opentext™

Open Enterprise Server 2023
OES iPrint Advanced Administration Guide

May 2023

Legal Notices

Copyright 2023 Open Text.

Contents

About This Guide

This guide describes how to install, configure, and customize `OES iPrint Advanced` on Open Enterprise Server 2023.

Audience

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

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 *OES iPrint Advanced Administration Guide*, visit the Open Enterprise Server Documentation web site.

Additional Documentation

For information about other OES products, see the OES 2023 Documentation web site.

For information about OES iPrint, see the OES 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 `OpenText iPrint Appliance`, a standalone version of iPrint. For more information, see iPrint Appliance Feature Tour.

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

The `OES iPrint Advanced` service would be running on an `iPrint` server. Hence, this guide refers the server running the `OES iPrint Advanced` service as an `iPrint` server.

`OES iPrint Advanced` along with `OES 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, and Android.
- **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 and Android mobile devices can download apps that allow them to print from their mobile devices directly to any of your organization's printers.

  `OES iPrint Advanced` 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 OES iPrint Advanced," on page 13.

Benefits of OES iPrint

The following benefits continue from `OES 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: `OES 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: `OES iPrint` makes secure printing easy by integrating its data store with your identity directory. It works with lightweight directory access protocol (LDAP) such as Microsoft Identity.

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 OES iPrint Advanced

The following new features are offered by `OES iPrint Advanced` in addition to `OES iPrint` features:

Addition	OES iPrint Advanced
Devices supported	Mobile phones
	Tablets
	Chromebook
Management interfaces	iPrint Console
	iPrint Portal
Printing with	Web-based printing (QuickPrint)
	Mobile apps
	Chromebook
	Email
	WalkUp

Figure 1-1 *Overview*
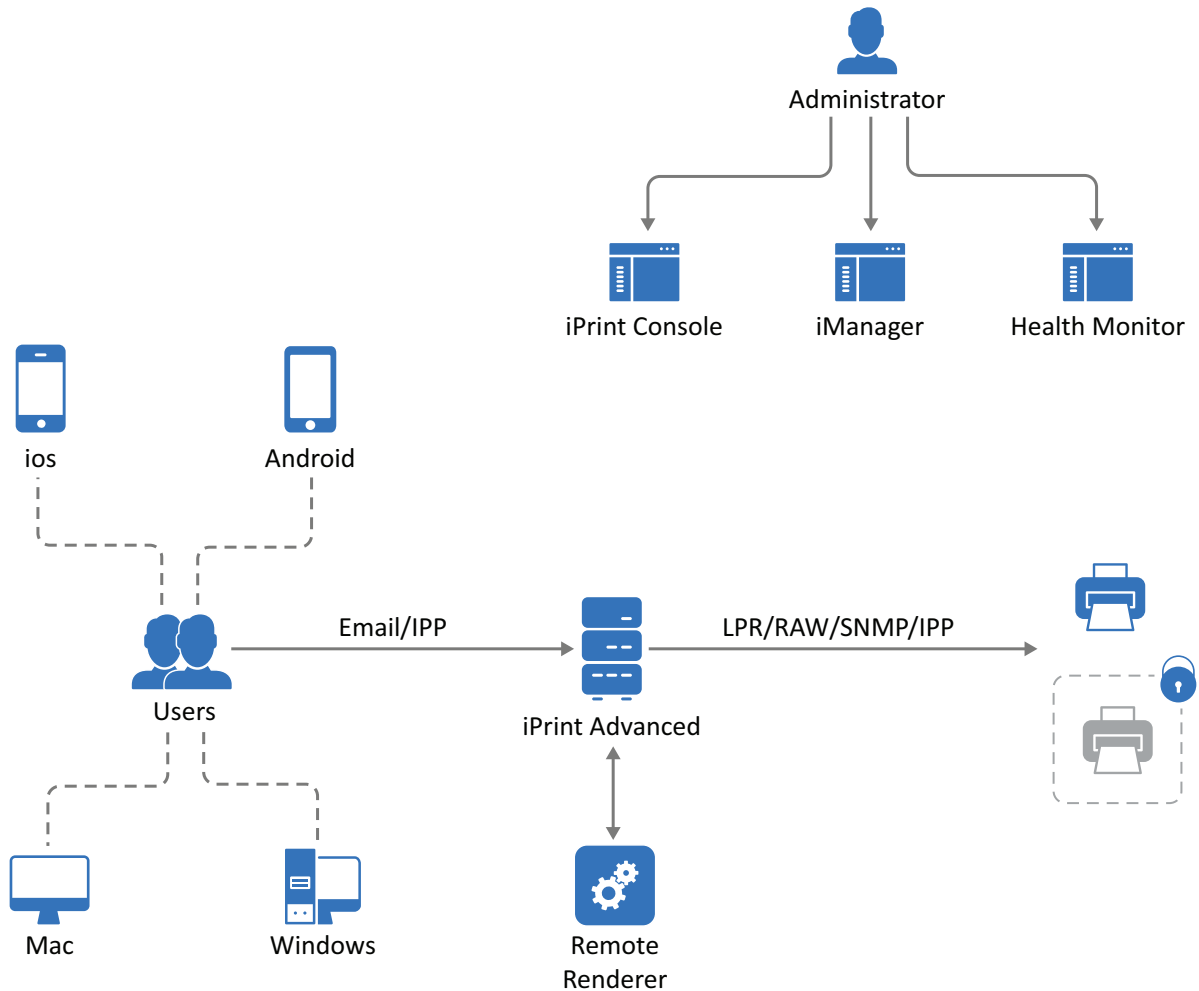
- "Users" on page 9
- "Devices" on page 9
- "Protocols" on page 10
- "Administration" on page 10
- "Accounting With Third-party Solutions" on page 10
- "Renderers" on page 10
- "Printers" on page 11

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 devices, and Amazon Kindle.

Protocols

IPP: Desktop and mobile applications use 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.

To access iPrint Console, specify `https://<iPrint_Advanced_IP_or_hostname>/ipcon` or `https://<iPrint_Advanced_Cluster Resource IP>/ipcon`.

iPrint Portal: A new printer portal is designed for enhanced user experience.

To access iPrint Portal, specify `https://<iPrint_Advanced_IP_or_hostname>/print`

iManager: Allows you to set up and manage your print environment. You can create printers, printer drivers, profiles, and users using **iPrint Console** feature listed in **Roles and Tasks**.

To access iManager, specify `https://<iPrint_Advanced_IP_or_hostname>/nps`

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.

To access Health Monitoring tool, specify `https://<iPrint_Advanced_IP_or_hostname>/psmstatus`

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.

To access Map Designer, specify `https://<iPrint_Advanced_IP_or_hostname>/ippdocs/maptool.htm`

Accounting With Third-party Solutions

`OES iPrint Advanced` 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

`OES iPrint Advanced` 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.

Remote Renderer

`OES iPrint Advanced` server also ships with a Remote Renderer. For enhanced desktop-quality printing, you should use Remote Renderer. The remote renderer can be downloaded from the iPrint Console and must be installed on a Windows 64-bit computer.

The remote renderer provides high quality rendering for different formats. It communicates with iPrint server for document conversion. Although, it is not a mandatory requirement, it is recommended for desktop quality printing.

Printers

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

Feature List

- ◆ **OES iPrint Advanced:** Allows users to print from their desktops, laptops, and mobile devices.
- ◆ **OES iPrint (formerly Novell iPrint):** Allows users to print from their desktops and laptops. As an `OES` customer you are entitled to use the advanced features provided by `OES iPrint Advanced`. However, to avail all these features, you must configure `OES iPrint Advanced` and apply the desktop license.

Table 1-1 *Features Available Per License*

Features	OES iPrint Advanced			OES iPrint
	Desktop License (Entitled)	Enterprise License (Purchase)	Mobile License (Purchase)	OES License
Printing from/with:				
◆ Desktop (Windows and MAC)	✅	✅	❌	✅
◆ Mobile Devices (Android for Work/AppConfig Community Standards)	❌	✅	✅	❌
◆ Chromebook	✅	✅	✅	❌
◆ iPrint Portal (QuickPrint)	✅	✅	✅	❌
Web Printing	✅	✅	✅	❌

Features	OES iPrint Advanced			OES iPrint
Email Printing	✔	✔	✔	�‌✘
Release WalkUp Jobs with:				
◆ Mobile Devices	✔	✔	✔	✘
◆ Release Portal	✔	✔	✔	✘
◆ Identity Cards	✔	✔	✔	✘
◆ Identity Cards (Using Advanced Authentication)	✔	✔	✘	✘
MDM Support (BlackBerry (formerly Good)/Ivanti Neurons /Zenworks)	✔	✔	✔	✘

For more information on applying the license, see .

2 What's New in OES iPrint Advanced

What's New OES 2023

In addition to bug fixes, OES 2023 provides the following enhancement to iPrint:

iPrint Management Client

A new browser independent management tool called iPrint Management client is introduced for driver & profile management. This is a standalone utility for managing drivers and profiles. Only iPrint Administrators have access to this management tool. The tool provides improved security, large driver uploads are made easy and fast. You can upload drivers for Mac/Linux too. Hence, provides a seamless experience of driver & profile management. See, iPrint Management Client.

Standalone iPrint server on NSS Media

iPrint server on NSS media and NSS relocate logging enhancement.

iPrint Client and Mobile Operating System

  ◆ iPrint App supports Android 13.
  ◆ iPrint App supports iOS 16.

3 Installing OES iPrint Advanced Server

This section describes how to install and configure `OES iPrint Advanced` Server.

- "Planning Your Environment" on page 15
- "Installing OES iPrint Advanced Server During OES Installation" on page 16

Planning Your Environment

In addition to OES requirements, ensure to meet the following requirements:

- "Server Requirements" on page 15
- "Remote Renderer Requirements" on page 15
- "OES iPrint Advanced Desktop License" on page 15

Server Requirements

- **Memory:** 8 GB RAM or higher is recommended.
- **Hard Disk:** 40 GB. This disk stores the configuration details and all the WalkUp jobs. Depending on your usage, decide the space required on the disk.

Remote Renderer Requirements

For desktop quality printing for Microsoft Office and PDF documents, you must install a remote renderer. The minimum requirements are as follows:

- Install the renderer on a Microsoft Windows 64-bit system.
- Windows 11/ Windows 2022/ Windows 10/ Windows 2019 with a dual-core processor or higher.
- Microsoft .Net Framework 4.5 or later.

