

Laserfiche Connector for Ricoh Installation and Administration Guide

White Paper

September 2014

Laserfiche®

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Overview

This manual provides an overview of the installation, configuration, and operation of the Laserfiche Connector for Ricoh embedded software. The Laserfiche Connector for Ricoh is a single integrated solution in which scanning, printing, searching, browsing, and configuring user settings on the Laserfiche Server can be performed. This software integrates with Multi-Function Devices (MFDs) to leverage these smart devices and to provide a convenient way to communicate with your Laserfiche Server from a Ricoh MFD.

The Laserfiche Connector for Ricoh lets you:

- Save scanned images in TIFF, JPEG, or PDF format. [Learn more.](#)
- Store scanned images in specific folders in a Laserfiche repository. [Learn more.](#)
- Assign templates and field values to Laserfiche documents while saving them to a Laserfiche repository. [Learn more.](#)
- Print documents stored in a Laserfiche repository. [Learn more.](#)
- Browse folders and documents in a Laserfiche repository. [Learn more.](#)
- Search documents and folders in a Laserfiche repository based on document text, entry names, and field values. [Learn more.](#)
- Configure Quick Scan settings for easy scanning. [Learn more.](#)

Embedded solutions, like the Laserfiche Connector for Ricoh, are developed in-house by the Laserfiche development team. Users who are familiar with Laserfiche will find it easy to use this embedded application.

Note: The Laserfiche Connector for Ricoh is compatible with Laserfiche Server 8.3 and later.

Before Installation

Ensure your Laserfiche Server and MFP meet the requirements below, and follow the instructions to configure your system and the installation ZIP file before proceeding to installation.

Requirements

Ensure that the following requirements are met before installing the application:

- A Laserfiche Server version 8.3 or 9.0 must be installed and running on your network.
- Your Ricoh device supports ESA SDK version 7.x, 10.x, 11.x, or 12.x and has a WVGA screen. See the [Supported devices](#) section below.
- The Java card is installed. Some MFP machines are sold with a Java card. If the card is not included on your machine, you must purchase it and have it installed by a Ricoh dealer. Check with your Ricoh dealer for more information.
- For devices using SDK version 7, verify the **Other Function** button is installed on the left side of the Ricoh LCD screen (below the **Copy** and **Scanner** buttons). This button activates the Laserfiche Connector for Ricoh and is usually installed by a Ricoh technician when the Java card is installed.

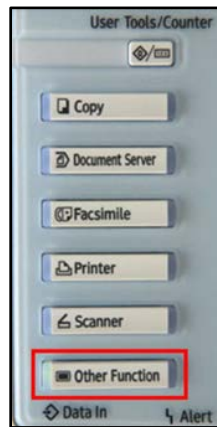


Figure 1: SDK 7 device with the Other Function button

- You have available the network name and IP address of the system running the Laserfiche Server.
- The Ricoh MFP is connected to the network.
- You have the network address of the Ricoh MFP available. We recommend configuring your MFP with a static IP.
- Your license file (**lf.licx**) and edited **LfConnector.dalp** file are included in the installation ZIP file. [Learn more.](#)

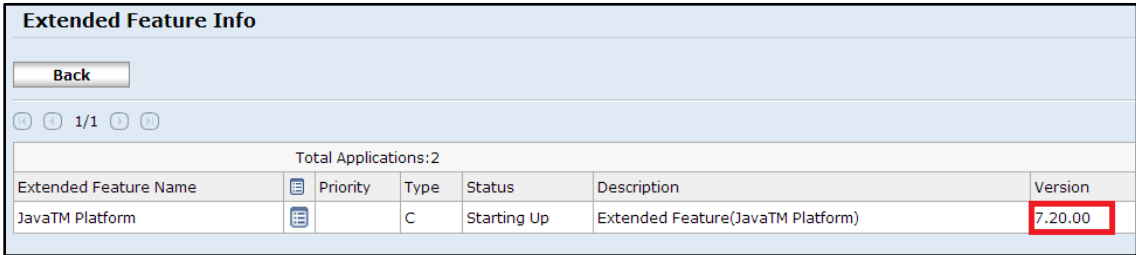
Supported devices

- Aficio MP C6501/C7500/C7501
- Aficio MP C3001/C3501/C5041
- Aficio MP C4501/C5000/C5501
- Aficio MP C2051/C2551/C7140
- Aficio MP C300/C400
- All devices that support Embedded Software Architecture (ESA) SDK 7.x, 10.x, 11.x and 12.x, and that have an LCD touch-screen (WVGA).

How to determine the ESA SDK version

Use the device's web-based interface to determine which version of the SDK is installed.

1. Connect to the device's web interface. E.g., <http://device-ip/>
2. Select the **Configuration** menu on the left sidebar.
3. Select **Extended Feature Info**.
4. Find the entry for **Java™ Platform**, and check the version number in the version column.



The screenshot shows a web interface titled "Extended Feature Info". It includes a "Back" button, a "1/1" indicator, and a table of applications. The table has columns for "Extended Feature Name", "Priority", "Type", "Status", "Description", and "Version". The "Java™ Platform" entry is highlighted, and its version "7.20.00" is enclosed in a red box.

Total Applications:2						
Extended Feature Name	Priority	Type	Status	Description	Version	
Java™ Platform		C	Starting Up	Extended Feature(Java™ Platform)	7.20.00	

Figure 2: Java™ Platform, ESA SDK version number

This is the ESA SDK version number referred to in this paper.

Configure arguments in the LfConnector.dalp file

Before installing the Laserfiche Connector for Ricoh, you must first configure your existing Laserfiche Sever, repository, listening port, default user, default administrative user, and auto-timeout settings. All these configurations should be made and saved in the Laserfiche Connector for Ricoh's configuration file:

LfConnector.dalp. You can find the **LfConnector.dalp** file in the application's ZIP file, which is included in the Installation Package folder.

The **LfConnector.dalp** file is an XML file that contains the following configurable arguments:

Tip: To find information about your Laserfiche Server, including repository name and listening port, see the Server Settings node of your Laserfiche Administration Console. [Learn more.](#)

- s Laserfiche Server (Use the IPV4 address or the machine’s fully qualified domain name.)
- r Laserfiche repository name
- p The Laserfiche Server’s listening port. Port 80 or port 5050 is the default.
- u The default username for logging into Laserfiche
- t The number of seconds before a user is automatically logged out due to inactivity. Use -1 to turn off this feature.
- a The default administrative user that will configure Quick Scan settings. Usually, this is the admin user, and the XML defaults to “admin” if this argument is not set. We strongly recommend selecting an administrative account that has been granted most of the Laserfiche privileges (such as, Manager Trustees, Manage Templates and Fields, etc.) and feature rights (such as, Scan, Import, Export and Print, etc.) For more information, see the [Privileges](#) and [Feature Rights](#) sections of the Laserfiche Administration Guide.

-o Certificate settings for connecting to Laserfiche server over SSL; **trustStore** is the client certificated used for SSL connection; **trustStorePassword** is the password configured when generating the JKS file (See [Connect to Laserfiche Server over SSL](#) for more information). Comment or delete this setting if you do not want to connect to Laserfiche server over SSL. **Important:** Do not change any settings in this file besides the arguments specified above.

Sample configuration DALP for WVGA

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- DALP File for Device-SDK Sample Application -->
<dalp spec="2.4" dsdk="" version="2.12">
  <product-id>34096641</product-id>
  <information>
    <product-id>34096641</product-id>
    <title>Laserfiche Scan</title>
    <vendor>Laserfiche</vendor>
    <description>Allows for communication with the Laserfiche server.</description>
    <description type="detail">Allows MFP for bidirectional, real-time
communication with the Laserfiche server.</description>
    <telephone>562-988-1688</telephone>
    <fax>562-988-1886</fax>
    <e-mail>support@laserfiche.com</e-mail>
    <application-ver>1.1.0.310</application-ver>
    <icon href="./LfConnector.jar" basepath="current" location="jar">LF.bmp</icon>
  </information>
  <resources>
    <dsdk version="10.00"/>
    <jar href="./LfConnector.jar" basepath="current" main="true"/>
    <jar href="./httpcore-4.1.jar" basepath="current"/>
    <jar href="./jaxen-1.1.jar" basepath="current"/>
    <jar href="./commons-codec-1.4.jar" basepath="current"/>
    <jar href="./fw-util-common-3.02.00.jar" basepath="current"/>
    <jar href="./jcert.jar" basepath="current"/>
    <jar href="./jnet.jar" basepath="current"/>
    <jar href="./jsse.jar" basepath="current"/>
    <jar href="./lf.licx" basepath="current"/>
    <!--<jar href="./cacert" basepath="current"/>-->
  </resources>
  <application-desc main-class="com.laserfiche.mfp.ricoh.connector.RicohConnector"
visible="true" auto-run="true">
    <argument>-s:server-ip-address</argument>
    <argument>-p:5050</argument>
    <argument>-r:RicohTest</argument>
    <argument>-u:test</argument>
    <argument>-t:600</argument>
    <argument>-a:admin</argument>
    <!--<argument>-o:trustStore=cacert;trustStorePassword=devroot</argument>-->
  </application-desc>
  <install mode="auto" destination="sdcard" workDir="hdd" />

```



