Kofax Invoice Processing Agility

Installation Guide

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KOFAX

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Preface

This guide contains information about installing Invoice Processing Agility and assumes that you have a thorough understanding of Windows standards, applications, and interfaces, as well as Kofax TotalAgility.

This guide is for solution integrators who are installing Invoice Processing Agility or who need a description of the installation procedures and requirements.

Related documentation

In addition to this *Kofax Invoice Processing Agility Installation Guide*, the following documentation is available.

- The *Kofax Invoice Processing Agility Administrator's Guide* provides instructions for customizing Invoice Processing Agility so that it meets your specific requirements.
- *Help for Kofax Invoice Processing Agility Scan* provides information on how to scan documents into Invoice Processing Agility.
- *Help for Kofax Invoice Processing Agility* Validation provides information about validating a document in Invoice Processing Agility.

  Additional documentation about validating documents is available in the *Help for Kofax TotalAgility* Validation.

- *Help for Kofax Invoice Processing Agility Solution Configuration Manager* provides detailed information on how to configure Invoice Processing Agility for your environment.
- *Help for Kofax Invoice Processing Agility* Line Pairing Correction provides use cases and examples for correcting a document that fails line pairing.
- *Help for Kofax Invoice Processing Agility* PIX Correction provides detailed information about how to navigate through PIX Correction. It also includes details about how to use PIX Correction when processing documents with Invoice Processing Agility.

For more information on how to access documentation, see Access Invoice Processing Agility documentation.

Training

Kofax offers both classroom and computer-based training that will help you make the most of your Kofax TotalAgility solution. Visit the Kofax website at http://www.kofax.com for complete details about the available training options and schedules.

Getting help for Kofax products

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

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

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

The Kofax Support page provides:
- Product information and release news

  Click a product family, select a product, and select a version number.
- Downloadable product documentation

  Click a product family, select a product, and click **Documentation**.
- Access to product knowledge bases

  Click **Knowledge Base**.
- Access to the Kofax Customer Portal (for eligible customers)

  Click **Account Management** and log in.

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

  Click **Tools** and select the tool to use.
- Information about the support commitment for Kofax products

  Click **Support Details** and select **Kofax Support Commitment**.

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

Chapter 1

System requirements

Information about supported operating systems and other Invoice Processing Agility requirements is available on the Kofax Support website.

For a list of supported operating systems, see the Technical Specification on the Kofax support website.

Software prerequisites

The software prerequisites required prior to the installation of Invoice Processing Agility, are listed as follows.

Kofax TotalAgility 7.5.0

Kofax TotalAgility version 7.5.0 must be installed on the system when installing Invoice Processing Agility 1.1.0.

Internet Information Services

Prior to installing the Solution Configuration Manager for Invoice Processing Agility, you must install Microsoft Internet Information Services (IIS) according to the instructions provided on the Microsoft website. During the installation of IIS, make sure you install the following role services.

- Static Content
- Default Document
- Directory Browsing
- HTTP Errors
- ASP.NET 3.5
- ASP.NET 4.5
- .NET Extensibility 3.5 and 4.5
- HTTP Logging
- Request Monitor

For more information on installing and configuring IIS, refer to the Microsoft documentation.

SAP Client Component

If SAP support is required, download the "SAP .Net Connector x64 3.0.13.1" or newer from SAP. Also, install the assemblies to GAC. (This is offered as an option during the installation.)

Oracle Client Component

If Oracle database access is required, install the Oracle Data Provider for .NET 2 (ODP.NET20) that you can get from the Oracle website.

Localize Invoice Processing Agility

The localization of Invoice Processing Agility is available for these languages.

- English
- French
- German
- Spanish
- Brazilian Portuguese

If the main language of your web browser is set to one of the above languages, the user interface and documentation for Invoice Processing Agility appear in that language automatically. For any other language, and for the administrative documentation, it defaults to English.

However, this localizes the Invoice Processing Agility activities only. Because Invoice Processing Agility is a part of Kofax TotalAgility, it is necessary to install the TotalAgility language packs to ensure a fully localized environment. For more information about localizing Kofax TotalAgility, refer to the *Kofax TotalAgility Installation Guide*.

Note If you have upgraded Kofax TotalAgility from a previous version, the Workspace Package.zip file is needed to install the Kofax TotalAgility 7.5 language packs. However, when you install the Kofax TotalAgility Workspace Package.zip file, this also updates the TotalAgility theme. Unfortunately, this updated theme is not supported by Invoice Processing Agility so it is necessary to change the theme to the classic version.

Important installation notes

The following note is important when installing Invoice Processing Agility.

Administrator Rights

To install the product, the logged on user must have Administrator rights on the local computer.

Database Permissions

It is necessary that the users in the following areas have sufficient database permissions to perform their tasks.

Installation

During installation, multiple databases are created or updated. It is necessary that the user specified has the `db_creator` role to create a database or the `db_owner` role to update a database.

In addition to these roles, users must also have the Connect permission.

Configuration

It is necessary that the users who manage, maintain, and use both the Solution Configuration Manager database and the Invoice Processing Agility client database have the `db_datawriter` and `db_datareader` roles for the various databases.

In addition to these roles, users must also have the Connect and Execute permissions.

If a user in one of these scenarios does not have the necessary database role or permissions, they cannot successfully perform their tasks.

Invoice Processing Agility in an Azure environment

You can deploy Invoice Processing Agility into an Azure hosted Kofax TotalAgility environment. However, there are some limitations using this method of deployment over a traditional installation.

- User exits are not supported.
- SAP, Oracle, and MarkView integrations are not supported.
- PIX is not supported so this means that you cannot process electronic XML invoices.
- ERP data such as purchase order or company data, is provided by an ERP connector only.
- Exporting to Process Director is not supported.
- You cannot use Invoice Processing Agility integrated user management or client group assignments.
- Some Solution Configuration Manager settings are not available for configuration.
- PDF Generation is not supported.
- Document Export is not supported.
- Windows Authentication is not supported.

If you choose to use this deployment method, the Solution Configuration Manager is installed in the on-premises environment. A set of database scripts and a Kofax TotalAgility package is provided for installation into the cloud.

Since no assemblies can be installed on the Azure server, the package includes the following.

- The IPA.dll that contains all dependencies needed to run Invoice Processing Agility in the cloud.
- The Transformation Designer project that contains everything needed to run Invoice Processing Agility in the cloud.

Invoice Processing Agility installation

Invoice Processing Agility processes invoices by extracting and validating data on those documents. It also performs line-pairing so that your back-end ERP system can assign a specific invoice line item to a corresponding purchase order line item.

You can install Invoice Processing Agility on a system where Kofax TotalAgility is installed.

Important If you are using Oracle, ensure that you have installed the prerequisite client.

If you are using SAP, ensure that you have installed the prerequisite connector.

The following steps are for the overall installation of Invoice Processing Agility. Each step contains its own set of instructions and the order is important. Skipping steps that are not optional, or performing steps out of sequence can result in a failed installation.

1. Extract the zip file contents.
2. Run the Invoice Processing Agility Installer in one of the following modes.
   - Full
   - Custom
   - Command Line or silent installation
3. Optionally, change your installation.
4. Configure your installation for your needs.

Extract the ZIP file

All of the installation files necessary to install Invoice Processing Agility are available in the `KofaxInvoiceProcessingAgility-1.1.0.zip` file.

You can extract the contents of the ZIP file by following these steps.

1. Right-click on the zip file and select **Extract**.
2. When prompted, select a location for the extracted files.
   Make a note of this location for further installation steps.

Install Invoice Processing Agility

How you install Invoice Processing Agility depends on your Kofax TotalAgility installation.

In some environments, Kofax TotalAgility is installed on a single server. In other environments, Kofax TotalAgility is distributed across multiple servers. Each environment requires a different approach when installing Invoice Processing Agility.

To help with this, there are three different methods of installing Invoice Processing Agility.

Full

Use the full installation method when installing all Invoice Processing Agility features on the same machine.

Custom

Use the custom installation method to install one or more of the individual Invoice Processing Agility features.

Command Line/Silent Install

Use the command line silent installation method to install one or more of the individual Invoice Processing Agility features. Use this method to install various features on multiple machines at one time, or across a network.

Full installation

Use the full installer to install all available Invoice Processing Agility components.

These components include the following.

- Invoice Processing Agility Assemblies

  These assemblies are installed on this server automatically whenever the Full installer is run. No configuration is required.

  - The following assemblies are installed on this server automatically if their prerequisite components are found on this server.
    - SAP Assemblies
    - Oracle Assemblies
      - MarkView Assemblies

        Important If you are using MarkView, additional manual steps are required once the installer is complete.

- Invoice Processing Agility Client Database Connection
- Kofax TotalAgility Integration
  - Kofax TotalAgility Package
- Solution Configuration Manager

If you do not need all of these components use the Custom installation instead. This enables you to select the specific component(s) that you require.

You can install all of the components for Invoice Processing Agility using the Setup Wizard by following these steps.

1. Navigate to your extracted files and open the **Installer** folder.
   The contents of the **Installer** folder are displayed.

2. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
   The installer opens and calculates if there is enough space on disk for the installation.

3. Once the Install Wizard confirms that there is enough disk space, click **Next**.
   The **End-User License Agreement** Setup Wizard step is displayed.

4. Select **I accept the terms in the License Agreement** and then click **Next**.
   The **Prerequisites** Setup Wizard step is displayed along with any information about missing prerequisites.

5. The information displayed on the **Prerequisites** step is relevant if you are installing the listed components only.

   For example, if you receive a message that the SAP .NET connector is missing, but you are not using SAP, ignore this message. However, if you are using one of the components listed, click **Cancel** and then **Finish** to exit the Setup Wizard, install the required prerequisite, and then restart the installer. Otherwise, click **Next**.

   If you did not install the necessary prerequisites, the corresponding options are not available for installation.

   The **Choose Setup Type** Setup Wizard step is displayed.

6. On the **Choose Setup type** window, select **Full**.
   The **Invoice Processing Agility Client Database Connection** Setup Wizard step is displayed.

7. On the **Invoice Processing Agility Client Database Connection** step, enter the following information to configure your database connection.

   > **Tip** Ensure that the user specified to create this database connection has at least `db_owner` permissions.

   a. Enter a **Database name**.

      A default database name is provided. If you modify the database name, note the name as it is needed later in the installation.

   b. Enter your database **Server name**.

   c. Select your database **Authentication type**.

      If you select Windows Authentication, this means that Integrated Security is used to connect to the client database. If you select SQL Server Authentication, Integrated Security is not used to connect to the client database. If Integrated Security is enabled, some additional manual steps are required later when setting up the database connection for the Solution Configuration Manager.

   d. If you are using **SQL Server Authentication** enter a **User name** and the corresponding **User password**.

   e. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

   f. Once your connection test is successful, click **Next**.

   The **Kofax TotalAgility Connection** Setup Wizard step is displayed.

8. On the **Kofax TotalAgility Connection** step, enter the following information.

   a. If the default Kofax TotalAgility URL that is provided is not correct, update the **TotalAgility URL**.

      For example, `http://<Server name>/TotalAgility/`.

b. Select your **Authentication type** from one of the following options.

- **Authentication by username and password**.
- **Provide Session ID**.

  This ID is found by navigating to the TotalAgility Designer home page. Select **System Settings** > **Settings**.

- **Windows authentication**.

Is you are using **Authentication by username and password** enter a **User name** and **User password**.

If you are using **Provide Session ID**, enter the **Session ID**.

If you are using **Windows authentication**, no further action is required.

c. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

d. Once your connection test is successful, click **Next**.

The **Solution Configuration Manager** Setup Wizard step is displayed.

9. On the **Solution Configuration Manager website** window, enter the following information.

Note A default set of values is presented by this step of the installer. If you do not want to use the default values, enter or select alternative values.

a. Optionally, enter an alternate **Web Site**.

Important A web site must exist in IIS before it can be added here. All other items are created dynamically.

b. Optionally, enter a different **Virtual Directory**.

c. Optionally, enter a different **Application Pool**.

d. Optionally, select a **Pool Identity**.

If you select **Custom Account**, enter a **User name**, **User domain**, and the corresponding **User password**.

e. Click **Next**.

The **Solution Configuration Manager Database** Setup Wizard step is displayed.

10. On the **Solution Configuration Manager Database** step, enter the following information.

Note A default set of values is presented by this step of the installer. If you do not want to use the default values, enter or select alternative values.

a. Optionally, enter an alternate **Database name**.

b. Optionally, enter an alternate **Server name**.

c. Select your **Authentication Type** from one of the following.

- **Windows Authentication**
- **SQL Server Authentication**

Tip Ensure that the user specified here has at least `db_owner` permissions.

      d. If you selected **SQL Server Authentication**, enter a **User name** and **User password**.

      e. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

      f. Once your connection is successful, click **Next**.

    The **Ready to Install Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

11. On the **Ready to install Kofax Invoice Processing Agility 1.1.0** step click **Install** to proceed with your installation.

    Otherwise, click **Back** to return to previous steps in the Setup Wizard.

    A progress indicator shows the progress of the Kofax Invoice Processing Agility installation.

12. Click **Finish**.

    Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

    The installer closes and if selected, the log file opens.

13. Now that you have run the installer, Invoice Processing Agility is installed, but it does not work in your environment. You must now configure your installation so that it works for your environment.

Custom installation

If you do not want to install all of the components of Invoice Processing Agility at the same time, or on the same machine, you can choose which components to install.

If you want to install all components, including the Solution Configuration Manager, use the Full installation instead.

The components and when they are needed is as follows.

The Invoice Processing Agility assemblies

These assemblies must be installed on every server where Kofax TotalAgility is installed. This includes any servers running Transformation Server.

SAP Assemblies

These assemblies are required if you are using SAP only and are available in the list of features if the SAP .NET connector is installed. If this connector is not installed, the SAP assemblies are not available for installation.

These assemblies must be installed on every server where Kofax TotalAgility is installed.

Oracle Assemblies

These assemblies are required if you are using Oracle only and are available in the list of features if the Oracle Data Provider .NET connector is installed. If this connector is not installed, the Oracle assemblies are not available for installation.

These assemblies must be installed on every server where Kofax TotalAgility is installed.

MarkView Assemblies

These assemblies are required if you are using MarkView only and are available in the list of features if the Oracle Data Provider .NET connector is installed. If this connector is not installed, the MarkView assemblies are not available for installation.

These assemblies must be installed on every server where Kofax TotalAgility is installed.

The Invoice Processing Agility client database connection

This database is installed once on a Kofax TotalAgility server or a dedicated database server.

Kofax TotalAgility integration

This updates the Kofax TotalAgility variables that are used by Invoice Processing Agility.

Kofax TotalAgility package

This installs the Invoice Processing Agility package for Kofax TotalAgility. This is installed once and then used by all Kofax TotalAgility servers.

The Solution Configuration Manager

Install the Solution Configuration Manager once for your Kofax TotalAgility environment. This can be on a Kofax TotalAgility server or a dedicated Web Server.

Here are the most common scenarios for installing Invoice Processing Agility with a list of components that are required in each scenario.

- On your Kofax TotalAgility development or production environments you can install all of the Invoice Processing Agility components.

  However, if you have a separate database server, you can point to your database server with this installer. This means the all necessary components for integrating with Kofax TotalAgility are installed, even if they are not on the same server where the installer is executed.

  Also, if you have a separate web server, it is possible to install the Solution Configuration Manager separately on that server. If you have both a development and a production server, a separate Solution Configuration Manager installation is required.

- On Kofax TotalAgility additional servers, install the Invoice Processing Agility assemblies only. This includes any additional assemblies for SAP, Oracle, or MarkView.

- You can install the Solution Configuration Manager only on any server, as long as it is not installed elsewhere already.

  If you are using both a development server and a production server it is necessary that each server has its own separate Invoice Processing Agility client database and Solution Configuration Manager installations.

You can install specific Invoice Processing Agility components using the Setup Wizard by following these steps.

1. Navigate to your extracted files and open the **Installer** folder.
   The contents of the **Installer** folder are displayed.

2. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
   The installer opens and calculates if there is enough space on disk for the installation.

3. Once the Install Wizard confirms that there is enough disk space, click **Next**.
   The **End-User License Agreement** Setup Wizard step is displayed.

4. Select **I accept the terms in the License Agreement** and then click **Next**.
   The **Prerequisites** Setup Wizard step is displayed along with any information about missing prerequisites.

5. The information displayed on the **Prerequisites** step is relevant if you are installing the listed components only.

For example, if you receive a message that the SAP .NET connector is missing, but you are not using SAP, ignore this message. However, if you are using one of the components listed, click **Cancel** and then **Finish** to exit the Setup Wizard, install the required prerequisite, and then restart the installer. Otherwise, click **Next**.

If you did not install the necessary prerequisites, the corresponding options are not available for installation.

The **Choose Setup Type** Setup Wizard step is displayed.

6. Select **Custom** and then click **Next**.
   The **Custom Setup** step is displayed along with a list of available components.

7. On the **Custom Setup** step, a list of features is listed. By default, all of the listed features are configured for installation. If you do not want to install one or more features, select **Entire feature will be unavailable** for each of those features.

   Once you select the necessary components, click **Next**.

   Most of the selected components require further configuration. As a result, depending on what you select, additional Setup Wizard steps are available.

   Use the links below to install each of the following features as appropriate for your installation.

   - Invoice Processing Agility assemblies
   - Invoice Processing Agility client database connection
   - Kofax TotalAgility Integration/package
   - The Solution Configuration Manager

8. Now that you have run the installer, Invoice Processing Agility is installed, but it does not work in your environment. You must now configure your installation so that it works for your environment.

Install Invoice Processing Agility assemblies

For the assemblies, no additional configuration is required.

If the necessary prerequisites for SAP or Oracle are installed, their associated client assemblies are selected automatically. Because of this, it is important to ensure that the desired client assemblies are installed only.

For example, if you have the Oracle prerequisites installed, this enables the MarkView assemblies automatically. If you do not want to install the MarkView assemblies, ensure that they are set to **Entire feature will be unavailable**.

However, if you are using MarkView, some manual steps are required when the installer is complete.

The following steps assume that you are installing the Invoice Processing Agility assemblies only. If you do select additional features, refer back to the Custom install for their individual installation instructions.

You can install the Invoice Processing Agility assemblies and any valid client assemblies by following these steps.

1. On the **Custom Setup** step, ensure that the required **Assembiles** are set to **Will be installed on local hard drive** and then click **Next**.
   The **Ready to install Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

2. Click **Install**.
   A progress bar is shown indicating the installation progress of the selected assemblies.

3. Click **Finish**.

Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

The installer closes and if selected, the log file opens.

Install Invoice Processing Agility client database

Install the Invoice Processing Agility client database once on any Kofax TotalAgility server or a dedicated database server.

The following steps assume that you are installing the Invoice Processing Agility client database only. If you do select additional features, refer back to the Custom install for their individual installation instructions.

You can install the Invoice Processing Agility client database by following these steps.

1. On the **Custom Setup** step, ensure that the Invoice Processing Agility client database is set to **Will be installed on local hard drive** and then click **Next**.
   The **Invoice Processing Agility client database connection** Setup Wizard step is displayed.

2. On the **Invoice Processing Agility client database connection** step, enter the following information.

   a. Enter a **Database name**.