For Desktop quality printing, we recommend to install the following optional software:

- Microsoft Office 2019
- Microsoft Office 2016
- Adobe Acrobat XI Professional
- Adobe Acrobat X Pro

OES iPrint Advanced Desktop License

Login to the Micro Focus Customer Center (SLD).

NOTE: Micro Focus is now OpenText.

Home   Entitlements   Downloads   Activations   Identity Access Management   Reports   ELA

Software Licenses and Downloads (SLD)

Welcome to the Software Licenses and Downloads Portal where you can access your entitlements to software activations and downloads.

Please select an account: Search Account   💡

ELA Introduction Video

Manage Entitlements

Downloads

Activate Enterprise License Agreement (ELA)

Manage Access

Support Portal

License File: Download the `NP-iPrint-Desktop.xml` file. All the OES customers are entitled to use the desktop features under this license. By using iPrint Console, upload the license file to continue using the advanced desktop features provided by `OES iPrint Advanced`. For more information about licenses, see "License" on page 47.

Installing OES iPrint Advanced Server During OES Installation

1 From the boot menu, select **Installation** and press enter, then continue with the installation as desired until you get to the Installation Settings page.

   For detailed instructions, see Installing OES 2023 as a New Installation in the OES 2023: Installation Guide.

2 On the **Installation Settings** page, click **Software** to open the Software Selection page.

3 Under **Open Enterprise Server**, select **OES iPrint Advanced**, and accept the EULA agreement to continue with the installation process.

The following additional services are automatically selected:

- OES iPrint
- NetIQ eDirectory
- OES Linux User Management (LUM)
- OES Remote Manager (NRM)
- OES Backup / Storage Management Services (SMS)

4 Configure OES iPrint, for more information, see Setting Up iPrint in the OES 2023: iPrint Administration Guide.

5 To configure mobility in a cluster environment, continue with "Clustering on a NSS File System" on page 23.

or

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

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

6a Modify 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
```

6b Restart mobile server:

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

6c Modify the LDAP parameter in the `/etc/opt/novell/iprintauth/conf/authService.conf` as follows:

```
config.RepositoryLdapUrl = ldaps://localhost:1636
```

6d Restart iprint auth service: `systemctl restart iprint-auth.service`

7 Launch **iPrint Console** in a web browser. You must login to the console the first time to complete the configuration of `OES iPrint Advanced`. No additional tasks needs to be performed in the console.

NOTE: Ensure that the Driver Store and Print Manager are running. For more information, see Creating a Driver Store and Creating a Print Manager in OES 2023: iPrint Administration Guide.

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

7a 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.

Using iPrint Console, you can manage email and mobile features of the printers.

For more information, see . Each of the page in iPrint Console includes an help icon ⑦. The help includes information for enabling the features.

Installing OES iPrint Advanced after OES 2023 and OES iPrint Installation

Ensure to meet the following specific requirements along with prerequisites for OES Install and OES iPrint Advanced:

- ◆ `OES iPrint Advanced` runs on OES 2023 servers. For information about installing and configuring OES 2023, see OES Install.
- ◆ `OES iPrint` must be installed and configured on OES 2023 server. For information about installing and setting up OES iPrint, see the OES 2023: iPrint Administration Guide

On installing `OES 2023` and `OES iPrint`, continue with the following steps:

1 To launch YaST, run the command `yast2`.

2 Click **Open Enterprise Server > OES Install and Configuration**.

3 Select the pattern **OES iPrint Advanced**, then click **Accept**.

4 Continue with on-screen prompts until `OES iPrint Advanced` is successfully installed.

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

   5a Modify 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
   ```

   5b Restart mobile server:

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

   5c Modify the LDAP parameter in the `/etc/opt/novell/iprintauth/conf/authService.conf` as follows:

   ```
   config.RepositoryLdapUrl = ldaps://localhost:1636
   ```

   5d Restart iprint auth service: `systemctl restart iprint-auth.service`

6 (Conditional) To configure mobility in a cluster environment, continue with the "Clustering on a NSS File System" on page 23.

   or

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

7 Launch **iPrint Console** in a web browser. You must login to the console the first time to complete the configuration of `OES iPrint Advanced`. No additional tasks needs to be performed in the console. Using **iPrint Console**, you can manage email and mobile features of the printers.

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

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

7a 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 OES iPrint Advanced," on page 31. Each of the

page in **iPrint Console** includes an help icon . The help includes information for enabling the features.

4 Configuring OES iPrint Advanced Server

This section describes how to configure `OES iPrint Advanced` server in a Standalone and Cluster environment.

- ◆ "Configuring OES iPrint Advanced Server In a Standalone Environment" on page 21
- ◆ "Configuring OES iPrint Advanced Server In a Cluster Environment" on page 22
- ◆ "Patching OES iPrint Advanced 2023" on page 25

Configuring OES iPrint Advanced Server In a Standalone Environment

- ◆ "Planning for OES iPrint Advanced Server As a Standalone" on page 21
- ◆ "OES iPrint Advanced Server As a Standalone On an NSS File System" on page 22

Planning for OES iPrint Advanced Server As a Standalone

- ◆ "Open Enterprise Server 2023" on page 21
- ◆ "OES iPrint" on page 21
- ◆ "NSS File System" on page 21

Open Enterprise Server 2023

The OES 2023 server must be patched with the latest patch.

OES iPrint

OES iPrint is installed. For more information, see Installing and Setting Up iPrint on Your Server in the OES 2023: iPrint Administration Guide.

NSS File System

Ensure to install and configure NSS, if you are using NSS file system to host iPrint configuration and data on an NSS Volume. For more information, see OES 2023: NSS File System Administration Guide for Linux.

OES iPrint Advanced Server As a Standalone On an NSS File System

1 Install `OES iPrint Advanced` service on an OES server using YaST. For more information, see Installing and Configuring iPrint Services through YaST in the OES 2023: iPrint Administration Guide.

2 Run the `iprint_nss_relocate` script located at `/opt/novell/iprint/bin` on the OES server. For more details on this script, see Setting up iPrint on the NSS File System in the OES 2023: iPrint Administration Guide.

Configuring OES iPrint Advanced Server In a Cluster Environment

Planning for OES iPrint Advanced Server in a Cluster

Open Enterprise Server 2023

- The OES 2023 server must be patched with the latest patch.
- Ensure that each node in the cluster is running the same release version of OES 2023.

OES Cluster Services

Ensure that each node is running the same release version of OES Cluster Services with the latest patches applied. For information on installing OES Cluster Services, see Installing, Configuring, and Repairing OES Cluster Services in the OES 2023: OES Cluster Services for Linux Administration Guide.

OES iPrint

`OES iPrint` service is configured in a cluster environment on an NSS file system. Ensure that each node in cluster where you plan to install `OES iPrint Advanced`, is running with `OES iPrint`. For more information, see Configuring iPrint with OES Cluster Services in the OES 2023: iPrint Administration Guide.

Driver Store and Print Manager

Ensure Driver Store and Print Manager is running in the cluster environment. For more information, see Creating a Driver Store and Creating a Print Manager in OES 2023: iPrint Administration Guide.

NSS File System

`OES iPrint Advanced` supports only NSS file system.

Clustering on a NSS File System

1 Identify the node where pool resource is running.

2 Install `OES iPrint Advanced` service using YaST on the node where the pool resource is running.

3 Identify all the other nodes to host the `OES iPrint Advanced` service. Install `OES iPrint Advanced` service on those nodes.

> **IMPORTANT:** Ensure `OES iPrint Advanced` 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:

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

systemctl stop novell-iprint-license.service

systemctl stop iprint-cups.service

systemctl stop iprint-auth.service

systemctl stop orientdb.service
```

6 Migrate the pool resource to the next identified node. For more information, see Installing, Configuring, and Repairing OES Cluster Services.

7 Repeat Step 4 to Step 6 on all the iPrint cluster nodes.

8 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 systemctl start novell-iprint-ocs.service

exit_on_error systemctl start novell-iprint-license.service

exit_on_error systemctl start orientdb.service

exit_on_error systemctl start iprint-auth.service

exit_on_error systemctl start iprint-cups.service

exit_on_error systemctl start novell-iprint-tomcat.service
```

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.

9 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 systemctl stop novell-idsd.service` statement:

```
ignore_error systemctl stop novell-iprint-tomcat.service

ignore_error systemctl stop iprint-cups.service
```

```
ignore_error systemctl stop iprint-auth.service

ignore_error systemctl stop orientdb.service

ignore_error systemctl stop novell-iprint-license.service

ignore_error systemctl stop novell-iprint-ocs.service
```

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.

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

10a Modify 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
```

10c Modify the LDAP parameter in the `/etc/opt/novell/iprintauth/conf/authService.conf` as follows:

```
config.RepositoryLdapUrl = ldaps://localhost:1636
```

10d Restart iprint auth service: `systemctl restart iprint-auth.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 OES iPrint Advanced 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 `OES iPrint` and `OES iPrint Advanced` on the new node.

12b Comment out the load and unload scripts added in Step 8 and Step 9.

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.

Patching OES iPrint Advanced 2023

Remote Renderer

On applying the latest patch, the `iPrintRendererBundle.zip` file must be manually updated. For the standalone environment, the remote renderer zip file is automatically bundled. But for the cluster environment, before updating the remote renderer zip file, you must manually re-bundle it.

Re-bundling the Remote Render Zip File

Perform the following steps to re-bundle the `iPrintRendererBundle.zip` file.

1 Ensure that every node running `OES iPrint Advanced` is patched with the latest patch.

2 Go to `/opt/novell/iprintmobile/bin` folder on the node where the pool resource is running.

3 Run `sh /opt/novell/iprintmobile/bin/certman_oes.sh -b`. The latest remote renderer zip file is re- bundled.

Updating the Remote Render Zip File

On re-bundling the latest remote renderer zip file, download, install, configure and register remote renderer. For more information, see .

5 Upgrading to OES iPrint Advanced

Supported Source Upgrade Paths

 ◆ OES iPrint Advanced on OES 2018 SP3
 ◆ OES iPrint Advanced on OES 2018 SP2

Upgrading to OES iPrint Advanced (Standalone)

Follow the step-by-step instructions for upgrading to OES 2023. For more information, see Upgrading to OES 2023 in the OES 2023: Installation Guide.

NOTE: Beginning with OES 2018 SP3 and later, a new service file `iprint-cups.service` is added to start the cups binary on `OES iPrint Advanced` server with `cupsd-iprint.conf` (iPrint configuration file) file. The CUPS file (`cups.service`) available with the earlier release is masked and should not be used with the OES 2018 SP3 and later server.

Post- Upgrade

You must complete the following tasks before using `OES iPrint Advanced`:

1 Migrate the pool resource to upgraded node.
2 Run the `iprint_nss_relocate` script located at `/opt/novell/iprint/bin`.
   For more details on this script, see Running the iprint_nss_relocate script.

Upgrading to OES iPrint Advanced Server (Cluster)

NOTE: Beginning with OES 2018 SP3, a new service file `iprint-cups.service` is added to start the cups binary on `OES iPrint Advanced` server with `cupsd-iprint.conf` (iPrint configuration file) file. The CUPS file (`cups.service`) available with the earlier release is masked and should not be used with the OES 2018 SP3 server.

---

1 Follow the step-by-step OES upgrade instructions. See Upgrading to OES 2023 in the OES 2023: Installation Guide.
2 Ensure that the upgraded OES 2023 node is joined to the cluster.
3 Comment the cups service: `exit_on_error systemctl start cups.service`

NOTE: Step 3 is not required when the servers are upgraded from OES2015SP1/OES2018/OES2018 SP3 to OES2023

4 Migrate the pool resource to the upgraded OES 2023 node.

5 Ensure that the pool and volume is running on the node running the OES 2023 server.

6 Run the `iprint_nss_relocate` script located at `/opt/novell/iprint/bin`.

For more details on this script, see Running the iprint_nss_relocate script.

7 Stop the Mobile (`novell-iprint-tomcat`) and License by executing the following commands:

```
systemctl stop novell-iprint-tomcat.service
systemctl stop novell-iprint-license.service
```

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

```
exit_on_error systemctl start novell-idsd.service
exit_on_error systemctl start novell-ipsmd.service
exit_on_error systemctl start novell-iprint-ocs.service
exit_on_error systemctl start novell-iprint-license.service
exit_on_error systemctl start orientdb.service
exit_on_error systemctl start iprint-auth.service
exit_on_error systemctl start iprint-cups.service
exit_on_error systemctl start novell-iprint-tomcat.service
```

NOTE: You must remove the line `ignore_error rcnovell-iprint-mobile start` as it is replaced with license and tomcat services and add `exit_on_error systemctl start iprint-cups.service` as it replaces CUPS service.

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.

9 Edit the unload script to add the Mobile, License, and CUPS service for the Cluster Pool. Add the following lines to the existing unload script after the `ignore_error systemctl stop novell-ipsmd.service` statement:

```
ignore_error systemctl stop novell-iprint-tomcat.service
ignore_error systemctl stop iprint-cups.service
ignore_error systemctl stop iprint-auth.service
ignore_error systemctl stop orientdb.service
ignore_error systemctl stop novell-iprint-license.service
ignore_error systemctl stop novell-iprint-ocs.service
ignore_error systemctl stop novell-ipsmd.service
ignore_error systemctl stop novell-idsd.service
```

NOTE: You must remove the line `ignore_error rcnovell-iprint-mobile stop` as it is replaced with license and tomcat services and add `ignore_error systemctl stop iprint-cups.service`as it is replaced with CUPS service.

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.

10 Ensure all the services (Print Manager, License, Mobile, and Cups) are up and running. Also, ensure that the Driver Store configured with the Print Manager is running.

```
systemctl status novell-ipsmd.service
```

```
systemctl status novell-iprint-license.service
```

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

```
systemctl status iprint-cups.service
```

11 To upgrade to the next identified nodes in cluster, do the following:

11a Follow Step 1 to Step 5 on all the identified cluster nodes.

11b 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.

11c Stop the Mobile and CUPS service by executing the following commands:

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

```
systemctl stop novell-iprint-license.service
```

```
systemctl stop iprint-cups.service
```

11d Changes do not take effect until you take the resource offline, and bring it online again.

11e Login to **iPrint Console** on successful migration of a node.

6 Managing OES iPrint Advanced

iPrint Console (*ipcon*) is used to manage the features provided by `OES iPrint Advanced`. To access *ipcon*, specify either the host name or the IP address of `OES iPrint Advanced` 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.

NOTE: Ensure Print Manager is up and running in the tree.

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 that are configured with `OES iPrint Advanced`.

iPrint Console allows you to manage the following:

- "Printers" on page 31
- "WalkUp Printers" on page 39
- "Configuration" on page 42
- "Renderers" on page 43
- "Printer Map" on page 44
- "Printer Status" on page 44
- "Identity Card Release" on page 44
- "Identity Sources" on page 45
- "Advanced Authentication" on page 46
- "License" on page 47

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 42 and "Enabling Private Email Printing" on page 36.

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 32
- "Email Printing Commands" on page 33
- "Printing Using Email" on page 35

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 33
- "Additional Print Commands" on page 34

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 33 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	◆ **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	◆ **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.

◆ Secure printers cannot be configured for email printing.

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.

Editing a Printer

1 To view and modify the details of a printer, click the printer name.

2 You can modify the details as follows:

- ◆ **Name:** Displays the name of the printer.

- ◆ **Address:** Displays the IP address or host name of the printer.

- ◆ **Location:** (Optional) Local location of the printer.

- ◆ **Description:** (Optional) Specific description related to the printer.

- ◆ **Web upload using iPrint Portal:** This option enables the QuickPrint button in the iPrint Portal. Using any web browser, the user selects a file and prints. The user no longer requires client or driver installations.

- ◆ **Visible to all users in iPrint Portal:** By default, all printers are listed in iPrint Portal when a user is not logged in. If you want to hide some printers from the user who is not-logged in, then you can deselect this option.

- ◆ **Printer Status:** Displays the Health monitoring GUI to monitor the printer status.

- ◆ **Tags:** Specify a label for the printer. Multiple printers can be grouped under same label. In the iPrint Portal, it will be easier for the users to find a specific set of printers. For example, if you specify a tag as Color Printer. In the iPrint Portal, a user can easily locate specific printers by selecting the Color Printer tag.

3 Click **Save**.

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, Mobile App, or ID card.

You must associate drivers for printers when performing desktop printing.

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 either a Release Portal, Mobile App or ID card. 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 By default, the **Web upload using iPrint Portal** option is enabled. This enables the QuickPrint feature in the **iPrint Portal** and user can print files using any web browser. The user no longer requires client or driver installations.

6 By default, the **Visible to all users in iPrint Portal** option is enabled. This option lists all the printers in **iPrint Portal**. If you want to hide some printers from the user who is not-logged in, then you can deselect this option.

7 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.

8 Click **Next**.

9 Assign platform-specific drivers for the WalkUp printer.

If Windows drivers are selected, then bi-directional communication can be set for the WalkUp printer.

  9a Specify the IP Address or host name from the pool of printers that you have selected for WalkUp.

10 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 iPrint Console. For more information, see "Modifying the Job Hold Time" on page 40.

- **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://*<OES iPrint Advanced server address>*/user> or <https://**<OES iPrint Advanced server address>**/release-portal).

Printing a WalkUp Job

1. Using a web browser, specify the server address (https://<OES iPrint Advanced server address>/user) or (https://<OES iPrint Advanced 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://<OES iPrint Advanced server address>/user) or (https://<OES iPrint Advanced 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

This page allows you to download the remote renderer and also manage all the renderers. For managing the renderers, see .

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 Setting Up Location-Based Printing in the OES 2023: iPrint Administration Guide.

Printer Status

This page displays a global view of your print system. The tool displays the current status of Printer Agents, and lets you configure settings and generate reports about your print system.

For more information about the **iPrint Printer Status** tool, see the OES 2023: iPrint Manager Health Monitor Administration Guide.

Identity Card Release

A user can now print the WalkUp jobs by using their identity card. A card reader is placed adjacent to the printer and the user swipes his/her identity card to print the jobs.

1 The administrator configures the Ethernet 241 switch and card reader.

2 The card reader is attached to the printer.

3 The user prints to a WalkUp queue and job is put on hold.

4 The user swipes his/her identity card on the card reader.

5 The `OES iPrint Advanced` server validates the user credentials.

6 All the jobs in the WalkUp queue submitted by the user for that printer are printed.

`OES iPrint Advanced` works with RF IDeas Ethernet 241 devices. For more information on supported card types, see the RF IDeas product page.

How to Configure Identity Cards for OES iPrint Advanced

You must configure the `OES iPrint Advanced` server to allow the release of WalkUp jobs by using the identity cards:

1 Configure the Card (Ethernet 241) devices as per the instructions of the vendor.

2 Launch the **Ethernet 241 Web portal** (http://<ethernet241 device's IP)

    2a In **Server's** tab, specify the **Data Server IP** as the `OES iPrint Advanced` IP details.

    2b The **Data Server URl** as the `OES iPrint Advanced` URL (http://hostname or IP of OES iPrint Advanced).

    2c In the **Data Server Str**, specify the exact value given below:

