



Kofax MarkView Upgrade Guide for Oracle E-Business Suite

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KOFAX

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Preface

This guide describes how to upgrade from earlier versions of MarkView and configure third-party products that integrate with MarkView. Use this document in conjunction with the *Kofax MarkView Installation Worksheet*.

Who should read this guide

The audience for this document includes:

- Oracle Database Administrators who are experienced with Oracle Relational Database Management System (RDBMS), can edit and run PL/SQL scripts, and are familiar with their ERP system.
- Application Server Administrators who have J2EE technology knowledge.
- Windows Server Administrators who have Microsoft Windows experience and who can install and configure Windows applications and hardware.
- Customers who are planning a new installation or a migration from a previous release of any MarkView product.

Administrators should be familiar with MarkView system operation.

Related documentation

The documentation set for Kofax MarkView is available online:¹

<https://docshield.kofax.com/Portal/Products/MarkView/10.5.0-yw2qf8m7r6/MarkView.htm>

In addition to this guide, the documentation set includes the following items:

Kofax MarkView Features Guide

Use this guide to learn about the features included and options available with MarkView; to become familiar with MarkView products; and to decide which are important to the business challenges you face and best suit your site. This guide includes information about how features impact the

¹ You must be connected to the Internet to access the full documentation set online. If the security policy for your organization requires offline access (without an Internet connection), see the Installation Guide.

workflow, the interaction between features, the touch points with the ERP system, and how features address business problems.

Kofax MarkView Planning Guide

Use this guide to learn about the prerequisites for implementing MarkView products. This guide includes system information, such as the protocols required for communication between servers, hardware and software prerequisites, and minimum RAM requirements.

Use this guide in conjunction with the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#) to prepare a site for product installation.

Kofax MarkView Installation Worksheet

Use this worksheet to collect and record the information you need to install or upgrade MarkView products.

Kofax MarkView Installation Guide

Use this guide in conjunction with the *Kofax MarkView Installation Worksheet* to install and configure MarkView products and to configure third-party products that integrate with MarkView.

Kofax MarkView Integration Guide

Use this guide in conjunction with the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#) to learn about the prerequisites for implementing Kofax products and preparing a site for product installation.

Kofax MarkView Reintegration Guide for Upgrades to Oracle E-Business Suite R12 or 12.2

Use this guide to reintegrate MarkView after an upgrade to Oracle E-Business Suite R12 or 12.2.

Kofax MarkView Administrator's Guide, Volume 1

Use this guide to administer the MarkView system. This guide describes how to configure and maintain the applications, solutions, and users that make up the MarkView Suite. The guide also describes how MarkView influences the administration of other servers and software that interface with MarkView applications.

The MarkView Administrator should be well-versed in database administration, application server setup, tuning and maintenance, or should know where to get such information. The administrator's guide does not replicate this information, but conveys MarkView product-specific information.

Kofax MarkView Administrator's Guide, Volume 2

Use this guide to maintain MarkView components that are administered outside of the MarkView interface. This guide includes advanced administrative tasks and describes MarkView custom packages and join points.

Kofax MarkView Release Notes

Use this document to learn what is new with the latest MarkView release, identify outstanding defects and workaround solutions where applicable, and learn which defects the release fixes.


Kofax MarkView Technical Specifications

Use this document to learn about supported operating systems and other system requirements.

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

Before you start

MarkView system requirements

The primary source of information about supported operating systems and other MarkView requirements is the *Kofax MarkView Technical Specifications* document which is available on the [Kofax MarkView Product Documentation site](#).

Oracle patches

Oracle Accounts Payable processing requires Oracle patch 20725445:R12.AP.

If you plan to use the WebLogic application server with Oracle JDBC drivers version 12.1, apply Oracle patches 21043834, 20692348, and 19028811 on WebLogic. If you plan to use WebLogic with Oracle JDBC drivers version 11.2, verify that you use Oracle JDBC drivers 11.2.0.3 or higher.

See the Oracle website for more information.

WebLogic JDK for 64-bit WebLogic servers

The 32-bit versions of the WebLogic client come with a bundled JDK. For the 64-bit WebLogic client, you need a separate 64-bit JDK.

See the Oracle website for more information.

Complete the Kofax MarkView installation worksheet

The installation worksheet is a Microsoft Word document that helps you gather and record the information to upgrade and configure MarkView. Before you proceed, verify that you have completed all the applicable fields in the worksheet. Have the worksheet available as you upgrade.

Upgrade paths

Upgrade from MarkView 5.x

To upgrade from MarkView 5.x, follow the instructions in the *Kofax MarkView 7.1 Upgrade Guide* to run the MarkView installer. Do not perform any of the post-installation steps listed in the *Kofax MarkView 7.1 Upgrade Guide*. Do not upgrade the Oracle Forms.

To upgrade from MarkView 7.1, follow the instructions in the *Kofax MarkView 8.2 Upgrade Guide* to run the MarkView installer. Do not perform any of the post-installation steps listed in the *Kofax MarkView 8.2 Upgrade Guide*. Do not upgrade the Oracle Forms.

Then, follow the instructions in this guide to upgrade from MarkView 8.2 to MarkView 10.5.0 and upgrade the Oracle Forms.

Upgrade from MarkView 6.x

To upgrade from MarkView 6.x, follow the instructions in the *Kofax MarkView 8.2 Upgrade Guide* to run the MarkView installer. Do not perform any of the post-installation steps listed in the *Kofax MarkView 8.2 Upgrade Guide*. Do not upgrade the Oracle Forms.

Then, follow the instructions in this guide to upgrade from MarkView 8.2 to MarkView 10.5.0 and upgrade the Oracle Forms.

Upgrade from MarkView 7.x

To upgrade from MarkView 7.x, follow the instructions in the *Kofax MarkView 8.2 Upgrade Guide* to run the MarkView installer. Do not perform any of the post-installation steps listed in the *Kofax MarkView 8.2 Upgrade Guide*. Do not upgrade the Oracle Forms.

Then, follow the instructions in this guide to upgrade from MarkView 8.2 to MarkView 10.5.0 and upgrade the Oracle Forms.

Upgrade from MarkView 8.0 and 8.1

To upgrade from MarkView 8.0 and 8.1, follow the instructions in the *Kofax MarkView 8.2 Upgrade Guide* to run the MarkView installer. Do not perform any of the post-installation steps listed in the *Kofax MarkView 8.2 Upgrade Guide*. Do not upgrade the Oracle Forms.

Then, follow the instructions in this guide to upgrade from MarkView 8.2 to MarkView 10.5.0 and upgrade the Oracle Forms

Upgrade from MarkView 8.2

If you are upgrading from MarkView 8.2, upgrade the items listed in these tables.

Product Components	Upgrade Needed?
MarkView installer for Application Server and Database Components (KofaxMarkView-<version_number>_Oracle.zip)	yes
MarkView installer for Oracle Objects (KofaxMarkView-<version_number>_Oracle_Objects.zip)	yes
MarkView installer for Capture and Output Components (KofaxMarkView-<version_number>_Capture_Output.zip)	yes
MarkView Fax Server	unsupported
MarkView Document Server Windows-only (Mail Gateway Server, Bar Code Server)	yes
MarkView Import Server	yes
MarkView Data Export Server	yes

Upgrade from MarkView 9.x

If you are upgrading from MarkView 9.x, upgrade the items listed in these tables.

Product Components	Upgrade Needed?
MarkView installer for Application Server and Database Components (KofaxMarkView-<version_number>_Oracle.zip)	yes
MarkView installer for Oracle Objects (KofaxMarkView-<version_number>_Oracle_Objects.zip)	yes
MarkView installer for Capture and Output Components (KofaxMarkView-<version_number>_Capture_Output.zip)	yes
MarkView Fax Server	unsupported
MarkView Document Server Windows-only (Mail Gateway Server, Bar Code Server)	yes
MarkView Import Server	yes
MarkView Data Export Server	yes

Upgrade from MarkView 10.x

If you are moving from MarkView 10.x, upgrade the items listed in these tables.

Product Components	Upgrade Needed?
MarkView installer for Application Server and Database Components (KofaxMarkView-<version_number>_Oracle.zip)	yes

Product Components	Upgrade Needed?
MarkView installer for Oracle Objects (KofaxMarkView-<version_number>_Oracle_Objects.zip)	yes
MarkView installer for Capture and Output Components (KofaxMarkView-<version_number>_Capture_Output.zip)	yes
MarkView Document Server Windows-only (Mail Gateway Server, Bar Code Server)	yes
MarkView Import Server	yes
MarkView Data Export Server	yes

Upgrade checklist

Use this checklist to track the upgrade steps for your system.

Task	Section	Notes	Done?
Prerequisites	MarkView system requirements		
	Complete the Kofax MarkView installation worksheet		
	Download and decompress distribution files		
	Back up your MarkView schema		
	End MarkView items in process in the connector validation workflow		
	Set locale-sensitive environment variables		
	Configure schema user		
	(Optional) Uninstall Advisor	If MarkView AP Advisor was previously installed on your system and you integrate with Oracle E-Business Suite 12.2, follow the steps in this section.	
	Empty the Oracle database recycle bin		
	(Optional) Complete in-process invoices for Self-Service Invoice	Follow the instructions in this section only if you have Self-Service Invoice installed.	
	(Optional) Back up your files	If you have updated your _CUSTOM packages, follow the steps in this section to back up your files.	

Task	Section	Notes	Done?
	(Optional) Back up the MarkView Kofax Transformation Modules project and batch classes	If your system includes Kofax Transformation Modules and you have modified your Kofax Transformation Modules project files, follow the steps in this section.	
	Upgrade Kofax Transformation Modules	Before you upgrade MarkView, make any planned upgrades to Kofax Transformation Modules.	
Verify and Upgrade	Either: <ul style="list-style-type: none"> To use the MarkView silent installer, see Silent verification and upgrade. To use the MarkView interactive mode, see: <ul style="list-style-type: none"> Verify your environment Upgrade MarkView 		
Set up Your Oracle Environment	Set up your environment and install MarkView Oracle Objects		
Configure the Oracle Forms	Configure Oracle Forms		
(Optional) Upgrade Capture and Output modules to control how documents enter into and are output from the MarkView system.	Capture and Output modules	Capture and Output components include: <ul style="list-style-type: none"> MarkView Bar Code Server MarkView Mail Gateway MarkView Import Server MarkView Data Export Server (for MarkView with Kofax Transformation Modules) 	
(Optional) Configure MarkView for Accounts Payable.	Configure MarkView for Accounts Payable	Follow the steps in this section if your system includes MarkView for Accounts Payable.	
(Optional) Configure Self-Service Invoice.	Configure Self-Service Invoice	Follow the instructions in this section only if you have Self-Service Invoice installed.	
(Optional) Configure Oracle Forms	Configure Oracle Forms	If you apply an Oracle Applications patch, update your Oracle Forms configuration. The specific updates depend on which patch you install.	

Task	Section	Notes	Done?
(Optional) Integrate with other Kofax products.	Integration with other Kofax products	Follow the steps in this chapter to integrate with other Kofax products, such as Kofax Capture or Kofax Transformation Modules.	
(Optional) Migrate Data	Migrate environments Customization migration tools	If you are migrating your environment, review the information in these appendices.	

i When upgrading Kofax MarkView, the existing Oracle personalizations get overwritten. To prevent data loss, back up your existing personalizations and after the upgrade is complete, restore the backup manually.

Download and decompress distribution files

Your Kofax representative will give you the location from which to download the compressed MarkView system setup files.

1. Log in to the application server host operating system as the application server owner.
2. Create a temporary distribution directory for the compressed MarkView installer and verification files. For example, `<home_directory>/mvdist` where `<home_directory>` is the user home directory.
3. In the distribution directory, create the following subdirectories:
 - `<distribution_directory>/verify`
 - `<distribution_directory>/installer`

Where `<distribution_directory>` is the name of the directory you just created.

4. Download the following file into the verify directory:
KofaxMarkView-`<version_number>`_Oracle_Verify.zip
5. Download the following file into the installer directory:
KofaxMarkView-`<version_number>`_Oracle.zip
6. Extract the files.

i The built-in ZIP utilities in certain versions of Windows have issues with lengthy directory paths. Kofax recommends using a third-party extraction utility to decompress the distribution files.

Pre-upgrade tasks

Redefine c_MARKVIEW_TOP (Oracle EBS 12.2 only)

i Only follow the steps below if you upgraded to Oracle E-Business Suite 12.2.

Redefine the c_MARKVIEW_TOP environment variable:

1. Remove all the occurrences of c_MARKVIEW_TOP from FND_OAM_CONTEXT_CUSTOM table:

- a. Log in to the database as the APPS user.
- b. From the SQL prompt, run the following script:

```
delete from fnd_oam_context_custom where
name = 'c_MARKVIEW_TOP' or name = 'C_MARKVIEW_TOP'; commit;
```

2. Remove all the occurrences of c_MARKVIEW_TOP from \$CONTEXT_FILE XML file:

- a. On the Oracle E-Business Suite server, open a command shell and log in as the Oracle E-Business Suite owner. The default account for this user is applmgr.

- b. To set the environment variables, source the run file system environment file.

For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../../../../EBSapps.env run
```

- c. Open \$CONTEXT_FILE XML file and remove all the lines which contain 'c_MARKVIEW_TOP'.

For example, remove the following line, if any:

```
<c_MARKVIEW_TOP oa var="c MARKVIEW_TOP" scope="CUSTOM" oa_type="PROD_TOP"
oa_enabled="FALSE">/appl01/apps/apps_st/appl/markview/12.0.0</c_MARKVIEW_TOP>
```

- d. To set the environment variables, source the patch file system environment file.

For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../../../../EBSapps.env patch
```

- e. Open \$CONTEXT_FILE XML file and remove all the lines which contain 'c_MARKVIEW_TOP'.

- f. To set the environment variables, source the run file system environment file.

For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../../../../EBSapps.env run
```

3. Add the c_MARKVIEW_TOP environment variable to the \$customfile custom environment files.

- a. On the Oracle E-Business Suite server, open a command shell and log in as the Oracle E-Business Suite owner. The default account for this user is applmgr.

- b. To set the environment variables, source the run file system environment file.

For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../../../../EBSapps.env run
```

- c. Create the \$customfile custom environment file (if it does not already exist).

- d. Add the following lines to the end of the \$customfile custom environment file:

```
export c_MARKVIEW_TOP=`dirname ${BASH_SOURCE[1]}`/markview/12.0.0
```

```
export C_MARKVIEW_TOP=${C_MARKVIEW_TOP}
```

- e. To set the environment variables, source the patch file system environment file.
For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../../../../EBSapps.env patch
```

- f. Create the \$customfile custom environment file (if it does not already exist).
g. Add the following lines to the end of the \$customfile custom environment file:

```
export C_MARKVIEW_TOP=`dirname ${BASH_SOURCE[1]}`/markview/12.0.0
export C_MARKVIEW_TOP=${C_MARKVIEW_TOP}
```

- h. To set the environment variables, source the run file system environment file.
For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../../../../EBSapps.env run
```

Back up your MarkView schema

Before you begin to upgrade, back up your MarkView schema. See the *Kofax MarkView Administrator's Guide, Volume 1*, for the information about backup strategies.

End MarkView components in process

Before you upgrade, stop all MarkView components, unless needed for the upgrade, including all Capture and Output services, as well as Capture and Kofax Transformation Modules services.

End MarkView items in process in the connector validation workflow

Before you upgrade, verify that no MarkView work items remain in process in the connector validation workflow. Run the following query against the MarkView database schema:

```
select wi.workitem_instance_id, q.queue_name
  from sf_workitem_info wi, sf_queue_tab q, sf_workflow w
 where w.workflow_name = 'Connector Validation v5.9.1.1'
    and wi.workflow_id = w.workflow_id
    and q.queue_id = wi.queue_id
    and q.queue_name_unq in
      ('Starting Point', 'Validate Entity', 'Populate Interface');
```

If the query returns work items, process those work items to an end queue before upgrading MarkView.

Set locale-sensitive environment variables

To avoid or resolve SQLExceptions that can occur with the MarkView verify or install program, adjust the locale settings on the application server.

The following is an example of an exception that may be logged in the installer log file when the verify or install program fails:

```
java.sql.SQLException: ORA-01403: no data found
ORA-06512: at "APPS.FND_DOC_CATEGORIES_PKG", line 345
ORA-06512: at line 68
ORA-06510: PL/SQL: unhandled user-defined exception
```

Such exceptions can occur when the language setting in the session on the application server where the MarkView verify or install program executes does not match any language in the Oracle EBS tables (for example, FND_LOOKUP_VALUES). Ensure that the locale-sensitive environment variables in the session on the application server are set to the primary language used in the Oracle EBS tables. For example, if the primary language used in the EBS tables is en-GB, set the LANG environment variable on the application server to en-GB before you run the install or verify program.

Depending on the operating system of the application server, other locale-sensitive environment variables may be defined. Ensure that any of these variables that is defined is set to the EBS language:

- NLS_LANG
- LC_TYPE
- LC_TIME
- LC_MONETARY
- LC_NUMERIC
- LC_MESSAGES
- LC_COLLATE

Configure schema user

The MarkView schema user is the MarkView database administrator.

The scripts directory includes automated SQL scripts to help you configure the MarkView schema user. This directory may also include other scripts that you do not need to run. The steps in this section describe how to use each upgrade script.

The scripts directory is `<distribution_directory>/installer/scripts` (where `<distribution_directory>` is the location where you downloaded and decompressed the installation files). The scripts directory includes:

- `gencomp.sql` (for installations and upgrades): Checks for invalid packages, recompiles objects and resolves dependencies between objects. You will use this script after you upgrade.
- `markview_grant_privileges.sql` (for installations and upgrades): Assigns grants and privileges to the MarkView schema user.

Assign grants and privileges to the MarkView schema user

If you upgrade from MarkView 8.1.x and earlier and integrate with Oracle E-Business Suite 12.2, skip this section and continue at [Reconfigure MarkView for upgrades from MarkView 8.1.x and earlier \(Oracle EBS 12.2 only\)](#). Perform the following procedure later according to the instructions.

The `markview_grant_privileges.sql` script assigns grants and privileges to the MarkView schema user. Do not modify this script.

1. Log in to the MarkView database as SYSDBA.
2. Navigate to `<distribution_directory>\installer\scripts`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
3. Run **markview_grant_privileges.sql**.
4. At the prompt, enter the MarkView schema user name.

Historical data cleanup (optional)

The script `cleanup_connector_history.sql` is used to clean up the MarkView historical data if you want to reduce the length of time that the MarkView upgrade process takes. The script is located in the directory `<distribution_directory>/installer/scripts/cleanup_historical_data` (where `<distribution_directory>` is the location where you downloaded and decompressed the installation files).

Clean up the Connector historical data (optional)

Use `cleanup_connector_history.sql` to partially delete the Connector historical data imported from Kofax Transformation Modules to your MarkView environment if you want to reduce the length of time that the MarkView upgrade process takes. Do not modify this script.

i The connector data include the information about invoices imported from Kofax Capture/ Kofax Transformation Modules through the MarkView Connector subsystem. The MarkView Connector uses these records during the internal validation and before ERP export phase. Once the invoices are exported to the ERP, the records become historical. If the Connector fails to create invoices in the ERP, the records are used by MarkView Quick Invoices for the required corrections.

1. Grant read, write and execute permissions to the directory `<distribution_directory>/installer/scripts/cleanup_historical_data`, where `<distribution_directory>` is the location where you downloaded and decompressed installation files.
2. Log in to the MarkView database as the MarkView schema user.
3. Navigate to `<distribution_directory>/installer/scripts/cleanup_historical_data`.
4. Run `cleanup_connector_history.sql`.
5. At the output, check the total number of records in the connector tables.
6. At the prompt, enter the time period (in months), for which you would like to save the connector historical data and confirm the start of the cleanup.

If any errors occur, contact the system administrator.

Configure historical data migration period for upgrades from MarkView 8.1.x and earlier (optional)

Skip this section if you upgrade from MarkView 8.2 and higher and continue to [Empty the Oracle database recycle bin](#).

Skip this section if you are integrating MarkView with Oracle E-Business Suite 12.2 and continue to [Reconfigure MarkView for upgrades from MarkView 8.1.x and earlier \(Oracle EBS 12.2 only\)](#).

The data migration includes moving of connector historical data imported from Kofax Transformation Modules to your MarkView environment. The following connector historical tables will be migrated: `MVCN_ELEMENT`, `MVCN_STRUCTURE_MESSAGE`.

The length of time that the MarkView upgrade process takes depends on the number of months you want to migrate the data for (the default is 12 months). To configure the data transfer period, manually update the migration scripts. To shorten the upgrade process time, you may reduce the number of months to migrate the data for. Do not modify the files if you want to save the default value for the data transfer period or if you do not use Kofax Capture/Kofax Transformation Modules integration.

i The connector data include the information about invoices imported from Kofax Capture/Kofax Transformation Modules through the MarkView Connector subsystem. The MarkView Connector uses these records during the internal validation and before ERP export phase. Once the invoices are exported to the ERP, the records become historical. If the Connector fails to create invoices in the ERP, the records are used by MarkView Quick Invoices for the required corrections.

1. In the <distribution_directory>/installer/modules/connector-dist-10.5.0/connector-db/patches/scripts directory, open **connector-1219-mvcnelement-migrate.sql** for editing.
2. Locate the following string:

```
DEF_MONTH_NUMBER_TO_KEEP_DATA CONSTANT NUMBER := 12;
```

 and change the default value 12 to the number of months for which you want to save the historical connector data of the MVCN_ELEMENT table.
3. In the <distribution_directory>/installer/modules/connector-dist-10.5.0/connector-db/patches/scripts directory, open **connector-1218-mvcnstructuremessage-migrate.sql** for editing.
4. Locate the following string:

```
DEF_MONTH_NUMBER_TO_KEEP_DATA CONSTANT NUMBER := 12;
```

 and change the default value 12 to the number of months for which you want to save the historical connector data of the MVCN_STRUCTURE_MESSAGE table.

Reconfigure MarkView for upgrades from MarkView 8.1.x and earlier (Oracle EBS 12.2 only)

Skip this section if you are integrating MarkView with Oracle E-Business Suite 12.1 or earlier [Empty the Oracle database recycle bin](#).

Skip this section if you upgrade from MarkView 8.2 and higher and continue at [Uninstall Advisor](#).

The scripts used to repair the MarkView schema after Oracle EBS 12.2 installation are located in the directory <distribution_directory>/installer/scripts/repair_mv_schema_on_EBS12_2 (where <distribution_directory> is the location where you downloaded and decompressed the installation files). The scripts directory includes:

- migrate_connector_tables.sql (for upgrades): Transforms connector tables and migrates data;
- schema_correction.sql (for upgrades): Corrects MarkView schema changes after upgrading to Oracle E-Business Suite 12.2.

Transform connector tables and migrate data

The following steps apply only after upgrading to Oracle E-Business Suite 12.2. Use migrate_connector_tables.sql to migrate connector data. Do not modify this script.

The data migration includes moving of connector historical data imported from Kofax Transformation Modules to your MarkView environment. The following connector historical tables will be migrated: MVCN_ELEMENT, MVCN_STRUCTURE_MESSAGE.

The length of time that the MarkView upgrade process takes depends on the number of months you want to migrate the data for (the default is 12 months). To configure the data transfer period, at the prompt enter the number of months for which you would like to keep the connector historical data.

i The length of time that running the connector data migration process takes depends on the amount of data imported from Kofax Transformation Modules to your MarkView environment and the speed of your system processors. To track the progress, use DBA Oracle tools, for example, system view v\$session_longops.

1. Grant read, write and execute permissions to the directory <distribution_directory>/installer/scripts/repair_mv_schema_on_EBS12_2 , where <distribution_directory> is the location where you downloaded and decompressed installation files.
2. Grant read permissions to the directory <distribution_directory>/installer/modules/connector-dist-x.x.x/connector-db/patches/scripts, where <distribution_directory> is the location where you downloaded and decompressed installation files and x.x.x is the product version number.
3. Log in to the MarkView database as the MarkView schema user.
4. Navigate to <distribution_directory>/installer/scripts/repair_mv_schema_on_EBS12_2.
5. Run **migrate_connector_tables.sql**.
6. At the prompt, enter the MarkView data tablespace and index tablespace names.
7. At the prompt, enter the number of months for which you would like to keep the connector historical data.

If any errors occur, contact the system administrator.

Correct the MarkView schema

The following steps apply only after upgrading to Oracle E-Business Suite 12.2. Use schema_correction.sql to correct the MarkView schema after upgrading to Oracle EBS 12.2. Do not modify this script.

1. Grant read, write and execute permissions to the directory <distribution_directory>/installer/scripts/repair_mv_schema_on_EBS12_2 , where <distribution_directory> is the location where you downloaded and decompressed installation files.
2. Grant read permissions to the directory <distribution_directory>/installer/modules/connector-dist-x.x.x/connector-db/schema/types, where <distribution_directory> is the location where you downloaded and decompressed installation files and x.x.x is the product version number.
3. Log in to the MarkView database as the MarkView schema user.
4. Navigate to <distribution_directory>/installer/scripts/repair_mv_schema_on_EBS12_2.
5. Run **schema_correction.sql**.

Enable editions (for Oracle EBS 12.2 only)

Use `enable_editions.sql` to make the MarkView schema editable. Do not modify this script.

1. Verify that the upgrade to Oracle E-Business Suite 12.2 is completed.
2. Log in to the MarkView database as SYSDBA.
3. Navigate to `<distribution_directory>\installer\scripts`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
4. Run `enable_editions.sql`.
5. At the system prompt for the user name, enter the MarkView database schema name, for example, `markview`.

Assign grants and privileges to the MarkView schema user


The `markview_grant_privileges.sql` script assigns grants and privileges to the schema user. Do not modify this script.

1. Log in to the MarkView database as SYSDBA.
2. Navigate to `<distribution_directory>\installer\scripts`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
3. Run `markview_grant_privileges.sql`.
4. At the prompt, enter the MarkView schema user name.

Recreate grants and synonyms

The following steps apply only after upgrading to Oracle E-Business Suite 12.2.


1. Log in to SQL*Plus and set the working directory to **modules/erp-integration-oracle-dist-x.x.x/oracle-toolkit/sql/schema/grants_synonyms** where `x.x.x` is the product version number.
2. At the SQL prompt, run the script **@mvoa_create_grants_synonyms.sql**.
3. Follow the prompts to enter the MarkView and Apps schema information.
4. When prompted for the Oracle E-Business Suite version, enter **11.5** (select this version for Oracle EBS R12 and 12.2).

 When granting access on `FND_DOCUMENTS`, `FND_DOCUMENTS_TL`, `AP_TAX_DEFAULT_PKG`, `AP_TAX_RECOVERY_PKG` to MarkView, error messages may appear. This is expected behavior. The error messages can be ignored.

Recompile invalid objects after upgrading to Oracle E-Business Suite 12.2

1. Log in as the MarkView database user.
2. In `<distribution_directory>\installer\scripts`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files run **@gencomp.sql**. You should see a message similar to the following:

```
Recursively compiling 2 object(s).
Please wait...
```

 INVALID objects with compilation errors may appear. This is expected behavior.

Uninstall Advisor

Skip this section if you do not have MarkView AP Advisor.

Kofax MarkView 9.1 and higher does not support Advisor.

Delete MarkView synonyms for Advisor (Oracle EBS 12.2 only)

If you integrate MarkView with Oracle E-Business Suite 12.1 or earlier, skip this section.

1. Log in as the MarkView database user.
2. Navigate to `<distribution_directory>\installer\scripts`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
3. Run `synonym_drop_in_all_editions.sql` and when prompted enter the MarkView schema user name and MarkView database logging directory name.
The `synonym_drop_in_all_editions.sql` script creates `synonym_drop_in_all_editions_autogen.sql` in the MarkView database logging directory.
For information about the MarkView database logging directory, see the *Kofax MarkView Installation Guide*.
4. Log in to the MarkView database as SYSDBA.
5. Navigate to the MarkView database logging directory and run `synonym_drop_in_all_editions_autogen.sql` to drop synonyms that connect the MarkView and Advisor user schemas in database editions.
Do not modify this script.

Uninstall Advisor from MarkView

Before you upgrade MarkView, uninstall Advisor.

1. Log in to the WebLogic or WildFly Server Administration Console.
2. On the **Deployments** tab, select and delete the following Advisor deployments:
 - analytics-core
 - analytics-actionable
 - analytics-markview
3. Delete analytics JMS queues from the Web server.
 - For the WebLogic users:
 - a. In the **Domain Structure** section, navigate to **Services > Messaging > JMS Modules**.
 - b. Click **MarkViewJmsModule**.
 - c. Click **MarkViewForeignServer**.
 - d. On the **Destinations** tab, select and delete the following queues:
 - MV_ADVISOR_HOTSYNC_Q

- MV_ADVISOR_HS_Q
 - MV_ADVISOR_RLTIME_Q
 - MV_ADVISOR_RT_Q
- For the WildFly users:
 - a. On the **Configuration** tab, select **Subsystems**.
 - b. Navigate to **Messaging > Destinations** and in **Available Messaging Provider**, select the provider.
 - c. In **Option**, click **View** and delete the following queues:
 - MV_ADVISOR_HOTSYNC_Q
 - MV_ADVISOR_HS_Q
 - MV_ADVISOR_RLTIME_Q
 - MV_ADVISOR_RT_Q
4. Log in as the MarkView database user and run `<distribution_directory>\installer\scripts\remove_advisor.sql` to uninstall the Advisor queue tables, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
 5. Delete AnalyticsDataSource from the Web server:
 - For the WebLogic users: Navigate to **Services > Data Sources > AnalyticsDataSource** and click **Delete**.
 - For the WildFly users: Navigate to **Configuration > Datasources > AnalyticsDataSource** and click **Remove**.
 6. To delete the Advisor schema and tablespaces:
 - a. Stop the MarkView application server.
 - b. Log in to the MarkView database as SYSDBA and run the following SQL commands:


```
drop user <AdvisorSchema> cascade;
drop tablespace <AdvisorDataTablespace> including contents and datafiles;
drop tablespace <AdvisorIndexTablespace> including contents and datafiles;
```

Where `<AdvisorSchema>` is the user name of the Advisor schema user, `<AdvisorDataTablespace>` is the data tablespace for Advisor, and `<AdvisorIndexTablespace>` is the index tablespace for Advisor.
 - c. Start the MarkView application server.
 7. In **MarkView Admin**, delete the ADVSYS user.
 8. Log in as the MarkView database user and run `<distribution_directory>\installer\scripts\gencomp.sql` to recompile objects, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.

Empty the Oracle database recycle bin

Empty the Oracle database recycle bin prior to installing MarkView.

1. Log in as the MarkView schema owner.
2. Run `select count(*) from recyclebin;` to determine whether objects exist in the recycle bin:

3. If the results return a count larger than zero, run `purge user_recyclebin;`. The system displays a message that the recycle bin is purged.
4. Verify that the recycle bin is empty. The result should look like:

```
SQL>select count(*) from recyclebin;
COUNT(*)
-----
0
```

Add SSL certificate to Oracle Wallet (for SSL only)

Skip this section if you do not plan to use Secure Sockets Layer (SSL) to provide secure web communications for the application server.

1. Log in to the Oracle EBS server as the EBS user.
2. If you do not have an Oracle Wallet, from the command line, run the following command to create Oracle Wallet and set the Oracle Wallet location:

```
orapki wallet create -wallet <WalletFolder> -pwd <WalletPasswd> -auto_login
```

3. Add the SSL certificate to the Oracle Wallet:

```
orapki wallet add -wallet <WalletFolder> -trusted_cert -cert "<certificate>" -pwd <WalletPasswd>
```

Where:

- `<WalletFolder>` is a directory where Oracle Wallet files are located.
- `<certificate>` is a file that contains the self-signed certificate or any other certificate received from the certificate authority.

If you have a certificate received from the certificate authority, verify that root and intermediate certificates from the certification chain are in the Oracle Wallet and run the indicated command to add the missing certificates.

- `<WalletPasswd>` is a password for the Oracle Wallet.

Add SSL certificate to the RDBMS Java truststore (for SSL only)

Skip this section if you do not plan to use SSL to provide secure web communications for the application server.

1. Log in to the RDBMS as SYSDBA.
2. Run the following SQL command to get the `<java_home>` value:

```
SELECT dbms_java.get_ojvm_property(PROPSTRING=>'java.home') FROM dual
```

3. From the command line, run the following command to add the certificate to the RDBMS Java truststore:

```
keytool -import -alias <alias> -keystore <java_home>/jre/lib/security/cacerts -file <certificate>
```

Where:

- `<alias>` is a keystore entry unique name.
- `<java_home>` is a Java installation directory.
- `<certificate>` is a file that contains the self-signed certificate or any other certificate received from the certificate authority.

If you have a certificate received from the certificate authority, verify that root and intermediate certificates from the certification chain are in the RDBMS Java truststore and run the indicated command to add the missing certificates.

The default Java certificate authority keystore is `cacerts`. The default password for `cacerts` is `<changeit>`.

4. If you use Oracle EBS 19c database with SSL, perform the following procedure.

- a.** Check if `<java_home>/jdk/jdk8/lib/security/` contains the `cacerts.alt` file. If the file exists, add a certificate to the `cacerts.alt` file as follows:

```
keytool -importcert -trustcacerts -keystore <java_home>/jdk/jdk8/lib/security/cacerts.alt -storepass <password> -file <certificate> -alias <alias>
```

Where:

- `<alias>` is a keystore entry unique name.
- `<certificate>` is a file that contains the self-signed certificate or any other certificate received from the certificate authority.

If you have a certificate received from the certificate authority, verify that root and intermediate certificates from the certification chain are in the RDBMS Java truststore.

- `<password>` is a password. The default password for `cacerts` is `<changeit>`.
- b.** If the file does not exist, copy the `cacerts` file created on step 3 to `<java_home>/jdk/jdk8/lib/security/` and rename it to `cacerts.alt`.
- c.** Log in to the RDBMS as SYSDBA.
- d.** If you use a pluggable database, switch to the PDB where the MarkView schema resides.
- e.** Run the following command to add the `cacert.alt` file to the RDBMS:

```
exec dbms_java.loadjava('-schema SYS -grant PUBLIC -dirprefix <java_home>/jdk/jdk8 <java_home>/jdk/jdk8/lib/security/cacerts.alt');
```

Complete in-process invoices for Self-Service Invoice

If you have Self-Service Invoice installed, complete all in-process invoices before you upgrade MarkView.

To find in-process invoices, log in to the MarkView database as the MarkView schema user and run:

```
select *
from sf_workitem_info wi, sf_queue_tab q
where wi.workflow_id in
(select workflow_id
from sf_workflow
where workflow_name = 'Self-Service Invoice')
and q.queue_id = wi.queue_id
and q.queue_name_unq not in
('Completed',
'Error Queue',
'Cancelled Requests')
```

If the query returns work items, process those work items to an end queue before upgrading MarkView.

Back up your files

Back up _CUSTOM packages

The _CUSTOM packages contain functionality and scripting that is unique to an installation of MarkView database objects.