```

<display-mode type="COLOR" size="WVGA"/>
<shortcut id="0">
  <home-icon type="original">
    <icon-image display-type="WVGA" home-type="easy" location="jar"
href="./LfConnector.jar" basepath="current" icon-
type="normal">simple_normal.bmp</icon-image>
    <icon-image display-type="WVGA" home-type="easy" location="jar"
href="./LfConnector.jar" basepath="current" icon-
type="inverse">simple_selected.bmp</icon-image>
    <icon-image display-type="WVGA" home-type="normal" location="jar"
href="./LfConnector.jar" basepath="current" icon-
type="normal">standard_normal.bmp</icon-image>
    <icon-image display-type="WVGA" home-type="normal" location="jar"
href="./LfConnector.jar" basepath="current" icon-
type="inverse">standard_selected.bmp</icon-image>
  </home-icon>
</shortcut>

</dalp>

```

Generate the Laserfiche license

To use the Laserfiche Connector for Ricoh, you must have an **lf.licx** license file saved on each of your MFP machines. You can generate a license file using your activation key and the Activation Utility. The application will validate the license when it connects to Laserfiche.

To activate the Laserfiche Connector for Ricoh using the Activation Utility

1. Make sure that you have an active, working Internet connection.
2. Ensure .NET 3.0 or 3.5 is installed on the computer. [Learn more](#).
3. Open the Laserfiche Connector for Ricoh installation folder and then the Activation Utility folder.
4. Launch the utility by double-clicking the **ActivationTool.exe** file.
5. In the **Computer information** option of the utility, select **Activate another computer**.
6. Next to **Hardware Fingerprint**, input the **Machine ID** of the MFP you are activating. You do not need to enter a **Host ID**.



Figure 3: Machine ID

7. In the **Activation key** option, type or paste your activation key.
8. Click **Validate Key** to confirm that the key is valid. A product and version will appear. Check that they correspond to the product and version you are activating.
9. In the **Save license as** option, select a location to save your license information. By default, this will be the computer's desktop.
10. It's not necessary to save the activation key. But if you want to keep it, select **Save the activation key in an ACTIVATIONKEY file** and save it to the computer.
11. Click **OK** to activate. The Activation Utility will contact Laserfiche and activate your product.
12. Move the license file (**lf.licx**) into the application's installation ZIP file.
13. Upload the ZIP file to the MFP.
14. Follow the [Installation instructions](#) for the Laserfiche Connector for Ricoh.
15. Repeat steps 4 through 12 for each MFP you want to run the Laserfiche Connector for Ricoh on.

Verify access to the Ricoh Web Image Monitor

Ricoh devices have an embedded web server that provides an alternate administration interface. Before you install the Laserfiche Connector for Ricoh, verify you can access the Ricoh administrative web interface.

To verify administrative access:

1. In a web browser, type the URL of the Ricoh device (e.g., <http://ricoh-device-ip/>).
2. Click the **Login** link in the top-right area of the page.
3. Type the device's administrative username and password, and click **Login**.

Tip: The default login is “admin” with no password.

4. Select **Configuration** on the left sidebar.
5. Scroll down, and confirm the **Startup Setting** and **Uninstall** options under **Extended Feature Settings** are visible and accessible; but don't select them. If these options are visible and accessible, you have logged into the MFP as an administrator with the necessary rights.

Tip: This web interface is useful as another way to stop or uninstall the application as needed.

Configure your network/firewall

Ensure your network/firewall configuration allows inbound connections from the Ricoh devices to the Laserfiche Server on the listening port. The default listening port is 80 or 5050.

Prepare the application ZIP file

Create an application ZIP file that will be uploaded to the MFP device.

1. Open the directory that contains the application:
[app-dir]\ 34096641
2. Open the **LfConnector.dalp** file in this folder and verify the following arguments are set correctly:
-s (Laserfiche Server name), -p (listening port), and -r (repository name)
Other arguments are listed in the [Configure arguments in the LfConnector.dalp file](#) section above.
3. Ensure the generated license file (**lf.licx**) is copied to this directory so that it's included in the ZIP file created in the next step. See the [Laserfiche license](#) section above.
4. Use a ZIP tool to create a ZIP file containing all the files in the above directory. The name of the ZIP file name is not important.
5. Copy the ZIP file to the location where you will perform the installation. You can perform the installation from any workstation that has network access to the Ricoh devices.

Connect to Laserfiche Server over SSL

Laserfiche Connector for Ricoh supports using SSL to connect to the Laserfiche Server.

To configure Laserfiche Connector for Ricoh use an SSL connection:

1. Generate a JKS file. JKS files are the supported certificate for use on the Java platform.
 - a. If your client side certificate is CER file, you must convert this file to .jks using **utility keytool.exe**, which comes with Java. By default, this utility is installed at **C:\Program Files\Java\jre6\bin**.
 - b. Open the utility and run the following command, replacing *DestCertName* with your JKS certificate name and *OrigCertName* with the name of your CER certificate, to convert your CER file into a JKS file: **keytool -import -keystore DestCertName.jks -file OrigCertName.cer**
 - c. When prompted, enter the password for this certificate.
