# Kofax Front Office Server 4.1.0

# Administrator's Guide



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# **Preface**

This guide is intended for the administrator who will configure and maintain the Kofax Front Office Server installation.

#### **Related Documentation**

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.

#### Multifunction Peripheral (MFP) Administrator's Guides

These guides show how to make Kofax Front Office Server features available on MFP front panels. Administrator's guides are available for the following MFPs (for information about the specific models supported, see the *Kofax Cross-Platform Compatibility Matrix* on the Kofax web site):

- Canon
- Fujitsu
- Hewlett Packard
- Konica Minolta
- Kyocera
- Lexmark
- Ricoh
- Xerox
- Kofax Front Office Server MFP Emulator

#### Help for Kofax Front Office Server Applications

Help for Kofax Front Office Server Thin Client (also referred to as the Thin Client) and 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.

#### Kofax Capture Documentation

Kofax Front Office Server is designed to work with Kofax Capture. See the Kofax Capture documentation for instructions about using Kofax Capture features.

# **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 <a href="https://www.kofax.com">www.kofax.com</a> for details about the available training options and schedules.

# **Getting Help for Kofax Products**

Kofax regularly updates the Kofax Support site with the latest information about Kofax products.

To access some resources, you must have a valid Support Agreement with an authorized Kofax Reseller/Partner or with Kofax directly.

Use the tools that Kofax provides for researching and identifying issues. For example, use the Kofax Support site to search for answers about messages, keywords, and product issues. To access the Kofax Support page, go to <a href="https://www.kofax.com/support">www.kofax.com/support</a>.

The Kofax Support page provides:

- Product information and release news
   Click a product family, select a product, and select a version number.
- Downloadable product documentation
   Click a product family, select a product, and click **Documentation**.
- Access to product knowledge bases
  - Click Knowledge Base.
- Access to the Kofax Customer Portal (for eligible customers)
  - Click **Account Management** and log in.

To optimize your use of the portal, go to the Kofax Customer Portal login page and click the link to open the *Guide to the Kofax Support Portal*. This guide describes how to access the support site, what to do before contacting the support team, how to open a new case or view an open case, and what information to collect before opening a case.

- Access to support tools
  - Click Tools and select the tool to use.
- Information about the support commitment for Kofax products
   Click Support Details and select Kofax Support Commitment.

Use these tools to find answers to questions that you have, to learn about new functionality, and to research possible solutions to current issues.

# **Overview**

Kofax Front Office Server enables documents from a variety of sources—including multifunction peripherals (MFPs), scanners, and mobile devices—to be delivered to email and fax recipients, content management systems such as Microsoft SharePoint, network folders, Kofax Capture, and other destinations. Users can work with documents in a browser-based Thin Client application. They can also install a local version of the Thin Client so they can continue working when the connection with Kofax Front Office Server is not available and synchronize data when the connection is restored.

# **Integration with Kofax Capture**

Kofax Front Office Server integrates with Kofax Capture and takes advantage of the following features.

#### **User Authentication**

Kofax Front Office Server uses the Kofax Capture user profile and group membership authentication on MFP devices and in both the Thin Client and the Administration Console applications. You can configure Kofax Front Office Server so that once users have logged on to the computer where they launch the browser, users will not have to log on to either the Thin Client or the Administration Console (this is also called single sign on). Kofax Front Office Server supports single sign on for Kofax Capture linked users. For details, see <a href="About Single Sign On">About Single Sign On</a>.

**Note** Access to the Administration Console is restricted to Kofax Capture users who have rights to the Kofax Capture Administration module. All Kofax Capture users can be assigned permission to access the Thin Client without special Kofax Capture rights.

#### Licensing

Kofax Front Office Server integrates with the Kofax Capture centralized license management scheme.

- System Licenses
  - Kofax Front Office Server
     System license to run Kofax Front Office Server standard installations using the Microsoft SQL Server Express or Standard database.
  - Kofax Front Office Server Enterprise
     System license to run Kofax Front Office Server Enterprise installations using a SQL Server Enterprise or Oracle database.
- Station Licenses
  - Kofax Front Office Server Thin Client

Limits the number of concurrent open sessions of the Thin Client. When no more station licenses are available, users cannot log on. You can either have current users log off, or purchase additional licenses.

**Note** In versions of Kofax Capture prior to version 9 Service Pack 1, this license was named Kofax Front Office Server Web Client.

Kofax Front Office Server Device

Limits the number of devices that can be connected to the Administration Console. When no more device licenses are available, no more devices can be connected. You can either remove or inactivate devices, or purchase additional licenses.

Kofax Mobile Device

Limits the number of mobile devices that can be connected to Kofax Front Office Server. When no more device licenses are available, no more devices can be added. You can either remove devices, or purchase additional licenses.

Kofax Mobile Device - Concurrent

Limits the number of concurrent mobile devices that can be connected to Kofax Front Office Server. When no more licenses are available, users cannot connect. After a period of inactivity, licenses may be released and become available, or you can purchase additional licenses.

**Note** You cannot mix mobile licenses: licensing for a Kofax Front Office Server installation must be all regular or all concurrent.

#### **Volume Licensing and MFPs**

Volume licensing for the following Kofax Capture licenses is not affected (the page count is not decremented) for any documents that are scanned at an MFP and come through Kofax Front Office Server directly to Kofax Capture or through the Thin Client:

- Scan/Import page count
- Kofax PDF Image+Text page count

Documents scanned or imported directly into the Thin Client and then submitted to Kofax Capture do decrement page count.

If documents scanned at an MFP are merged, page count is not decremented. However, if any imported pages are added to a scanned MFP document, page count is decremented only for the additional pages that were added.

Volume licensing is still affected by activity from any custom Web services client.

#### **Shared Folder in Kofax Capture Server Files Location**

The Kofax Front Office Server installation detects the location of the Kofax Capture server files, and creates a \kfs<version> subfolder where images, MFP support files, and configuration files (among other items) are stored.

### **Validation**

Kofax Capture batch class information is used to validate batches submitted to Kofax Capture from MFPs or the Thin Client.

Overview

# Starting the Kofax Front Office Server Applications

Before starting either of the applications, complete the installation and make sure that the Kofax Front Office Server service has started.

# **Starting the Administration Console**

You can start the Administration Console from the Kofax Capture Administration module, or from a browser by entering the URL.

Before starting the Administration Console, do the following:

- Make sure that the Web browser is certified by Kofax Front Office Server.
- Enable the browser to use cookies and JavaScript.
- Make sure that Kofax Front Office Server is properly installed and currently running.

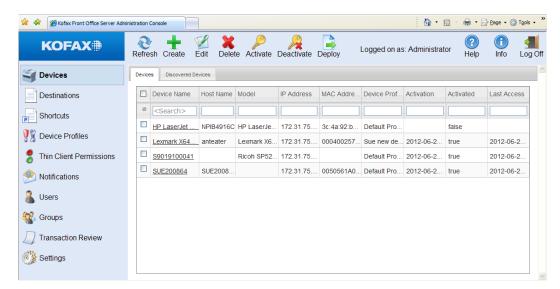
Once you start the Administration Console, you can click the Help button for information about the particular tab you are on, and from there you can access the entire Help system or select other items. The Introduction to the Administration Console topic is a good place to start, because it outlines the general steps to configure MFPs and describes the tasks you can perform.

If you install the Administration Console Plug-In, you can access the Administration Console module directly from the Kofax Capture Administration module.

- 1 Start the Kofax Capture Administration module, and select the **Kofax Front Office Server** tab.
- 2 On the Kofax Front Office Server tab, in the Menu Items group, click the item that corresponds to the settings you want to access.

  The Administration Console appears.

#### **The Administration Console**



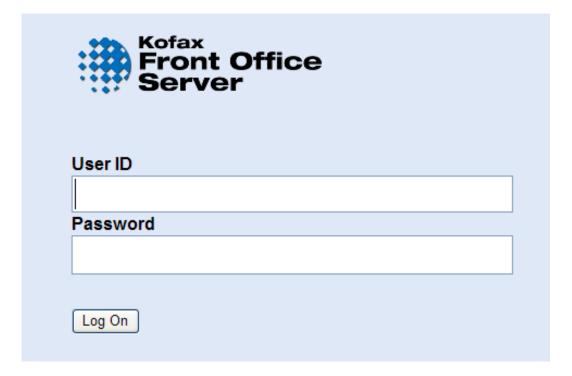
**3** Update the settings or click other items on the navigation panel to create destinations, shortcuts, add devices, or perform other Kofax Front Office Server management tasks.

