



Kofax Front Office Server Administrator's Guide for Ricoh MFPs

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KOFAX

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Preface

This guide describes how to install the client software that resides on the MFP and has options that appear on the device's front panel. After performing this procedure, you can create and update device profiles with shortcuts from Administration Console whenever needed. When the MFP connects with Kofax Front Office Server, the updated device profiles are retrieved and display on the MFP.

Kofax Front Office Server supports Ricoh devices with the Smart Operation Panel. The instructions in this guide apply to all devices unless otherwise noted.

 If you are upgrading Kofax Front Office Server, you must upgrade the client software on all MFPs to implement the latest security features.

Related documentation

The product documentation set for Kofax Front Office Server is available at the following location.

<https://docshield.kofax.com/Portal/Products/KFS/4.3.0-ugsc6qbedi/KFS.htm>

In addition to this guide, Kofax Front Office Server includes the following documentation:

Kofax Front Office Server Installation Guide

The *Kofax Front Office Server Installation Guide* provides installation instructions and other information that helps you successfully set up Kofax Front Office Server.

Kofax Front Office Server Administrator's Guide

The *Kofax Front Office Server Administrator's Guide* shows you how to change the configuration by modifying properties files and performing other administration tasks to keep Kofax Front Office Server working properly.

Help for Kofax Front Office Server Applications

Help for Kofax Front Office Server Thin Client (also referred to as the Thin Client) and the Kofax Front Office Server Administration Console (also referred to as the Administration Console) describes how to use the application. To view the Help from the interface, click the **Help** icon. The Help appears in a separate browser window.

Release Notes

Release notes provides late-breaking product information that may not be included in other Kofax Front Office Server documentation. The release notes are available for viewing or downloading from the Kofax website.

For instructions on using Kofax Capture, see the Kofax Capture guides and Help.

Training

Kofax offers both classroom and computer-based training to help you make the most of your Kofax Front Office Server solution. Visit the Kofax website at www.kofax.com for details about the available training options and schedules.

Getting help with Kofax products

The [Kofax Knowledge Portal](#) repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Kofax Knowledge Portal, go to <https://knowledge.kofax.com>.

 The Kofax Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Kofax Knowledge Portal provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.
To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:

- Access the Kofax Community (for all customers).
On the Resources menu, click the **Community** link.
- Access the Kofax Customer Portal (for eligible customers).
Go to the [Support Portal Information](#) page and click **Log in to the Customer Portal**.
- Access the Kofax Partner Portal (for eligible partners).
Go to the [Support Portal Information](#) page and click **Log in to the Partner Portal**.
- Access Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Go to the [Support Details](#) page and select the appropriate article.

Chapter 1

Features

The following Kofax Front Office Server features are available with the Ricoh MFP. See the Help for the Administration Console and the Thin Client for more information.

- Management through Kofax Front Office Server Administration Console
MFPs are able to self-register with the Administration Console and automatically activate licenses. (This feature is optional.) You can also manually activate, deactivate, or remove MFPs whenever needed. In the Administration Console, you can open the Web page for the MFP if Kofax Front Office Server can communicate over the network with the MFP.
The number of MFPs you can use with Kofax Front Office Server depends on your product license.
- Client software on the MFP
When the client software is installed, a button is added to the front panel of the MFP to provide access to Kofax Front Office Server features. The appearance of the front panel depends on the MFP model.
- Log on
This feature enables you to log on to the MFP as a Kofax Front Office Server user. Logging on may provide additional options, such as personal shortcuts.
- Shortcuts
This feature facilitates the sending of documents. Use the Administration Console to create shortcuts and assign the shortcuts to device profiles. When the MFP connects to Kofax Front Office Server, the shortcuts appear on the MFP front panel. Users can also create their own personal shortcuts with the Thin Client. When users log on at the MFP, any personal shortcuts appear along with group shortcuts associated with the user.
- Scan history
At the MFP, you can press the Scan History button on the main menu to view the scan history. If you are logged on, the history shows transactions you sent to the server from any connected device. If you are not logged on, the history shows transactions sent from all anonymous users on the device, as well as any transactions that are waiting to be sent to the server from the device.

Status	Description
Pending*	The job is waiting to be sent to the server.
Processing	Submitting to destination.
Inbox	Successfully sent to an inbox destination, but not yet sent to final destination. or Created in the thin client, but not yet submitted.
Error to Inbox	Indicates that the job has failed and was sent to the user's inbox.

Status	Description
Merged	Multiple documents are merged into a single document. The parent history record status remains as <i>Inbox</i> , but the status for child records is changed to <i>Merged</i> .
Completed	Successfully sent to destination.
Retry	Error occurred and job will be retried later.
Pending Retry*	The job failed to be sent and another attempt will be made. This message indicates the number of the retry attempt.
Error	Failed to send to destination after three attempts. Status is <i>Retry</i> while a retry is scheduled.
Deleted	User deleted transaction from the inbox, or the administrator removed it during transaction review.

* Can be cancelled manually on devices. The number of attempts, the duration between retries and the behavior for handling a failed job is configured in the Administration Console. If the failed job is retried or cancelled, the device processes it after finishing all other jobs pending for process.

- Display confirmation messages

You can enable confirmation messages to be sent from Kofax Front Office Server to this MFP so that users can see status information about their transactions. Messages appear on the MFP front panel when each scanned transaction reaches the server, or if a problem occurs. See the Administration Console Help for instructions on setting up confirmation messages.