```
/iprint/users/
release?csn=$1&mac=$2&luid=$3&seq=$4&ip=$5&devmac=$6&devip=$7&rdr=$
8&fwver=$9
```

    2d Click on **Update** to configure the device with the details of `OES iPrint Advanced`.

3 Launch **iPrint Console** and in the Identity Card Release page, specify the following details:

    3a **Enter the attribute names that are mapped with the user's identity cards:** Specify the attribute that maps the user to their identity card. When releasing the WalkUp job, `OES iPrint Advanced` maps this attribute to the attribute specified in eDirectory and on receiving the user details, authenticates the user. On successful authentication, the jobs are released.

    3b **(Optional) Search Context for Users:** Specify the context to search the user object.The OES Common Proxy user will be given `Compare` rights on this context to read the card attributes for all the users.

        If no context is specified, the users are searched in the complete tree. This will take longer time to return the user objects.

        Search Subtree: Select whether you want to search for users in containers below the specified DN (that is, in subtrees).

    3c **Release WalkUp jobs only with identity cards:** Select this option to release the WalkUp jobs only by using the identity cards. On enabling this option, WalkUp jobs cannot be released using the Mobile App or Release Portal.

Identity Sources

Configure Azure Active Directory (Azure AD) users to print jobs by using iPrint application.

Configuring Microsoft Identity Source

Ensure all the prerequisites are met before configuring Microsoft Identity in the iPrint Console.

Option, Field, or Button	Information and/or Action
Directory (tenant) ID	Specify the unique identifier generated for iPrint in the Azure AD portal.
Application (client) ID	Specify the identifier that is set up as an application in the directory instance.
Client Secret	Specify the secret key value that will be used when communicating with Azure AD server.
API Scope	Specify the scope, so you can provide permissions-based access to iPrint resources to authorized users and client apps that access your API.
New Group	Create a group called IPRINT_ACCESS_GROUP and add AzureAD Users/Groups to that group.
Save	Click this to save your changes.
Delete	Click this to delete to configured Azure server.

Advanced Authentication

`OES iPrint Advanced` supports Advanced Authentication for the users releasing the WalkUp jobs. Only Card or combination of a Card and a Smartphone is used for multi-factor authentication. The Smartphone method is used for authentication through your Smartphone that uses an app to perform the out-of-band authentication. The authentication method must be in order of Card and Smartphone. We do not support only Smartphone or changing the order to Smarphone and Card.

For more information about using the Advanced Authentication Framework, see the Advanced Authentication - Administration documentation website.

The following steps describe the authentication flow for Card and a Smartphone authentication:

1 To release a print job, when a user swipes the identity card, the authentication request is initiated and `OES iPrint Advanced` contacts the Advanced Authentication server.

2 The Advanced Authentication server validates the user's card data.

3 After validating the data, the Advanced Authentication server sends a push message to the user's Smartphone to inform that an authentication request has been initiated.

4 When the user opens the Smartphone app, the app reaches the Advanced Authentication server to validate if there is an authentication needed. The authentication is indicated by the **Accept** and **Reject** options. The user's selection is then sent to the server.

5 The server validates the authentication and `OES iPrint Advanced` releases all the print jobs of the user for that printer.

Prerequisites

◆ Ensure that the `OES iPrint Advanced` users are available in the Advanced Authentication server. If the users are not available on both the servers, authentication will fail.

◆ Configure the Advanced Authentication server with the following:

— Authentication Chain with the authentication method as Card and Smartphone or only Card

— Authentication Event with the event type as Generic

— Endpoint with type as Other

   NOTE: Ensure that a Owner is not set for the Endpoint that is configured for the `OES iPrint Advanced`.

◆ Endpoint ID and Endpoint Secret should be available before configuring Advanced Authentication in the **iPrint Console**.

Configuring Advanced Authentication

Ensure all the prerequisites are met before configuring Advanced Authentication in the **iPrint Console**.

Configure Advanced Authentication

☑ Enable Advanced Authentication

Advanced Authentication support is enabled for iPrint users when WalkUp jobs are released with identity cards. Specify the details that you created in the Advanced Authentication Administrative Portal.

Advanced Authentication Server Address : [   ]

Event Name : [   ]

EndPoint Name : [   ]

EndPoint ID : [   ]

EndPoint Secret : [   ]

(Save) (Reset)

Enable Advanced Authentication: Select this to enable advanced authentication for iPrint users when releasing the WalkUp jobs by using their identity cards.

Option, Field, or Button	Information and/or Action
Advanced Authentication Server Address	The hostname or IP address of the Advanced Authentication server that you want to use for authentication.
Event Name	Specify the name that you created in the Advanced Authentication Administrative Portal. If inaccurate name is provided, the users will be unable to release their WalkUp jobs.
Endpoint Name	Specify the name that you created in the Advanced Authentication Administrative Portal.
Endpoint ID	Specify the value that is automatically generated when you use the Advanced Authentication Administrative Portal to create a Endpoint. You can copy the ID from the portal and paste it here.
Endpoint Secret	Specify the value that is automatically generated when you use the Advanced Authentication Administrative Portal to create a Endpoint. You can copy the secret key from the portal and paste it here.
Save	Click this to save your changes.
Reset	Click this to clear the changes you have made.

License

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

`OES iPrint Advanced` ships with a 90-day trial license. The type of licenses are:

- Trial License
- Enterprise License
- Desktop License
- Mobile License

Trial License This is a 90-day license to evaluate the advanced features of desktop and the features on the mobile devices.

Enterprise License This license provides printing from Desktop, Mobile devices, and any email-enabled devices.

The major features offered are WalkUp, Identity Card release, and QuickPrint (Web printing). An iPrint extension is also available to print from Chromebook.

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. On expiry of the trial license, the entitled desktop features will stop working, however, OpenText iPrint desktop features will continue to work uninterruptedly.

Mobile License This license provides printing from mobile devices.

You can obtain a new license key from Micro Focus Customer Center.

NOTE: Micro Focus is now OpenText.

Updating the iPrint License

Apply multiple licenses, overwrite the existing license, or delete a 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.

Replacing existing license file: Browse and upload a new license (.xml) file to overwrite the existing license file.

Upload additional license file: This option is available to apply an addition license (.xml). This functionality helps applying multiple licenses.

7 Document Rendering

iPrint provides a client-independent and driverless printing environment to mobile users.

Overview

What Is a Renderer?

iPrint now supports printing from mobile devices that have limited abilities to convert documents into print-ready formats. On desktop platforms, the documents are usually converted to 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 must be provided by the Print Service. 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 OES iPrint Advanced server using our built-in solution known as Local Renderer. Printing quality varies, depending on the document complexity so for enhanced desktop-quality printing, you can use the Remote Renderer on a Windows platform.

You can view the Local renderer and list of remote renderers in the **iPrint Console > Administration > Renderers**.

The renderers support broad range of document formats. For more information, see "Supported Document Formats By the Local Renderer and Remote Renderer" on page 81.

Local Renderer

`OES iPrint Advanced` server is bundled with a built-in document renderer known as Local Renderer. The renderer converts documents to the PDF format, and then converts them to the print-ready format using CUPS. The renderer supports multiple formats, has a multithreading feature, and provides limited support for Microsoft Office formats. If a printer does not have a driver associated with it, the default printer driver PostScript is automatically used to print documents.

Remote Renderer