2. After the certificate is generated, rename the file name to **cacert**. Make sure that the file does not have an extension type. Move this file to the folder where **LfConnector.dalp** is located.
3. Open **LfConnector.dalp** and find the following JAR resource: `<!--<jar href="/cacert" basepath="current"/>-->`
By default, this item is commented out. Uncomment this setting by deleting the `<!--` at the start and `-->` in the end.
4. Find the following argument: `<!--<argument>-o:trustStore=cacert;trustStorePassword=devroot</argument>-->`
By default, this item is commented out. Uncomment this setting by deleting the `<!--` at the start and `-->` in the end.
5. Modify the argument -o. Change the **trustStorePassword** value to your configured password when generating the JKS file.
 - Make sure that Laserfiche Server in `<argument>-s: server-ip-address</argument>` is the fully qualified domain name (FQDN) of that Laserfiche Server.
 - Make sure that port set in `<argument>-p:443</argument>` is the port configured in the Laserfiche Server for SSL connection.
6. Save and close the **LfConnector.dalp** file.

If you do not want to use the SSL connection, just delete or comment out the argument. Please refer to [Using SSL TLS](#) to see more information about how to configure the Laserfiche Server using SSL.

Installation

This section discusses how to install the Laserfiche Connector for Ricoh embedded application for compatible Ricoh devices. The embedded application allows you to scan new documents into Laserfiche and to search for, view, and print any document already in Laserfiche.

Choose an installation method

The easiest way to install the Laserfiche Connector for Ricoh is to use the RXOP GUI Client. This client lets you install the embedded application on the device remotely. To use this installation method, follow the instructions in the [Installing Application using RXOP GUI Client](#) section.

Alternatively, you can install the embedded application via the MFP web administration interface. This installation method also allows you to upload the embedded application to the device remotely. To perform the web-based installation, follow the instructions in the [Installing Application using the Ricoh Web Image Monitor](#) section.

Install using the RXOP GUI Client (Recommended)

The RXOP GUI Client provides a convenient way to install the application. You can perform the installation remotely on multiple devices with this client.

To install the application

1. Ensure JRE 6 or later has been installed on the machine.
2. Download the installation file, and unzip **RxopGUIClient.zip** in the **Tools** folder.
3. Double-click the **RxopGUIClient.jar** file to launch the RXOP GUI client.

4. Click the **Add** button under the **Device List** box. Type the device's IP address and the device's administrative username and password.
5. Click **OK** to connect to that device.

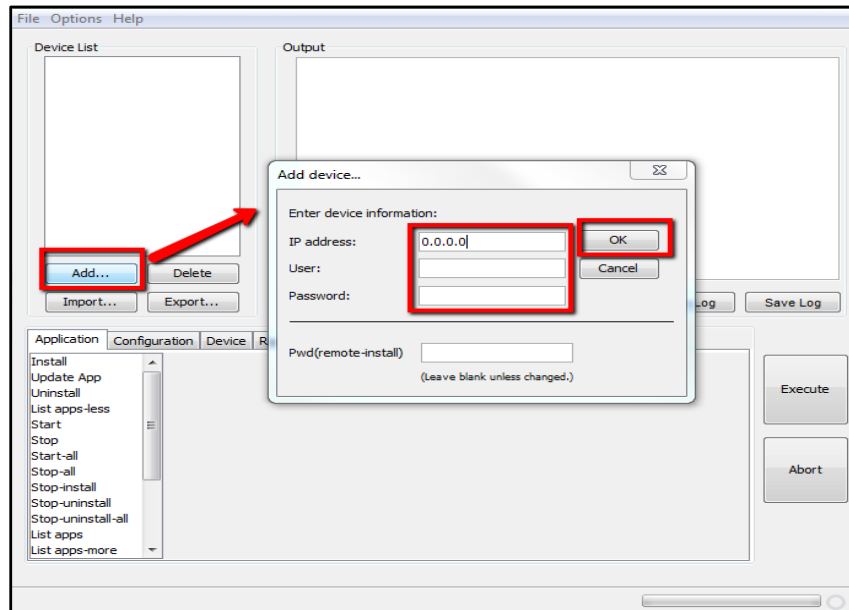


Figure 4: Add device in the RXOP GUI client

6. Under **Application**, select the **Install** option.
7. Click **Browse**, and select the application ZIP file. (See the [Prepare the application ZIP file](#) section above for information on this ZIP file.)
8. Select **auto-start** and **install-start**.

9. Click **Execute**.

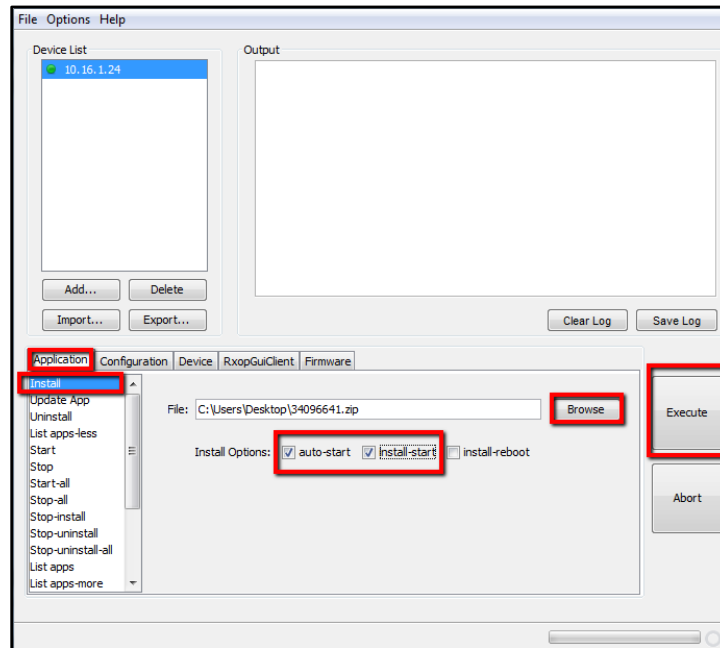


Figure 5: Upload the Laserfiche Connector for Ricoh ZIP file

10. The Laserfiche Connector for Ricoh will start to install on that device.

11. After it's installed, the **Output** text box will display the text “Application already active,” which indicates that the Laserfiche Connector for Ricoh has installed and started successfully.

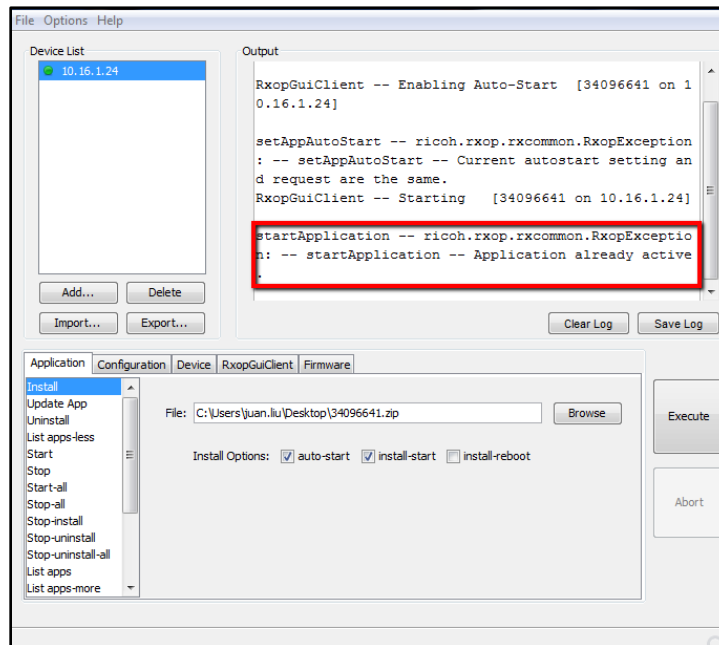


Figure 6: Output confirmation for installing the Laserfiche Connector for Ricoh

12. You can also confirm the installation was successful by selecting **List apps** in the **Application** tab and clicking **Execute**. The **Output** textbox will list all the applications that have been installed on the device. The Laserfiche Connector for Ricoh should be listed as “Laserfiche Scan.”

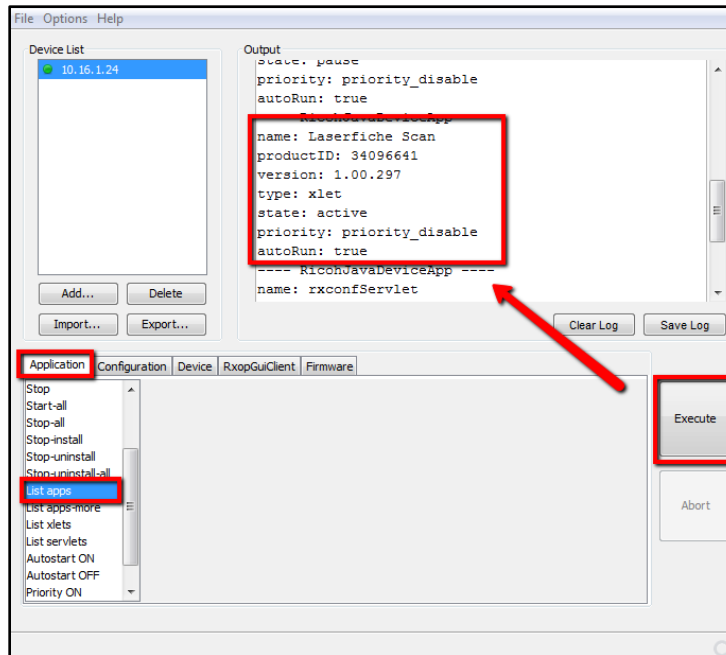


Figure 7: List apps in RXOP GUI client

Now that the application is installed, you can skip the **Installing Application using the Ricoh Web Image Monitor** section and proceed to the [Set the Laserfiche Connector for Ricoh as the default application](#) section below.

Install using the Ricoh Web Image Monitor

Web installation provides a convenient way to install the embedded application that can be done remotely on multiple devices using just a web browser.

To install the application

1. In a web browser, type the URL of the Ricoh device (e.g., <http://ricoh-device-ip/>).
2. Click the **Login** link in the upper-right section of the page.
3. Type the device’s administrative username and password, and click **Login**.
4. Select **Configuration** from the menu on the left sidebar.

5. Under **Extended Feature Settings**, select **Install**.



Figure 8: Install option under Extended Feature Settings

6. Select **Local File**, click **Browse**, and select the embedded application ZIP file. (See the [Prepare the application ZIP file](#) section above for information on the ZIP file.)
7. Click **Display Extended Feature List**.

Note: This button may take more than one minute to appear.

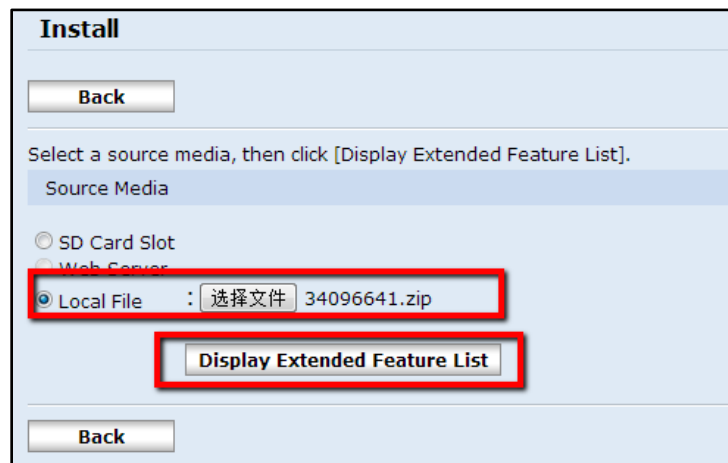


Figure 9: Uploading the Laserfiche Connector for Ricoh

- Change the install location to **Device HDD**, set **Auto Start** to **On**, and select the “Laserfiche Scan” application at the bottom of the screen.

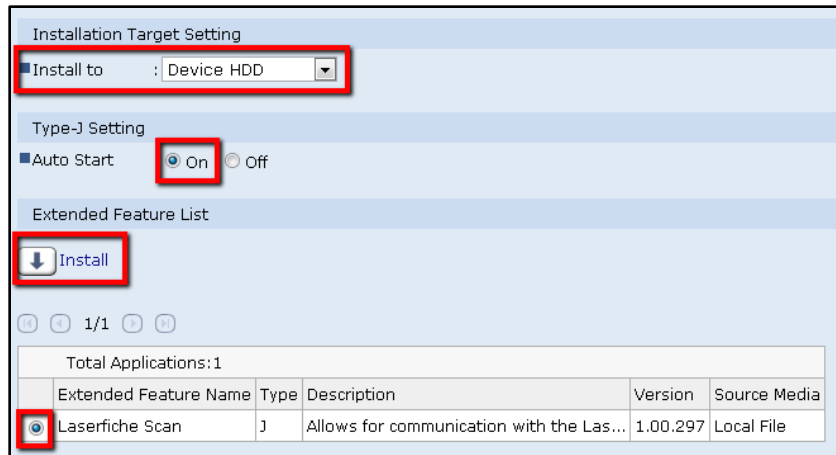


Figure 10: Installation target setting

- Click **Install**.
- A confirmation screen will appear. Verify the installation options, and click **OK**.