Back up all _CUSTOM packages and store a copy of the SQL script files that create the current version of your _CUSTOM packages.

To extract the current version of your _CUSTOM packages from the database, use the tool associated with Extracting custom package bodies from your MarkView schema.

See the *Kofax MarkView Administrator's Guide, Volume 2* for more information about _CUSTOM packages.

Back up the MarkView Kofax Transformation Modules project and batch classes

If your system includes Kofax Transformation Modules, copy your customized MarkView Kofax Transformation Modules project files and batch classes to a safe location before you upgrade. When you upgrade, MarkView automatically installs a new MarkView Kofax Transformation Modules project in C:\KTM\Markview.

After you upgrade, refer to your customized MarkView Kofax Transformation Modules project files and batch classes, manually edit the new MarkView Kofax Transformation Modules project files and batch classes, and save them in your runtime directory, for example C:\KTM\Markview\MyProject.

Back up XSLT files

If you have any customizations of the following XSLT files used by MVImportAPIConfig, back up these XSLT files:

- KofaxCapture82Generic.xslt
- KofaxCapture82ImportServer.xslt
- KofaxCapture82Parse.xslt

Upgrade Kofax Transformation Modules

If you plan to upgrade Kofax Transformation Modules, do it before you upgrade MarkView. Follow the instructions in the *Kofax Transformation Modules Upgrade* guide.

Move to a new application server during MarkView upgrade

During MarkView upgrade, you can move from your current application server to a new application server.

Skip this section if you plan to upgrade MarkView on your current application server.

1. Stop your current application server.
2. (Optional) If you plan to use SSL to provide secure web communications for your new application server, follow the steps in [Create the certificate keystore \(for SSL only\)](#).
3. Install and configure the environment.
 - For **WebLogic**, follow the steps in [Configure the WebLogic environment](#) on page 29.
 - For **WildFly** or **JBoss EAP**, follow the steps in [Configure WildFly or JBoss EAP environments](#) on page 34.

Create the certificate keystore (for SSL only)

Skip this section if you are not using SSL.

Run one of the following commands to create the certificate keystore:

- If you have a self-signed certificate for the application server, import the certificate to the JKS format keystore:

```
keytool -import -v -alias selfsigned -file <certificate> -keystore <keystore> -storepass <keystorepassword>
```

- If you have any other certificate received from the certificate authority, import the certificate to the JKS format keystore:

```
keytool -importkeystore -srckeystore <certificate> -srcstoretype pkcs12 -destkeystore <keystore> -deststoretype JKS -storepass <keystorepassword>
```

Where:

- <certificate> is a file that contains the self-signed certificate or any other certificate received from the certificate authority.
- <keystore> is a repository that contains your security certificate or certificates.
- <keystorepassword> is a password of the keystore.

Configure the WebLogic environment

If you plan to use the WildFly or JBoss EAP application servers, skip this section and continue with [Configure WildFly or JBoss EAP environments](#) on page 34.

Before you proceed, verify that your system meets the [MarkView system requirements](#).

Configure environment variables for WebLogic

Configure the environment variables for your WebLogic application server.

Set WL_HOME, MW_HOME, and ORACLE_HOME to your WebLogic installation directory. Set the JAVA_HOME variable and point it to the Java SDK installation directory.

For WebLogic 12.1 only, run the installation configuration script to configure the WebLogic installation:

1. Run the installation configuration script.
 - Windows: %MW_HOME%\configure.cmd

- UNIX: \$MW_HOME/configure.sh
2. When prompted if you want to configure a new domain, enter N and press Enter to complete the configuration.

Set up memory properties

For UNIX:

1. In <markview_domain>/bin/startWebLogic.sh, locate the following strings:

```
# Call setDomainEnv here.
DOMAIN_HOME=
```


2. Immediately before these strings, add the command to set the USER_MEM_ARGS parameter or replace the existing command with the following:

```
USER_MEM_ARGS="-Xms8g -Xmx8g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -
XX:MaxMetaspaceSize=2g -Djava.net.preferIPv4Stack=true" export USER_MEM_ARGS
```

3. Log in to the WebLogic Server Administration Console.
4. Go to **Environment > Servers**.
5. On the list of servers, click **AdminServer** and go to **Configuration > Server Start** tab.
6. In the **Arguments** field, remove the following arguments, if any:

```
-Xms1024m -Xmx1400m -XX:CompileThreshold=8000 -XX:MetaspaceSize=128m -
XX:MaxMetaspaceSize=256m
```

The values for your environment may differ.

 Do not remove other arguments in order for MarkView to function correctly.

7. Restart WebLogic.

For Windows:

On Windows, select one of the following procedures to set up the memory properties for the WebLogic application:

- [Use the command line start script](#)
- [Use Windows Service](#)

Use the command line start script

1. In <markview_domain>\bin\startWebLogic.cmd, locate the following strings:

```
@REM Call setDomainEnv here.
set DOMAIN_HOME=
```

2. Immediately before these strings, add the command to set the USER_MEM_ARGS parameter:

```
set USER_MEM_ARGS=-Xms8g -Xmx8g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -
XX:MaxMetaspaceSize=2g
```

3. Log in to the WebLogic Server Administration Console.
4. Go to **Environment > Servers**.
5. On the list of servers, click **AdminServer** and go to **Configuration > Server Start** tab.
6. In the **Arguments** field, remove the following arguments, if any:

```
-Xms1024m -Xmx1400m -XX:CompileThreshold=8000 -XX:MetaspaceSize=128m -
XX:MaxMetaspaceSize=256m
```

The values for your environment may differ.

i Do not remove other arguments in order for MarkView to function correctly.

7. Restart WebLogic.

Use Windows Service

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Servers**.
3. On the list of servers, click **AdminServer** and go to **Configuration > Server Start** tab.
4. In the **Arguments** field, remove the following arguments, if any:

```
-Xms1024m -Xmx1400m -XX:CompileThreshold=8000 -XX:MetaspaceSize=128m -
XX:MaxMetaspaceSize=256m
```

The values for your environment may differ.

i Do not remove other arguments in order for MarkView to function correctly.

5. Select one of the following options to set up the memory properties:

- Uninstall your current WebLogic Windows Service and before creating your new WebLogic Windows Service, verify that the following parameter is set up correctly in the start script:

```
set USER_MEM_ARGS=-Xms8g -Xmx8g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -
XX:MaxMetaspaceSize=2g
```

- Back up your current version of the Windows Registry and update the HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\services\

```
-server -Xms8g -Xmx8g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -
XX:MaxMetaspaceSize=2g
```

Verify the JDK version and Java virtual machine availability for WebLogic

For the Java JDK version supported, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).

To check the JDK version, and if necessary, add Java to your path:

1. In the JDK installation directory, open the bin directory.
2. Run `java -version` to verify the installed JDK version.
3. Set `JAVA_HOME` to the JDK installation directory.
4. Add `JAVA_HOME/bin` to your path.

JDBC driver version (for WebLogic 12.1.3)

Before you proceed, to verify that you use the appropriate JDBC driver version compatible with your environment, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).

Replace the JDBC driver version 12.1.0.1 with the recommended version.

1. Download the JDBC driver from the Oracle website.
2. Stop the WebLogic servers.
3. Navigate to `$MW_HOME/oracle_common/modules/oracle.jdbc_12.1.0` and make a backup copy of the existing JDBC driver.
4. Copy the recommended JDBC driver version to:
`$MW_HOME/oracle_common/modules/oracle.jdbc_12.1.0`
5. Restart the WebLogic servers.

Configure SSL for WebLogic 12c (for SSL only)

Skip this section if you are not using SSL.

1. Log in to the WebLogic Server Administration Console using a non-SSL port.
2. Go to **Environment > Servers**.
3. On the list of servers, click the administration server to configure and go to **Configuration > Keystores** tab.
4. If you are on the production mode, click **Lock & Edit**.
 - a. In the **Keystores** field, click **Change** and select **Custom Identity and Custom Trust**. Click **Save**.
 - b. In the **Identity** section, enter the required identity information such as:
 - **Custom Identity Keystore:** <keystore>
 - **Custom Identity Keystore Type:** JKS
 - **Custom Identity Keystore Password:** <keystorepassword>
 - **Confirm Custom Identity Keystore Password:** <keystorepassword>Where:
 - <keystore> is a certificate repository that you created or imported in [Create the certificate keystore \(for SSL only\)](#).
 - <keystorepassword> is a password of the keystore.
 - c. In the **Trust** section, enter the required trust information such as:
 - **Custom Identity Keystore:** <truststore>
 - **Custom Identity Keystore Type:** JKS
 - **Custom Identity Keystore Password:** <truststorepassword>
 - **Confirm Custom Identity Keystore Password:** <truststorepassword>Where:
 - <truststore> is a repository that contains a trusted certificate or certificates.
 - <truststorepassword> is a password of the truststore.
 - d. Click **Save**.
5. Click the **SSL** tab, enter the required information and save changes:
 - **Private Key Alias:** <alias>
 - **Private Key Password:** <keypassword>
 - **Confirm Private Key Password:** <keypassword>

Where:

- <alias> is a keystore entry unique name.
 - <keypassphrase> is a password of the certificate.
6. Click the **General** tab, clear **Listen Port Enabled** and select **SSL Listen Port Enabled**. Click **Save**.
 7. If you are on the production mode, click **Activate Changes**.
 8. Restart the Node Manager and the WebLogic application server.

Set up Node Manager (for SSL only)

1. Open <markview_domain>/nodemanager.properties for editing.
2. Enter the following information:

```
KeyStores=CustomIdentityAndCustomTrust
CustomIdentityKeystoreType=jks
CustomIdentityKeystoreFileName=<keystore>
CustomIdentityKeystorePassPhrase=<keystorepassword>
CustomIdentityPrivateKeyPassPhrase=<keypassphrase>
CustomIdentityAlias=<alias>
CustomTrustKeystoreType=jks
CustomTrustKeystoreFileName=<truststore>
CustomTrustKeystorePassPhrase=<truststorepassword>
```

3. Restart the Node Manager and the WebLogic application server.

Enable secure session cookies (for SSL only)

To enable MarkView to securely work over SSL, enable the cookie-secure flag by modifying the weblogic.xml file. The weblogic.xml file is located in the WEB-INF directories on all web applications. You must perform the following procedure for all weblogic.xml files within the specified path.

1. In the <installation_directory>\applications\<ear_file>\<war_file>\WEB-INF directories, locate the weblogic.xml file.
 - <installation_directory>: MarkView installation directory.
 - <ear_file>: All .ear files located in the MarkView installation directory.
 - <war_file>: All .war files located within the .ear file.
2. In weblogic.xml, locate the <session-descriptor> element.
3. Add the <cookie-secure>true</cookie-secure> tag inside the <session-descriptor> element and save the file.

Disable WebLogic basic authentication

1. Log in to the WebLogic host as the WebLogic owner.
2. Open the domain configuration file, which is located in the directory specified when you created the domain, for example:


```
<WL_home>/../user_projects/domains/<markview domain>/config/config.xml
```
3. Add the following XML code immediately before the close tag for the security configuration:

```
<enforce-valid-basic-auth-credentials>>false
</enforce-valid-basic-auth-credentials>
```

4. Restart the server.

Exclude conflicting libraries (WebLogic 12.2 only)

1. Locate the file:

<WL_HOME>/modules/com.oracle.weblogic.security.opensaml2.jar

The WL_HOME environment variable points to the directory where you installed the WebLogic server.

2. Change the file name, or back up and remove the file.

3. If you need to apply a patch on the WebLogic server after the preceding procedure, perform the following steps:

- a. Restore the file <WL_HOME>/modules/com.oracle.weblogic.security.opensaml2.jar.
- b. Apply the WebLogic patch.
- c. Change the file name, or back up and remove the file.

Verify that WebLogic components are running

Verify that the NodeManager is running on every platform and that the WebLogic user has the permissions required for access.

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Machines** and click **markview_machine**.
3. On the **Monitoring** tab, verify that **Status** is **Reachable**.

Set up Java Options for WebLogic on AIX

Skip this section, if you do not use AIX platform.

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Servers**.
3. On the list of servers, click **markview_server** and go to **Configuration > Server Start** tab.
4. In the **Arguments** field, add the following to the end of the line:
-XX:+PositiveIdentityHash -XX:-IgnoreUnrecognizedVMOptions -XX:
+UnlockExperimentalVMOptions
5. Restart **markview_server**.

Configure WildFly or JBoss EAP environments

Kofax MarkView supports the WildFly application server, formerly known as JBoss, and JBoss Enterprise Application Platform, known as JBoss EAP.

The MarkView installer has the option to install and configure Wildfly as part of the MarkView installation process, so that you do not need to install WildFly before running the MarkView installer. Alternatively, you can manually install and configure the WildFly environment.

Kofax MarkView supports MarkView installation on the WildFly application server and JBoss EAP in both standalone mode and domain mode.

i The WildFly application server in the silent-mode installation files is referred to as JBoss.

Skip this section, if you plan to use the MarkView installer to install and configure WildFly.

For information about downloading and installing both the WildFly and JBoss EAP application servers, see the corresponding documentation on the [WildFly website](#).

Complete the following procedures to configure the JBoss EAP environment or to manually set up WildFly.

- [Configure environment variables](#) on page 35.
- [Set up memory properties \(standalone mode only\)](#) on page 35.
- [Set up memory properties \(domain mode only\)](#) on page 36.
- [Create WildFly or JBoss EAP users](#) on page 37.
- [Configure ports and hosts](#) on page 37.
- [Start WildFly or JBoss EAP application servers](#) on page 38.
- [Configure SSL for WildFly and JBoss EAP \(for SSL only\)](#) on page 39.
- [Create a new WildFly or JBoss EAP server for the MarkView instance \(domain mode only\)](#) on page 42.
- [Set up Java Options for WildFly or JBoss EAP \(standalone mode only\) on AIX](#) on page 43.
- [Set up Java Options for WildFly or JBoss EAP \(domain mode only\) on AIX](#) on page 43.

Install WildFly or JBoss EAP

1. Download the WildFly or JBoss EAP server from the [WildFly website](#).
2. Extract the downloaded ZIP file to JBOSS_HOME, where JBOSS_HOME is the WildFly or JBoss EAP installation directory.

Configure environment variables

Configure the environment variables for your WildFly or JBoss EAP application servers. Set JBOSS_HOME to your WildFly or JBoss EAP installation directory and ensure that the JBOSS_HOME environment variable persists with the shell profile, such as `export JBOSS_HOME=<drive&path>/wildfly`.

For more information about setting JBOSS_HOME for UNIX or Windows, see the installation guide on the [WildFly website](#).

Set up memory properties (standalone mode only)

Skip this section if you configure the WildFly or JBoss EAP application servers in domain mode.


For UNIX:

1. For standalone mode, open `JBOSS_HOME/bin/standalone.conf` for editing.
2. Locate the string similar to the following:

```
JBOSS_JAVA_SIZING="-Xms64m -Xmx512m -XX:MetaspaceSize=96M -
XX:MaxMetaspaceSize=256m"
```

Change the string to:

```
JBOSS_JAVA_SIZING="-Xms8g -Xmx8g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -XX:MaxMetaspaceSize=2g"
```

 This command must be run on a single line. If you cut and paste from this guide, remove any line breaks.


For Windows:

1. For standalone mode, open `JBOSS_HOME\bin\standalone.conf.bat` for editing.
2. Locate the following string:

```
set "JBOSS_JAVA_SIZING=-Xms64M -Xmx512M -XX:MaxMetaspaceSize=256m"
```

Change the string to:

```
set "JBOSS_JAVA_SIZING=-Xms8g -Xmx8g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -XX:MaxMetaspaceSize=2g"
```

 This command must be run on a single line. If you cut and paste from this guide, remove any line breaks.

Set up memory properties (domain mode only)

Skip this section if you configure the WildFly or JBoss EAP application servers in standalone mode.


For UNIX:

1. For domain mode, open `JBOSS_HOME/bin/domain.conf` for editing.
2. Locate the string similar to the following:

```
JBOSS_JAVA_SIZING="-Xms64m -Xmx512m -XX:MetaspaceSize=96M -XX:MaxMetaspaceSize=256m"
```

Change the string to:

```
JBOSS_JAVA_SIZING="-Xms2g -Xmx2g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -XX:MaxMetaspaceSize=2g"
```

 This command must be run on a single line. If you cut and paste from this guide, remove any line breaks.

For Windows:

1. For domain mode, open `JBOSS_HOME\bin\domain.conf.bat` for editing.
2. Locate the following string:

```
set "JBOSS_JAVA_SIZING=-Xms64M -Xmx512M -XX:MaxMetaspaceSize=256m"
```

Change the string to:

```
set "JBOSS_JAVA_SIZING=-Xms2g -Xmx2g -XX:CompileThreshold=8000 -XX:MetaspaceSize=1g -XX:MaxMetaspaceSize=2g"
```

i This command must be run on a single line. If you cut and paste from this guide, remove any line breaks.

For Unix and Windows:

1. Log in to WildFly or JBoss EAP Administration Console.
2. On the **Runtime** tab, select **Server Groups**.
3. On the **Server Group** menu, select **Server Group Name**.
4. In the **Server Group Name** box, click the **View** button.
5. On the left pane, select **JVMs**, and add a new **JVM** configuration.
6. Click **Edit**, and set the following memory properties for your application server. Suggested values are:

a. Heap Size to

```
8g
```

b. JVM Options to

```
-XX:MetaspaceSize=1g
```

```
-XX:MaxMetaspaceSize=2g
```

7. Click **Save**.

Create WildFly or JBoss EAP users

1. Navigate to `JBOSS_HOME\bin`.
2. Run either:
 - Windows: `add-user.bat`
 - UNIX: `add-user.sh`

For more information about creating both the WildFly and JBoss EAP users, see the administrator's guide on the WildFly website.

Configure ports and hosts

The configuration process varies depending on the mode you use for running the application server.

1. For standalone mode: In `JBOSS_HOME\standalone\configuration`, do the following:
 - a. Rename `standalone.xml` to `standalone_old.xml`.
 - b. Rename `standalone-full.xml` to `standalone.xml`.
 - c. Open `standalone.xml` for editing and do the following to configure the host on the server:
 - Locate `<inet-address value="{jboss.bind.address.management:127.0.0.1}"/>` and change the default value `127.0.0.1` to the appropriate host name.
 - Locate `<inet-address value="{jboss.bind.address:127.0.0.1}"/>` and change the default value `127.0.0.1` to the appropriate host name.

- d. In `stanalone.xml`, locate the following string to configure the admin port on the server:

```
<socket-binding name="management-http" interface="management" port="${jboss.management.http.port:9990}"/>
```

Change the default value 9990 to the appropriate port value.
- e. In `standalone.xml`, locate the following string to configure the HTTP port on the server:

```
<socket-binding name="http" port="${jboss.http.port:8080}"/>
```

Change the default value 8080 to the appropriate port value.
2. For domain mode: In `JBOSS_HOME\domain\configuration`, do the following:
 - a. Open `host.xml` for editing and do the following to configure the host on the server:
 - Locate `<inet-address value="${jboss.bind.address.management:127.0.0.1}"/>` and change the default value 127.0.0.1 to the appropriate host name.
 - Locate `<inet-address value="${jboss.bind.address:127.0.0.1}"/>` and change the default value 127.0.0.1 to the appropriate host name.
 - b. In `host.xml`, locate the following string to configure the port:

```
<socket interface="management" port="${jboss.management.http.port:9990}"/>
```

Change the default value 9990 to the appropriate port value.
 - c. In `domain.xml`, configure the HTTP port on the server:
 - In the `<socket-binding-groups>` section, locate socket binding group with the name of your MarkView profile, such as `<socket-binding-group name="full-ha-sockets" default-interface="public">`
 - In `<socket-binding name="http" port="8080"/>`, change the default value 8080 to the appropriate port value.

Start WildFly or JBoss EAP application servers

Start the WildFly or JBoss EAP application servers in standalone or domain modes. For more information about the operating modes, see the [WildFly website](#).

If the JBoss EAP or WildFly application servers fail to start, check the application server log file for `TimeoutException`. For JBoss EAP and WildFly, the timeout parameter default value is 300. To increase the timeout parameter, add the `blocking.timeout` Java option:

1. Open the file for your configuration:
 - Standalone mode: `bin/standalone.conf.bat` or `bin/standalone.conf`.
 - Domain mode: `bin/domain.conf.bat` or `bin/domain.conf`.
2. Add the following line:
 - For Windows: `set "JAVA_OPTS=%JAVA_OPTS% -Djboss.as.management.blocking.timeout=600"`
 - For Unix: `JAVA_OPTS="$JAVA_OPTS -Djboss.as.management.blocking.timeout=600"`

Configure SSL for WildFly and JBoss EAP (for SSL only)

Skip this section if you are not using SSL.

Select one of the following procedures depending on the mode:

- [Standalone mode](#)
- [Domain mode](#)

Standalone mode

1. Open `JBOSS_HOME/standalone/configuration/standalone.xml` for editing.
2. Locate the `<key-stores>` line and add the following strings right after the line:

```
<key-store name="<keystorename>">
  <credential-reference clear-text="<keystorepassword>" />
  <file path="<keystore>" relative-to="jboss.server.config.dir" />
</key-store>
<key-store name="<truststorename>">
  <credential-reference clear-text="<truststorepassword>" />
  <file path="<truststore>" relative-to="jboss.server.config.dir" />
</key-store>
```

Where:

- `<keystorename>` is a name of the repository that contains your security certificate or certificates.
- `<keystorepassword>` is a password of the keystore.
- `<truststorename>` is a name of the repository that contains a trusted certificate or certificates.
- `<truststorepassword>` is a password of the truststore.

3. Locate the `<key-managers>` line and add the following strings right after the line:

```
<key-manager name="<keymanagername>" key-store="<keystorename>">
  <credential-reference clear-text="<keystorepassword>" />
</key-manager>
```

Where:

- `<keymanagername>` is a name of the repository that contains a trusted certificate or certificates.
- `<keystorename>` is a name of the repository that contains your security certificate or certificates.
- `<keystorepassword>` is a password of the keystore.

4. Right after the `<key-managers>..</key-managers>` tag, add the following strings:

```
<trust-managers>
  <trust-manager name="<trustmanagername>" key-store="<truststorename>" />
</trust-managers>
```

5. Locate the `<server-ssl-contexts>` line and add the following strings right after the line:

```
<server-ssl-context name="<managementsslcontextname>" key-
manager="<keymanagername>" trust-manager="<trustmanagername>" />
  <server-ssl-context name="<applicationsslcontextname>" key-
manager="<keymanagername>" trust-manager="<trustmanagername>" />
```

Where:

- <managementsslcontextname> is a management SSL context name
- <keymanagername> is a key manager name.
- <trustmanagername> is a trust manager name.
- <applicationsslcontextname> is an application SSL context name.

6. Locate the following line:

```
<http-interface http-authentication-factory="management-http-authentication">
  <http-upgrade enabled="true" sasl-authentication-factory="management-sasl-
authentication"/>
  <socket-binding http="management-http"/>
</http-interface>
```

Change the line to:

```
<http-interface http-authentication-factory="management-http-authentication" ssl-
context="<managementsslcontextname>">
  <http-upgrade enabled="true" sasl-authentication-factory="management-sasl-
authentication"/>
  <socket-binding https="management-https"/>
</http-interface>
```

7. Locate the following line:

```
<https-listener name="https" socket-binding="https" ssl-context="applicationSSC"
enable-http2="true"/>
```

Change the line to:

```
<https-listener name="https" socket-binding="https" ssl-
context="<applicationsslcontextname>" enable-http2="true"/>
```

8. Locate the following string:

```
<socket-binding name="management-https" interface="management"
port="{jboss.management.https.port:9993}"/>
```

Change the default value 9993 to the appropriate port value.

9. Locate the following string:

```
<socket-binding name="https" port="{jboss.https.port:8443}"/>
```

Change the default value 8443 to the appropriate port value.

10. Copy the <keystore> and <truststore> JKS files to JBOSS_HOME/standalone/configuration.

11. Restart the WildFly or JBoss EAP application server.

Domain mode

1. Open JBOSS_HOME/domain/configuration/host.xml for editing.
2. Right after the <sasl>..</sasl> tag, add the following strings:

```
<tls>
  <key-stores>
    <key-store name="<keystorename>">
      <credential-reference clear-text="<keystorepassword>"/>
      <implementation type="JKS"/>
      <file path="<keystore>" relative-to="jboss.domain.config.dir"/>
    </key-store>
    <key-store name="<truststorename>">
      <credential-reference clear-text="<truststorepassword>"/>
      <implementation type="JKS"/>
  </key-stores>
```



```

    <file path="<truststore>" relative-to="jboss.domain.config.dir"/>
  </key-store>
</key-stores>
<key-managers>
  <key-manager name="<keymanagername>" key-store="<keystorename>"
    <credential-reference clear-text="<keystorepassword>"/>
</key-manager>
</key-managers>
<trust-managers>
  <trust-manager name="<trustmanagername>" key-store="<truststorename>"/>
</trust-managers>
<server-ssl-contexts>
  <server-ssl-context name="<managementsslcontextname>" key-
manager="<keymanagername>" trust-manager="<trustmanagername>"/>
</server-ssl-contexts>
</tls>

```

Where:

- <keystorename> is a name of the repository that contains your security certificate or certificates.
- <keystorepassword> is a password of the keystore.
- <truststorename> is a name of the repository that contains a trusted certificate or certificates.
- <truststorepassword> is a password of the truststore.
- <keymanagername> is a key manager name.
- <trustmanagername> is a trust manager name.
- <managementsslcontextname> is a management SSL context name.

3. Locate the following line:

```
<http-interface http-authentication-factory="management-http-authentication">
```

Change the line to:

```
<http-interface http-authentication-factory="management-http-authentication" ssl-
context="<managementsslcontextname>">
```

4. Locate the following line:

```
<socket interface="management" port="<${jboss.management.http.port:9990}>"/>
```

Change the line to:

```
<socket interface="management" secure-port="<securemanagementport>"/>
```

5. Open JBOSS_HOME/domain/configuration/domain.xml for editing and locate <profile name="full-ha">

- Within <profile name="full-ha">, locate the <key-stores> line and add the following strings right after the line :**

```

<key-store name="<keystorename>">
  <credential-reference clear-text="<keystorepassword>"/>
  <file path="<keystore>" relative-to="jboss.domain.config.dir"/>
</key-store>
<key-store name="<truststorename>">
  <credential-reference clear-text="<truststorepassword>"/>
  <file path="<truststore>" relative-to="jboss.domain.config.dir"/>
</key-store>

```

- Locate the <key-managers> line and add the following strings right after the line:**

```
<key-manager name="<keymanagername>" key-store="<keystorename>">
```

```
<credential-reference clear-text="<keystorepassword>"/>
</key-manager>
```

- c. Right after the `<key-managers>..</key-managers>` tag, add the following strings:

```
<trust-managers>
  <trust-manager name="<trustmanagername>" key-store="<truststorename>"/>
</trust-managers>
```

- d. Locate the `<server-ssl-contexts>` line and add the following strings right after the line:

```
<server-ssl-context name="<sslcontextname>" key-manager="<keymanagername>"
  trust-manager="<trustmanagername>"/>
```

- e. Locate the following line:

```
<https-listener name="https" socket-binding="https" ssl-
context="applicationSSC" enable-http2="true"/>
```

Change the line to:

```
<https-listener name="https" socket-binding="https" ssl-
context="<applicationsslcontextname>" enable-http2="true"/>
```

- f. Locate the `<servlet-container name="default">` tag and add the following string between `<jsp-config/>` and `<websockets/>`:

```
<session-cookie http-only="true" secure="true"/>
```

6. Locate the `<socket-binding-group name="full-ha-sockets" line and then locate the following string:`

```
<socket-binding name="https" port="{jboss.https.port:8443}"/>
```

Change the default value 8443 to the appropriate port value.

7. Copy the `<keystore>` and `<truststore>` JKS files to `JBOSS_HOME/domain/configuration`.
8. Restart the WildFly or JBoss EAP application server.

Create a new WildFly or JBoss EAP server for the MarkView instance (domain mode only)

Create a new domain

1. Log in to the WildFly or JBoss EAP Administration Console.
2. Select the **Runtime** tab.
3. On the **Browser By** menu, select **Server Groups** and click **Add Server Group**.
4. In the **Add Server Group** window, enter the following information and click **Add**:
 - **Name:** `<domain_name>`
 - **Profile:** `full-ha`
 - **Socket Binding Group:** `full-ha-sockets`

Create a new server

1. In the WildFly or JBoss EAP Administration Console, select the **Runtime** tab.
2. On the **Browser By** menu, select **Server Groups**.
3. On the **Server Group** menu, select the newly created server group and click **Add Server**.

4. In the **Add Server** window, enter the following information and click **Add**:
 - **Name:** <domain_name>_server, where <domain_name> is the server group name.
Add the _server postfix to your server name.
 - **Host:** master
 - **Auto Start:** On
 - **Group:** <domain_name>
 - **Socket Binding Port Offset:** 0
5. On the **Runtime** tab, select **Topology** and click **Refresh**.
Start the created server by clicking its name.

Set up Java Options for WildFly or JBoss EAP (standalone mode only) on AIX

Skip this section if you do not use AIX platform or configure the WildFly or JBoss EAP application servers in domain mode.

For Windows:

1. Open the %JBOSS_HOME%\bin\standalone.conf.bat file for editing.
2. Go to end file and add string `set "JAVA_OPTS=%JAVA_OPTS% -XX:+PositiveIdentityHash -XX:-IgnoreUnrecognizedVMOptions -XX:+UnlockExperimentalVMOptions"` before `:JAVA_OPTS_SET` instruction.
3. Save the file.

For Linux:

1. Open the \$JBOSS_HOME/bin/standalone.conf file for editing.
2. Go to end file and add string `JAVA_OPTS="$JAVA_OPTS -XX:+PositiveIdentityHash -XX:-IgnoreUnrecognizedVMOptions -XX:+UnlockExperimentalVMOptions"`.
3. Save the file.

Set up Java Options for WildFly or JBoss EAP (domain mode only) on AIX

Skip this section if you do not use AIX platform or configure the WildFly or JBoss EAP application servers in standalone mode.

1. Log in to the WildFly or JBoss EAP Administration Console.
2. On the **Runtime** tab, select **Server Groups**.
3. On the **Server Group** menu, select **Server Group Name**.
4. In the **Server Group Name** box, click the **View** button.
5. On the left pane, select JVMs and add a new JVM configuration.
6. Click **Edit** and set the following memory properties for your application server. Suggested values for **JVM Options** are:
 - XX:+PositiveIdentityHash
 - XX:-IgnoreUnrecognizedVMOptions
 - XX:+UnlockExperimentalVMOptions

Add SSL certificate to the application server truststore (for SSL only)

Skip this section if you are not using SSL to provide secure web communications for the application server.

Skip this section if you plan to use the MarkView installer to install and configure WildFly.

To add the certificate to the application server Java truststore, run the following command:

```
keytool -import -alias <alias> -keystore
<application_server_java_home>/jre/lib/security/cacerts -file
<certificate>
```

Where:

- <alias> is a keystore entry unique name
- <certificate> is a file that contains the self-signed certificate or any other certificate received from the certificate authority

If you have a certificate received from the certificate authority, verify that root and intermediate certificates from the certification chain are in the application server Java truststore and run the indicated command to add the missing certificates.

The default Java certificate authority keystore is `cacerts`. The default password for `cacerts` is `<changeit>`.

Add truststore to the `jboss-cli` configuration file (for SSL only)

Skip this section if you are not using SSL to provide secure web communications for the application server.

In `JBOSS_HOME/bin`, open the `jboss-cli.xml` file for editing. Right after the `<color-output>..</color-output>` tag, add the following strings:

```
<ssl>
  <alias>"<alias>"</alias>
  <trust-store>"<truststore>"</trust-store>
  <trust-store-password>"<truststorepassword>"</trust-store-password>
</ssl>
```

Where:

- <alias> is a truststore entry unique name.
- <truststore> is a repository that contains a trusted self-signed certificate or certificates.
- <truststorepassword> is a password of the truststore.

What to do next

- To use Silent Installation mode, go to [Silent verification and upgrade](#) on page 45.
- To use Interactive mode, go to [Verify your environment](#) on page 59.

Chapter 2

Silent verification and upgrade

In silent mode, you set installation properties in a script that is used by the installer. The installer does not display windows or prompt for input during the installation process. Because you can reuse the `install_silent` script, you can automate identical installations on multiple systems.


You can use silent-mode installation on Windows or UNIX systems and can also use it to install Oracle Objects.

This chapter assumes that you:

- Completed the tasks described in [Before you start](#).
- Completed the *Kofax MarkView Installation Worksheet* and have the worksheet available for reference.
- Logged in as the owner of the application server.

Using silent-mode installation requires you to complete the following procedures, which this chapter describes:

1. Edit the interview files in the MarkView installation directory. See [Silent-mode setup](#).
2. If you choose to run the `verify_silent` script, copy the interview files to the **verify** directory and run `verify`. See [Run the verify_silent script](#) on page 53.
3. Run the `install_silent` script. See [Run the install_silent script](#) on page 54.

 If you upgrade from MarkView 8.1.x and earlier, the length of time that the upgrade process takes depends on the amount of data imported from Kofax Transformation Modules to your MarkView environment, data migration period, and the speed of your system processors. To track the progress, use DBA Oracle tools, such as, system view `v$session_longops`. See [Configure historical data migration period for upgrades from MarkView 8.1.x and earlier \(optional\)](#).


When you finish the silent upgrade:

- For Accounts Payable post-upgrade steps, see [Configure MarkView for Accounts Payable](#) on page 105.
- For Oracle Objects post-upgrade steps, see [Configure Oracle Forms](#) on page 81.

Silent-mode setup

Edit the `preliminary_interview.properties` file

1. Navigate to `<distribution_directory>/installer/conf` where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
2. Back up the `preliminary_interview.properties` file.
3. Open the `preliminary_interview.properties` file and enter the following information.

 For installations running on Windows, when modifying manually populated fields, use a double backslash (`\\`) or a forward slash (`/`) as a path delimiter.

Field	Allowed Values
AppServerType.app_server_type	<ul style="list-style-type: none"> • WebLogic • JBoss (use for WildFly and JBoss EAP)
InstallDirectory.install_directory	Installation directory. This is user defined and must exist prior to upgrade. This cannot be the same as the temporary distribution directory. See the <i>MarkView Installation Worksheet</i> .
InstallerAction.installer_action	upgrade
InstallationType.installation_type	<ul style="list-style-type: none"> • Standard Full Install (Select this option for upgrades.) • Partial Install (Any value other than Standard Full Install performs a partial install)
SelectedProducts.selected_products	<p>These must exactly match what appears in the <code>install_script.xml</code> file. To verify product names, open <code>install_script.xml</code> and search for <code>display = <product name></code>.</p> <p>For example:</p> <ul style="list-style-type: none"> • MarkView for AP 10.5.0 with Transformation • MarkView for Expense Management 10.5.0 • MarkView Document Library 10.5.0 • MarkView Self Service Invoice 10.5.0 <p>To list multiple products, separate product names with commas.</p>
ERPTType.erp_type	(Optional) Oracle, or blank
MarkView DBConn.password	Password for MarkView schema user

Run the `generateInterviewTemplate` file

The `generateInterviewTemplate` script uses the information in the `preliminary_interview.properties` file to generate the `installer_interview.properties` file.