# Starting the Administration Console from a Browser

- **1** Be sure your computer can connect to the server where Kofax Front Office Server is installed.
- **2** Start the Administration Console by doing either of the following:
  - Open a certified Web browser and type the URL for Kofax Front Office Server Administration Console. For the URL, See <u>Identify URLs for Kofax Front Office Server</u> <u>Applications</u>.
  - If you are at the server, on the Start menu, navigate to Kofax Front Office Server and click **Administration Console**.

The Administration Console Log On screen appears. If automatic log on (also called single-sign on) does not occur, the Administration Console Log On screen appears.

#### **Administration Console Log On Screen**



**Tip** Bookmark the Administration Console Log On screen to make it convenient to start each time.

- **3** Type your Kofax Capture user ID and password. Passwords are case-sensitive. After you have logged on successfully, the Administration Console appears.
- **4** Click any item on the navigation panel to create destinations, shortcuts, add devices, or perform other Kofax Front Office Server management tasks.

# Starting the Thin Client from a Browser

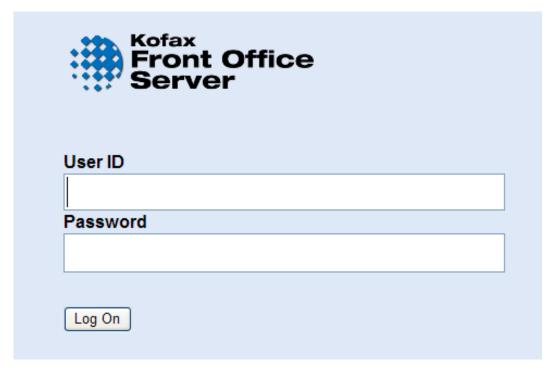
Before you can log on to the Thin Client, you need the following:

- The URL of the Thin Client. For the URL, see <u>Identify URLs for Kofax Front Office Server Applications</u>.
- A user name and password if you are prompted for log on credentials.
- A Web browser supported by the Thin Client.
- Cookies and JavaScript enabled on the browser.

**Tip** Bookmark the Thin Client Log On page to make it convenient to start each time.

- 1 In the browser's Address field, type the URL for the Thin Client. If automatic log on (also called single sign on) does not occur, the Thin Client Log On screen appears.
- 2 Click Log On.

#### Thin Client Log On Screen



**3** Type your Kofax Capture user ID and password and click **Log On**. Passwords are casesensitive.

After you are logged on successfully, the Thin Client appears.

# **Identify URLs for Kofax Front Office Server Applications**

Provide all users of Kofax Front Office Server applications with the URL they need to connect from a Web browser.

For Kofax Front Office Server Administration Console, type the URL as follows:

• If security is not enabled with an SSL certificate:

http://<server>/Kofax/KFS/Admin

If security is enabled with an SSL certificate:

https://<server>:443/Kofax/KFS/Admin

For Kofax Front Office Server Thin Client, type the URL as follows:

- If security is not enabled with an SSL certificate:
   http://<server>/Kofax/Kofax/KFS/ThinClient
- If security is enabled with an SSL certificate and you are not using Thin Client Scanning: https://<server>:443/Kofax/KFS/ThinClient
- If security is enabled with an SSL certificate and you are using Thin Client Scanning: https://<server>:443/Kofax/KFS/ThinClient

Where:

<server> is the IP address or host name of:

- The computer with a departmental or Enterprise installation of Kofax Front Office Server
- An NLB cluster or IIS server in an Enterprise installation

servername is the host or DNS name of:

- The computer with a departmental installation of Kofax Front Office Server
- The proxy server in an Enterprise installation

443 is the port used by Kofax Front Office Server for transmitting secure data.

#### Note the following:

• In the URL, *KFSAdmin* and *KFSThinClient* may be typed in all uppercase or all lowercase, as in these examples:

```
http://<server>/Kofax/KFS/ADMIN
http://<server>/Kofax/KFS/admin
http://<server>/Kofax/KFS/THINCLIENT
http://<server>/Kofax/KFS/thinclient
```

# **Security Settings for Server Operating Systems**

Depending on your browser version and security settings, you may need to add Kofax Front Office Server applications and Help to the Trusted Sites zone.

# Stop and Restart Kofax Front Office Server

You may need to stop and restart Kofax Front Office Server for some specific reason or for routine maintenance. The process depends on which type of installation and configuration you use, and the instructions are in the *Kofax Front Office Server Installation Guide*.

Starting the Kofax Front Office Server Applications

# **About Database Encryption**

By default, index data and images stored in the database are encrypted. Encryption is set by two values in the Administration Console Settings - General tab:

- Encrypt Image Data: When set to Secure, images in the database are encrypted.
- Encrypt Index Data: When set to Secure, index data in the database is encrypted. (Other data remains unencrypted.)

If you change a setting, it is applied to new images or index data. The encryption setting of existing data and images is not affected.

Encryption requires the key file key3.bin in the \KFS<version>\Config folder. If this file is lost, you cannot access encrypted images and index data. Be sure to back up this file as shown in <a href="Backing Up and Restoring Configurations">Backing Up and Restoring Configurations</a>.

If the key3.bin file or the database has been compromised, generate new keys by running the Database Utility with the following command:

Kofax.KFS.Util.DatabaseMigrationUtility.exe /REGENERATEKEYS=1

**About Database Encryption** 

# **About Single Sign On**

Kofax Front Office Server supports single sign on for Kofax Capture linked users. If users log on to a computer using a user account that is linked in Kofax Capture and have the appropriate access rights, users can start the Administration Console or the Thin Client without being prompted to log on. When authentication fails, or if the user is not authorized to log on, a log on screen appears to allow users to manually enter credentials. This section assumes you are familiar with Group Policy configuration and using and registering a Service Principal Name (SPN).

To use the single sign-on feature, the following conditions have to be met:

- If using IIS, the IIS authentication method must be set to "Enable anonymous access."
- Clients must use Internet Explorer 7, 8, or 9.
- Internet Explorer must have the Enable Integrated Windows Authentication option turned on.
- If users are using the Fully Qualified Domain Name (FQDN), Internet Explorer must have the Kofax Front Office Server computer added to the "Local intranet" zone or the Trusted zone. To avoid setting this up for each user individually, your domain administrator can create a Group Policy and add it to the desired organizational units.

**Important** When adding to the Trusted zone, the IE Security Settings option "User Authentication, Logon" must be set to "Automatic logon with current user name and password."

• The user you specify with SPN must be in the Administrators group on the computer registered with DNS.

# **Enabling Single Sign On**

- 1 In the Administration Console, click **Settings** on the Navigation panel.
- **2** Click the **General** tab.
- **3** Select the **Integrated Windows Authentication** option.
- **4** Click **Save**. The change takes effect automatically in less than a minute.

#### **Registering a DNS Entry**

In the section <u>Examples of Possible Configurations</u>, there are some additional configuration tasks listed in the tables to register DNS and SPN. Although it is expected that system administrators will know how to perform those tasks, we include the following instructions.

Use this procedure to register a DNS entry pointing to a machine hosting the physical server.

**Note** Complete this procedure before you register the SPN because you need to use the URL that you will create as part of the SPN command line entry when you register SPN. Note also that you must create a DNS entry for all configurations, including a standalone (Departmental), that will not use the host name in the URL.

- 1 On your domain controller, open Administrative Tools and select **DNS**.
- 2 Expand Forward Lookup Zones, select your domain, and then right-click to select **New Host (A)**.
- **3** In the Name field, type a name that will be the first part of the URL (for example, wwwkfs). This will be the URL address. Be sure the name you enter is not already used on the domain.
- **4** In the IP address field, enter your standalone IP or the IP of your proxy IIS, IBM HTTP for WebSphere, or NLM cluster host.
- 5 Click Add Host.

#### **About Security with the Encrypting File System (EFS)**

A number of Kofax Front Office Server capabilities rely on access to local and network resources. If you encrypt files using EFS, there is the potential to prevent Kofax Front Office Server from accessing critical resources. This inability may cause unexpected errors.