- The Laserfiche Connector for Ricoh will start to install on that device. To confirm the installation was successful navigate to the **Configuration** page and, under **Extended Features Settings**, select **Startup Setting**. The Laserfiche Connector for Ricoh should be listed as “Laserfiche Scan.”

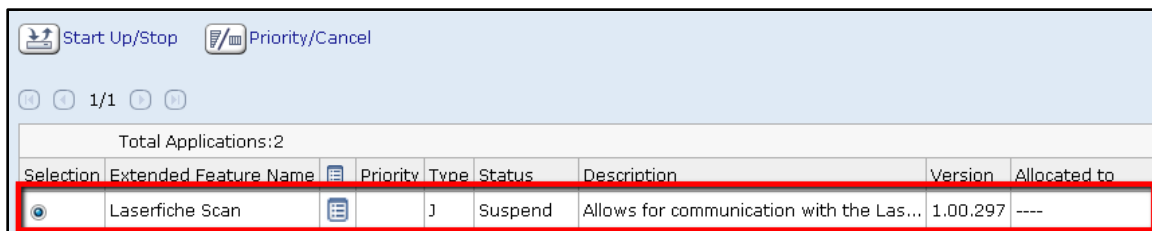


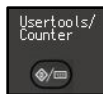
Figure 11: Startup setting

Set the Laserfiche Connector for Ricoh as the default application

Once the application is installed on the Ricoh MFP device, setting it as the default application will enable it to run effectively.

To set the default application

- Go to the Ricoh administration settings by pressing the **User Tools/Counter**



key on the left side of the device panel.

- Click **Extended Feature Settings**.

3. The Laserfiche Connector for Ricoh is listed as “Laserfiche Scan.” Click the **Priority** button next to the application to highlight it.

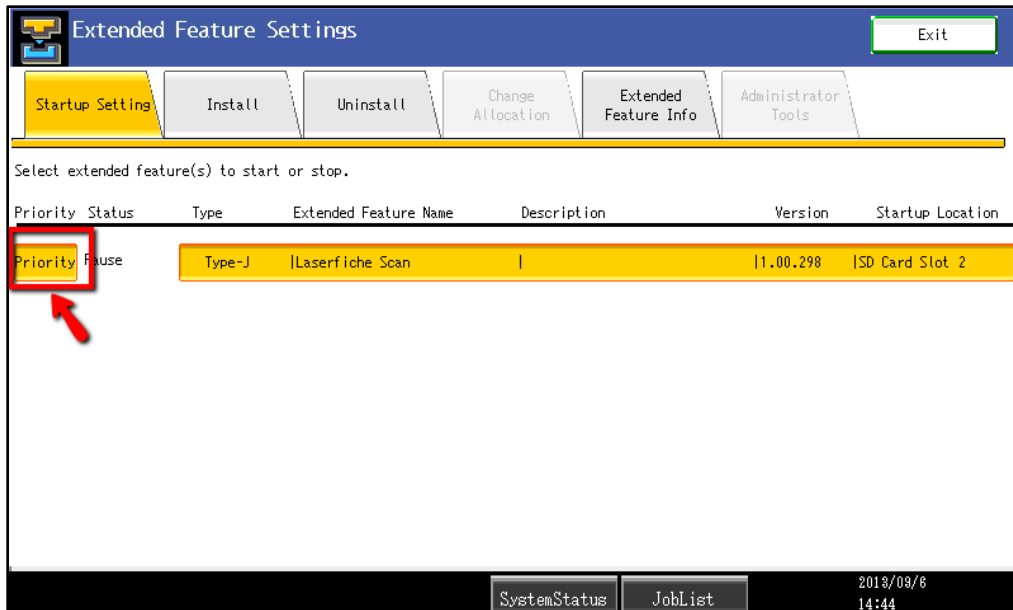


Figure 12: Priority button in the Extended Feature Settings

Set the system timeout

If a system reset timeout is set, we recommended giving it a longer value than the application’s timeout or turning it off. The Laserfiche Connector for Ricoh’s timeout argument is set the **LfConnector.dalp** file (argument -t). See the [Configure arguments in the LfConnector.dalp file](#) section of this paper.

To configure the system reset timeout

1. On the device, go to the Ricoh administration settings by pressing the **User Tools/Counter** key on the top left of the device panel.
2. Click the **System Settings** button.
3. On the **General Features** tab, select the **Function Priority** setting.
4. Select **JavaTM/X**, and press **OK**.
5. Select the **Timer Settings** tab.
6. Select the **System Auto Reset Timer** option.
7. Enable the timer by clicking the **On** button. We recommend setting the timeout to longer than 900 in seconds or turning it off. If the timeout is too short, the system may log out your users while they are still actively using it.

Starting the Laserfiche Connector for Ricoh

If you set the **Auto-Start** option to **On** in step 8 of the [installation instructions](#), the Laserfiche Connector for Ricoh will automatically start when the Ricoh MFP device is rebooted or restarted.

If you did not turn on this option, you can manually start the application from the web interface or from the device itself.

To start the application from the web interface


1. Navigate to **Device Configuration**.
2. Select **Extended Feature Settings**, and then select **Startup Setting**.

To start the application from the device

1. Go to the devices administration settings by pressing the **User Tools/Counter**



key on the left side of the device panel.

2. Click **Extended Feature Settings** .
3. On the **Extended Features Settings** screen, select the **Startup Setting** tab.
4. The running applications are highlighted. If the Laserfiche Connector for Ricoh is not running, click the “Laserfiche Scan” application button to start it.
5. The device will display a **Please wait** dialog box until the application starts.
6. After the application has started, exit the admin settings by clicking **Exit** twice.

To open the application

1. On the MFP device, press the **Other function** button, which is below the **Copy** and **Fax** buttons on the left side of the device panel.

Note: The **Other function** button can be replaced with a custom button.

2. The application **Log in** screen will appear.

A screenshot of the Laserfiche login page. The page has a white background with a thin black border. At the top left, there is a small orange tab with the text "Laserfiche". The main heading is "Log in to Laserfiche". Below this, there are two input fields: "User name:" with the text "Test" and "Password:" with a masked password "*****". Below the password field is an "OK" button. At the bottom left, there is small text: "Connect to repository: RicohTest", "Version 1.00.297", and "Copyright © 2011-2013 Laserfiche. All rights reserved."

Figure 13: The Login page

Uninstall

You can uninstall the Laserfiche Connector for Ricoh from the RXOP GUI Client, the Ricoh Web Image Monitor, or the Ricoh device.

Uninstall with the RXOP GUI Client

The RXOP GUI Client is a convenient way to uninstall the embedded application. You can uninstall it remotely if needed.

1. Download the installation file, and unzip the **RxopGUIClient.zip** file under the **Tools** folder.
2. Double click the **RxopGUIClient.jar** file to launch the RXOP GUI Client.
3. Click **Add** under the **Device List** box. Type the device's IP address and the device's administrative username and password.
4. Click **OK** to connect to the device.
5. Select **Uninstall** under **Application**. The Product ID (34096641) has been filled in automatically.
6. Click **Execute** to start the uninstallation process.

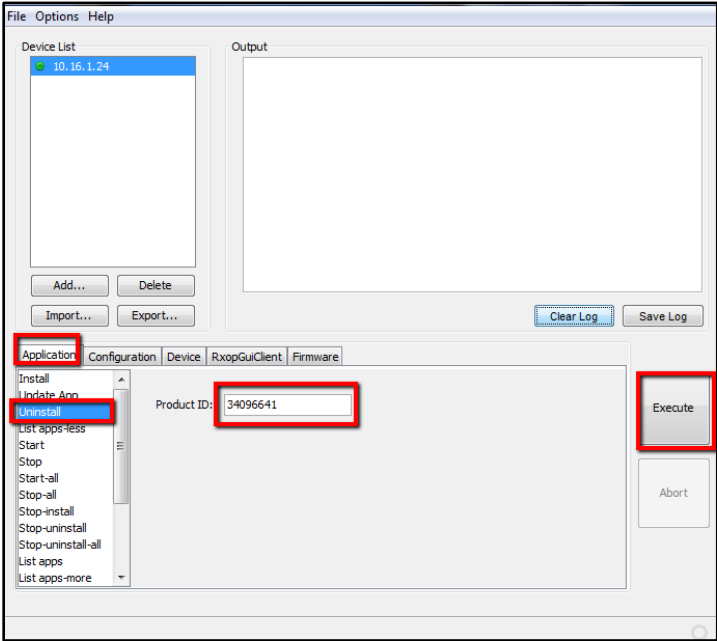


Figure 14: Uninstall with the RXOP GUI Client

Uninstall with the Ricoh Web Image Monitor

The Ricoh Web Image Monitor provides a convenient way to uninstall the embedded application. You can uninstall it remotely if needed.

1. In a web browser, type the URL of the Ricoh device (e.g., <http://ricoh-device-ip/>).
2. Click the **Login** link at the top right of the page.
3. Type the device's administrative username and password, and click **Login**.
4. Select **Configuration** from the menu on the left.
5. Select **Uninstall** under **Extended Feature Settings**.



Figure 15: Extended Feature Settings

6. To uninstall the Laserfiche Connector for Ricoh, select "**Laserfiche Scan**" in the application list.
7. Click **Uninstall**.
8. Click **OK** on the confirmation page.

Uninstall with the Ricoh device

You can also uninstall the application from the MFP directly.

1. Go to the device's administrative settings by pressing the **User Tools/Counter**



