♦ **Sample Format of Configuration File**

```
<key>Configuration</key>
<dict>
  <key>server</key>
  <string>iprint.acme.com</string>
  <key>server1</key>
  <string>iprint1.acme.com</string>
  <key>username</key>
  <string>admin</string>
  <key>username1</key>
  <string>admin1</string>
  <key>configLocked</key>
  <string>true</string>
</dict>
```

Managing the iPrint App with ZENworks Mobile Management 3.2.x

ZENworks Mobile Management (ZMM) 3.2.x is a mobile device management solution that provides organizations with centralized management and control of the wireless device platforms in their enterprise network.

The Micro Focus iPrint App available in the Google Play Store is enabled for ZMM. You can now manage the Micro Focus iPrint app using ZMM solution. For information about adding iPrint app for Android devices, see [Adding and Managing Apps for Android Devices](#) in the [Managing User, Resources, and Applications](#) guide.

Configuring MobileIron to Manage the iPrint App

iPrint App is enabled for MobileIron. You must configure MobileIron to manage the iPrint mobile app.

- ♦ “Supported Features” on page 43
- ♦ “Adding the iPrint App to MobileIron” on page 43
- ♦ “Pre-Populating Fields for iPrint Login” on page 45
- ♦ “Distributing the iPrint App to Devices” on page 46

Supported Features

iPrint mobile app provides an additional feature to pre-populate the following fields on the iPrint login screen on both iOS and Android devices:

- ♦ **Server IP Address**
- ♦ **User ID**

Adding the iPrint App to MobileIron

- ♦ “Adding the Android iPrint App” on page 43
- ♦ “Adding the iOS iPrint App” on page 44

Adding the Android iPrint App

To add the Android iPrint app to MobileIron, upload the *.apk file and then apply the Android label to the application:

- 1 Download the Micro Focus iPrint for MobileIron Appconnect (*.apk) file from the [Novell downloads site \(https://download.novell.com\)](https://download.novell.com).
- 2 Upload the file to MobileIron:
 - 2a In the MobileIron Admin Portal, click the **Apps** tab.
 - 2b On the **App Distribution Library** tab, in the **Select Platform** drop-down list, select **Android**.
 - 2c Click **Add App**.

The Add App Wizard is displayed.
 - 2d Click **Next**, then specify the following information:
 - Distribution Type:** Select **In-house App**.
 - Silently Install:** If your device supports a silent install, select **Yes**. If the device does not support a silent install or if you are unsure, select **No**.
 - App Upload:** Browse to and select the .apk file that you downloaded.
 - 2e Click **Next**, then specify the following information:
 - App Name:** Micro Focus iPrint is already specified for you. This cannot be changed.
 - Display Version:** The version is already specified for you. This cannot be changed.
 - Code Version:** The version is already specified for you. This cannot be changed.
 - Description:** Specify a short description for the app.
 - Override URL:** For information about this feature, see the blue information icon next to this field.

Featured: Select whether you want to feature this app.

Category: Select the category that most closely matches the app. You can add a new category as described in the dialog box.

2f (Optional) Click **Next**, then click **Browse** to upload any screen shots that you have for the app.

The mandatory image size is displayed in the dialog box.

2g Click **Finish** to close the Add App Wizard.

3 Apply the Android label to your application:

3a From the **App Distribution Library** tab on the **Apps** tab, select the Micro Focus iPrint app that you created, then click **Actions > Apply To Label**.

The Apply To Label dialog box is displayed.

3b Select the **Android** label, then click **Apply > OK**.

Adding the iOS iPrint App

To add the iOS iPrint app to MobileIron, import it from the Apple Appstore and then apply the iOS label to the application:

1 Import the app from the Apple Appstore:

1a In the MobileIron Admin Portal, click the **Apps** tab.

1b On the **App Distribution Library** tab, in the **Select Platform** drop-down list, select **iOS**.

1c Click **App Store Import**.