OES iPrint Advancedserver also ships with a Remote Renderer. For enhanced desktop-quality printing, you can use the Remote Renderer. The remote renderer can be downloaded from the iPrint Console and installed on a Windows 64-bit computer.

The remote renderer provides high quality rendering for different formats. The remote renderer job might take some additional time to complete the print jobs in comparison to the local renderer. If you do not want to use the built-in PDF renderer, you can also install Adobe Acrobat Pro for PDF rendering. However, if you are printing PDF using a built-in pdf renderer, then there can be some minor print quality differences such as color shade difference in the PDFs.

The remote renderer communicates with iPrint server for document conversion. Although, it is not a mandatory requirement, the remote renderer is recommended for desktop quality printing.

Key Features

Multi-driver Support

You can configure the local and remote renderer to use multiple drivers for different mobile enabled printer agents. The renderer installs the unique drivers associated with various mobile enabled printer agents, on the renderer machine. During the rendering of jobs, the correct printer driver is selected based on the printer agent to which the job is being submitted for rendering.

If a printer agent does not have any driver associated with the renderer platform, the renderer uses the default driver for rendering the jobs sent to those printer agents. You can select a default driver when adding a renderer from the iPrint Console. Also, an option to change the default drivers is available.

For information on how to upload drivers to the Driver Store, see Managing the Driver Store in the OES 2023: iPrint Administration Guide.

Secure and Non-secure Communication Support (Remote Renderer)

The remote renderer can communicate over secure and non-secure channels with the iPrint server. By default, the `OES iPrint Advanced` server is set to communicate in non-secure modes.

Secure Communication Mode: When this mode is used, only the secure remote renderers can communicate with the iPrint server.

Non-secure Communication Mode: When this mode is used, both secure and non-secure remote renderers can communicate with the iPrint server.

You can verify the mode of the renderer in the **Renderers** page under the **Secure Mode** column.

- If the **Secure Mode** column displays **false**, then the renderer is in a non-secure communication mode.
- If the **Secure Mode** column displays **true**, then the renderer is in a secure communication mode.

Automatic Printer Driver Updates

The local and remote renderer supports the Automatic Driver Update feature. When a printer driver is updated on the Drive Store, or if the association of a particular printer agent is changed, the driver is automatically updated on the renderer.

Local Renderer: All the jobs submitted for printing is rendered by the driver that is currently associated with the printer. However, the first print job that is sent for printing after the driver association change may take some time to be rendered depending on the size of the driver.

Remote Renderer: All the jobs submitted for printing is rendered by the driver that is currently associated with the printer. However, the first print job that is sent for printing after the driver association change may take some time to be rendered depending on the size of the driver. This is because the remote renderer installs the driver first and then processes it for rendering.

Printer Rename and Redirection (Remote Renderer)

If a printer is renamed or redirected through the **iPrint Console**, the remote renderer automatically updates its Advanced server to associate the correct printer drivers with the printer.

When you redirect a printer, the printer driver associated with the destination printer is used for rendering.

Deploying a Remote Renderer

For desktop quality printing for Microsoft Office and PDF documents, you must install a remote renderer on a Microsoft Windows 64-bit system.

Before installing and configuring the remote renderer, ensure that you have met the requirements listed in "Remote Renderer Requirements" on page 15.

NOTE: If you have upgraded to OES 2018 SP2 or later from OES 2015 SP1 or earlier server, then you need to perform additional steps before using the remote renderer in a secure mode. For more information, see "Using Secure Remote Renderer When Upgraded From OES 2015 SP1 or Earlier Versions" on page 56.

- "OES iPrint Advanced Server" on page 52
- "Windows Machine" on page 54

OES iPrint Advanced Server

Prerequisites

◆ At least one printer driver is uploaded to the Driver Store for the Windows platform on which you are setting up the renderer. This is required because when you add a remote renderer from the **iPrint Console**, you must designate one driver as the default driver for the renderer.


NOTE: It is recommended that you upload a universal printer driver such as HPUPD, and set that as the default driver.

Secure/ Non-Secure Communications With OES iPrint Server Advanced

The remote renderer communicates over both secure and non-secure channels with the `OES iPrint Advanced` server. By default, the `OES iPrint Advanced` server is set to communicate in non-secure modes. To modify the communication channel, do the following:

1 On a web browser, specify either the host name or the IP address of `OES iPrint Advanced` server and in case of cluster setup, specify the resource IP. For example, https://iprintadvanced.example.com/ipcon or https://10.0.0.1/ipcon.

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

3 Under **Administration**, click **Renderers**. All the available renderers are displayed.

4 Click the 🔒 **Secure settings for renderers** icon. This setting impacts all the renderers displayed on this page.

The Secure Communication Settings window is displayed.
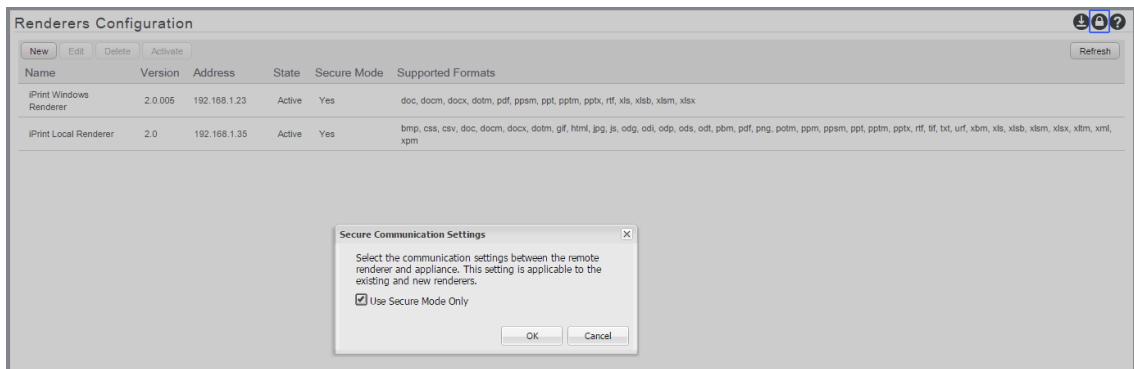
5 **Secure Communication:** If you have configured the Remote Renderer to secure mode in , then select the **Use Secure Mode Only** check box and click **OK**. The `OES iPrint Advanced` server will now accept only secure communications. The non-secure renderers will fail to communicate with the server and no jobs can be rendered by those renderers.

or

Non-Secure Communication: Deselect the **Use Secure Mode Only** check box, then click **OK**. The `OES iPrint Advanced` server will now accept both secure and non-secure communications from the renderers.

Secure Communication Mode

The OES iPrint Advanced server accepts both secure and non-secure communication. To set only secure communication mode, you must ensure that the renderer is secure and the `OES iPrint Advanced` server accepts only secure communications. Do the following:

1 On the OES server, generate the `.pfx` file - "Generating PFX File" on page 53.

2 Install and configure Remote Renderer - "Installing and Configuring the Remote Renderer" on page 55.

3 Additional steps to accept secure communication between OES iPrint Advanced and Remote Renderer - "Secure/ Non-Secure Communications With OES iPrint Server Advanced" on page 52.

Generating PFX File

1 On to the OES server, run `sh /opt/novell/iprintmobile/bin/certman_oes.sh -c` to generate the CSR file. This generates a `iprint_renderer_cert.csr` file in the `/etc/opt/novell/iprintmobile/conf/certs` folder.

2 Copy the `iprint_renderer_cert.csr` file to a iManager workstation.

3 On the iManager workstation, generate the digital certificate using the `.csr` file and eDirectory.

   3a In iManager, go to **NetIQ Certificate Server > Issue Certificate**, select the `iprint_renderer_cert.csr` file, then click **Next**.

   3b Under **Key type**, select the option **SSL or TLS**. Under **Extended key usage**, select the options **Server authentication** and **User authentication**, then click **Next**.

   3c Under **Certificate Type**, select the option **End Entity**, then click **Next**.

   3d In the remaining screens, click **Next** and continue with the default options. Verify the certificate and click **Finish**.

   3e To download the `iprint_renderer_cert.der` file, click **Download the issued certificate**.

4 Copy the `iprint_renderer_cert.der` file in the `/etc/opt/novell/iprintmobile/conf/certs` folder.

5 Run `sh /opt/novell/iprintmobile/bin/certman_oes.sh -g` to generate the PFX file. This generates a `iprint_renderer_cert.pfx` file in the `/etc/opt/novell/iprintmobile/conf/certs` folder.

Windows Machine

Prerequisites

You must assign **Log on as a service** rights to the account with which you want to set up the renderer.

Assigning Log On as a Service Rights

1 On your Windows computer, click **Start > Control Panel**.

2 In the upper-right corner of the Control Panel window, click the **View by** drop-down menu, then select **Large icons**.

3 Go to **Administrative Tools > Local Security Policy**.

4 In the left pane, double-click **Local Policies**.

5 Click **User Rights Assignment**.

6 In the right pane, under **Policy**, double-click **Log on as a service**.

7 Click **Add User or Group**.

8 Specify the user name in the **Enter the object names to select** box, then click **Check Names**.