      A default database name is provided. If you modify the database name, note the name as it is needed later in the installation.

   b. Enter your database **Server name**.

   c. Select your database **Authentication type**.

      If you select Windows Authentication, this means that Integrated Security is used to connect to the client database. If you select SQL Server Authentication, Integrated Security is not used to connect to the client database. If Integrated Security is enabled, some additional manual steps are required later when setting up the database connection for the Solution Configuration Manager.

   d. If you are using **SQL Server Authentication** enter a **User name** and the corresponding **User password**.

   e. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

   f. Once your connection test is successful, click **Next**.

   The **Ready to install Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

3. Click **Install**.
   A progress bar is displayed showing the creation or update of the Invoice Processing Agility client database.

4. Click **Finish**.

   Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

   The installer closes and if selected, the log file opens.

Kofax TotalAgility integration and package

If you select Kofax TotalAgility Integration, the Kofax TotalAgility Package is selected automatically. You cannot install one without the other.

The following steps assume that you are installing the Kofax TotalAgility integration and package only. If you do select additional features, refer back to the Custom install for their individual installation instructions.

If you are installing the Kofax TotalAgility integration and package only, it is possible to skip the following steps.

1. Invoice Processing Agility client database connection

2. Solution Configuration Manager

You can skip either or both of these steps if you do not know the Invoice Processing Agility client database connection or the Solution Configuration Manager configuration settings.

However, if you do skip these steps, it is necessary to manually enter this information at a later time.

Once you know the necessary information, you can either run the installer again or you can manually enter the necessary information on the Settings page.

You can install the Kofax TotalAgility integration and package by following these steps.

1. On the **Custom Setup** step, ensure that Kofax TotalAgility Integration and Kofax TotalAgility Package are set to **Will be installed on local hard drive** and then click **Next**.
   The **Invoice Processing Agility client database connection** Setup Wizard step is displayed.

2. On the **Invoice Processing Agility Client Database Connection** step, enter the following information to configure your database connection.

   > **Tip** Ensure that the user specified to create this database connection has at least `db_owner` permissions.

   a. Enter a **Database name**.

      A default database name is provided. If you modify the database name, note the name as it is needed later in the installation.

   b. Enter your database **Server name**.

   c. Select your database **Authentication type**.

      If you select Windows Authentication, this means that Integrated Security is used to connect to the client database. If you select SQL Server Authentication, Integrated Security is not used to connect to the client database. If Integrated Security is enabled, some additional manual steps are required later when setting up the database connection for the Solution Configuration Manager.

   d. If you are using **SQL Server Authentication** enter a **User name** and the corresponding **User password**.

   e. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

   f. Once your connection test is successful, click **Next**.

The **Kofax TotalAgility Connection** Setup Wizard step is displayed.

3. On the **Kofax TotalAgility Connection** step, enter the following information.

   a. If the default Kofax TotalAgility URL that is provided is not correct, update the **TotalAgility URL**.
      For example, `http://<Server name>/TotalAgility/`.

   b. Select your **Authentication type** from one of the following options.
      - **Authentication by username and password**.
      - **Provide Session ID**.
        This ID is found by navigating to the TotalAgility Designer home page. Select **System Settings** > **Settings**.
      - **Windows authentication**.

      Is you are using **Authentication by username and password** enter a **User name** and **User password**.

      If you are using **Provide Session ID**, enter the **Session ID**.

      If you are using **Windows authentication**, no further action is required.

   c. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

   d. Once your connection test is successful, click **Next**.

      The **Solution Configuration Manager** Setup Wizard step is displayed.

4. On the **Solution Configuration Manager** step, enter the **Solution Configuration Manager URL** and then click **Next**.
   The **Ready to install Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

5. Click **Install**.
   A progress bar is displayed showing the creation or update of the Invoice Processing Agility client database.

6. Click **Finish**.

   Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

   The installer closes and if selected, the log file opens.

Install the Solution Configuration Manager

Install the Solution Configuration Manager once for your Kofax TotalAgility environment. This can be on a Kofax TotalAgility server or a dedicated Web Server.

If you are using a Microsoft Azure environment, install the Solution Configuration Manager feature only.

The following steps assume that you are installing the Solution Configuration Manager only. If you do select additional features, refer back to the Custom install for their individual installation instructions.

You can install the Solution Configuration Manager by following these steps.

1. On the **Custom Setup** step, ensure that the Solution Configuration Manager is set to **Will be installed on local hard drive** and then click **Next**.
   The **Solution Configuration Manager** Setup Wizard step is displayed.

2. On the **Solution Configuration Manager website** window, enter the following information.

> **Note** A default set of values is presented by this step of the installer. If you do not want to use the default values, enter or select alternative values.

    a. Optionally, enter an alternate **Web Site**.

> **Important** A web site must exist in IIS before it can be added here. All other items are created dynamically.

    b. Optionally, enter a different **Virtual Directory**.

    c. Optionally, enter a different **Application Pool**.

    d. Optionally, select a **Pool Identity**.

       If you select **Custom Account**, enter a **User name**, **User domain**, and the corresponding **User password**.

    e. Click **Next**.

The **Solution Configuration Manager Database** Setup Wizard step is displayed.

3. On the **Solution Configuration Manager Database** step, enter the following information.

> **Note** A default set of values is presented by this step of the installer. If you do not want to use the default values, enter or select alternative values.

    a. Optionally, enter an alternate **Database name**.

    b. Optionally, enter an alternate **Server name**.

    c. Select your **Authentication Type** from one of the following.

       • **Windows Authentication**

       • **SQL Server Authentication**

> **Tip** Ensure that the user specified here has at least `db_owner` permissions.

    d. If you selected **SQL Server Authentication**, enter a **User name** and **User password**.

    e. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

    f. Once your connection is successful, click **Next**.

The **Ready to Install Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

4. Click **Install**.
A progress bar is displayed showing the creation and configuration of the Solution Configuration Manager database.

5. Click **Finish**.

Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

The installer closes and if selected, the log file opens.

Command Line installation and parameters

It is possible to use the Command Line to install Invoice Processing Agility. This type of installation provides you with more control over configuration settings during installation so that you can remotely deploy the software across the network or onto several machines at once. You can also use the command line if you want to use a silent installation.

You can use the MSI installer if you want to install the software onto multiple machines over a network, and do not want to visit each machine individually.

For example, the following command is one of many examples for installing Invoice Processing Agility.

```
msiexec /i IPAgilitySetup.msi SAP_INSTALLATION_TYPE=0 SCM_INSTALLATION_TYPE=1
```

If a parameter is not included in the command, its default value is used. In the above command, the basic assemblies are installed. Since the SAP assemblies are explicitly listed, those too are installed. All other features with the exception of the Solution Configuration Manager are installed with their default settings.

For more information about the msiexec.exe options, see the Microsoft MSDN description of Command Line options.

The following parameters are available when installing Invoice Processing Agility.

Command Line Parameters

Parameter	Description and Value Options
BASIC_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied.
	The default value for this parameter is 1.
	When this parameter value is set to 1 the basic assemblies required by Invoice Processing Agility are installed.
	When this parameter value is set to 0 the installation of the basic assemblies and all other assembly types are skipped.
	For assemblies, the hierarchy is as follows.
	• Basic assemblies
	• SAP assemblies
	• Oracle assemblies
	• MarkView assemblies
	This hierarchy means that child assemblies can only be installed when their parent is installed.

Parameter	Description and Value Options
SAP_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied.
	The default value for this parameter is 0, but it cannot be installed if the BASIC_INSTALLATION_TYPE=0. This is because the basic assemblies are required for the SAP assemblies.
	When this parameter value is set to 1 the SAP assemblies required by Invoice Processing Agility are installed. However, if the prerequisites for SAP are not installed, this is skipped, even if its value is set to 1.
	When this parameter value is set to 0 the installation of the SAP assemblies is skipped.
ORACLE_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied.
	The default value for this parameter is 0, but it cannot be installed if the BASIC_INSTALLATION_TYPE=0. This is because the basic assemblies are required for the Oracle assemblies.
	When this parameter value is set to 1 the Oracle assemblies required by Invoice Processing Agility are installed. However, if the prerequisites for Oracle are not installed, this is skipped, even if its value is set to 1.
	When this parameter value is set to 0 the installation of the Oracle assemblies is skipped.
MARKVIEW_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied.
	The default value for this parameter is 0, but it cannot be installed if the BASIC_INSTALLATION_TYPE=0. This is because the basic assemblies are required for the MarkView assemblies. Similarly, if the ORACLE_INSTALLATION_TYPE=0, you cannot install the MarkView assemblies.
	When this parameter value is set to 1 the MarkView assemblies required by Invoice Processing Agility are installed. However, if the prerequisites for Oracle and MarkView are not installed, this is skipped, even if its value is set to 1.
	When this parameter value is set to 0 the installation of the MarkView assemblies is skipped.
DATABASE_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied.
	The default value for this parameter is 1.
	When this parameter value is set to 1 the Invoice Processing Agility client database is installed based on several additional SQL parameters.
	When this parameter value is set to 0 the installation of the Invoice Processing Agility client database is skipped.
SQL_SERVER_NAME	This parameter is mandatory if you set DATABASE_INSTALLATION_TYPE=1.
	This is the name of the SQL Server where you want to create the Invoice Processing Agility client database.

Parameter	Description and Value Options
SQL_DATABASE_NAME	This parameter is mandatory if you set `DATABASE_INSTALLATION_TYPE=1`. This is the name of the SQL database. By default, this is set to `InvoiceProcessingAgility_Client`. Edit the database name if necessary.
SQL_AUTHENTICATION_TYPE	This parameter is mandatory if you set `DATABASE_INSTALLATION_TYPE=1`. Set this parameter to `WINDOWS` for Windows Authentication. Alternatively, set it to `SQL_SERVER` to use SQL Server authentication. If you select Windows Authentication, this means that Integrated Security is used to connect to the client database. If you select SQL Server Authentication, Integrated Security is not used to connect to the client database. If Integrated Security is enabled, some additional manual steps are required later when setting up the database connection for the Solution Configuration Manager.
SQL_USER_NAME	This parameter is mandatory if you set `SQL_AUTHENTICATION_TYPE=SQL_SERVER`. Set this parameter to the name of the SQL user.
SQL_USER_PASS	This parameter is mandatory if you set `SQL_AUTHENTICATION_TYPE=SQL_SERVER`. Set this parameter to the password of the SQL user.
SKIP_DATABASE_INT	This parameter is required in one specific scenario only. It is available only if `KTA_INT_INSTALLATION_TYPE=1` and `DATABASE_INSTALLATION_TYPE=0`. In this case, it is possible to skip updating the database variable in Kofax TotalAgility if you do not have the database details to hand. The database configuration can be done at a later time.
KTA_INT_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied. The default value for this parameter is 1. When this parameter is set to 1 the Kofax TotalAgility variables that are used by Invoice Processing Agility are updated. When set to 0, no variables are updated and the Kofax TotalAgility package is not installed.
KTA_PKG_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied. The default value for this parameter is 1. When this parameter is set to 1 the Invoice Processing Agility package for Kofax TotalAgility is installed. When set to 0, the package is not installed. This is a child of `KTA_INT_INSTALLATION_TYPE`. This means that you cannot install the child without installing the parent.
KTA_URL	This parameter is mandatory if you set `KTA_INT_INSTALLATION_TYPE=1`. Enter the name of the URL used by Kofax TotalAgility.

Parameter	Description and Value Options
KTA_LOGIN_TYPE	This parameter is mandatory if you set KTA_INT_INSTALLATION_TYPE=1. This parameter can be set to the following authentication types. • WINDOWS for Windows authentication • USERNAMEANDPASSWORD for Kofax TotalAgility local authentication • SESSIONID for session-specific authentication
KTA_USERNAME	This parameter is mandatory if you set KTA_LOGIN_TYPE=USERNAMEANDPASSWORD. Enter the Kofax TotalAgility user name.
KTA_PASSWORD	This parameter is mandatory if you set KTA_LOGIN_TYPE=USERNAMEANDPASSWORD. Enter the Kofax TotalAgility user password.
KTA_SESSIONID	This parameter is mandatory if you set KTA_LOGIN_TYPE=SESSIONID. Enter the Kofax TotalAgility session id.
SCM_INSTALLATION_TYPE	This parameter is mandatory and must be included in the installation command. If this parameter is not included, its default value is applied. The default value for this parameter is 1. When this parameter is set to 1 the Solution Configuration Manager is installed based on several additional SCM parameters.
SCM_WEBSITE_NAME	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. This is the name of the IIS Web Site that you want to use. By default, this is set to the Default Web Site.
SCM_VIRTUAL_DIR_NAME	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. This is the name of the IIS Virtual Directory you want to use. This is set to IPASCM by default.
SCM_POOL_NAME	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. This is the name of the IIS Pool name. This is set to SCMAppPool by default.
SCM_POOL_IDENTITY_TYPE	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. Choose from one of the following identity types for your application pool. • LOCALSERVICE • LOCALSYSTEM • NETWORKSERVICE • APPPOOLIDENTITY • CUSTOMACCOUNT
SCM_POOL_USERNAME	This parameter is mandatory if you set SCM_POOL_IDENTITY_TYPE=CUSTOMACCOUNT. Enter the name of the user for the IIS Pool.
SCM_POOL_USERDOMAIN	This parameter is mandatory if you set SCM_POOL_IDENTITY_TYPE=CUSTOMACCOUNT. Enter the domain of the user for the IIS Pool.

Parameter	Description and Value Options
SCM_POOL_USERPASSWORD	This parameter is mandatory if you set SCM_POOL_IDENTITY_TYPE=CUSTOMACCOUNT. Enter the password of the user for the IIS Pool.
SCM_SQL_SERVER_NAME	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. Enter the SQL Server name.
SCM_SQL_DATABASE_NAME	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. Enter the SQL database name. By default, this is set to IPASCM. Change this as necessary.
SCM_SQL_AUTHENTICATION_TYPE	This parameter is mandatory if you set SCM_INSTALLATION_TYPE=1. Set this parameter to WINDOWS for Windows Authentication. Alternatively, set it to SQL_SERVER to use SQL Server authentication.
SCM_SQL_USER_NAME	This parameter is mandatory if you set SCM_SQL_AUTHENTICATION_TYPE=SQL_SERVER. Set this parameter to the name of the SQL user.
SCM_SQL_USER_PASS	This parameter is mandatory if you set SCM_SQL_AUTHENTICATION_TYPE=SQL_SERVER. Set this parameter to the password of the SQL user.
SKIP_SCM_INT	This parameter is required in one specific scenario only. It is available only if KTA_INT_INSTALLATION_TYPE=1 and SCM_INSTALLATION_TYPE=0. In that case, it is possible to skip the Solution Configuration Manager URL step if you do not have the web server details to hand. The Solution Configuration Manager URL can be entered at a later time.
SCM_URL	This parameter is required in one specific scenario only. It is available only if KTA_INT_INSTALLATION_TYPE=1 and all other steps are set to 0. Enter the Solution Configuration Manager URL.

Important Some of the above parameters work in a hierarchy. This means that if your command explicitly installs a child, but explicitly does not install the parent, neither are installed.

For example, your command includes the following installation type parameters.

```
BASIC_INSTALLATION_TYPE=0 SAP_INSTALLATION_TYPE=0 ORACLE_INSTALLATION_TYPE=0
MARKVIEW_INSTALLATION_TYPE=1
```

In this scenario, even though you want to install the MarkView assemblies, nothing is installed. This is because the MarkView assemblies are a child of the Oracle assemblies, which are also a child of the basic Invoice Processing Agility assemblies.

If you want to install MarkView assemblies, you need to add the following parameters to your command.

```
BASIC_INSTALLATION_TYPE=1 SAP_INSTALLATION_TYPE=0 ORACLE_INSTALLATION_TYPE=1
MARKVIEW_INSTALLATION_TYPE=1
```

Silent Install

If you do not want to perform an interactive installation of Invoice Processing Agility, you can use a silent installation. This automatic installation does not display configuration, progress, feature information or warning messages. It does however, display any error messages.

The following parameters can be added to the command line for a silent installation.

Parameter	Description and Value Options
`/?` or `/h`	Displays the help for the command.
`/quiet`, `/q`, or `/qn`	Runs the installer with no user interaction.
`l*v [filename]`	Writes the installer log messages to the specified file.
`/x`	Removes the product.
`/i`	Installs the product.
`<property>=<value>`	Passes additional parameters to the installer.

You can install Invoice Processing Agility using the silent install by following these steps.

1. Locate the **Command Prompt** on your computer.

   If you are an Administrator, double-click to open the application. If you are not an Administrator, right-click and select **Run as administrator**.

   The **Command Prompt** opens.

2. Navigate to where you extracted the ZIP file and the installer.

3. Enter the command to install the features that you need.

   For example, use the following command to silently install the base assemblies, the client database, Kofax TotalAgility integration, and the Kofax TotalAgility package, but not the Solution Configuration Manager. In addition, a log records the installation steps

   ```
   msiexec /i IPAgilitySetup.msi /l*v IPAgilitySetupLOG.txt /quiet
    SCM_INSTALLATION_TYPE=0
   ```

   If a feature is excluded from a command, it is assumed that you want to use its default installation behavior. The default behavior for `BASIC_INSTALLATION_TYPE`, `DATABASE_INSTALLATION_TYPE`, `KTA_INT_INSTALLATION_TYPE`, and `KTA_PKG_INSTALLATION_TYPE` is to install them. This is why these features are not included in the above command. In addition, the `SCM_INSTALLATION_TYPE` default is also to install this feature. In this command however, we override the default value by including it in the command and explicitly saying not to install the Solution Configuration Manager.

   See the command line parameters for more information about default behavior and possible

4. Now that you have run the installer, Invoice Processing Agility is installed, but it does not work in your environment. You must now configure your installation so that it works for your environment.

On-premise installation for Invoice Processing Agility hosted on Microsoft Azure

After Kofax provides your credentials to log on to Invoice Processing Agility in the cloud, it is necessary to install additional on premise-components to use Invoice Processing Agility.

The following components are required.

1. Install the Kofax TotalAgility Integration Server.

   For more information, see the *Kofax TotalAgility Integration Server Installation Guide*.

2. Extract the `KofaxInvoiceProcessingAgilty-1.1.0.zip` file.

3. Install the Solution Configuration Manager by excluding all other features on the installer.

   For more information, see Install the Solution Configuration Manager

4. Once installed, configure the Solution Configuration Manager.

   For more information, see Configure the Solution Configuration Manager .

5. Install or configure your ERP connector.

   For more information, see Enterprise Resource Planning system connectors

Configure Invoice Processing Agility

After installing Invoice Processing Agility, it is necessary to make some configuration changes to Kofax TotalAgility depending on your needs.

The following steps are for the configuration of Invoice Processing Agility. Each step contains its own set of instructions and the order is important. Skipping steps that are not optional, or performing steps out of sequence can result in a failed installation.

1. Update the default style sheet used by Kofax TotalAgility.

2. Configure resource access.

3. Optionally, if you are using Windows Authentication, configure the authentication type and timeout session behavior.

4. Create CSV files for required database lookups.

5. Update references to the CSV databases in the Transformation Designer.

6. Optionally, modify the recognition engines in theTransformation Designer.

   This step is necessary only if you are processing documents in languages other than English.