The App Store Search dialog box is displayed.

1d In the **App Name** field, type `Micro Focus iPrint`.

1e In the **App Store** field, select the country appropriate to your location.

1f Click **Search**.

1g Click **Import** next to the Micro Focus iPrint app, then click **OK** after it is imported.

1h Close the App Store Search dialog box.

1i From the **App Distribution Library** tab on the **Apps** tab, click the **Edit** icon next to the Micro Focus iPrint app that you imported.

The Edit App for iOS dialog box is displayed.

1j Make any desired changes to the app details and icon, then click **Save**.

2 Apply the iOS label to your application:

2a From the **App Distribution Library** tab on the **Apps** tab, select the Micro Focus iPrint app that you just created, then click **Actions > Apply To Label**.

The Apply To Label dialog box is displayed.

2b Select the **iOS** label, then click **Apply > OK**.

Pre-Populating Fields for iPrint Login

Pre-populate the server URL and user ID fields for both the iOS and Android apps.

You must modify the app configuration for Android, and create a new app configuration for iOS.

- ♦ [“Creating the iOS iPrint App Configuration for MobileIron” on page 45](#)
- ♦ [“Key-Value Pairs” on page 45](#)
- ♦ [“Modifying the Android iPrint App Configuration for MobileIron” on page 46](#)

Creating the iOS iPrint App Configuration for MobileIron

- 1 In the MobileIron Admin Portal, click the **Policies & Configs** tab.
- 2 On the Configuration tab, click **Add New > AppConnect > Configuration**.
The New AppConnect App Configuration dialog box is displayed.
- 3 Specify the following information:
Name: Provide a name for the configuration, such as `iPrint iOS Configuration`.
Description: (Optional) Provide a description for the configuration.
Application: Specify the iPrint iOS bundle ID, which is `com.novell.print`.
- 4 In the **App-specific Configurations** section, click the **Plus** icon to add a new field to the key-value pair table; you can then specify the key-value pair to be included in the configuration.
The key-value pairs that you can add are shown in [Table 6-4, “iPrint Key-Value Pairs,” on page 45](#). Key-value pairs that you add to the table represent the information that will be pre-populated for iPrint login.
- 5 Click **Save**.

Key-Value Pairs

Table 6-4 iPrint Key-Value Pairs

Key	Value
<code>server</code>	Specify the URL of your iPrint site. For example, <code>iprint.acme.com</code> .
<code>server2</code>	When specifying multiple servers, the subsequent servers will be <code>server2</code> , <code>server3</code> , and so forth. You can provide same or different user for each server.
<code>user</code>	Specify <code>\$USERID\$</code> for MobileIron to automatically populate the app with the users' MobileIron user ID. Alternatively, you can specify an individual user's user ID.
<code>configlocked</code>	The value is true or false. By default, the value is true and the app users will not be able to modify the iPrint app configuration on their devices.

Examples for Key-Value Pairs

- ♦ **Multiple Servers and Same Users:** If there are two iPrint servers and you want all the app users to print through both the servers, specify the server values and `user` as the key.

Table 6-5 Multiple Servers and Same Users

Key	Value
server	iprint.acme.com
server2	iprint2.acme.com
user	\$USERID\$

- ♦ **Multiple Servers and Different Users:** If there are two iPrint servers and you want different set of app users to print through each server, specify the server values and subsequent `user` as the key. Use the key-value pair as `server` and `user` and `server2` and `user2`.