- Language support

At the MFP front panel, you can specify the language. If the language specified is not supported by Kofax Front Office Server, English is used by default.

- Batch and/or index fields

You can enter values for batch and/or index fields at the MFP. When you define shortcuts in the Administration Console, you can enter default values into fields for these shortcuts. The data is also validated for an appropriate type and length. You can also customize the validation and field lookup options. For information, see the *Kofax Front Office Server Administrator's Guide*.

- Coversheet destination

This destination enables you to add a coversheet generated by Kofax Front Office Server to documents you want to send.

You can include more than one coversheet in a scan job. Put the coversheet in front of the documents that you want to send to a destination. If you scan at an MFP, the separated documents are sent to the destinations encoded on the coversheet.

Coversheets can also be used when scanning directly into the Thin Client. Coversheets separate the pages into individual documents. You can then send the documents to their destination with the data encoded in the coversheet.

- Dynamic browsing for SharePoint and Folder destinations

For folder destinations, users can dynamically browse the directory structure. For SharePoint and CMIS destinations, the user can dynamically select where the document will be stored.

- Enhanced lookup

Depending on the configuration, you can look up fax numbers and email addresses at the MFP. Kofax Front Office Server retrieves fax number and email address lists from Active Directory,

personal address books, and the database table customemailfaxlookup. For information about the various data sources and necessary configuration steps, see the *Kofax Front Office Server Administrator's Guide*.

At the front panel of the MFP, press the fax number or email address field to open the onscreen keyboard and type the search entry. Then, press **Search** to obtain the list of matching entries.

- Customized validation and lookup options

You can customize validation and a variety of field lookup options, as well as form validation. For information about the necessary configuration steps, see the *Kofax Front Office Server Administrator's Guide*.

- Device logging

Log messages from the device are stored on the server. Each file is named according to its device ID, and they are stored in the following folders where Kofax Front Office Server is installed:

- Log\Service: Contains logs related to asynchronous activities, such as exporting jobs to destinations.
- Log\WebApp: Contains logs related to activities from Administration Console, Thin Client, MFPs, and Web Services.

- Scanned page count

This feature displays the number of pages that have been scanned. When you add pages to a document, the front panel displays the number of newly scanned pages and the total number of pages in the document.

- Help

Help is available at the MFP touch screen. Users can press the question mark or Help button on the touch screen to view information about the screen.

Chapter 2

System requirements

The primary source of information about supported devices and other Kofax Front Office Server requirements is the Technical Specifications document. The document is updated regularly, and we recommend that you review it carefully to ensure success with your Kofax Front Office Server product.

Before installing the client software for the Ricoh MFP, do the following:

- Install Kofax Front Office Server.
- Download the Ricoh client software from the Administration Console.
- Make sure you have sufficient licenses to use your MFPs.
- Make sure that you use a supported Ricoh MFP. See the Kofax Front Office Server Support pages on the Kofax website for supported MFPs.
- Increase the default heap memory size for applications when both Card Authentication Package (CAP) and Kofax Front Office Server operate simultaneously on the same device. Ricoh supports Card Authentication Package (CAP) on versions 4, 5, and 6 of the Ricoh JDK. However, Kofax only supports CAP with Kofax Front Office Server on versions 5 and 6, not 4.
- When using device authentication with Kofax, make sure that the timeout setting is set to enable the device to prepare the largest likely scanned documents for sending to Kofax. If the device logs out before finishing, the scan job is lost.
- If you are using a 10.x or later device, you can use IPv4 and IPv6 addresses. For devices using earlier versions of Ricoh software, only IPv4 addresses can be used.

Cards for Ricoh MFPs

You may need to install cards in the MFP to support Kofax Front Office Server features.

Embedded Software Architecture card

To install the client software, you must install an Embedded Software Architecture card. Kofax Front Office Server supports Embedded Software Architecture versions 2 and 4. See the Kofax website for a list of supported Ricoh MFPs and the cards required for each. Install the card as shown in the Ricoh MFP documentation.

To purchase an Embedded Software Architecture card, contact your Ricoh dealer or Kofax.

PostScript card for discovery support

To use the automatic discovery feature in Administration Console to detect the MFP, install a PostScript card, which includes software needed for the feature. If the MFP cannot be discovered automatically, or if it is outside a firewall, add it manually in the Administration Console. The PostScript card and the automatic discovery feature are not required to use a Ricoh MFP with Kofax Front Office Server.

To purchase a PostScript card, contact your Ricoh dealer or partner.

Network configuration

Make sure the Ricoh devices are able to connect with the server, especially if you are using SSL. This section describes basic network configuration tasks for Ricoh Android and Java devices. There may be differences in menus, depending on your device. For more information, refer to the Ricoh documentation. For tips to troubleshoot the network configuration, see [Troubleshooting network connectivity](#).

Ricoh Android network configuration

1. Start the Web Image Monitor as shown in the Ricoh documentation.
2. Select **Device Management > Configuration**.
3. Under **Security**, click **SSL/TLS**.
4. Select the highest version of TLS that your server and device supports.

In most cases, this is TLS 1.2. Devices may only support a lower version of TLS. If you need to use a higher version to connect with the server, contact Ricoh about available HTLS firmware upgrades.

Ricoh Java client network configuration

Before you begin, make sure you have the latest firmware for your device.