1. Navigate to `<distribution_directory>\installer\bin`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.


2. Run either:

- UNIX: generateInterviewTemplate.sh
- Windows: generateInterviewTemplate.bat

Edit the installer_interview.properties file

1. Navigate to <distribution_directory>\installer\conf where <distribution_directory> is the location where you downloaded and decompressed the installation files.
2. Back up the installer_interview.properties file.
3. Open the installer_interview.properties file.
4. Enter information for the fields identified with **bold** type in the following table. These fields appear in the same alphabetical order in the installer_interview.properties file. Use this list as a reference for all possible fields in the installer_interview.properties file. Your file may not contain all of the listed fields. Field names and values cannot contain spaces.

 Modifying automatically populated fields may cause unexpected results during the upgrade.

 For installations running on Windows, when modifying manually populated fields, use a double backslash (\) or a forward slash (/) as a path delimiter.

Field	Values	Source	Product
AppServer Type. app_server_type	<ul style="list-style-type: none"> • WebLogic • JBoss (use for WildFly and JBoss EAP) 	Automatically populated. Do not change this value.	All
AppServerType. type	SimpleQuestion	Automatically populated. Do not change this value.	All
Folder Location. location	Directory for the Document Server. Must exist prior to upgrade.	Enter the data from your Installation Worksheet.	AP
FolderLocation. type	FolderLocation	Automatically populated. Do not change this value.	AP
InstallDirectory. install_directory	From the preliminary_interview.properties file	Automatically populated. Do not change this value.	All
InstallDirectory. type	SimpleQuestion	Automatically populated. Do not change this value.	All

Field	Values	Source	Product
InstallationType. installation_type	From the preliminary _interview. properties file	Automatically populated. Do not change this value.	All
InstallationType.type	SimpleQuestion	Automatically populated. Do not change this value.	All
JBossAppServer. adminUserName	JBoss administrator name	Enter the data from your Installation Worksheet.	All
JBossAppServer. adminPassword	JBoss application server administrator password	Enter the data from your Installation Worksheet.	All
JBossAppServer. adminPort	The admin HTTP port (for example, 9090)	To change the default value, enter the data from your Installation Worksheet.	All
JBossAppServer.asSSL	For SSL with WildFly or JBoss EAP: true Valid values: true, false	Enter the data from your Installation Worksheet.	All
JBossAppServer.domain	For domain mode, enter your domain name as follows: <code>JBossAppServer.domain=<domainName></code> For standalone mode, leave the field value blank: <code>JBossAppServer.domain=</code>	For domain mode, enter the data from your Installation Worksheet.	All
JBossAppServer.host	Fully qualified hostname of this machine	Enter the data from your Installation Worksheet.	All
JBossAppServer.port	The HTTP port where MarkView applications listen (for example, 26000)	To change the default value, enter the data from your Installation Worksheet.	All
JBossAppServer.type	JBossAppServer	Automatically populated. Do not change this value.	All

Field	Values	Source	Product
JBossAppServer.jbossLocation	Defaults to <code><distribution_directory>/../wildfly</code> , where <code><distribution_directory></code> is the location where you downloaded and extracted the MarkView installation files. If <code><distribution_directory>/../wildfly</code> does not exist prior to upgrade, the installer creates the directory.	To change the default value, enter the data from your Installation Worksheet.	All
JBossAppServer.oracleDriver	Defaults to <code><distribution_directory>/distr/ojdbc6-11.2.0.3.jar</code> , where <code><distribution_directory></code> is the location where you downloaded and extracted the MarkView installation files.	To change the default value, enter the data from your Installation Worksheet	All
JBossAppServer.needsDeploy	Defaults to <code><empty></code> Valid values: no, yes	To change the default value, enter the data from your Installation Worksheet.	All
MarkView DBConn.dbType	oracle	Automatically populated. Do not change this value.	All
MarkView DBConn.host	Fully qualified hostname where MarkView resides	Enter the data from your Installation Worksheet.	All
MarkView DBConn.indexspace	Tablespace for MarkView indexes	Enter the data from your Installation Worksheet.	All
MarkView DBConn.loggingDirectory	Oracle logging directory for MarkView processes	Enter the data from your Installation Worksheet.	All
MarkView DBConn.password	Password for MarkView schema user	Enter the data from your Installation Worksheet.	All
MarkView DBConn.port	Port for MarkView schema	Enter the data from your Installation Worksheet.	All

Field	Values	Source	Product
MarkView DBConn. sid	SID for MarkView schema	Enter the data from your Installation Worksheet.	All
MarkView DBConn. tablespace	Tablespace for MarkView data	Enter the data from your Installation Worksheet.	All
MarkView DBConn. type	OracleDatabase Connection	Enter the data from your Installation Worksheet.	All
MarkView DBConn. user	User name for the MarkView schema user	Enter the data from your Installation Worksheet.	All
OracleEBS. password	Oracle APPS user password	Enter the data from your Installation Worksheet.	All except Doc Lib
OracleEBS.type	OracleEBSInstance	Automatically populated. Do not change this value.	All except Doc Lib
OracleEBS. user	Oracle APPS user name	Enter the data from your Installation Worksheet.	All except Doc Lib
OracleEBSCodes. holdCode	170_SYSTEMS_HOLD	Automatically populated. Do not change this value.	All except Doc Lib
OracleEBSCodes. releaseCode	170_SYSTEMS_RELEASE	Automatically populated. Do not change this value.	All except Doc Lib
OracleEBSCodes. type	OracleEBS Codes	Automatically populated. Do not change this value.	All except Doc Lib
OracleText. password	Oracle Text user password	Enter the data from your Installation Worksheet.	Doc Lib

Field	Values	Source	Product
OracleText.type	OracleText	Automatically populated. Do not change this value.	Doc Lib
OracleText.user	CTXSYS	Enter the data from your Installation Worksheet.	Doc Lib
SelectedProducts.selected_products	Products selected in the preliminary _interview. properties file	Automatically populated. Do not change this value.	All
Selected Products. type	MultipleAnswer Question	Automatically populated. Do not change this value.	All
SMTPInfo. password	SMTP password, if necessary	Enter the data from your Installation Worksheet.	All
SMTPInfo. serverName	Fully qualified SMTP server address	Enter the data from your Installation Worksheet.	All
SMTPInfo. type	Custom Resource	Automatically populated. Do not change this value.	All
SMTPInfo. username	SMTP user name if necessary	Enter the data from your Installation Worksheet.	All
WebLogic AppServer. adminPassword	WebLogic application server password	Enter the data from your Installation Worksheet.	All
WebLogic AppServer. adminPort	The admin HTTP port (default 7001)	Enter the data from your Installation Worksheet.	All
WebLogic AppServer. adminUserName	WebLogic administrator name	Enter the data from your Installation Worksheet.	All

Field	Values	Source	Product
WebLogicAppServer.asSSL	For SSL with WebLogic: true Valid values: true, false	Enter the data from your Installation Worksheet.	All
WebLogic AppServer.domainLocation	Defaults to \${WL_HOME}/../markview)	To change the default value, enter the data from your Installation Worksheet.	All
WebLogic AppServer.domainName	Defaults to MarkView	To change the default value, enter the data from your Installation Worksheet.	All
WebLogic AppServer.host	Fully qualified hostname of this machine	Enter the data from your Installation Worksheet.	All
WebLogic AppServer.jarLocation	Defaults to \${WL_HOME}/server/lib/weblogic.jar	To change the default value, enter the data from your Installation Worksheet.	All
WebLogic AppServer.javaHomeDir	Defaults to %WL_HOME/../../jrocket_*	To change the default value, enter the data from your Installation Worksheet.	All
WebLogic AppServer.nodeManagerPort	Defaults to 5556	To change the default value, enter the data from your Installation Worksheet.	All
WebLogic AppServer.port	The HTTP port where MarkView applications listen (default 8001)	To change the default value, enter the data from your Installation Worksheet.	All
WebLogic AppServer.type	WebLogicAppServer	Automatically populated. Do not change this value.	All

Run the verify_silent script

To ensure that your environment is configured properly for successful upgrade, run the verify script, which is a smaller version of the installation script.

1. Copy the installer_interview.properties file that you generated in [Run the generateInterviewTemplate file](#) and edited in [Edit the installer_interview.properties file](#) from <distribution_directory>/installer/conf to <distribution_directory>/verify/conf, (where <distribution_directory> is the location where you downloaded and decompressed the installation files).
2. Ensure that all the paths entered in the install_interview.properties file exist.
3. Skip this step if you do not use SSL for the application server. If you plan to use SSL, navigate to <distribution_directory>/verify/bin, (where <distribution_directory> is the location where you downloaded and decompressed the installation files), open for editing verify_silent.sh or verify_silent.bat and change the following string:

- For UNIX:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} com.markview.installer.Installer "$@"
```

to:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.Installer "$@"
```

- For Windows:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% com.markview.installer.Installer %*
```

to:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.Installer %*
```

4. In <distribution_directory>/verify/bin, run either:

- UNIX: verify_silent.sh
- Windows: verify_silent.bat

If no errors occur, verify_silent returns to a command prompt with no further messages.

If Verify encounters an error

1. Review the verify logs located in the distribution directory in the reports folder.
2. Resolve the issue.
3. Rerun the verify script.

If no errors occur, the script returns to a command prompt with no further messages.

Run the install_silent script

1. Skip this step if you do not use SSL for the application server. If you plan to use SSL, navigate to `<distribution_directory>/installer/bin`, (where `<distribution_directory>` is the location where you downloaded and decompressed the installation files), open for editing `install_silent.sh` or `install_silent.bat` and change the following string:

- For UNIX:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} com.markview.installer.Installer "$@"
```

to:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.Installer "$@"
```

- For Windows:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% com.markview.installer.Installer %*
```

to:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.Installer %*
```

2. In `<distribution_directory>\installer\bin`, run either:

- UNIX: `install_silent.sh`
- Windows: `install_silent.bat`

i If the installer encounters an error, the upgrade stops. Review the log files located in the log folder in the MarkView installation directory. Resolve the issue, then rerun the `install_silent` script.

Upon successful completion, the `install_silent` script returns to the command prompt with no further messages.

Install Oracle Objects

Make sure that your environment is configured correctly for installing Oracle Objects. See [Set up your environment and install MarkView Oracle Objects](#) on page 77. Copy the

target_registry_service.properties file from the MarkView installation directory to the Oracle Objects installation directory.

Silent-mode setup for Oracle Objects

Edit the preliminary_interview.properties file for Oracle Objects

1. Log in to the Oracle EBS server as the EBS user.
2. Navigate to <distribution_directory>/installer/conf (where <distribution_directory> is the location where you downloaded and decompressed the installation files).
3. Back up the preliminary_interview.properties file.
4. Open the preliminary_interview.properties file and enter the following information.

Field	Allowed Values
AppServerType.app_server_type	<ul style="list-style-type: none"> • WebLogic • JBoss (use for WildFly and JBoss EAP)
InstallDirectory.install_directory	Installation directory. This is user defined and must exist prior to installation. See the <i>Kofax MarkView Installation Worksheet</i> .
InstallerAction.installer_action	upgrade
InstallationType.installation_type	Standard Full Install Partial Install (Any value other than Standard Full Install will perform a partial install)
SelectedProducts.selected_products	Must be an exact match to contents of the install_script.xml file. To verify product names, open install_script.xml and search for display = <product name>. To list multiple products, separate product names with commas.
ERPTType.erp_type	Oracle or blank - optional field

Run the generateInterviewTemplate file for Oracle Objects

1. Log in to the Oracle EBS server as the EBS user.
2. Navigate to <distribution_directory>\installer\bin where <distribution_directory> is the location where you downloaded and decompressed the installation files.
3. Run either:
 - UNIX: generateInterviewTemplate.sh
 - Windows: generateInterviewTemplate.bat

Edit the Oracle Objects installer_interview.properties file

1. Log in to the Oracle EBS server as the EBS user.
2. Navigate to the conf folder in the MarkView installation directory.
3. Back up the installer_interview.properties file.

4. Open the Oracle Objects installer_interview.properties file.
5. Enter information for the fields marked with **bold** type. There are no spaces in field names.

i Modifying fields populated by the preliminary_interview.properties file may cause unexpected results during installation.

Field	Values	Source	Product
InstallDirectory. install_directory	MarkView installation directory from the preliminary_interview.properties file	preliminary_interview.properties	All
InstallDirectory.type	Simple Question	preliminary_interview.properties	All
InstallationType. installation_type	Install type seeded from preliminary_interview . properties	preliminary_interview.properties	All
InstallationType . type	SimpleQuestion	preliminary_interview.properties	All
MarkView DBConn. dbType	Enter oracle .	preliminary_interview.properties	All
MarkView DBConn. host	Fully qualified hostname where MarkView resides	Installation Worksheet	All
MarkView DBConn. indexspace	Tablespace where MarkView indexes will reside	Installation Worksheet	All
MarkView DBConn. logging Directory	Oracle logging directory for MarkView processes	Installation Worksheet	All
MarkView DBConn. password	Password for MarkView schema user	Installation Worksheet	All
MarkView DBConn. port	Port for MarkView schema	Installation Worksheet	All
MarkView DBConn. sid	SID for MarkView schema	Installation Worksheet	All
MarkView DBConn. tablespace	Tablespace where MarkView data will reside	Installation Worksheet	All
MarkView DBConn. type	Oracle Database Connection	Installation Worksheet	All
MarkView DBConn. user	User name for MarkView schema user	Installation Worksheet	All
OAForms EnvInfo. appl_top		install_silent.sh	Forms
OAForms EnvInfo. au_top		install_silent.sh	Forms

Field	Values	Source	Product
OAForms EnvInfo. c_markview_top		install_silent.sh	Forms
OAForms EnvInfo. fnd_top		install_silent.sh	Forms
OAForms EnvInfo. type		install_silent.sh	Forms
OAFrameworks EnvInfo. appl_top		install_silent.sh	OA Frameworks, OA Expense
OAFrameworks EnvInfo. common_top		install_silent.sh	OA Frameworks, OA Expense
OAFrameworks EnvInfo. java_top		install_silent.sh	OA Frameworks, OA Expense
OAFrameworks EnvInfo. type	OAFramework EnvInfo Resource	install_silent.sh	OA Frameworks, OA Expense
OracleEBS password	Oracle APPS user password	Installation Worksheet	All except Doc Lib
OracleEBS .type	Oracle EBSInstance	preliminary_interview. properties	All except Doc Lib
OracleEBS. user	Oracle APPS user name	Installation Worksheet	All except Doc Lib
Selected Products. selected_products	Products selected from preliminary_interview. properties	preliminary_interview. properties	All
Selected Products. type	Multiple Answer Question	preliminary_interview. properties	All

Run the verify_silent script for Oracle Objects

1. Log in to the Oracle EBS server as the EBS user.
2. Copy the installer_interview.properties file from <distribution_directory>/installer/conf to <distribution_directory>/verify/conf (where <distribution_directory> is the location where you downloaded and decompressed the installation files).
3. Ensure that all the paths entered in the install_interview.properties file exist.
4. In <distribution_directory>/verify/bin, run either:
 - UNIX: verify_silent_oracle_objects.sh
 - Windows: verify_silent_oracle_objects.bat

If no errors exist, verify_silent_oracle_objects returns to a command prompt with no further messages.

If Verify Oracle Objects encounters an error

1. Review the verify logs located in the reports folder in the distribution directory.
2. Resolve the issue.
3. Rerun the verify script.

If no errors exist, the script returns to a command prompt with no further messages.

Run the install_silent script for Oracle Objects

1. Log in to the Oracle EBS server as the EBS user.
2. If the Target Registry Service is already deployed, copy the existing target_registry_service.properties file to the MarkView installation directory for Oracle Objects.
3. In <distribution_directory>/installer/bin, (where <distribution_directory> is the location where you downloaded and decompressed the installation files), run either:
 - UNIX: install_silent.sh
 - Windows: install_silent.bat

i If the installer encounters an error, the installation stops automatically. Review the log files located in the log folder in the target installation directory. Resolve the issue, then rerun the install_silent script.

4. Continue at [Post-upgrade steps](#).

If no errors exist, the install_silent file returns to the command prompt with no further messages.

Chapter 3

Verify your environment

The Verify tool is a smaller version of the installation application. Verify checks many of the system configuration settings and generates log files to help you identify and correct any issues before you upgrade MarkView.

Before running Verify:

- Ensure that your system is in compliance with the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).
- Complete the *Kofax MarkView Installation Worksheet*.
- Complete the tasks described in [Before you start](#).

Run Verify

The MarkView verification process requires information about your environment. Complete the sections of the installation worksheet that apply to your environment before you begin to verify MarkView.

Run verify on all systems where MarkView products are installed or being upgraded:

- Application server hosts
- Oracle E-Business Suite hosts

Verify hosts

Verify checks the following:

- Version information for
 - Operating System
 - Database
 - Database Server
 - Application Server
 - Forms Server
- MarkView Oracle RDBMS user privileges
- Oracle XML DB
- Oracle Advanced Queuing
- MarkView schema user setup

Verify generates logs that contain information about issues that can cause the MarkView upgrade to fail.

Run Verify on the MarkView application server host

Use the information that you entered on the *Kofax MarkView Installation Worksheet* to respond to the Verify prompts. Run Verify before upgrading MarkView.

1. Log in to the application server host operating system as the application server owner.
2. Ensure that the MarkView application server is running.
3. Ensure that the environment variables are correct.

For more information, see:

- [Set locale-sensitive environment variables](#)
 - [Configure environment variables for WebLogic](#) or [Configure environment variables](#)
4. Skip this step if you do not use SSL for the application server. If you plan to use SSL, navigate to `<distribution_directory>/verify/bin`, (where `<distribution_directory>` is the location where you downloaded and decompressed the installation files), open for editing `verify.sh` or `verify.bat` and change the following string:

- For UNIX:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} com.markview.installer.InstallerVerify "$@"
```

to:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.InstallerVerify "$@"
```


- For Windows:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% com.markview.installer.InstallerVerify %*
```

to:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.InstallerVerify %*
```

5. Navigate to `<distribution_directory>/verify/bin`, (where `<distribution_directory>` is the location where you downloaded and decompressed the installation files), and run the command for your operating system:
 - UNIX: `verify.sh`
 - Windows: `verify.bat`
6. On the **Which products do you want to verify for this environment?** page, select *only* the products that you plan to upgrade.
7. Follow the on-screen prompts and click **Verify**.

 On the **Installation Progress** window, click **Show Details** to display the progress.

8. Review the generated reports located in the MarkView installation directory you selected during the verification. Save these logs in another directory to avoid overwriting them.
The log file `reports/EnvironmentReport.txt` describes issues with your environment that will prevent successful upgrade.
9. Make changes as indicated in the failure reports. You are now ready to upgrade.

To run Verify for the Oracle Objects installer on the Oracle EBS host before running the application server and database components installer, copy the `target_registry.properties` file from the MarkView installation directory on the application server host to the installation directory on the OEBS host. See [Download the Oracle Objects installer and Verify files](#) on page 77.

Chapter 4

Upgrade MarkView

Follow the steps in this chapter to run the MarkView installer. If you used the silent-mode installation, skip this section.

Upgrade MarkView products

Before running the installer to upgrade MarkView products:


- Use the Installation Worksheet completed when MarkView products were installed.
- Run Verify: Perform this task if you have not already done so. For information about Verify, see [Run Verify on the MarkView application server host](#) on page 60.
- Follow the steps described in [Run the MarkView installer](#) on page 64.

If you are upgrading both MarkView and your Oracle ERP system, Kofax recommends that you upgrade Oracle first.

Restart the application server

WebLogic

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Servers > Control** tab.
3. Select the check box next to **markview_server**.
4. Click **Shutdown** and select **Force shutdown now**.
5. Select the check box next to **markview_server** and click **Start**.

 When you restart markview_server the first time after installing or upgrading applications, not all applications transition to the Active state. At this point, not all applications need to be active.

WildFly or JBoss EAP

Skip this section, if you want to use the MarkView installer to install and configure WildFly and proceed to [Run the MarkView installer](#) on page 64.

If you use manually configured WildFly or JBoss EAP, make sure that the application server is started. See [Start WildFly or JBoss EAP application servers](#) on page 38.

Add SSL certificate to the MarkView installer Java truststore (for SSL only)

Skip this section if you are not using SSL to provide secure web communications for the application server.

To add the certificate to the MarkView installer Java truststore, run the following command:

```
keytool -import -alias <alias> -keystore
<installer_java_home>/jre/lib/security/cacerts -file
<certificate>
```

Where:

- <alias> is a keystore entry unique name.
- <certificate> is a file that contains the self-signed certificate or any other certificate received from the certificate authority.

If you have a certificate received from the certificate authority, verify that root and intermediate certificates from the certification chain are in the MarkView installer Java truststore and run the indicated command to add the missing certificates.

The default Java certificate authority keystore is `cacerts`. The default password for `cacerts` is `<changeit>`.

Modify installation scripts (for SSL only)

Skip this section if you are not using SSL to provide secure web communications for the application server or if your MarkView installation is already configured on the application server with SSL and you perform the upgrade on the same application server.

1. Navigate to `<distribution_directory>/installer/bin` where `<distribution_directory>` is the location where you downloaded and extracted the installation files, and open for editing:

- UNIX: `install.sh`
- Windows: `install.bat`

2. Locate and change the string as follows:

- For UNIX:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} com.markview.installer.Installer "$@"
```

to:

```
java -Xmx1024m -cp ${CLASSPATH}
-Doracle_home=${ORACLE_HOME} -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.Installer "$@"
```

- For Windows:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% com.markview.installer.Installer %*
```

to:

```
java -Xmx1024m -cp "%CLASSPATH%"
-Doracle_home=%ORACLE_HOME% -Dmarkview.ssl.alias=<alias>
-Djavax.net.ssl.keyStore=<keystore>
-Djavax.net.ssl.keyStorePassword=<keystorepassword>
-Djavax.net.ssl.trustStore=<truststore>
-Djavax.net.ssl.trustStorePassword=<truststorepassword>
com.markview.installer.Installer %*
```

Where:

- <alias> is a keystore attribute that defines the string alias used to store and retrieve the server private key.
- <keystore> is a repository that contains private keys and the certificates with the corresponding public keys.
- <keystorepassword> is a password of <keystore>.
- <truststore> is a repository that contains trusted certificates from other parties that it expects to communicate with, or from Certificate Authorities that it trusts to identify other parties.
- <truststorepassword> is a password of <truststore>.

Run the MarkView installer

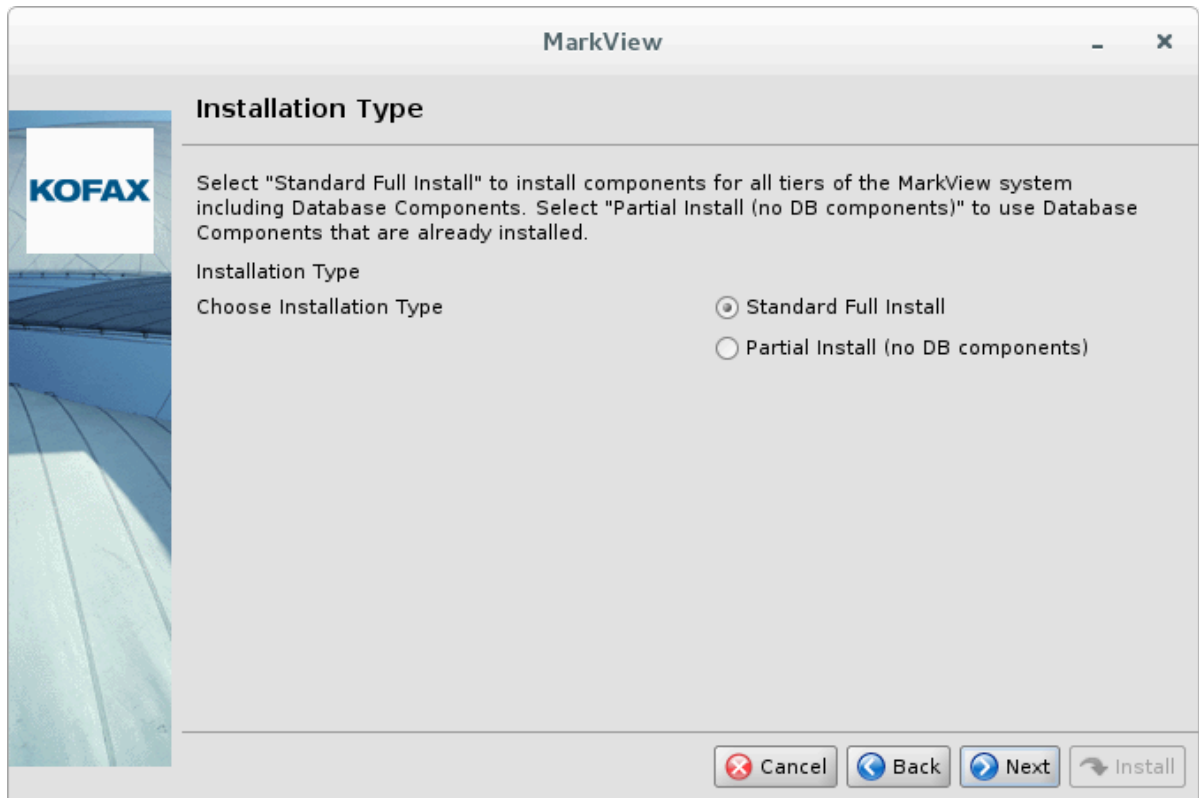
WebLogic

The installer populates some fields based on entries in the Target Registry Service (TRS) file. (Installing MarkView for Accounts Payable creates the TRS file.) Some information, like passwords, is not saved. Have your completed installation worksheet available when you start the installer.

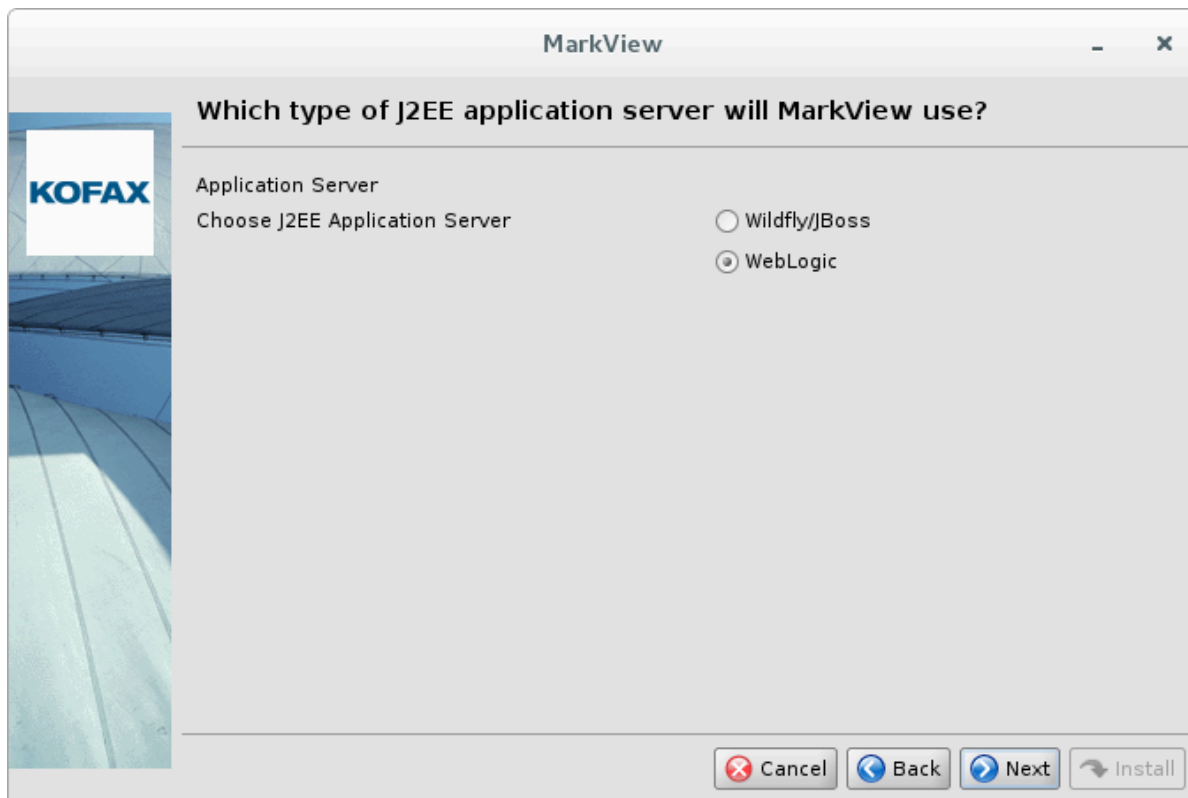
1. Log in to the application server host operating system as the application server owner.
2. Verify that the application server is running.
3. Ensure that the environment variables are correct.

For more information, see:

- [Set locale-sensitive environment variables](#)
 - [Configure environment variables for WebLogic](#)
4. Navigate to <distribution_directory>\installer\bin where <distribution_directory> is the location where you downloaded and extracted the installation files, and run the command for your operating system:
 - UNIX: install.sh.
 - Windows: install.bat.
 5. On the **Which products do you want to install?** window, select the products to upgrade.
 6. Click **Next**.
 7. Select **Standard Full Install** and click **Next**.



8. Select **WebLogic** and click **Next**.



9. Use the installation worksheet to complete the windows as prompted by the installer. The windows and prompts that appear vary based on your selections.
10. When prompted, click **Install**.

i If you are keeping your existing Application Server, select the same MarkView installation directory where MarkView is installed. See your *Kofax MarkView Installation Worksheet*.

i If you upgrade from MarkView 8.1.x and earlier, the length of time that the upgrade process takes depends on the amount of data imported from Kofax Transformation Modules to your MarkView environment, data migration period, and the speed of your system processors. To track the progress, use DBA Oracle tools, for example, system view `v$session_longops`. See [Configure historical data migration period for upgrades from MarkView 8.1.x and earlier \(optional\)](#).

11. Click **Exit** to complete the upgrade.
The installer finishes with a message indicating whether the upgrade is successful.
12. The installer creates a log file in the MarkView installation directory. Save the installation log files in a safe place in case you need this information for Technical Support.

WildFly or JBoss EAP

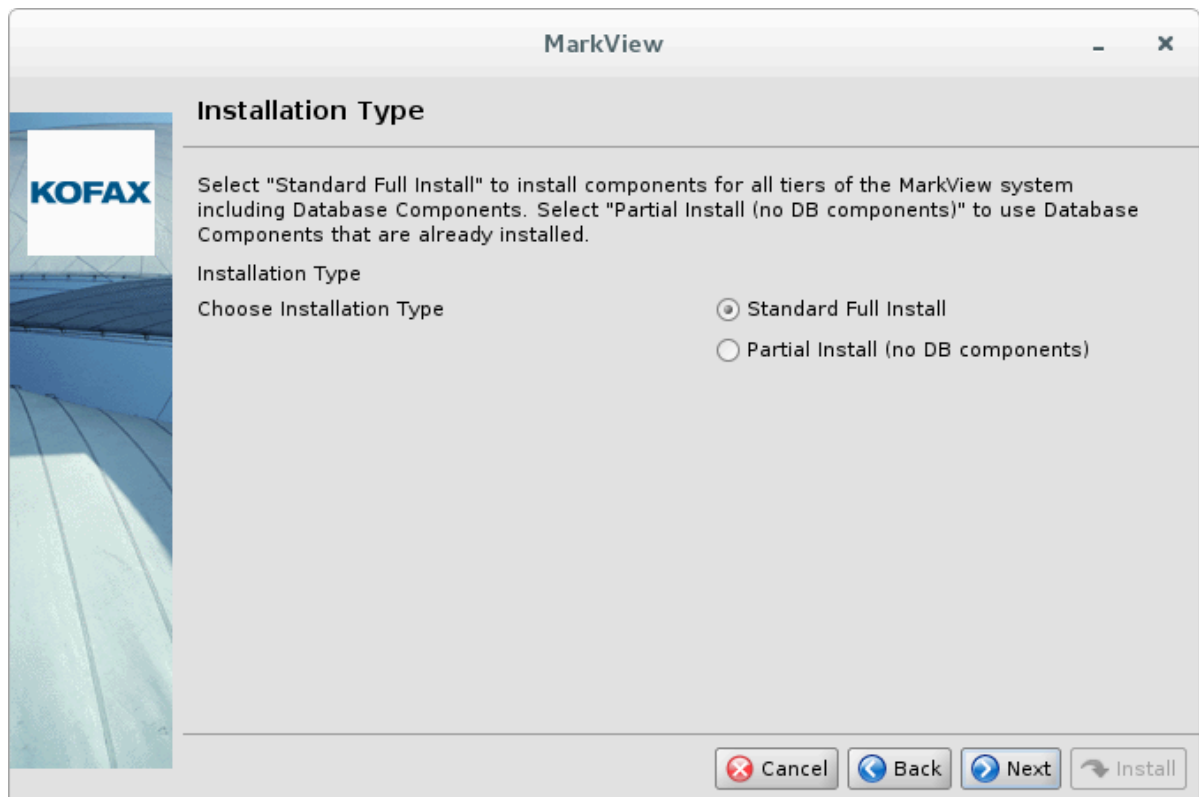
The installer populates some fields based on entries in the Target Registry Service (TRS) file. (Installing MarkView for Accounts Payable creates the TRS file.) Some information, like passwords, is not saved. Have your completed installation worksheet available when you start the installer.

1. Log in to the application server host operating system as the application server owner.
2. If you use manually installed WildFly or JBoss EAP, verify that the application server is running.
3. If you use manually installed WildFly or JBoss EAP, ensure that the environment variables are correct.

For more information, see:

- [Set locale-sensitive environment variables](#)
- [Configure environment variables](#)

4. Navigate to `<distribution_directory>\installer\bin` where `<distribution_directory>` is the location where you downloaded and extracted the installation files, and run the command for your operating system:
 - UNIX: `install.sh`.
 - Windows: `install.bat`.
5. On the **Which products do you want to install?** window, select the products to upgrade.
6. Click **Next**.
7. Select **Standard Full Install** and click **Next**.



8. On the **Which type of J2EE application server will MarkView use?** window, select **WildFly/ JBoss** and click **Next**.
9. Use the installation worksheet to complete the windows as prompted by the installer. The windows and prompts that appear vary based on your selections.

MarkView

Enter App Server information for MarkView applications

KOFAX

Admin Username: jboss

Admin User Password:

Domain:

App Server Directory: /projects/mvhome/wildf

Host Name: rhebsr12.kofax.com

Admin Port: 9090

SSL:

HTTP Port: 26000

Install Wildfly:

- **Admin Username**
- **Admin User Password**
- **Domain**

For the domain mode, enter your domain name in the **Domain** field.

For the standalone mode, leave the **Domain** field blank.

- **App Server Directory**

For manually configured WildFly or JBoss EAP, specify <JBOSS_HOME>.