7. Optionally, configure your MarkView settings.

8. Prepare ingestion.

   • Configure filesystem ingestion.
   • Configure scan ingestion.
   • Configure email ingestion.

9. Configure page image renditions.

10. Optionally, install PIX.

11. Restart services.

Update the Kofax TotalAgility theme form style sheet

By default, Kofax TotalAgility uses a style theme that does not display the Validation and the Line Pairing Correction forms in an ideal manner. As a result, it is recommended that you change the Theme and Style Sheet in Kofax TotalAgility to use previous versions that work well with the Invoice Processing Agility forms.

If you do not make these changes your forms are displayed out of alignment, and they are hard to read.

You can update the theme and style sheet used by the forms in Kofax TotalAgility by following these steps.

1. Logon to the TotalAgility Designer.

2. On the **Home** page, click **Form Designer**.
The **Form Designer** page is displayed.

3. On the **Form Designer** page, from the left pane, click **Themes**.
A list of **Themes** for the **Default Category** are displayed, if any exist.

4. On the left **Themes** pane, select **TotalAgility Forms** from the list.
A list of existing **Themes** is displayed.

5. Select **TotalAgility Workspace**.
The theme for the TotalAgility Workspace is displayed.

6. On the main pane, select **Classic** from the **Desktop Style** list.

7. On the left pane, select **Style Sheets**.
A list of style sheets are displayed for the **Default Category** if any exist.

8. Select **TotalAgility Forms** from the category list.
A list of style sheets are displayed for the **TotalAgility Forms** category.

9. Drag the **WorkspaceTheme.css** style sheet from the left pane to the **Style Sheet** field in the main pane.
The **Style Sheet** is updated.

10. Click **Save**.
The default theme is saved and all forms are now displayed with the supported style.

Configure Windows authentication and session timeout behavior

By default, Invoice Processing Agility is configured so that it does not use Windows Authentication.

If you want to use Windows authentication, you can modify how Invoice Processing Agility works within Kofax TotalAgility so that is uses Windows Authentication. If you do make this authentication change you must also configure the session timeout behavior.

Note If you are using Invoice Processing Agility in an Azure environment you cannot use Windows authentication.

You can configure Invoice Processing Agility to use Windows Authentication and update its session timeout behavior by following these steps.

1. Logon to the TotalAgility Designer.

2. On the **Home** page, click **Form Designer**.
The **Form Designer** page is displayed.

3. In the **Explorer** pane, select **Sites**.
The **Explorer** pane is replaced with the **Sites** pane.

4. From the **Category** list, select **InvoiceProcessingAgility**.
A list of available categories is displayed.

5. Click on the icon to the left of **IPA** and click **Open**.
The **Site** configuration page is displayed.

6. In the left **Consume** pane, select **Form**.

7. From the list, select **InvoiceProcessingAgility**.

A list of available forms is displayed.

8. Drag the **Workspage_Logon_Windows_Authentication** form to the **Default Form** option in the **Desktop Settings** group.

   If you are using the **Tablet Settings** or the **Phone Settings**, make this change there too.

9. Click **Save** in the upper left corner.
   The **Form Designer** page is displayed once more.

10. In the left **Sites** pane, click **< Sites**.
    The **Explorer** pane is displayed.

11. From the **Explorer** pane click **Forms**.
    A list of forms for the selected **InvoiceProcessingAgility** category is displayed.

12. Select the **IPA_SessionTimeout** form.

    When prompted to lock the form, click **Yes**.

    The existing session timeout form is displayed.

13. To make changes to this form, select **Actions** from the lower toolbar at the top of the screen.
    A list of actions is displayed.

14. Select **Redirect1**.
    The redirect form is displayed.

15. In the **Target** field enter the following.

    ```
    ./ipa/Workspace_Logon_Windows_Authentication.form
    ```

16. Click **Release**.
    Your changes are saved and the form is updated.

17. Click **Close** and then return to the **Home** page.

18. Optionally, close the TotalAgility Designer.

Configure resource access

You need to configure resource access in the TotalAgility Designer, so that users can access the Solution Configuration Manager website. You can configure the resource access by following these steps.

1. Login to the TotalAgility Designer.

2. On the **Home** page, click **Resources**.

3. Under **Explorer** on the left pane, click **Resources**.

4. Select the **InvoiceProcessingAgility** category from the menu.
   A list of groups is displayed.

5. Click the Group button (🟢) to the left of the **IPA_Administrators** group.

   If you click on the **IPA_Administrators** link instead of the button, you do not have access to the **Open** option mentioned below.

   Two options for the group are now available.

6. Click **Open**.
   The **Group** page appears with details of the **IPA_Administrators** group.

7. On the main pane, click the Resource button (🟤) next to the large **Members** box.
   A list of Kofax TotalAgility users is displayed on the left pane.

8. Drag one or more users from the left pane to the **Members** box.

9. When you are done adding users, click **Save** at the top.

10. Once users are set up for **IPA_Administrators** group, repeat steps 5 - 8 for the other groups in the **InvoiceProcessingAgility** category except the **Everyone** group.

11. Optionally, close the TotalAgility Designer.

User access permissions

You can set access permissions at the group level so that you can better control access without having to configure access permissions per user.

By default, Invoice Processing Agility has two Resource Groups. This includes:

- `IPAResourceGroup_Scan`
- `IPAResourceGroup_ValidationResources`

The `IPAResourceGroup_Scan` corresponds to the **Scan Resource** option from the **Solution Configuration Manager** > **Global Settings** > **User Management**.

Similarly, the `IPAResourceGroup_ValidationResources` corresponds to the **Validation Resource**, **LPR Correction Resource**, and **PIX Correction Resource** options from the **Solution Configuration Manager** > **Global Settings** > **User Management**.

When a User ID is added to the **Solution Configuration Manager** > **Global Settings** > **User Management**, and the **Scan Resource** option is selected, the user automatically is assigned the same permissions as that Resource Group.

However, even though these Resource Groups are available automatically, no Access Permissions via Kofax TotalAgility are configured when first installed. Because of this, manual Access Permission configuration is required.

Note As you add new Resource Groups, specific access permissions for that group are required.

Example: User Authorization Example

The following example shows three users and how they are distributed between client groups and resource groups.

UserID	Client Group	Domain	Password	ScanResource	Validation Resource	LPR Correction Resource	PIX Correction Resource
r_smith	1	*****	TRUE	FALSE	FALSE	FALSE
c_brown	1	*****	FALSE	TRUE	TRUE	FALSE
c_brown	2	*****	FALSE	TRUE	TRUE	TRUE
j_black	2	*****	FALSE	TRUE	FALSE	FALSE

IPAResourceGroup_Scan
Permissions:
• Reject documents   • Split documents
• Delete documents   • Merge documents
                      • Rotate pages

r_smith
Scan Resource

IPAResourceGroup_Validation_Resources
Permissions:
• Reject documents
• Modify/Read documents
• All other batch-editing operations

IPAResourceGroup_Validation_1
Client Group 1 Validation User

c_brown
Validation Resource

IPAResourceGroup_Validation_2
Client Group 2 Validation User

c_brown
Validation Resource

j_black
Validation Resource

IPAResourceGroup_LPRCorrection_1
Client Group 1 LPR Correction Users

c_brown
Validation Resource

IPAResourceGroup_LPRCorrection_2
Client Group 2 LPR Correction Users

c_brown
Validation Resource

IPAResourceGroup_PIXCorrection_1
Client Group 1 PIX Correction Users

IPAResourceGroup_PIXCorrection_2
Client Group 2 PIX Correction Users

c_brown
Validation Resource

Resource Group permissions

The `IPA_Administrators` resource group requires that the following permissions are enabled in the TotalAgility Designer.

• Read/Write access for Resource
• Read/Write access for CaptureDesign
• Read/Write access for MaintainServer

A member of the `IPAResourceGroup_Scan` resource group only, requires the following permissions in the TotalAgility Designer.

• Reject documents
• Delete documents
• Split documents
• Merge documents

- Rotate pages

A member of the `IPAResourceGroup_ValidationResources` resource group only, requires the following permissions in the TotalAgility Designer.

- Reject documents
- Modify/Read documents
- All other batch-editing operations

If a user is a member of both the `IPAResourceGroup_Scan` resource group and the `IPAResourceGroup_ValidationResources` resource group, they require the following permissions in the TotalAgility Designer.

- Reject documents
- Delete documents
- Split documents
- Merge documents
- Rotate pages
- Modify/Read documents
- All other batch-editing operations

Manage resource groups via Kofax TotalAgility

When Invoice Processing Agility is first installed, there are two main Resource Groups. These groups however, have no permissions assigned by default. As a minimum, specific permissions are required for the various resource groups.

> **Note** If you are using Invoice Processing Agility in an Azure environment adding users manually is the only method available. This is because **Solution Configuration Manager** > **Global Settings** > **User Management** is not available in this type of environment.

You can configure manual access permissions by following these steps.

1. Launch the TotalAgility Designer.
2. Select **System Settings**.
   The **Manage** page is displayed.
3. From the **Access Permissions** group, select **Capture**.
   The **Access Permissions - Capture** page is displayed.
4. From the **Consume** panel, click **Resources**.
   A list of all resources configured in Kofax TotalAgility are displayed.
5. From the **Resources** list, select **InvoiceProcessingAgility**.
   The list of resources is filtered to include only those related to Invoice Processing Agility.
6. From the **Resources** panel, drag-and-drop a resource group into the **Resource** field.
   The list of settings and users is displayed.
7. Update the various permissions based on requirements.
8. Click **Save**.
9. Optionally, repeat steps 6 to 8 for additional resource groups.

Configure the Solution Configuration Manager

You can configure the Solution Configuration Manager by following these steps.

1. Log on to the Invoice Processing Agility Workspace.

   For example, `http://<ServerName>/TotalAgility/forms/ipa/`.

   > **Note** If you are using an Azure environment, log on to the Azure workspace instead.

   The workspace for Invoice Processing Agility is loaded.

2. In the **Workspace** menu, select **IP Agility** > **Settings**.
   The **Settings** page is loaded.

3. Click **Launch SCM**.

   The Solution Configuration Manager opens and you can now manage its database connection.

Manage database connections

Now that you can open the Solution Configuration Manager, further configuration steps may be required so that the Invoice Processing Agility client database is configurable via the Solution Configuration Manager. This depends on the Authentication type selected for the Invoice Processing Agility client database during install, or if you are using Invoice Processing Agility in an Azure environment.

> **Important** This step is not necessary if you are using Invoice Processing Agility in an Azure environment.

If you used SQL Server Authentication when installing the Invoice Processing Agility client database then no changes are required because the database connection is added automatically. Proceed by adding the Solution Configuration Manager package.

If you used Windows Authentication when installing the Invoice Processing Agility client database then some manual changes are needed to add a connection to the Invoice Processing Agility client database.

You can manage database connections by following these steps.

1. In the Solution Configuration Manager, hover over the **Manage Project Configuration** menu and select **Manage Database Connections**.
   The **Manage Database Connection Settings** screen is displayed.

2. Enter a value of **1** into the **Connection Number** field.

3. In the **Server Name** field, enter the name of the server where the Invoice Processing Agility client database is installed.

4. In the **Database Name** field, enter the name of the Invoice Processing Agility client database.

   The installer uses `InvoiceProcessingAgility_Client`. If you made no changes during the installation use this name.

5. Optionally, enter a **User Name** and a corresponding **Password**.

   A **User Name** and **Password** are necessary only if SQL Authentication was used during installation.

> **Note** If you are using Windows Authentication to connect to the client database, ensure that the **Integrated Security** option is selected.

6. Click **Test Connection**.
    If the connection is not successful, review and edit the settings and try again.

7. When the connection is successful, click **Insert**.
    A confirmation message is displayed when the settings are successfully saved.

8. Click **Close** to close the confirmation window.

9. Continue to configure the Solution Configuration Manager by adding the Solution Configuration Manager package.

Add the Solution Configuration Manager package

Unlike the Invoice Processing Agility package that was installed in Kofax TotalAgility, the Solution Configuration Manager package is installed from the Solution Configuration Manager website. You can install the Solution Configuration Manager package by following these steps.

1. Hover over the **Manage Project Configuration** menu and click **Manage Existing Package**.
    The **Manage Package** screen is displayed.

2. From the **Add new package** group, click **Browse** to choose a file next to the **Select File** field.

3. Navigate to the extracted zip files and then select the **SCM_Install\SCM_IPA1.1.0** zip file.
    The selected file is listed in the **Select File** field.

4. Ensure that the **Is Active?** check box is selected.

5. Click **Add New Package**.
    A confirmation message is displayed.

6. In the confirmation message window, click **Close**.
    The confirmation message window closes and the package is listed under **Existing Packages**.

7. Continue by managing the project configuration.

Manage project configuration

Now that you have mapped the client database and installed the Solution Configuration Manager package, it is necessary to configure the Solution Configuration Manager package.

You can install and configure the Solution Configuration Manager package by following these steps.

1. Click **Manage Project Configuration**.
    The **Manage Project Configuration** screen is displayed.

2. In the **Project Name** field, type a project name.

    For example, "IPA" or similar.

3. From the **Package** list, select the name of the package.

4. From the **Version** list, select the version number.

5. From the **Connection Group** list, select the connection group.

6. Ensure that the **Active** check box is selected.

7. Click **Insert**.
    A confirmation message is displayed.

8. In the confirmation message window, click **Close**.

   The confirmation message window closes and the Solution Configuration Manager is now ready for use.

CSV files for database lookups

Before you can use Invoice Processing Agility in production it is necessary to create the CSV files that are used by the database lookups that appear in Validation. This is because the Associative Search Engine used by these database lookups requires a CSV file.

To aid in this, there is an automatic process to convert the `BRWVendorMaster`, `BRWEmployeeMaster`, and `BRWCompanyAddressMaster` tables from the Invoice Processing Agility client database into CSV format. These CSV files are then stored in Kofax TotalAgility and used by the database lookups.

By default, the following three databases exist in Transformation Designer and they directly correlate to the Invoice Processing Agility client master database tables.

- VendorASE
- EmployeeASE
- CompanyCodeASE

However, there is no information available for these databases until you create CSV files based on your Vendor, Employee, and Company Code data.

If you are not using the Employee field, the `BRWEmployeeMaster` table is not needed. Similarly, if you are getting the Company Code from the PO or from the file name, the `BRWCompanyAddressMaster` table is not needed. You can leave one or both of these tables blank.

The `BRWVendorMaster` is always used and needs populated with your own data.

If you do not have any vendor, employee, or company code data, you can still create the CSV files. This is because mock data is provided for empty tables to ensure that the CSV creation succeeds. You can add your own data to one or more of the master database tables at a later time.

In order to ensure that the database lookups behave as intended, do the following.

1. Optionally, add your own data to the master tables that you are using.

2. Create the CSV files.

3. Configure your CSV files to regularly update.

4. If you did not add data to the master tables earlier, add your data now.

   The CSV files are updated automatically the next time that your schedule job is executed. Alternatively, you can force the CSV file to update by running the same job you used to create the CSV files in the first place.

For more information on Transformation Designer and how to use this tool, please refer to the *Transformation Designer Help*.

Vendor master database

Use the following table to prepare your Vendor Master data for export into the `BRWVendorMaster` database.

Note This table is mandatory. Populate it with your own data to ensure that the database locator is able to reconcile your vendors during Validation.

Column	Type	Description	Example
IndexID	varchar	A unique key for vendor addresses across all partitions. This `IndexID` is a compound string that is made up from the `PartitionID`, the `ID` (Vendor), and if available, the `SiteID`. The `PartitionID` and the `ID` are separated by a hyphen (-). By default, the `ID` and `SiteID` are separated by a tilde (~). This separator between the `ID` and the `SiteID` is configurable under **Solution Configuration Manager** > **Profile Settings** > **Vendor Settings** > "**Alpha Num Site Separator**."	`0-12345~5` In the above example, the `PartitionID` is 0, the `ID` (Vendor) is 12345, and the `SiteID` is 5.
PartitionID	int	The Vendor partition. This is used to distinguish Vendors from different sources.	`0`
ID	varchar	The Vendor ID that is used in the ERP.	`12345`
SiteID	varchar	The `SiteID` for the associated Vendor. This may not be used for some Vendors. If this is used, it is part of the `IndexID`. > **Note** The `SiteID` is commonly used by Oracle or PeopleSoft.	`5`
Name	varchar	Vendor name.	`Thumps Up`
Address1	varchar	First line of Vendor address.	`Drummers Lane`
Address2	varchar	Second line of Vendor address, if applicable.	
City	varchar	City of the Vendor address.	`Houston`
Zip	varchar	Post code or Zip code of the Vendor address.	`77032`
State	varchar	State or region of the Vendor address.	`TX`
Country	varchar	Country of the Vendor address. This must be given as an ISO 3166 Alpha-2 character code.	`US`
POBox	varchar	PO Box of the Vendor Address, if applicable.	`12345678`
POBoxZip	varchar	PO Box Zip code of the Vendor Address, if applicable.	`77032`

Column	Type	Description	Example
EUMember	varchar	Indicates whether or not the Vendor is from a country that is a member of the European Union. Use an "X" to indicate that a Vendor is from an EU country. When a Vendor is from an EU country, this column indicates when it is necessary to resolve tax codes and provide VAT compliancy checks.	X
Currency	varchar	Currency of the Vendor Country. The currency code must comply with the ISO 4437 code standard.	GBP
TAXID1	varchar	The Primary Tax ID for a Vendor. Invoice Processing Agility does not require this for any business logic. However, you can populate and use this as a searchable field if needed.	
TAXID2	varchar	The Secondary Tax ID for a Vendor. Invoice Processing Agility does not require this for any business logic. However, you can populate and use this as a searchable field if needed.	
VATRegNo	varchar	The Vendor VAT registration number(s). Multiple VAT registration numbers must be presented as a comma-separated list, if the Vendor is VAT registered in more than one country. VAT registration numbers should contain the two-character country prefix, but this is not mandatory. This is used to populate the `VendorVATRegNo` field if a VAT compliancy check is required.	DE118827839
TaxJurCode	varchar	The tax jurisdiction code. Invoice Processing Agility does not require this for any business logic. However, you can populate this field and access it in custom user exits.	
TelNo	varchar	The Vendor telephone number. Invoice Processing Agility does not require this for any business logic. However, you can populate and use this as a searchable field if needed.	
InvoiceType	varchar	The Vendor invoice type. This must correspond to the configured `PO` or `NPO` value specified in the **Solution Configuration Manager** > **Profile Settings** > **Invoice Type Settings**. This is relevant only if the **Solution Configuration Manager** > **Profile Settings** > **Invoice Type Settings** > "**Set By Vendor**" value is set.	PO

Column	Type	Description	Example
PaymentMethods	varchar	A comma-separated list of Bank methods for the Vendor. This must match one of the methods configured in the **Solution Configuration Manager** > **Profile Settings** > **Payment Method Settings** in order to enable bank account extraction.	B,T

BankDetails	varchar	The bank account details for the Vendor.
		
		This is a colon-separated list that uses the following format.
		
		`BankAccount,SortCode,`
		`ERPBankAccountCode:`
		
		Note A sort code is the US equivalent of a routing number.
			357357,,CAD1:
			789789,,EUR1
			
			In the above example, the Vendor has two different sets of bank details. One for Canadian dollars, and another for Euros. In both cases, the Vendor does not have a sort code.