The Kofax Front Office Server service user account must have privileges to decrypt all data used by Kofax Front Office Server and the Kofax Capture share, including the Kofax Capture database location. In addition, the Kofax Capture Service user account must have privileges to decrypt to all Kofax Capture data including the Kofax Capture database location.

We recommend either of the following configurations:

- Configure EFS at the domain level, and include the Kofax Front Office Server and Kofax Capture Server services user accounts as members of the group allowed to decrypt encrypted files.
- Encrypt all files with EFS using the Kofax Front Office Server service name and run the Kofax Capture Service with the same user account.

#### **Registering SPN**

Use this procedure to register SPN (Service Principal Name) under the user account running the Kofax Front Office Server service.

The intent is to enable Kerberos authentication: you are using a domain account to run the Kofax Front Office Server service, and that domain user must be registered. (The Local System account is automatically registered by the server.)

1 On the domain controller machine (where directory service runs), open a Command Prompt and run:

Setspn -A <http/DNS name> <domain>\<user>

For example, in an domain named domain01 for the account Kfs-service-user, you would run:

Setspn -A http/www-kfs domain01\Kfs-service-user

This registers SPN for Kfs-service-user.

**2** Change the log on account for all your Kofax Front Office Server services to the account you just registered.

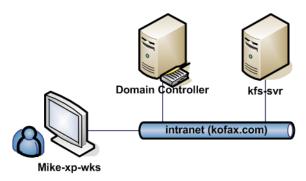
# **Examples of Possible Configurations**

This section provides examples and lists any additional configuration needed for different installations, log on accounts to run Kofax Front Office Server service, and URLs used to log on to the Thin Client (used in the examples) and the Administration Console.

#### Single Server Installation (Department or Enterprise)

The figure illustrates a single server installation on a domain (Kofax.com). Both the server (named kfs-svr) and client (named Mike-xp-wks) are on the same domain. A domain account Kfs-serviceuser has been created to be used instead of the built-in Local System account. Clients access the server using either host name or a DNS name.

#### Single Server



#### **Client Connects to Server Using Host Name**

URL Entered by Mike on Mike- xp-wks	Log on Account for Kofax Front Office Server Service	Additional Configuration Required by a Domain Administrator
http://kfs-svr/Kofax/ KFS/ThinClient	Local System <sup>1</sup>	None
http://kfs- svr.kofax.com/Kofax/KFS/ ThinClient	Local System <sup>1</sup>	Add the FQDN (kfs-svr.kofax.com) to the Intranet zone or Trusted zone in Internet Explorer. This can be done individually on each client browser, or it can be done on the domain controller with Group Policies so that the setting will be applied to all clients in the domain.  Note that the DNS and SPN steps in the following configurations are not necessary since they are done automatically for server host names.

<sup>&</sup>lt;sup>1</sup> If you need to use a domain user account, then you must use a DNS name. See the next table for information.

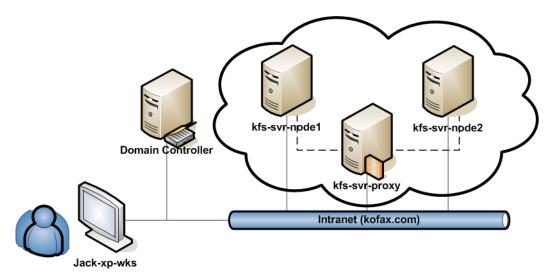
#### **Client Connects to Server Using a DNS Name**

URL Entered by Mike on mike- xp-wks	Log on Account for Kofax Front Office Server Service	Additional Configuration Required by a Domain Administrator
http://www-kfs/Kofax/ KFS/ThinClient	Kfs-service-user	None On the domain controller, register DNS entry pointing www-kfs.kofax.com to host machine kfs-svr. On the domain controller, register SPN HTTP/ www- kfs-svr.kofax.com under user account Kfs-service-user. Then, configure the computer to use Kfs-service-user as the KofaxService log on account.
http://www- kfs.kofax.com/Kofax/KFS/ ThinClient	Kfs-service-user	Same two steps above plus: Add the FQDN (kfs- svr.kofax.com) to the Intranet zone or Trusted zone in Internet Explorer. This can be done individually on each client browser, or it can be done on the domain controller with Group Policies so that the setting will be applied to all clients in the domain.

## **Enterprise Cluster with Proxy Server**

The figure illustrates an Enterprise installation using a proxy. The cluster is configured to include kfs-svr-node1, kfs-svr-node2 and the proxy server kfs-svr-proxy. All servers and clients are on the same domain. Clients access the cluster through the proxy server's designated DNS name.

#### **Cluster with Proxy Server**



#### **Client Connects to Proxy Server Using DNS Name**

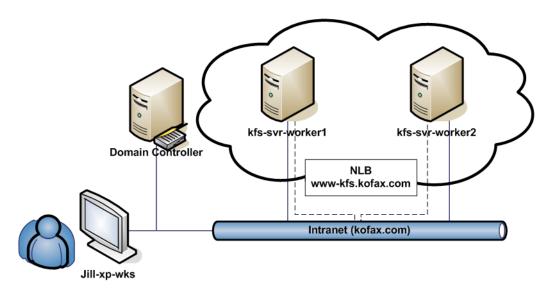
URL Entered by Jack on Jack- xp-wks	Log on Account for Kofax Front Office Server Service	Additional Configuration Required by a Domain Administrator
http://www-kfs/Kofax/ KFS/ThinClient	Kfs-service-user	On the domain controller, register DNS entry pointing www-kfs.kofax.com to host machine kfs-svr-proxy.
		On the domain controller, register SPN HTTP/www-kfs.kofax.com under user account Kfs-service-user. Then, configure every Kofax Front Office Server in the cluster to use Kfs-service-user as the KofaxService log on account
http://www- kfs.kofax.com/Kofax/KFS/ ThinClient	Kfs-service-user	Same two steps above plus: Add the FQDN (kfs-svr- proxy.kofax.com) to the Intranet zone or Trusted zone in Internet Explorer. This can be done individually on each client browser, or it can be done on the domain controller with Group Policies so that the setting will be applied to all clients in the domain.

### **Enterprise Cluster with NLB**

This figure illustrates an enterprise installation using NLB. The NLB cluster is configured to include kfs-svr-worker1 and kfs-svr-worker2. The cluster name is www-kfs.kofax.com. All

servers and clients are on the same domain. Clients access the cluster through the cluster's DNS name.

#### **Cluster with Microsoft NLB**



#### Client Connects to Server (NLB Cluster) Using DNS Name

URL Entered by Jill on Jill-xp- wks	Log on Account for Kofax Front Office Server Service	Additional Configuration Required by a Domain Administrator
http://www-kfs/Kofax/ KFS/ThinClient	Kfs-service-user	On the domain controller, register DNS entry www-kfs.kofax.com as NLB cluster name pointing to the static IP address assigned to the NLB cluster.
		On the domain controller, register SPN HTTP/www-kfs.kofax.com under user Kfs-service-user. Then, configure every Kofax Front Office Server in the cluster to use Kfs-service-user as the KofaxService log on account.
http://www- kfs.kofax.com/Kofax/KFS/ ThinClient	Kfs-service-user	Same two steps above plus: Add the FQDN (www-kfs.kofax.com) to the Intranet zone or Trusted zone in Internet Explorer. This can be done individually on each client browser, or it can be done on the domain controller with Group Policies so that the setting will be applied to all clients in the domain.

# Integrating with RightFax Phone Book

You can enable users to look up entries in their RightFax phone book. Follow this procedure to set up user credentials and configure the batch class and Kofax Front Office Server to integrate with RightFax.

**Important** For Kofax Front Office Server to make a connection to the RightFax server to retrieve user address information, the RightFax Client Software version 9.4 must be installed and configured on the Kofax Front Office Server computer.