If you are using the MarkView installer to install and configure WildFly, specify the location to store your WildFly installation files.

- **Host Name**

Specify your application server host name.

- **Admin Port**

The admin ports for manually configured WildFly and JBoss EAP may differ. See [Configure ports and hosts](#).

- **SSL**

Select the check box if you are upgrading MarkView on SSL.

- **HTTP Port**


See [Configure ports and hosts](#).

- **Install WildFly**


Select **Install WildFly**, to use the MarkView installer to install and configure the WildFly application server.


Clear **Install WildFly**, to use the manually installed WildFly.


10. On the installer screen, check the summary of your selections.

 In the **Application server** field, the value **JBoss** is set.

11. When prompted, click **Install**.

 If you are keeping your existing Application Server, select the same MarkView installation directory where MarkView is installed. See your *Kofax MarkView Installation Worksheet*.

 In **Show Details > Output, Installing or verifying JBoss server...** line indicates the WildFly installation and verification process.

 If you upgrade from MarkView 8.1.x and earlier, the length of time that the upgrade process takes depends on the amount of data imported from Kofax Transformation Modules to your MarkView environment, data migration period, and the speed of your system processors. To track the progress, use DBA Oracle tools, for example, system view `v$session_longops`. See [Configure historical data migration period for upgrades from MarkView 8.1.x and earlier \(optional\)](#).

12. Click **Exit** to complete the upgrade.

The installer finishes with a message indicating whether the upgrade is successful.

13. The installer creates a log file in the MarkView installation directory. Save the installation log files in a safe location in case you need them later for Technical Support.

Chapter 5

Post-upgrade steps

Add SSL certificate for WildFly (for SSL only)

Only follow the instructions in this section if you used the MarkView installer to install and configure WildFly and if you use SSL to provide secure web communications for the WildFly application server.

To add the certificate to the application server Java truststore, run the following command:

```
keytool -import -alias <alias> -keystore  
  <application_server_java_home>/jre/lib/security/cacerts -file  
  <certificate>
```

Where:

- <alias> is a keystore entry unique name.
- <certificate> is a file that contains the self-signed certificate or any other certificate received from the certificate authority.

The default Java certificate authority keystore is `cacerts`. The default password for `cacerts` is `<changeit>`

Set up memory properties (for WebLogic only)

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment** > **Servers**.
3. On the list of servers, click **markview_server** and go to **Configuration** > **Server Start** tab.
4. In the **Arguments** field, remove the following arguments, if any:

```
-Xms1024m -Xmx1400m -XX:CompileThreshold=8000 -XX:MetaspaceSize=128m -  
XX:MaxMetaspaceSize=256m
```

The values for your environment may differ.

i Do not remove other arguments in order for MarkView to function correctly.

Set up the log files location

To set up the log files location, configure the `markview.home` variable.

WebLogic

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Servers**.
3. On the list of servers, click **markview_server** and go to **Configuration > Server Start** tab.
4. In the **Arguments** field, add the following to the end of the line:
`-Dmarkview.home=<path>`
Where `<path>` is the location where you installed MarkView.
The WebLogic log files will be located in the `<path>/log` directory.
5. Click **Save**.

WildFly or JBoss EAP

1. Open one of the following configuration files depending on the mode you use to run the application server:
 - a. For Unix: `JBOSS_HOME/bin/standalone.conf` or `JBOSS_HOME/bin/domain.conf`
 - b. For Windows: `JBOSS_HOME/bin/standalone.conf.bat` or `JBOSS_HOME/bin/domain.conf.bat`
2. Locate the `JAVA_OPTS` value and add the `markview.home` parameter to the end of the string as follows:
`JAVA_OPTS="... -Dmarkview.home=<path>"`
Where `<path>` is the location where you installed MarkView.
The WildFly or JBoss EAP log files will be located in the `<path>/log` directory.

Configure the print function (for WebLogic 12.1.3 only)

To set up the print function for MarkView Viewer on WebLogic 12.1.3 application server, perform the following steps.

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Servers**.
3. On the list of servers, click **markview_server** and go to **Configuration > Server Start** tab.
4. In the **Arguments** field, add the following to the end of the line:
`-DUseSunHttpHandler=true`
5. Click **Save**.

Standard/Basic WebLogic license

In case you have a Standard/Basic license for WebLogic, you need to make the following changes to the **frameworks** deployment after the installation:

1. Log in to the WebLogic Server Administration Console.

2. Shut down **markview_server**.
3. Delete **frameworks** deployment.
 - a. Go to **Deployments**.
 - b. Select the **frameworks** deployment and click **Delete**.
4. Install and rename the application. Do not rename the ear file, only the application.
 - a. On the **Deployments** tab, click **Install**.
 - b. Update the path to point at
`<installation_directory>/applications/frameworks.ear`
Where `<installation_directory>` is the MarkView installation directory.
 - c. Select the **frameworks.ear** and click **Next**.
 - d. Select **Install this deployment as application** and click **Next**.
 - e. Select **markview_server** and click **Next**.
 - f. Change the name of the application from **frameworks** to **aframeworks** and click **Finish**.

i Repeat the renaming step (4.f) after major updates or when you apply fix packs.

Restart the application server

WebLogic

1. Log in to the WebLogic Server Administration Console.
2. Go to **Environment > Servers > Control** tab.
3. Select the check box next to **markview_server**.
4. Click **Shutdown** and select **Force shutdown now**.
5. Select the check box next to **markview_server** and click **Start**.

i When you restart **markview_server** the first time after installing or upgrading applications, not all applications transition to the Active state. At this point, not all applications need to be active.

WildFly or JBoss EAP

If you used the MarkView installer to install and configure WildFly, before starting the application server, configure the memory properties. See [Set up memory properties \(standalone mode only\)](#) on page 35 or [Set up memory properties \(domain mode only\)](#) on page 36 for more information.

1. Set the `JBOSS_HOME` environmental variable, such as:
`JBOSS_HOME=<drive&path>/wildfly`
For specific details related to UNIX or Windows, see the installation guide on the [JBoss website](#).
2. Start the WildFly or JBoss EAP application server in standalone or domain modes. See the JBoss website for more information about the operating modes.

Reintegrate _CUSTOM packages

There are several changes to the _CUSTOM packages.

If you have not customized your _CUSTOM packages, compile these packages to upgrade them to the current versions.

Compile these custom packages from the distribution directory (/modules/erp-integration-dist-10.5.0/erp-integration-db/schema/custom_package_bodies/custom_package_bodies_private/):

- @mverp_dfm_custom_pb.sql
- @mverp_dfm_descr_flex_custom_pb.sql
- @mverp_dfm_lov_custom_pb.sql

If you have customized your _CUSTOM packages, modify and compile your packages before you can test other aspects of the system such as entering invoices into the system, and displaying and marking up these invoices.

See the *Kofax MarkView Administrator's Guide, Volume 2* for more information about custom packages.

To support Oracle R12, MarkView divides the definition of distribution line into distributions and invoice lines. These custom packages have changed as a result of this division and although the changes are applicable only for Oracle 12, you must edit and recompile these packages for all Oracle and SAP environments.


- **MVERP_DFM_DESCR_FLEX_CUSTOM:** This package has a new function, a new procedure, and a change to an existing procedure:
 - New function, SetContextValueForLine. Derives Descriptive FlexField (DFF) content for an invoice line. This is only applicable for Oracle R12 environments when the DFM is created with the DFM_FIELD_DFF field enabled.
 - New Procedure, PopulateSegmentForLine. Populates DFF segments for a distribution line. This is only applicable for Oracle R12 environments when the DFM is created with the DFM_FIELD_DFF field enabled.
- **MVERP_DFM_CUSTOM:** This package has new procedures and a new function.
 - New function, GetDefaultAccountForLine. Gets the default concatenated account segments whenever the amount is entered on an invoice line and the account has not already been entered. This is only applicable for Oracle R12 environments when the DFM has been created with UseProjects set to FALSE.
 - New procedures, SetLineTypeDefaultsForLine and SetLineTypeDefaults. Set the default values for the Tax fields when the Line Type of an invoice line or a distribution line changed. This is only applicable for Oracle environments when the DFM has been created with EnableLineTypeDefaults set to TRUE.
 - New procedure, SetProjectDefaultsForLine. Sets the default values for additional project-related fields when the Project has been changed on an invoice line. This is only applicable for Oracle R12 environments when the DFM has been created with UseProjects set to TRUE.
 - New procedure, ValidateInvoiceLine. Performs custom validation on an invoice line. This procedure cannot change values on an invoice line. This is only applicable for Oracle R12 environments.

- **MVERP_DFM_LOV_CUSTOM:** This package has a new procedure.
 - New procedure, `PopulateFlexSegmentForLine`. Populates LOV for flex segment values for an invoice line. This is only applicable for Oracle R12 environments when the DFM is created with the `DFM_FIELD_DFF` field enabled.

Check for invalid packages

1. Log in as the MarkView database user.
2. Enter the following SQL statement:

```
SELECT OBJECT_NAME, OBJECT_TYPE FROM USER_OBJECTS WHERE STATUS
= 'INVALID';
```

 Systems with Self-Service Invoice (SSI) display invalid package messages until the SSI upgrade is complete. This is expected behavior and not an error.

3. If invalid database objects exist, save the output from the SQL statement and run `@gencomp.sql` in `<distribution_directory>\installer\scripts`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.

A message similar to the following appears:

```
Recursively compiling 2 object(s).
Please wait...
All objects compiled successfully.
```

4. Review the information in the `COMPILE.LOG`. If the message says that it is recursively compiling more than 0 objects, rerun `@gencomp.sql`. Dependencies between objects can require more than one execution to complete compilations successfully before the other completes compilations.
5. If any objects still fail to compile, run `SQL*Plus SHOW ERRORS` to view the error messages. Use the following format for this command:

```
SHOW ERRORS { FUNCTION | PROCEDURE | PACKAGE | PACKAGE BODY | TRIGGER | VIEW }
name
```

For example, to view the PL/SQL errors for the package body `MVERP_DFM_DESCR_FLEX_CUSTOM`, enter:

```
SQL> SHOW ERRORS PACKAGE BODY MVERP_DFM_DESCR_FLEX_CUSTOM
```

The errors that occurred during compilation of the object are displayed.

Configure MarkView to use the Oracle Wallet (for SSL only)

Skip this section if you do not use SSL to provide secure web communications for the application server.

1. Log in to MarkView and navigate to **Administration > MarkView Admin**.
2. Select the **Preferences** tab.

3. Locate and change the settings for the following preferences:
 - a. Set SECURITY_SSL_WALLET_LOCATION to <WalletFolder>.
 - b. Set SECURITY_SSL_WALLET_PASSWORD to <WalletPasswd>.

For information about the values, see [Add SSL certificate to Oracle Wallet \(for SSL only\)](#).


Verify access to Document Server

To verify the access:

- If you are moving your application server, verify that the OS user running the MarkView application server can access the Document Server directory.
- Verify that you can read and write to your existing Document Server directory. If necessary, copy the Document Server directory to a new location. If you copy the directory to a new location, update the Volume Path after you upgrade the system. See the *Kofax MarkView Administrator's Guide, Volume 1* for instructions.
- If the Document Server directory was moved to a new location before MarkView upgrade, update the Volume Path after MarkView upgrade. See the *Kofax MarkView Administrator's Guide, Volume 1* for instructions.

Verify the system setup

1. Log in to MarkView and navigate to **Administration > Verify MarkView**.
2. In the Test Folder that opens, click the **document icon** next to the About MarkView document. MarkView Viewer displays the document, which validates that the viewer operates correctly.

 The first time that you try to view a document after upgrade, you may get a null pointer exception. If this happens, restart the application server and retry this step.

3. Navigate to **Utilities > Process Monitor**. Open a configuration to verify that you can view it.
4. Navigate to **Utilities > Bar Code Generation** and generate a bar code for **Supplier Document**.

Verify that database jobs are running

1. Log in to MarkView and navigate to **Utilities > System Status**.
2. Locate **DBMS User Jobs Broken**.

Status	Current Value	Limit	Over Limit	Description
DBMS User Jobs Broken	2	0	Y	The number of current MarkView database user jobs and scheduler jobs that are in error.
Disconnected Bar Code Server	1	0	Y	Checks v\$session to see if the Bar Code server has a connection to the database.

3. Contact Kofax Technical Support if the current value for **DBMS User Jobs Broken** is greater than 0.

Chapter 6

Set up your environment and install MarkView Oracle Objects

Follow these steps if you installed MarkView manually. If you installed MarkView Oracle Objects in silent mode, continue at [After you run the installer](#).

Upgrade MarkView Oracle Objects

Complete the following procedures:

- [Download the Oracle Objects installer and Verify files](#)
- [Run Verify on the Oracle E-Business Suite host](#)
- [Run the MarkView Oracle Objects installer](#)

Download the Oracle Objects installer and Verify files

1. On the Oracle E-Business Suite server, open a command shell and log in as the Oracle E-Business suite owner. The default account for this user is applmgr.
2. Create a temporary distribution directory for the compressed MarkView installer and verification files. For example, `<home_directory>/mvforms_dist` where `<home_directory>` is the user home directory.
3. In the distribution directory, create these subdirectories:
 - `<distribution_directory>/verify`
 - `<distribution_directory>/installer`

Where `<distribution_directory>` is the temporary distribution directory you just created.

4. Download the following file into the verify directory (where `<version_number>` is the MarkView version number):
KofaxMarkView-`<version_number>`_Oracle_Verify.zip (for all hosts)
5. Download the following file into the installer directory (where `<version_number>` is the MarkView version number):
KofaxMarkView-`<version_number>`_Oracle_Objects.zip
6. Decompress the files.

Add SSL certificate to the MarkView Oracle Objects installer Java truststore (for SSL only)

Skip this section if you do not use SSL to provide secure web communications for the application server.

Add the certificate to the MarkView installer Java truststore on the system where you plan to run the Oracle Objects installer:

```
keytool -import -alias <alias> -keystore "<installer_java_home>\jre\lib\security\cacerts" -file <certificate>
```

Where:

- <alias> is a keystore entry unique name.
- <certificate> is a file that contains the self-signed certificate or any other certificate received from the certificate authority.

If you have a certificate received from the certificate authority, verify that root and intermediate certificates from the certification chain are in MarkView installer Java truststore and run the indicated command to add the missing certificates.

The default Java certificate authority keystore is `cacerts`. The default password for `cacerts` is `<changeit>`.

Run Verify on the Oracle E-Business Suite host

Use the information that you entered on the MarkView Installation Worksheet to respond to the Verify prompts. Run Verify before upgrading MarkView.

1. On the Oracle E-Business Suite server, open a command shell and log in as the Oracle E-Business suite owner. The default account for this user is APPLMGR.
 2. Ensure that the environment variables are correctly set up:
 - \$PATH: Confirm the appropriate Java version comes first (or run `java -version`). For the Java version, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).
 - \$APPL_TOP: Confirm this is the correct instance of Oracle E-Business Suite
 - \$FORMS_PATH: Confirm that it includes \$AU_TOP/resource and \$AU_TOP/forms/US.
- Also, for more information, see:
- [Set locale-sensitive environment variables](#)
 - [Configure environment variables for WebLogic](#) or [Configure environment variables](#).
3. Ensure that the MarkView application server is running.
 4. Navigate to `<distribution_directory>/verify/bin`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.
 5. Run **Verify**:
 - On Unix, enter `./verify_oracle_objects.sh`.

- On Windows, enter `verify_oracle_objects.bat`.
6. Select the products you are planning to install with the Oracle Objects installer.
 - Oracle Forms Integration
 - OA Framework Integration for AP
 - OA Framework Integration for Expense (only if you are running MarkView for Expense Management)

Consider these points when you select products:

- Only systems running Oracle EBS 12.x that also include MarkView for Account Payables can select OA Framework Integration for AP.
 - Only systems running MarkView for Expense Management can select OA Framework Integration for Expense.
7. Follow the prompts.
 8. Review the generated reports. The reports are located in the MarkView installation directory you selected during the verification. Save these logs in another directory to prevent overwriting them.

The file `reports/EnvironmentReport.txt` describes issues with your environment that will prevent successful installation.
 9. Make changes as indicated in the failure reports. You are now ready to upgrade.

Run the MarkView Oracle Objects installer

To run the installer:

1. On the Oracle E-Business Suite server, open a command shell and log in as the Oracle E-Business suite owner. The default account for this user is `applmgr`.
2. Make sure that all environment variables are correctly set up for this account, check:
 - `$PATH`: Confirm the appropriate Java version comes first (or run `java -version`). For the Java version, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).
 - `$APPL_TOP`: Confirm this is the correct instance of Oracle E-Business Suite
 - `$FORMS_PATH`: Confirm that it includes `$AU_TOP/resource` and `$AU_TOP/forms/US`.
3. Ensure that the application server is running.
4. Navigate to `<distribution_directory>/installer/bin`, where `<distribution_directory>` is the temporary distribution directory.
5. Start the installer by running either:
 - For Unix: `./install.sh`
 - For Windows: `install.bat`
6. Select the applications to install. Available choices are:
 - Oracle Forms Integration
 - OA Framework Integration for AP
 - OA Framework Integration for Expense

Consider the following when selecting products:

- Only systems running Oracle Release 12 that also include MarkView for Account Payables can select OA Framework Integration for AP.
- Only systems running MarkView for Expense Management can select OA Framework Integration for Expense.

7. Click **Next**.

8. Select **Standard Full Install** and click **Next**.

9. Click **Select Folder** to navigate to the MarkView installation directory and click **Next**.

10. Enter your MarkView schema password and click **Next**.

11. Enter your Oracle Applications schema password and click **Next**.

The order and appearance of the next few steps vary depending on the installation options.

12. Review the values displayed and click **Next**:

- **Location of APPL_TOP** value: Confirm this is the instance of Oracle E-Business Suite where you want to install Forms.
- **Location of AU_TOP and FND_TOP** values: Confirm this is the instance of Oracle E-Business Suite where you want to install Forms (both directories should be under \$APPL_TOP).
- **Location of \$c_MARKVIEW_TOP** value: It should be the value you set up in the Pre-Install steps.

13. Verify the Oracle Framework Environment Variable values APPL_TOP, COMMON_TOP, and JAVA_TOP and click **Next**.

14. Review the Summary and click **Next**.

15. Click **Install**.

The process can take several minutes. To track the progress, click **Show Details**.

The installation finishes with a message indicating whether the installation is successful.

The installation script creates log files in the MarkView installation directory.

16. Click **Exit**.

After you run the installer

You must restart the application server processes to pick up the new components.

Oracle R12:

```
$ADMIN_SCRIPTS_HOME/adapctl.sh stop
$ADMIN_SCRIPTS_HOME/adoacorectl.sh stop
$ADMIN_SCRIPTS_HOME/adapctl.sh start
$ADMIN_SCRIPTS_HOME/adoacorectl.sh start
```

Oracle 12.2:

```
$ADMIN_SCRIPTS_HOME/adapctl.sh stop
$ADMIN_SCRIPTS_HOME/admanagedsrvctl.sh stop oacore_server1
$ADMIN_SCRIPTS_HOME/adapctl.sh start
$ADMIN_SCRIPTS_HOME/admanagedsrvctl.sh start oacore_server1
```


Chapter 7

Configure Oracle Forms

If you have made customizations to the CUSTOM.pll file, follow the steps in this chapter:

- [Verify the environment \(Oracle EBS 12.2 only\)](#)
- [Set up the Oracle Forms environment variables](#)
- [Start Oracle Forms Builder](#)
- [Update the custom library \(CUSTOM.pll\)](#)
- [Synchronize the run and patch file systems \(Oracle EBS 12.2 only\)](#)

Verify the environment (Oracle EBS 12.2 only)

Follow these steps if you are integrating MarkView with Oracle E-Business Suite 12.2 or higher

When configuring Oracle Forms, run any shell commands on the run file system.

1. On the Oracle E-Business Suite server, open a command shell and log in as the Oracle E-Business Suite owner.

The default account for this user is applmgr.

2. Source the run file system environment file.

For example, from a UNIX shell, run the following command:

```
$ source $APPL_TOP/../.././EBSapps.env run
```

3. Verify that the environment is properly set by examining the relevant environment variable.

For example, from a UNIX shell, run the following command:

```
$ echo $FILE_EDITION
run
```

Set up the Oracle Forms environment variables

Before launching Oracle Forms Builder, set environment variables. Log in to the Forms host as a user with write privileges in the \$APPL_TOP directory (for example, applmgr).

Oracle Forms Builder must run through a windowing system. Initiate this session on a desktop environment or from an X Windows client.

For X Windows clients, set the DISPLAY environment variable to the IP address of your local machine. For example:

```
export DISPLAY=xxx.xxx.xxx.xxx:0
```

The \$APPL_TOP directory contains configuration files which have the suffix .env and set environment variables. These environment variables must be set properly so you can compile forms and libraries.

Before invoking Oracle Forms Builder, invoke the appropriate configuration file to establish the proper working environment. Use the shell command that runs scripts or batch files in your current environment:

- C shell: `source APPS<sid>_<hostname>.env`
- KornShell: `APPS<sid>_<hostname>.env`

where <sid> is the database SID and <hostname> is the server name.

The configuration file establishes several environment variables, including the following:

Variable	What it Holds
APPL_TOP	The name of the directory where the configuration files reside.
FORMS_PATH in R12.x	One or more directories required to compile forms and libraries.
AU_TOP	The source code for all forms.

To verify FORMS_PATH:

1. Check FORMS_PATH to make sure that it includes \$AU_TOP/resource.
2. Oracle Forms Builder must have \$AU_TOP/forms/US in its path. Either:
 - Launch Oracle Forms Builder from the directory \$AU_TOP/forms/US.
 - Set the variable FORMS_PATH to include \$AU_TOP/forms/US.

Start Oracle Forms Builder

Before running the Oracle Forms Builder installer, verify that the Java version on the system matches the Oracle EBS Java (32-bit or 64-bit versions).

To start Oracle Forms Builder for Oracle Release 12, enter the following command in a shell:

```
frmbld
```

Update the custom library (CUSTOM.pll)

The custom library (CUSTOM.pll) is an Oracle Forms library shipped with Oracle Applications. The custom library is attached to all forms in the E-Business Suite. As shipped by Oracle, this library performs no functions, but provides callouts for custom logic.

The MarkView installer overwrites CUSTOM.pll to integrate it with MarkView. Therefore, if you added your own customizations to CUSTOM.pll, restore the version of CUSTOM.pll that contains your modifications and manually add the MarkView integration code.

Step 1: Back up the active CUSTOM.pll and CUSTOM.plx files

Back up the active versions of the CUSTOM.pll and CUSTOM.plx files before you restore the modified CUSTOM.pll file.

1. Create the following directory (if it does not already exist):

```
$c_MARKVIEW_TOP/MVOA/<version_number>/restore
```

where <version_number> is the Oracle version number.

2. Copy:

```
$AU_TOP/resource/CUSTOM.plx  
to:  
$c_MARKVIEW_TOP/MVOA/<version_number>/restore
```

3. Copy:

```
$AU_TOP/resource/CUSTOM.pll  
to:  
$c_MARKVIEW_TOP/MVOA/<version_number>/restore
```

Step 2: Restore the modified CUSTOM.pll file

If you did not modify the CUSTOM.pll file, skip this step and proceed to [Step 3: Open CUSTOM.pll for editing](#) on page 83.

If you added your own customizations to CUSTOM.pll, restore the version of the file that contains your changes. The MarkView installer creates restore directories with both CUSTOM.pll and CUSTOM.plx files in

```
$c_MARKVIEW_TOP/MVOA/<version_number>/Restore_<timestamp>
```

where <version_number> is the Oracle version number, and <timestamp> is the date and time when the MarkView installer ran.

1. Locate the original CUSTOM.pll file in `$c_MARKVIEW_TOP/MVOA/<version_number>/Restore_<timestamp>`.

If multiple restore directories exist, use the directory which contains the most recent version of your modified files.

2. Copy:

```
$c_MARKVIEW_TOP/MVOA/<version_number>/Restore_<timestamp>/CUSTOM.pll  
to:  
$c_MARKVIEW_TOP/MVOA/<version_number>/libraries/
```

Step 3: Open CUSTOM.pll for editing

1. Start Oracle Forms Builder as described in [Start Oracle Forms Builder](#) on page 82.
2. Connect to the Oracle APPS database schema.
 - a. Select **File > Connect**.

5. In the **function style** section, comment out any existing return lines, such as:

```
# return(FALSE);
```

6. Add the following code to the end of the **function style** section immediately before the end line:

```
return(MVOA_Util.Zoom_Style);
```

7. In the **procedure event** section, comment out any existing return lines, for example:

```
# return(FALSE);
```


8. Add the following code to the end of the **procedure event** section immediately before the end line:

```
MVOA_Util.Event(event_name);
if ( (GET_APPLICATION_PROPERTY(Current_Form_Name) = 'APXXXEER'
or GET_APPLICATION_PROPERTY(Current_Form_Name) = 'SFXIISIM'
or GET_APPLICATION_PROPERTY(Current_Form_Name) = 'APXINWKB')
and event_name = 'ZOOM') then
execute_trigger('WHEN-WINDOW-ACTIVATED');
end if;
```

9. Select **File > Save** and close the PL/SQL Editor.

Step 6: Compile and copy CUSTOM.pll

1. Using **Oracle Forms generator**, issue the following command to compile CUSTOM.pll into CUSTOM.plx. In this command, <version_number> is the Oracle version number:

 These commands must be run on a single line. If you cut and paste from this guide, remove any line breaks and update the version number.

Oracle R12

```
frmcmp userid=apps/apps-pw@connectstring module=$c_MARKVIEW_TOP/MVOA/
<version_number>/libraries/CUSTOM.pll module_type=LIBRARY compile_all=YES
```

2. Copy:

```
$c_MARKVIEW_TOP/MVOA/<version_number>/libraries/CUSTOM.pll
```

to:

```
$AU_TOP/resource
```

where <version_number> is the Oracle version number.

3. Copy:

```
$c_MARKVIEW_TOP/MVOA/<version_number>/libraries/CUSTOM.plx
```

to:

```
$AU_TOP/resource
```

where <version_number> is the Oracle version number.

Synchronize the run and patch file systems (Oracle EBS 12.2 only)

Follow these steps if you are integrating MarkView with Oracle E-Business Suite 12.2 or higher.

Proceed to one of the following procedures to synchronize the MarkView files between the run and patch file systems:

- [Synchronize the MarkView files using adop phase=fs_clone command](#)

The file systems synchronization with `adop phase=fs_clone` command requires a large amount of free disk space to be available for adop operations. The synchronization procedure is time-consuming. For more information about space requirements, refer to the Oracle documentation.

- [Synchronize the MarkView files using custom synchronization driver \(for UNIX only\)](#)

This procedure requires less time and disk space compared to the synchronization using `adop phase=fs_clone`.

Synchronize the MarkView files using adop phase=fs_clone command

If you configured Oracle Forms or applied any changes to the Oracle Forms, do the following:

1. Before synchronizing the run and patch file systems, verify that no patching cycle is currently active.

For example, from a UNIX shell, run the following command:

```
$ adop -status
```

2. To propagate the changes to the secondary file system, run the following command:

```
$ adop phase=fs_clone
```

`adop phase=fs_clone` command recreates the patch edition file system as an exact copy of the run edition file system.

3. For more information about using the Oracle adop (the AD Online Patching) utility, refer to the Oracle adop utility documentation.

Synchronize the MarkView files using custom synchronization driver (for UNIX only)

If you configured Oracle Forms or applied any changes to the Oracle Forms, do the following:

1. Before synchronizing the run and patch file systems, verify that no patching cycle is currently active.

For example, from a UNIX shell, run the following command:

```
$ adop -status
```


2. In `<distribution_directory>\installer\tools`, locate the `copy_mv_objects.sh` shell script, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.

3. Copy `copy_mv_objects.sh` to: `$APPL_TOP_NE/ad/custom/`
Verify that the copied script has the **Execute** permissions.

4. In `$APPL_TOP_NE/ad/custom/adop_sync.drv`, add the following line between `#Begin Customization` and `#End Customization`:

```
sh %s_ne_base%/EBSapps/appl/ad/custom/copy_mv_objects.sh
   %s_current_base% %s_other_base%
```

Next time you start a new patching cycle with the `adop phase=prepare` command, the MarkView files will be synchronized between the file systems.

 The files will be automatically synchronized between the file systems each time you start a new patching cycle with the `adop phase=prepare` command.

If you do not want to propagate any subsequent changes in the MarkView files (for example, temporary changes in the customized Oracle Forms) from the run file system to the patch file system, comment out the added line in `$APPL_TOP_NE/ad/custom/adop_sync.drv` to stop synchronization.

Chapter 8

Capture and Output modules

For more information about the MarkView Capture and Output modules, see the following documents on the [Kofax MarkView Product Documentation site](#):

- *Kofax MarkView Planning Guide*
- *Kofax MarkView Technical Specifications*.

Upgrade each Capture and Output module separately.

About upgrading Data Export Server for Kofax Transformation Modules

The Data Export Server provides data from Oracle and MarkView to Kofax Transformation Modules for validation and is required for MarkView AP.

Upgrade the Data Export Server on all machines running Kofax Transformation Modules. That assumes the export data services are installed on the Kofax Transformation Modules server. Usually, the export data services are installed on the Capture server as a part of the MarkView Capture and Output components and accessible via UNC path.

Before you start

Upgrade MarkView Application Server and Database components before you upgrade any Capture and Output module. For more information, see [Run the MarkView installer](#) on page 64.

Download and extract the installer and Verify files

Download the compressed MarkView System setup files from the [Kofax Fulfillment Site](#).

To access the files:

1. Log in as the local administrator for the operating system for the Windows Capture and Output server.
2. Create a temporary distribution directory for the compressed MarkView installer file, for example, `C:\mvcodist`.
3. Download the following file into the distribution directory:
KofaxMarkView-<version_number>_Capture_Output.zip
4. Extract the file.

i The built-in ZIP utilities in certain versions of Windows have issues with lengthy directory paths. Use a third-party extraction utility if your directory paths are more than 200 characters long.

Install Oracle Database 19c Client (19.3) for Microsoft Windows

For the Oracle Data Access Components supported, see "Required Third-Party Technologies" in the *Kofax MarkView Technical Specifications* document. Look at the table and select between the 32-bit or 64-bit version.

If you plan to integrate with Kofax Capture and Kofax Transformation Modules on Windows Server 2019, complete the following procedure.

1. Install Oracle Database 19c Client (19.x) (ODAC).
 - a. Run the installer.
 - b. Select the **Custom** installation type.
 - c. On the **Available Product Components** page, select the following components.
 - Oracle ODBC Driver.
 - Oracle Provider for OLE DB.
 - Oracle Data Provider for .NET.
 - d. Install the product.
2. If you installed ODAC Xcopy version, register Oracle.DataAccess.dll in the GAC by running the following commands:

```
OraProvCfg.exe /action:gac /providerpath:<oracle_client>\odp.net\bin
\4\Oracle.DataAccess.dll
OraProvCfg.exe /action:config /force /product:odp /frameworkversion:v4.0.30319
/providerpath:<oracle_client>\odp.net\bin\4\Oracle.DataAccess.dll
```

3. If you installed ODAC Xcopy version and you encounter problems with database connectivity, run the following commands to register Oracle products in the GAC manually.

```
cd <oracle_client>\odp.net\bin\4
```

```
OraProvCfg.exe /action:ungac /providerpath:<oracle_client>\odp.net\bin
\4\Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.112.Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.121.Oracle.DataAccess.dll
```

```
cd <oracle_client>\odp.net\bin\4
```

```
OraProvCfg.exe /action:gac /providerpath:<oracle_client>\odp.net\bin
\4\Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.112.Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:gac
```

```

/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.121.Oracle.DataAccess.dll

cd <oracle_client>\odp.net\bin\2.x

OraProvCfg.exe /action:ungac /providerpath:<oracle_client>\odp.net\bin\2.x
\Oracle.DataAccess.dll

OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.102.Oracle.DataAccess.dll

OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.111.Oracle.DataAccess.dll

OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.112.Oracle.DataAccess.dll

OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.121.Oracle.DataAccess.dll

cd <oracle_client>\odp.net\bin\2.x

OraProvCfg.exe /action:gac /providerpath:<oracle_client>\odp.net\bin\2.x
\Oracle.DataAccess.dll

OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.102.Oracle.DataAccess.dll

OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.111.Oracle.DataAccess.dll

OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.112.Oracle.DataAccess.dll

OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.121.Oracle.DataAccess.dll

```

Where <oracle_client> is the Oracle Database 19c Client installation folder.

i Some Windows folders (such as C:\Users\<USER NAME>) may be protected and have permission restrictions.

Folder location values that contain spaces must be enclosed in double quotation marks.


Example: "C:\oracle client\network\admin".

Customize the tnsnames.ora file

Your tnsnames.ora file is an Oracle DBMS file that specifies the names and locations of your databases. MarkView uses the information to communicate with the database. A template tnsnames.ora file is installed with the Oracle components.

Edit the template tnsnames.ora file to:

- Refer to the correct databases
- Contain the name and location of your Oracle DBMS

 Edit tnsnames.ora for each instance of ODAC installed on your system.

Bar Code and Mail Gateway prerequisites

Kofax VirtualReScan (VRS) includes a bar code reader. Determine whether you need to install VRS separately:

- If you are installing Bar Code Server on a system with Kofax Capture, you do not need to install VRS separately. VRS is installed silently as part of all Kofax Capture installations.
- If you are installing Bar Code Server on a system without Kofax Capture, install VRS. See the *Kofax VirtualReScan (VRS) Installation Guide* for information about installing VRS. For a list of supported versions, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).

Upgrade Capture and Output modules

Upgrade each Capture and Output module separately.

1. Stop MarkView Capture and Output server components before upgrading.
2. Log in as the local administrator for the operating system for the Windows Capture and Output server.
3. Navigate to `<distribution_directory>` and run one of the available installers: `MVBarcodeServer.Installer.msi`, `MVDataExport.Installer.msi`, `MVImport.Installer.msi`, or `sfMailService.Installer.msi`.
4. Follow the prompts to upgrade the components you selected.
5. When prompted to select the upgrade directories, browse to the base directories where the Capture and Output components were originally installed.
6. Click **Finish** on the **Maintenance Complete** window.
7. Reboot the system to activate the changes.

Configure Capture and Output modules

Follow these steps to configure newly installed instances of the Capture and Output modules. Upgrades to existing instances of the Capture and Output modules do not require reconfiguring. After upgrading the existing instances of Data Export Server, Import Server, or Mail Gateway to version 10.5.0, reenter your password.

Configure Data Export Server

Follow these steps to configure newly installed instances of Data Export Server. Upgrades to existing instances of Data Export Server do not require reconfiguring.

1. Double-click the **MV Data Export Server - Configuration** shortcut on your desktop.
2. Enter an instance **Name** that identifies the function that the instance will perform, such as Contacts, and click **OK**.