9 Click **OK** after the user is displayed.

10 Click **OK**.

11 Click **OK**, then close the Local Security Policy window.

Downloading the Remote Renderer

1 On a web browser, use either the host name or the IP address to access the **iPrint Console**. For example, https://10.0.0.1/ipcon or https://iprint.example.com/ipcon.

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

3 Under **Administration**, click **Renderers**.

4 Click the ⬇ icon in the upper-right corner of the screen.

NOTE: The remote renderer installation interface is not available in Slovak, Hungarian, Netherlands Dutch, or Catalan languages

A zip file named `iPrintRendererBundle.zip` is downloaded. This zip file contains a `setup.exe` file, `iPrintRendererSetup.msi` file, `ReadMe.txt`, and a `.pfx` certificate file.

Continue with installing and configuring the remote renderer.

Installing and Configuring the Remote Renderer

1 Unzip the `iPrintRendererBundle.zip` file, then launch the `setup.exe` file. Follow the on-screen prompts to complete the installation procedure.

2 When the installation is complete, launch the command prompt in the **Run as administrator** mode.

3 Run the command `iPrntRendCmd -c` to configure the remote renderer.

   3a If you want to configure the remote renderer over a secure channel, copy the `.pfx` file into the `C:\NDPS\Renderer\certificates\` folder. The `.pfx` file is generated on the OES server - "Generating PFX File" on page 53.

4 When prompted for **Do you want to configure the remote renderer over secure channel**, depending on your requirement, specify **Yes** or **No**.

   4a When you specify **Yes**, the renderer is configured in a secure mode. You should perform additional steps for the `OES iPrint Advanced` server to accept only secure communications. For more information, see "Secure/ Non-Secure Communications With OES iPrint Server Advanced" on page 52.

   4b When you specify **No**, the renderer is configured in a non-secure mode. You need to perform additional steps to ensure that `OES iPrint Advanced` server accepts non-secure communications. For more information, see "Secure/ Non-Secure Communications With OES iPrint Server Advanced" on page 52.

5 When prompted for credentials, specify your credentials.

On successful configuration, you must register the Remote Renderer.

Registering the Remote Renderer

1 In the **iPrint Console**, under **Administration**, click **Renderers**.

2 Click **New**.

3 In the **Renderer Host/IP address** box, specify the hostname or IP address of the renderer system, then click **Connect**.

4 Under Options, specify a name for the renderer in the **Renderer Name** box.

5 Select the document formats you want the remote renderer to render.

6 Choose the **Default Printer Driver**, then click **Register**.

After you click the **Register** button, a success message is displayed, but the remote renderer is still configuring. The OES iPrint Advanced server time depends on the number of unique drivers associated with mobile enabled printers. During that period, the renderer is in the **Configuring** state. After the registration is complete, the renderer changes to the **Active** state. When the status of the remote renderer displays **Active**, it means that the registration is successful. Refresh the page after a couple of minutes to check the status.

Using Secure Remote Renderer When Upgraded From OES 2015 SP1 or Earlier Versions

Perform the following steps:

1 Log on to iManager with the admin privileges.

2 **Update the CRL object "One" to include the default CRL distribution points:**

   2a Click **Roles and Tasks** > **NetIQ Certificate Server** > **Configure Certificate Authority**.

   2b Click **CRL**, then **One**.

   2c Under **CRL Distribution Points**, click **Add defaults**.

   2d Click **OK**.

3 **Repair Default Certificates:** To add the CRL distribution point in the server certificate

   3a Click **Roles and Tasks** > **NetIQ Certificate Server** > **Repair Default Certificates**.

   3b Select the server to repair the server, then click **Next**.

   3c In **Choose default certificate options**, select the following options:

   ◆ **Yes All Default Certificates will be overwritten**

   ◆ Select **Create SSL CertificateIP**, select the DNS server that is discovered by default

   ◆ Under **Default DNS Address**, select the default DNS address.

   ◆ Click **Next**.

   ◆ Verify the details and click **Finish**.

4 **Restart eDirectory and iPrint Services**

   4a (Standalone Server) Restart the following services on a Standalone OES 2023 server:

   ◆ To restart the eDirectory service, run `rcndsd restart`

   ◆ To restart the Apache service, run `rcapache2 restart`

   ◆ To restart Print Manager, run `rcnovell-ipsmd restart`

   ◆ To restart the Mobile server, run `rcnovell-iprint-mobile restart` (for standalone server)

4b (Cluster) Login to the terminal of the node where the cluster pool is running and perform the following steps:

    4b1 Restart the following services:

        ◆ To restart the eDirectory service, run `rcndsd restart`

        ◆ To restart the Apache service, run `rcapache2 restart`

        ◆ To restart Print Manager, run `rcnovell-ipsmd restart`

    4b2 To recreate the certificate and keystore for the mobile server, run the command:

      `sh /opt/novell/iprintmobile/bin/yast_mobile_config.sh -c`

    4b3 Move the cluster pool to another node.

4c Perform steps in Step 4b on all the cluster nodes.

4d After successfully performing Step 4c, restart mobile service as follows:

  `rcnovell-iprint-mobile restart`

Proceed with "Deploying a Remote Renderer" on page 51.

Managing the Remote Renderer

The management of remote renderer is supported from the **iPrint Console**. You can additionally, use the command line interface by launching the command prompt in the **Run as administrator** mode and executing the `iPrntRendCmd` command.

On the Renderers page, you can perform the following actions:

- "Add a Renderer" on page 57
- "Edit a Renderer" on page 58
- "Delete a Renderer" on page 58
- "Activate or Deactivate a Renderer" on page 58

Add a Renderer

1 Under **Administration**, click **Renderers**.

2 Click **New**.

3 In the **Renderer Host/IP address** box, specify the host name or IP address of the renderer system, then click **Connect**.

4 Under Options, specify a name for the renderer in the **Renderer Name** box.

5 Select the document formats you want the remote renderer to render.

NOTE: The **Build-in PDF renderer** is selected by default. If you want to use Adobe Acrobat, you must ensure that Adobe Acrobat Pro is installed on the renderer machine before selecting the **Adobe Acrobat** option. Similarly, if you want to enable the remote renderer to render Microsoft Office formats, you must ensure that Microsoft Office is installed on the renderer machine before selecting the **Office Support** option.

---

6 Choose the **Default Printer Driver**, then click **Register**.

Edit a Renderer

You can change a remote renderer's name, the document rendering options, and the default printer driver using the **Edit** feature on the Renderers page.

1 Under Administration, click **Renderers**.

2 Select a renderer which you want to edit, then click **Edit**.

3 Modify the details, then click **Commit**.

Delete a Renderer

1 Under Administration, click **Renderers**.

2 Select a renderer that you want to delete, then click **Delete**.

Deleting a renderer unregisters the renderer from the `OES iPrint Advanced` server.

Activate or Deactivate a Renderer

1 Under Administration, click **Renderers**.

2 Select a renderer that you want to activate, then click **Activate**.

The renderer is now in an active state.

If the renderer is in an Inactive state, it will not render any jobs. Deactivating a renderer does not unregister the renderer from the server.

8 OES iPrint Advanced on Client Workstations

This section describes how to install iPrint Client and printers on your workstation by using **iPrint Portal**. When a printer is selected for installation, OES iPrint verifies if the iPrint Client is installed and then installs it if necessary. If iPrint Client is already installed, the printer driver is downloaded and the printer is installed on your workstation.

You can distribute the client to user's workstations in a variety of ways. Refer to the see Installing and Setting Up iPrint on Your Server in the OES 2023: iPrint Administration Guide.

- "Installing the iPrint Client" on page 59
- "iPrint Portal: Installing Printers" on page 60
- "iPrint Portal: QuickPrint" on page 61
- "Windows: Context Menu-based Desktop Printing" on page 62
- "MAC: Automatic Update Notification" on page 64

Installing the iPrint Client

You can use iPrint Client to install the printers on your workstation. The client is located in the `/var/opt/novell/iprint/htdocs` directory.

iPrint Portal

To access **iPrint Portal**, specify **https://<iPrint_Advanced_IP_or_hostname>/print** in the web browser. To download iPrint client, click **Download iPrint Client**.

Figure 8-1   iPrint Portal
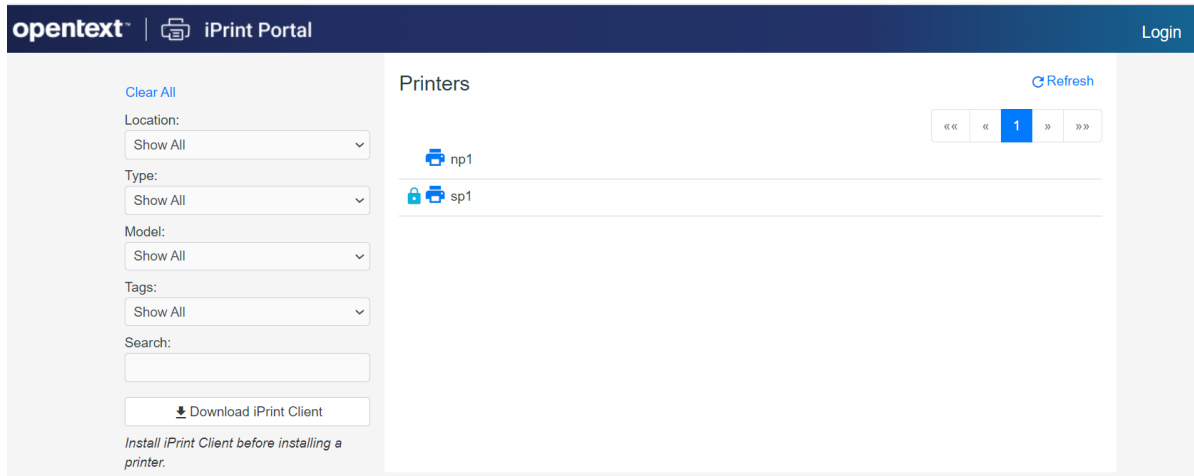
iPrint Portal: Installing Printers