key on the left side of the device panel.



2. Click **Extended Feature Settings**
3. Select the **Uninstall** tab.

- To uninstall the Laserfiche Connector for Ricoh, select “**Laserfiche Scan**” in the application list.

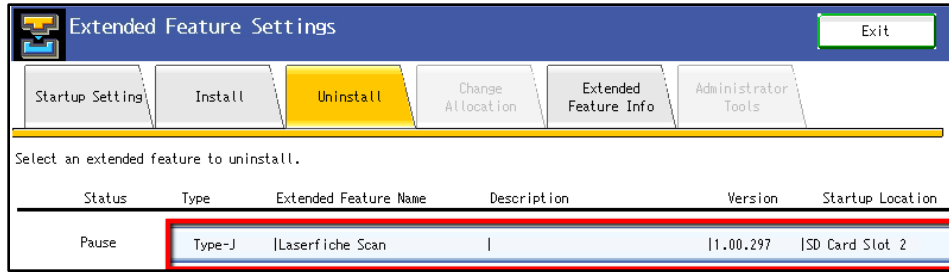


Figure 16: Uninstall tab

- Click **Yes** on the confirmation page.

Post-Installation Testing

After installing and configuring the Laserfiche Connector for Ricoh, test some of the common usage scenarios. Testing is important for two reasons:

- It ensures that the embedded application is working as expected.
- It helps you get familiar with the features and functionality of the Laserfiche Connector for Ricoh.


This section outlines two test scenarios that are applicable for most organizations. Please complete all tests relevant to your site.

Test preparation

These tests require two user accounts: a basic user and an administrative user.

- **Basic user:** Create a basic named user in the Laserfiche Administration Console and configure its feature, privileges, and access rights so the user can print and search. To learn more, see the [Security](#) section below.
- **Administrative user:** The administrative user account in Laserfiche has all feature rights and permissions. To create an administrative user, see the [Security](#) section below.

Test 1: Scan a file and save to Laserfiche

1. Log in to the Laserfiche Connector for Ricoh as a basic named user.
2. Click the **Scan Settings** gear  button.
3. Set **Sides** to **One-Sided**.
4. Click **Save**.
5. Put a sheet of paper on the platen glass of the MFP.
6. In the main panel, click **Scan**.
7. After the paper is scanned, click **Next**.
8. Under **Select a processing profile to use on this document** in the main panel, click **Standard Scan**. This option is hidden if no Quick Scan settings are configured.
9. Next to **Name**, type a file name.
10. Next to **Volume**, choose a volume from the drop-down menu.
11. Click **Next**.
12. Browse to the destination folder. Click **Next**.

13. Select a template from the drop-down menu next to **Template**.
14. Input any desired field values.
15. Click **Done**.
16. Open the Laserfiche Client and ensure the document has been saved to the destination folder successfully.

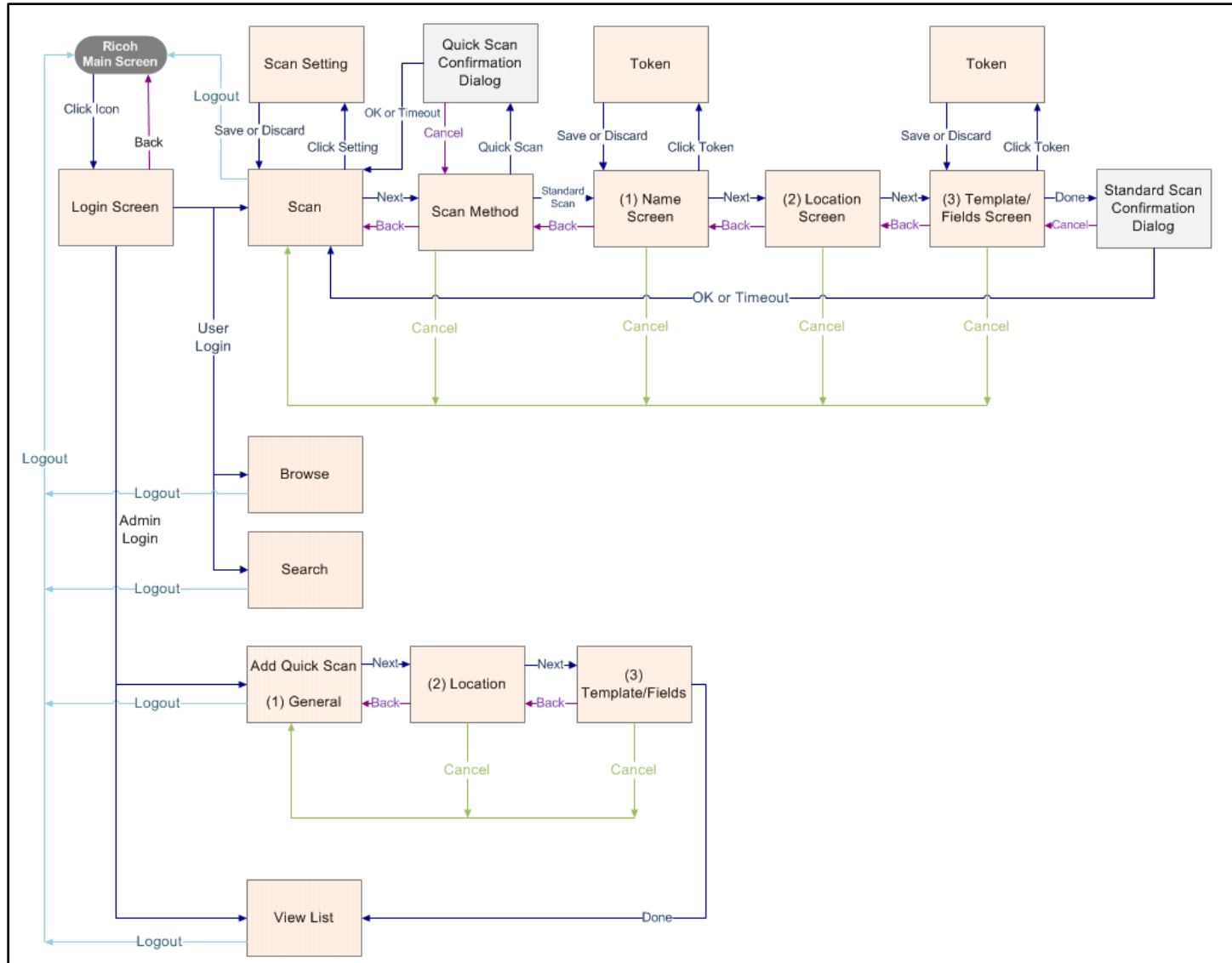
Test 2: Create Quick Scan settings

1. Log in to the Laserfiche Connector for Ricoh as the administrative user specified in the **LfConnector.dalp** file. [Learn more](#).
2. Click **Configuration** on the left sidebar, and then click **Add**.
3. In the main panel, input the **Profile Name**, **File Name**, and **Volume**. Click **Next**.
4. Browse to the destination folder. Click **Next**.
5. Select a template from the drop-down menu next to **Template**.
6. Input any desired field values.
7. Click **Save**.
8. If it is not already selected, click the **List** button on the left sidebar under **Configuration**.
9. Check that the new Quick Scan settings are in the **Quick Scan List**.

For more information, see the [Instructions](#) section.

Using the Laserfiche Connector for Ricoh

Overview of the Laserfiche Connector for Ricoh's logic



Security

Users' security permissions in the Laserfiche Connector for Ricoh are the same as their Laserfiche security permissions.

Example: If user "Bob" has the Print feature right in Laserfiche, then he can print in the Laserfiche Connector for Ricoh.

Therefore, you will need to configure users' security permissions in the Laserfiche Administration Console to grant them access to features in the Laserfiche Connector for Ricoh. Add Laserfiche users or LDAP accounts for the people who need access to the Laserfiche Connector for Ricoh, and then configure their security permissions accordingly. These users must have the necessary privileges, feature rights, and entry access rights to interact with and create entries in the Laserfiche Connector for Ricoh.

Note: Windows Accounts are not supported in the Laserfiche Connector for Ricoh 1.0.

Note: If you are using Laserfiche Avante or Laserfiche Rio, ensure the user is a named user. [Learn more.](#)

The Laserfiche Administration Guide provides more information about [creating users](#), [adding an LDAP account](#), [privileges, feature rights](#), and the [entry access rights](#).

Security permission examples

- To scan a document to a Laserfiche repository, the user must have the Scan feature right and the access right to create a document in the destination folder.
- To assign a template to the scanned document, the user must have the Read right on the template and the Create right on each field.
- To search for a document, the user must have the Search feature right.
- To print the document, the user must have the Print feature right.

Logging into the Laserfiche Connector for Ricoh

Laserfiche users can log in to the Laserfiche Connector for Ricoh as basic users using their Laserfiche login. Basic users can perform any operations allowed by their security permissions.

Note: To log in, the Laserfiche user must be associated with the repository that the Laserfiche Connector for Ricoh is configured to store documents in.

If the administrative user logs in, he or she will be able to create and edit Quick Scan settings. The administrative user is the user specified in the **LFConnector.dalp** file. [Learn more.](#)

To log in as basic user

1. Start the Laserfiche Connector for Ricoh on the MFP.
2. Type your username and password.
3. Click **OK**.

To log in as the administrative user

1. Start the Laserfiche Connector for Ricoh on the MFP.
2. Type the administrative user's username and password.

Note: The administrative user is the user configured the in **LFConnector.dalp** file. [Learn more.](#)

Set the administrative user after the parameter “-a”.