3. Select the instance and click **Preferences**.
4. In the MarkView Data Export Server Preferences window, provide the following:
 - **Database user:** The MarkView schema user
 - **Database password:** The password for the MarkView schema user
 - **Database host:** The TNS alias name that was configured in the TNS names file (such as tnsnames.ora) for the database instance of the MarkView schema
5. In the **Data Function** list, select the data function for the instance.

Data Function	Description																					
Get Vendor	<p>Provides vendor information to Kofax Transformation Modules Validation for selecting valid vendors/vendor sites to associate with invoices. Each record in this data feed is a Supplier Site, so you might have multiple records for Suppliers with multiple Sites. Provides the following values for each vendor/vendor site:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Company</td> <td style="width: 33%;">Street 3</td> <td style="width: 33%;">Supplier Site ID</td> </tr> <tr> <td>Active/Inactive</td> <td>City Name</td> <td>Org ID</td> </tr> <tr> <td>Enabled/Disabled</td> <td>State</td> <td>Tax ID 1 (VAT Registration Number)</td> </tr> <tr> <td>Organization Name/Org Short Name</td> <td>Zip</td> <td>Tax ID2</td> </tr> <tr> <td>Supplier Site Code</td> <td>Phone</td> <td>Bank Code</td> </tr> <tr> <td>Street Name</td> <td>Fax</td> <td>Bank Account</td> </tr> <tr> <td>Street 2</td> <td>Supplier ID</td> <td>IBAN</td> </tr> </table>	Company	Street 3	Supplier Site ID	Active/Inactive	City Name	Org ID	Enabled/Disabled	State	Tax ID 1 (VAT Registration Number)	Organization Name/Org Short Name	Zip	Tax ID2	Supplier Site Code	Phone	Bank Code	Street Name	Fax	Bank Account	Street 2	Supplier ID	IBAN
Company	Street 3	Supplier Site ID																				
Active/Inactive	City Name	Org ID																				
Enabled/Disabled	State	Tax ID 1 (VAT Registration Number)																				
Organization Name/Org Short Name	Zip	Tax ID2																				
Supplier Site Code	Phone	Bank Code																				
Street Name	Fax	Bank Account																				
Street 2	Supplier ID	IBAN																				
Get Contacts	<p>Provides contact information to Kofax Transformation Modules Validation for associating contacts with invoices. Provides the following values for each invoice approver.</p> <ul style="list-style-type: none"> • Last Name • First Name • User ID <p>Each invoice approver must have an email address configured for use with MarkView.</p>																					
Get Organizations	<p>Provides organization information to Kofax Transformation Modules Validation for associating valid organizations with invoices. This data is derived from Organizations configured in MarkView; it is not the full list of Organizations defined in Oracle Applications. Provides the following values for each organization:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">ORGID</td> <td style="width: 50%;">REGION</td> </tr> <tr> <td>ORGNAME</td> <td>POSTALCODE</td> </tr> <tr> <td>ADDRESSLINE1</td> <td>COUNTRY</td> </tr> <tr> <td>ADDRESSLINE2</td> <td>BASECURRENCY</td> </tr> <tr> <td>CITY</td> <td></td> </tr> </table>	ORGID	REGION	ORGNAME	POSTALCODE	ADDRESSLINE1	COUNTRY	ADDRESSLINE2	BASECURRENCY	CITY												
ORGID	REGION																					
ORGNAME	POSTALCODE																					
ADDRESSLINE1	COUNTRY																					
ADDRESSLINE2	BASECURRENCY																					
CITY																						
Get Purchase Order Numbers	<p>Provides purchase order information to Kofax Transformation Modules Validation UI for associating valid purchase orders with invoices. Provides the following values for each purchase order:</p> <ul style="list-style-type: none"> • Purchase Order # • PO Type (Blanket or Standard) • Release Number (for Blanket POs only) 																					

Data Function	Description
Generate Tax Regime Feed	Provides tax Regime information for Oracle EBS 12.x (data available is specific to the Org of the invoice)
Generate Tax Feed	Provides tax code information for Oracle EBS 12.x (data available is specific to the Org and Tax Regime of the invoice)
Generate Tax Jurisdiction Feed	Provides the Tax Jurisdiction information for Oracle EBS 12.x (data available is specific to the Org, Tax Regime, and Tax of the invoice)
Generate Tax Status Feed	Provides the Tax Status information for Oracle EBS 12.x (data available is specific to the Org, Tax Regime, and Tax of the invoice)
Other	Provides custom information for use in the Validation UI.

When you select a data function, MarkView populates the following fields:

- **Output folder**
 - **Output file**
 - **XSL Transform**
6. Ensure that the **Output** folder points to the location of the Kofax Transformation Modules project file. The default is `C:\KTM\MarkView\KTM Source Files\Databases`.
 7. Set the database polling interval and the connection retry interval, then click **OK**.
 8. Repeat these steps for the remaining functions: Contacts, Vendors, Purchase Orders, and Organizations.
 9. Open the **Windows Service Manager**.
 10. Specify the startup type (automatic or manual) as follows:
 - a. Right-click the MarkView service name.
 - b. Select **Properties**.
 - c. In the **Startup Type** list, select **Automatic** or **Manual**.
 11. If your configuration requires access to network resources requiring authentication:
 - a. Right-click the MarkView service name.
 - b. Select **Properties**.
 - c. Select the **Log On** tab.
 - d. Log in as a user with access to the network resources.

Configure Bar Code Server and Mail Gateway

Configure the Bar Code Server source

Use the Scanner Configuration Utility to configure a Kofax VirtualReScan (VRS) file import scan source and set that source as default. The process depends on your VRS version. See the *Kofax VirtualReScan (VRS) User Guide* for more information.

1. Open Scanner Configuration Utility.
2. If **Kofax Software Import Source (no image processing)** appears in the list of configured sources, remove it.

3. Configure a file import scan source that uses Image Processing.
4. Set the source you create as the default.

Configure Mail Gateway

To open the Mail Gateway window and configure server instances, double-click the **MarkView Process Mail Gateway Configuration** shortcut on your desktop.

Configure the instance

1. Open MarkView Mail Gateway and click either
 - **New**
 - OR:
 - **Preferences.**
2. Enter a new instance name and click **OK**.
The **Preferences** window, which includes five tabs, opens.
3. Complete the fields on each tab as described in the sections that follow.
Configuration settings take effect the next time you start the service.

Configure monitoring options

The Monitoring tab settings specify which accounts to monitor and how often.

1. Set the following information to complete the tab.

Field Name	Description
Process Outbound Messages	Select this option to monitor and process outbound mail messages.
Process Inbound Messages	Select this option to monitor and process inbound mail messages.
Polling Period (seconds)	Set this value to the number of seconds to wait before checking for new messages. Mail Gateway processes any messages it finds until none remain to process. The gateway waits the duration of the polling period before checking again. Default: 60

2. To continue, do one of the following:
 - Select another tab.
 - Click **OK** to confirm your selections and close the window.

Configuration settings take affect the next time you start the service.

Configure error options

The Error tab settings specify the actions that Mail Gateway takes in response to errors.

1. Set the following information to complete the tab.

Field Name	Description
Reconnect on Errors	Select this option to have Mail Gateway periodically attempt to reconnect at the retry interval specified. Otherwise, Mail Gateway remains disconnected on errors and stops the service. Mail Gateway automatically disconnects from the database and the mail system when a database or a mail error occurs.
Error Retry Period (minutes)	The number of minutes to wait between retry attempts when reconnecting. Default: 1

- To continue, do one of the following:
 - Select another tab.
 - Click **OK** to confirm your selections and close the window.

Configuration settings take affect the next time you start the service.

Configure MarkView process options

The MarkView tab specifies which settings to use to connect to the database and the database objects to use to process outbound message.

- Enter the following information to complete the tab.

Field Name	Description
Username	The name of the database account.
Password	The password associated with the database account.
Host	The name of the host database as defined in the TNS file.
User ID	SQLFLOW_MAIL This is the user account created to connect to the system for processing inbound and outbound messages.
Application Function	SQL*Flow Mail Gateway This is the application function created to retrieve work items for processing outbound messages.
Completed Action	Sent Outbound Email This is the action created to retrieve work items for processing outbound messages.
Work Item Class	Outbound Email Message This is the work item class created for outbound messages.

- Click **Test** to validate database connectivity.
- To continue, do one of the following:
 - Select another tab.
 - Click **OK** to confirm your selections and close the window.

Configuration settings take effect the next time you start the service.

Configure mail options

Mail tab settings specify which options the gateway uses to send and receive email.

- Select a protocol which determines the available options.

2. Complete the tabs for your outbound protocol.

SMTP Outbound Protocol Options

Field or checkbox	Value
Protocol	SMTP
SSL	Enable to use SSL on authentication.
Server	Enter the host name or IP address of the SMTP server or servers to use, such as SMTP.KOFAX.COM. To allow Mail Gateway to try multiple mail servers in case of failures, use a semicolon to delimit a list of servers.
Port	Enter the TCP/IP port on which to communicate with the SMTP server. Default: 25
Enable authentication	Select if your SMTP server requires authentication.
Enable OAuth	Select to use OAuth credentials to authenticate without password. To configure OAuth credentials, click OAuth Credentials . The credentials set saved as default is automatically applied for any protocol with OAuth authentication enabled. Register Mail Gateway on your OAuth provider site. When you enable OAuth, the password is no longer used to access the mailbox, although it remains unchanged.
Timeout	Specify how many seconds Mail Gateway waits for a response from the server before returning an error. Default: 30
Username	If you selected a type of authentication, enter the name of the account to use to access the SMTP server.
Password	If you selected a type of authentication, enter the password for the Username account that accesses the SMTP server.

MAPI Outbound Protocol Options

Field or checkbox	Value
Server	The host name or IP address of the MAPI server or servers to use. To allow Mail Gateway to try multiple mail servers in case of failures, use semicolons to delimit a list of servers.
Username	If the MAPI client requires a user name, enter a user name. The Microsoft Exchange Inbox client does not require a user name.
Password	If the MAPI client requires a password, enter a password. The Microsoft Exchange Inbox client does not require a password.

3. Click **Test Connection** to verify your settings.
4. Complete the tabs for your inbound protocol.

POP Inbound Protocol Options

Field or checkbox	Value
Protocol	POP
SSL	Enable to use SSL on authentication.
Server	Enter the host name or IP address of the POP3 server to use.
Port	Enter the TCP/IP port on which to communicate with the POP3 server. Default: 110
Timeout	Specify how many seconds Mail Gateway waits for a response from the server before returning an error. Default: 30
Preferred Format	Select the message format to use. Some inbound mail messages may contain the same message in both text and HTML formats.
Enable OAuth	Select to use OAuth to authenticate without password. To configure OAuth credentials, click OAuth Credentials . The credentials set saved as default is automatically applied for any protocol with OAuth authentication enabled. Register Mail Gateway on your OAuth provider site. When you enable OAuth, the password is no longer used to access the mailbox, although it remains unchanged.
Username	Enter the name of the account to use to access the POP3 server.
Password	Enter the password for the user name account that accesses the POP3 server.
Mailbox	Select the folder. The field is disabled for the POP3 server. Default: Inbox

MAPI Inbound Protocol Options

Field	Value
Server	If you use the Microsoft Exchange Inbox client, enter the name of the Profile you created when you configured the Microsoft Exchange Inbox client For other MAPI clients, see the client documentation.
Username	If the MAPI client requires a user name, enter a user name. The Microsoft Exchange Inbox client does not require a user name.
Password	If the MAPI client requires a password, enter a password. The Microsoft Exchange Inbox client does not require a password.

IMAP Inbound Protocol Options

Field or checkbox	Value
Protocol	IMAP


Field or checkbox	Value
SSL	Enable to use SSL on authentication.
Server	Enter the host name or IP address of the IMAP server to use.
Port	Enter the TCP/IP port on which to communicate with the IMAP server. Default: 143
Enable OAuth	Select to use OAuth to authenticate without password. To configure OAuth credentials, click OAuth Credentials . The credentials set saved as default is automatically applied for any protocol with OAuth authentication enabled. Register Mail Gateway on your OAuth provider site. When you enable OAuth, the password is no longer used to access the mailbox, although it remains unchanged.
Timeout	Specify how many seconds Mail Gateway waits for a response from the server before returning an error. Default: 30
Preferred Format	Select the message format to use. Some inbound mail messages may contain the same message in both text and HTML formats.
Username	Enter the name of the account to use to access the IMAP server.
Password	Enter the password for the user name account that accesses the IMAP server.
Mailbox	Select the folder. Default: Inbox

5. Click **Test Connection** to perform connection with the current settings.
6. Click **OK** to confirm your selections and close the window.

For the configuration settings to take affect, restart the service.

Configure OAuth credentials

To use OAuth credentials, you must register Mail Gateway on your OAuth provider site, such as Google Developer Console. This is required to enable the application to access your email account without the password. If you experience troubles with registering the application on the OAuth provider site, contact the OAuth provider customer service.

 We recommend that you create all instances of Mail Gateway before saving OAuth credentials.

OAuth Credentials
✕

To use OAuth authentication, you must register the application within your OAuth provider. After you register the application, fill in these fields with the provided identifiers.

Client ID

Client Secret

Authorization URL

Append Client ID

Authentication URL

Status


NOT READY. Credentials not entered. Register the application within the OAuth provider and fill in this form with the provided credentials

Save as Default for all protocols

OAuth Credentials UI elements

UI element	Value
Client ID	The identifier provided to an application during the registration on the OAuth provider site. Example: Google Client ID: 1072099888437-8q5k7u2ibf1m7r3m3v91g6j2qgb6h6oj.apps.googleusercontent.com Microsoft Client ID: ba98929d-45ec-4cbd-91af-0ad6f4416fb9
Client Secret	The secret code received from the OAuth provider. This code is specific for an application. Some providers do not use a client secret, so the field may be left empty in such a case.

UI element	Value
<p>Authorization URL</p>	<p>The URL of the page that a user enters manually to grant access rights to the registered application.</p> <p>This URL should contain the Client ID parameter to enable the "Authorize application" button.</p> <p>Example:</p> <p>Google Authorization URL: <code>https://accounts.google.com/o/oauth2/auth?scope=https%3A%2F%2Fmail.google.com&redirect_uri=urn:iETF:wg:oauth:2.0:oob&response_type=code</code></p> <p>Microsoft Authorization URL: <code>https://login.microsoftonline.com/6f8c8d80-c6d3-4b33-b30a-f45fda35bca5/oauth2/v2.0/authorize?response_type=code&redirect_uri=https%3A%2F%2Flogin.microsoftonline.com%2Fcommon%2Foauth2%2Fnativeclient&response_mode=query&scope=offline_access%20https%3A%2F%2Foutlook.office.com%2FIMAP.AccessAsUser.All&state=12345&client_id=aef27fc4-7763-465e-8152-cfd3b6fb604b</code></p>
<p>Append Client ID</p>	<p>Click to add your Client ID to the Authorization URL.</p>
<p>Authentication URL</p>	<p>The URL that the application uses to perform authentication for operations in the service mode.</p> <p>In the Authentication URL, the values for parameters "scope" and "redirect_uri" should correspond to the values in the Authorization URL.</p> <p>Example:</p> <p>Google Authentication URL: <code>https://accounts.google.com/o/oauth2/token?scope=https%3A%2F%2Fmail.google.com&redirect_uri=urn:iETF:wg:oauth:2.0:oob</code></p> <p>Microsoft Authentication URL: <code>https://login.microsoftonline.com/6f8c8d80-c6d3-4b33-b30a-f45fda35bca5/oauth2/v2.0/token?scope=offline_access%20https%3A%2F%2Foutlook.office.com%2FSMTP.Send%20User.Read&redirect_uri=https%3A%2F%2Flogin.microsoftonline.com%2Fcommon%2Foauth2%2Fnativeclient</code></p>
<p>Authorize Application</p>	<p>Click to perform the provider authorization and get the access tokens. The access tokens represent the authorization of an application to access specific parts of a user's data.</p> <p>After you click the button, the Authorize Application window appears. Then, the system default browser window appears prompting to authorize the application and providing the authorization code. The code is shown on the interactive page or is given as a value of the URL parameter after the OAuth provider redirects you to the new page. Copy the code without parameters (if any) and paste it in the Authorize Application window. Then click Submit to pass the code to Mail Gateway.</p> <p>Example:</p> <p>In this example, the code is in bold.</p> <p><code>login.microsoftonline.com/common/oauth2/nativeclient?code=0.AX0AgI2Mb9PGM0uzCvRf2jW8pZ2SmLrsRb1Mka8K1vRBb7mcAAAAgABAAIAAAAmoFfGtYxvRrNriQdPKIZ&state=12345&session_state=286eff1d-cf79-4172-8a74-2ba4e3e2ab79</code></p>

UI element	Value
Status	<p>The text in the Status field is self-adjusting depending on the values in other fields. For example, once the authorization code is submitted, the Status field text is changed.</p> <ul style="list-style-type: none"> • READY: The access tokens are received successfully. The OAuth credentials can be used to connect to the mail service. • NOT READY: Read the proceeding message to troubleshoot the issue. The OAuth credentials set cannot be saved.
Save as Default for all protocols	<p>Select to share the same tokens among several Mail Gateway instances. When selected, the current tokens are accessible for every Mail Gateway instance.</p> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px; margin-top: 10px;"> <p> If you select "Save as Default for all protocols," you rewrite the default credentials for all protocols. All previously configured protocols remain unchanged, but their OAuth settings are no longer default.</p> </div>
Use Default Credentials	Click to insert the default settings into the OAuth Credentials window fields.
Save	Click to store the access tokens.
Cancel	Click to discard changes.

Once you save the OAuth credentials, the window is closed and the connection starts using the access tokens. To verify the configuration, click **Test Connection** on the mail configuration tab.

Configure logging options

The Log tab settings specify the types of messages that appear in the Event Log:

- Errors
- Errors and Warnings (Default)
- Errors, Warnings, and Normal Messages

To continue, do one of the following:

- Select another tab.
- Click **OK** to confirm your selections and close the window.

Configuration settings take affect the next time you start the service.

Configure Microsoft Outlook with MAPI protocol for Mail Gateway

If you use the MAPI protocol and use Microsoft Outlook as your MAPI client for Mail Gateway, disable the Outlook Email Security Update option in Microsoft Outlook. The security update prevents Microsoft Outlook from operating as a MAPI client through a Windows NT Service. The Outlook Email Security Update is built into Outlook 2002 and higher and is an optional update to older versions of Outlook.

Configure Mail Gateway to support invoice approval and rejection by email

Configuration settings take affect the next time you start the service.

Set up the Outbound instance

1. Double-click the **MarkView Process Mail Gateway Configuration** shortcut on your desktop.
2. In the **MV Mail Gateway** window, create a new **OUTBOUND** instance and click **Preferences**.
3. Click the **Monitoring** tab and do the following:
 - a. Enable **Process Outbound Messages**.
 - b. Clear **Process Inbound Message**.
 - c. Set the Polling Period (seconds) to **30**.
4. Click the **MarkView** tab and complete the Database fields, for example:
 - Username: markview
 - Password: markview
 - Host: r4ebsr12.vis01Where r4ebsr12.vis01 is a TNS name in the TNSNAMES.ORA file for the database connection.
5. Click **Test** to verify your connection.
6. On the MarkView tab, complete the MarkView Process fields, for example:
 - User ID: SQLFLOW_MAIL
 - Application Function: SQL*Flow Mail Gateway
 - Completed Action: Sent Outbound Email
 - Work Item Class: Outbound Email Message
7. Click the **Mail** tab and complete the Outbound section, for example:
 - Protocol: SMTP
 - SSL: (if needed)
 - Server: smtp.kofax.com
 - Port: 25
 - Enable authentication: (if needed)
 - Timeout: (if needed)
 - Username: (if needed for authentication)
 - Password: (if needed for authentication)
8. Click **Test Connection** to verify your settings.
9. Click **OK**.

Set up the Inbound instance

1. Double-click the **MarkView Process Mail Gateway Configuration** shortcut on your desktop.
2. In the **MV Mail Gateway** window, create an **INBOUND** instance and click **Preferences**.
3. Click the **Monitoring** tab and do the following:
 - a. Clear **Process Outbound Messages**.

- b. Enable **Process Inbound Message**.
 - c. Set the Polling Period (seconds) to **30**.
 - d. Click **Test** to verify your connection to the host server.
4. Click the **MarkView** tab and complete the Database fields as follows:
 - Username: markview
 - Password: markview
 - Host: r4ebsr12.vis01
5. Click **Test** to verify your connection.
6. On the **MarkView** tab, complete the MarkView Process fields, for example:
 - User ID: SQLFLOW_MAIL
 - Application Function: SQL*Flow Mail Gateway
 - Completed Action: Sent Inbound Email
 - Work Item Class: Inbound Email Message
7. Click the **Mail** tab and complete the Inbound section, for example:
 - Protocol: IMAP
 - SSL: (if needed)
 - Server: imap.gmail.com
 - Port: 25
 - Enable authentication: (if needed)
 - Preferred format: Text
 - Username: chorton@gmail.com
 - Password: *****
 - Mailbox: Inbox
8. Click **Test Connection** to verify your settings.
9. Click **OK**.

Enable the feature in MarkView

Once you set up Mail Gateway to support invoice approval and rejection by email, complete the following task in MarkView Administration.

1. Log in to MarkView and navigate to **Administration > MarkView Admin**.
2. Select the **Preferences** tab.
3. Locate and change the settings for the following preferences:
 - MVAP_CONTROL_EMAIL_ADDRESS: Enter an SMTP email address. This is the email address from which Mail Gateway sends approval and rejection emails.
 - MVAP_ENABLE_APPROVAL_REJECTION_EMAIL: Set to **TRUE**.
 - MVAP_ENABLE_SUCCESS_MESSAGE: Set to **TRUE**.

Configure Capture and Output services

1. After installation, open the **Windows Service Manager**.

2. Specify the startup type (automatic or manual) as follows:
 - a. Right-click the MarkView service name.
 - b. Select **Properties**.
 - c. In the **Startup Type** list, select **Automatic** or **Manual**.
3. If your Capture and Output configuration requires access to network resources requiring authentication:
 - a. Right-click the MarkView service name.
 - b. Select **Properties**.
 - c. Select the **Log On** tab.
 - d. Log in as a user with access to the network resources.

Add SSL certificate to Windows (for SSL only)

Skip this section if you do not use SSL to provide secure web communications for the application server.

If you have a self-signed certificate for the application server, add the certificate to **Trusted Root Certification Authorities** of the Windows Computer account or user account.

If you have any other certificate received from the certificate authority, add all root and intermediate certificates from the certification chain to **Trusted Root Certification Authorities** of the Windows Computer account or user account.

1. Start the **mmc** console.
2. On the **File** menu, click **Add/Remove Snap-in**.
3. In the **Available snap-ins** list, select **Certificates** and click **Add**.
4. Select the account and expand **Certificates**.
5. Expand **Trusted Root Certification Authorities** and click **Certificates**.
6. Right-click the list on the right and, on the context menu, select **All Tasks**.
7. Click **Import** to import the certificates and follow the steps in the Certificate Import Wizard.

Troubleshoot Capture and Output configuration utilities

Windows Security settings may cause issues when running the Capture and Output configuration utilities. If you see errors when you run a configuration utility, right-click the desktop shortcut for the utility, select the **Compatibility** tab, and select **Run as Administrator** to set the access-level permanently.

Chapter 9

Configure MarkView for Accounts Payable

To configure MarkView for Accounts Payable:

- Configure the Oracle Payables Open Interface import job to move data from the AP Invoice Interface tables to the AP Invoice tables.
- Add organizations to MarkView. See the *Kofax MarkView Administrator's Guide, Volume 1*.
- Add users to user groups associated with organizations. Either configure AUSS to assign MarkView users to user groups associated with organizations (see [Set up MarkView users with AUSS](#) on page 107) or add the users manually (see the *Kofax MarkView Administrator's Guide, Volume 1*.) Ensure that every MarkView user has a corresponding Oracle HR record with a valid email address. Users without email addresses cannot participate in MarkView workflows.
- Configure an optional default GL account to create dummy lines on a Non-PO Invoice. See [Configure default GL accounts for organizations](#).
- Update workflow filters. See [Update Accounts Payable workflow filters](#) on page 107.
- Change the Execution File Name of the AlertApprovalCheck Concurrent Program Executable.

Configure default GL accounts for organizations

You can configure a default GL account for an organization, which is used to create dummy lines on a Non-PO Invoice when it is created in Oracle. Set up default GL accounts in Oracle prior to configuring Organizations in MarkView.

1. Log in to MarkView and navigate to **Administration > Module Admin**.
2. Select the **Organizations** tab.

The Org Admin window opens.


Short Name	Name	ID			
VISOP	Vision Operations	204	Configuration	Replace Configuration with new Template	Delete
VISSR	Vision Services	458	Configuration	Replace Configuration with new Template	Delete

Add

3. Click **Add**.

The **Org Admin - Create a New Org Record** form appears.

4. In the **Org Name** list, select the organization to add.

 You cannot add an organization that is not defined in Oracle.

5. Enter a new **Org Short Name** or accept the default **Org Short Name**, which MarkView populates with the name specified in Oracle. (If you use lowercase letters, MarkView converts them to uppercase.)

MarkView uses the Org Short Name to more efficiently retrieve information. An **Organization Name** can have up to 260 characters with spaces and special characters, whereas the **Org Short Name** is limited to 8 alphanumeric characters with no spaces.

6. (Optional) To use the configuration of an existing organization as the configuration for the new organization, select an organization under **Copy Configuration From**.

For example, if your shared service center has 15 organizations that will follow the same workflow processes and have the same Sub Types, you can fully define and configure one organization and copy that configuration to the other 14 when you add them to MarkView.

7. Click **Insert**.
8. If you did not use an existing organization as a template, enter a valid default GL account number:
 - a. Click **Configuration** on the new organization line.
The **Preferences** window for the organization opens.
 - b. On the menu on the left, click **GL Account, Hierarchy, and Instance**.
 - c. Click **Update**.
The **Update GL Account, Hierarchy, and Instance** window for the organization opens.
 - d. Enter the **Default GL Account**.
 - e. Click **Update**.

Configure the Oracle Payables Open Interface Import job

Configure the Oracle Payables Open Interface Import job to move data from the AP Invoice Interface tables to the AP Invoice tables.

The Payables Open Interface Import job creates the invoices in the Oracle AP Invoice tables after Kofax MarkView Export Connector has prepared the invoice and image data. This concurrent request can be submitted as a single or recurring request. For MarkView, the key parameters for this Payables Open Interface Import concurrent request are:

- Source: MarkView Connector
- Hold Name: 170_SYSTEMS_HOLD
- Hold Reason: 170_SYSTEMS_HOLD

The Hold Name was configured during the installation of MarkView. The default is 170_SYSTEMS_HOLD. Your hold name may be different. It is also stored as the value of the MarkView preference MVAP_170_MARKVIEW_HOLD.

i When configuring and scheduling the Payables Open Interface Import, configure the import to apply the 170_SYSTEMS_HOLD during the process. Doing so guarantees that MarkView immediately applies the hold to each imported invoice. The hold remains in place until all workflow actions are completed and the invoice is ready for payment. Applying the hold prevents an imported invoice from circumventing the workflow if a system component malfunctions.

For information about configuring Oracle Payables Open Interface Import jobs, see the Oracle documentation.

Update Accounts Payable workflow filters

To ensure that all workflow filters are up-to-date, log in to the database as the MarkView schema owner and run the following SQL statement:

```
begin
SF_Designer.RebuildFilterDispatch;
end;
/
exec SF_Filter_Util.UpdateAllFilterResults;
commit;
```

i In production environments, this can be a lengthy process.

Set up MarkView users with AUSS

To upgrade from a version of MarkView with configured Automated User Setup and Synchronization (AUSS), there is no AUSS-specific upgrade process, you can skip this chapter.

Automated User Setup and Synchronization (AUSS) maps user Source System Groups to corresponding MarkView Groups and Roles through MarkView Profiles. This mapping provides MarkView users with privileges required for the tasks they perform in MarkView. Thus, AUSS leverages user information from Oracle E-Business Suite or Microsoft Active Directory Service without requiring an administrator to manually recreate it in MarkView per each Source System user. You can also use MarkView Profiles to add users to default user groups associated with organizations.

When integrated with Oracle Source System, ensure that the users to be synchronized have a valid email address in their Oracle HR record. Oracle users without email addresses cannot participate in MarkView workflows. The user must have an entry in the FND_USER and PER_ALL_PEOPLE_F tables in the Oracle APPS database schema. The FND_USER and PER_ALL_PEOPLE_F tables are joined by the EMPLOYEE_ID and PERSON_ID fields.

The following table contains terms and definitions used in AUSS.

Term	Description
Source System	The system from which AUSS loads user information into MarkView. Your options are Oracle E-Business Suite (Oracle) and Microsoft Active Directory Service (Active Directory).
Source System Group	The AUSS term for Oracle Application Responsibilities and Active Directory Groups.
MarkView Profile	The profile that maps the Source System Groups to MarkView Groups and MarkView Roles.
MarkView Group	The group that determines user access to MarkView documents and related privileges in MarkView.
MarkView Role	Workflow functions the user can access.
Oracle Application Responsibility	The Oracle Source System Group to which an AUSS administrator maps MarkView Profiles.
Active Directory Group	The group in the Active Directory server to which an AUSS administrator maps. The users in Active Directory are members of security groups.
LDAP Search Filters	Search filters that select the entries on the LDAP server to be returned for a search operation.
LDAP Attributes Mapping	Mapping of LDAP user attributes to MarkView user attributes. Set Active Directory Attributes to manage Active Directory filter results.
Manually created MarkView user	A user created in MarkView by a MarkView administrator.
Source System user	A user in the Source System. If the user is synchronized, an account of the same user name is created/updated in MarkView.
AUSS managed user	Such MarkView user that is subject to synchronization: has or had at least one assignment to the Source System Groups added in AUSS setup.
Full synchronization	AUSS conducts a complete comparison of user accounts in the Source System and MarkView.
Initial synchronization	AUSS conducts a first-time full synchronization during which user information is transferred from the Source System to MarkView.

Term	Description
Incremental synchronization	AUSS looks for changes only since the previous synchronization.

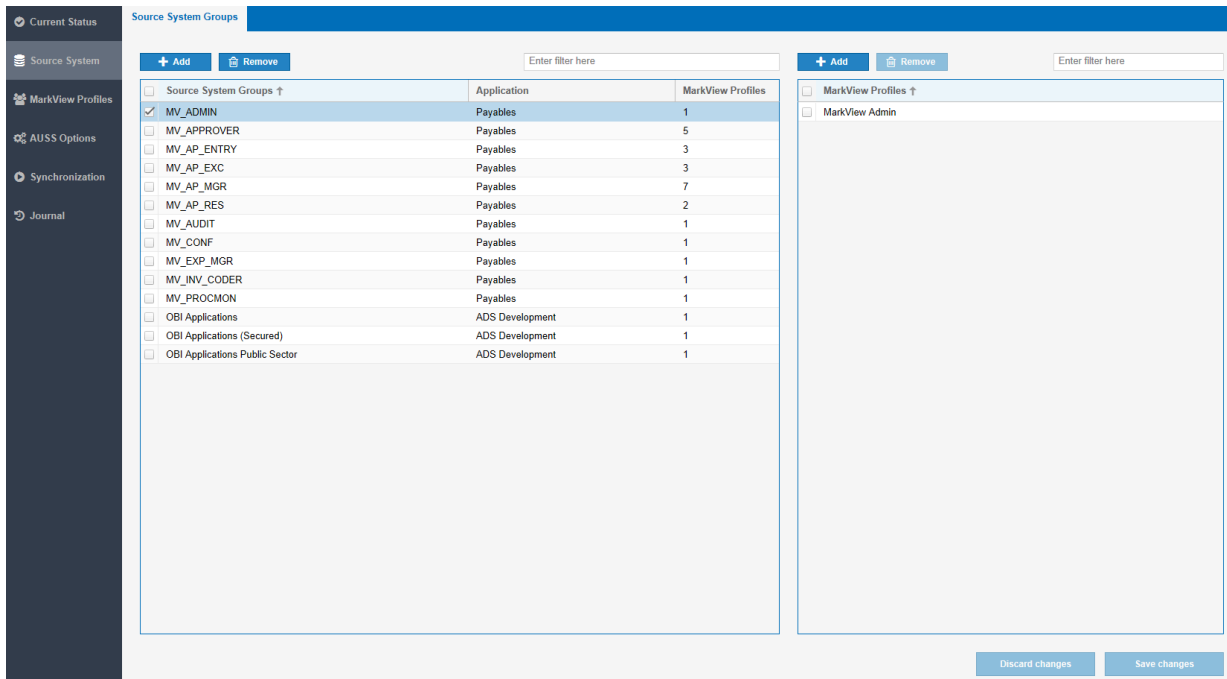
AUSS interface

- **Current Status:** Displays the current AUSS status on near real-time basis. The visual refresh occurs every 10 seconds. See [Current Status](#).

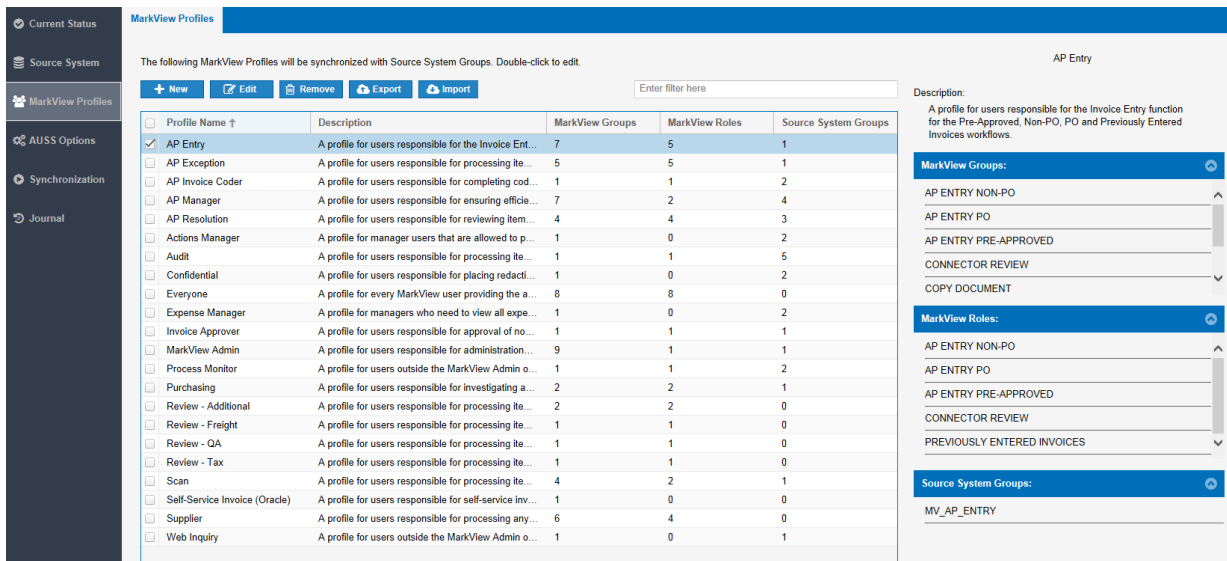
The screenshot displays the 'Current Status' interface for AUSS. It features a dark sidebar on the left with navigation options: Current Status (selected), Source System, MarkView Profiles, AUSS Options, Synchronization, and Journal. The main content area is divided into three sections:

- Synchronization Status:** Shows a 'Success' status with a green checkmark. It includes details for the last failure (2017.10.19 10:20:03) and last success (2017.10.20 02:43:39), both started by 'ADMIN'. The current sync duration is 0:00:05, and 1 user has been processed. A 'Download log files' link is present.
- Current Synchronization:** Shows the status as 'Not running'. Fields for 'Started on:', 'Started by:', 'Duration:', 'Options:', and 'Processed users:' are present but empty.
- System Statistics:** Lists various metrics for the 'Microsoft Active Directory Service' source system, including server time, profile counts, user counts, execution counts, success rates, and memory usage. The schedule is 'Disabled' with a note 'AUSS Sync Job disabled' and an 'Edit schedule' link.