- 1 Set up the credentials for RightFax users. When specifying user identification, do the following:
  - For Active Directory users: Select **Use Integrated Windows NT Security?** and specify the domain user account. Then, enter a user ID in the User ID field. This does not need to match the Kofax Capture user ID. Because the RightFax ID is associated with the user's domain account, RightFax authentication automatically takes place when the user logs on to the MFP or Thin Client.
  - For Kofax Capture users who are not on a domain: Enter the Kofax Capture user ID in the User ID field. These IDs must match.
- **2** In Kofax Capture, create a batch class with a Fax Lookup field. See <u>Adding Fax Number and Email Address Lookup Fields</u> for instructions.
- **3** In the Kofax Front Office Server Administration Console, on the Settings RightFax tab, enter the information for your RightFax server, select **Enable RightFax Integration**, and save the settings.

Integrating with RightFax Phone Book

# Backing Up and Restoring Configurations

The steps to back up and restore your data depend on whether you have a Departmental or Enterprise configuration.

# **Backing Up Departmental Configurations**

You may want to back up important data before upgrading, and regularly to be able to restore a failed system to a certain state.

Make sure that you have your original Kofax Front Office Server installation media (or installation media of the same version) before proceeding.

- 1 In the Services console, stop the SQL Server (KOFAXKFS) service.
- **2** Create backup copies of the following folders and all subfolders and files contained in them:
  - <root of installation drive>\ProgramData\Kofax\Front Office Server
  - <installation path>\Kofax\Front Office Server
  - <shared folder>\CaptureSV\KFS<version>
  - <root of installation drive>\ProgramData\Kofax\KFS (created if jobs were run through Kofax VRS)
- **3** Back up the database using the appropriate database utility.
- **4** Verify that the backup was successful, and store in a safe location.
- **5** Restart the SQL Server (KOFAXKFS) service.

# **Restoring Departmental Configurations**

- 1 Remove the non-functional Kofax Front Office Server installation from the computer. This can be done by uninstalling the software or restoring the computer a state before Kofax Front Office Server was installed. Be sure that all Kofax Front Office Server software is removed from the computer.
- **2** Install the same version of Kofax Front Office Server as you previously backed up, because the installer versions must match. If possible, install to the same path as the original installation.
- **3** In the Services console, stop the following services:
  - Kofax Front Office Server
  - SQL Server (KOFAXKFS)
- **4** Delete the following folders:
  - <root of installation drive>\ProgramData\Kofax\Front Office Server

- <installation path>\Kofax\Front Office Server
- <shared folder>\CaptureSV\KFS<version>
- <root of installation drive>\ProgramData\Kofax\KFS (created if jobs were run through Kofax VRS)
- **5** Replace the deleted folders with the backup data folders.
- **6** Set the Security permissions to grant Full Control to the Windows user that was specified for the Kofax Front Office Server service during installation:
  - <shared folder>\CaptureSV\KFS<version>
  - <root of installation drive>\ProgramData\Kofax\Front Office Server
  - <root of installation drive>\ProgramData\Kofax\FrontOfficeServer
  - <root of installation drive>\ProgramData\Kofax\KFS (created if jobs were run through Kofax VRS)
- 7 In the Services console, start the following services:
  - Kofax Front Office Server
  - SQL Server (KOFAXKFS)

# **Backing Up Enterprise Configurations**

You may want to back up important data before upgrading, and regularly to be able to restore a failed system to a certain state.

Make sure that you have your original Kofax Front Office Server installation media (or installation media of the same version) before proceeding.

- 1 Create backup copies of the following folders and all subfolders and files contained in them:
  - $\hbox{$\overset{\bullet}{$}$ <root of installation drive>\ProgramData\Kofax\Front Office Server}\\$
  - <installation path>\Kofax\Front Office Server
  - <shared folder>\CaptureSV\KFS<version>
  - <root of installation drive>\ProgramData\Kofax\KFS (created if jobs were run through Kofax VRS)
- **2** Back up the database using the appropriate database utility.
- **3** Verify that the backup was successful, and store in a safe location.

# **Restoring Enterprise Configurations**

- 1 Remove the non-functional Kofax Front Office Server installation from all computers in the cluster. This can be done by uninstalling the software or restoring the computers a state before Kofax Front Office Server was installed. Be sure that all Kofax Front Office Server software is removed from the computer.
- **2** Install the same version of Kofax Front Office Server as you previously backed up, because the installer versions must match. If possible, install to the same path as the original installation.
- **3** In the Services console, stop the Kofax Front Office Server service.

- **4** Delete the following folders:
  - <root of installation drive>\ProgramData\Kofax\Front Office Server
  - <installation path>\Kofax\Front Office Server
  - <shared folder>\CaptureSV\KFS<version>
  - <root of installation drive>\ProgramData\Kofax\KFS (created if jobs were run through Kofax VRS)
- **5** Replace the deleted folders with the backup data folders.
- **6** Set the Security permissions of the following folders to grant Full Control to the Windows user that was specified for the Kofax Front Office Server service during installation:
  - <shared folder>\CaptureSV\KFS<version>
  - <root of installation drive>\ProgramData\Kofax\Front Office Server
  - <root of installation drive>\ProgramData\Kofax\KFS (created if jobs were run through Kofax VRS)
- **7** Restore your backed-up SQL Server or Oracle database state.
- **8** In the Services console, start the Kofax Front Office Server service.

Backing Up and Restoring Configurations

# **Changing System Configuration**

You can change several system configuration options.

# **Changing SQL Server Database Authentication**

If your SQL Server database authentication username or password is changed after installation, you need to change the database authentication credentials in Kofax Front Office Server.

- 1 In the database management console, make the changes to the database credentials.
- **2** For Kofax Front Office Server, do the following:
  - **a** Stop the Kofax Front Office Server service on the local host and, if you have a cluster installation, all other hosts in the cluster.
  - **b** On the local Kofax Front Office Server host or any host machine in a cluster, run <installation path>\Kofax\Front Office Server\bin \Kofax.KFS.Util.DatabaseMigrationUtility.exe.
  - **c** The connection to the database cannot be made, so the Kofax Front Office Server Utilities Database Authentication screen appears, where you enter the new database access credentials.
  - d Click OK.
    - A message that the credentials have been changed briefly appears.
  - **e** Restart Kofax Front Office Server on the local host and, if you have a cluster installation, all other hosts in the cluster.

# **Changing Host Names**

The host name of a computer should not be changed after Kofax Front Office Server has been installed. Changing the host name may cause problems connecting to MFPs or other devices. You can restore connections by changing the host name back to the one you used when you licensed Kofax Front Office Server.

The host name of an MFP or device also should not be changed after it has been added to Kofax Front Office Server. Because the Administration Console does not recognize that the device's host name has changed, it instead recognizes it as a different device. If you add the device with the new host name, the Administration Console will have two records and use two device licenses for the same device.

# **Using the Database Utility**

The Database Utility is run automatically during an installation or upgrade so that you can set up or upgrade a database. You can also run it by itself to migrate data from one database type to another, such as migrating from a Microsoft SQL Server database to Oracle RAC.

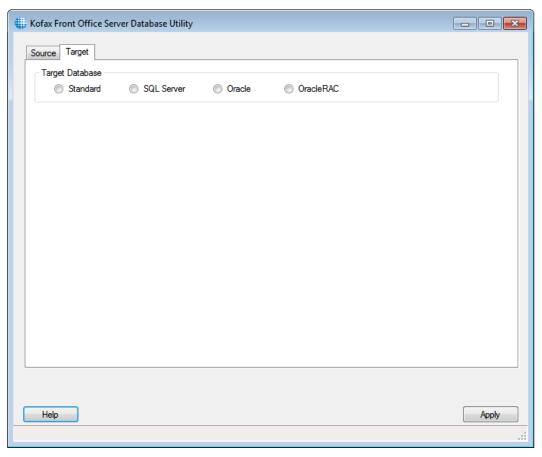
Before migrating data, note the following:

- If you had installed Kofax Front Office Server with a non-standard database and want to move to the Standard database, you need to install SQL Server Express manually before using the Database Utility. To install SQL Server Express, run SQLEXPR\_x86\_ENU.exe. The file is in the Prerequisites folder in the Kofax Front Office Server product files. Specify the database instance name and credentials you want. When you run the Database Utility, select SQL Server and specify the information for the database.
- If you have deployed at least one Local Client, you cannot use the Database Utility to migrate to another database. Contact Kofax Technical Support for assistance.