Table 6-6 Multiple Servers and Different Users

Key	Value
server	iprint.acme.com
user	\$USERID\$
server2	iprint2.acme.com
user2	\$USERID\$

Modifying the Android iPrint App Configuration for MobileIron

- 1 In the MobileIron Admin Portal, click the **Policies & Configs** tab.
- 2 On the **Configuration** tab, in the **Name** column, click the name of the iPrint configuration for the iPrint app that you uploaded, as described in “[Adding the Android iPrint App](#)” on page 43.
- 3 Click **Edit**.
The Modify AppConnect App Configuration dialog is displayed.
- 4 Specify the following information:
 - Name:** Provide a name for the configuration, or keep the default.
 - Description:** (Optional) Provide a description for the configuration, or keep the default.
 - Application:** Select `Micro Focus iPrint` from the drop-down list.
- 5 In the **App-specific Configurations** section, keep or remove the key-value pairs that are shown in [Table 6-4](#), “[iPrint Key-Value Pairs](#),” on page 45. Key-value pairs that remain in the table represent the information that will be pre-populated for iPrint login.
- 6 Click **Save**.

Distributing the iPrint App to Devices

You must distribute the iPrint app to devices in your organization via MobileIron if this is the first time your organization is using MobileIron with iPrint, or any time a new device enters the organization.

Some users might have independently download the iPrint app from the app store before their device is managed by MobileIron. Even in this scenario, you must push the app to their device via MobileIron. (These devices will lose any cached or downloaded files within the iPrint app after their device becomes managed and the iPrint app is pushed to their device.)

A

Troubleshooting iPrint for OES

The following are some common troubleshooting issues:

- ♦ [“Local Renderer Fails to Print the Password-Protected PDF Files” on page 47](#)
- ♦ [“Printer Prints Junk Characters” on page 47](#)
- ♦ [“All Print Jobs Fails Post Configuration” on page 48](#)
- ♦ [“Email Printing Fails When the Filename Includes Extended Characters Or Double-byte Characters” on page 48](#)
- ♦ [“Unable to Configure Email Printing When SSL Is Enabled for IMAP/POP on a Mail Server” on page 48](#)
- ♦ [“Garbage Characters Printed When Printing from Gmail on Internet Explorer” on page 48](#)
- ♦ [“Caveats” on page 49](#)

Local Renderer Fails to Print the Password-Protected PDF Files

The local renderer fails to print password-protected or corrupt PDF files.

You might get a message in the audit page that the job is complete or success message for email printing, if the local renderer uses the pre-packaged driver for printing.

Printer Prints Junk Characters

When trying to print a document, the printer might print only junk characters in the following scenarios:

- ♦ This issue is caused because the local renderer does not support all the font types. To resolve this issue, you can install the Microsoft TrueType fonts on your iPrint server.

1. Log in as `root`.
2. Type the following command to navigate to the `fonts` directory, then press Enter:

```
cd /opt/novell/iprintmobile/fonts/
```

3. Install the supported RPM files by typing the following command, then press Enter:

```
rpm -ivh *.rpm
```

The RPM files are now installed on the iPrint server.

4. Run the script to retrieve the fonts by typing the following command, then press Enter:

```
sh fetchmsttfonts-11.1-5.7.10-fetchmsttfonts.sh.txt
```

The fonts are downloaded from Sourceforge and installed on your iPrint server.

- ♦ Few of the Linux drivers might fail to print due to absence of certain filters. You can verify this information, using the command: `lpstat -p`

The command displays the status of the drivers. Change the driver for which you have received the failure messages. This is applicable only for local renderer.

All Print Jobs Fails Post Configuration

If Driver Store or Print Manager is not running, printing fails.

Execute the following command to list the installed drivers: `lpstat -p`.

If no drivers are listed, then run the following command to install the default driver: `sh /opt/novell/iprintmobile/bin/post_initial_config.sh -u <adminuser> -p <passwd>`

Email Printing Fails When the Filename Includes Extended Characters Or Double-byte Characters

Printing through email fails, if the name of the file includes either extended characters or double-byte characters.

To resolve this issue, rename the file to include only supported characters.

Unable to Configure Email Printing When SSL Is Enabled for IMAP/POP on a Mail Server

If SSL is enabled for IMAP/POP on a mail server, you might be unable to configure email printing using the iPrint Console.