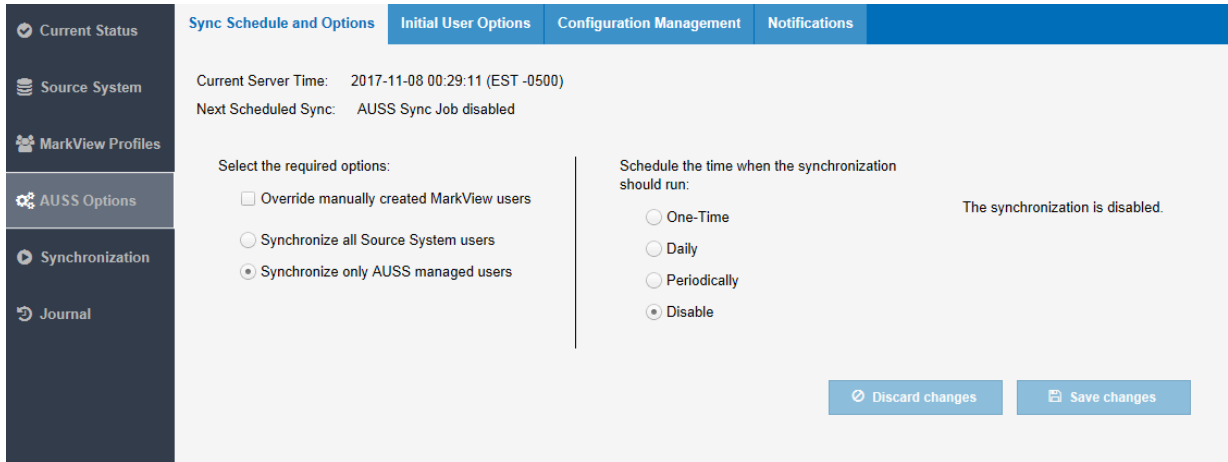
- **Source System:** Accesses Source System Groups information for both Active Directory and Oracle. If you use Active Directory as a source system, Source System also displays the Active Directory Connection tab, LDAP Search Filters, and LDAP Attributes Mapping. See [Source System](#).



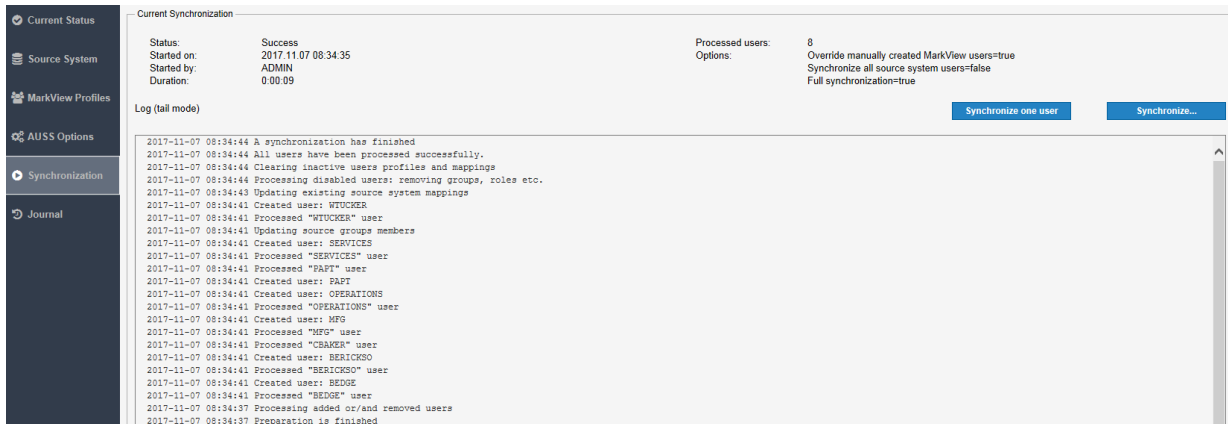
- **MarkView Profiles:** Lists available MarkView Profiles. See for a list of the default profiles. See [MarkView Profiles](#) for information about adding, editing, importing and exporting profiles.



- **AUSS Options:** Opens the window in which you can set up synchronization schedules, set passwords, create backup files, configure notifications, and set up queues. See [AUSS Options](#).



- **Synchronization:** Enables manual synchronization of user information between AUSS and the Source System. See [Synchronization](#).



- **Journal:** Displays the synchronization process history and changes. See [Journal](#) for information about the Journal tab.

Started by	Result	Started on ↓	Stopped	User count	Options
ADMIN	Success	2017.11.07 08:34:35	2017.11.07 08:34:44	8	Override manually created MarkView users=true Synchronize all source system users=false Full by ...
ADMIN	Success	2017.11.07 08:33:50	2017.11.07 08:33:51	0	Override manually created MarkView users=true Synchronize all source system users=false Full by ...
ADMIN	Success	2017.11.07 08:33:11	2017.11.07 08:33:26	0	Override manually created MarkView users=true Synchronize all source system users=false Full by ...

Active Directory source system connection information

If you select Active Directory as a source system, you will need to specify the LDAP data.

Use this list as a reference for all fill-in fields in the **Source System** tab for Active Directory.

Field	Description
Active Directory Connection	
LDAP connection URL	<protocol>://<host>:<port>/<root> Where: <protocol> is the LDAP protocol, such as ldap or ldaps <host> is the LDAP server name or IP address <port> is the LDAP server port to which AUSS connects. Default: 389 <root> is the root entry of the LDAP server you are connecting to, such as dc=AUSS,dc=local
User name	LDAP admin user DN (Distinguished Name), such as CN=Administrator, DC=local
Password	LDAP admin user password
LDAP Search Filters	
User base DN(s)	The base Distinguished Name (DN) subtree that is used when searching for user entries on the LDAP server.
User search filter	Filter string for objectclasses required by AUSS: (objectClass=person)
Group base DN(s)	The base Distinguished Name (DN) subtree that is used when searching for group entries on the LDAP server.

Field	Description
Group search filter	Filter string for objectclasses required by AUSS: (objectClass=group)
LDAP Attributes Mapping (Objects such as Last Name are described by LDAP attributes. MarkView uses Attributes to filter Active Directory users for AUSS.)	
User name	LDAP user attribute for Common Name (CN) or logon account name (sAMAccountName)
First name	LDAP user attribute for first name (givenName)
Last name	LDAP user attribute for last name (SN)
Email	LDAP user attribute for email address (mail)
Source group	LDAP user attribute for user group (memberOf)

Run the MarkView AUSS Setup Wizard

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**. The **MarkView AUSS Setup Wizard** opens.
2. Follow the prompts of the **MarkView AUSS Setup Wizard**.
3. If you have the AUSS configuration backup file, click the corresponding link to upload it. With this file, you upload the information about your source system settings, initial user options, MarkView profiles, synchronization schedule, and notifications. When prompted to select the source system, continue with the previously used source system.
For Active Directory Source System, the backup file fills in the source system connection information fields automatically.
4. For Active Directory Source System only: After you fill in the source system connection information fields (see [Active Directory source system connection information](#)), click **Test connection**.
 - If you see an error message, verify if the field settings are correct.
 - If the test is successful, click **Next** and then apply changes.
5. Review the steps to complete the configuration and click **Go to AUSS Home**.

Configure AUSS

[Run the MarkView AUSS Setup Wizard](#) and perform the following tasks to configure AUSS:

1. Configure the source system as described in [Source System](#).
2. Set up the user options. Navigate to **AUSS Options > Initial User Options** and follow the instructions in [Initial User Options](#).
3. Configure MarkView Profiles as described in [MarkView Profiles](#).
4. Set up the synchronization schedule. Navigate to **AUSS Options > Sync Schedule and Options** and follow the instructions in [Synchronization schedule and options](#).
5. If you want to run the first synchronization manually, see [Synchronize for the first time](#).

Source System

Select the source system that you use to supply user data and follow the required configuration procedure:

- [Microsoft Active Directory Service source system](#)
- [Oracle E-Business Suite source system](#)

Microsoft Active Directory Service source system

If you use the Active Directory source system, see [Active Directory source system connection information](#) for the source system connection details.

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. On the **Source System** tab, open **Active Directory Connection**, enter or verify the LDAP connection information, and click **Test connection**.
 - If you see an error message, confirm the field settings.
 - If the test is successful, click **Save changes**.
3. Open **LDAP Search Filters**, configure the LDAP search filters using the context sensitive help, and click **Check filter**.
 - If you see an error message, confirm the field settings.
 - If the test is successful, the search results are displayed.
 - Click **Save changes**.
4. Open **LDAP Attribute Mapping**, type a user personal information and a source group, and click **Check mapping**.
 - If you see an error message, confirm the field settings.
 - If the test is successful, click **Save changes**.
5. Use **Source System Groups** to limit the scope of AUSS users by selecting specific groups from the user's Source Systems.
AUSS allows mapping of the selected groups in Source System with MarkView Profile.

Oracle E-Business Suite source system

If you use the Oracle E-Business Suite source system, add Source System Groups.

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. On the **Source System Groups** tab, click **Add Source Groups**.
3. In the **Application** drop-down list, select an application. Available Source Groups are listed.
4. To find a specific source group on the list, in the **Filter** field, start typing the name.
5. Select Source System Groups that contain MarkView users and click **Add selected**.
6. Optionally you can remove a previously added Source System Group. In the list, select the Source System Group and click **Remove**.
7. To apply the changes, click **Save changes**.

Initial User Options

Use the **Initial User Options** tab to configure the default setup for all synchronized users.

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. On the **AUSS Options** tab, click **Initial User Options**.
3. Change the default **Initial user password**, if required.
4. Select **Print queue** and **Export queue** assigned for work item processing.
5. Click **Save changes**.

MarkView Profiles

The MarkView Profiles screen displays MarkView profiles with configured MarkView Groups and Roles.

Use the MarkView Profiles tab to review a brief description of the selected MarkView Profile with the list and the count of associated MarkView Groups, MarkView Roles, and Source System Groups.

You can add, delete, or edit profiles. Select a profile to add Source System Groups, MarkView Groups, and MarkView Roles and to map multiple groups from User Source Systems to MarkView Groups and MarkView Roles.

Create or edit a profile

Edit the existing profiles or create new profiles and map MarkView Groups, Roles, and Source Groups before you import users.

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. On the **MarkView Profiles** tab:
 - To add a profile, click **New**.
 - To edit a profile, select the profile and click **Edit** or double-click the profile.
3. To create a new profile, enter the **Profile Name** and **Profile Description** and add at least one MarkView group or role.
4. Select MarkView Groups:
 - a. On the **MarkView Groups** tab, click **Add**.
The Select MarkView Groups window opens.
 - b. To find a specific group on the list, in the **Filter** field, start typing the name.
 - c. Click **Add selected**.
5. (Optional) Select **Auto-populate** MarkView Roles based on MarkView Groups.
When you select **Auto-populate**, MarkView Roles with the same names as the MarkView User Groups are automatically made part of this profile. However, each role name must be unique within MarkView.
6. If you did not select **Auto-populate**, select MarkView Roles now:
 - a. On the **MarkView Roles** tab, click **Add**.
The Select MarkView Roles window opens.
 - b. To find a specific role on the list, in the **Filter** field, start typing the name.

- c. Click **Add selected**.
7. Click **Save changes** to save the new profile.
8. Select Source Groups:
 - a. On the **Source System Groups** tab, click **Add**.
The Select Source Groups window opens.
 - b. To find a specific source group on the list, in the **Filter** field, start typing the name.
 - c. Click **Add selected**.
 - d. Click **Save changes** to edit the profile.
 - e. To verify that the source system group is mapped to the profile, navigate to **Source System > Source System Groups**.

MarkView profile export and import

The AUSS Import/Export feature enables bulk updates to profile mappings. An Administrator can:

- Export selected profiles to a comma separated value file (CSV)
- Edit the CSV file.
- Import the updated CSV file into AUSS.

AUSS then processes the imported CSV file and updates the profiles.

CSV file format

The CSV file format is identical for both export and import purposes. The first line of the CSV file must be the field names in the order specified later. All fields in the CSV file are required for both importing and exporting. All field names and values, except for MarkView Group names, are case insensitive.

The following table lists the CSV file fields and their content.

Order	.csv Field Name	Field Content
1	AUSS Profile	Profile name (1–100 single-byte characters)
2	Description	Profile description (0–1000 single-byte characters)
3	Source Group	Source group name (1–100 single-byte characters)
4	Source Application	Source application name
5	Source System	Source system type (Oracle or Active Directory)
6	MarkView Group	A MarkView group name (1–200 single-byte characters)
7	MarkView Role	A MarkView role name (1–200 single-byte characters)
8	User Controllable	User controllable flag for MarkView Role (Y or N)

If a profile has multiple associated source groups or MarkView groups and roles, you can add additional rows in the CSV file to represent the one-to-many relationship of the MarkView profile to its source groups or MarkView groups and roles.

Tips for CSV files:

- Before you import or export, check your file path to ensure that you have read/write/modify access.
- Imported profiles are identified by the name.
 - If the profile name does not exist, AUSS adds the new profile name.
 - If the profile name exists, AUSS overwrites the profile information with the imported values from the CSV file including the mapping for that profile. The values in the CSV file replace the values for that profile in the database.
 - If a profile name is not in the imported CSV file, AUSS does not make any changes to that profile. Importing a CSV file does not delete any profiles.

Export profile CSV files from AUSS

You should be a user in the AUSS Mapping Administrator user group to perform this task.

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. On the **MarkView Profiles** tab, select the MarkView Profiles to export and click **Export**.

 If you do not select specific profiles, AUSS exports all profile data.

3. Follow the prompts to download the CSV file. Validate the path and file name to ensure that you have access to the exported file.

Edit a CSV file

1. Make a backup copy of the exported CSV file. If editing errors exist, you can reimport this backup file to revert to the pre-edited profile settings.
2. Open the exported CSV file in Microsoft Excel or a text editor.
3. Edit the profile lines.
4. Save the file as a CSV file. If you save the file in another format, you cannot import the data back into AUSS.

Import profile CSV files to AUSS

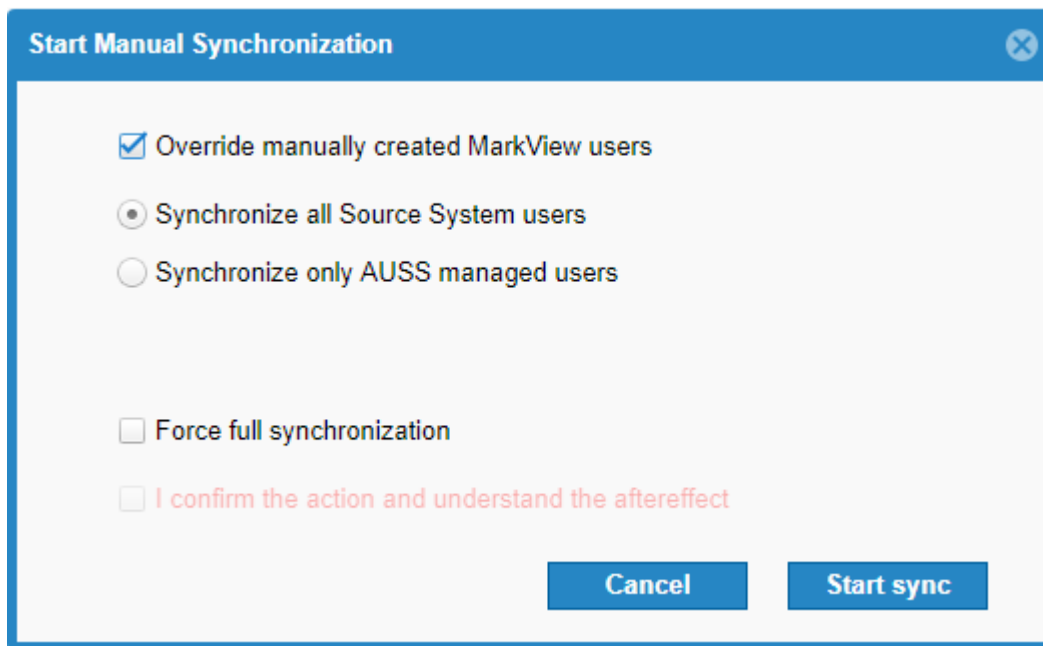
1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration > MarkView Profiles**.
2. Export your profile data to a backup CSV file. Validate the path and file name to ensure that you can recover your backup data.
3. Click **Import** and select the CSV file to import.
4. Correct any errors reported. See the Troubleshooting AUSS section of the *Kofax MarkView Administrator's Guide, Volume 1*.
5. If no errors exist, the changes made to the CSV file appear in the MarkView Profiles.

Synchronize for the first time

To complete the initial AUSS setup, run the synchronization for the first time. Either follow manual steps in this section, or configure AUSS automatic synchronization schedule as described in [Synchronization schedule and options](#).

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.

2. Ensure that your Source System Group to MarkView Profile mappings are correct and complete.
3. On the **Synchronization** tab, click **Synchronize** to synchronize users.
The Start Manual Synchronization window opens.



4. In the Start Manual Synchronization window, select **Override manually created MarkView users** if you want to update manually created MarkView users during AUSS synchronization.

i This option determines whether to update manually created users or not. If the option is selected and there is a Source System user with the same user name as a manually created user, the MarkView user receives assignments in accordance with AUSS mappings and loses all the previous assignments that do not match AUSS mappings. Such overridden user becomes managed by AUSS in subsequent synchronizations. If the option is not enabled, AUSS does not update such users. Subsequent incremental synchronizations can also override manually created MarkView users with the option enabled, but only for the users which AUSS detects as updated since the previous synchronization.

If you will need to override manually created MarkView users at a different time later, you will be able to do it by running manual synchronization with both **Override manually created MarkView users** and **Force full synchronization** options enabled.

5. Select a synchronization method:
 - **Synchronize all Source System users:** For the first-time synchronization, adds all Source System users to MarkView even if they do not belong to any Source System Group configured in AUSS.
 - **Synchronize only AUSS managed users:** For the first-time synchronization, adds only the Source System users that belong to at least one Source System Group configured in AUSS.
6. For the initial synchronization, do not select **Force full synchronization**.
7. Click **Start sync** to start synchronization.

About using AUSS

With Kofax MarkView AUSS, you can map your Source System Group users to corresponding MarkView Groups and Roles through MarkView Profiles.

In addition to the AUSS settings specified in [Configure AUSS](#), use the following AUSS options:

- View the information about the current AUSS state and analyze synchronization data in near real time.
- Create a backup file with the current AUSS configuration data.
- Reset AUSS configuration and revert to initial setup.
- Enable email notifications about successful or unsuccessful synchronization.
- Configure the synchronization schedule and options.
- Review the synchronization history and track changes.

Current Status

The Current Status screen displays the overview information about the current AUSS state. Select the Current Status tab to review and analyze the following near real-time data. The data updates every 10 seconds.

- **Synchronization Status:** Displays current synchronization progress including the AUSS state in general (success, failure, or unknown after the first upgrade), the date and time of last successful and unsuccessful synchronization with the synchronized users count and the duration of the process.

If required, download log files to view the synchronization details.

- **Current Synchronization:** Displays the information about current synchronization status including the percentage value of the process completeness, the start time and duration, synchronization options, and the synchronized users count. If sync is started, a user may see the process by clicking the link View process log.

During the synchronization process, you may view the process log.

- **System Statistics:** Displays general information about synchronization statistics including MarkView profiles count and source system groups count. Click the corresponding links to review the full list of profiles and groups. System Statistics provides the maximum memory data and the schedule details. Click **Edit schedule** to configure the synchronization schedule.

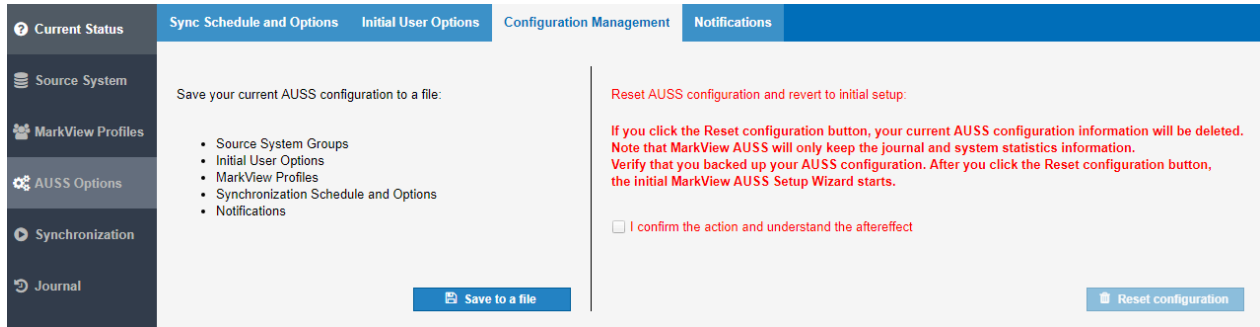
The System Statistics information remains if you clear the configuration.

AUSS Options

Use the following additional options to set up AUSS:

- Set the initial password that users need when logging in to MarkView for the first time on the **Initial User Options** tab.
- Define print and export queues to use for AUSS.
- Enable automatic synchronization. See [Synchronization schedule and options](#).
- Back up your current AUSS configuration or reset the configuration information.
- Configure email notifications about successful or failed jobs.

Configuration Management



In **Configuration Management**, you can create a backup file with your AUSS configuration data. Use this file if you [Run the MarkView AUSS Setup Wizard](#).

The backup file includes the information about a source system, MarkView profiles, a synchronization schedule and options, notifications, and initial user options.

Use **Configuration Management** to delete the AUSS configuration. MarkView AUSS will only keep the Journal and System Statistics information. Before you click **Reset configuration**, verify that you backed up your current AUSS configuration.

i Once you click **Reset configuration**, your Source System Groups, Initial User Options, MarkView Profiles, Synchronization Schedule and Options, and Notifications will be deleted.

After you reset the configuration, MarkView AUSS Setup Wizard starts. For details, see [Run the MarkView AUSS Setup Wizard](#).

Notifications

Use the AUSS Notifications tab to configure email notifications that indicate if the synchronization process is a success or a failure.

To send email notifications, select **Enable the Successful Job notification** and **Enable the Failed Job notification**. Customize the email address from which notifications are sent, email recipients, email subject and content.

The **From** field is filled in automatically according to the MVFC_OUTBOUND_SMTP_USER preference value.

Do not use spaces in the **To** field for email recipients.

If you enable the Failed Job notification, you can also select the option to attach a log file that does not exceed 10 MB to the notification. After you verify the settings, save changes.


After you fill in all required fields, you may type a test email address in the **To** field and click **Verify** to receive the example of notification immediately.

Synchronization

AUSS synchronization adds new users to MarkView from the source system and updates groups and roles to which users are assigned.

The initial AUSS synchronization moves the group and user data from the source system to MarkView. AUSS assigns users to the appropriate MarkView Groups and Roles, based on MarkView Profile mappings. After running the initial synchronization, you can configure an automatic synchronization schedule to keep Source System user changes synchronized with MarkView user data and assignments. To enable automatic synchronization, see [Synchronization schedule and options](#).

AUSS performs synchronization in one direction only: from the source system to MarkView. Do not maintain users in MarkView that you manage with AUSS. Manual changes in MarkView might be overwritten the next time you synchronize users.

 If a user record is deleted in your source system, AUSS disables the MarkView user record. AUSS does not delete MarkView user records.

If the synchronization is running, the Synchronization window displays manual synchronization status, including the time when the process was started, the user who started it, the synchronization duration, options, and processed users count. The window also displays the last lines of a log file as they appear in a real-time mode. The **Synchronize one user** and **Synchronize** buttons are disabled during the synchronization. If the synchronization is not running, you may start the synchronization for a selected user or for all users with the required options.

The synchronization process varies depending on your situation:

- For the first synchronization after a new MarkView installation, see [Synchronize for the first time](#) on page 117.
- For the first synchronization after an upgrade, see [Manually synchronize the source system and MarkView after initial synchronization](#) on page 122.
- To set up periodic synchronization, see [Synchronization schedule and options](#).

Synchronization schedule and options

Use Sync Schedule and Options to enable automatic synchronization.

1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. On the **AUSS Options** tab, click **Sync Schedule and Options**.
3. Select the required synchronization options from the list.
 - a. Select or clear [Override manually created MarkView users](#).

i Scheduled synchronization searches for changes in the source system since the previous synchronization. Only users updated since the previous synchronization or users that belong to updated Source System Groups are processed during incremental synchronization and thus affected by the **Override manually created MarkView users** option. To process all Source System users and override manually created MarkView users, run manual synchronization with both the **Override manually created MarkView users** and **Force full synchronization** options enabled.

- b. Select a synchronization method:
 - **Synchronize all source system users:** Adds/modifies all Source System users that were added/updated since the previous synchronization or belong to updated Source System Groups.
 - **Synchronize only AUSS managed users:** Adds/modifies Source System users that belong to updated Source System Groups. Modifies only those updated users who already exist in MarkView. For example, if there is a new Source System user added since the previous synchronization and this user does not belong to any Source System Group managed by AUSS, then this user is not added in MarkView in this case.
4. In the synchronization schedule, select one of the following options and configure the synchronization time if required:
 - **One-Time:** In the drop-down list, select the HH:MM value that increments by 30 minutes. The synchronization starts in HH:MM.
 - **Daily:** In the drop-down list, select the HH:MM value that increments by 30 minutes. The synchronization starts every day at HH:MM.
 - **Periodically:** In the **Time interval (hours)** field, specify the time period over which the synchronization repeats.
Select the **Starting point** field if you want to set the time of the day when the synchronization starts. The synchronization starts when the next time interval is reached.
 - **Disable:** Select to disable automatic synchronization schedule.
5. Click **Save changes** to apply the synchronization settings.

Manually synchronize the source system and MarkView after initial synchronization

To synchronize MarkView users with AUSS:


1. Log in to MarkView and navigate to **Administration > AUSS Mapping Administration**.
2. Ensure that your Source System Group to MarkView Profile mappings are correct and complete.
3. If you want to synchronize all users manually, navigate to **Synchronization** and click **Synchronize**.
 - a. Determine whether or not to overwrite your manually created MarkView user information with user information from Active Directory or Oracle. If you select **Override manually created MarkView users**, this option replaces the MarkView user information with the Source System user information provided that the following conditions are met:
 - A user exists in both MarkView and Active Directory or Oracle
 - A user is enabled and active in the source system

To overwrite your MarkView user information, select **Override manually created MarkView users**. The synchronization replaces the MarkView user information with the Source System user information for any user who appears in both places. Unless you select the **Force full synchronization** option, AUSS will process only users added/updated since the previous synchronization or users that belong to updated Source System Groups. The **Override manually created MarkView users** option affects only the users to be processed in the current synchronization session.

To keep your existing MarkView user information, clear **Override manually created MarkView users**. The synchronization keeps the MarkView user information for any user who appears in both places.


b. Select a synchronization method:

- **Synchronize all Source System users:** Updates all users that have a valid record in the ERP system. For incremental synchronization, adds/modifies all Source System users that were added/updated since the previous synchronization or belong to updated Source System Groups. For full synchronization, adds/modifies all Source System users even if they do not belong to any Source System Group configured in AUSS.

 Full synchronization is performed initially. All subsequent synchronizations are incremental, unless you select the **Force full synchronization** option.

- **Synchronize only AUSS managed users:** Updates only such Source System users that have at least one assignment to a Source System Group. For incremental synchronization, adds/modifies Source System users that belong to updated Source System Groups. Modifies only the updated users who already exist in MarkView. For full synchronization, adds/modifies only the Source System users that belong to at least one Source System Group configured in AUSS.

c. Select **Force full synchronization** if required.

- 
- If the **Force full synchronization** option is disabled, the synchronization will only capture changes since the previous synchronization. If any user information is missing and is not re-captured the next time you synchronize, use **Force full synchronization** to synchronize all the differences between the source system and MarkView according to the current AUSS settings. During the full synchronization AUSS also disables all the users who are currently inactive in the source system and removes manual assignments to groups and roles for other users.
 - If you use Oracle EBS as a source system, with Role Based Access Control (RBAC) configured, incremental synchronization will not track Role Hierarchy changes correctly because Oracle EBS does not track such changes. For example, if a user has Role A and Responsibility B is connected to this role, the user will indirectly have Responsibility B and the respective record in the database. However, if Responsibility B is deleted from Role A in Role Hierarchy, the respective record for the user will not be end-dated but completely removed in Oracle EBS, so incremental synchronization will not be able to track such a change. In this case, use the **Force full synchronization** option to synchronize all the differences including indirect responsibilities deleted as a result of Role Hierarchy changes.

4. To manually synchronize a specified user, click **Synchronize one user**. If you choose this type of synchronization, the selected user will be removed from any groups and roles manually assigned in MarkView. To remove manual assignments for a MarkView-created user (a manually created user with a valid record in the ERP system), also select the **Override manually created MarkView users** option (see Step **b** below).
 - a. In the **Start User Manual Synchronization** window, start typing the name of the user you want to synchronize and select the user in the drop-down list.
You can only synchronize one user at a time.
 - b. Determine whether or not to overwrite your manually created MarkView user information with user information from Active Directory or Oracle. If you select **Override manually created MarkView users**, this option replaces the MarkView user information with the Source System user information provided that the following conditions are met:
 - A user exists in both MarkView and Active Directory or Oracle
 - A user is enabled and active in the source system
 To overwrite your MarkView user information, select **Override manually created MarkView users**. The synchronization replaces the MarkView user information with the Source System user information for any user who appears in both places.
To keep your existing MarkView user information, clear **Override manually created MarkView users**. The synchronization keeps the MarkView user information for any user who appears in both places.
5. Click **Start sync** to start synchronization.

Journal

Sync History		Change History			
Started by	Result	Started on ↓	Stopped	User count	Options
ADMIN	Success	2017.10.20 02:43:34	2017.10.20 02:43:39	1	Synchronize one user=true Override manually created MarkView users=true
ADMIN	Success	2017.10.20 02:42:50	2017.10.20 02:42:54	1	Synchronize one user=true Override manually created MarkView users=false
ADMIN	Success	2017.10.20 02:41:43	2017.10.20 02:41:51	43	Override manually created MarkView users=false Synchronize all source system users=false Full sy...
ADMIN	Success	2017.10.20 02:40:56	2017.10.20 02:41:04	0	Override manually created MarkView users=false Synchronize all source system users=false Full sy...
ADMIN	Success	2017.10.20 02:22:51	2017.10.20 02:22:52	1	Synchronize one user=true Override manually created MarkView users=true
ADMIN	Success	2017.10.20 02:06:19	2017.10.20 02:06:34	1	Synchronize one user=true Override manually created MarkView users=false
ADMIN	Success	2017.10.20 02:05:05	2017.10.20 02:05:08	43	Override manually created MarkView users=false Synchronize all source system users=false Full sy...
ADMIN	Success	2017.10.20 01:56:11	2017.10.20 01:56:15	0	Override manually created MarkView users=false Synchronize all source system users=false Full sy...
ADMIN	Success	2017.10.19 10:33:21	2017.10.19 10:36:52	53	Override manually created MarkView users=false Synchronize all source system users=false Full sy...
ADMIN	Success	2017.10.19 10:24:07	2017.10.19 10:27:51	43	Override manually created MarkView users=false Synchronize all source system users=false Full sy...
ADMIN	Success	2017.10.19 10:23:31	2017.10.19 10:23:41	1	Synchronize one user=true Override manually created MarkView users=true

The **Journal** tab displays the synchronization history and change tracking.

The **Sync History** table includes the following data:

- **Started by:** The user who started the synchronization.
- **Result:** The actual status of the synchronization. For example, **Success**.
- **Started on:** The date and time when the synchronization started.
- **Stopped:** The date and time when the synchronization ended.
- **User count:** The number of synchronized users.
- **Options:** The synchronization method and the **Override manually created MarkView users** option selection.

Use additional **Sync History** options to refresh the page, to export the information to a XLS file, or to remove records.

The **Change History** table displays:

- **Action:** Added, Changed, or Deleted
- **Area:** The area where the change took place.
- **Element:** The item that was changed. This field can include MarkView Groups and MarkView Roles, fill-in fields in AUSS Options.
- **Old value:** If the item was added, the column is blank.
- **New value:** If the item was deleted, the column is blank.
- **User name:** The user who performed the action.
- **Date:** The date and time when the action was performed.

It may help to troubleshoot some issues. The administrator user can export the information to a XLS file.

Chapter 10

Configure Self-Service Invoice

To configure SSI with MarkView:

- Schedule periodic Payables import scheduling with hold. See [Configure the SSI Oracle Payables Open Interface job](#) on page 126.
- If you plan to use AUSS to configure your SSI users, use the Self-Service Invoice profile in AUSS. You can map the Source System Group (the Oracle EBS responsibility) for those users to the Self-Service Invoice profile. See [Configure AUSS](#) on page 113 for information about configuring this profile.
- If you do not plan to use AUSS, see the *Kofax MarkView Administrator's Guide, Volume 1* to add users to the SSI Users group in MarkView.
- If you plan to enable SSI users to submit follow-up documents in email messages, install Kofax Import Connector (KIC) with the MarkView system and install an email client on the SSI user's client machine.

The SSI_EMAIL_ADDRESS preference points to an address Kofax Import Connector monitors. See the *Kofax MarkView Administrator's Guide, Volume 1* for information about setting preferences.


- After initial setup, see the *Kofax MarkView Administrator's Guide, Volume 1* for information about:
 - Setting SSI Preferences: At a minimum, set SSI_EMAIL_ADDRESS and review the default settings for
 - SSI_FOLLOWUP_REMINDER_01
 - SSI_FOLLOWUP_REMINDER_02
 - SSI_FOLLOWUP_REMINDER_03
 - Setting Invoice Header and Invoice Line field display for SSI invoice requesters.
 - Configuring scan and email settings.

Configure the SSI Oracle Payables Open Interface job

Configure the Oracle Payables Open Interface import job to move data from the AP Invoice Interface tables to the AP Invoice tables. The Payables Open Interface Import job creates the invoices in the Oracle AP Invoice tables after SSI has prepared the invoice and image data. This concurrent request can be submitted as a single or recurring request. The key parameters for this Payables Open Interface Import concurrent request are:

- Source: MarkView Self-Service Inv
- Hold Name: 170_SYSTEMS_HOLD
- Hold Reason: 170_SYSTEMS_HOLD

The default Hold Name is 170_SYSTEMS_HOLD. If you changed this value, your hold name may be different. See [Configure the Oracle Payables Open Interface Import job](#) on page 107 for more information.