A new printer portal with intuitive GUI that includes QuickPrint functionality, search and quick access (bookmark) to printers based on filters.

To access iPrint Portal, specify **https://<iPrint_for_OES IP or hostname>/print**
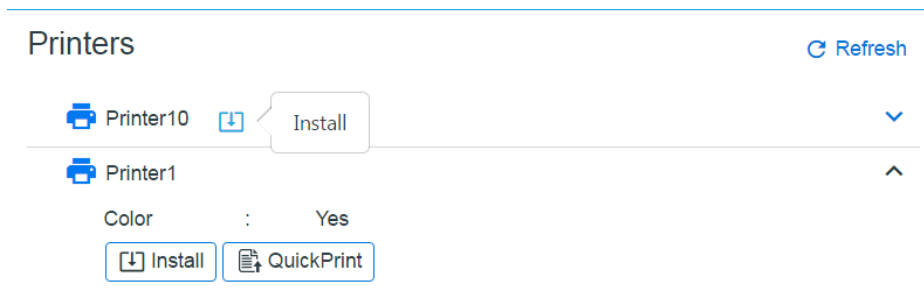
Installing a Printer: To install a printer, hover the cursor on the printer and click [icon]. You can also expand a printer to view the printer properties and then click **Install**. The installation of secure and WalkUp printers is controlled through ACLs set for that user.

Figure 8-2   iPrint Portal Printer Installation

Quick Access (bookmark) Printers: Printers can now be filtered on location, type, model, and tags. You can also filter with the **Search** field, just type description or any such printer details. The browser url can be bookmarked and shared.

Figure 8-3   *Filter Printers*

iPrint Portal: QuickPrint

QuickPrint is printing documents via a Web browser. iPrint service renders and coverts the document into a print-ready format using the renderer, hence, no drivers are required to be associated with the printer.

Using any web browser, the user selects a printer and document, then prints. The QuickPrint feature is controlled through ACLs set for that user.

To print using web browser, do the following:

1 Launch the iPrint Portal (**https://<iprintforoes_IP or hostname>/print**).

2 Expand a printer and click **QuickPrint** or select the **QuickPrint** icon next to a printer.

Figure 8-4   *Expand Printer to View QuickPrint*

Figure 8-5 QuickPrint Adjacent to a Printer
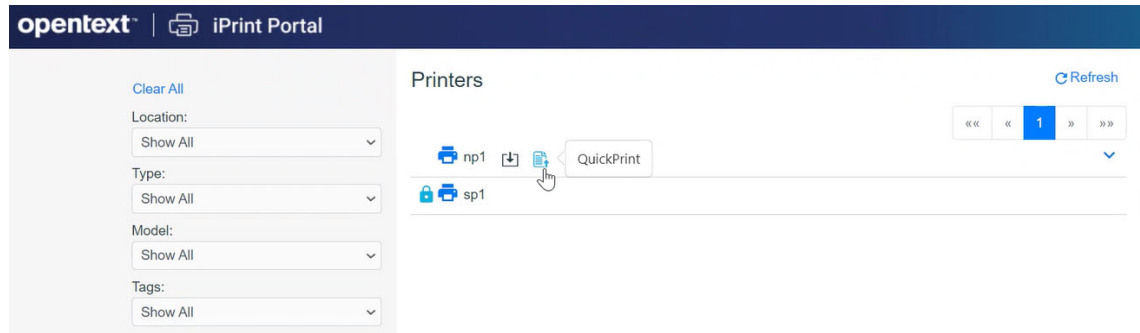
3 Select a file, modify the printer options and click **Print**.
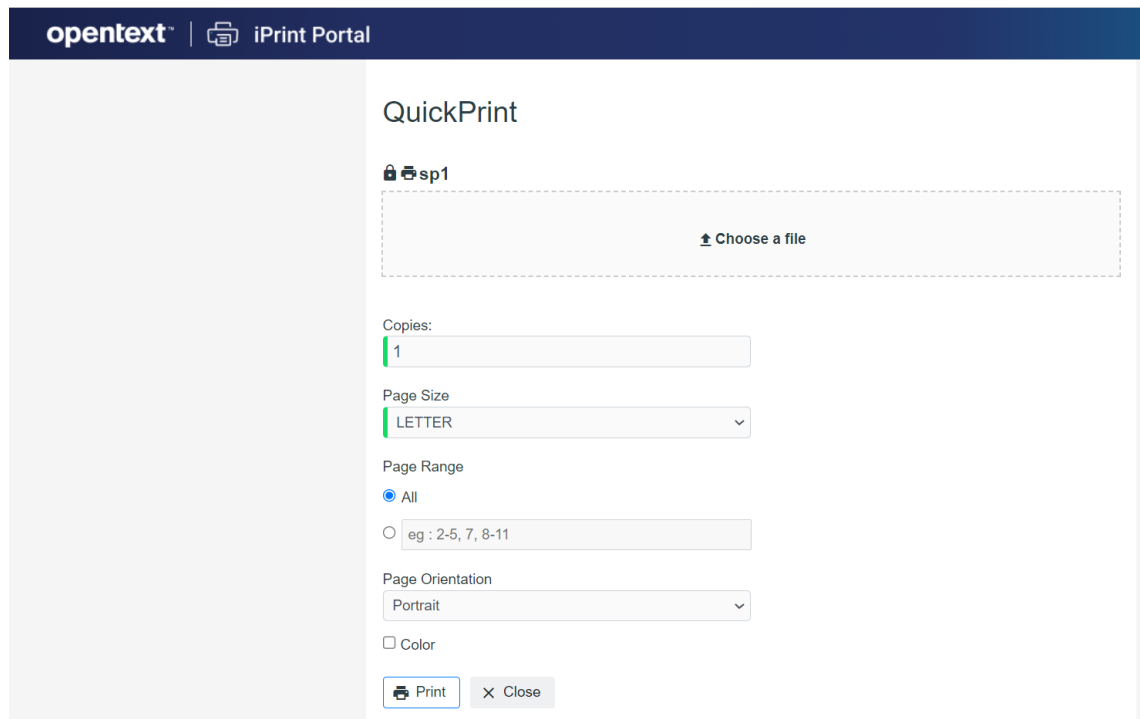
Windows: Context Menu-based Desktop Printing

iPrint is now available as a context menu option on Windows. To print from the Context menu do the following:

1 Right-click a file or files, then select iPrint, an iPrint dialog is displayed.

You can print without opening a document. For example, if you received a document in an email, and no application is available to view it, you can still print with the context menu option.

2 Click **Select a printer**.

   2a The recently used printers are populated in the drop-down menu of **Printer**. Select a previously used printer or Click **Choose printer** to select a different printer.
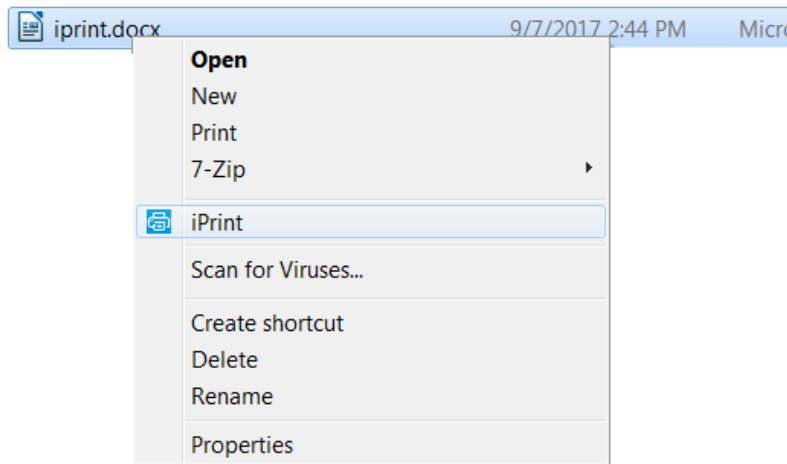
   2b Specify an iPrint server and click **Find**.
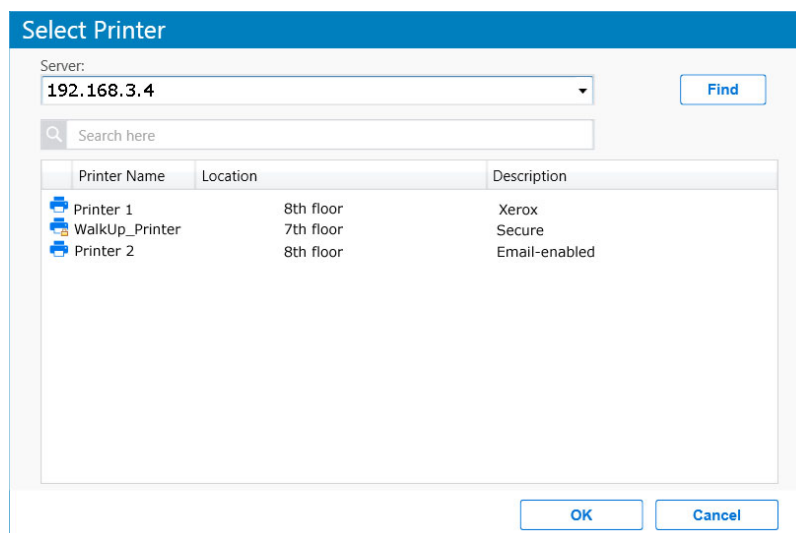
   For secure or a WalkUp printer, you must login to the server. On logging in, printers are displayed through ACLs set for that user. You can login using only the username or in a LDAP format (comma separated).

3 Click **Print**. The documents are successfully printed.
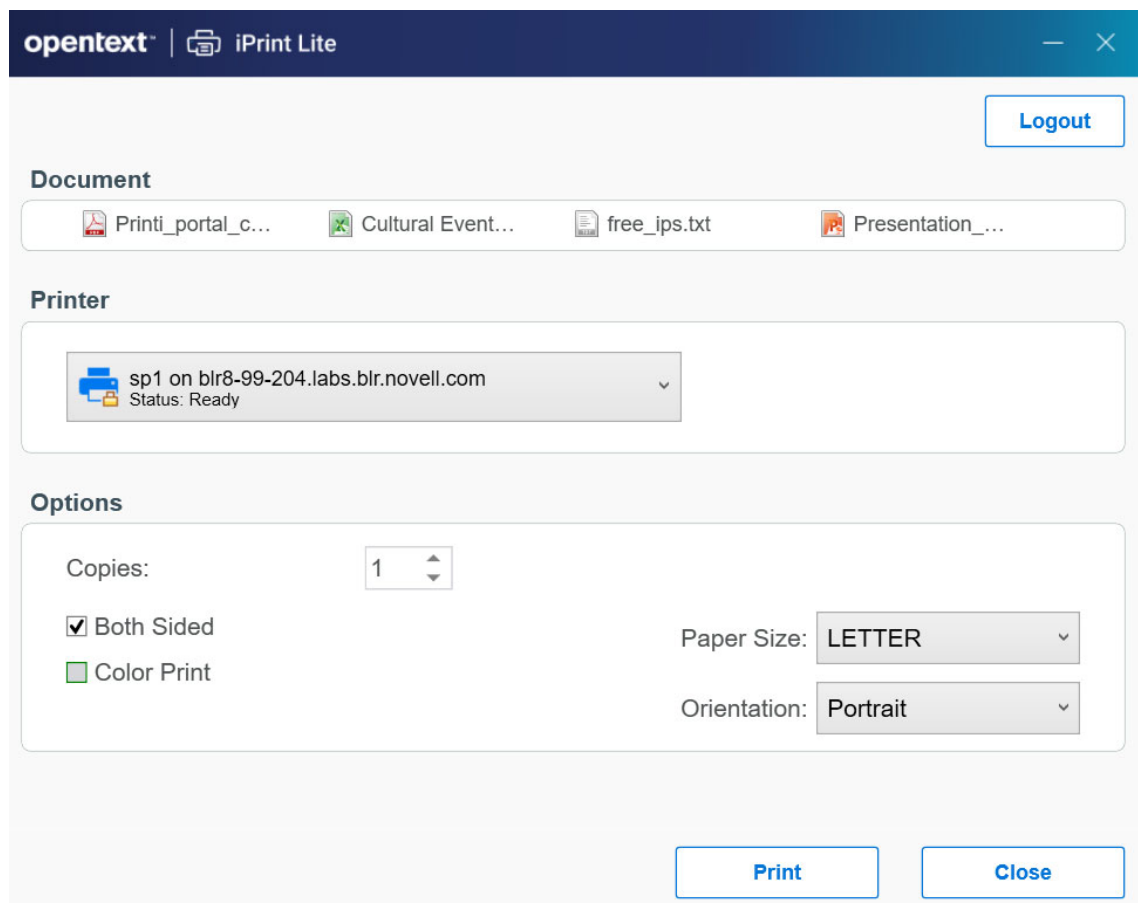
The **Options** displayed are set in the **Mobile > Global Settings** page of the **iPrint Console**. The values can be changed as per your printing requirements.

NOTE: If some file formats are not supported for printing, the file will not be listed for printing.

The info icon ⚠ lists the unsupported files.

To see the list of supported file formats, see TID 7022058.

MAC: Automatic Update Notification

When the MAC workstation boots up, iPrint checks the default printer to ensure that the workstation is using the latest iPrint Client. If necessary, a notification is launched to update the newer client. The notification provides you two options:

- Update: Click Update for downloading the client and launch the installer for updating the client.
- Later: Click **Later** five times after which the iPrint Client is forcefully downloaded on the workstation and client installer is launched

If the notifications are disabled on the client workstations, then the user can click the **Check for Updates** option from the tray menu.

Printers
Job Status
Message Board
Configuration
Find/Install Printers
About
Check for Updates

Hide Tray Icon
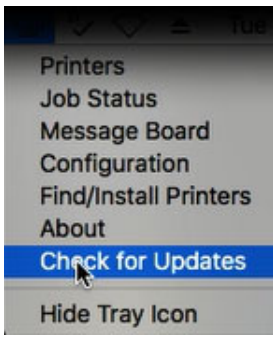
9 Mobile Device Management (MDM)

- ◆ "Managing the iPrint App with ZENworks Configuration Management 2017" on page 67
- ◆ "Managing the iPrint App with ZENworks Mobile Management 3.2.x" on page 68
- ◆ "Configuring Ivanti Neurons to Manage the iPrint App" on page 69

Managing the iPrint App with ZENworks Configuration Management 2017

The 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 9-1 *iPrint Key-Value Pairs*

Key	Value
server	Specify the URL of your iPrint site. For example, iprint.acme.com.
server1	When specifying multiple servers, the subsequent servers will be server2, server3, and so forth. You can provide same or different user for each server.
username	Specify ${LoginName} for ZENworks to automatically populate the app with the login name of the ZENworks user. Alternatively, you can specify name of an individual user.
configLocked	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 9-2 *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 9-3 *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 OpenText iPrint App available in the Google Play Store is enabled for ZMM. You can now manage the OpenText 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 Ivanti Neurons to Manage the iPrint App

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

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 Ivanti Neurons

Adding the Android iPrint App

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

1 Download the OpenText iPrint for Ivanti Neurons Appconnect `(*.apk)` file from the Novell downloads site (https://download.novell.com).

2 Upload the file to Ivanti Neurons:

   2a In the Ivanti Neurons 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: `OpenText 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 OpenText 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 Ivanti Neurons, 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 Ivanti Neurons 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 `OpenText iPrint`.

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

1f Click **Search**.

1g Click **Import** next to the OpenText 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 OpenText 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 OpenText 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 Ivanti Neurons" on page 71
- "Key-Value Pairs" on page 71
- "Modifying the Android iPrint App Configuration for Ivanti Neurons" on page 72

Creating the iOS iPrint App Configuration for Ivanti Neurons

1 In the Ivanti Neurons 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 9-4, "iPrint Key-Value Pairs," on page 71. 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 9-4 *iPrint Key-Value Pairs*

Key	Value
server	Specify the URL of your iPrint site. For example, iprint.acme.com.
server2	When specifying multiple servers, the subsequent servers will be `server2`, `server3`, and so forth. You can provide same or different user for each server.
user	Specify `$USERID$` for Ivanti Neurons to automatically populate the app with the users' Ivanti Neurons user ID. Alternatively, you can specify an individual user's user ID.
configlocked	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 9-5 *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 9-6 *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 Ivanti Neurons

1 In the Ivanti Neurons 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 69.

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 `OpenText 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 9-4, "iPrint Key-Value Pairs," on page 71. 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 Ivanti Neurons if this is the first time your organization is using Ivanti Neurons 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 Ivanti Neurons. Even in this scenario, you must push the app to their device via Ivanti Neurons. (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 OES iPrint Advanced

The following are some common troubleshooting issues:

Unable to Login to IPCON After Upgrade

In a cluster setup, if you are unable to login to IPCON due to an OrientDB issue, then follow the TID 7024959 to resolve it.

Post Printer Migration, Unable to Login to Mobile App and Access Secure Printers

Post printer migration, logging in to the iPrint mobile app fails. Also, printing to secure printers fails when using **iPrint Portal** and Context-menu "iPrint" option. To resolve this issue, users can log in to the Mobile apps or secure printers by using the FQDN format (cn=admin,o=microfocus). To enable logging through the CN format, you must modify the trustee rights of the user container:

1. Login to iManager (https://*<IP Address or host name of OES iPrint Advanced server>*/nps).
2. Under **Roles and Tasks**, click **Rights > Modify Trustees.**
3. Browse and select the user container whose trustee you want to modify.
4. Click **Assigned Rights** link for that trustee.
5. To add the CN property, click **Add Property**, then click **Show all properties in schema** and click **OK**.
6. In **Modify Trustees**, select **Inherit** for CN property, then **Done** and **OK**.

You can successfully login to mobile apps and print through secure printers by using the FQDN format.

Allow Users to Log in to Apps and Portal in the CN Format