1. Start the Web Image Monitor as shown in the Ricoh documentation.
2. Select **Device Management > Configuration**.

Chapter 3

Installing the client software

You can install the Kofax Front Office Server app on the MFP using one of the following methods:

- For an Android device with the Smart Operation Panel, use the Ricoh Android Registration Client.
- For other Ricoh devices, use either Administration Console or the internal Web pages of the MFP, depending on whether or not the device can be discovered by Kofax Front Office Server.

The Ricoh Android Client requires second-generation SOP (SOP G2) and SmartSDK Service 2.1 or later. For SOP G1 and Java devices, install the Ricoh Java Client.

Before installing the client software on the MFP, do the following:

- Install Kofax Front Office Server.
- Download the Ricoh client software from Administration Console. (See the *Help for Kofax Front Office Server Administration Console* for instructions.) Then extract `ricoh.zip` to a folder on your computer. It contains the following files.
 - `ricoh_smart_operation_panel.zip`: For devices with a Smart Operation Panel.
 - `KofaxRicohClient.zip`: For Ricoh devices that have Java Platform 7.x or higher.
 - `RegistrationAnroidRicohClient.zip`: A tool to register `ricoh_smart_operation_panel.zip` to Ricoh Smart Operation Panel devices.
- Make sure that Embedded Software Architecture is installed on the Ricoh MFP.
- Make sure port 80 or 443 is open for communication between Kofax Front Office Server and the MFP.

 If the MFP already has the client software, unregister or uninstall it before installing the new version.

Installing on Ricoh Android devices

For Ricoh Android devices, use the Ricoh Android Registration Client to install the Kofax Front Office Server client software to one or more devices with the Smart Operation Panel.

Note the following:

- The Ricoh Android Registration Client requires Java Runtime Environment (JRE) version 6 or later.
- You can pre-configure settings by editing the `KofaxRicohAndroid.dalp` file before deploying the Kofax Ricoh Android client to Ricoh Smart Operator Panel devices. See [Pre-configured settings for Ricoh Android devices](#).

1. In the folder where you downloaded and extracted the client software, run `RegisterAndroidRicohClient.exe`.

The **Ricoh Android Registration Client** window opens.

2. In the **MFP Host Names or IP Addresses (comma separated)** field, provide information for the MFPs you are registering. To register multiple MFPs at one time, use one of the following options.
 - Enter MFP host names or IP addresses separated by commas into the **MFP Host Names or IP Addresses (comma separated)** field.
 - If you have a file that is generated by MFP management software, select the character used to separate each entry (a comma, tab, or semicolon) in the **Delimiter**. Make sure each MFP is on a separate line and the IP address or host name is the first entry. In this example, the IP address, host name, MAC address, and model name are delimited by commas.

```
173.21.45.23,purchasing01,11-22-33-44-55-66,Purchasing 1
173.21.45.24,purchasing02,11-22-33-44-55-67,Purchasing 2
173.21.45.25,purchasing03,11-22-33-44-55-68,Purchasing 3
173.21.45.26,purchasing04,11-22-33-44-55-69,Purchasing 4
173.21.45.27,purchasing05,11-22-33-44-55-70,Purchasing 5
```

If the first entry is not an IP address or host name, correct it before attempting to import the file.

- Create a text file to import with all your IP addresses or host names with a line break after each, as shown in the following example. If you use this method, it does not matter what is selected in the **Delimiter** field.

```
173.21.45.28
173.21.45.29
173.21.45.30
173.21.45.31
173.21.45.32
```

If you have a file to import, click **CSV File** and select the file. The registration program registers each MFP in order until all of the ones listed in the file are registered.

3. Enter the credentials for the device administrator. Enter the user name in the **Device Administrator ID** field and the password in the **Device Administrator Password** field.

 To register multiple MFPs, the administrator credentials must be the same on every MFP.

4. Select the type of connection in **MFP Protocol** field, either **http** or **https**.
5. In the **Ricoh Client File** field, click **Browse**. and select the ricoh_smart_operation_panel.zip file.
6. Click **Register**.

The Ricoh Android Registration Client validates the fields and indicates any missing fields. The progress bar at the bottom of the window indicates the status of the registration.

When the registration process is completed, the **Registration Results** window lists successful deployments as well as any errors. Right-click and copy one or more selected items or select them all.

7. When you finish viewing the **Registration Results** window, click **OK** and close the Ricoh Android Registration Client.

Pre-configured settings for Ricoh Android devices

You can pre-configure settings by editing the KofaxRicohAndroid.dalp file before deploying the Kofax Ricoh Android client to Ricoh Smart Operator Panel devices. This enables you to deploy the same settings to multiple devices. This feature requires a minimum of G2 firmware.

i If an SOP device does not support pre-configured settings, a settings window appears on the device the first time you run the Kofax client.

To use this feature, do the following:

1. From the folder where the Ricoh client software is located, locate `ricoh-smart-operation.zip`.
2. Extract `ricoh-smart-operation.zip`.
3. Edit `KofaxRicohAndroid.dalp` to enter connection information for Kofax Front Office Server and other settings.
For example, to enable logging so you can perform network troubleshooting, set `-a` to `true`. See the comments in the `KofaxRicohAndroid.dalp` file for information.
4. Compress `KofaxRicohAndroid.dalp` and `KofaxRicohAndroid.apk` into a single `.zip` file.
5. Deploy the `.zip` file to Ricoh Smart Operator Panel devices using either the Ricoh Android Registration Client tool or WIM.