Run the Database Utility as follows:

- 1 Stop Kofax Front Office Server on the local host and, if you have a cluster installation, all other hosts in the cluster.
- 2 On the local host or any host machine in a cluster, go to the <installation path>\Kofax\Front Office Server\bin folder and run Kofax.KFS.Util.DatabaseMigrationUtility.exe.
- **3** If prompted, log on with your Kofax Capture user name and password. You must have the "Allow admin utility usage" right in Kofax Capture to use the Database Utility. The Database Utility window appears.

#### **Database Utility Window for Migration**



**4** The utility comes with its own Help system. Click **Help** and follow the instructions for the task you want to perform.

Changing System Configuration

# **Setting Preferences for the Thin Client**

You can use the Administration Console to set preferences related to the Thin Client. On the Administration Console, use the Settings-Advanced tab to locate the kfsportal.properties namespace, and then edit the applicable values, as described in the following table.

If you make changes, they go into effect with the next new session of the Thin Client.

See the Administration Console Help for details about accessing the Settings-Advanced tab.

#### Properties Affecting Thin Client Preferences on the Settings - Advanced Tab

kfsportal.properties namespace Property	Description
paging.page.size	Sets the number of documents that display at one time in the Inbox. If the number of documents in the Inbox exceeds a defined maximum, you can view additional entries on the list. Valid range is 1 to 150.
client.session.timeout	Sets the number of minutes of inactivity before the Thin Client session times out and the user has to log on again.
thumbnail.generator.threads	Sets the number of threads used to generate a thumbnail for each user in the Thin Client. You can increase the number of threads to generate thumbnails more quickly, or decrease the number if thumbnail generation slows down other processes in Kofax Front Office Server. The value must be a whole number greater than 0. Default is 4.
thumbnail.generator.priority	Sets the priority at which thumbnails are generated, relative to other processes. The value must be entered in all capital letters. Select one of the following values, which are listed from highest to lowest: HIGH  ABOVENORMAL  NORMAL  BELOWNORMAL  LOW  You can increase the priority to generate thumbnails more quickly, or reduce the priority if thumbnail generation slows down other processes in Kofax Front Office Server. Default is BELOWNORMAL.

# **Scanning Directly from the Thin Client**

Users can scan directly from the Thin Client from a TWAIN compatible scanner that is connected directly to their computer. When they scan the document, it appears in the Thin Client Active Jobs list.

See the Thin Client Help for instructions on setting up to scan from the Thin Client.

# Connector, Data Validation, and Field Lookup Customization

Resources for developing and implementing a custom Web services connector, data validation, and field lookup are provided for Kofax Front Office Server. To view instructions for using these resources, go to \Kofax\Front Office Server\DeveloperResources \devindex.html in the location of the installed software or \DeveloperResources in the product media.

#### Developer Resources as Viewed in devindex.html



# **Data Validation and Field Lookup Customization**

For the Thin Client and MFPs, any data entered for index fields is validated for an appropriate data type and data length. You can also customize validation and a variety of field lookup options for Kofax Front Office Server as follows:

- Field validation and selection: Each field value is validated as soon as it has been changed. You can determine which fields to validate, and whether other fields are filled in automatically or provide a selection list after successful validation. For selection lists, you can additionally define whether users have to select a value from the list or whether they can also type a value which is not in the list.
- Form validation: All the field values of a form and their interdependencies can be validated.

#### Kofax Capture Validation Script Customization

You can create or edit a Visual Basic .NET validation script in Kofax Capture to validate data provided for index fields in the Thin Client or supported MFPs. The data is validated for index fields for documents in a particular Kofax Capture document class. Validation occurs when the user exits the index fields.

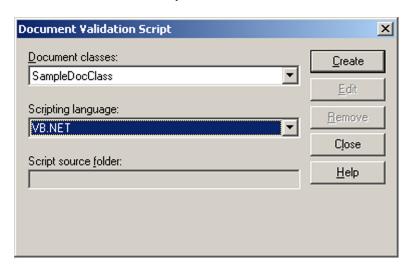
The validation script implemented in Kofax Capture is used for both Kofax Capture and Kofax Front Office Server. The validation script determines in which context it was called (Kofax Capture or Kofax Front Office Server), and in which context for Kofax Front Office Server it was called (the Thin Client or an MFP). Kofax Front Office Server supports a subset of the Kofax Capture validation scripting API. For a full listing of supported properties, see the README.txt file in the \DeveloperResources\DataValidation\sample.NET folder where Kofax Front Office Server is installed.

See the Kofax Capture Developer's Guide and the Kofax Capture API Reference Guide for more information about custom scripting.

**Note** This feature requires Kofax Capture 9 or Service Pack 1, or Kofax Capture 8 with Service Pack 5.

To create or edit a VB.NET validation script, go to the Kofax Capture Administration module. Then, on the Scripts menu, select **Document Validation**. (For additional information, see the Kofax Capture user documentation.)

#### **Document Validation Script Window**

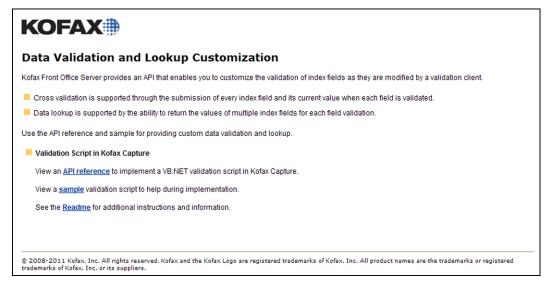


When preparing the validation script, note the following:

- For the scripting language, be sure VB.NET is selected.
- The VB.NET project for the validation script contains the following:
  - A class that inherits from Kofax.AscentCapture.Scripting.DocumentValidationScript
  - Members for each field in the document class, tagged with an attribute indicating the field name it represents
- Create or edit the validation script using a sample validation script, and the API reference and Readme.

Links are provided to the sample validation script, API reference, and README in Data Validation and Lookup Customization for Developer Resources.

#### **Data Validation and Lookup Customization for Developer Resources**



• To implement Kofax Front Office Server-specific functionality, add a reference to Kofax.KFSLib.KFSValidation.dll, the assembly that contains classes necessary to handle Kofax Front Office Server behavior. The file is located in the Bin folder, where Kofax Front Office Server is installed.

This reference must maintain the Copy Local property, to ensure that other validation stations can perform properly if the appropriate version of Kofax Capture is not installed.

 Add the attribute KFSIndexFieldAttribute to each field, specifying the following parameters:

Validate (true or false)

ReadOnly (true or false)

For an example of how to use the KFSIndexFieldAttribute type, see the validation scripts included with either the CitiesSample or the Order Forms sample batch classes located in the \DeveloperResources\DataValidation\sample.NET folder where you installed Kofax Front Office Server.

- Add an AssemblyResolve event handler function to the script. This function must return the location of the KFSValidation library. Register the handler in the script's "New" subroutine. For an example of how to create an AssemblyResolve event handler, see the validation scripts included with either the CitiesSample or the Order Forms sample batch classes. The code from these examples can be copied into your own script as is.
- Optionally, use a static property in the ValidationContext class that indicates if the script is called through Kofax Front Office Server or Kofax Capture validation. For an example of how to use the ValidationContext class, see the Country\_FieldPostProcessing method of the validation script included with the CitiesSample batch class.
- Be aware that only FieldPostProcessing is called from within Kofax Front Office Server.
   FieldPreProcessing is ignored. For an example of a FieldPostProcessing method, see the Item\_Number\_FieldPostProcessing method of the validation script included with the Order Forms batch class.

- Optionally, implement an event handler from one or both of the following:
  - DocumentPreProcessing: Called each time a new document is opened. See the Cities\_DocumentPreProcessing method of the validation script included with the CitiesSample batch class for an example.
  - DocumentPostProcessing: Called when a document is closed. See the Catalog\_Orders\_DocumentPostProcessing method of the validation script included with the Order Forms batch class for an example.
- When FatalErrorException or RejectAndSkipDocumentException is encountered in your validation script, the exception is handled the same as ValidationErrorException. For an example of a ValidationErrorException being thrown to indicate validation failure, see the Item\_Number\_FieldPostProcessing method of the validation script included with the Order Forms batch class.
- Unique to Kofax Front Office Server, a utility method is provided that allows you
  to specify value lists for a given field. Currently, dynamic value lists are supported
  for Kofax Front Office Server only, and not Kofax Capture. For an example of using
  the CreateDynamicValueList utility method to create a dynamic value list, see the
  Country\_FieldPostProcessing method of the validation script included with the
  CitiesSample batch class.
- Be aware of the following about batch fields:
  - You cannot populate or read batch field values in the validation script.
  - In Kofax Front Office Server, the validation script cannot detect that the value of a batch field has changed in Kofax Capture.
  - Validation will not perform as desired if a batch field and document index field have the same name.