```
<application-desc main-  
class="com.laserfiche.mfp.ricoh.connector.RicohConnector" visible="true" auto-  
run="true">
```

```
<argument>-s:server IP address</argument>
```

```
<argument>-p:listening port</argument>
```

```
<argument>-r:repository name</argument>
```

```
<argument>-u:repository named user name</argument>
```

```
<argument>-t:600</argument>
```

```
<argument>-a:administrative user</argument>
```

```
</application-desc>
```

3. Click **OK**.

Scanning and saving to Laserfiche

The Laserfiche Connector for Ricoh supports scanning documents and saving those images as TIF, JPG, and PDF files in Laserfiche.

Note: TIFF and JPG formats are supported by Ricoh devices directly. However, the PDF format is not directly supported by some Ricoh devices. If you are using one of these devices, you can use a postscript card to support PDFs. Please check the platform details of Ricoh device to see if the PDF format is supported on that machine.

Scan options

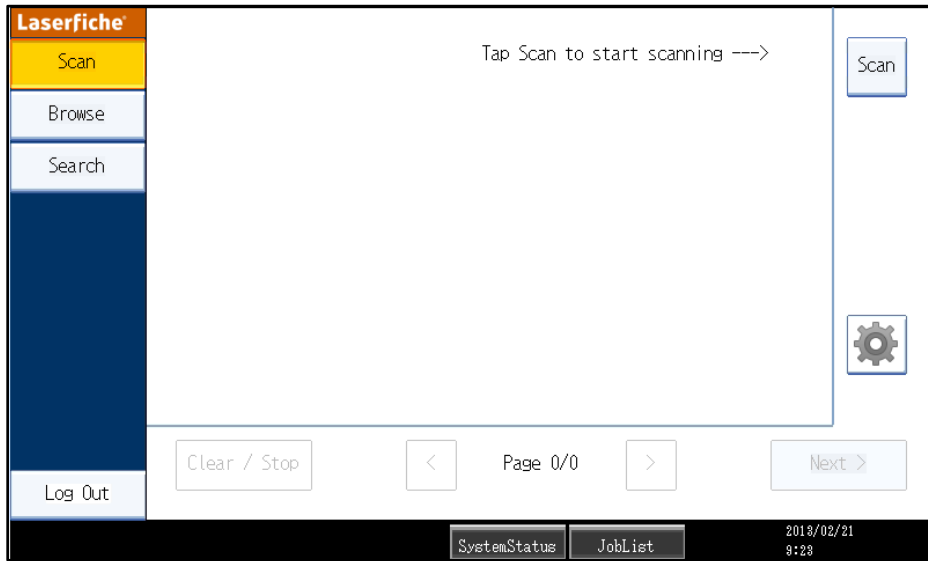


Figure 17: Scan button in the main panel (before scan)



Starts scanning.



Opens the scan settings for the current user.

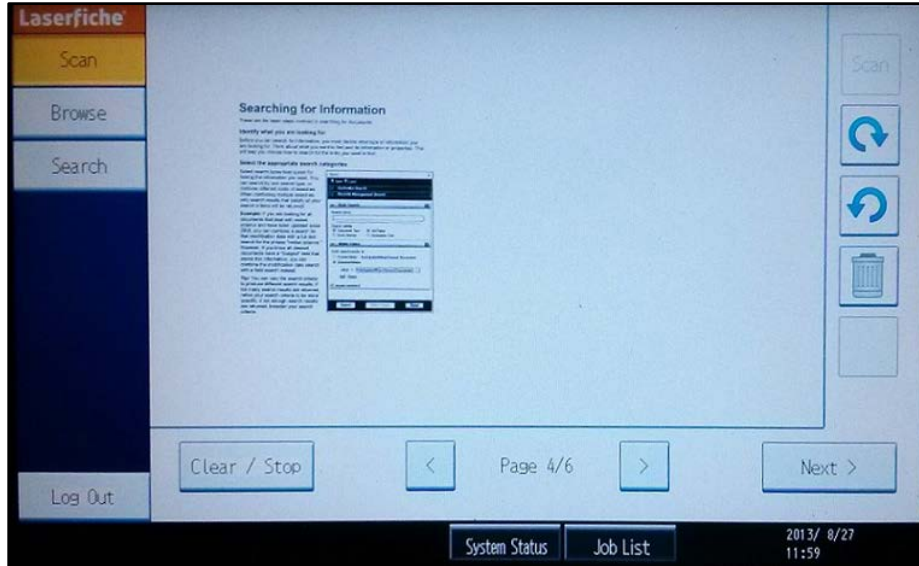


Figure 18: Main panel (after scan)



Rotates the thumbnail of scanned images clockwise.



Rotates the thumbnail of scanned images counterclockwise.



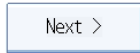
Deletes the current scanned image page.



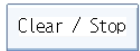
Goes to the thumbnail of the previous scanned image page.



Goes to the thumbnail of the next scanned image page.




Goes to the next step after scanning is finished.



Clears all the scanned images and stops the scanning processing.

Configuring scanning settings

Users can set scanning settings by clicking the Scan Settings  button. Scan settings will be reverted to their defaults after the current session finishes. If a specific setting is not supported by the device, the choice will be disabled.

Example: If the device does not support auto detect, the **Auto Detect** option will not appear in the **Scan size** list on that machine.

The screenshot shows the 'Scan Settings' dialog box. At the top, the title is 'Scan Settings'. Below it, there are several settings sections:

- Scan size:** A dropdown menu currently showing 'Auto Detect'.
- Show thumbnails:** A yellow checkbox that is currently checked.
- Sides:** Two buttons: 'One-Sided' (highlighted in yellow) and 'Two-Sided'.
- Resolution:** A display showing '300 DPI' with '-' and '+' buttons on either side.
- Binding:** Two buttons: 'Long Edge' and 'Short Edge' (highlighted in yellow).
- Format:** Three buttons: 'TIFF', 'PDF', and 'JPG' (highlighted in yellow).
- Color:** Two buttons: 'Black & White' and 'Color' (highlighted in yellow).
- ADF Scan Mode:** Two buttons: 'Batch' and 'SADF' (highlighted in yellow).

At the bottom of the dialog, there are two buttons: 'Discard' on the left and 'Save' on the right.

Figure 19: Scan Setting

Scan Size sets the size of scanned images to be saved in Laserfiche. There are five scan sizes:

- **Auto Detect**
- **Letter (8.5 x 11 in)**
- **Legal (8.5 x 14 in)**
- **A4 (210 x 297 mm)**
- **B5 (182 x 257 mm)**

Sides specifies the sides of the paper will be scanned.

- **One-Sided:** One side of the paper will be scanned.
- **Two-Sided:** Both sides of the paper will be scanned.

Note: If the scan mode is platen, the **Sides** setting will always be **One-Sided**.

Binding specifies if the paper is to be flipped on the **Short Edge** or **Long Edge**.

Note: If the scan size is A3, the binding will always be **Short Edge**.

Color specifies the color of scanned images. The Laserfiche Connector for Ricoh supports two color options.

- **Black & White:** Generates images in black and white only.

Note: If the scan format is TIFF, scanned images will always be Black & White.

- **Color:** Generates 24-bit true color images.

Resolution can be set between 100 and 600 DPI (dots per inch). The default resolution is 300 DPI.

Format specifies the file format of the scanned images when they are saved to Laserfiche. Three file formats are provided: TIFF, JPG, and PDF.

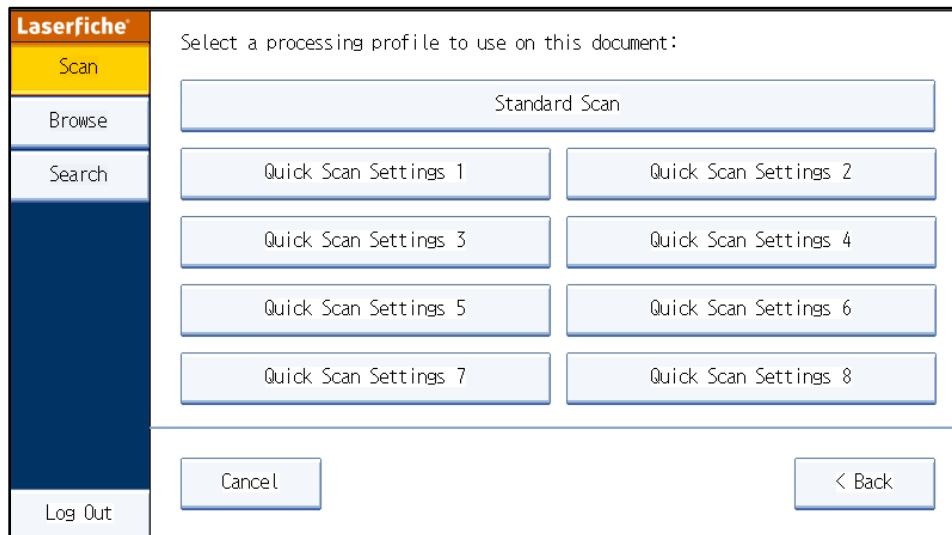
Note: The PDF format is not directly supported by some Ricoh devices. See the [Scanning and saving to Laserfiche](#) section for more information.

Show thumbnail displays thumbnails for the scanned images. Clear this option to speed up scan processing.

ADF Scan Mode specifies how to process multiple documents. Two scan modes are supported:

- **Batch:** Only allows users to scan one batch of documents.
- **SADF:** Allows users to scan multiple batches of documents, with a confirmation dialog box between batches that asks if they want to continue to scan.

Methods of processing scanned documents



The screenshot shows a web interface for Laserfiche. On the left is a vertical navigation menu with buttons for 'Scan' (highlighted in yellow), 'Browse', 'Search', and 'Log Out'. The main content area is titled 'Select a processing profile to use on this document:'. It features a large button labeled 'Standard Scan' at the top, followed by eight smaller buttons arranged in two columns, labeled 'Quick Scan Settings 1' through 'Quick Scan Settings 8'. At the bottom of the main area are two buttons: 'Cancel' on the left and '< Back' on the right.

Figure 20: Scan process selection in the main panel