Installing on Ricoh Java devices

For Ricoh Java devices, the installation process depends on whether Kofax Front Office Server can discover the MFP. For an MFP to be discovered, the Kofax Front Office Server computer must be able to communicate with the MFP over the network traffic. Use Ping to test the connection. Then do the following:

- If the MFP can be discovered, deploy the software from Administration Console.
- If the MFP cannot be discovered, install the software using the internal Web pages of the MFP.

i Although you can use the internal Web pages even if the MFP can be discovered, deploying from the Administration Console requires fewer steps.

If the MFP can be discovered

1. Start the Administration Console as described in the *Kofax Front Office Server Administrator's Guide* and log on as a user with administrator rights.
2. In the Administration Console on the **Settings - Advanced** tab, locate the `kfs.properties` namespace. Set the following properties.
 - **ProxyServer**: Enter the host name or IP address of the server (or the proxy server for a cluster configuration) used by Kofax Front Office Server.
 - **ProxyServerProtocol**: Select a secure (HTTPS) or unsecure (HTTP) connection.
 - **ProxyServerPort** or **ProxyServerSecurePort**: Enter the port number used by Kofax Front Office Server in **ProxyServerPort** for an HTTP connection or **ProxyServerSecurePort** for an HTTPS connection.

When you have set these options, click **Save**.

3. In the Administration Console, discover and add the MFP. For instructions, see the Administration Console Help.

4. On the available devices list, select the MFP and click **Deploy**. A Kofax button appears on the MFP Home screen.
5. Create a device profile, and associate the profile with the MFP. Follow the instructions in the Administration Console Help.

If the MFP cannot be discovered

1. Start the Administration Console as described in the *Kofax Front Office Server Administrator's Guide* and log on as a user with administrator rights.
2. In the Administration Console on the **Settings - Advanced** tab, locate the kfs.properties namespace. Set the following properties.
 - **ProxyServer**: Enter the host name or IP address of the server (or the proxy server for a cluster configuration) used by Kofax Front Office Server.
 - **ProxyServerProtocol**: Select a secure (HTTPS) or unsecure (HTTP) connection.
 - **ProxyServerPort** or **ProxyServerSecurePort**: Enter the port number used by Kofax Front Office Server in **ProxyServerPort** for an HTTP connection or **ProxyServerSecurePort** for an HTTPS connection.

When you have set these options, click **Save**.

3. Start the Ricoh Web Image Monitor using a browser, and enter the IP address of the MFP as the URL.
4. Log on as a user with administrator rights.
5. On the left panel, select **Configuration**.
6. In the **Extended Feature Settings** area, select **Install**
7. On the **Install** window, select **Local File** and browse to KofaxRicoClient.zip.
8. Click **Display Extended Feature List**.
9. In the **Extended Feature List** area, select your installation target settings.
10. Select **Kofax_Client** and then click **Install**.
The MFP will be added in the Administration Console the first time it contacts Kofax Front Office Server.
11. On the confirmation screen, click **OK**.

 Depending on the model, the Ricoh MFP may restart after the client software is installed.

Chapter 4

Uninstalling the client software

As with installation, uninstall the Kofax Front Office Server app on the MFP using one of the following methods:

- For an Android device with the Smart Operation Panel, use the Ricoh Android Registration Client.
- For other Ricoh devices, use either Administration Console or the internal Web pages of the MFP, depending on whether or not the device can be discovered by Kofax Front Office Server.

Uninstalling with the Ricoh Android Registration Client

Use the Ricoh Android Registration Client to uninstall the app by following these steps:

1. In the folder where you downloaded and extracted the client software, run RegisterAndroidRicoClient.exe.
The **Ricoh Android Registration Client** window opens.
2. In the **MFP Host Names or IP Addresses (comma separated)** field, provide information for the MFPs from which you are uninstalling the app. To uninstall the app from multiple MFPs at one time, do one of the following:
 - Enter MFP host names or IP addresses separated by commas into the **MFP Host Names or IP Addresses (comma separated)** field.
 - Use the file containing a comma, tab, or semicolon delimited list of host names or IP addresses of the MFPs. In the **Delimiter** field of the registration client, select the type of delimiter that is used in the file. Click the **CSV File** button and select the file.

See [Installing on Ricoh Android devices](#) for instructions on using a comma-delimited list or specifying IP addresses or host names without a list.

3. Enter the credentials for the device administrator. Enter the user name in the **Device Administrator ID** field and the password in the **Device Administrator Password** field.

 To register multiple MFPs, the administrator credentials must be the same on every MFP.

4. Select the type of connection in **MFP Protocol** field, either **http** or **https**.
5. Click **Unregister**.

The Ricoh Android Registration Client validates the fields and indicates any missing fields. The progress bar at the bottom of the window indicates the status. When the process is completed, the **Results** window lists successful uninstallations as well as any errors. Right-click and copy one or more selected items or select them all.

6. When you finish viewing the **Results** window, click **OK** and close the Ricoh Android Registration Client.

Uninstalling the client software from other Ricoh devices

Uninstall the client software if you are no longer using Kofax Front Office Server with the MFP or to deploy an updated version of the client software. Uninstall the current version of the client software before deploying a new one.

i The commands and buttons vary depending on device model. Refer to the documentation provided with the Ricoh MFP for instructions.