Users can log in to the mobile apps, Release Portal, and iPrint Portal only in the FQDN format (cn=admin,o=microfocus). To enable logging through the CN format, you must modify the trustee rights of the user container:

1 Login to iManager (https://*<IP Address or host name of OES iPrint Advanced server>*/nps).

2 Under **Roles and Tasks**, click **Rights > Modify Trustees.**

3 Browse and select the user container whose trustee you want to modify.

4 Click **Assigned Rights** link for that trustee.

5 To add the CN property, click **Add Property**, then click **Show all properties in schema** and click **OK**.

6 In **Modify Trustees**, select **Inherit** for CN property, then **Done** and **OK**.

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 `OES iPrint Advanced` 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>`

   Th 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:

- Users should login to mobile apps, Release Portal, and iPrint Portal in FQDN format (cn=admin,o=microfocus).

- You must restart the mobile server on changing the driver store from local to remote or vice-versa. The command to restart the mobile server is `rcnovell-iprint-mobile restart`.

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

B ^B OES iPrint Advanced Support Matrix

This section provides information on the following.

- "Mobile Server Support" on page 79
- "Mobile Operating System Support" on page 79
- "iPrint Console Support" on page 80
- "Ivanti Neurons Support" on page 80
- "Remote Renderer" on page 80
- "Supported Document Formats By the Local Renderer and Remote Renderer" on page 81
- "Clients for Email Printing" on page 82

Mobile Server Support

Table B-1   *Moblie Server Support*

Features	Version
Email	- GroupWise 18.4.x - 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	16.x 15.x 14.x 13.x 12.x

Type	Version
Android	◆ Android 13 (13.x)
	◆ Android 12 (12.x)
	◆ Android 11 (11.x)
	◆ Android 10 (10.x)
	◆ Pie (9.x)
	◆ Oreo (8.x)
	◆ Nougat (7.x)
Amazon Kindle	Fire Phone OS 4.6.6.1

iPrint Console Support

Table B-3 *Management Console Support*

Access	Version
Browser	◆ Microsoft Edge
	◆ Firefox
	◆ Chrome
	◆ Safari latest on Mac
	◆ iOS 10.x or later tablet with default browsers
	◆ Android 6.x or later tablet with default browsers

Ivanti Neurons Support

Table B-4 *MobileIron Support*

MobileIron Core Version	iPrint Mobile App Version
9.3	3.0.x mobile app for iOS and Android
8.5	2.0 mobile app for iOS and Android
7.5	1.1 mobile app for iOS and Android

Remote Renderer

- ◆ Table B-5, "Operating Systems Support," on page 81
- ◆ Table B-6, "Software Support," on page 81

Table B-5 *Operating Systems Support*

Support	Version
Operating System	◆ Windows 10 64-bit Enterprise
	◆ Windows 8.1 64-bit Enterprise
	◆ Windows 2016 Standard
	◆ Windows 2012 R2 Standard
	◆ Windows 2008 R2 64-bit Enterprise
	◆ Windows Vista (32-bit and 64-bit)

Table B-6 *Software Support*

Support	Version
Microsoft Office	◆ Ms Office 2016 (64-bit) Standard
	◆ Ms Office 2013 (32-bit and 64-bit) Standard
Adobe Acrobat	Adobe Acrobat XI Professional

Supported Document Formats By the Local Renderer and Remote Renderer

Table B-7 *Local Renderer Supported Document Formats*

Software	File Formats
OpenDocument	ODT, ODP, ODG, ODS
Graphics	JPG, BMP, TIF, GIF, PNG
Others	PDF
	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.

Table B-8   *Remote Renderer Supported Document Formats*

Software	File Formats
Microsoft Word	DOC, DOCX, DOCM, DOTM, RTF
Microsoft Excel	XLS, XLSX, XLSM, XLSB
Microsoft PowerPoint	PPT, PPTX, PPTM, PPTX
Others	PDF

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
- Groupwise 18.3.x

C Log Files Location

This section details the location of the `OES iPrint Advanced` log files:

Name	Location
Mobile Server	/var/opt/novell/log/iprintmobile/iprint_mobile*.log
iPrint Console	/var/opt/novell/iprint-tomcat/logs/catalina*.log
iPrint auth log	/var/opt/novell/log/iprintauth/iprint-auth.log
License Server	/var/opt/novell/log/iprintlicense/license*.log
OCS	/var/opt/novell/log/iprintgmt/iprintocs*.log

D   Advanced Configuration for iPrint Mobile Service (Optional)

In addition to the iPrint Console, there are a few additional parameters that can be configured to fine-tune the iPrint service, based on your network and printing requirements. The iPrint Server Configuration file, located at `/etc/opt/novell/iprintmobile/conf/iprintmobile.conf`, allows you to customize the iPrint Mobile service per your requirements.

You must configure the `iprintmobile.conf` file manually. When assigning a value to any parameter, ensure that you uncomment the line, in order for the changes to take effect.

IMPORTANT: After configuring the file, you must restart the iPrint Mobile service through the iPrint Console.

The advanced configuration is optional. For most environments, the configuration does not require modifications.

The `OES iPrint Advanced` server configuration file contains the following information:

Table D-1   *Server Configuration File Contents*

Parameter	Default Value	Function
home_directory	/var/opt/ novell/ iprintmo bile	A directory on the file system that is used to store the data. This folder contains the service metadata and temporary job data.
conversion_wait_time	300	Duration of time (in seconds) that the job submission threads wait for the job conversion threads.
db_backup_interval	10000	Duration (in milliseconds) after which the database is backed up on the disk.
is_test_setup	false	Set this flag if the server is being set up for testing and no dedicated email address is available. Print job requests are read-only from the Cabinet folder.
job_submission_thread_timeout	60	Duration (in seconds) for which an excess idle thread waits before terminating.

Parameter	Default Value	Function
delete_completed_job_data	true	Deletes the converted email print job data stored at `/var/opt/novell/iprintmobile/jobs/`. Set the value to *false* to retain the converted job data for email print jobs.
		The /var/opt/novell/iprintmobile/jobs/ folder does not maintain the IPP job data. IPP job data includes job data from the Novell iPrint app. The job data for apps are stored in the PA spool directory of the Print Manager.
		WARNING: If you set the value to *false*, you must ensure that you delete the print job data regularly to free up disc space. If the disk space gets full, then email print jobs are not processed.
fallback_to_local_converter	false	If the remote renderer fails, you can run the job through a local converter.
num_email_receiver_threads	0	Configure this parameter to the maximum number of threads to be used for processing multiple mailboxes. By default (when set to 0), the number of threads to email addresses ratio is 1:5 (1 thread per 5 email addresses).
use_global_address_for_notifications	false	By default, notifications are sent from the printer-specific email address. Change the value to 'true' if you want to send notifications to users using the global email address.
renderer_time_out	180000	Duration (in milliseconds) after which a registered renderer times out and moves to an inactive state.
verify_certificates	false	Disable certificate validation.
renderingOnlyServiceEnabled	true	RenderOnly Configuration
backendRenderingPollingInterval	500	Backend Rendering Polling Interval (in milliseconds)
email_polling_interval	30000	Configures the interval (in milliseconds) at which emails are fetched from mail servers.
subject_optional_for_printer_specific_emails	true	Stops printing emails without the correct iPrint email print command. By default this value is 'true.' Emails forwarded to the printer-specific email address, with or without a subject line, are printed.
email_reconnect_interval	30	If the email server is unavailable, OES iPrint Advanced tries to reconnect to the email server after the specified duration (in seconds).
stellent_conversion_thread_count	5	Number of threads allocated for job conversion.
pdf_conversion_thread_count	10	Number of threads allocated to PDF job conversion.
convert_stellent_pdf_using_external_renderer	true	If this is set to false the PDF job data is not send to the remote renderer, even if the remote renderer is configured and active.

Parameter	Default Value	Function
enable_client_login	false	By default this value is 'false'. Set this value to 'true' if you require user authentication in apps for printer-based license.
driver_update_interval	60	Duration (in minutes) after which driver update is triggered.
default_network_interface	eth0	Change the default value, if you have configured multiple NIC cards configured.
direct_pdf_print	-	Add and set this value to 'true' to enable direct pdf printing. If this parameter is not added or set to 'false', then the printing is done in the earlier way where the jobs are rendered by the Renderer.
proxy_server_hostname	-	Add and specify the value as IP address or host name along with port number.
		Whenever a user adds the proxy configured iPrint server in the iPrint mobile app, it will automatically get configured with the Proxy server. All the requests of the mobile app users will be redirected to the iPrint server thru the proxy server.
		For example, http://proxy.mycompany.com:8080