The Laserfiche Connector for Ricoh allows users to process scanned documents manually or with Quick Scan settings. Each method involves three steps: setting the file name and volume, specifying a location, and specifying metadata information. The Quick Scan settings are defined by the administrative user.


Standard Scan

With Standard Scan, you must specify the file name, volume, destination, and metadata manually.

To use Standard Scan settings

1. Log in to the Laserfiche Connector for Ricoh.
2. Click **Scan** to scan the documents.
3. Click **Next** when you are finished scanning.
4. Click **Standard Scan** under **Select a processing profile to use on this document** in the main panel.

5. Click the textbox after **Name**, and type a file name.

Note: Click the **Token** button (right arrow)  to open the token list panel and select tokens to use in the file name. See the [Tokens](#) section of the Laserfiche User Guide for more information.

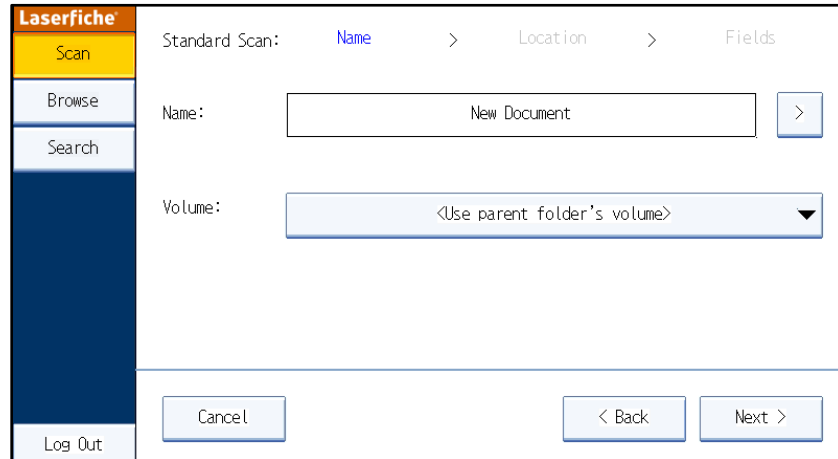


Figure 21: Name and volume options in the Standard Scan settings

6. Next to **Volume**, use the drop-down menu to select the desired volume.

Note: The **Use parent folder's volume** option will save the document to the same volume as the parent folder is stored in. If you select this option, make sure the folder you select in the next step has been assigned a volume. If it hasn't, you will get a **No volume found** error when you finish configuration.

7. Click **Next**.
8. For the **Location** setting, open the desired folder by clicking the folder's name.

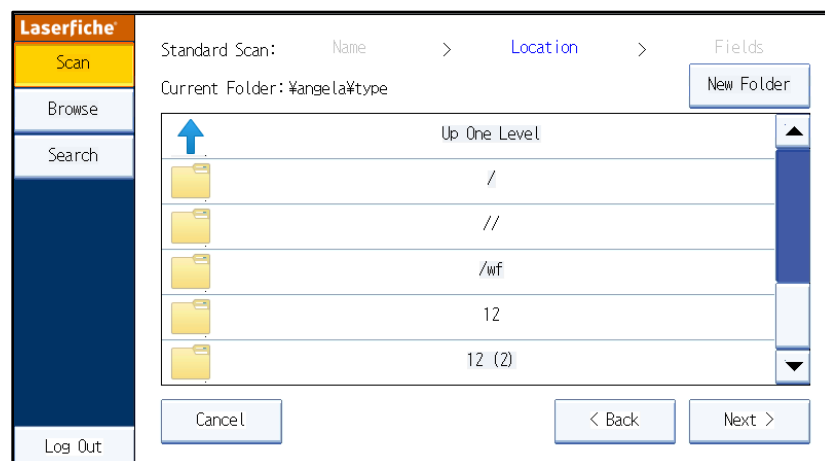



Figure 22: Location settings in the Standard Scan settings

- Click on the **Up One Level** arrow button  to browse the parent folder.

- Click the **New Folder** button  to create a new folder in the current folder.
9. Click **Next** after the desired location has been set.
 10. Next to **Template**, use the drop-down menu to select the desired template. See the [Fields and Templates](#) section of the Laserfiche Administration Guide for more information.

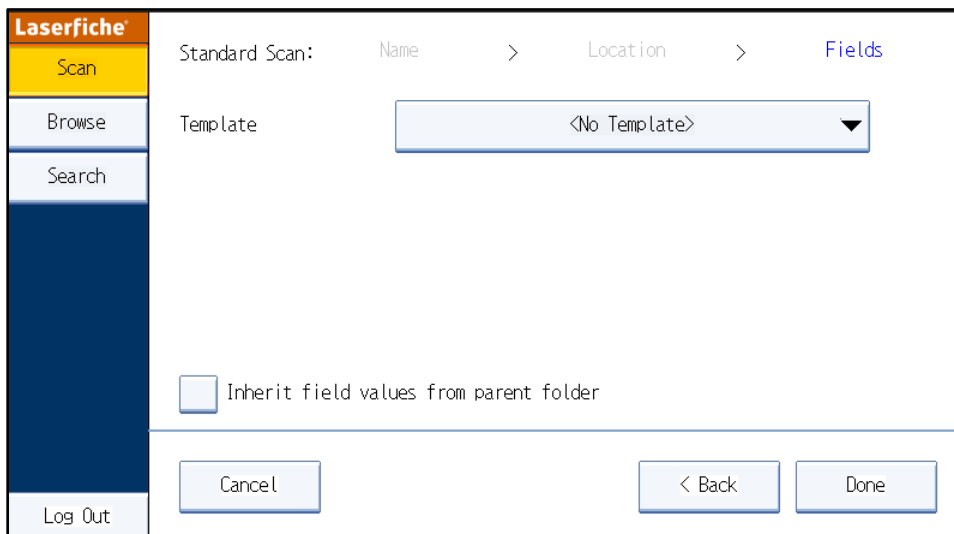
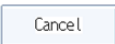


Figure 23: Template and fields options in the Standard Scan settings

11. Provide any desired field values.

Note: The **Inherit field values from parent folder** option will copy the parent folder's template and fields values and apply them to the document. If you select this option, it will disable the template drop-down menu, but you will still be able to edit individual field values.

12. Click **Done** to save the document to Laserfiche.

Tip: Click the **Cancel** button  at any time to discard the scanned images and settings and go back to the application's initial scan screen.

Quick Scan settings

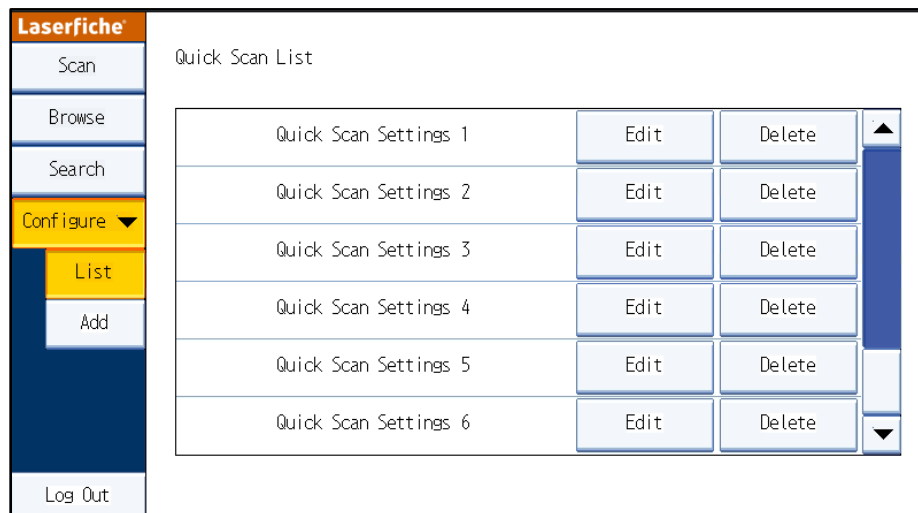
The Quick Scan settings are defined by the administrative user. File name, location, and metadata must be set and saved in the Quick Scan settings.

To create Quick Scan settings

1. Log in to the Laserfiche Connector for Ricoh as the administrative user.
2. Click **Configure**, and select **Add** on the left sidebar.
3. Next to **Profile Name**, type a name for your Quick Scan settings.
4. Follow steps 5-11 in the [Standard Scan](#) section above.
5. Click **Save** to save the Quick Scan settings.

To edit or delete Quick Scan settings

1. Log in to the Laserfiche Connector for Ricoh as the administrative user.
2. Click **Configure**, then click **List** on the left sidebar.
 - Click the **Edit** button next to the Quick Scan settings you want to edit. Make any desired changes to the settings.
 - Click the **Delete** button next to the Quick Scan settings you want to delete.



Laserfiche		
Scan	Quick Scan List	
Browse		
Search		
Configure		
List		
Add		
Log Out		

Quick Scan Settings 1	Edit	Delete
Quick Scan Settings 2	Edit	Delete
Quick Scan Settings 3	Edit	Delete
Quick Scan Settings 4	Edit	Delete
Quick Scan Settings 5	Edit	Delete
Quick Scan Settings 6	Edit	Delete

Figure 24: Quick Scan list

To use Quick Scan settings

1. Log in to the Laserfiche Connector for Ricoh.
2. Click **Scan** to scan documents.
3. Click **Next** when you have finished scanning.

4. Select a Quick Scan setting from the **Select a processing profile to use on this document** panel.

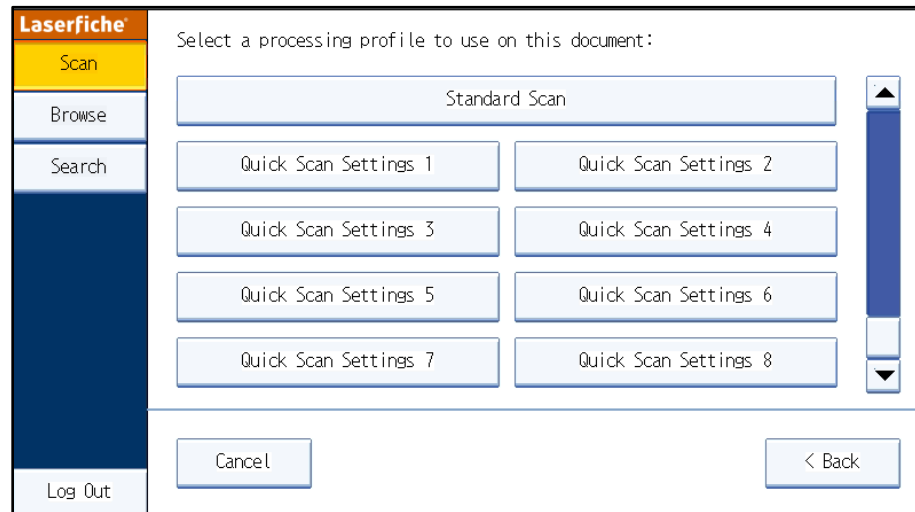


Figure 25: Scan process selection in the main panel

4. An informational message displays the file name and storage location. Click **OK**.
5. Review the field values, and make any necessary changes.
6. Click **Done** to save the document to Laserfiche.


Browsing to documents to print

The Laserfiche Connector for Ricoh allows users to browse the repository and print documents.

Note: Ricoh devices and the Laserfiche Connector for Ricoh support printing TIFF Group 3, TIFF Group 4 A4 size, and JPG format files. However, as discussed in the [Configure scanning settings](#) section, some Ricoh devices do not directly support the PDF format. If you are using one of these devices, you can use a postscript card to support PDFs. Check the platform details of your Ricoh device to see if PDF format is supported on that machine. The Laserfiche Connector for Ricoh does not support printing Word, Excel, or other electronic documents.

To browse to and print Laserfiche documents

1. Log in to the Laserfiche Connector for Ricoh.
2. Click the **Browse** button on the left sidebar.