1. On the front panel, select **User Tools > Machine Features > Extended Feature Settings > Extended Feature Settings**.
2. Shut down the client software as follows:
 - a. Press the **Startup Setting** tab.
The tab has a **Kofax MFP Client** button showing the status to the left.
 - b. If the status is **Stop**, go to the next step. If the status is **Active, Starting Up, or Suspend**, press **Kofax MFP Client** to stop the client software.
3. Uninstall the client software as follows:
 - a. Press the **Uninstall** tab.
The tab has a **Kofax MFP Client** button.
 - b. Press **Kofax MFP Client**.
 - c. When prompted to confirm that you are uninstalling the client software. Press **Yes**.
 - d. When notified that the removal is completed, press **Exit** in succession to close the Extended Feature Settings and the User Tools page.
4. Turn off the power switch on the front panel (wait until the lights are off) and then the main power switch.
5. Leave the MFP off for 15 seconds or until the main power light goes off. Then, turn on the MFP.
6. If you are upgrading, follow the instructions in [Installing the client software](#).

Chapter 5

Starting the client software for the first time

After installing the client software, follow these steps to run it for the first time. This task only needs to be performed once.

i The commands and buttons vary depending on device model. Refer to the documentation provided with the Ricoh MFP for instructions.

1. Set the function priority to **Home** to ensure that the device connects to the server reliably.
 - a. On the front panel, select **User Tools > Screen Features > Screen Device Settings > Function Priority**.
 - b. Make sure **Home** is selected. If not, change the setting.
 - c. If you changed the function priority to **Home**, restart the device.
2. Start the **Kofax MFP Client** app, if it is not already started.
 - a. On the front panel, select **User Tools > Machine Features > Extended Feature Settings > Extended Feature Settings**.
 - b. Press the **Startup Setting** tab.
The tab should have a **Kofax MFP Client** button.
 - c. If the status does not indicate that the app has started, press the **Kofax MFP Client** button to start it.

After completing this procedure, use the information in [Displaying the client software on the MFP front panel](#) to display the client software on the front panel.

Displaying the client software on the MFP front panel

On a Smart Operation Device, press **Kofax** on the main menu.

i The client software does not support the Function Priority feature.

On other Ricoh devices, press the **Other Function** button. Depending on the other functions assigned to the button, the following happens:

- If there are no other functions assigned to the button, the client software appears on the front panel immediately.
- If other functions are assigned to that button, a menu of buttons appears. Press **Kofax MFP Client**.

If the client software does not appear on the front panel, make sure you started the software on the Startup Setting tab.

Chapter 6

Additional information

The following is additional information which may be of interest to you when working with Kofax Front Office Server and the MFP.

Disconnected processing

If the MFP is disconnected from the network, or if Kofax Front Office Server is down, scanned documents are saved on the MFP hard drive until the connection to Kofax Front Office Server is restored. This feature enables you to keep scanning documents, but with the following limitations:

- New users cannot log on at the MFP.
- Device profiles cannot be retrieved from Kofax Front Office Server.
- Documents are not delivered until the connection to Kofax Front Office Server is restored.
- If the hard drive on the MFP is full, no more documents can be scanned.

When the connection to Kofax Front Office Server is restored, the documents on the MFP hard drive are sent to the specified destinations.

Troubleshooting network connectivity

To troubleshoot network connectivity, enable logging by editing the `KofaxRicoAndroid.dalp` and set `-a` to true. See [Pre-configured settings for Ricoh Android devices](#) for instructions on modifying `KofaxRicoAndroid.dalp`.

If the device has a web browser, you can use it to check connectivity. Enter the URL to the server and verify that you can connect. You can also check the certificate installed on the server and make sure it matches the one on the device.

Port 4242 requirement for Telnet commands

For Ricoh Android MFPs, port 4242 needs to be redirected to the client by default so that Telnet can be used for log tracking data and other commands. Follow these steps:

1. Open the device IP on the Telnet console.
2. Log on as a user with administrator rights.
3. Enter the following commands to configure port forwarding.

```
nat_ui machine_port <xy> 4242
nat_ui ui_port <xy> 4242
```

Where <xy> is the position of the modified forwarding setting, which can be from 1 to 10. For example, to use position 1, enter the following commands.

```
nat_ui machine_port 1 4242
nat_ui ui_port 1 4242
```

For information about these positions, enter the `help nat_ui` command.

4. Enter `logout`. When prompted to save changes, enter `yes`.
5. On the MFP, start the Kofax client.
6. Go back to the Telnet console and enter the following command:

```
telnet <MFP IP Address> 4242
```

This command creates the connection to the MFP client.

7. Enter the following command to send the log to the server:

```
sendlogs
```

8. Close the console window.

JPEG compression level

JPEG compression level for scanning can be adjusted on version 11x devices. Use the Ricoh device web interface and select **Device Management > Configuration > Send Settings**.

For Ricoh Android MFPs, image compression can be preconfigured by specifying the compression mode in the `.dalp` file. For the best results with black and white images, specify `MH` for `-compression_BW_method`. For color images, select `LEVEL1` for `-compression_Color_Level`. The settings and their available options appear as follows in the `.dalp` file.

```
<!-- #OPTIONAL# set default B&W compression method, one of MH|MR|MMR|JBIG2 -->
<argument>-compression_BW_method MMR</argument>
<!-- #OPTIONAL# set default Color compression level, one of LEVEL1|LEVEL2|LEVEL3|
LEVEL4|LEVEL5-->
<argument>-compression_Color_level LEVEL4</argument>
```

Device profiles updates

When a device profile associated with an MFP changes, the changes are reflected on the front panel of the MFP when it polls Kofax Front Office Server. This poll occurs when the Kofax Front Office Server client software button is pressed. To ensure the MFP contains the most current device profile information, do the following:

- Make changes to device profiles when there is low user activity, such as at night.
- Set the MFP inactivity timeout to a short period, such as one to three minutes, so that the next user who presses the Kofax button retrieves the latest profile.