WithholdingTax Details	varchar	A colon-separated list in the following format.
		
		`CompanyCode,WithholdingTaxType,`
		`WithholdingTaxCode:`
		
		If there is withholding tax on the invoice at the time of posting, the system posts the full withholding tax amount to the entry with the relevant company code.
		
		Important This column is relevant for SAP only.	

CompanyCodes	varchar	A comma-separated list of company codes that are valid for the Vendor. Invoice Processing Agility does not require this for any business logic. However, you can populate this field and access it in custom user exits.	
UtilityFlag	varchar	Indicates if a Vendor is a utility vendor. If used, this value for this must correspond to one of the utility aliases configured in the **Solution Configuration Manager** > **Profile Settings** > **Invoice Number Settings**.	
PORSubscruberNo	varchar	The Swiss purchase order subscriber number for the Vendor. If this value is populated, it overrides the extracted value during export.	
ExternalVendorID	varchar	The external VendorID. If a Vendor has a value for this field, it is used as the `ID` (Vendor). This is used by some ERP systems like Oracle EBS.	

Column	Type	Description	Example
ExternalSiteID	varchar	The external SiteID. Invoice Processing Agility does not require this for any business logic. However, you can populate this field and access it in custom user exits.	
VendorAccountGroup	varchar	The Vendor account group. This is available for export.	
AlternatePayee	varchar	The Vendor alternate payee. This is used for the `ALTERNATIVEPAYYEE` export key if the `AlternativePayee` field is not populated.	
PermittedPayee	varchar	A comma-separated list of permitted alternative payees for this Vendor. This list contains the `ID` (Vendor) (without the `PartitionID` and `SiteID`). **Important** This is supported by SAP only.	12345
SiretID	varchar	The French SiretID for this Vendor, if applicable.	RC NANTES 234 987 456
VendorIdentifier	varchar	A unique Vendor identifier, such as a Chinese tax registration number. This is used for vendor scoring if found on the document.	
InterCompany	bit	Indicates if a Vendor is an intercompany vendor. Intercompany vendors are used only for vendor extraction if the invoice is classified into the Intercompany class.	

Employee master database

Use the following table to prepare your Employee Master data for export into the `BRWEmployeeMaster` database.

Note If you are using the Employee field, populate this table with your own data to ensure that the database locator is able to reconcile your employees during Validation. If you are not using the Employee field, leave this table blank.

Column	Type	Description	Example
IndexID	varchar	A unique key for employee addresses across all partitions. This `IndexID` is a compound string that is made up from the `PartitionID` and the `ID` (Employee). The `PartitionID` and the `ID` are separated by a hyphen (-).	0-12345

Column	Type	Description	Example
PartitionID	int	The Employee partition. This is used to distinguish Employees from different sources.	0
ID	varchar	The Employee ID that is used in the ERP.	12345
Name	varchar	The Employee name.	Michael Miller
Address1	varchar	The first line of the Employee address.	Drummers Lane
Address2	varchar	The second line of the Employee address.	
City	varchar	The Employee city.	Houston
Zip	varchar	The Employee post code or zip code.	77032
State	varchar	The Employee state or region.	TX
Country	varchar	The Employee country. This must be given as an ISO 3166 Alpha-2 character code.	US
TelNo	varchar	The Employee telephone number.	
TaxID1	varchar	The Employee primary tax code.	
TaxID2	varchar	The Employee secondary tax code.	

Company Code database

Use the following table to prepare your Company Code data for export into the BRWCompanyAddressMaster database.

Note If you are getting the company code from this database table, populate it with your own data to ensure that the database locator is able to reconcile your company code during Validation. If you are getting the company code from the PO or the file name, leave this table blank.

Column	Type	Description
CompanyCode	varchar	A unique identifier for a company.
CompanyName	varchar	The name of a company.
CompanyAddress	varchar	The Company address. This address should be similar to what is printed on the invoice.

Dump address data to CSV databases

There is a process within Kofax TotalAgility that lets you automatically create CSV files from the BRWVendorMaster, BRWEmployeeMaster, and BRWCompanyAddressMaster tables in the Invoice Processing Agility client database. These files are then stored in Kofax TotalAgility.

You can create the CSV databases needed for the database lookups in Transformation Designer by following these steps.

1. Ensure that data is available in the Invoice Processing Agility client database for the following tables if needed.

   If you have no data for these database tables at this time, or you do not use all three database lookups, you can leave the tables blank. The CSV tables are created using mock data that you can update at a later time as needed.
   - `BRWVendorMaster`
   - `BRWEmployeeMaster`
   - `BRWCompanyAddressMaster`

2. Open the Invoice Processing Agility Workspace.

3. From the **Jobs** menu, select **Create**.
   The **Jobs - Create** page is displayed.

4. From the **Category** list, select **InvoiceProcessingAgility**.
   The **Process** list is populated with processes.

5. From the **Process** list, select **DumpAddressFiles**.

6. Click **Create**.

   A message is displayed when the job is created successfully and the Vendor.csv, Employee.csv, and CompanyCode.csv files are created automatically. These files are stored in Kofax TotalAgility and picked up automatically by the corresponding Database Locators in Transformation Designer.

   However, it is still necessary to Release your project Transformation Designer after you have created the CSV databases.

Release project with new database references

When Invoice Processing Agility is installed, three Database Lookups are created automatically in Transformation Designer. Now that you have dumped your address data to CSV files that are stored in Kofax TotalAgility, it is necessary to open and then release your project in Transformation Designer so that the newly created databases are used.

You can update the project and its databases by following these steps.

1. Dump your address data.

2. Open the Transformation Designer.

3. From the **Project** tab, click **Open Project**.
   The **Open Project** window is displayed.

4. From the **Select category** group, select the **InvoiceProcessingAgility** category.
   The **Select project** area is updated.

5. In the **Select project** area, expand **Shared** and then double-click on the **InvoiceProcessingAgility** project.
   The project opens.

6. On the **Project** tab, click **Project Settings**.

   The **Project Settings** window opens.

7. In the **Project Settings** window, click on the **Databases** tab.
   The **Databases** tab is displayed.

8. Select the **VendorASE** database and click **Import**.

When prompted to import the database click **Yes**.

The corresponding CSV file is imported.

9. Select the **EmployeeASE** database and click **Import**.

When prompted to import the database click **Yes**.

The corresponding CSV file is imported.

10. Select the **CompanyCodeASE** database and click **Import**.

When prompted to import the database click **Yes**.

The corresponding CSV file is imported.

11. On the **Project Settings** window click **OK**.
Your changes are saved and the window closes.

12. On the **Project** tab, click **Release**.
The project is released.

13. Close the Transformation Designer.

Configure the CSV databases to update automatically

When you converted the `BRWVendorMaster`, `BRWEmployeeMaster`, and `BRWCompanyAddressMaster` tables into CSV databases, that was a single point-in-time representation of that data. Since it is likely that some of these tables are modified regularly with additional data over the lifetime of your project, it is necessary to update the CSV files at regular intervals.

You can update the CSV databases at regular intervals by following these steps.

1. Launch the TotalAgility Designer.

2. Optionally, log in with your Kofax TotalAgility Administrator user credentials if prompted.

3. On the **Home** page, click **System Settings**.
The **System Settings** page is displayed.

4. On the **System Settings** page, click **Job Schedules**.
A list of scheduled jobs is displayed for the default category.

5. From the **Categories** list, select **InvoiceProcessingAgility**.
A list of scheduled jobs is displayed for Invoice Processing Agility.

6. Double-click on the **AddressData2CSV** scheduled job.

7. When prompted, click **Yes** to lock the scheduled job for modification.
The properties for the job are displayed.

8. For the **Active** option, set it to **Yes**.

9. Edit the **Frequency** and **Range of Recurrence** settings as necessary.

For more information on these settings, see the *Kofax TotalAgility Help*.

10. In the upper right corner, click **OK** so save your settings.
You are returned to the list of scheduled jobs and your CSV files are now updated at regular intervals.

11. **Close** the TotalAgility Designer.

Integrate MarkView with Invoice Processing Agility

This integration is necessary only if you are using MarkView and want to integrate it with Invoice Processing Agility. In addition, if you are using MarkView, please ensure that the Oracle Client Component is installed. If this client is available, the MarkView option is installed automatically with the Invoice Processing Agility Full installation. If you use the Custom installation, MarkView is available for selection. If you use the silent install method, add the `MARKVIEW_INSTALLATION_TYPE=1` parameter to your command.

> **Important** If you are using MarkView, there is no functionality within MarkView to differentiate the vendor type. If you have invoices that include Intercompany vendors, create your own method of identifying which vendors are Intercompany vendors. For more information on Intercompany invoices, see the *Invoice Processing Agility Administrator's Guide*.

After the MarkView components are installed, follow these steps to configure Invoice Processing Agility.

1. Update the Invoice Processing Agility client database for MarkView.
2. Configure the MarkView database connection within Invoice Processing Agility.
3. Configure your MarkView export settings.

Update the Invoice Processing Agility client database for MarkView

If you are using MarkView and want to integrate it with Invoice Processing Agility, you must update the Invoice Processing Agility client database so that it is compatible with MarkView.

You can update the Invoice Processing Agility client database so that it works with MarkView by following these steps.

1. Open the Microsoft SQL Server Management Studio.
2. Navigate to your extracted files and open `Database_Scripts/Update`.
3. Drag the **UpdateMarkview.sql** file into Microsoft SQL Server Management Studio.
   The script is loaded.
4. Edit the script with the following changes.

   a. Edit the value for the `@profileID`.

      The value for this should match the Profile ID in Invoice Processing Agility that is processing documents with MarkView.

   b. Edit the value for `@sqlConnectionGroup`.

      The value for this should be the connection group related to the MarkView database connection string that is configured in the **Solution Configuration Manager** > **Global Settings** > **Database Connection Settings**.

5. Ensure that the Invoice Processing Agility client database is selected and then press **Execute**.
   The query is performed and the Invoice Processing Agility client database is updated to work with MarkView.
6. Since several fields are activated by executing this script, it is necessary to update the Document Variants.

For more information on document variants, see the *Invoice Processing Agility Administrator's Guide*.

    a. Open the Solution Configuration Manager.

    b. Select a **Project** from the list.
       An additional **Settings** list is displayed.

    c. From the **Settings** list, select **Profile Settings**.
       An additional **Profile** list and two buttons are displayed.

    d. Click **Update Document Variants**

    The document variants for all profiles are updated.

7. Optionally, **Close** the Solution Configuration Manager.

Configure MarkView database connection

In order for Invoice Processing Agility to successfully interact with MarkView, a connection string for the MarkView database is required in the Solution Configuration Manager. This connection string is then used to access the MarkView database as well as the integration between MarkView and the main Invoice Processing Agility client database.

This database is also used to synchronize vendors from, export documents to, and perform purchase order lookups in MarkView.

For more information about MarkView integrations, see the *Invoice Processing Agility Administrator's Guide*.

You can configure the MarkView database connection by following these steps.

1. Open the Solution Configuration Manager.

2. Navigate to the **Solution Configuration Manager** > **Global Settings** > **Database Connection Settings**.

3. Add a **Connection Group ID**.

   This ID is usually the next number in the sequence.

4. Enter a **Connection String** for your MarkView database.

5. Click **Insert**.
   The connection string is added to your database settings.

Configure MarkView export settings

Once you have updated the Invoice Processing Agility client database to work with MarkView, it is important to configure the export settings so that they work for MarkView. For more information on these export settings, see the *Invoice Processing Agility Administrator's Guide*.

You can edit the MarkView export settings by following these steps.

1. Open the Solution Configuration Manager.

2. Navigate to the **Solution Configuration Manager** > **Export Settings** > **Export Options**.

3. Select **Export to MarkView**.
   Additional options are available.

4. Select the **Markview Connection Group.**

This is configured in **Solution Configuration Manager** > **Global Settings** > **Database Connection Settings**.

5. Enter the **MarkView Import API Username**.

   This is the unique username used to log on to MarkView.

6. Enter the **MarkView Import API Password**.

   This is the associated password to the above username.

   > **Note** As you type in this password, the individual characters are displayed as expected. However, when you click **Save**, the password is encrypted and saved in a dedicated password file. In the field, the regular characters are replaced with the encrypted value from the password file.

7. Click **Save**.
   Your export changes are saved.

Integrate AP Agility with Invoice Processing Agility

If you are using AP Agility as well as Invoice Processing Agility, it is necessary to make a few changes to the Invoice Processing Agility client database. These changes are needed so that you can effectively import, export, and configure AP Agility.

However, it is possible to integrate with an ERP system without installing AP Agility. In this use case, the Invoice Processing Agility client database also needs updated with the same scripts used when AP Agility is installed.

> **Note** Integration with AP Agility, whether it is installed or not, is available in an on-premise environment only.

You can update the Invoice Processing Agility client database so that it works with AP Agility by following these steps.

1. Open the Microsoft SQL Server Management Studio.
2. Navigate to your extracted Invoice Processing Agility files and open **Database_Scripts/Update**.
3. Drag the **UpdateAPAgility.sql** into Microsoft SQL Server Management Studio.
   The script is loaded.
4. Ensure that the Invoice Processing Agility client database is selected and then press **Execute**.
   The query is performed and the Invoice Processing Agility client database is updated with the necessary AP Agility tables.

   This means that if AP Agility is installed, it can successfully work with Invoice Processing Agility.

   If AP Agility is not installed, the client database still contains the necessary tables needed to configure an ERP connector.
5. **Close** the Microsoft SQL Server Management Studio.

Create document variants

When Invoice Processing Agility is first installed, there is a default client and associated profile. There is not however, a document variant for this profile.

Since a document variant is required to determine which fields are displayed during validation, it is necessary to create a document variant.

Even though document variants are part of Kofax TotalAgility, do not edit them in the TotalAgility Designer. Instead, an automatic mapping is in place so any changes made to the **Solution Configuration Manager** > **Profile Settings** > **Field Settings** for a specific profile are automatically updated in the corresponding document variants.

If you are happy with the fields that are active by default for your profiles, you can create document variants for all profiles at once by clicking on the **Update Document Variants** button. This button is available whenever you select **Profile Settings** in the Solution Configuration Manager. Otherwise, you can create a document variant for a profile by following these steps.

1. Open the Solution Configuration Manager.
2. From the **Settings** list, select **Profile Settings**.
   A list of available profiles is displayed.
3. Select a **Profile** from the list.
   A list of profile-specific settings is displayed.
4. From the list of settings, select **Field Settings**.
   After a few moments, a list of fields is displayed for the selected profile.
5. For each field listed, select or clear the **Active** option.

   Selected/Active fields are extracted and displayed in Validation. Cleared/Deactivated fields are not displayed in Validation.
6. Click **Save**.

   If you activated fields for both the **Invoices** and the **InvoicesCN** classes, a document variant is created for each class in Kofax TotalAgility, specific to the selected profile. If you activate fields for the **Invoices** class and deactivate the **InvoicesCN** fields, a single document variant is created for the **Invoices** class only.

   > **Note** If you need the **InvoicesCN** class, ensure that the necessary fields are active. If no fields are active, the corresponding fields are not available during Validation, as no document variant is available.

7. Optionally, select a different profile and repeat the above steps to create document variants for additional profiles.
8. Close the Solution Configuration Manager.

Modify the Transformation Designer recognition engines

If you are processing documents in languages other than English, it is recommended that you update the recognition engines in the Transformation Designer. This ensures that the recognition engines are more efficient for your needs than they are by default.

You can modify the recognition engines by following these steps.

1. On the **Project Settings** window and click the **Recognition** tab.
   A list of recognition engines is displayed.
2. Double-click on the default **FineReader** recognition Engine. This is the third entry in the list.
   The **FineReader Profile Settings** window is displayed.
3. In the **Languages** list, select each language that you process.

   > **Tip** For the best results, leave **Digits** and **English** selected.

4. Click **OK** to save your changes.
   The **FineReader - Profile Settings** window is closed.
5. Click **OK** to save changes to the project settings.
   The **Project Settings** window is closed.
6. In the **Project** tab, click **Release Project**.
7. Close the Transformation Designer.

Prepare ingestion configuration

Before you can configure individual types of ingestion, you first need to create a general Invoice Processing Agility import connection. Once the import connection is available, you can add filesystem ingestion and email ingestion.

> **Note** If you are using Invoice Processing Agility in an Azure environment, use the Kofax TotalAgility Integration Server to configure ingestion.

You can add an import connection by following these steps..

1. Open the TotalAgility Designer.
2. On the **Home** page, click **Integration**.
   The **Manage** page is displayed.
3. On the **Integration** page, click **Import Settings**.
   The **Import Settings** page is displayed, but there are no **Import Connections** configured.
4. Click ➕ next to **Import Connections**.
   The **Import Connection** page is displayed.
5. Enter a **Name** such as "InvoiceProcessingAgility".
6. Enter a **Description** for your new connection.

7. Configure the **Message Connector URL** settings.

   a. From the Windows Start menu, select **Start** > **Kofax** > **Message Connector** > **Message Connector Monitor**.
   The **Message Connector Web Portal** website is displayed.

   b. Copy the **hostname** and **port** for the Message Connector Web Portal and then copy them into the **Message Connector URL** field back on the **Import Connection** page.

8. Edit the other settings based on your requirements.

   For more information on these settings, refer to the *Kofax TotalAgility Help*.

9. In the upper right corner, click **OK** to save your settings.
   Your changes are saved, you are prompted to restart the "Kofax TotalAgility Core Worker Service". Afterward, you are returned to the **Import Connections** page where your new import connector is listed.

Configure filesystem ingestion

When Invoice Processing Agility is first installed, there are no integration settings for ingestion. As a result, you must create the import settings before configuring each type of ingestion.

You can configure filesystem ingestion by following these steps.

1. Open the TotalAgility Designer.

2. On the **Home** page, click **Integration**.
   The **Integration** page is displayed.

3. On the **Integration** page, click **Import Settings**.
   The **Import Settings** page is displayed.

4. Under **Import Connections**, click the name that you provided when you created the connection.
   The import connection you created earlier is visible but it has no **Import Sources**.

5. Click ➕ next to **Import Sources**.
   The **Import Source** page is displayed.

6. In the **Type** list, select the import source type as **FILE**.

7. Enter a **Display Name**, such as "IPAFilesystemImport".

8. Edit the settings as needed.

   For more information on the individual settings, refer to the *Kofax TotalAgility Help*.

9. Optionally, **Test File Import**.

10. Ensure that the **Job Type** is set to **Create New Job**.

11. Drag-and-drop the **InvoiceProcessingAgility** process called **Capture Document** into the **Process** field on your Input Source.
    The **Map Variables** section is populated with **Metadata** and **Initialization Variables**.

12. From the **Metadata** column, drag-and-drop the **Import Source Type** Metadata so that it maps to the **Input Source**.

13. Drag-and-drop the **File Name** Metadata so that it maps to the **Filename**.

    You can map additional fields, but if you do, this mapping overrides the mapping configured in the **Solution Configuration Manager** > **Global Settings** > **Import Settings**.

14. In the upper-right corner, click **OK**.
    Your changes are saved and the **Import Connection** page is displayed with your newly created **Import Source**.