# **Setting Up Kofax Capture**

If you have defined index fields for a document class, they are retrieved by Kofax Front Office Server. Users can enter values for them in the Thin Client or at the MFP front panel. If you have defined values for these fields, users can select them from a drop-down field in the Thin Client. If you have hidden index fields, they are also hidden in Kofax Front Office Server.

If you are creating global shortcuts in the Administration Console, you can enter default values for the index fields that display when users send documents through a shortcut.

## **Setting Up User Accounts**

Kofax Front Office Server uses user accounts and groups defined in Kofax Capture user profiles. In the Administration Console, you can assign these users or groups to Thin Client Permissions to control access to Kofax Front Office Server features. If you remove a user from Kofax Capture, the user's access to Kofax Front Office Server is also removed, but the user's active jobs are not deleted.

For instructions on adding users and groups, including how to link to those from Active Directory, see the Kofax Capture documentation. For information about assigning Thin Client permissions, see the Administration Console Help.

**Note** The following characters cannot be used in user IDs: / \ "

# Setting Up Batch Classes, Document Classes, and Form Types

Note the following when setting up batch classes, document classes, and form types in Kofax Capture:

- When configuring a batch class, select "Allow import of eDocument files" on the Batch Class Properties - Advanced tab if you are using documents in formats other than TIFF.
- On the Batch Class Properties Advanced tab, the "Treat imported PDF files as TIFF images" check box should not be selected for PDF files with text. This may cause Kofax Capture to generate an error when it processes a PDF file that contains text.
- Do not use DataStore or Formtype as index field names.
- Do not use the following characters in the names of batch classes, document classes, and form types: / \ "
- If you have defined fields for a batch or document class, they are retrieved by Kofax Front Office Server. Users can enter values for them at the MFP or in the Thin Client. If you have defined values for these fields, users can select them from drop-down fields. Some field types may work differently from one MFP to another. For example, if you configure a field with a data type of "DOUBLE" with a maximum of 15 digits, you may be able to type more than 15 digits on a Ricoh MFP (once the batch is exported to Kofax Capture, the value is displayed at 15 characters). On an HP MFP, you are restricted to typing 15 characters for the same field.

**Important** If your batch class has single document processing enabled with automatic document separation, be sure to only send documents using loose pages. This will prevent users from entering index field data that would be removed if automatic document separation occurs.

If your batch class uses Kofax Fixed Pages for automatic document separation, be sure to only send documents using loose pages. This will prevent users from entering index field data that would be removed if a user scans more pages than is configured for fixed page separation and automatic document separation occurs.

The form type name appears in the Administration Console and the Thin Client as follows:

- If a form type exists in only one batch class, only the form type name appears.
- If a form type exists in multiple batch classes, the batch class name appears in parentheses after the form type name, such as "Form Type (Batch Class)."
- Loose pages, used for submitting documents directly to a batch class, appear as follows: "[Loose Pages] (Batch Class)."

# **Information Updates to Kofax Capture Values**

In Kofax Capture, you can view and/or use information about scan jobs that are processed by Kofax Front Office Server. These scan jobs are for documents that are scanned from an MFP or submitted from the Thin Client to Kofax Capture.

The following information generated by document activity in Kofax Front Office Server is updated to the following information in Kofax Capture.

#### Kofax Front Office Server Information Updates to Kofax Capture Values

Kofax Front Office Server		Kofax Capture	
Document Activity Information	User Tracking	Kofax Capture Values	Batch History
MFP host name (if documents are submitted from an MFP) Device Name (if documents are submitted from a source other than an MFP, such as the Thin Client or Thin Client scanning, resolves to MFP or Thin Client Hostname or IP address)	For Batch: Creation station ID	{Batch Creator's Station ID} {Scan Operator's Station ID}	Station ID

Kofax Front Office Server		Kofax Capture	
User ID (entered for Kofax Front Office Server)	For Batch: Creation user ID Creation user name For Module Launch: User ID User name	{Scan Operator's User ID}	(not applicable)
Number of pages scanned	For Batch Module: Pages scanned	(not applicable)	(not applicable)
Date and time the pages were scanned	For Batch Module and Module Launch: Start date and time	{Batch Creation Date} {Batch Creation Time}	For scan queue: Start date & time End date & time

In addition, the following is true:

- The {Scan Operator's User ID} resolves to:
  - MFP user name if authenticated on the device
  - [Anonymous] if not authenticated on the device
  - Coversheets: the user that created the coversheet
  - User name if originating from the Thin Client (file upload, desktop scan)
- {Scan Operator's Station ID} or {Batch Creator's Station ID} resolve to:
  - MFP host name if the host name is non-empty
  - MFP IP address if the host name is empty (or unattainable)
  - Hostname or client IP address if originating from the Thin Client (file upload, desktop scan)

**Important** If the {Repository Document ID} macro is used in an email notification, all other values and macros are *not* expanded. Remove the {Repository Document ID} macro to enable values and macros to be expanded correctly in Kofax Capture. See the Kofax Front Office Server Administration Console Help for information about setting up email notifications.

If you are upgrading to Kofax Front Office Server from a previous version, and there are existing documents in the Thin Client, information for these documents is not updated to Kofax Capture when the documents are submitted following the upgrade.

**Note** For tracking user information in Kofax Capture, be sure that User Tracking is enabled in Kofax Capture. For more information, see the Kofax Capture documentation.

#### **Batch Names**

Batches are created from documents that are submitted from the Thin Client and MFPs. By default, batches are named in the following formats:

- For documents submitted from the Thin Client:
  - [User name]-[Thin Client host name (or IP address if host name is unavailable)]-[YYYY/ MM/DD HH:MM:SS.ms (UTC offset)]

- For documents submitted from an MFP:
  - If user is logged on or a coversheet is used:
     [User name]-[MFP host name]-[YYYY/MM/DD HH:MM:SS.ms (UTC offset)]
  - If there is no user logged on:-[MFP host name]-[YYYY/MM/DD HH:MM:SS.ms (UTC offset)]

If you use a coversheet, [User name] indicates the user who created the coversheet.

The time stamp is based on the local time zone of the server where Kofax Front Office Server is installed. The time is followed by the local time UTC offset, such as (-5:00). The time is shown to the nearest millisecond.

For example, if a document is sent from host name "myserver" by user "jill" at 2:45 p.m. on August 18, 2009, the batch is named as follows:

```
[jill]-[myserver]-[2009/08/18 2:45:00.234 PM (-8:00)]
```

If a user name is not provided (such as if you use a global shortcut at an MFP without logging on), it is omitted from the batch name as shown:

```
-[MFP hostname]-[2009/08/18 2:45:00.234 PM (-8:00)]
```

Documents submitted from an MFP to the Thin Client, then from the Thin Client to a final destination are treated as MFP documents, and will have the MFP hostname.

#### **Custom Batch Names**

You can also define your own batch names by setting property values in the Kofax Front Office Server Administration Console Settings - Advanced tab namespace kc.properties values for:

- batchname.kofaxcapture.usedefault
  - If this value is set to true, batches are named using the Kofax Capture batch name format (which defaults to false). If this property is enabled, the document tracking entries for backenddocumentid are blank, so for reporting statistics, use Kofax Capture User Tracking.
- batchname.indexfield

In Kofax Capture, create an index field where users can enter the name for the generated batch. Assign the index field to the batch class, and use the index field name as the value for this property. Note that this property is ignored if batchname.kofaxcapture.usedefault is set to true.

**Important** If the batch class contains a batch field with the same name as an index field, the batch field value is used for the batch name instead of the index value.

# **Setting up Masked Fields**

You can enable masking for text fields (on password fields, for example), so that the associated field entry on the MFP will be masked with asterisks (\*). Default values will also display masked, and anything the MFP user enters will also be masked. The Masking feature is designed to be used only on text fields.