Support for single sign on

Kofax Front Office Server supports single sign on for users who are also registered users on the Ricoh MFP. Users who log on to the MFP are also logged on automatically to Kofax Front Office Server.

To use single sign on, the user name for the MFP must exactly match the user name for logging on to Kofax Front Office Server. User names for a Ricoh MFP are set using the User Name property of the device. See the Ricoh documentation for instructions.

Ricoh also supports SafeQ SSO. To enable this feature, use this setting in the Devices app by selecting **Settings > Advanced**.

- Namespace: mfp.ricoh.properties
- Name: sso.activedirectory.domain
- Value: The domain associated with the authenticated MFP user.

A backslash (\) separates the domain from the user name for single sign-on, such as domain \username.

Support for custom languages

If there is a language that is not available for a Ricoh device, you can create a properties file with strings in the desired language and upload it to the device. Make sure that the localized strings are the same length or shorter than the English version so that the text does not get cut off. Do the following:

1. Download and unzip ricoh.zip file from the Administration Console.
2. Extract KofaxRicoClient.jar. One of the files is a template language file, mfp.customizelanguage.properties.
3. In mfp.customizelanguage.properties, add the strings for your language.
4. In the Administration Console, select **Settings** and click the **Advanced** tab. Go to the **mfp.ricoh.properties** namespace.
5. Depending on which devices the custom language applies, do either of the following:
 - If the language applies to all devices, select **mfp.customize.language** and upload the customized mfp.customizelanguage.properties file.
 - If different languages are used for specific devices, create a new advanced setting for **mfp.ricoh.properties** named **mfp.customize.language_xx** where xx is the ISO 639-1 code for the custom language (such as **mfp.customize.language_cs** for Czech). Assign the mfp.customizelanguage.properties file as its value.
6. Redeploy the Kofax Ricoh client to a sample device and make sure that the localized strings appear correctly. If any corrections are needed, repeat the previous steps and adjust the localized strings as needed.
7. If localized strings appear correctly, redeploy the Kofax Ricoh Client to all applicable devices.

Configuring a secure connection with SSL

The default connection protocol between the MFP and Kofax Front Office Server is set to http for an unsecured connection. You can change the protocol to HTTPS for a secured connection with SSL. After you change the connection protocol, you need to redeploy the Ricoh client to each device using the Administration Console.

SSL configuration for Ricoh Java devices

For Ricoh Java devices, use the settings on the device to configure SSL. For other devices, follow these instructions.

1. If you want to add external server certificates to use with the Ricoh client, do the following before downloading the Ricoh client. This enables the certificates to be included in the ricoh.zip file.
 - a. Make sure that the certificate is in Base-64 encoded X.509 format.
You can use IIS or the Certificate Export Wizard to export the certificate in the correct format.
 - b. On the server where Kofax Front Office Server is installed, locate the `C:\ProgramData\Kofax\Capture\KFS <Version Number>` folder.
 - c. Create a new subfolder named `externalcerts`.
 - d. Copy the certificate files to the `externalcerts` folder.
2. Download the client software from Kofax Front Office Server Administration Console.
3. Extract `ricoh.zip` or open the `Ricoh` folder in `MFPClients.zip` and then extract `KofaxRicoClient.zip`.

This creates a `KofaxRicoClient` folder containing the `KofaxRicoClient.dalp` file.

4. Open the `KofaxRicoClient.dalp` file with a text editor.
5. Edit the port in the following argument to change the Kofax Front Office Server URL and corresponding host name or IP address to use SSL:

```
<argument>-s https://<server>:443/Kofax/KFS/Legacy/Java</argument>
```

6. Edit the following arguments to indicate which server certificates can be trusted:

```
<argument>-ssl_trust_all_certificates true</argument>  
<argument>-ssl_trust_all_hosts true</argument>
```

You can change the arguments as follows:

- Keep both arguments set to true if you want the Ricoh client to trust all server certificates.
- Change both arguments to false if you only want the Ricoh client to trust the Kofax Front Office Server server certificate or the external server certificates you add in step 1. This option is more secure.

7. Save your changes and close the file.
8. Zip the `KofaxRicoClient` folder with the updated `KofaxRicoClient.dalp` file.
Make sure the .zip file is named `KofaxRicoClient.zip`.
9. Uninstall and reinstall Kofax Front Office Server MFP client on each MFP using the updated `KofaxRicoClient.dalp` file.

10. After updating each MFP, restart it.

SSL configuration for Ricoh Android devices

The Ricoh Android client collects the Kofax Front Office Server certificate during the first connection. It then pins the server certificate to the device for subsequent requests from the client to the server. If the server certificate is changed, you must uninstall Ricoh Android Client to remove the pinned certificate and install the Ricoh Android client again.

Configuring retries

You can set the number of times a job is retried and the interval between retries in Administration Console.

For devices with Smart Operation Panel, use the settings on the device to configure retries in Advanced Settings. For other devices, follow these instructions.