 When configuring and scheduling the Payables Open Interface Import, configure the import to apply the 170_SYSTEMS_HOLD during the process. Doing so guarantees that MarkView immediately applies the hold to each imported invoice. The hold remains in place until all workflow actions are completed and the invoice is ready for payment. Applying the hold prevents an imported invoice from circumventing the workflow if a system component malfunctions.

For information about configuring Oracle Payables Open Interface import jobs, see the Oracle documentation.

Chapter 11

Integration with other Kofax products

After you install MarkView, follow the steps in this chapter to integrate with

- Kofax Capture (KC)
- Kofax Import Connector (KIC)
- Kofax Transformation Modules

Integration with Kofax Capture and Kofax Transformation Modules

Kofax MarkView Export Connector enables you to export documents from Kofax Capture to MarkView.

Kofax MarkView Export Connector does not support the following:

- Exporting non-image files, PDF files, or OCR full text files
- Using the original file name, as defined for Export Properties in Kofax Capture

Kofax Transformation Modules requires the Data Export Server to provide data from Oracle to Kofax Transformation Modules for validation.

Before you upgrade Kofax MarkView Export Connector, verify that your system meets the minimum system requirements. For the version numbers, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).

MarkView requires:

- Kofax Capture and 32-bit ODBC drivers
(64-bit ODBC drivers are required for MarkView Capture and Output components version 10.5.0. For more information, see the *Kofax MarkView Technical Specifications* document).
- ODAC with the following required components:
 - Oracle Data Provider for .NET
 - Oracle Provider for OLE DB
- For transformation, you also need Kofax Transformation Modules

Upgrade Kofax Capture Server on the server, and the Kofax Capture client on all workstations before upgrading Kofax MarkView Export Connector. Before you upgrade Kofax Transformation Modules or Kofax Capture, back up your files.

i MarkView does not support the Kofax Transformation Modules annotation feature. See the Kofax Transformation Modules documentation for information about disabling annotation for MarkView.

Install Oracle Database 19c Client (19.3) for Microsoft Windows

For the Oracle Data Access Components supported, see "Required Third-Party Technologies" in the *Kofax MarkView Technical Specifications* document. Look at the table and select between the 32-bit or 64-bit version.

If you plan to integrate with Kofax Capture and Kofax Transformation Modules on Windows Server 2019, complete the following procedure.

1. Install Oracle Database 19c Client (19.x) (ODAC).
 - a. Run the installer.
 - b. Select the **Custom** installation type.
 - c. On the **Available Product Components** page, select the following components.
 - Oracle ODBC Driver.
 - Oracle Provider for OLE DB.
 - Oracle Data Provider for .NET.
 - d. Install the product.
2. If you installed ODAC Xcopy version, register Oracle.DataAccess.dll in the GAC by running the following commands:

```
OraProvCfg.exe /action:gac /providerpath:<oracle_client>\odp.net\bin
\4\Oracle.DataAccess.dll
OraProvCfg.exe /action:config /force /product:odp /frameworkversion:v4.0.30319
/providerpath:<oracle_client>\odp.net\bin\4\Oracle.DataAccess.dll
```

3. If you installed ODAC Xcopy version and you encounter problems with database connectivity, run the following commands to register Oracle products in the GAC manually.

```
cd <oracle_client>\odp.net\bin\4
```

```
OraProvCfg.exe /action:ungac /providerpath:<oracle_client>\odp.net\bin
\4\Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.112.Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.121.Oracle.DataAccess.dll
```

```
cd <oracle_client>\odp.net\bin\4
```

```
OraProvCfg.exe /action:gac /providerpath:<oracle_client>\odp.net\bin
\4\Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.112.Oracle.DataAccess.dll
```

```
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy
\4\Policy.4.121.Oracle.DataAccess.dll
```

```
cd <oracle_client>\odp.net\bin\2.x
OraProvCfg.exe /action:ungac /providerpath:<oracle_client>\odp.net\bin\2.x
\Oracle.DataAccess.dll
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.102.Oracle.DataAccess.dll
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.111.Oracle.DataAccess.dll
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.112.Oracle.DataAccess.dll
OraProvCfg.exe /action:ungac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.121.Oracle.DataAccess.dll
cd <oracle_client>\odp.net\bin\2.x
OraProvCfg.exe /action:gac /providerpath:<oracle_client>\odp.net\bin\2.x
\Oracle.DataAccess.dll
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.102.Oracle.DataAccess.dll
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.111.Oracle.DataAccess.dll
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.112.Oracle.DataAccess.dll
OraProvCfg.exe /action:gac
/providerpath:<oracle_client>\odp.net\PublisherPolicy\2.x
\Policy.2.121.Oracle.DataAccess.dll
```

Where <oracle_client> is the Oracle Database 19c Client installation folder.

i Some Windows folders (such as C:\Users\<USER NAME>) may be protected and have permission restrictions. Folder location values that contain spaces must be enclosed in double quotation marks. Example: "C:\oracle client\network\admin".

Upgrade Kofax MarkView Export Connector

Perform the following procedure on all machines running Kofax Capture or Kofax Transformation Modules, including all scan and validation stations.

1. Log in as an administrator.
2. If you are upgrading from MarkView 8.0.0.5 or earlier, uninstall the existing version of Kofax MarkView Export Connector.

i If you are upgrading from MarkView 8.0.0.5 or earlier with Kofax Capture 10.1, follow the instructions in the Technical Support note to uninstall the existing version of Kofax MarkView Export Connector at <https://techsupport.kofax.com/knowledge-base/11827>.

- a. Stop the Kofax Capture Service.
 - b. On the Windows machines where Kofax Capture is installed, navigate to **Control Panel > Programs and Features**.
 - c. Follow the prompts to uninstall the older version of Kofax MarkView Export Connector. If the uninstall opens a command prompt window and appears to be stuck for more than 5 minutes, close the command prompt window.
3. On the MarkView Application Server host, navigate to the MarkView installation directory, open the export-connector folder, and locate the kcec-markview.msi file.
For example: `<installation_directory>/export_connector/kcec-markview.msi`
 4. Copy kcec-markview.msi to a temporary directory on the Windows machine on which Kofax Capture is installed.
 5. To start the installation, run kcec-markview.msi as Administrator or use the Administrator command line.
 6. When the installation wizard opens, follow the prompts.
When the installation is complete, a message indicates that Kofax MarkView Export Connector was successfully installed.
 7. Click **Finish**.
 8. Verify that the Kofax Capture service is running.
 9. Repeat these steps on all scan and validation stations.

Set up the ODBC Data source

Configure the ODBC Data source on both the Kofax Transformation Modules server and Kofax Capture Network Server (KCNS). If you are not using Kofax Capture Network Server, also configure an ODBC data source on each MarkView scan station.

1. Configure a data source using the Microsoft ODBC Administrator application.
 - For 32-bit operating systems, start Microsoft ODBC Administrator on the Microsoft Start menu.
 - For 64-bit operating systems without Kofax Transformation Modules, run `\Windows\SysWOW64\odbcad32.exe` to launch the 32-bit version of Microsoft ODBC Administrator.
 - For 64-bit operating systems with Kofax Transformation Modules, start Microsoft ODBC Administrator on the Microsoft Start menu.
2. In the **ODBC Data Source Administrator** window, select the **System DSN** tab.
3. Click **Add**.
The **Create New Data Source** window opens.
4. In the list of drivers, select the driver installed by Oracle ODAC, usually **Oracle in OraClientxxx_home1**, and click **Finish**.
The configuration window opens.

5. Enter values in the following fields:
 - **Data Source Name** (DSN): Enter the name, such as MarkView. Use this when [Prepare the Kofax Transformation Modules project template for use](#).
 - **Description** (optional)
 - **TNS Service Name**: Configure the TNS Service Name and User ID to connect to the MarkView schema.
 - **User ID**: Enter a MarkView schema name.
6. Clear **Enable Query Timeout**.
7. Click **Test Connection**.
The **Oracle ODBC Driver Connect** window opens.
8. When prompted, enter the password.
If you see an error message, confirm the field settings.
If the test is successful, you see a **Connection Successful** message.
9. Click **OK** to close the success message.
10. Click **OK** to close the configuration window.
The **MarkView Data Source** appears in the **Data Source Name** list. This ODBC connection corresponds to a listener running on your database server. Use the DSN to connect.
11. For 64-bit operating systems with Kofax Transformation Modules, you need to also configure 32-bit ODBC drivers:
 - a. Run `\Windows\SysWOW64\odbcad32.exe` to launch the 32-bit version of Microsoft ODBC Administrator.
 - b. Repeat steps 2 through 10 to install and configure 32-bit ODBC drivers.

About MarkView Kofax Transformation Modules Project templates


MarkView automatically installs the project template "MarkView KTM Invoices 50" in `C:\KTM\Markview`. When you customize the project, create a new runtime version of the project directory that stores the MarkView Kofax Transformation Modules project fpr file and all the files needed for the project.

Copy your customized MarkView Kofax Transformation Modules project files to a safe location before you upgrade. After you upgrade, refer to your customized project files when you manually edit the new project files. Then, save the edited project files in your runtime directory, such as `<MarkView_KTM_project>\MyProject`.

Follow the instructions in this section to prepare the project template and batch class templates. For more information, see the user documentation for Kofax Transformation Modules and Kofax Capture.

Prepare the Kofax Transformation Modules project template for use

1. Ensure that you have a read-write access to the Kofax Transformation Modules project:
 - a. In Windows, navigate to your Kofax Transformation Modules project folder, such as `<MarkView_KTM_project>`.
 - b. Select the Kofax Transformation Modules project and right-click **Properties**.

- c. Select the **General** tab and clear **Read-only**.
 - d. Select **Apply changes to this folder subfolders and files** and click **OK**.
 - e. Click **OK**.
2. Start Kofax Transformation Modules Project Builder.
3. Open the Kofax Transformation Modules project:
 - a. Select **File > Open Project**.
 - b. Locate the MarkView Kofax Transformation Modules Invoices project folder, such as `<MarkView_KTM_project>`.
 - c. Open the MarkView Kofax Transformation Modules Invoices 50 project file.
A warning may appear. Click **Close** to close the warning. You will address any warnings later in this process.
4. Click **Save Project As** and save the edited project to a new name.
MarkView creates a new directory under `<MarkView_KTM_project>`, such as `<MarkView_KTM_project>\MyProject` and stores the Kofax Transformation Modules project file and all the files needed for the project.
5. Select **Project > Script Variables** and set the following script variables:
 - **Project type** : Enter Oracle.
 - **Oracle Version** : Enter the Oracle version.
 - **Demo**: Select True or False (set to False when connecting to a live MarkView environment).
 - **DatabaseDataSource**: Specify the connection string for the Oracle database where the MarkView schema is located in the format of `tns_names_entry.SID`.
 - **DatabaseUID**: Enter the MarkView schema name.
 - **DatabasePWD**: MarkView database password.
6. For R12 environments, point the **TaxCodes** database to a blank TaxCodes.txt file.
The data export service properties for **TaxCodes** do not apply to R12. However, for the Oracle R12 environment, you need to point the database to a blank TaxCodes.txt file to prevent Kofax Transformation Modules project validation errors.
 - Create a blank TaxCodes.txt file in your Kofax Transformation Modules project folder, such as `<MarkView_KTM_project>\KTMSourceFiles\Databases`.
 - In the Kofax Transformation Modules project, select **Project > Project Settings > Databases**.
 - Select **TaxCodes** and click **Properties**.
 - Specify the full path to the blank text file. For example, `<MarkView_KTM_project>\KTMSourceFiles\Databases\TaxCodes.txt`.
7. Set the **LineItems** properties:
 - a. Select **Project > Project Settings**.
The **Project Settings** window opens.
 - b. Select the **Tables** tab.
 - c. In the **Table Models** area, highlight **LineItems** and click the **Edit Table Model Properties** icon .

- The **Properties** window opens.
- d. In the **Visible** column, enable the check boxes for the following fields for Oracle EBS 12.x:
 - **R. Code**
 - **Tax**
 - **Tax Status**
 - **J. Code**
 - e. In the **Visible** column, clear the check boxes for the following fields for Oracle EBS 12.x:
 - **Receipt Year**
 - **Service Entry Sheet Number**
 - **Service Entry Sheet Line Number**
 - **Tax Code**
 - f. Click **OK** to close the window.
 - g. In the Project Tree panel, navigate to **Project > Project Class > Invoice > Fields**.
 - h. Double-click the **LineItems** field definition or right-click **LineItems** and select **Properties**. The **Properties** window opens.
 - i. In the **Always Valid** column, enable the check boxes for the following fields for Oracle EBS 12.x:
 - **Receipt Year**
 - **Service Entry Sheet Number**
 - **Service Entry Sheet Line Number**
 - **Tax Code**
 - j. In the **Always Valid** column, clear the check boxes for the following fields for Oracle EBS 12.x:
 - **R. Code**
 - **Tax**
 - **Tax Status**
 - **J. Code**
 - k. Click **OK** to close the window.
8. (Optional) If you need to set the default Organization ID value, configure the DefaultOrgId variable.
- For example, if the **Organization ID** field is blank, the vendor list is not filtered by Organization ID correctly. The DefaultOrgId variable value used by Vendor Locator (VL locator) filters vendors.
- a. Navigate to **Project > Script Variables**.
 - b. In **Name**, locate **DefaultOrgId**.
 - c. For the **DefaultOrgId** variable, set the appropriate Organization ID value and click **OK**.
9. (Optional) If you do not want to delete extracted lines for Non-PO and Pre-Approved Invoices, in **Project > Script Variables**, set **AfterExtractDeleteLineItems** to **False** and click **OK**.

Validate the Kofax Transformation Modules project

1. Select File > Validate Project.

Kofax Transformation Modules displays any error messages related to the project.

2. If you see database validation warning messages, reestablish links in the project to correct the database text files.

a. Select Project > Project Settings.

b. Select the Databases tab. Find and correct any database validation issues.

3. If you see library errors, reestablish links in the project to correct the dictionary text files.

a. Select Project > Project Settings.

b. Select the Dictionaries tab.

c. Select the dictionary with validation errors and click Properties.

d. In the Referenced import file box, select the text file of the server with the same name as the dictionary (such as <MarkView_KTM_project>\KTM Source Files\Dictionaries\DocumentType_Validation.txt) and click OK.

e. Click Import to reimport the dictionaries.

4. Repeat the validation until the process no longer generates errors.

5. If you want to change the default online learning folder defined for the Kofax Transformation Modules project.

a. Select Project > Project Settings.

b. Select the General tab.

c. Under Online Learning, select Enable online learning.

d. In the Path to online learning box, browse to the appropriate folder (such as C:\KTM\OnlineLearning_MarkView) and click OK.

6. Select File > Save Project Settings.

7. Click File > Exit to close Project Builder.

About Kofax Capture batch class templates

The following batch class templates are available when imported:

- MarkView Document: Used to separate documents that do not go through Kofax Transformation Modules.
- MarkView Invoice: Used to separate documents that go through Kofax Transformation Modules.

The batch class templates are set up with batch fields based on Kofax Capture Values, such as Batch Name, Batch ID, Batch Creation Date, Batch Creation Time, and Scan Operator.

Import the batch class templates

1. Log in to Kofax Capture as an administrator.

2. Select Import.

3. In the Open window, select <MarkView_KTM_project>\Markview.cab and click Open.

4. In the **Import/Export** window, click **OK** when the unpacking is completed.
5. In the **Import** window, click **Add All**.
6. Select **Save duplicates to new name**.
7. Click **Import**.
8. Follow the prompts to save the batch classes to a new name.
9. Click **OK** when the import is completed.

Prepare the batch class templates

1. Highlight the MarkView Document batch class.
2. Select **Properties**.
3. On the **Separation and Form Identification** tab, select **Custom**. In the list, select **MarkView Bar Code Separators** and click **Edit Profile**.
The **Custom Separation and Form Identification Profiles** window opens.
4. Enter the following values:
 - Enable **Bar Code**.
 - In the list, select **MarkView Bar Code**.
 - Set **Found on stand-alone separator sheet** as follows:
 - To discard the bar code cover sheet after import, select this option.
 - To keep the bar code cover sheet with imported documents, deselect this option.
 - In the **Search Text** field, enter:
^(CP|DT)ID-
 - Enable **Treat search as regular expression**.
5. Click **Save** and **Close**.
6. Click **Apply**.
7. Select the MarkView Invoice batch class and repeat steps 2 through 6.

Prepare Kofax Import Connector to use MarkView Bar Code separators

1. From Kofax Capture Administration, highlight the MarkView Document batch class.
2. Expand the batch class to import through Kofax Import Connector until you see Sample Page 1 with a bar code.
3. Right-click **Page Level Bar Codes** and select **Properties**.
4. On the **Available Fields** pane, select **Barcode**, click **Add**, and click **Apply** to add the Bar Code index field.
5. Highlight the MarkView Document batch class.
6. Select **Properties**.
7. On the **Separation and Form Identification** tab, select **Custom**. In the list, select **MarkView Bar Code Separators12** and click **Edit Profile**.
The **Custom Separation and Form Identification Profiles** window opens.
8. Enter the following values:
 - Enable **Bar Code**.
 - In the list, select **MarkView Bar Code12**.

- Set **Found on stand-alone separator sheet** as follows:
 - To discard the bar code cover sheet after import, select this option.
 - To keep the bar code cover sheet with imported documents, deselect this option.
 - In the **Search Text** field, enter:
^(CP|DT)ID-
 - Enable **Treat search as regular expression**.
9. Click **Save** and **Close**.
 10. Click **Apply**.
 11. Select the MarkView Invoice batch class and repeat steps 2 through 10.

Customize the batch class templates

If you customized your batch classes, copy your customized batch classes to a safe location before you upgrade. After you upgrade, refer to your customized batch classes when you manually edit the new batch classes. Then, save the edited batch classes in your runtime directory, such as `<MarkView_KTM_project>\MyProject`.

Synchronize MarkView batch classes with the Kofax Transformation Modules project

1. Open the Kofax Capture Administration module.
2. On the **Batch** tab, right-click the **MarkView Invoice** batch class and select **Synchronize Kofax Transformation Project**.
3. In the **Synchronization Tool** window, select the **Classes** tab.
4. Select **File > Load Project**.
5. In the **Project File** window, open the project (the .fpr file).
6. When the system notifies you that you are replacing the project, click **Yes** to keep the existing class and field settings.
7. Click **Next Step**.
The **Synchronization Tool** window displays data in two columns: **Extraction Field** and **Index Field**.
8. If you have Kofax Capture 10, verify that Unit Price is set correctly in both the **Extraction Field** and **Index Field** columns:
 - a. Scroll down in the **Extraction Field** list until you see **Unit Price**.
 - b. If necessary, use the drop down list to change the value in the **Index Field** column to **Unit Price**.
9. Click **Next Step**.
10. Click **Synchronize**.
11. When synchronization is complete, verify the batch class image folder location.
 - a. Right-click the batch class and select **Properties**.
 - b. In the **Batch Class Properties** window in the **Image folder** field, verify the path.
12. Click **OK** to save and exit.


Set up scan users

You must configure a Kofax Capture scan user and a MarkView scan user. Otherwise, the scan operation fails and generates an error message.

- See the *Kofax Capture Administrator's Guide, Administration Module*, for information about using the Kofax Capture Administration interface to add and configure a Kofax Capture scan user.
- See the *Kofax MarkView Administrator's Guide, Volume 1* for information about using the MarkView Administration interface to add a MarkView scan user.

Scan user requirements:

- The Kofax Capture scan user and the MarkView scan user must have the same name.
- In MarkView, the scan user must be a member of a MarkView group with scan privileges, such as the SCAN USERS group.

 If separate users will perform Kofax Transformation Modules validation, add the validation users to the SCAN USERS group as well.

Set up Kofax MarkView Export Connector

After you associate a document class with a batch class in Kofax Capture, specify and set up Kofax MarkView Export Connector to use when exporting your documents.

1. Start Kofax Capture Administration.
2. Select the **Batch** tab.
3. Expand the batch class to view associated document classes.
4. Right-click the **MarkView Document class** and select **Export Connectors**.
The **Export Connectors** window lists all available export connectors. Available export connectors are those that are registered with Kofax Capture.
5. Under the **Available Export Connectors** column on the left side of the window, select **Kofax MarkView Export Connector**.
6. Click **Add** to add **Kofax MarkView Export Connector** to the list of assigned export connectors.
7. In the **Assigned Export Connectors** section, select **Kofax MarkView Export Connector** and click **Setup**.
8. In the **Kofax Capture Export Connector - MarkView** window, specify the settings for exporting documents.
 - **Name:** MarkView Document EC
 - **Export Settings Instance:** MarkView Document
 - **Skip first page of each document:** Clear this check box
 - **Threshold:** Select **Enable** and change the **Brightness level** and **Contrast level** values, if required.
9. Click **Apply** and click **OK**.
10. Close the **Export Connectors** window.
11. Right-click the MarkView Invoice class and select **Export Connectors**.

The **Export Connectors** window lists all available export connectors. Available export connectors are those that are registered with Kofax Capture.

12. Under the **Available Export Connectors** column on the left side of the window, select **Kofax MarkView Export Connector**.
13. Click **Add** to add **Kofax MarkView Export Connector** to the list of assigned export connectors.
14. In the **Assigned Export Connectors** section, select **Kofax MarkView Export Connector** and click **Setup**.
15. In the **Kofax Capture Export Connector - MarkView** window, specify the settings for exporting invoices, such as:
 - **Name:** MarkView Document EC
 - **Export Settings Instance:** MarkView Invoice EC
 - **Skip first page of each document:** Clear this check box.
 - **Threshold:** Select **Enable**
16. Click **Apply** and click **OK**.
17. Close the **Export Connectors** window.

Set up Database Validation for batch classes

Perform the following procedure for each MarkView Document and MarkView Invoice class. Depending on the number of database tables in your environment, changing between tabs in this process can take a long time.

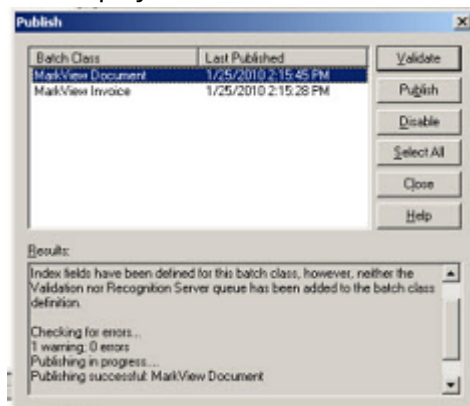
1. In Kofax Capture Administration, expand the batch class, right-click the document class and select **Database Validation**.
2. Click the Browse button and select the ODBC Datasource that you created for this environment.
3. Select **Properties**.
4. Update the user name and password.
5. When prompted that changing the value will break current mappings, click **Yes**.
6. On the **Table Settings** tab, select the following values:
 - **Index field to validate:** **Kofax.Separation.BarCodeValue**
 - **Validate against table:** **MV_BAR_CODE_TYPE**
 - **Match Column:** **BAR_CODE_TYPE_ID**
7. If you use Kofax Capture Network Server, select the **KCN Server** tab and enable the **Use KCN Server for validation** check box.
8. Click **OK**.
9. Click **Close**.

Publish a batch class

After you select the batch class settings, publish the batch class. The publishing process checks the integrity of the settings in your batch class and makes the batch class available for use. If problems exist with any of the settings, error and warning messages appear along with the recommended actions for fixing the problems.

If you edit your batch class, publish your batch class again before you use the batch class. Changes are not applied to batches created before the new publication date.

1. Open the Kofax Capture Administration module.
2. Select the **Batch class** tab.
3. Right-click the batch class and, on the context menu, select **Publish**.
The **Publish** window opens.
4. Select your batch class and click **Publish**. Kofax Capture checks all of your batch class settings and displays the results in the **Results** box.



- If no problems exist, the message "Publishing successful" appears.
- If problems exist, error and warning messages appear along with the recommended actions to resolve the problems. Perform the recommended actions, and then try to publish the batch class again.

After successfully publishing, you can create batches based on your batch class. As your batches flow through your Kofax Capture system, they are routed from module to module. The batch class definition specifies the modules that process a batch and the order that processing occurs.

Process batches in Kofax Capture

Use the following information to enhance your understanding of exporting batches. See the Kofax Capture documentation or help for more information.

Set up scanning for MarkView documents

1. Log in to Kofax Capture Batch Manager as Admin.
2. Create a new batch.
3. In the **Create Batch** window, enter a batch name and description (optional).
4. In the **Batch Properties Queues** list, select **Scan**.
5. In Batch Manager, select the batch you just created and click **Process Batch**. The **Kofax Capture Scan** page opens.
6. In the left-hand panel, select a configured scanner as the source.
7. Scan a document with a bar code cover page.
8. To split a multi-page document, select the number of pages per document and optionally select **Retain document properties in split documents**.

9. Click **Split**.
10. In Batch Manager, click **Process Batch** to send the batch to Kofax Transformation Modules Server.
11. Click **Process Batch** to send the batch to Kofax Transformation Modules Validation.
12. Click **Process Batch** to send the batch to **Learning Server**.
13. Click **Process Batch** to send the batch to Export, and make the scanned documents available in MarkView.

Export batches

The Kofax Capture Export module processes batches based on the settings of the associated batch classes. The Export module exports documents and index data, using the properties defined during the export connector setup.

The Kofax Capture Export module usually runs as an unattended module on a Windows workstation, periodically polling the Export module for available batches. Configure the Export module to run during off-hours to avoid impact on the throughput of Kofax Capture and the network system.

Start the Export module

On the Start menu, select **Programs > Kofax Capture > Export**.

All batches queued for export are exported after initiation of the Export module.

Export a batch

Start the Kofax Capture Export module. The module main window opens. Any batches waiting to be exported are processed.

Once your batch is exported, it is removed from Kofax Capture. If any documents or pages are rejected, the batch is routed to the Kofax Capture Quality Control module.

Exit the Export module

On the Batch menu, select **Exit**.

XSLT files modification

If you customized your existing XSLT file, apply your customizations to the new XSLT files and restart the Kofax Capture service.

Set up Kofax Capture and Kofax Transformation Modules for MarkView

About Auto-Categorization

Auto-Categorization allows MarkView batch classes to bypass categorization in Kofax Capture to allow Kofax Transformation Modules to perform the categorization. Depending on the batch class property setting specified for `RequireCategorizationInCapture`, Kofax Capture handles batch classes as follows:

- 1 (ON): Prevents documents in the batch classes from moving out of Kofax Capture unless they are completely categorized.
- 0 (OFF): Allows documents in the batch classes to continue from Kofax Capture without being categorized.

If a document that has no categorization reaches Kofax Transformation Modules, Kofax Transformation Modules tries to categorize the document automatically based on extracted values.

Prerequisites:

- The Kofax Transformation Modules version is in compliance with the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).
- The Kofax Transformation Modules validation station is connected to the MarkView database.

Set the default document type for invoices without PO numbers

1. Open Kofax Transformation Modules Project Builder.
2. Open your MarkView Kofax Transformation Modules project and select **Script Variables**.
3. Near the bottom of the script variables table, locate **DefaultNonPODocumentType**.
4. Set the value to use as the default document type for invoices that enter the system without a PO number. Supported values include:
 - NON-PO INVOICE
 - PRE-APPROVED INVOICE

By default, Kofax Transformation Modules uses NON-PO INVOICE, which you can override.

5. Click **OK**.
6. Save the project.

Set the `RequireCategorizationInCapture` property

The `RequireCategorizationInCapture` property specifies how Kofax Capture processes MarkView batch classes.

1. Open **Kofax Capture Administration**.
2. Right-click the **MarkView Invoice** or **MarkView Document** batch class and select **Properties**.
3. Select the **General** tab and in the **Batch Fields** table, locate `RequireCategorizationInCapture`.

4. Set the Default setting to one of the following:
 - 1 (ON): Requires categorization
 - 0 (OFF): Does not require categorization
5. Click **OK**.
6. Save the batch class and proceed as follows:
 - For a MarkView Invoice batch class only, synchronize the batch class to the project and publish the batch class.
 - For a MarkView Document batch class, publish the batch class.

About the MarkView Workflow Agent

The MarkView Workflow Agent enables Kofax Capture to handle MarkView batches introduced through non-scan Kofax Capture products in the same way that Kofax Capture handles batches introduced through Kofax Scan.

Kofax Capture processes MarkView batches based on the batch class settings. For example, in a batch imported through Kofax Import Connector:


- If the Workflow Agent cannot communicate with MarkView, Kofax Capture routes the batch to the Quality Control queue.
- If AlwaysStopForReview specifies that all documents go to review, Kofax Capture routes all imported batches to the configured review queue.

Workflow Agent batch class properties

Two MarkView batch class properties define how Kofax Capture processes MarkView batch classes imported through an application other than Kofax Scan. These properties do not affect MarkView batch classes imported through Kofax Scan.

- **AlwaysStopForReview:** When enabled, routes every document in the batch to review in Kofax Capture, whether or not the documents have a valid bar code.
 - Disable (default): 0 (False)
 - Enable: 1 (True)
- **ReviewQueue:** Specifies the review queue to which Kofax Capture routes documents in the batch that need review.
 - Scan (default): Routes documents to the Scan queue
 - QC: Routes documents to the Quality Control queue

To change how Kofax Capture processes a MarkView batch imported through an application other than Kofax Scan, edit the batch class properties for the destination associated with the connection. Workflow Agent properties appear on the Batch fields tab.


 If you access the Document fields tab and change or add a value for the BarCode or Kofax.Separation.BarCodeValue fields, the Kofax.Separation.BarCodeValue always takes precedence.

See the Kofax Import Connector documentation for information about editing the destination.

Interaction between Kofax Capture and Workflow Agent batch class properties

The combination of batch class settings that you use determines how Kofax Capture processes non-scanned MarkView Invoice batch classes.

- If you set AlwaysStopForReview to 1 (ON), non-scanned documents always stop for review in the defined review queue.
- If you set AlwaysStopForReview to 0 (OFF) and RequireCategorizationInCapture to 1 (ON), non-scanned documents only stop for review if Kofax Capture cannot decode the bar code value.

 For MarkView batch classes imported through an application other than Kofax Scan, the RequireCategorizationInCapture property appears on the Batch Fields tab of the destination that handles the batch.

Integration with Kofax Import Connector

Before configuring the integration between MarkView and Kofax Import Connector, verify that you have the following installed and configured:

- MarkView
- Kofax Capture
- Message Connector

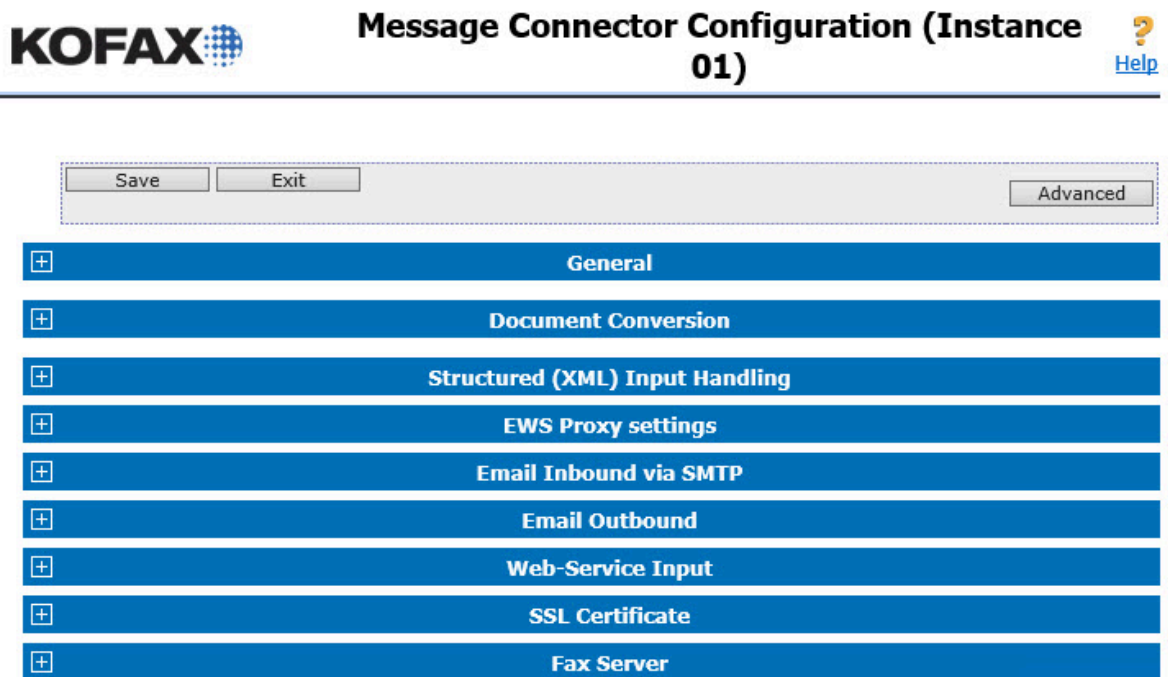
For information about installing and configuring Message Connector and Kofax Capture Plug-In, see the documentation provided with the product from the fulfillment site.

The integration process involves completing the following processes in Kofax Import Connector and Kofax Capture Administration:

- [Configure Message Connector](#)
- [Set up destinations](#) on page 147
- [Configure connections](#) on page 151

Configure Message Connector

1. On the Start menu, select **All Programs**.
2. Select **Kofax > KIC-Electronic Documents > Message Connector Configuration**.
If a user access control prompt appears, click Yes to allow the configuration to proceed.
By default, the window displays a list of basic features.
3. Click **Advanced**.



4. Expand the **General** panel and configure the following options.

Option	Setting
Operator Email	Specify the administrator email address to receive a copy of messages that fail conversion.
Email From	Specify the email address from which the system sends notifications.
Keep Failed	<p>Failed inbound messages are those not imported into Kofax Capture and not forwarded to an operator. If you select the option to keep failed messages, the messages are treated as pending. To keep from running out of disk storage space, process or manually delete these messages.</p> <ul style="list-style-type: none"> • Disable: For the best result, clear the check box for this option. • Enable: Stores messages on the message connector server. You must manually delete stored messages.
Storage Size	<p>Enter the amount of disk space in MB reserved for storing messages.</p> <ul style="list-style-type: none"> • Minimum: 10 MB • Maximum: 64,000 MB <p>For SMTP protocol, use the default. Allocate enough space for mail storage. For POP3 with KeepFailed disabled, allocate enough space for active email processing.</p>
Storage File	Enter the file name and location for file storage. The default file location is: C:\Program Files\Kofax\KIC-ED\MC\Storage.bin. Monitor the size of this file and ensure that it does not exceed 50% of the available disk space.

Option	Setting
Prefetched Messages	Enter the number of messages that the connector should prefetch from all boxes, folders, and other passive input methods. <ul style="list-style-type: none"> • Minimum: 1 • Maximum: 100
Own Computer Name	For SMTP and Web Services, enter the name of the computer or domain where you will install the solution.
Load Balancer Support	For SMTP and Web Services input, select the supported load balancer.