15. Click **OK** to close the **Import Connection** page.
    You are prompted to restart a service.

16. Restart the **Kofax TotalAgility Core Worker Service** and then click **OK**.

17. Optionally, close the TotalAgility Designer.

Configure scan ingestion

You can configure scan ingestion, by following these steps.

1. In the **Workspace** menu, select **IP Agility** > **Scan**.
   The **Kofax Web Capture Service Required** window appears.

2. Install **Kofax Web Capture Service** by clicking the relevant link in the window.

3. Click **OK** to close the window after the installation is complete.

4. Optionally, configure the settings to scan documents in languages other than English.

5. Refresh the **Scan** page.
   This ensures that the newly installed Web Capture Service is accessible to Scan.

Configure language settings

If your invoices are in a language other than English, you can improve your extraction results by selecting the relevant language before scanning your documents. To aid in document recognition, these languages are available for selection at the point of scan.

- Chinese
- Japanese
- Korean
- Thai
- Greek
- Russian

Depending on which of the above languages is selected, a dedicated recognition profile is available in Transformation Designer. Each of these languages has its own profile that is configured to extract documents in the relevant language. Using one of these dedicated recognition profile ensures better extraction results than the default English recognition profile. For more information on recognition profiles, refer to the *Transformation Designer Help*.

You can configure scan language settings by following these steps.

1. In the **Workspace** menu, select **IP Agility** > **Scan**.

2. In the **Language ID** list, select a language.

   For example, you can select the relevant language ID for Greek or Chinese documents.

3. Refer to Configure scan ingestion to complete the remaining steps of the ingestion process.

Configure email ingestion

If you plan to process documents received by one or more email address, email ingestion is necessary. An email import process is required for each email address that you process. This is configured in the same location as filesystem ingestion. For more information on ingestion in general, and the various settings available, refer to the *Kofax TotalAgility Help*.

You can configure email ingestion by following these steps.

1. Launch the TotalAgility Designer.

2. Click **Integration**.
   The **Manage** page is displayed.

3. Click **Import Settings**.
   The **Import Settings** page is displayed.

4. Click ➕ next to **Import Connections**.
   The **Import Connection** page is displayed.

5. Click ➕ next to **Import Sources**.
   The **Import Source** page is displayed.

6. In the **Type** list, select the import source type as **POP3**.

7. Enter a **Display Name** such as "IPAEmailImport".

8. Enter your email service provider into the **Host** field.

9. Enter a **Username** and **Password**.

10. Test your settings by clicking **Test Mailbox**.

11. Ensure that the **Job Type** is set to **Create New Job**.

12. Drag-and-drop the **InvoiceProcessingAgility** process called **Capture Document** into the **Process** field on your Input Source.
    The **Map Variables** section is populated with **Metadata** and **Initialization Variables**.

13. Drag the **Import Source Type** into the **Input Source** Mapping field.

14. Enter a **Client ID**.

    You can either hard code a Client ID or you can select one of the Metadata variables. If you do map a variable, you need to modify the `CaptureDocument` process so that it can use the Metadata value and process it accordingly.

15. In the upper-right corner, click **OK**.
    Your changes are saved and the **Import Connection** page is displayed with your newly created **Import Source**.

16. Click **OK** to close the **Import Connection** page.
    Your window is displayed and you are prompted to restart a service.

17. Restart the **Kofax TotalAgility Core Worker Service** and then click **OK** to close the window.

18. Optionally, close the TotalAgility Designer.

19. On your mail server, do the following.

    a. In the email account specified above, enable POP download in the account settings.

    b. Configure the settings to allow Invoice Processing Agility access to your email account.
       Your settings are now configured to use email ingestion.

Image rendition

Rendition is used in Invoice Processing Agility to keep a copy of the originally ingested document, such as a PDF, a 200 DPI, or a color TIFF, when the `ImageProcessing` activities are performed.

The `ImageProcessing` activities in the main process convert all documents to 300 DPI b/w TIFF images.

The original document is stored in the rendition.

Add image rendition

The image rendition needs to be manually added to the system and named as Original.

You can add image rendition by following these steps.

1. Open TotalAgility Designer.
2. Navigate to **System Settings**.
3. Select **Page Renditions.**
4. If no rendition is available, define one and name it **Original.**

Enterprise Resource Planning system connectors

If you are using an Enterprise Resource Planning (ERP) system, you can integrate it with Invoice Processing Agility in two ways.

1. Integrate Invoice Processing Agility with AP Agility to install an ERP system.

    a. Install AP Agility and then use AP Agility to install an ERP Connector.

    For more information on installing AP Agility refer to the *Kofax AP Agility Installation Guide*.

    For more information on installing an ERP Connector refer to the *Kofax AP Agility Administrator's Guide*.

    b. Integrate Invoice Processing Agility with AP Agility.

    > **Note** This step is necessary for an on-premise environment but not in an Azure cloud environment. This is because the integration with AP Agility is pre-configured in an Azure cloud environment.

2. Integrate Invoice Processing Agility directly with an ERP Connector.

    To do this, perform the following steps.

    a. Integrate Invoice Processing Agility with AP Agility without installing AP Agility.

    > **Note** This step is necessary for an on-premise environment but not in an Azure cloud environment. This is because the integration with AP Agility is pre-configured in an Azure cloud environment.

    b. Download and extract the agnostic ERP connector files.

    c. Update the Invoice Processing Agility client database for the ERP connector.

    d. Configure the agnostic ERP web service.

If you are using one of the following, configure its web service after the agnostic web service.

- Install the Infor Lawson ERP connector.
- Install the PeopleSoft ERP connector.

e. Configure the CSV files for the ERP Connector.

f. Configure the ERP web service logs.

g. Install the SPA package into TotalAgility.

h. Configure the ERP connection strings.

i. Update Integration Server variable for Azure.

> **Note** This step is necessary if you are using Invoice Processing Agility in an Azure environment only.

j. Configure the ERP web service settings.

k. Add ERP configuration menu navigation and forms.
- Add ERP connections.
- Add ERP organizations.
    - Add a Business Unit for an organization.

l. Agnostic ERP integration.

m. Lawson integration.

   1. Create the Lawson web service.

   2. Configure the Lawson web service.

   3. Configure the Lawson connection settings.

n. PeopleSoft integration.

Download and extract the Invoice Processing Agility agnostic ERP Connector Files

If you want to use an ERP system it is necessary to add the agnostic
ERP connector manually. Before you can do this however, download the
`KofaxInvoiceProcessingERPConnector-1.1.0_For_AgnosticERP.ZIP` file from the Kofax e-Fulfillment site.

This is a basic connector that supports agnostic ERP systems only. To enable support for the Lawson or PeopleSoft ERP systems, download the corresponding ZIP file from the Kofax e-Fulfillment site.

- `KofaxInvoiceProcessingERPConnector-1.1.0_For_Lawson.ZIP`
- `KofaxInvoiceProcessingERPConnector-1.1.0_For_PeopleSoft.ZIP`

You can extract the ERP connector zip file by following these steps.

1. Download the Agnostic ERP Connector ZIP file from the Kofax e-Fulfillment site.

2. Navigate to the downloaded ZIP file, right-click, and then select **Extract**.

3. When prompted, select a location for the extracted files.

Make a note of this location for further installation steps.

4. Optionally, repeat the above steps if you are also installing another ERP connector, specifying a separate extraction folder.

Update the Invoice Processing Agility client database for the ERP Connector

Before you can install and configure an ERP connection within Invoice Processing Agility it is necessary to update the Invoice Processing Agility client database. These updates are necessary so that the ERP connection is able to successfully connect with the Invoice Processing Agility client database.

> **Note** If you are using Invoice Processing Agility in an Azure environment, the name of the database may differ to the database name used in the steps below.

You can update the Invoice Processing Agility client database for the ERP connection by following these steps.

1. Open Microsoft SQL Management Studio and select the `InvoiceProcessingAgility_Client` database.

2. Navigate to where you extracted the ERP Connector.

3. Execute the following SQL scripts from the `Database` folder against the `InvoiceProcessingAgility_Client` database in the order below.
   - `Tables_AP_Database.sql`
   - `Views_Procedures_AP_Database.sql`
   - `Insert_AP_Data.sql`

4. Navigate to where you extracted the Invoice Processing Agility file.

Configure the agnostic ERP Connector web service

The agnostic ERP Connector uses the ERP Connector web service to exchange data between Invoice Processing Agility and an ERP system. You can configure the ERP Connector web service by following these steps.

1. Open **Internet Information Services (IIS) Manager**.

2. In the **Connection** page, expand `http://localhost` represented by the server name
   A list of Application Pools and Sites is displayed.

3. Select and then right-click on **Application Pools**. Select **Add Application Pool**.
   The **Add Application Pool** window is displayed.

4. In the **Add Application Pool** window, enter a name for your application pool such as "ErpConnectorServiceAppPool".

   a. From the **.NET Framework version** list, select **.NET Framework v4.0.XXXXX**.

   b. From the **Managed pipeline mode** list, select **Integrated**.

   c. Select **Start application pool immediately**.

   d. Click **OK**.

   The new application pool is created and appears in the application pool list.

5. Right-click on your newly added application pool and select **Advanced Settings**.

The **Advanced Settings** window is displayed.

6. In the **Process Model Group**, set the **Identity** for the "ErpConnectorServiceAppPool". You cannot use the default option. You must select either a Built-in account or a Custom account.

   The Application Pool account specified here must have the following permissions.

   - Read/Write/Execute permissions for the folder where the ERP Connector files are located.
   - Read/Write permissions for the folder where the CSV import files are located.
   - Read/Write permissions for the folder where invoices are exported.
   - Read/Write permissions for the folder where the log files are created.

7. Click **OK**.

   The Application Pool needed for the ERP Connector web service is now configured.

8. Copy the **ERP Connector** folder from the extracted ERP connector files to a location that is accessible by IIS.

9. Back in IIS, expand **Sites**.

   The **Default Web Site** is displayed.

10. Right-click on the **Default Web Site** and select **Add Application**.

    The **Add Application** window is displayed.

11. In the **Add Application** window, enter the following settings.

    a. In the **Alias** field, enter a name for the application such as "ErpConnector."

    b. From the **Application Pool**, click **Select** and choose your newly created application pool and click **OK**.

    c. In the **Physical path**, click **Browse** and then navigate to where you copied the "ERP Connector" files.

    d. Optionally, test the connection.

    e. Click **OK**.

    A new web application is added to the list of applications under the Default Web Site.

    If necessary, install any ERP connectors if you are using Lawson or PeopleSoft.

    In addition, you can now configure an Agnostic ERP integration.

Install the Lawson ERP connector

If you are using the Lawson ERP system, it is necessary to install this connector in addition to the agnostic ERP connector. You cannot install this connector without first configuring the agnostic ERP connector.

You can install the Lawson ERP connector by following these steps..

1. Download and extract the `KofaxInvoiceProcessingERPConnector-1.1.0_For_Lawson.ZIP` ERP connector.

2. Copy the contents in the `ERP Connector\bin` folder from the extracted files to the `ERP Connector\bin` location in IIS where you copied the agnostic ERP connector files.

   The Lawson ERP connector is now ready for integration.

Install the PeopleSoft ERP connector

If you are using the PeopleSoft ERP system, it is necessary to install this connector in addition to the agnostic ERP connector. You cannot install this connector without first configuring the agnostic ERP connector.

You can install the PeopleSoft ERP connector by following these steps..

1. Download and extract the `KofaxInvoiceProcessingERPConnector-1.1.0_For_PeopleSoft.ZIP` ERP connector.
2. Copy the contents in the `ERP Connector\bin` folder from the extracted files to the `ERP Connector\bin` location in IIS where you copied the agnostic ERP connector files.
   The PeopleSoft ERP connector is now ready for integration.

Configure CSV files for the ERP Connector web service web.config

Now that the application pool and application are set up for an ERP Connector web service, it is necessary to configure its web.config file so that your implementation can find the necessary CSV files. These files are as follows.

- employee.csv
- misc_charge.csv
- taxcode.csv
- uom_conversion.csv

You can configure the ERP connector web.config file by following these steps..

1. Navigate to the "ErpConnector" folder that is referenced by IIS.
   You configured this when you configured the ERP web service.
2. Open the **Web.config** file for editing.
3. Locate and edit the value for each of the following entries with their corresponding CSV files.
   - `<add key="EmployeeDataPath" value="" />`
   - `<add key="UOMConversionPath" value="" />`
   - `<add key="TaxCodePath" value="" />`
   - `<add key="MiscChargeAccountDataPath" value="" />`

   For example, `<add key="EmployeeDataPath" value="C:\Agnostic\Import\employee.csv" />`.
4. **Save** and then **Close** the Web.config file.

Configure ERP Connector web service logs

The ERP Connector web service logs issues during production. Logging settings are configured in the ERP Connector files that are used by the web service and IIS.

By default, the ERP Connector uses the following logging configuration.

```
<log4net>
    <appender name="FileAppender" type="log4net.Appender.FileAppender">
      <param name="File" value=" "/>
```

```
      <param name="AppendToFile" value="true"/>
      <maximumFileSize value="10MB"/>
      <layout type="log4net.Layout.PatternLayout">
        <conversionPattern value="%d %level - %message%newline"/>
      </layout>
      <filter type="log4net.Filter.LevelRangeFilter">
        <param name="LevelMin" value="ERROR"/>
        <param name="LevelMax" value="ERROR"/>
      </filter>
    </appender>
    <logger name="ERP_CONNECTOR_LOGGER">
      <appender-ref ref="FileAppender"/>
    </logger>
</log4net>
```

By default, the minimum level is set to `Error` which means that entries are added to the log whenever an error is encountered. You can change the minimum log level to `Debug` if you are troubleshooting the web service as follows.

```
<filter type="log4net.Filter.LevelRangeFilter">
        <param name="LevelMin" value="DEBUG"/>
        <param name="LevelMax" value="ERROR"/>
</filter>
```

You can set up your own logging configuration using the log4net documentation.

You can specify where the log file is stored by following these steps..

1. Navigate to the "ErpConnector" folder that is referenced by IIS.

    You configured this when you configured the ERP Connector web service.

2. Open the **Web.config** file for editing.

3. Locate the <log4net> section and then update the **File** value.

    Overwrite the default value or create the necessary folder structure.

4. **Save** and **Close** the file.

ERP Connector package for Kofax TotalAgility

In order to use the ERP Connector web service, it is necessary to install the TotalAgility SPA package. You can do this by following these steps.

1. Launch the **TotalAgility Designer**.

    The **TotalAgility Designer** Home page is displayed.

2. Optionally, log on if prompted.

3. On the **Home** page, click **Packages**.

4. On the **Packages** page, under Import/Export, click **Import Package**.

5. On the **Import Package** page, click **Browse** next to Package.

6. Navigate to the location where you extracted the ERP Connector files, select TotalAgility\Package\IP Agility ERP Connector.zip, and click **Open**.

    The contents of the ZIP file are displayed on the **Import Package** page.

7. Click **Import Package**.

    When prompted to import the package, click **OK**.

    You are notified when the package is added to TotalAgility Designer. Click **OK**.

8. Click **Close** to close the package.

9. Optionally, **Close** the TotalAgility Designer.

   If you choose not to close the TotalAgility Designer, refresh the web page for your changes to take effect.

Configure the database connection strings

The `InvoiceProcessingAgility_Client` database is used by the ERP Connector to import and export data. If you are using Invoice Processing Agility in an Azure environment, tables from the Azure database are used to import and export data.

The connection string for this database is specified in the TotalAgility server variables and global variables. To ensure that the ERP Connector knows where to find this database, edit the connection strings in TotalAgility by following these steps.

1. Launch the **TotalAgility Designer**.

   The **TotalAgility Designer** Home page is displayed.

2. Optionally, log on if prompted.

3. On the **Home** page, click **Data**.

4. Under the **Manage** group, click **Server Variables**.

   The **Server Variables** window is displayed.

5. From the **Category Filter** list at the top, select **AP Agility**.

   A list of server variables are displayed in the table.

6. From the table, click **DB Connection String**.

   The values of the variable are displayed above so that they can be edited.

7. Set **Secure** to **Yes**.

   This ensures that the password is displayed unencrypted anywhere within TotalAgility.

   When prompted, click **Yes**.

8. To the right of the **Value** field, click **Configure**.

   The **String Variable** window is displayed.

9. In the text box, enter the connection string for the Invoice Processing Agility client database.

   Alternatively, if you are using Invoice Processing Agility in an Azure environment, enter the connection string for the Azure database.

   > **Tip** Use the same credentials as the Invoice Processing Agility connection strings. Refer to the connection string from the Settings page.

   For example, `Data Source=<server name>;Initial Catalog=InvoiceProcessingAgility_Client;Integrated Security=True;Connect Timeout=30`.

   If you are not using Windows Authentication, set the `Integrated Security` to False.

10. In the upper-right corner, click **OK**.

    Your connection string is saved.

11. Return to the **TotalAgility Designer** Home page.

12. Click **Form Designer**.

13. Under the **Manage** group click **Global Variables**.

    A list of global variables are displayed for the default category.

14. From the **Category Filter** list above the table, select **AP Agility**.

    A list of global variables for AP Agility are displayed.

15. From the list of global variables, click **APA_Connection_String**.

    The values for that global variable are loaded and editable.

16. Set **Secure** to **Yes**.

17. Review the connection string to ensure that it matches the one you added in step 9 above. Click **Update** ✓ to save your changes.

    You are notified that the updated value only takes effect after the session is reloaded. Click **OK**.

18. From the list of global variables, click **IPA_Connection_String**.

    The values for that global variable are loaded and editable.

19. Set **Secure** to **Yes**.

20. Review the connection string to ensure that it matches the string listed on the IPA_Settings page. Click **Update** ✓ to save your changes.

    You are notified that the updated value only takes effect after the session is reloaded. Click **OK**.

21. Return to the **TotalAgility Designer Home** page.

Update Integration Server variable for Azure

If you are using Invoice Processing Agility in an Azure environment, it is necessary to update one of the Kofax TotalAgility server variables.

This is not necessary if you are using an on-premise environment.

You can update the Kofax TotalAgility server variable by following these steps.

1. Open the **TotalAgility Designer Home** page.

2. On the **Home** page, click **Data**.

3. From the **Category Filter** list at the top, select **AP Agility**.

    A list of server variables are displayed in the table.

4. From the table, click **Is Integration Server Used**.

    The values of the variable are displayed above so that they can be edited.

5. If you are using Invoice Processing Agility in an Azure environment, set the **Value** to **True**.

    This tells TotalAgility to use the Integration Server.

6. Click **Update** ✓ to save your changes.

    You are notified that the updated value only takes effect after the session is reloaded. Click **OK**.

7. Return to the **TotalAgility Designer Home** page.

Configure the web service settings in TotalAgility Designer

TotalAgility points to a default ERPConnectorService. In almost all cases, this reference needs updated so that it matches your implementation. You can update the web service configuration in TotalAgility by following these steps.

1. On the TotalAgility Designer **Home** page, click **Integration**.

2. Click **Web Service References**.

3. From the **Category** list, select **AP Agility**

A list of web service references is displayed.

4. Click **ApAgilityErpConnector**.

   The web service is loaded and its settings are displayed.