1. In Administration Console on the **Settings - Advanced** tab, change the following settings in the `mfp.ricoh.properties` namespace:
 - **mfp.retry.count**: Number of attempts to send images to server before failing without requeuing. When this happens, an error appears, and the job is deleted. If you want to requeue a failed job instead of deleting it, disable this property and use `mfp.retry.count` in the `mfp.properties` namespace instead by entering -1.
To disable retries, enter 0. To keep retrying without failing, enter any negative number except -1. The default value is -1.
 - **mfp.retry.interval**: Seconds between retries. To retry without delays, enter 0. The default value is 30.
2. Restart the Ricoh client in the settings panel or website of the MFP to update the values.

Flash memory support

You can configure Ricoh MFPs with the latest version of Java Platform 11 and SDK/J to use flash memory. Modify the `.dalp` file to specify the storage device to be used to install and store data for the Kofax Client.

Add or locate the following element to the Kofax `.dalp` file.

```
<install mode="manual" destination="device" workDir="device">
```

Where `destination` is the storage device where the Kofax Client is installed, and `workDir` is the storage device where the working folder is created and used for data.

The following table shows the codes for the devices that are used for `destination` and `workDir`.

Code	Description
hdd	Hard drive
sdcard	SD card slot where CVM is installed

Code	Description
sdc card1	SD card in slot 1
sdc card2	SD card in slot 2
sdc card3	SD card in slot 3
sdc card4	SD card in slot 4

Example: Configuration for SD card storage

If you want to install the Kofax Client on the same card where CVM is installed and use the SD card in slot 1 as storage, add or modify the following element in the Kofax .dalp file:

```
<install mode="manual" destination="sdc card" workDir="sdc card1">
```

Smart-card authentication

Kofax Front Office Server supports Ricoh smart-card authentication on MFPs that use Card Authentication Package (CAP). All four CAP authentication modes are supported: Device Authentication, LDAP, Active Directory, and CAP Enterprise Server. The domain is not passed from CAP. Kofax Front Office Server matches users by user ID regardless of how the user is registered on CAP.

To ensure correct authentication:

- Have a Kofax Front Office Server/Kofax Capture user with a matching user ID.
- Have unique user IDs on all domains connected with Kofax Front Office Server.
- If you create a user profile on Kofax Capture, make sure that it does not have the same name as a domain user.

Improving image quality for the Ricoh Aficio MP C2500 MFP

If you use the Ricoh Aficio MP C2500 MFP, change device settings as follows to improve image quality.

1. At the Ricoh front panel, press the following buttons in order:
 - a. To the left of the screen, press **Scanner**.
 - b. Above the numeric keypad, press the yellow **Clear Modes** button.
 - c. On the numeric keypad, press **1**, **0**, and **7**.
2. Press and hold the red **Clear/Stop** button until the SP Mode menu appears on the screen.
3. On the panel, press **Copy Sp**.
Example: The **SP Mode (Service)** menu appears.
4. On the left side of the screen for **Scanner** settings, press **SP-4XXX**.
The list expands to show numbered buttons with additional options.
5. Press the button to go down a page until you see the **4565** button for grayscale options. Press the button.

The list expands to show options for changing the settings.

6. Under the **4565** button, press the following buttons:
 - a. Press **5** for **MTF**. The option, which appears on the right side of the screen, should be set to **8**. If it is not, on the numeric keypad, press **8** and then **#**.
 - b. Press **6** for **Smoothing**. The option should be set to **4**. If it is not, on the numeric keypad, press **4** and then **#**.
 - c. Press **7** for **Brightness**. On the numeric keypad, type **108** and then press **#**.
 - d. Press **8** for **Contrast**. The option should be set to **128**. If it is not, on the numeric keypad, type **128** and then press **#**.
 - e. Press **9** for **Independent Dot Erase**. The option should be set to **0**. If it is not, press **0** and then **#**.

Changes that you make to the settings take effect immediately.

7. In the upper right corner of the screen, press **Exit** to exit the **SP Mode (Service)** menu.
8. Below the **Scanner** button, press **Other Function**.
9. Press **Exit** again to exit the **SP Mode** menu.

You can resume using the MFP, and the new settings are used.

Text field limits

Text fields support a maximum of 256 characters. Any characters over 256 are truncated.

Field data limit from Kofax Capture not enforced

If you configure a Kofax Capture batch class that includes a field type with the data type set to Double with 15 numeric digits, and then create a Kofax Front Office Server shortcut based on that batch class, the limit is not enforced on a Ricoh MFP if you enter a value exceeding 15 digits for that field.

Hiding and showing information after scanning

When you finish scanning pages, New Pages Scanned information appears. You can change a setting so that information does not appear until a user clicks Add New Pages by doing the following:

1. In Kofax Front Office Server Administration Console, select **Settings > Advanced**.
2. In the `mfp.ricoh.properties` namespace, locate `mfp.hide.new.scanned.pages.on.first.scan` and specify either of the following:
 - true: Hide **New Pages Scanned** information until a user clicks **Add New Pages**,
 - false: Always display the information.

Customizing the name of the client software

By default, Kofax appears as the name of the client software on the front panel of the device. You can change the name by editing the KofaxRicohClient.dalp file before you deploy the client software.