5. To convert Microsoft Word plain text (.txt) or html files, expand the **Document Conversion** panel and configure the following options.

Option	Setting
MS Office Documents	Select the software to use for converting Microsoft Word and plain-text (.txt) documents.
MHTML and HTML Documents	Select the software to use for converting MHTML and HTML documents.
MS Office User	If you use MS Office for the conversions, Kofax recommends that you use a dedicated, named user for production mode. To do so, select This User .
Name	The Windows user name for MS Office. Verify that the user has the correct privileges to use Kofax Capture as well as MS Office.
Password	The password for the selected Windows user. Set the password to never expire.
Custom Extension List	Enter a list of extensions, separated by spaces, for file types to convert to PDF using a customizable script. Create the script in the Scripts sub-folder with the name "CustomToPdf.bat".

6. Expand the **Email Outbound** panel and configure the following settings, which send notifications to MarkView.

Option	Setting
SMTP Server Mode	Select how to locate the outbound SMTP server.
SMTP Smart Host	Enter the domain name or IP address of the SMTP host for outgoing messages. (Use a fully qualified mail server name.)
TCP Port	Specify the port on the SMTP host for outgoing messages (use 25).
User ID	Enter the User ID for SMTP authentication.
Password	Enter the password associated with User ID for SMTP authentication.
SSL Active	Select the setting for Secure Sockets Layer protocol.

7. Click **Save** and **Exit**.
8. Restart the service to activate the changes.

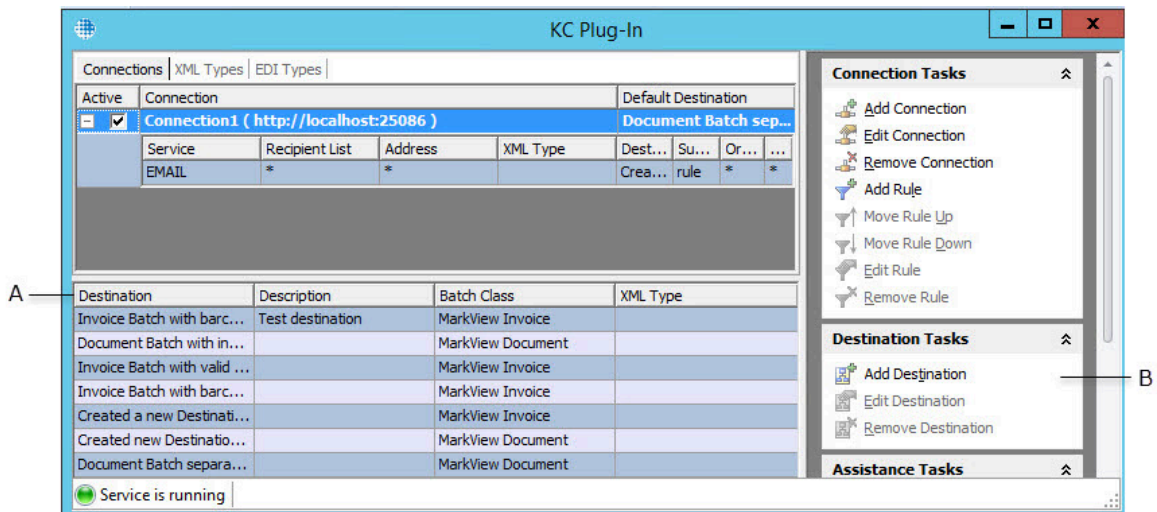
Configure destinations and connections

Configuring the Kofax Capture Plug-In to work with MarkView requires you to set destinations, configure connections, and map import types to destinations.

Set up destinations

For details about configuration settings, see the Kofax Import Connector documentation.

1. On the Start menu, select **All Programs > Kofax Capture xx.x > Administration** (where xx.x is the current version of Kofax Capture).
If prompted to log in, do so.
2. Select the **Electronic Documents** tab and click **Configuration**.
3. Proceed as follows:
 - To create a destination: Go to the right-hand pane of the window, locate **Destination Tasks** and click **Add Destination**.
 - To edit a destination: In the **Destinations** list, select a <destination> to edit; in the right-hand pane, locate **Destination Tasks** and click **Edit Destination**.




A—Destinations List

B—Destination Tasks

4. In the **Destination configuration** window, complete the fields on the **Import settings** tab with the following information.

Panel	Settings
Destination information	<ul style="list-style-type: none"> • Name: Enter a name for the destination. • Description: Enter a description.
Message content options	<ul style="list-style-type: none"> • Import content: <ul style="list-style-type: none"> • Attachments: Imports only email attachments • Body and attachments: Imports the body of the email and the attachment • Body only: Imports only the body of the email and no attachments • Include original content: Enable to include original message content. • Include complete message as EML file: Enable to include original content in EML format. • Originals import mode: If you enable "Include original content" or "Include complete message as EML file," select whether to import the content to Kofax Capture or to save the content to a Kofax Capture batch folder.
Import mode	<ul style="list-style-type: none"> • Convert to: Select the file format to which the Kofax Capture Plug-In should convert files. • Conversion mode: If you select a "Convert to" file format, specify whether to convert the both the message body and attachment (All Content) or to convert only non-image parts of the message. • Image format: 300x300 B/W • Message rendering VRS: None
Batch settings	<ul style="list-style-type: none"> • Batch size: 1 (Default) • Batch timeout: 300 (Default) • Batch priority: 5 (Default)

5. Select the **Import mappings** tab, and complete the form using the following information.

Option	Setting
Batch class	<ul style="list-style-type: none"> MarkView Document: Recommended setting MarkView Invoice: For importing into Kofax Transformation Modules <p> For environments with multiple instances, select the instance batch class to which to import.</p>
Document class	<p>Select a document class based on your Batch class selection. For example, if you select the MarkView Invoice batch class, select the MarkView Invoice document class.</p> <ul style="list-style-type: none"> MarkView Document MarkView Invoice <p>To configure your system to read a bar code on the cover page of the imported document, select (Loose Pages - No document will be used.).</p>
Create document per attachment	<ul style="list-style-type: none"> Enable: Recommended setting Disable: To combine all incoming email attachments as a single MarkView document
Folder class	Undefined: Recommended setting
Form type	<p>Select the Form type based on your Batch class selection. For example, if you select the MarkView Invoice batch class, select the MarkView Invoice form type.</p> <ul style="list-style-type: none"> MarkView Document MarkView Invoice <p>To configure your system to read a bar code on the cover page of the imported document, select (Undefined Form Type - No Form Type will be used.).</p>

6. At the bottom of window, change the settings for sub tab fields as described next. For fields not described, keep the default settings. For information about using RequireCategorizationInCapture, AlwaysStopForReview, and ReviewQueue, see [Set up Kofax Capture and Kofax Transformation Modules for MarkView](#) on page 142.

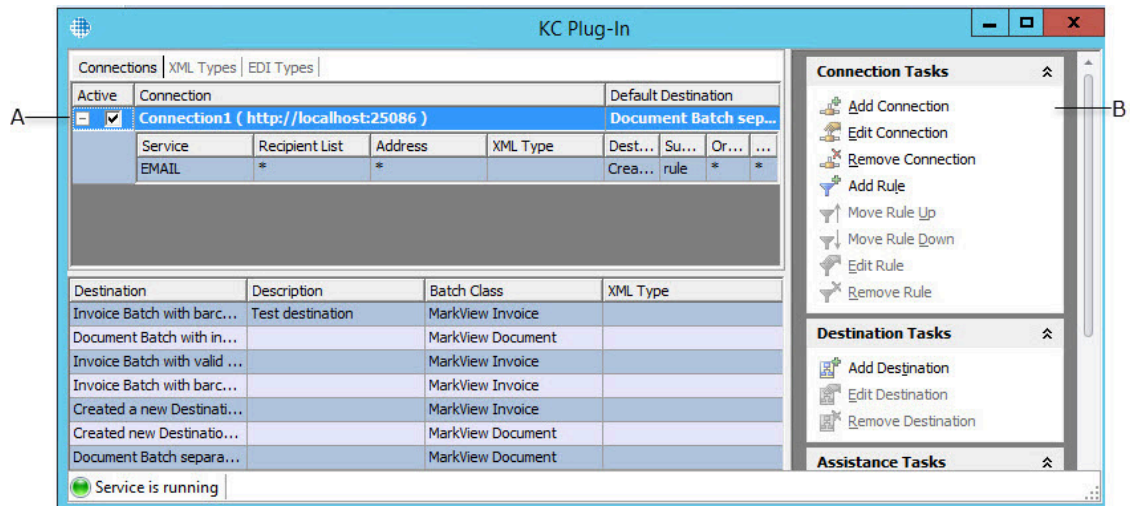
Sub Tab Name	Field or Index Name	Value
Batch Fields	AlwaysStopForReview	Disable (default): 0 (FALSE) Enable: 1 (TRUE)
	BatchName	The name you specify appears as the origin information on MarkView documents. If internal users forward emails that have informative subject lines, set this value to Message Field > KfxMessageSubject.
	Kofax.MarkView. BarCodeSepSearch	^(CP DT)ID-

Sub Tab Name	Field or Index Name	Value
	MailTo	KfxRecipientTo If you enter a list of addresses, only the first address in the list is used.
	MailCc	Not used.
	MailFrom	KfxOriginatorNumber
	MailFromName	KfxOriginatorName
	MailSubject	KfxMessageSubject
	RequireCategorizationInCapture	<ul style="list-style-type: none"> • 1 (ON) • 0 (OFF)
	ReviewQueue	Scan (default) QC
Folder Fields	Keep the default settings	
Document Fields If you selected (Loose-Pages - No document will be used.) as the Document Class , the Document Fields are empty.	BarCode	<ul style="list-style-type: none"> • Set a constant value using a bar code string from the bar code cover sheet. • To route documents to manual review, create a cover sheet for an Uncategorized Document and use that bar code string.
	Comment	Leave blank. This option creates a sticky note on the MarkView document with the comment that you specify here.
	Kofax.Separation.BarCodeValue	The value you set in this field takes precedence over the value set in the BarCode field. <ul style="list-style-type: none"> • Set a constant value using a bar code string from the bar code cover sheet. • To route documents to manual review, create a cover sheet for an Uncategorized Document and use that bar code string.
	ScanStationID	For location filtering in MarkView, set to a location name, such as TORONTO, HOUSTON.
Advanced Fields	Leave fields empty.	

7. Click **OK**.

Configure connections

- In the right-hand pane of the Kofax Capture Plug-In window, locate the **Connection Tasks** and proceed as follows:
 - Click **Add Connection**.
 - In the top half of the window, select a connection to edit, go to the Connection Tasks pane, and click **Edit Connection**.



A—Connections List

B—Connection Tasks

- In the **Connection configuration** window, configure the following options:
 - Connection name:** Use a generic name
 - Message Connector URL:** Enter the URL of the computer where Message Connector is running.
 - For a secure connection, use `https://<address:port>`.
 - For a non-secure connection, use `http://<address:port>`.
 - Default destination:** Specify the default destination to associate with import connections that you configure.
- To validate the connection, click **Test Connection**.

i If validation fails, you might need to perform additional configuration. See the Kofax Import Connector documentation or consult with your Kofax Capture administrator.

- Under **Import Connectors**, click **Add** and select **Mailbox Import** to set up a mailbox import connector.
Set up one mailbox per organization-workflow-priority combination.

Option	Setting
Display name	Enter a descriptive, unique <name> for this mailbox.
Host	Enter the POP3 or IMAP <host name> of the inbound mail server.

Option	Setting
Protocol	Select the protocol to use for accessing the mailbox. <ul style="list-style-type: none"> • IMAP • POP3
SSL	Select the security option to use: <ul style="list-style-type: none"> • NEVER • ALWAYS • NEGOTIATE
User name	(Required) Enter the User name associated with the mailbox.
Password	(Required) Enter the Password associated with the user name for the mailbox.

For more information about setting up access to mailboxes and other import connectors, see the *Kofax Import Connector Administrator's Guide*.

5. To test the settings, click **Test Mailbox**.

You should see a successful connection message.

If the test fails, check with your mail server administrator to verify that you supplied the correct information.

6. Click **OK** to save the import connector settings, and **OK** again to save the Connection settings.

7. Restart the Kofax Capture Plug-In service to activate your configuration changes.

Map mailboxes to destinations

Map each mailbox to a corresponding destination using the following procedure as a guideline. For details, see the Kofax Import Connector documentation.

1. In the Kofax Capture Plug-In window, select a <connection>, go to the **Connection Tasks** pane, and click **Add Rule**.
2. Complete the form using the following settings:

Option	Setting
Service filter	Select EMAIL .
Recipient list	Enter the <email address> of those to receive documents from this mailbox. Separate multiple email addresses with commas.
Address	Enter the <email address> from which Message Connector receives the document. Kofax Capture imports documents with this address to the configured destination.
Destination	Select a <destination> in the list. If you do not see any destinations, see Set up destinations on page 147 to set up destinations.

3. Click **OK**.

4. If prompted to restart the service, click **Yes**.

Configure the email subject to override bar codes

In addition to configuring email accounts for specific categorizations, Kofax Capture can read the text version of a MarkView bar code string. To enable this feature, complete the following procedure.

Verify that you have a dedicated email server that can be polled from the Kofax Capture server for the subject line override.

1. Configure the mailbox.
2. Set up a new destination (see [Set up destinations](#) on page 147).
3. On the **Destination configuration** window, select the **Import mappings** tab.
4. Under **Document fields**, locate the **BarCode** row or the **Kofax.separation.BarcodeValue** row.
5. In the row to set, click the **Value** column and select **Message Fields > KfxMessageSubject**.
6. (Optional) If you reuse the field for location filtering, add a location to the ScanStationID Value field.

i To prevent the need for each user to generate a bar code for each use, an administrator can generate a set of bar codes in production and distribute them along with a chart. For example:

- OU (Organization): ORG1
- Document Type: PO Invoice
- Priority: Normal
- Mail Subject (Bar Code String): DTID-10\$CPID-190846\

Use the bar code override

To email copies of invoices into the MarkView workflow when you do not have a dedicated mailbox for the document type-organization-priority combination, send the attachment in an email to the address that you configure using the instructions in [Configure the email subject to override bar codes](#) on page 152.

1. Using the chart provided, look up the bar code string based on the Organization (OU), Document Type, and Priority.
2. Copy and paste the bar code string into the email subject line. Verify that you do not add leading or trailing characters to the string.
3. In the body of the email, add information (such as the document type, organization, priority, or notes) to help the administrator with troubleshooting in case the conversion fails.

Chapter 12

Integration with Kofax Analytics for MarkView

This chapter gives you information about settings needed to maintain and optimize Kofax Analytics for MarkView performance if you plan to use this Kofax product. Follow the steps in this chapter after you installed Kofax Analytics for MarkView according to the *Kofax Analytics for MarkView Administrator's Guide*.

About Kofax Analytics for MarkView

Kofax Analytics for MarkView is an extension of Kofax MarkView that produces a graphical business intelligence dashboard based on near real-time data collected during the batch processing workflow. Kofax Analytics for MarkView presents finance processes data in graphical and interactive views.

Kofax Analytics for MarkView is a browser-based product built on Kofax Insight. Kofax Insight is a process intelligence platform that monitors, analyzes and helps optimize your operational business activities to ensure compliance, eliminate risk and provide insight and visualization of all information.

Kofax Analytics for MarkView brings together data from the Oracle E-Business Suite system, MarkView, and Kofax Capture with Kofax Transformation Modules workflows to give you strategic information about your business activities. Kofax Analytics for MarkView provides the insight and metrics required to analyze the effectiveness of business processes.

With Kofax Analytics for MarkView you can:

- Prioritize daily activities
- Take advantage of available discounts
- Check for duplicate invoices and possible compliance violations
- Review invoice summary data
- Take action to meet key performance indicators
- Review invoice full history and status
- Optimize cash resources

Enable Kofax Analytics for MarkView in the Kofax MarkView Export Connector (optional)

Skip this step if you do not want to use Kofax Capture and Kofax Transformation Modules with Kofax Analytics for MarkView.

Perform the following steps for all systems where Kofax MarkView Export Connector is installed.

1. In the Kofax MarkView Export Connector installation directory, locate the Kofax.MarkViewExport.Notifier.dll.config file and open it for editing.
2. To enable Kofax Analytics for MarkView, locate the "EnableKofaxAnalytics" key and set the value to true as follows:

```
<appSettings>
  <add key="EnableKofaxAnalytics" value="true"/>
  ...
</appSettings>
```

3. Save the .config file and reopen Kofax Capture.

Configure access to Kofax Analytics for MarkView

Configure your MarkView menu to access Kofax Analytics for MarkView from MarkView.

1. Log in to MarkView and navigate to **Administration > Module Admin**.
2. Select the **Menu Item** tab.
3. Scroll to the bottom of the page and click **Insert**.
4. Complete the form and click **Insert** again to save the changes.
 - **Menu Name:** Main Menu
 - **Menu Sequence:** Next available value for Main Menu items.
 - **Item Type:** URL
 - **Default Item Label:** The name that appears in the interface, such as Kofax Analytics for MarkView.
 - **Item Value:** The URL link to the Kofax Analytics for MarkView home page in the following format:
http(s) ://<host>:<port>/Insight/View/
Where <host> is the name of the server where you installed Kofax Insight and <port> is the port used by Kofax Insight.
 - **MV Home Aware:** Y

When you add a menu item, the item remains inactive until you assign it to a user group. For more information about assigning menu items to User Groups, see the *Kofax MarkView Administrator's Guide, Volume 1*.

User authorization in Kofax Analytics for MarkView

The Kofax Analytics for MarkView viewer user is the same as the MarkView user.

Verify that a user profile meets the following requirements:

- The user is enabled in MarkView.
- The user is added to the MV Analytics user group.

i You can create a number of groups for Kofax Analytics for MarkView to add different set of organizations.

When you create the Kofax Analytics for MarkView user group, specify the group name as follows:

"MV Analytics - xxx", where "- xxx" is a unique value.

- The MV Analytics user group is assigned for at least one organization in MarkView.

After a user is added to MarkView, verify that the viewer user follows the procedures in this section to ensure that data appears on the Kofax Analytics for MarkView viewer as expected.

1. To access Kofax Analytics for MarkView, open a web browser and enter the URL such as `http(s)://<host>:<port>/Insight/View`, where `<host>` is the name of the server where you installed Kofax Insight and `<port>` is the port used by Kofax Insight.

i The URL address is defined by the settings used for IIS during Kofax Insight installation.

2. Log in to Kofax Analytics for MarkView using the MarkView user name and password.
3. Verify that you have access to the predefined data for organizations.

i Kofax Analytics for MarkView supports all organizations that a user is authorized in MarkView and Oracle EBS.

User authorization for invoice actions in MarkView

Kofax Analytics for MarkView lets authorized users take actions on invoices. You can Increase Priority, Reassign, or Escalate an invoice.

The MarkView administrator sets the access to Kofax Analytics for MarkView invoice actions in MarkView.

Increase Priority

The Increase Priority action is available with standard MarkView installation. To set the access to the Increase Priority action:

1. Log in to MarkView and navigate to **Administration > MarkView Admin**.

2. Select the **Toolsets** tab and click **Add**.
3. Enter the toolset name such as Analytics Toolset and the sequence, and click **Save**.
4. To create new mapping between the new toolset and the existing MarkView tools, select the **Toolsets Tool** tab and click **Add**.
5. Click **Select Tool** and in the List of Values, locate the **Increase Priority** Tool.
6. Add the **Increase Priority** Tool to the appropriate Analytics Toolset and click **Save**.
7. Open User Groups and select the appropriate MV Analytics group or create a new one for users that must be authorized for Increase Priority action.
8. Open details, select the **Document Toolset Auths** tab, and click **Add** to add new document-toolset authorization mapping.
9. In the **Document Type** field, select **ALL**.
10. In the **Toolset** field, select the toolset that you created for the Increase priority action such as Analytics Toolset and click **Save**.

After you added the **Increase Priority** Tool to the appropriate User Group, the members of this group are authorized to use the Increase Priority action in Kofax Analytics for MarkView.

Reassign

To set the access to the Reassign action:

1. Log in to MarkView and navigate to **Administration > MarkView Admin**.
2. Select the **Tools** tab and locate **Reassign Document** Tool in the list.
 - If you have the **Reassign Document** Tool, follow the same process to add the tool to the appropriate user group as for the **Increase Priority** Tool.

After you added the **Reassign Document** Tool to the appropriate User Group, the members of this group are authorized to use the Reassign action in Kofax Analytics for MarkView.
 - If you do not have the **Reassign Document** Tool, select the **User Groups** tab and create a new MarkView group and add users.

The user group name must be MV ANALYTICS REASSIGN which is case-insensitive.

Escalate

To set the Escalate Document action:

1. Log in to MarkView and navigate to **Administration > MarkView Admin**.
2. Select the **Tools** tab and locate **Escalate Document** Tool in the list.
 - If you have the **Escalate Document** Tool, follow the same process to add the tool to the appropriate user group as for the **Increase Priority** Tool.

After you added the **Escalate Document** Tool to the appropriate User Group, the members of this group are authorized to use the Escalate action in Kofax Analytics for MarkView.
 - If you do not have the **Escalate Document** Tool, select the **User Groups** tab and create a new MarkView group and add users.

The user group name must be MV ANALYTICS ESCALATE which is case-insensitive.

i If you do not have Reassign Document or Escalate Document Tool installed in MarkView, Action History in MarkView Viewer does not display new items after reassign or escalate action in Kofax Analytics for MarkView.

Enable Kofax MarkView Export Connector notifications

If you want to use Kofax Analytics for MarkView with Kofax Capture and Kofax Transformation Modules, enable the integration after you install Kofax MarkView Export Connector. Perform the following steps for all systems where Kofax MarkView Export Connector is installed.

1. In the Kofax MarkView Export Connector installation directory, locate the Kofax.MarkViewExport.Notifier.dll.config file and open it for editing.
2. To enable Kofax Analytics for MarkView, locate the "EnableKofaxAnalytics" key and set the value to true as follows:

```
<appSettings>
  <add key="EnableKofaxAnalytics" value="true"/>
  ...
</appSettings>
```

3. Save the .config file and reopen Kofax Capture.

Chapter 13

Make other updates after applying an Oracle Applications patch

Add MarkView classes to the EBS class path (Oracle EBS 12.2 only)

After running the Oracle Objects installer on Oracle EBS 12.2, you must add the MarkView classes to the \$JAVA_TOP/customall.jar file that is on the EBS class path by following the steps in this section. If you do not add the MarkView classes, you may encounter errors while working with Oracle Forms, for example an unexpected error may occur in the iExpenses module.

1. Run the Oracle Adadmin utility to generate the new jar files.
 - a. In the Oracle Adadmin utility, select option **1: Generate Applications Files menu**.
 - b. Select option **4: Generate product JAR files**.
 - c. If you wish to force regeneration of all jar files, when prompted, enter **Y**.
2. Restart Oracle EBS Applications.

Redo modifications

When an Oracle Applications patch is applied to the system, it is often a standard implementation without modifications. Therefore, some integration changes may be lost if an Oracle Applications patch is applied. While the exact changes are patch-dependent, you should verify and, if necessary, complete the following tasks after applying any Oracle Applications patch:

Reapply modifications to SFXINWKB

To apply modifications to the latest version of the form:

1. Back up your existing **SFXINWKB.fmb** file (located in \$c_MARKVIEW_TOP/forms/US) to a safe location.
2. Copy the new **APXINWKB.fmb** file to \$c_MARKVIEW_TOP/forms/US.
3. Rename the **APXINWKB.fmb** file as **SFXINWKB.fmb**.
4. Integrate the new version of the form.

Reapply modifications to Expense

To reapply your modifications to the Expense, rerun the Oracle Objects installer and re-install the AP_WEB_OA_CUSTOM_PKG:

1. On the Oracle E-Business Suite server, navigate to **<distribution_directory>/installer/bin**, where **<distribution_directory>** is the temporary distribution directory.
2. Run **./install.sh** to start the installer.
3. Select **OA Framework Integration for Expense**.
4. Follow the prompts for a Partial Install.
5. Re-install the AP_WEB_OA_CUSTOM_PKG in the Oracle Applications schema.
6. Reconfigure Expense Management. See the *Kofax MarkView Installation Guide* for the information about performing the expense management configuration.

Observe best practices

After applying an Oracle patch update, we strongly recommend that you follow the same best practices prescribed in the "Software Support for Upgrades and Bug Fixes" section of your Software Support Terms and Conditions.

As part of your software support, you are entitled to technical support assistance for software upgrades and bug fixes to troubleshoot and diagnose any incidents which may arise. All incidents will be addressed through the software support process described in the Software Support Terms and Conditions.

Before upgrading, consider contacting Kofax to discuss options for analyzing the overall impact of these product upgrades on the MarkView implementation.

It is required policy that all system changes be applied in your test environment and be tested thoroughly before migrating such system changes into a production environment.

For more information, see the detailed list of steps and best practices outlined in your copy of Software Support Terms and Conditions. This is an overview of these procedures:

- Back up the TEST system.
- Perform the upgrade in the TEST environment.
- Unit test the fix.
- Perform a User Acceptance Test of the changed TEST system.
- Back up the PROD system.
- Install in PROD during scheduled system downtime.
- Test PROD system before normal Production uptime.

Appendix A

Troubleshoot your upgrade

This appendix identifies conditions you might encounter and suggests ways to resolve them. For more information, see the Release Notes and the [Kofax Knowledge Base](#).

JVM location errors

If you encounter problems related to locating a JVM, take the following steps:

1. Use the `java -version` command to check your environment path for a valid version. For the version supported, see the *Kofax MarkView Technical Specifications* document on the [Kofax MarkView Product Documentation site](#).
2. If the version returned is not supported, specify the Java version to determine how your path resolves.

Invalid JDK errors

Errors related to an invalid JDK vary depending on your platform, but the problem is usually caused by the location of the JDK in the path. To resolve the problem, modify your path environment variable so that the JDK version appears before all other JDKs, JREs, and JVMs.

Too many open files

The error "java.io.FileNotFoundException: Too many open files" indicates that open files limit on your system should be increased.

UNIX: increase `ulimit nofile` setting (max number of open files).

Appendix B

Migrate environments

Migrate your MarkView production environment to a non-production environment to test new functionality, train new users, or troubleshoot issues which you might encounter in your production environment. Use a third-party tool to clone the MarkView production database. Then, use the MarkView Migration utility to generate an SQL script to update the environment-specific MarkView URLs and design-time data on the non-production environment.

Also, you can use the MarkView Migration utility to move to a new application server without upgrading MarkView.

To migrate Kofax Analytics for MarkView from a production to non-production environment, additional setup is required. For more information, see the *Kofax Analytics for MarkView Administrator's Guide*.

- **Migrating Data to Existing Non-Production Environments:** If you already have a functioning non-production environment, refresh the database with a more recent copy of the production environment. See [Migration Utility: Configure an existing non-production environment](#).
- **Migrating Data to New Non-Production Environments:** If you need a new non-production environment, see [Configure a new non-production environment](#) on page 164.

Migration Utility: Configure an existing non-production environment

Follow these steps before you use the Migration Utility:

1. Copy your production database schema to your non-production database.
2. Copy your production document server to your non-production document server.
3. Log in to a working MarkView environment (for example, your production environment) as an Administrator who is a member of the MODULE ADMINISTRATOR group.
4. Select **Administration > Migration Utility**.

Use the Migration Utility

1. Complete the values for your site using the following information.

Section	Field Name	Description
Application Server Post Migration	Application Server	<ul style="list-style-type: none">• WebLogic• JBoss (use for WildFly and JBoss EAP)

Section	Field Name	Description
	Fully Qualified Hostname	Enter the fully qualified hostname of the target application server.
	HTTP Port	Enter the HTTP port of the target application server.
Configuration to be Updated to Reference Application Server Post Migration	Preferences	Select to update the MarkView preference URLs to use the target application server.
	Volume Paths	Select to update the MarkView volume paths to use the new application server.
	Volume Path To Leave Open	If you select Volume Paths , select the Volume Path To Leave Open in the list. Values include: <ul style="list-style-type: none"> • Close All • DEVELOPMENT • PRODUCTION • TEST
	Menu Items	Select to update the MarkView menu item URLs to use the new application server.
	Export Server Queue Assignments	Select to update the MarkView export queue assignments to use the new application server.
Data Cleanup Tasks	Enable SSL (HTTPs) on Application Server	Select to update the MarkView URLs to use HTTPs. This option also generates the SQL to update the WEBCLNT_HTTP_TYPE to the correct value (http or https) depending on whether SSL is enabled.
	SSL Wallet Location	If you select Enable SSL (HTTPs) on Application Server , enter the SSL Wallet Location. (Required for SSL wallets only.)
	SSL Wallet Password	If you select Enable SSL (HTTPs) on Application Server , enter the SSL Wallet Password. (Required for SSL wallets only.)
	Clear Pending Export Requests	Select to clear the pending export requests.
	Route New Mail to Complete Mail Queue	Select to route the new mail items to the Complete Mail queue.
	Override Outbound E-mail Destination	Select to update the MarkView Outbound Destination email address override preference, MVT_TEST_EMAIL_ADDRESS, to use a new email address.

Section	Field Name	Description
	E-mail Address	If you select Override Outbound E-mail Destination , enter the email address (required). The email address must meet the RFC2822 standards for valid syntax. See http://tools.ietf.org/html/rfc2822#section-3.4.1 for more information about the RFC2822 standards.
E-Mail Import Configuration	The fields in this section are no longer supported.	

2. Select **Generate SQL** to generate the script and direct where to save the script.
3. Execute the script against the MarkView schema on the target database.

Configure a new non-production environment

If you are configuring a new non-production environment, or the current non-production database was overwritten with your production environment, follow these steps to configure your non-production environment.

1. Follow the instructions in [Before you start](#) to prepare your new non-production environment.
2. Copy your production database schema to your non-production database.
3. Copy your production document server to your non-production document server.
4. Install the MarkView application server.

Install the same MarkView version as in your production environment.

- For point releases, such as MarkView 10.5.0, use the standard installer. Follow the instructions in this guide.
- For service packs, such as MarkView 10.x.x, only apply the service pack. Do not first install the MarkView point release. For example, if your production system is at MarkView 10.x, only apply service pack 10.x.x to the new non-production environment. This is because your database is already at version 10.x.
- If applicable, apply any fix pack to the new non-production application server to bring it to the same level as your production environment.

After the MarkView application server is installed, follow the instructions in [Move to a new application server during MarkView upgrade](#).

5. Refresh the new non-production environment. See [Refresh a new non-production environment](#).

Refresh a new non-production environment

1. Log in to a working MarkView environment (for example, your production environment) as an Administrator who is a member of the MODULE ADMINISTRATOR group.
2. Select **Administration > Migration Utility**.

3. Complete the values for your site using the following information.

Section	Field Name	Description
Application Server Post Migration	Application Server	<ul style="list-style-type: none"> WebLogic JBoss (use for WildFly and JBoss EAP)
	Fully Qualified Hostname	Enter the fully qualified hostname of the target application server.
	HTTP Port	Enter the HTTP port of the target application server.
Configuration to be Updated to Reference Application Server Post Migration	Preferences	Select to update the MarkView preference URLs to use the target application server.
	Volume Paths	Select to update the MarkView volume paths to use the new application server.
	Volume Path To Leave Open	<p>If you select Volume Paths, select the Volume Path To Leave Open in the list. Values include:</p> <ul style="list-style-type: none"> Close All DEVELOPMENT PRODUCTION TEST
	Menu Items	Select to update the MarkView menu item URLs to use the new application server.
	Export Server Queue Assignments	Select to update the MarkView export queue assignments to use the new application server.
Data Cleanup Tasks	Enable SSL (HTTPs) on Application Server	Select to update the MarkView URLs to use HTTPs. This option also generates the SQL to update the WEBCLNT_HTTP_TYPE to the correct value (http or https) depending on whether SSL is enabled.
	SSL Wallet Location	If you select Enable SSL (HTTPs) on Application Server , enter the SSL Wallet Location. (Required for SSL wallets only.)
	SSL Wallet Password	If you select Enable SSL (HTTPs) on Application Server , enter the SSL Wallet Password. (Required for SSL wallets only.)
	Clear Pending Export Requests	Select to clear the pending export requests.
	Route New Mail to Complete Mail Queue	Select to route the new mail items to the Complete Mail queue.

Section	Field Name	Description
	Override Outbound E-mail Destination	Select to update the MarkView Outbound Destination email address override preference, MVT_TEST_EMAIL_ADDRESS, to use a new email address.
	E-mail Address	If you select Override Outbound E-mail Destination , enter the email address (required). The email address must meet the RFC2822 standards for valid syntax. See http://tools.ietf.org/html/rfc2822#section-3.4.1 for more information about the RFC2822 standards.
E-Mail Import Configuration	The fields in this section are no longer supported.	

4. Select **Generate SQL** to generate the script and direct where to save the script.
5. Execute the script against the MarkView schema on the target database.

Appendix C

Customization migration tools

To migrate the MarkView customization data, use a third-party utility to create a production environment image in the non-production environment. After the third-party utility performs the migration, the MarkView configuration data export-import tools extract and merge all MarkView customization data into the database. They are located in the tools directory:

Tool	Description
export-config	Assigns the following to the CONFIG module: <ul style="list-style-type: none">• Volumes and volume paths• URL preferences• URL-type menu items• Export queue assignments• Connector configurations
import-config	Closes all open volumes and merges the data extracted by the CONFIG module into the database.
export-module	Extracts all the data assigned to the module to a file that the import-module can read
import-module	Merges the data from the import-module into the database

The configuration data export-import tools preserve the unique non-production environment settings. The process includes:

- Running the export-config tool in the non-production environment.
- Running a third-party tool to create a production environment image in the non-production environment.
- Running the import-config tool in the non-production environment.

i Use Kofax Capture (KC) Database Utility Application (DBUtil) to migrate the Kofax Capture database and integrate with the Windows file system. Do not use third-party database tools to migrate the Kofax Capture database. See the DBUtil online help for additional information.

Migrate customizations

1. Log in to the application server host operating system as the application server owner and navigate to the tools directory `<distribution_directory>\tools`, where `<distribution_directory>` is the location where you downloaded and decompressed the installation files.

2. UNIX:

```
config.sh <dbHost> <dbPort> <dbSID> <mvuser> <mvpasswd> <configFile>
```

Windows:

```
config.bat <dbHost> <dbPort> <dbSID> <mvuser> <mvpasswd> <configFile>
```

Where:

- <dbhost> is the database server host.
- <dbport> is the MarkView main application server port (default 7777).
- <dbSID> is the database SID name.
- <mvuser> is the MarkView schema user name.
- <mvpasswd> is the password for the MarkView schema user.
- <configFile> is the name of your configuration file.

The message "Configuration is successful" appears when the import is completed. The message also lists the location of a log file with more information about the export.

3. Run the import-config tool to import the data.

Appendix D

Third-party license agreement

BEA Public License Version 2.1

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