Enable masking for any field by selecting a check box when you set up shortcuts in the Kofax Front Office Server Administration Console.

## **Adding Fax Number and Email Address Lookup Fields**

Fax number and email addresses fields can be configured so that they are lookup fields in the Thin Client and MFPs (see the following figure for an example of the Thin Client email Lookup list with returned data).

**Note** When you create index fields in Kofax Capture, be sure that the size definition (number of characters) is sufficient to hold the largest fax or email description and number in your information source.

The Lookup fields retrieve email addresses and/or fax numbers from these sources as follows:

- The customemailfaxlookup table in the Kofax Front Office Server database: users whose records contain data for the particular search (either email address or fax number) will be returned in the results list. This search is automatically enabled: no configuration is needed.
- Users and groups in a connected directory service: records that contain data for the particular search (either email address or fax number) will be returned in the results list. This search is automatically enabled: no configuration is needed.
- The Microsoft Outlook Contacts list of the logged on user: Contacts whose records contain data for the particular search (either email address or fax number) will be returned in the results list. To enable the Contacts search, follow the instructions in Contacts List Lookup below.
- The RightFax Phone Book: when integrated correctly, the user's personal address book
  is included in the search and the fax numbers will be returned in the results list. See
  <a href="Integrating with RightFax Phone Book">Integrating with RightFax Phone Book</a> for instructions.

The data retrieved from the Kofax Front Office Server database, directory service, Contacts list, and RightFax phone book is combined to create the results list that appears in the Thin Client and MFPs.

- 1 In the Kofax Capture Administration module, create a new field type. See the Kofax Capture documentation for instructions.
- **2** As you complete the information for your field type, select either **CHAR** or **VARCHAR** as the data type, depending on which data type you use in your target database.
- **3** Enter the maximum number of characters in the "Number of characters" field.
- 4 In the Subtype field, select **Email Address** or **Fax Number**.
- **5** When you are finished defining the field type, click **Save**. See the Kofax Capture documentation for instructions on using the field type with batch class or document class fields.

#### **Database Table Lookup**

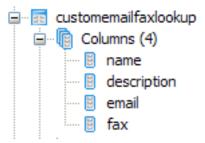
You can use the custom lookup table to add email and fax lookup information that is automatically included in searches.

- For Enterprise installations:
   As a database administrator, you can either manually edit the customemailfaxlookup table or use a tool to import email addresses and fax numbers.
- For Departmental installations:

When SQL Express is installed, a database user LookupMgr is created, assigned the password kofax123, and given read and write permissions to the database lookup table.

The following figure shows the table columns.

#### Database table: customemailfaxlookup



#### **Active Directory Lookup**

When searching an Active Directory, the lookup will return user and group entries that contain either email addresses or fax numbers (depending on which one was searched for).

#### **Contacts List Lookup**

If Contacts search is enabled, users can search their Microsoft Exchange Contacts list if the user is logged on using their directory service account. When the user attempts to submit or send a document, a log on is attempted using the current credentials used to log on to the Thin Client or MFP. If those credentials fail authentication, the search will not include Contacts.

For example, user Max James logs on to the Thin Client using his sAMAccount name mjames, and his company's Microsoft Exchange log on also uses the sAMAccount name. His Lookup List search will include his Contacts. However, if his company uses the first.last convention for user name, then the search will not include his Contacts. Of course if user mjames were to log on to the Thin Client using another user's credentials, a Lookup List search would not include Max's Contacts list, but would instead include any Contacts from the other user account that is currently logged on.

**Note** For the Contacts list lookup to work, Outlook must be configured with the Microsoft Exchange Server account type, and Use Cached Exchange Mode must be enabled. Any newly added Contacts will become available the next time the user's Outlook client synchronizes with the Exchange Server. Also note that this feature is not available for users who authenticate using single sign on.

- 1 Start the Administration Console as described in <u>Starting the Administration Console</u>. Log on as a user with administrator rights.
- 2 On the Settings Advanced tab, in the namespace kfsportal.properties, modify the following Names:
  conf.exchange.domain
  conf.exchange.server
- 3 Click Save.

## RightFax Phone Book Lookup

When searching the RightFax phone book, the lookup will return entries from the personal address book of the user who is logged on.

Setting Up Kofax Capture

# Advanced Notification Configuration for Kofax Capture

The Kofax Capture component of the Kofax Front Office Server notification feature has additional configuration settings that can be included in the ACConfig.xml file located in the CaptureSV folder where Kofax Capture is installed.

Configuration information is optional, and overrides information found in a form type or shortcut that has notifications enabled. Configuration information is read once when the application starts.

#### **KFSService Host**

Host, protocol, port, and path information of the Kofax Front Office Server installation where the Kofax Front Office Server service is running.

If either protocol or port is specified, both protocol and port must be specified.

The path attribute defines the path of the notification Web service relative to the Kofax Front Office Server.

#### RetryBackoffSeconds

RetryBackOffSeconds overrides the default 5 minute (300 seconds) failure back-off time listed in item 5 above. Values can be 0 or greater.

#### **Enabled**

Allows the administrator to disable the sending of notifications from Kofax Capture to Kofax Front Office Server. Values can be true or false.

#### RetryCount

The number of notification sending errors which can occur before halting the sending of notifications. Once RetryBackoffSeconds have passed, the software will once again attempt to send new notifications. Values can be 0 or greater.

#### ConfigurationUpdateSeconds

The number of seconds to wait between checks for changes to the ACConfig file. Values can be 0 or greater.

# Implementing the Properties

Add properties to the ACConfig.xml file as a child <KFSNotification> element of <ACConfig>, as shown in the following example:

```
<Service Key="BatchNotification\Batch Notification Service" Host="SUEKFS35"</pre>
 Protocol="http" Port="2424" />
   </BatchNotification>
  </Services>
  <CurrentVersion>9.0</CurrentVersion>
  <KfxDB>
    <DataArchitecture>SQL-Server</DataArchitecture>
    <DBMS>SQL-Server
    <SQL-Server>
      <SqlServerInstance>SXFDB1\SQL2008</SqlServerInstance>
      <Database>suekc9</Database>
      <AuthenticationMode>SqlServer</AuthenticationMode>
      <UserID>sa</UserID>
      <Password>agOgoAeWbzFStvgSe/BvRxg==
      <IsCreatedDatabase>0</IsCreatedDatabase>
    <IsDatabaseInstalled>1</IsDatabaseInstalled>
    <BatchStorageOption>1</BatchStorageOption>
  </KfxDB>
  <KFSNotification>
    <KFSService Port="80" Protocol="http" Host="KFS21-64" Path ="/Kofax/KFS/Legacy/WS/</pre>
Notification/" />
    <RetryBackoffSeconds>300</RetryBackoffSeconds>
    <Enabled>true</Enabled>
  </KFSNotification>
</ACConfig>
```

# **Configure Retries**

This section contains instructions on how to configure retries related to processing and failover.

# **Configuring Retries for Failed Scan Jobs**

If a scan job fails, a series of retries begins. If you are using the default settings, the retries continue every 30 seconds for a maximum of 3 tries. If a scan job fails on all retries, it is moved to an Errors subfolder in the \scan jobs folder. To retry failed scan jobs, move the folder for the scan job files from the \Errors subfolder to the \Unprocessed folder. (For Konica Minolta MFPs, copy the scan job files back to the FTP server for the MFP.) Kofax Front Office Server then starts processing the scan job.

You can change the properties for retry frequency and the maximum number of retries.

- 1 Start the Administration Console and log on as a user with administrator rights.
- 2 On the Settings Advanced tab, in the namespace shared\_resource.properties, modify the following Names: scanjob.server.retry.frequency scanjob.server.retry.limit
- 3 Click Save.

# **Configuring Database Retries**

The database retry applies when a database operation (for example insert, query, update, etc.) fails. Based on the retry settings, the failed operation is retried.

You can change the properties for the maximum number of retries and for retry frequency, and you can also change those values specifically for the Thin Client transactions (you may want to make the values smaller so you limit any possible wait time for the Thin Client users.