To work around this issue, you must manually import the mail server certificate into iPrint using the following procedure:

- 1 On the iPrint for OES server, execute the following command:

```
keytool -import -alias <alias_name> -keystore /usr/lib64/jvm/jre-1.8.0-ibm/lib/security/cacerts -file <Cert_file_path>
```

The default password is "changeit".

- 2 To accept the certificate, restart the Mobile server:

```
rcnovell-iprint-mobile restart
```

Garbage Characters Printed When Printing from Gmail on Internet Explorer

If you are using Gmail on Internet Explorer and you try to print an email, you might see garbage characters in place of line breaks. This is caused by a character encoding issue.

To work around this issue, you must change the default text encoding to UTF-8 in your Gmail settings.

- 1 Launch Internet Explorer, then go to www.gmail.com.
- 2 Sign in to Gmail with your user name and password.
- 3 Click the settings icon in the upper-right corner of the screen, then select **Settings**.
- 4 Under **General** settings, in the **Outgoing message encoding** section, select **Use Unicode (UTF-8) encoding for outgoing messages**.
- 5 Click **Save Changes**.

Caveats

This section discusses the following caveats:

- ◆ If you need to restart Apache and Print Manager, it is recommended to first restart Apache, then the Print Manager.

B iPrint for OES Support Matrix

This section provides information on the following.

- ♦ “Mobile Server Support” on page 51
- ♦ “Mobile Operating System Support” on page 51
- ♦ “iPrint Console Support” on page 52
- ♦ “MobileIron Support” on page 52
- ♦ “Supported Document Formats By the Local Renderer” on page 52
- ♦ “Clients for Email Printing” on page 53

Mobile Server Support

Table B-1 Mobile Server Support

Features	Version
Email	<ul style="list-style-type: none">♦ Novell GroupWise 2012♦ Microsoft Exchange 2013♦ Gmail♦ IBM Domino server 9♦ Lotus Notes

Mobile Operating System Support

Table B-2 Mobile Operating System Support for Apps

Type	Version
iOS	<ul style="list-style-type: none">♦ 10.x♦ 9.x♦ 8.x
Android	<ul style="list-style-type: none">♦ Nougat (7.x)♦ Marshmallow (6.x)♦ Lollipop (5.x)♦ KitKat (4.4)♦ Jelly Bean (4.1.x, 4.2.x, 4.3.1)♦ Ice Cream Sandwich (4.0.x)
Amazon Kindle	Fire Phone OS 4.6.6.1

Type	Version
Windows	<ul style="list-style-type: none"> ◆ 8.1 ◆ 10

iPrint Console Support

Table B-3 Management Console Support

Access	Version
Browser	<ul style="list-style-type: none"> ◆ Internet Explorer 10 or later ◆ Firefox 30 or later ◆ Chrome 35 or later ◆ Safari 7 or later ◆ iOS 10 tablet with default browsers ◆ Android 6.x tablet with default browsers

MobileIron Support

Table B-4 MobileIron Support

MobileIron Core Version	iPrint Mobile App Version
8.5	2.0 or later mobile app for iOS and Android
7.5	1.1 or later mobile app for iOS and Android
6.0.x	1.1 or later mobile app for iOS and Android

Supported Document Formats By the Local Renderer

Table B-5 Local Renderer Supported Document Formats

Software	File Formats
OpenDocument	ODT, ODP, ODG, ODS
Graphics	JPG, BMP, TIF, GIF, PNG
Others	TXT HTML (Static) Static HTML content refers to the HTML content that does not change or have dependencies on external files such as MySQL database and JavaScript.

Clients for Email Printing

- ◆ Novell GroupWise 2012 and Novell GroupWise 2014
- ◆ Microsoft Outlook 2010
- ◆ IBM Lotus Notes 9
- ◆ iOS 5, 6. x, 7.x default mail client
- ◆ Mail clients on Android 4.x or later
- ◆ Gmail