1. Download the ricoh.zip file from the Administration Console to your computer.
2. Extract ricoh.zip or open the Ricoh folder in MFPClients.zip and then extract KofaxRicohClient.zip, which contains KofaxRicohClient.dalp.
3. Open the KofaxRicohClient.dalp file in a text editor.
4. Locate the following line in the file:

```
<name lang="en">Kofax</name>
```

5. Edit the name between the <name> tags as in this example:

```
<name lang="en">Your Company</name>
```

6. Save and close the KofaxRicohClient.dalp file.
7. Follow the instructions in [If the MFP cannot be discovered](#) to deploy the client software. When required, upload the ricoh.zip file you modified.

Image preview

Ricoh MFPs can display a preview of the image in the Scan Preview window.

Enable the feature in the Administration Console. In the Advanced - Settings tab, set mfp.scan.preview in the mfp.ricoh.properties namespace to true.

The Scan Preview window shows the document you scanned and enables you to process it. Use these buttons to view the pages scanned:

- Drag the image to view more of the page.
- Press Previous or Next to move to the previous or next page of the document.
- Press Delete to delete the currently displayed page.

Then use these buttons to process the document:

- Press Send to send this scan job and return to the main menu.
- Press Send and Scan Again to send this scan job and start a new scan job to the same location.
- Press Add More Pages to scan more pages to the current scan job.
- Press Cancel if you do not want to send this scan job.

After a period of inactivity, the MFP automatically sends the scan job and returns to the main menu. Images in the device are deleted when the job is sent or canceled.

Jobs with no pages

You can configure Ricoh MFP clients to prevent jobs with no pages from being submitted. Use this advanced setting:

- Namespace: mfp.ricoh.properties
- Name: job.empty.submit.enabled
- Value: true or false

If the value is false (default), jobs cannot be submitted with no pages. A message appears to the user indicating the error. If set to true, jobs with no pages can be submitted.

For Ricoh Android devices, a confirmation message can be displayed when submitting a job with no pages. Use this advanced setting:

- Namespace: kfs.properties
- Name: job.empty.confirmation
- Value: true or false

If the value is false (default), no confirmation message is displayed. If set to true, a confirmation message appears each time you submit a job with no pages. Depending on the setting of job.empty.submit.enabled, the job with no pages can be sent, or an error appears.

Chapter 7

Frequently asked questions

If you cannot successfully install the software, or if you have questions about how the software operates, see the information in this section. For additional information and software updates on the Kofax website.

Why doesn't clicking Discover find the MFP?

Use the Refresh command to update the list of discovered devices. The MFP may be offline, on a separate network, outside a firewall, or does not have a PostScript card installed. See the MFP documentation for instructions. If the Refresh option still does not find the MFP, add the MFP manually. See the Administration Console Help for instructions.

Why am I unable to add MFPs?

There may not be sufficient licensing available to support the MFPs you want to add. Deactivate or remove MFPs from the available devices list or purchase a license for additional devices.

Why am I unable to install the client software on the Ricoh MFP?

Before you can install the client software, you must install the Embedded Software Architecture on the Ricoh MFP. To purchase an Embedded Software Architecture card, see your Ricoh reseller or Kofax. Install the card as shown in the Ricoh MFP documentation.

If you already have the client software installed on the MFP, uninstall it before installing the new version.

Why does the client software not appear when I press the button assigned for Embedded Software Architecture applications?

Make sure that you installed the client software and started it from the Startup Setting tab. See [Installing the client software](#).

If you have more than one Embedded Software Architecture application installed, a menu appears when you press the button. Press the Kofax_Client button.

Why do shortcuts not appear on the Ricoh MFP?

Before you can see shortcuts on the MFP, install and start the client software on the Ricoh MFP. See [Installing the client software](#) for instructions.

Why do I get an error telling me that no more documents can be scanned until the connection to the server is restored?

The error occurs when the MFP cannot connect to Kofax Front Office Server. In these situations, documents can continue to be scanned until the MFP hard drive is full. Make sure that the MFP is connected and Kofax Front Office Server is running.

When the connection to the server is restored, the documents on the MFP hard drive are sent, freeing space to resume scanning.

I entered my user name and password correctly at the MFP. Why am I unable to log on?

The MFP may not be able to retrieve authentication information if the connection to Kofax Front Office Server is down. Make sure that the MFP is connected to the network and Kofax Front Office Server is running.

When I start the client software on the MFP, an error indicates that the device is unlicensed.

The device may have been deactivated or removed in Administration Console. Run the Administration Console and make sure that the MFP is on the Added Devices tab.

The Kofax front panel displays only a limited number of buttons. Where are the rest of the buttons?

Add buttons by creating global or group shortcuts with Administration Console. Then, associate the shortcuts to device profiles. Make sure the device profile is configured to display the appropriate buttons. When the MFP retrieves the device profile, the buttons should appear.

You can also create your own personal shortcuts using Thin Client. Personal shortcut buttons appear after logging on.

Why do some scanned images scan sideways?

This may occur when the color selection is grayscale. Grayscale scans produce JPEG image files and the Ricoh interprets them sideways. This is a Ricoh device limitation. To correct the problem, rotate the page before scanning.

Why does an error appear when I attempt to scan on a Ricoh Android MFP?

The following errors may occur on a Ricoh Android MFP when a user attempts to scan:

- 401 – Unauthorized: This indicates that the user has not logged on, and the scan resource requires authentication.
- 403 – Forbidden: This indicates that user has logged on, but does not have permission to scan.
- 503 – Service Unavailable: For Smart Operator Panel devices, this indicates that the device SP mode 5-976-001 Copy Server function must be enabled. This requires assistance from Ricoh Technical Support or your Ricoh partner.