5. Update the path in the **URL** so that is points to the same location specified in IIS.

   For example, `https://servername/ERPConnector/ErpConnectorService.svc?wsdl`.

6. In the upper-right corner, click **OK**.

   When prompted to regenerate the proxy DLLs, click **OK**.

   The web service is updated and its proxy DLLs are refreshed.

7. Return to the **TotalAgility Designer** Home page.

Add ERP configuration menu navigation and forms

Before you can connect to an ERP system using the ERP connector, it is necessary to set up both TotalAgility and Invoice Processing Agility so that you can configure the necessary ERP connections and organizations for your needs.

You can configure the Invoice Processing Agility workspace menu and forms by following these steps.

1. Launch the **TotalAgility Designer**.

   The **TotalAgility Designer** Home page is displayed.

2. Optionally, log on if prompted.

3. On the **Home** page, click **Form Designer**.

   The **Form Designer** page is displayed.

4. From the left **Explorer** pane, click **Navigations**.

   A list of navigation options are displayed for the **Default Category**.

5. Select **InvoiceProcessingAgility** from the **Category** list.

   A list of navigation options are displayed for the **InvoiceProcessingAgility** category.

6. Select **InvoiceProcessingAgility** category.

   The menu items are displayed for the **InvoiceProcessingAgility** category.

7. In the **Menu Items** section, select **InvoiceProcessingAgility**.

8. Beside **Menu Items**, click **Add** ╋ to add a new menu category to the Invoice Processing Agility workspace.

   A new menu item called **MainMenu1** is added to the list under **InvoiceProcessingAgility**. An editable form is displayed on the right.

9. Edit the **Menu Item Name** on the right by entering **ERP Connector**.

   The menu name is updated.

10. Select **ERP Connector** and click **Add** ╋ to add a sub-menu item, calling it **ERP Organizations**.

11. Select **ERP Connector** and click **Add** ╋ to add a second sub-menu item, calling it **ERP Connections**.

12. Select the **ERP Connector** menu item.

    The editable form is displayed.

13. No form is required for this menu item, but it is necessary to configure it so that only those with the necessary permissions are able to see this menu item.

    Under **Access Permissions** set the **Access** to **Deny Everyone Except**.

14. In the left **Consume** pane, click **Back** to return to the original **Consume** pane. Then select **Resources** and then select the **InvoiceProcessingAgility** category.

15. Drag the **IPA_Administrators** resource to the **Resouces** field for the **ERP Connector** menu item.

16. In the Menu Items, select the **ERP Organizations** sub menu item.

    The editable form is displayed.

17. From the left **Consume** page, select **Form**.

    A list of forms for the **Default Category** is displayed.

18. Select **AP Agility** from the category list.

    > **Tip** If AP Agility does not appear in the category list, click **Refresh** ⟳ to update the list of categories.

    A list of forms for the **AP Agility** category is displayed.

19. Drag the **APA_Organizations** form to the **Target** field on the **ERP Organizations** form.

    The **Target** is updated to use the selected form.

20. Under **Access Permissions** set the **Access** to **Deny Everyone Except**.

21. Click on the **User** 🔒 icon to the right of **Resources** and then drag in the **IPA_Administrator** from the left pane.

22. Select the **ERP Connections** sub menu item.

    The editable form is displayed.

23. From the left **Consume** page, select **Form**.

    A list of forms for the **Default Category** is displayed.

24. Select **AP Agility** from the category list.

    A list of forms for the **AP Agility** category is displayed.

25. Drag the **APA_ERP_Connections** form to the **Target** field on the **ERP Connections** form.

    The **Target** is updated to use the selected form.

26. Under **Access Permissions** set the **Access** to **Deny Everyone Except**.

27. Click on the **User** 🔒 icon to the right of **Resources** and then drag in the **IPA_Administrator** from the left pane.

28. In the top-left corner, click **Save**.

    When prompted to confirm that the navigation menu is saved, click **OK**.

    You are returned to the main **Form Designer** page.

29. Optionally, close the **TotalAgility Designer**.

30. Optionally, open the Invoice Processing Agility workspace.

    The newly added menu items should be displayed if you are a member of the **IPA_Admininstrators** resource group.

    > **Tip** If the menu is displayed as UNDEFINED, refresh the Invoice Processing Agility workspace page.

Add ERP connections

You can add an ERP connection so that it is available to one or more organizations. You can add multiple connections if you are using multiple ERP systems.

The following information describes each field on the ERP Connections form and its purpose.

ERP Connection Name
A unique name for the ERP connection. This setting is mandatory.

Description
Provide any important details about the ERP connection. This setting is optional.

Connection Type
Select the type of ERP system from the list.

Start Data Load From
Set the date for when you want to start loading information from the ERP system.

You can add an ERP connection by following these steps.

1. Log on to the **Invoice Processing Agility Workspace** as a user with Administrator permissions.
   The Kofax TotalAgility Workspace for Invoice Processing Agility is displayed and the newly added **ERP Connector** menu is displayed.
2. From the **ERP Connector** menu, select **ERP Connections**.
   The **ERP Conections** form is displayed.
3. At the bottom of the form, click **New**.
   The **ERP Connection: New** form is displayed.
4. In the **ERP Connection Name** field, enter a name for this ERP connection.
   For example, use the name of your ERP systems such as PeopleSoft or Lawson.
5. Enter a **Description**.
   Provide any important information about this ERP system or its connection.
6. Select your **Connection Type** from the list.
7. Set the **Start Data Load From** date.
8. Click **Save**.
   A message indicates when your new connection is created.
9. Click **Close**.
   You can now see your newly created connection listed in the **ERP Connections**.
10. Optionally, add another connection by clicking **New**.
    Alternatively, click **Close** to return to the Invoice Processing Agility Workspace.

Add ERP organizations

Before you can add an organization, a connection is required.

The following information describes each field on the Organization form and its purpose.

ERP Connection
Select the ERP connection from the list. This setting is mandatory.

Organization Name
A unique name for the organization. This name may differ from the name in the ERP system.
This setting is mandatory.

Description

Provide any important details about the organization. This setting is optional.

ERP Organization ID

The ID that the ERP system uses to identify the organization. This setting is used to associate the Invoice Processing Agility organization with the corresponding entity in the ERP system.

This setting must be unique and it is mandatory.

ERP Organization Name

The organization name used in the ERP system. This setting is optional and is needed only when the Organization Name provided above differs from the ERP Organization Name.

This setting is optional.

IPA Client Name

Select the name of the Invoice Processing Agility client associated with this organization from the list of available clients.

This setting is mandatory.

Active

Select to activate the organization.

You can add an ERP organization by following these steps..

1. Log on to the **Invoice Processing Agility Workspace** as a user with Administrator permissions.
   The Kofax TotalAgility Workspace for Invoice Processing Agility is displayed and the newly added **ERP Connector** menu is displayed.
2. From the **ERP Connector** menu, select **ERP Organizations**.
   The **ERP Organizations** form is displayed.
3. At the bottom of the form, click **New**.
   The Add Organization form is displayed.
4. On the **Organization** tab, select an **ERP Connection** that was added earlier.
5. Enter the **Organization Name**.
6. Enter a **Description**.
7. Enter the **ERP Organization ID**.
8. Enter the **ERP Organization Name**.
9. Select the **IPA Client Name** from the list.
10. Select **Active** to enable this organization.
11. Click **Add**.
    The newly added organization is displayed in the list and the **Business Units** tab is enabled.
12. Optionally, add one or more business units.
13. Click **Close**.
    The **Organizations** list is displayed.
14. Click **Close**.
    The Invoice Processing Agility Workspace is displayed.

Add a Business Unit for an organization

Organizations can have one or more business units. A business unit may correspond with an organizational unit, department, or business area. This depends on your ERP system hierarchy.

The following information describes each field on the Business Unit form and its purpose.

Business Unit Name

A unique name of the business unit as used in Invoice Processing Agility. This name may differ from the business unit name used in the ERP system.

This setting is mandatory.

Description
Provide any important details about the organization. This setting is optional.

ERP Business Unit ID

The ID that the ERP system uses to identify the business unit. This setting is used to associate the Invoice Processing Agility business unit with the corresponding entity in the ERP system.

This ID is associated with the Invoice Processing Agility Company Code so it can determine what business unit receives the routed invoice.

This setting must be unique and it is mandatory.

ERP Business Unit Name

The name of the business unit used in the ERP system. This name may be used to match the Invoice Processing Agility Company Code in case a match is not possible using the ERP Business Unit ID.

This setting is optional.

Business Unit Address
The business unit address.

Country
The business unit country.

Currency
The business unit currency.

Active

Select to activate the organization so that output files are generated.

If this is not selected, then export does not generate any output files.

You can add one or more business units
1. Log on to the **Invoice Processing Agility Workspace** as a user with Administrator permissions.
   The Kofax TotalAgility Workspace for Invoice Processing Agility is displayed and the newly added **ERP Connector** menu is displayed.
2. From the **ERP Connector** menu, select **ERP Organizations**.
   The **ERP Organizations** form is displayed.
3. From the list of **Organizations**, select the specific organization where you are adding the Business Units.
4. Click on the **Business Units** tab.
   The **Business Units** form is displayed.

5. Click **New**.

    The form is updated.

6. Enter a **Business Unit Name**.

7. Enter a **Description**.

8. Enter an **ERP Business Unit ID**.

9. Enter an **ERP Business Unit Name**.

10. Enter the **Business Unit Address**.

11. Select a **Country** for this Business Unit.

12. Select the **Currency** for this Business Unit.

13. Select **Active** to enable this Business Unit.

14. Click **Add**.

    This Business Unit is now shown on a list.

15. Click **Close**.

    The list of business units is displayed with your newly added business unit.

16. Optionally, click **New** to add another business unit.

17. Click **Close**

    The Organizations list is displayed.

18. Click **Close**.

    The Invoice Processing Agility Workspace is displayed.

CSV file format

The format of the CSV files used by Invoice Processing Agility and ERP systems requires that the fields are in the order specified. The CSV files themselves must contain a header and the fields must be separated by a comma.

The following CSV files may be used when integrating with an ERP system.

- Vendors CSV file format
- PO headers CSV file format
- PO Lines CSV file format
- Plants CSV file format
- Receipt Lines data format
- Employee file format
- Miscellaneous Charge file format
- Tax Code file format
- Unit of Measure Conversion file format

Vendors CSV file format

This CSV file is called `vendors.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	ErpVendorId	String	This is the unique Vendor ID in ERP.
			The unique ID is from the point-of-view of the data extract where each row must have a unique reference. This is not the unique vendor ID from the point-of-view of the ERP system if a site ID is also used.
2	ErpBusinessUnitId	String	Business unit ID in ERP (company code).
3	ErpTermId	String	The ERP term ID for the vendor.
4	Description	String	A description of the vendor so that it can be differentiated from other vendors.
5	VendorName	String	The vendor name.
6	VendorSiteId	String	The vendor site ID, if applicable.
7	VendorSiteCode	String	The vendor site code.
8	VendorStreet1	String	The first line of the vendor address.
9	VendorStreet2	String	The second line of the vendor address, if applicable.
10	VendorCity	String	The City of the vendor address.
11	VendorZip	String	The post code or zip code of the vendor address.
12	VendorState	String	The state or region of the vendor address.
13	VendorCountry	String	The vendor country.
			This is given as an ISO 3166 Alpha-2 character code. For example, UK for the United Kingdom or US for the United States.
14	VendorVatCode	String	The vendor VAT code.
15	VendorVatRegno	String	The vendor VAT registration number.
16	TaxNumber	String	The vendor tax number.
17	BankCode	String	The Bank code for the vendor.
18	BankAccountNumber	String	The Bank account number for the vendor.
19	Email	String	The Email for the vendor contact.
20	Url	String	The URL for the vendor.
21	Telephone	String	The Telephone for the vendor contact.
22	Fax	String	The fax number for the vendor.
23	ContactName	String	A contact name for the vendor.
24	Active	Bit	When set to TRUE, the vendor is active.
25	Enabled	Bit	When set to TRUE, the vendor is enabled.

Field Index	Column Name	Type	Description
26	TermDateBasis	Bit	The term date basis of the vendor. • Invoice • Goods Received • Current • Invoice received
27	PoBox	String	The PO Box of the vendor address, if applicable.
28	PoBoxZip	String	The PO Box Zip code of the vendor address, if applicable.
29	EuMember	String	A value of 1 indicates that the vendor is from a country that is an EU Member. A value of 0 indicates that the vendor country is not an EU Member.
30	Currency	String	The currency of the vendor country.
31	TaxId1	String	The primary tax ID for the vendor.
32	TaxId2	String	The secondary tax ID for the vendor.
33	TaxJurCode	String	The tax jurisdiction code
34	InvoiceType	String	The vendor invoice type.
35	PaymentMethods	String	A list of bank payment methods for the vendor.
36	WithholdingTaxDetails	String	Any withholding tax details for the vendor.
37	CompanyCodes	String	A comma-separated list of company codes that are valid for the vendor.
38	UtilityFlag	String	Indicates if the vendor is a utility vendor.
39	PorSubscriberNo	String	The Swiss purchase order subscriber number for the vendor, if applicable.
40	ExternalSiteId	String	The external site ID
41	VendorAccountGroup	String	The vendor account group.
42	AlternatePayee	String	An alternate payee for this vendor.
43	PermittedPayee	String	A list of permitted payees for this vendor.
44	SiretId	String	The French Siret ID for this vendor, if applicable.
45	VendorIdentifier	String	A unique vendor identifier, such as a Chinese tax registration number.
46	InterCompany	Bit	A value of 1 indicates that the vendor is an intercompany vendor. A value of 0 means that the vendor is not an intercompany vendor.
47	ErpBankAccountCode	String	The ERP Bank Account Code for the vendor.

This content is found in the VENDOR_MASTER_DATA database table in the InvoiceProcessingAgility_Client database that was added when you integrated Invoice Processing Agility with AP Agility.

PO headers CSV file format

This CSV file is called `po_headers.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	ErpPoHeaderId	String	The unique PO header ID in the ERP. This can repeat the PO document number field if the document number is unique in the ERP . This number is used to match the PO line to the PO header during data load.
2	ErpBusinessUnitId	String	The business unit ID in the ERP (company code).
3	PoNumber	String	The PO number.
4	PoType	String	The type of PO. This is either, • MATERIAL • SERVICE
5	ErpVendorId	String	The vendor ID in the ERP.
6	VendorName1	String	The name of the vendor.
7	VendorSiteId	String	The vendor site ID. This should be empty if your ERP does not support vendor sites.
8	VendorSiteCode	String	The vendor site code. This should be empty if your ERP does not support vendor sites.
9	PoStatus	String	The status of the PO. For example, released, suspended, closed, etc.
10	Active	Bit	If the value is 1, the PO is active.

This content is found in the `PO_HEADER` database table in the `InvoiceProcessingAgility_Client` database that was added when you integrated Invoice Processing Agility with AP Agility.

PO Lines CSV file format

This CSV file is called `po_lines.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	ErpPoLineId	String	The PO line ID used in the ER for the PO line item.
2	ErpBusinessUnitId	String	Business unit ID in the ERP for the PO line item.
3	ErpPoHeaderId	String	The PO header ID in the ERP for the PO line item.
4	PoNumber	String	The PO number for the PO line item.

Field Index	Column Name	Type	Description
5	LineNumber	Number	The line number for the PO line item.
6	MaterialNumber	String	The material number for the PO line item.
7	MaterialGroup	String	The material group for the PO line item.
8	Description	String	A description of this particular PO line item.
9	PoQuantity	Number	The order quantity for the PO line item.
10	UnitPrice	Number	The unit price for the PO line item.
11	PoTotal	Number	The overall total for the PO line item.
12	TaxCode	String	The tax code for the PO line item.
13	TaxJurCode	String	The tax jurisdiction code for the PO line item.
14	UnitOfMeasure	String	The unit of measure for the PO line item.
15	PriceUnit	Number	The price unit for the PO line item.
16	Puom	String	The price unit of measure for the PO line item.
17	TotalQuantityDelivered	Number	The total quantity delivered to date for the PO line item.
18	TotalValueDelivered	Number	The total value delivered to date for the PO line item.
19	TotalQuantityInvoiced	Number	The total quantity invoiced to date for the PO line item.
20	TotalValueInvoiced	Number	The total value invoices to date for the PO line item.
21	ItemCategory	String	Item category or line item type of the PO line item.
22	Plant	String	The location code for the ship-to address where the goods were delivered, or where a service was performed.
23	ChargeCode	String	The charge code for the corresponding PO line item.
24	ChargeCodeId	String	The charge code ID.
25	ErpPoType	String	This is the PO type for JD Edwards purchase order line items.
26	Ers	String	Indicates if an ERS system is used. This is a SAP-specific field. A value of X indicates that the ERS system is used. An empty value indicates that the ERS system is not used.
27	ReceiptRequired	Bit	A flag that indicates if a receipt is required. If the value is 1, a receipt is required.

This content is found in the PO_LINES database table in the InvoiceProcessingAgility_Client database that was added when you integrated Invoice Processing Agility with AP Agility.

Plants CSV file format

This CSV file is called `plants.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	PLANT_ID	String	The plant ID. This must be unique in the CSV. This matches the Plant field specified for PO lines. It is exported as the invoice line Plant field.
2	ERP_ORGANIZATION_ID	String	The Organization ID of the plant. If an organization ID is not provided, the plant is created and then linked to the same organization as the ERP Connection.
3	COUNTRY_CODE	String	The two-character ISO country code for the plant. Entries with an empty country code are skipped during the import process.
4	STATE_CODE	String	The state code of the Plant. This is where the plant is located. For the United States, use the two-character state code such as CA for California.

This content is found in the `PLANTS` database table in the `InvoiceProcessingAgility_Client` database that was added when you integrated Invoice Processing Agility with AP Agility.

Receipt Lines data format

This CSV file is called `receipt_lines.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	BusinessUnit	String	The business unit ID in the ERP (company code).
2	PoNumber	String	The PO number. This is used during line pairing to match the receipt line to the PO number. (See PO Lines CSV file format.)
3	PoLineNumber	String	The ERP PO line number. This is an ERP-specific line ID in the PO, such as the line number. It must be unique among lines for the PO. In some ERP systems it may be simply the line number such as 1, 2, or 3. This is used during line pairing to match the receipt line to the number of PO line. (See PO Lines CSV file format.)

Field Index	Column Name	Type	Description
4	ErpReceiptId	String	The ERP receipt ID. This is used by Invoice Processing Agility as the receipt number (DOC_NO field) during line pairing. For the line paired invoice lines, it is exported as GRDocNo tag.
5	ReceiptLineNumber	String	The ERP receipt item number. This is used by Invoice Processing Agility as the receipt item (DOC_ITEM field) during line pairing. For paired invoice lines, it is exported as the GRDocItem tag.
6	DeliveryDocumentNumber	String	The delivery document number.
7	Quantity	Double	The quantity of the line item.
8	UnitPrice	Double	The unit price of the line item.
9	Total	Double	The total amount of the line item.
10	QuantityInvoiced	Double	The quantity invoiced for the line item.
11	TotalInvoiced	Double	The total invoiced for the line item.
12	DocYear	String	The year specified on the receipt.

This content is found in the RECEIPT_LINES database table in the InvoiceProcessingAgility_Client database that was added when you integrated Invoice Processing Agility with AP Agility.