- **1** Start the Administration Console as described in <u>Starting the Administration Console</u>. Log on as a user with administrator rights.
- 2 On the Settings Advanced tab, in the namespace shared\_resource.properties, modify the following Names:

  dh failover retry count
  - db.failover.retry.count db.failover.retry.interval kfs.db.failover.retry.count kfs.db.failover.retry.interval
- 3 Click Save.

# **Configuring Retries to Storage Destinations**

If a destination folder is not available to receive a document or file, by default a series of retries begins and continues every 500 milliseconds for 30000 milliseconds.

You can change properties for the retry timeout and the interval between retries.

- **1** Start the Administration Console as shown in <u>Starting the Administration Console</u>. Log on as a user with administrator rights.
- 2 On the Settings Advanced tab, in the namespace shared\_resource.properties, modify the following Names:
  filesys.retry.timeout.millis
  filesys.retry.wait.millis
- 3 Click Save.

# **Troubleshooting and Maintenance**

There are several areas where you can perform troubleshooting tasks, and maintain system processing capabilities.

# **Troubleshooting for Failed Batches**

If a batch is not generated from documents submitted from the Thin Client or the MFP, check the release\_errors.log file in C:\ProgramData\Kofax\Front Office Server\log folder. The file includes messages that indicate the type of error. Errors may be caused by the following:

- Users changing batch classes in Kofax Capture while other users are submitting documents in Kofax Front Office Server. For example, a user can delete a batch class or change an index field from optional to required. This would cause a document to fail even if it passed validation at the Thin Client. We recommend that changes to Kofax Capture batch classes take place when users are not actively submitting documents.
- Faint pages being deleted from documents when blank page removal is enabled. Kofax Front Office Server cannot create a batch for a document without images. If a page is too faint to be detected, it will be deleted by blank page removal and could generate a document without images. If you have faint pages to scan, adjust the image quality of the device or disable blank page removal.

# **Important Information About Validation Failure**

Under certain conditions, Kofax Capture Values will fail validation. Any fields that fail validation are cleared of content and appear blank. However, it is important to note that the Kofax Capture Value link will still remain intact and therefore the field will still resolve to the value of the linked Kofax Capture Value.

To understand why a Kofax Capture Value can fail validation, it is necessary to know that Kofax Front Office Server will interpret Kofax Capture Values as literal strings. For example, the name of the Kofax Capture Value {Site ID} contains 9 characters. If the Field Type defined for the index field limited the number of characters to less than 9, validation would fail, and the value would be cleared in the field as it appears when creating shortcuts in the Administration Console, viewing shortcuts on an MFP, or in the Thin Client indexing panel. However, as mentioned above, the Kofax Capture Value link will still remain intact and the field will still resolve to the value of the linked Kofax Capture Value when the document is submitted to Kofax Capture.

Examples of other cases where you would see Kofax Capture Values failing validation:

- Kofax Capture Value name exceeds the length of the Field Type defined for the index field
- Kofax Capture Value is linked to an index field defined as Numeric, Decimal, Integer, or Small Integer Field Types
- Kofax Capture Value is linked to an index field defined as Date or Time Field Types

Under most circumstances, the intent of using Kofax Capture Values is so that an index field will resolve to a value without user input. Kofax Capture Value links will remain intact unless overwritten manually during Thin Client or MFP indexing. Therefore, you could tell users not to fill out those particular blank fields during Thin Client or MFP indexing. Or, to be less confusing to your users, you could set such index fields to be hidden (either in Kofax Capture or Kofax Front Office Server) so that the blank index fields are not visible to the user during indexing. Either option would allow the Kofax Capture Value to remain linked and resolve properly when the document is submitted to Kofax Capture.

## **Troubleshooting for Submission Errors**

If there is an error submitting a batch, an XML file containing the description of the error and the batch information is created in the \KFS<version>\ReleaseError folder, along with a subfolder containing any document images.

The XML file is readable by the Kofax Capture XML Import Connector, which can be used to import the batch after any errors are corrected.

To run the XML Import Connector, the user must have rights to the Scan module and the batch classes listed in the XML file. The Scan module must also be added to the batch class. In addition, one of the following must be true:

- You are logged on to the computer as one of the linked users.
- You add the UserID and Password attributes of a Kofax Capture local user to the <ImportSession> element in the XML file.

The example below illustrates the second bullet above: adding an Admin user credentials to the element.

```
<ImportSession xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" DeleteBatchOnError="1"
UserID="Admin" Password="">
```

# **Information About Bar Code Support**

Kofax Front Office Server recognizes page-level bar codes on documents sent from MFPs to shortcuts or to the Inbox. If you set up an index field for a page-level bar code, the value of the bar code can be read when the document is scanned.

When indexing on the MFP, the bar code values do not display on the front panel because scanning takes place after indexing. If the user enters a value for an index field with a page-level bar code, the user-entered value is used instead of the recognized bar code value. If the user does not change the default value or clear the index field, the recognized bar code value will be populated at the server.

In the Thin Client, the recognized value of the bar code is displayed and can be changed by the user. As with the MFP, the user-supplied value takes precedence over any recognized bar code value.

To enable bar code support, modify the vrs-default.properties namespace in the Administration Console in the Settings - Advanced tab. For more information about supported bar codes, see the Kofax Capture documentation.

# **Changing the Default VRS Settings**

All documents scanned at an MFP or scanned or imported into the Thin Client are processed by Kofax VirtualReScan (VRS) based on numerous VRS settings. Which settings are used depends on where the document is scanned or sent:

- Documents scanned at an MFP and sent to the Thin Client or coversheets all use the settings in the vrs-default.properties namespace. Instructions for changing the settings follow
- Documents imported into the Thin Client use the settings in the vrs-dss.properties namespace. Instructions for changing the settings follow.
- Documents scanned at an MFP and sent to Global or Personal shortcuts use the settings specified for the shortcut, and then use the other settings in vrs-default.properties namespace.
- Documents scanned into the Thin Client using the scanning component use the settings specified in the Scanner Settings window.

VRS settings also affect the bar codes used on coversheets. Note the following:

- Different bar code types can be used on any page by adding the values specifying the type.
   For example, to use a Code 128 bar code with a value of 4 and PDF417 with a value of 2048, enter 2054 (4 + 2048).
- Coversheet bar codes must include PDF417 as one of the bar code types. Therefore, the value for the barcode type on the coversheet must be at least 2048.

**Important** Bitonal images will always remain in the DPI that the image is scanned at the MFP. In other words, if the MFP user changes the DPI settings directly at the MFP, that setting will override the settings selected in the shortcut.

- 1 Start the Administration Console as described in <u>Starting the Administration Console</u>. Log on as a user with administrator rights.
- 2 On the Settings Advanced tab, in the namespace vrs-default.properties, modify the values of the properties you want to change. Acceptable values for each property are documented in the comments for each property directly in the Help. For example, the ColorMode property controls the color format of the image:

# Specifies the color format of the output image.

# 1=color, 2=grayscale, 3=black/white (Bitonal)

ColorMode=3

So, if you want to change to color scanning and your scanner supports color, change the value to 1.

**3** Click **Save**. The changes are applied to the next scan.

# Log Files

Kofax Front Office Server generates log files when certain events occur. Besides the log files generated during installation (and mentioned in the *Kofax Front Office Server Installation Guide*), log files are generated and updated during processing.

The log files all have .log extensions and are located in C:\ProgramData\Kofax\Front Office Server\Log folder, and they can be viewed in any text editor.

The primary log file is kfs.log. It includes a list of activities performed by Kofax Front Office Server. Additional log files are created to track database activities, communication with MFPs, and processes. If there is a system failure, see kfs.log and the log files that were most recently updated for any error messages.

## **Free Drive Space**

The Kofax Front Office Server database expands in size as it accumulates logs and data. If destination types go offline for a prolonged period of time, requests are queued on the server, which also consumes hard drive space. If the hard drive runs out of space, Kofax Front Office Server may operate unpredictably.

**Tip** You can monitor the KFS.log file for any drive space errors.

#### Request Blocking when Drive Space is Limited

When drive space reaches a minimum threshold (the default minimum threshold is 5 GB), Kofax Front Office Server blocks requests until more drive space is made available. You can adjust this amount by editing the properties in the system.resource.checker.properties namespace in the Administration Console Settings - Advanced tab.

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