3. Click folder names to open folders, and select the file to be printed.

Tip: Click the **Up One Level** arrow  to return to the parent folder.

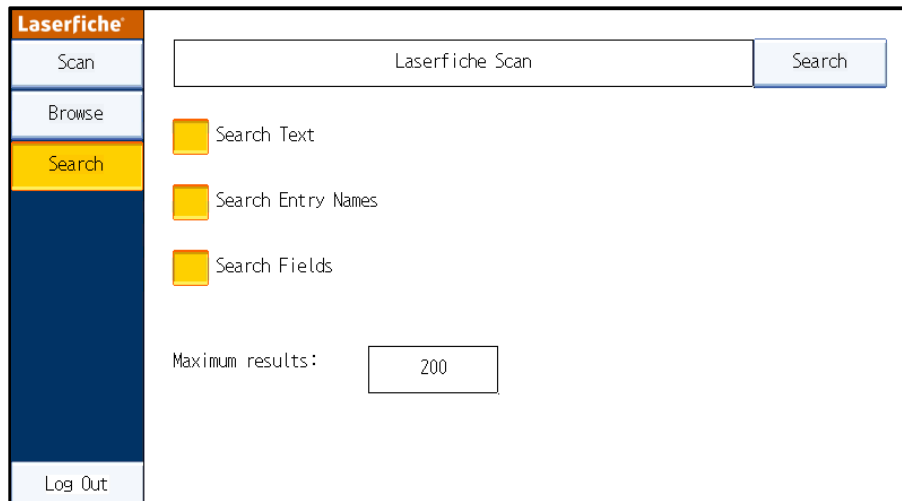
4. Click **Print**.

Searching for documents to print

The Laserfiche Connector for Ricoh also allows users to search for documents in the repository to print.

To search for and print Laserfiche documents

1. Log in to the Laserfiche Connector for Ricoh.
2. Click the **Search** button on the left sidebar.




The screenshot shows the Laserfiche search interface. On the left is a dark blue sidebar with a white header 'Laserfiche'. Below the header are four buttons: 'Scan', 'Browse', 'Search' (which is highlighted in yellow), and 'Log Out'. The main content area is white. At the top is a search box with the text 'Laserfiche Scan' and a 'Search' button to its right. Below the search box are three radio button options, each with a yellow square icon: 'Search Text', 'Search Entry Names', and 'Search Fields'. At the bottom of the main area, there is a label 'Maximum results:' followed by a text box containing the number '200'.

Figure 26: Search options

3. Select one or more of the following search types:
 - **Search Text:** Lets you search the documents' text.
 - **Search Entry Names:** Lets you search based on entry (document or folder) name.
 - **Search Fields:** Lets you search field values.
4. Type the search query in the search text box.


Tip: The asterisk *, accessed by clicking the **Shift** key, acts as a wild card.

5. Set the maximum number of results you want the search to return.
6. Click **Search**.

Note: Click the **Cancel** button  after the search query to start a new search. Search results are not saved.

7. Select a document to print.
8. Click **Print**.

Print settings

Users can set the print settings by clicking the **Print Settings** gear  button next to the **Print** button. Print settings will be reverted to their defaults after the current session finishes. Any settings not supported by the MFP will be disabled.

Example: If the device does not support auto detect, the **Auto Detect** option will not appear in the **Print Source** list on that machine.

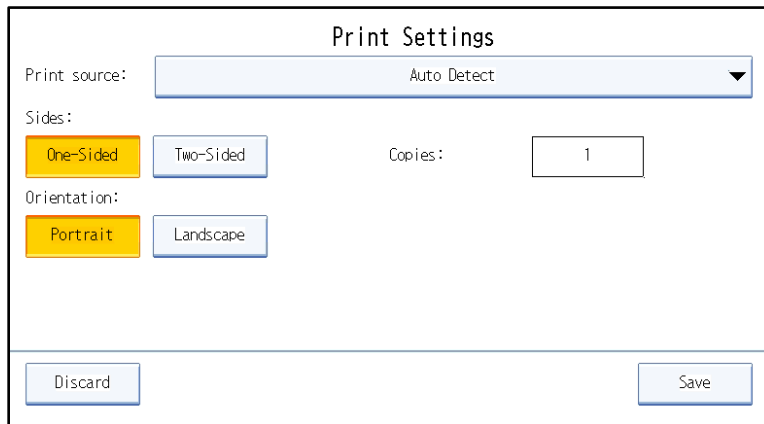


Figure 27: Print settings

Print Source specifies the paper tray to use. Five tray choices are supported: **Auto Detect**, **Top**, **Middle**, **Bottom**, and **Tray4**.

Sides specifies whether the device will print on one side or both sides of the paper.

Orientation determines the orientation the files will be printed in. This option may not be available on some devices.

- **Portrait:** Files will be printed with a vertical orientation.
- **Landscape style:** Files will be printed with a horizontal orientation.

Copies sets how many copies will be printed.

Known Limitations

The Laserfiche Connector for Ricoh only supports devices with:

- ESA SDK 7.x, 10.x, 11.x and 12.x
- WVGA screens

FAQ & Troubleshooting

Why is the “Extended Feature Settings” button not appearing in the administration settings?

If this button does not appear, the Ricoh Java card may not be installed correctly. Check that the Java SD card is inserted into Slot 3 of the Ricoh device. If you have problems enabling the Java card, contact your hardware vendor for assistance.

What is my Laserfiche Server’s IP address?

Use operating system command-line tools, such as ipconfig, to get information about your Laserfiche Server machine.

Why did connecting to the HTTP server fail?

This error indicates that the Laserfiche Connector for Ricoh is unable to connect to the Laserfiche Server over the network.

Common causes of the problem are:

- The Laserfiche Server is not running.
- Firewalls or network routing configurations are preventing the network connection from being established. Check for firewalls on the Laserfiche Server or with your network administrator.
- A network outage is preventing the connection from being established. Try accessing the web interface on the Ricoh machine to ensure a network connection can be established.
- The Laserfiche Server IP address was set incorrectly in the **LfConnector.dalp** file. To change the connection settings, reinstall the application after updating the **LfConnector.dalp** file. [Learn more](#).

Why is the Laserfiche Connector for Ricoh embedded application not listed in the applications to install?

Look for the Laserfiche Connector for Ricoh under the name “Laserfiche Scan.” If “Laserfiche Scan” is not listed in the applications to install, it might not have been copied to the Java SD card in the correct location or format. Please [uninstall](#) and then [reinstall](#) the Laserfiche Connector for Ricoh.

My users have symbols in their passwords and/or it's difficult to enter their usernames. What options do I have?

Clicking the **Shift** key provides additional symbols. If using the **Shift** key is too cumbersome, your users may want change their network passwords so they only contain standard characters.



Laserfiche Connector for Ricoh Installation and Administration Guide

September 2014

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Description:

This white paper discusses the installation and administration of the Laserfiche Connector for Ricoh. It also provides test scenarios and user instructions.

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