Employee file format

This CSV file is called employee.csv and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	IndexId	String	A unique key for employee addresses across all partitions. This IndexID is a compound string that is made up from the PartitionID and the ID (Employee). The PartitionID and the ID are separated by a hyphen (-). This value is mandatory.
2	PartitionID	Number	The Employee partition. This is used to distinguish Employees from different sources. This value is mandatory.
3	ID	String	The Employee ID that is used in the ERP. This value is mandatory.
4	Name	String	The Employee name.
5	Address1	String	The first line of the Employee address.
6	Address2	String	The second line of the Employee address.

Field Index	Column Name	Type	Description
7	City	String	The Employee city.
8	Zip	String	The Employee post code or zip code.
9	State	String	The Employee state or region.
10	Country	String	The Employee country. This must be given as an ISO 3166 Alpha-2 character code.
11	TelNo	String	The Employee telephone number.
12	TaxID1	String	The Employee primary tax code.
13	TaxID2	String	The Employee secondary tax code.

This content is found in the `BRWEmployeeMaster` database table in the `InvoiceProcessingAgility_Client` database.

Miscellaneous Charge file format

This CSV file is called `misc_charge.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	POPARTITION	Number	The PO partition ID for the line item. This value is mandatory.
2	COMPANYCODE	String	The company code for the line item. This value is mandatory.
3	CATEGORY	String	The category of the charge for the line item. This value is mandatory.
4	PLANT	String	The plant used for the line item.
5	LINETYPE	String	The line type of the line item.
6	GLACCOUNT	String	The GL account number for the line item.
7	COSTCENTER	String	The cost center for the line item.
8	PROFITCENTER	String	The profit center for the line item.
9	TAXCODE	String	The tax code for the line item.

This content is found in the `MiscChargesAccount` database table in the `InvoiceProcessingAgility_Client` database that was added when you integrated Invoice Processing Agility with AP Agility.

Tax Code file format

This CSV file is called `taxcode.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	PARTITIONID	Number	The partition ID.

Field Index	Column Name	Type	Description
2	VENDORID	String	The vendor ID.
3	COUNTRY	String	The two-character country code used on the invoice. This value is mandatory.
4	SHIPTO	String	Two-character code of the country where the item was shipped. This value is mandatory.
5	SHIPFROM	String	Two-character code of the country where the item was shipped from. This value is mandatory.
6	SERVICE	String	If this is a service, a value of Y is expected. For a non-service, a value of N is used.
7	MATERIALNO	String	The line item material number.
8	MATERIALGROUP	String	The line item material group.
9	PERCENTAGE	Number	The line item tax percentage. This value is mandatory.
10	TAXCODE	String	The line item tax code.

This content is found in the `TaxCode` database table in the `InvoiceProcessingAgility_Client` database that was added when you integrated Invoice Processing Agility with AP Agility.

Unit of Measure Conversion file format

This CSV file is called `uom_conversion.csv` and requires comma separated content in the following format.

Field Index	Column Name	Type	Description
1	POPartition	Number	The PO partition number. This value is mandatory.
2	MATERIAL_NO	String	The material number for the PO line item. This value is mandatory.
3	BASE_UOM	String	The base unit of measure for the PO line item. This value is mandatory.
4	NUMERATOR	String	The numerator for the unit of measure for the PO line item. This value is mandatory.
5	DENOMINATOR	String	The denominator for the unit of measure for the PO line item. This value is mandatory.
6	EXTERNAL_UOM	String	The external unit of measure for the PO line item. This value is mandatory.

This content is found in the `BRWUOMConversions` database table in the `InvoiceProcessingAgility_Client` database.

Agnostic ERP integration

Once you have added an ERP connection and assigned it to an organization, you can use these to integrate your Agnostic ERP with Invoice Processing Agility.

You can integrate your Agnostic ERP with Invoice Processing Agility by following these steps.

1. Create an ERP connection as shown in Add ERP connections.
2. Add an organization to use the above ERP connection as shown in Add ERP organizations.
3. Locate the web.config file in the web folder used by the ErpConnector service and open it with a text editor.
4. Ensure that your web.config file is configured as follows.

   a. Under `<configuration><erpConnector><plugins>` add a `<plugin>` element for your Agnostic ERP connection as follows.

   ```
   <plugin type="Files">
     <class>Kofax.ApAgility.ErpConnector.Files.Plugin,
   Kofax.ApAgility.ErpConnector, Version=1.0.0.0, Culture=neutral,
   PublicKeyToken=0a00a7449ea4c480"</class>
   </plugin>
   ```

   Note There can be one Agnostic plugin only.

   b. Under `<configuration><erpConnector><connections>` add a `<connection>` element and sub-elements for your Agnostic ERP connection as follows.

   ```
   <connection name="AgnosticERPName" type="Files">
      <add name ="input_path" value="C:\Agnostic\Import" />
      <add name ="output_path" value="C:\Agnostic\Export" />
      <add name ="apply_xslt" value="false" />
      <add name ="xslt_path" value="C:\Agnostic\example.xslt" />
   </connection>
   ```

   For the `<connection>`, the `name` attribute must match the name of the ERP connection defined when you added the ERP connection.

   The `type` attribute in `<connection>` should match the `type` attribute in `<plugin>`.

   For each of the `<add>` elements, provide the following values.

   - `input_path`: Enter the path to the folder that contains the master data files used for import.

     Note This does not include the following CSV files.
     - employee.csv
     - misc_charge.csv
     - taxcode.csv
     - uom_conversion.csv

     See Configure CSV files for the ERP Connector web service web.config for instructions on how to configure these additional CSV files.

   - `output_path`: Enter the path to where the invoice data is exported.

- `apply_xslt`: Set this value to true if you are using an XSLT to transform the data. If you do not want to transform the data set the value to false.
- `xslt_path`: Enter the path for the XSLT transform. If `apply_xslt` is set to false, this value is ignored.

> **Note** The paths specified here much be accessible to Invoice Processing Agility

   c. Save the web.config file.

Lawson integration

Once you have added an ERP connection and assigned it to an organization, you can use these to integrate your Lawson ERP with Invoice Processing Agility.

You can integrate your Lawson ERP with Invoice Processing Agility by following these steps.

1. Prerequisites for Lawson integration.
2. Create the Lawson web service.
3. Configure the Lawson connection string.
4. Configure the Lawson web service.
5. Lawson data import and export configuration.
6. If necessary, adjust the AGS invoice export configuration.
7. If necessary, adjust the Master data retrieval configuration.

Prerequisites for Lawson integration

Before you can configure the Lawson connector, the following prerequisites are necessary.

1. The user defined when you create the web service requires READ permissions for the following Lawson tables.
   - `APVENLOC`
   - `APINVOICE`
   - `PORECLINE`
   - `GLCHARTDTL`
   - `APVENMAST`
   - `TERMS`
   - `APCOMPANY`
   - `ACACTIVITY`
   - `POLINE`
   - `APPAYMENT`
   - `GLSYSTEM`
   - `ACACCTCAT`
   - `PURCHORDER`
   - `MAINVDTL`
   - `GLNAMES`

2. The configured user also requires ADD, CHANGE, and DELETE access for the following screens.
   - AP20.2
   - MA43.1
   - MA43.3
3. .NET 4.5.2 is required in order to use the Lawson connector.

Create Lawson web service

Before you can make use of the Lawson ERP Connector, it is necessary to create the web service using the files provided.

You can create the Lawson web service by following these steps.

1. Install the Lawson ERP connector.

   a. In the unzipped files, navigate to the `ERP Integration\Lawson` folder.
      The `KofaxConnector_For_Lawson.zip` file is displayed.

   b. Extract `KofaxConnector_For_Lawson.zip`.
      You can provide your own folder name or use the default name provided during extraction.
      The folder is extracted. Use this to copy the project.

   c. Copy the extracted folder from the previous step to a location that is accessible by IIS.
      For example, `C:\inetpub\wwwroot`.
2. Launch IIS.
3. In the Connections pane, expand `http://localost` represented by your computer name.
   A list of Application Pools and Sites is displayed.
4. Select and then right-click on **Sites**. Select **Add Website**.
   The **Add Website** window opens.
5. In the **Add Website** window, enter the following information.

   a. In the **Site name** field, enter a name for your web service.
      For example, `KTA Lawson Connector`.

   b. For the **Application Pool**, click **Select** and then choose **.NET v4.5** from the list.

   c. In the **Physical Path**, click on the **Browse** button and navigate to and select the folder you copied in step 1.c.

   d. Configure the other settings as required.
      For example, set the Binding **Port** to 9810.

   e. Ensure that the **Start Website immediately** option is selected and then click **OK**.
   The website is created and listed under Sites.
6. Select your newly created website.
   The central **Home** pane is updated for your site.
7. In the central **Home** pane, under **IIS**, double-click on **Authentication**.
   The **Authentication** settings are displayed.
8. Ensure that **Basic Authentication** is enabled.
   If necessary, right-click on **Basic Authenitcation** and select **Enable**.

If you cannot find **Basic Authentication** in your website, make sure that **Basic Authentication** is enabled in IIS by following these instructions.

https://docs.microsoft.com/en-us/iis/configuration/system.webserver/security/authentication/basicauthentication.

A warning message is displayed because you are not using an SSL.

9. Enable SSL for your website as follows.

   a. In the **Connections** panel, right-click on your website and select **Edit Bindings**.
   The **Site Bindings** window is displayed.

   b. In the **Site Bindings** window, click **Add**.
   The **Add Site Binding** window s displayed.

   c. In the **Add Site Binding** window, specify the following.
   Set **Type** to **https**.
   - Set the **Port** to any available port.
   - Set the **SSL certificate** to a valid certification.

   d. Click **OK**.
   Your newly added binding is listed on the **Site Bindings** window.

   e. Click **Close**.
   The **Site Bindings** window is closed.

   Your website is now configured for SSL connections.

10. Test your installation as follows.

    a. Edit the website Web.config file so that the **KtaService:UseMockData** setting is set to **true**.

    b. In a web browser go to **https://localhost:<port number>/testConection**.
    Where <port number> matches the port you specified in step 10 c.

    c. When prompted, enter the **Username** and **Password** for any Windows user.
    If the connection is successful, the following is displayed.

    ```
    <?xml version="1.0"?>
    <ConnectorTestStatus xmlns="http://schemas.datacontract.org/2004/07/
    KtaConnector.Services" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <AdditionalInformation/>
      <ErrorCode>NONE</ErrorCode>
      <IsSucceeded>true</IsSucceeded>
      <Message/>
    </ConnectorTestStatus>
    ```

    If the testing fails, review the previous steps and try again.

    Your web service website is ready for configuration.

Configure Lawson web service

Now that the web service is installed and its connection string is referenced in the web.config file, it is necessary to configure the web service.

You can configure the Lawson web service by following these steps..

1. Restart the Lawson web service that you recently created.

2. Navigate to the Lawson web service `<serviceFolder>/Services/Connectors/Lawson/lib` folder and open the **RPILawsonCOM_Config.xml** file for editing.

3. In the **RPILawsonCOM_Config.xml** file, edit the following parameters.

Parameter Name	Description and Examples
LawsonAuth	The authentication method. Choose between one of the following two authentication types. • **PREMISES** - Enter this value if you are using Invoice Processing Agility on-premise. • **CLOUD** - Enter this value if you are using Invoice Processing Agility in an Azure environment.
Username	The username of the Lawson user used by the connector for authentication.
Password	The password of the Lawson user used by the connector for authentication.
ProductLine	The product line to use when querying Lawson.
LawsonDMEPath	The relative path to the Lawson data servlet. For example, "`/servlet/Router/Data/Erp?`".
LawsonAGSPath	The relative path to the Lawson transaction servlet. For example, "`/servlet/Router/Transaction/Erp?`".
LawsongWriteAttachPath	The relative path to the Lawson `writeAttach` executable. For example, "`/cgi-lawson/writeattache.exe`".
LawsonGetAttachPath	The relative path to the Lawson `getAttach` execuatble. For example, "`/cgi-lawson/getattachrec.exe`".
LawsonBaseURL	The base URL where Lawson is listing for requests. For example, `https://100.11.12.13`.

If you are using Invoice Processing Agility in an Azure environment, also edit the following cloud-specific parameters.

Parameter Name	Description and Examples
LandmarkBaseURL	The URL of the landmark instance that the Lawson connector uses for authentication.
CloudAdfsUrl	The URL that is used in the third step of the Lawson connector authentication process.
CloudBaseUrl	The URL that is used in the fourth step of the Lawson connector authentication process.

4. **Save** and then **Close** the RPILawsonCOM_Config.xml file.

5. Open the web.config file for editing. This file was created when you created the web service.

6. Edit the web.config file so that the **KtaService:UseMockData** setting is set to **false**.
   This ensures that the web service no longer uses mock data.

7. **Save** and **Close** the web.config file.
   Your Lawson web service is now ready for use.

Configure the Lawson connection settings

Now that the web service website is available, configure the web.config so that it points to the newly added web service.

You can configure the Lawson connection string by following these steps.

1. Open the Invoice Processing Agility **Workspace.**
2. Create an Lawson ERP connection as shown in Add ERP connections.
3. Add an organization to use the above ERP connection as shown in Add ERP organizations.
4. Locate the web.config file in the web folder used by the ErpConnector service and open it with a text editor.

    a. Under `<configuration><erpConnector><plugins>` locate the `<plugin>` with the type `Lawson`.

    Ensure that the default plugin is as follows:

    ```
    <plugin type="Lawson"
     class="Kofax.ApAgility.ErpConnector.Plugins.InforLawson.InforLawsonErpPlugin,
     Kofax.ApAgility.ErpConnector.Plugins.InforLawson, Version=1.0.0.0,
     Culture=neutral, PublicKeyToken=0a00a7449ea4c480"/>
    ```

    Note There can be one Lawson plugin only.

    b. Under `<configuration><erpConnector><connections>` add a `<connection>` element and sub-elements for your Lawson ERP connection as follows.

    ```
    <connection name="Lawson" type="Lawson">
       <add name="url" value="https://localhost:9443"/>
       <add name="authentication_type" value="Basic"/>
       <add name="username" value="LawsonAdmin"/>
       <add name="password" value="password"/>
       <add name="page_size" value="1000"/>
       <add name="zip" value="1"/>
    </connection>
    ```

    For the `<connection>`, the `name` attribute must match the name of the ERP connection defined when you added the ERP connection.

    The `type` attribute in `<connection>` should match the `type` attribute in `<plugin>`.

    For each of the `<add>` elements, provide the following values.

    - `url`: Enter the URL to the Lawson service.
    - `authentication_type`: Enter either Basic or Windows. If you specify Basic, enter the username and password attributes. If you enter Windows, leave username and password empty.
    - `page_size`: Enter a positive integer with the mount of master data records that are returned by the web service for each call.

        For example, if `page_size` is set to 1000 and the number of vendors in the Lawson ERP is 5000, the Lawson ERP plugin makes 5 requests to the web service. Each time the web service returns 1000 records of data.
    - `zip`: Enter 1 to have the Lawson service compress archive data before it is returned. Enter 0 to leave the archive data uncompressed.

> **Note** The paths specified here must be accessible to Invoice Processing Agility

    c. Save the web.config file.

Lawson data import and export configuration

The Lawson connector uses the Lawson Data Service (DME) to retrieve AP master data. It also uses the Lawson Application Gateway Service (AGS) to export invoice data into Lawson. The DME queries are defined in the RPILawsonCOM.config.xml file.

The AGS scripts are used to export NON-PO, credit, and PO-based invoices.

The DME queries and AGS calls are adjustable based on your requirements and how Lawson is configured.

By default, import and export have a default configuration. However, you can adjust these settings as needed for your installation.

AGS invoice export configuration

The AGS Export uses the XSLT 1.0 transform the incoming XML from Kofax into a set of transactions required to process invoices in Lawson. See Lawson AGS export mapping - Invoice Header fields and Lawson AGS export mapping - Invoice Line fields for additional mapping details.

> **Note** After a configuration change restart the Lawson web service for the change to take effect.

NON-PO/CREDIT Transaction

File Location: `\Services\Connectors\Lawson\lib\Invoice_Add_NonPO.xslt`.

Example 1.

```
<API-INVOICE>
     <xsl:value-of select="translate(InvoiceNumber,'abcdefghijklmnopqrstuvwxyz',
'ABCDEFGHIJKLMNOPQRSTUVWXYZ')"/>
    </API-INVOICE>
```

Example 2.

```
<API-INVOICE-TYPE>
     <xsl:if test="DocumentType = 'CREDIT'">C</xsl:if>
     <xsl:if test="DocumentType != 'CREDIT'"></xsl:if>
    </API-INVOICE-TYPE>
```

PO Match Transaction

File Location: `\Services\Connectors\Lawson\lib\Invoice_Add_PO.xslt`.

Example 1.

```
<PT-MAD-LINE-NBR><xsl:value-of select="substring-after(GrDocNo,'-')"/></PT-MAD-LINE-
NBR>
```

Example 2.

```
<MAD-ENTERED-QTYr0><xsl:value-of select="Quantity"/></MAD-ENTERED-QTYr0>
```

Master data retrieval configuration

Lawson Data Service (DME) is a service that provides dynamic, read-only access to Lawson data. When a user makes a request from the Lawson Portal or another location, DME makes calls to the database and returns the requested data ensuring that the security rules are enforced. DME retrieves data and sends it back to the requesting client. By default, the format of the data sent back is XML. However, this can be modified to CSV format if necessary.

This data retrieval does not support data updating.

> **Note** After a configuration change restart the Lawson web service for the change to take effect.

Data query configuration

File Location: `\Services\Connectors\Lawson\lib\RPILawsonCOM_config.xml`

DME queries specified in the config file should not be edited in most cases. However, there are some cases were it may be necessary to adjust the configuration. Specifically, it may be necessary to update the SELECT clause in the DME query to filter results or add additional customer user fields that re used. Existing data columns should not be removed. DME queries must be URL encoded in the XML configuration file.

Vendors query example.

```
<item key="APVenMast">
   <Query QueryMode="Xml">
    <QueryURL>FILE=APVENMAST&amp;FIELD=VENDOR%2DSNAME;TAX%2DID;REMIT%2DTO
%2DCODE;VENDOR;VENDOR%2DGROUP;VENDOR%2DVNAME;VDR%2DADDR1;VDR%2DADDR2;VDR%2DCITY
%2DADDR5;VDR%2DCOUNTRY;VDR%2DPOSTAL;VDR%2DSTATE;VAT%2DREG%2DCTRY;VAT%2DREG%2DNBR;BANK
%2DID;VBANK%2DACCT%2DNO;E%2DMAIL%2DADDRESS;PHONE%2DNUM;VENDOR%2DCONTCT;BANK
%2DENTITY;VDR%2DADDR3;DISC%2DCALC%2DDATE;INV%2DCURRENCY;BANK%2DINST%2DCODE;CASH
%2DCODE;VAT%2DREG%2DCTRY;REQUIRE%2DPO;TERM%2DCODE;URL%2DADDR&amp;SELECT=VENDOR%2DGROUP
%3DVEN%7CVENDOR%2DGROUP%3D4321&amp;OUT=XML&amp;NEXT=TRUE&amp;{0}</QueryURL>
   </Query>
  </item>
```

Adding data filtering to the DME queries

In the Vendors query example above we can see that there is filtering applied with a SELECT statement in the query.

`"SELECT=VENDOR%2DGROUP%3DVEN%7CVENDOR%2DGROUP%3D4321"`

This is a URL encoded version for `"SELECT=VENDOR-GROUP=VEN|VENDOR-GROUP=4321"`.

For more information, see the Lawson *Doc for Developers: IOS Application Program Interfaces*.

Invoices query example.

```
<item key="APInvoice">
   <Query QueryMode="Xml">
    <QueryURL>FILE=APINVOICE&amp;FIELD=APPAYMENT%2ECHECK%2DDATE;APPAYMENT%2EVOID
%2DDATE;APPAYVENMAST%2EVENDOR%2DSNAME;APPAYVENMAST%2EREMIT%2DTO%2DCODE;OBJ
%2DID;VENDOR;COMPANY;INVOICE;CANCEL%2DDATE;INVOICE%2DDTE;INVOICE%2DTYPE;BASE%2DINV
%2DAMT;PO%2DNUMBER;REC%2DSTATUS;APPAYVENMAST%2EVENDOR;&amp;OUT=XML&amp;NEXT=TRUE&amp;
{0}</QueryURL>
   </Query>
  </item>
```

In the Invoices query above there is no SELECT clause. This means that for the specific Lawson instance, no filtering is required. A SELECT clause can be added if necessary.

Lawson AGS export mapping - Invoice Header fields

The following table explains the invoice header export fields used by the Lawson AGS.

Tag	Description	Lawson API Field	Interface Notes
Invoice	The root XML tag		
Invoice/AccountNumber	The account number field has a unique identification number for a client from the vendor point-of-view. See IPA Administration Guide for additional information.	N/A	N/A
Invoice/AlternatePayee	This field is a supplementary field to the Vendor ID. It represents the party that receives invoice payments, and is not necessarily the vendor listed on the invoice. This payee must be on a list of pre-defined permitted payees for the extracted Vendor. See IPA Administration Guide for additional information.	N/A	Lawson Handles "Payment Vendor" in internal setup and not during Invoice Creation
Invoice/AlternatePayeeAddress	Not used for export in ERP.	N/A	N/A
Invoice/AmtMiscellaneous	Not used for export in ERP.	N/A	N/A
Invoice/AmtWithholdingTax	The withholding tax amount fields capture the portion of the invoice total that is withheld by the client for legal reasons and not paid back to the vendor.	N/A	N/A
Invoice/AmtPst	This field captures the Provincial Sales Tax (ProvincialSalesTax/QST) component of Canadian tax.	N/A	N/A
Invoice/ApproveTime	Time when the invoice has been approved in APA	N/A	N/A
Invoice/ApproverName	Approver name who approved the invoice in APA	N/A	N/A
Invoice/BankAccount	The bank account number captures where the vendor wants to be paid.	N/A	Handled in Lawson Vendor Setup not during Invoice Creation
Invoice/BankAccountCode	The bank account code represents the identification of the bank account for that vendor from the point-of-view of the downstream ERP system.	N/A	Handled in Lawson Vendor Setup not during Invoice Creation
Invoice/BIC	The BIC or SWIFT code is an internationally assigned code to identify a unique banking institution.	N/A	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/BillToName	This field represents the name of the invoice recipient. This field is used to check that the incoming document is intended for a valid company within a client organization.	N/A	N/A
Invoice/BillToVatRegNo	The Vendor VAT Registration Number and Bill-to VAT Registration Number are available to satisfy a European legal/fiscal compliance ruling. This law states that if value added tax is charged, the vendor must state their VAT registration number as well as the VAT registration number of the bill-to party on the invoice.	N/A	N/A
Invoice/BusinessUnitID	ID of the invoiced business unit.	API-COMPANY	REQUIRED
Invoice/Currency	This field contains the ISO-code of the invoice currency. (USD, GBP, EUR, etc.)	API-INV-CURRENCY	
Invoice/Custom1	Not used for export in ERP.	N/A	
Invoice/Custom2	Not used for export in ERP.	N/A	
Invoice/Custom3	Not used for export in ERP.	N/A	
Invoice/Custom4	Not used for export in ERP.	N/A	
Invoice/Custom5	Not used for export in ERP.	N/A	
Invoice/DeliveryDate	This field captures the delivery date for the goods or services stated on the invoice.	N/A	
Invoice/DeliveryNote	This field captures the vendor delivery note number if one is found on the invoice.	N/A	
Invoice/Discount	This field captures a discount given by the vendor. See IPA Administration Guide for additional information.	N/A	Driven by Payment terms Code logic
Invoice/DiscountDueDate	Not used for export in ERP.	N/A	
Invoice/DocumentType	INVOICE, CREDIT. This field indicates if the incoming document is an invoice or a credit memo.	API-INVOICE-TYPE	Logic in export mapping to set this value to "C" if DocumentType = "CREDIT" Other wise Blank (Invoice)

Tag	Description	Lawson API Field	Interface Notes
Invoice/DueDate	This field captures the due date for payment.	API-DUE-DATE	If the vendor or location does not have a payment terms code assigned and you do not assign a payment terms code to the invoice, this field is required
Invoice/EmployeeID	This field contains the identification number for the user name of an employee found on the document. This field can be used downstream in the workflow to route the document to the relevant person in your organization. For example, for invoice coding and approval.	N/A	N/A
Invoice/EmployeeIndexNumber	Not used for export in ERP.	N/A	N/A
Invoice/EmployeeName	This field contains the user name of an employee found on the document. This field can be used downstream in the workflow to route the document to the relevant person in your organization. For example, for invoice coding and approval.	N/A	N/A
Invoice/ExchangeRate	Not used for export in ERP.	N/A	N/A
Invoice/Freight	This field captures a freight charge specified by the vendor at the header level. Freight is typically captured at the line-item level.	N/A	Mapped at the Line Level
Invoice/HarmonizedSalesTax	This is a type of sales tax (HarmonisedSalesTax) adopted by many Canadian provinces that combine the traditional Goods and Services Tax (GST) and Provincial Sales Tax (ProvincialSalesTax) into a single tax amount.	N/A	N/A
Invoice/Iban	This number represents the international bank account number invoice payment. It is extracted by the system in partnership with the BIC code.	N/A	N/A
Invoice/Icms	ICMS tax is a form of sales tax that is applied to material items in Brazil. When extracted, the system converts this to a valid amount using a period as the decimal separator. See IPA Administration Guide for additional information.	N/ A	N/A
Invoice/InvalidReason	Not used for export in ERP.	N/A	N/A
Invoice/InvoiceDate	Invoice date	API-DISTRIB-DATE	API-DISTRIB-DATE

Tag	Description	Lawson API Field	Interface Notes
Invoice/InvoiceNumber	The invoice number is a unique identifier for a document, from the point-of-view of the supplier.	API-INVOICE	
Invoice/InvoiceType	PO, NON-PO. This field indicates if an invoice is a purchase order (PO) or a non-purchase order (NON-PO).	N/A	N/A
Invoice/IpaClientName	Not used for export in ERP.	N/A	N/A
Invoice/IsrRetention	The ISR Retention (Impuestos sobre la Renta) field is used to capture the ISR retention component to withhold tax. This field can appear on Mexican invoices. The IVA retention component is captured in the regular withholding tax field.	N/A	N/A
Invoice/LocalVatAmount	Not used for export in ERP.	N/A	N/A
Invoice/MexicanUuid	This field is an invoice number that is provided by the Mexican SAT authorities. It appears as a standard field on electronic documents. It is 36 characters long and must be captured for government reporting purposes.	N/A	N/A
Invoice/NetAmount0	This field contains the extracted amounts on the document that have a tax rate of zero.	N/A	N/A
Invoice/NetAmount1	This field captures an invoice subtotal amount and it forms part of the Invoice Total. See IPA Administration Guide for additional information.	N/A	N/A
Invoice/NetAmount2	These fields contain the extracted amounts on the document that have tax rates specified in TaxRate2-TaxRate4 fields. See IPA Administration Guide for additional information.	N/A	N/A
Invoice/NetAmount3	N/A	N/A	
Invoice/NetAmount4	N/A	N/A	
Invoice/OrganizationName	The name of the invoiced organization in ERP	N/A	N/A
Invoice/OrganizationId	ID of the invoiced organization in ERP	N/A	N/A
Invoice/PaymentReference	This field captures vendor payment references specified on an invoice.	N/A	N/A
Invoice/PoExtension	The PO Extension field is populated in implementations involving JD Edwards or PeopleSoft only. In JD Edwards implementations, this field contains the purchase order type. In PeopleSoft implementations, this field contains the purchasing business unit.	N/A	N/A
Invoice/PoNumber	Purchase order number. Valid only for PO invoices.	API-PO-NUMBER	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/PorNumber	The payment order reference (POR) number is a 27-character transaction ID applied to the invoice by the Swiss Postal Service. See IPA Administration Guide for additional information.	N/A	N/A
Invoice/PorSubscriberNo	The payment order reference (POR) subscriber number. See IPA Administration Guide for additional information.	N/A	N/A
Invoice/PoType	MATERIAL, SERVICE. This field indicates if an extracted purchase order relates to materials or services. See IPA Administration Guide for additional information.	N/A	Static Value Used to determine the type of Export. Not Mapped
Invoice/SiteID	Vendor site ID.	API-REMIT-TO-CODE	N/A
Invoice/TaxAmount1	These fields contain the tax amounts for their corresponding Net Amounts. See IPA Administration Guide for additional information.	API-TRAN-TAX-AMT	N/A
Invoice/TaxAmount2	N/A	N/A	
Invoice/TaxAmount3	N/A	N/A	
Invoice/TaxAmount4	N/A	N/A	
Invoice/TaxRate1	These fields contain the tax rates for their corresponding Net Amounts. See IPA Administration Guide for additional information.	N/A	N/A
Invoice/TaxRate2	N/A	N/A	
Invoice/TaxRate3	N/A	N/A	
Invoice/TaxRate4	N/A	N/A	
Invoice/InvoiceAmount	This field contains the total amount due for payment on the current invoice.	API-TRAN-INV-AMT	REQUIRED
Invoice/VendorCity	Not used for export in ERP.	N/A	N/A
Invoice/VendorId	Vendor ID	API-VENDOR	REQUIRED
Invoice/VendorIndexId	Not used for export in ERP.	N/A	N/A
Invoice/VendorName1	Not used for export in ERP.	N/A	N/A
Invoice/VendorStreet1	Not used for export in ERP.	N/A	N/A
Invoice/VendorStreet2	Not used for export in ERP.	N/A	N/A
Invoice/VendorVat	Not used for export in ERP.	N/A	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/VendorVatRegNo	The Vendor VAT Registration Number and Bill-to VAT Registration Number are available to satisfy a European legal/fiscal compliance ruling. This law states that if value added tax is charged, the vendor must state their VAT registration number as well as the VAT registration number of the bill-to party on the invoice.	N/A	N/A
Invoice/VendorZip	Vendor ZIP code	N/A	N/A
Invoice/YourRef	Use this field to capture a reference number specified on the invoice that relates to the billable party. It can often consist of a contact name, a reference number, or a combination of both.	N/A	N/A
Invoice/PasswordCn	This field is used for domestic VAT invoices on Mainland China and refers to the encrypted 4-line coding block that appears in the top-right hand quadrant of the invoice document.	N/A	N/A
Invoice/InvoiceCodeCn	This field is used for domestic VAT invoices on Mainland China. It refers to the ten digit numeric code that habitually appears in the top-left hand corner of the document.	N/A	N/A
Invoice/EcmDocumentId	Document ID in the enterprise content management system where the document has been exported to (for ECM integration).	N/A	Would be custom mapped for each implementation
Invoice/DocumentLink	Document ID in ECM where the invoice was exported to by APA.	N/A	Would be custom mapped for each implementation
Invoice/ErpPoType	Not used for export in ERP.	N/A	N/A
Invoice/ScanDate	Invoice import (or scan) time.	N/A	N/A
Invoice/SubTotal	Not used for export in ERP.	N/A	N/A
Invoice/Urn	Unique archive document ID (for early archiving scenarios).	N/A	N/A
Invoice/IpaInvalidReasonCode	Not used for export in ERP.	N/A	N/A
Invoice/IpaInvalidReasonRule	Not used for export in ERP.	N/A	N/A
Invoice/IpaOrganizationName	Not used for export in ERP.	N/A	N/A
Invoice/IpaOrganizationId	Not used for export in ERP.	N/A	N/A
Invoice/PaymentComments	Not used for export in ERP.	N/A	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/PaymentMethod	Payment method.	N/A	Defaulted by Vendor in Lawson
Invoice/ImageExtension	Invoice image file name extension (depends on the image type, for example, .tiff, .pdf, etc.)	N/A	Documents are not exported to Lawson
Invoice/ImageBase64	Base64 encoded invoice image	N/A	Documents are not exported to Lawson

Lawson AGS export mapping - Invoice Line fields

The following table explains the invoice line export fields used by the Lawson AGS.

Tag	Description	Lawson API Field	Interface Notes
Invoice/LineItem	Root for a line item	Lawson API Field	Interface Notes
Invoice/LineItem/Category	Miscellaneous charge category applied to the invoice line item based on the extracted line item description.	N/A	N/A
Invoice/LineItem/Description	Invoice line item description. If the line item is paired, this description appears on the purchase order. If the line is unpaired, this field contains the raw text description that was read from the invoice. For third-party freight invoices, service invoices, and MIRA invoices where no line items were required in the TAB section, and line pairing was either unsuccessful for any lines, or was not carried out, the description is set to THIRD PARTY FREIGHT, SERVICE and MIRA respectively.	N/A	N/A
Invoice/LineItem/Discount	Not used for export in ERP.	N/A	N/A
Invoice/LineItem/LineNumber	Line number (1..N)	MAD-LINE-NBRr0	Each line is added to the first Row

Tag	Description	Lawson API Field	Interface Notes
Invoice/LineItem/LineType	One of: Item, Sales Tax, Misc. Tax, Freight, Misc. Charge. See IpaLineType below	N/A	Not mapped, but when used would drive different logic for the line depending on the Type of Line..MISC add on cost vs SPREAD add on cost vs TAX
Invoice/LineItem/MeterialNumber	Invoice line item material number. If the line item is paired, this is populated with the material number from the purchase order line item. If the line is not paired, this is populated with any values read from the invoice.	N/A	N/A
Invoice/LineItem/OriginalLineNumber	Not used for export in ERP.	N/A	N/A
Invoice/LineItem/PoNumber	The purchase order number, and is populated only if line pairing is successful for this item.	AOI-PO-NUMBER	N/A
Invoice/LineItem/Quantity	The invoice line item quantity.	MAD-ENTERED-QTYr0	Each line is added to the first Row - Only used in PO
Invoice/LineItem/Total	The invoice line item total.	N/A	Not mapped - calculated in Lawson based on unit price X quantity
Invoice/LineItem/UnitPrice	The invoice line item unit price and it is only populated for unpaired line items. In all other cases, it has a value of zero.	MAD-ENT-UNIT-CSTr0	Only used on PO invoices
Invoice/LineItem/UnitOfMeasure	Unit of measure.	ENT-BUY-UOM	N/A
Invoice/LineItem/UnitOfQuantity	Unit of quantity.	N/A	N/A
Invoice/LineItem/TaxAmount	Tax amount	MISC-INV-AOC-AMTr0	Used in Conjunction with an add on cost code - PO Invoice Only
Invoice/LineItem/TaxRate	Tax rate Invoice line item tax rate. The percentage rate of tax applied to the invoice line item. If no percentage tax rate at line item level can be ascertained, then this value is blank.	N/A	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/LineItem/ChargeCode	Invoice line item charge code. This is lifted from the purchase order line item to which an invoice line is paired.	N/A	N/A
Invoice/LineItem/ChargeCodeId	Invoice line item charge code ID (only for PO-matched lines). This is lifted from the purchase order line item to which an invoice line is paired.	N/A	N/A
Invoice/LineItem/ CompanyCode	Company code that corresponds to a line item. This is lifted from the purchase order when an invoice line is paired.	N/A	N/A
Invoice/LineItem/ErpPoType	Not used for export in ERP.	N/A	N/A
Invoice/LineItem/MaterialGroup	This column represents the material group of the purchase order line item material. If available, it can be mapped simply to pass this data to a downstream ERP for a paired line item.	N/A	N/A
Invoice/LineItem/Plant	Plant ID. This is lifted from the purchase order line item with which an invoice line is paired.	N/A	N/A
Invoice/LineItem/ PoLineNumber	The purchase order line item number. It is populated only if line pairing has been successful for this item.	MAD-LINE-NBRr0	N/A
Invoice/LineItem/Puom	The order unit of measure and it is populated with the purchase order line item order unit measure if the line item has been paired.	N/A	N/A
Invoice/LineItem/QtyPuom	The quantity in the order price unit of meausre. This value is calculated during line pairing if UOM does not correspont to PUOM.	N/A	N/A
Invoice/LineItem/ TaxableAmount	Taxable amount	APD-TAXABLE-AMT	Only mapped on non-po Invoices
Invoice/LineItem/TaxCode	The invoice line item tax code, and it is populated using the tax determination procedure if a line item is paired.	APD-TAX-CODE	Only mapped on non-po Invoices
Invoice/LineItem/Activity	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	Mapped in GLSegments
Invoice/LineItem/BusinessArea	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	Mapped in GLSegments
Invoice/LineItem/CostCenter	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	Mapped in GLSegments

Tag	Description	Lawson API Field	Interface Notes
Invoice/LineItem/DbCrIndicator	The subsequent debit or credit indicator that indicates is the line item is a subsequent debit of a credit line item. If this value is set to X and the document type is INVOICE, then the line item is treated as a subsequent debit, the amount only and not the quantity. If the value is set to X and the document type is CREDIT then the line item is treated as a subsequent credit. If the value is blank the line item is treated as a regular line item.	N/A	N/A
Invoice/LineItem/InternalOrder	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	N/A
Invoice/LineItem/Network	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	N/A
Invoice/LineItem/ProfitCenter	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	N/A
Invoice/LineItem/SalesOrder	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	N/A
Invoice/LineItem/ SalesOrderItem	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	N/A
Invoice/LineItem/TaxJurCode	The invoice line tax jurisdiction code. It represents the downstream ERP system ID for the tax office where taxes are paid for this line item. This is used in countries that have tax jurisdictions for their sales tax. It is populated only if the line item is paired.	N/A	N/A
Invoice/LineItem/WbsElement	Not used for export in ERP. *Copied from accounting data that was retrieved from ERP. Obviously SAP only so far.*	N/A	N/A
Invoice/LineItem/GlAccount	GL account string specified in APA coding activity.	N/A	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/LineItem/GlSegment	The value of one GL segment in GL account. This tag may repeat for the invoice line. The number of the segments should be equal to the number of segments specified for the account (in GlAccount tag). Each GlSegment tag should have two attributes: 1. · segmentNumber - the number of the segment in the account structure (as specified in APA configuration for the segment structure 1. · name - the segment name as specified for this segment in GL structure CSV **Example:** *<GlAccount>01-000-1100-0000-000<GlAccount> <GlSegment segmentNumber="1" name="Organization">01<GlSegment> <GlSegment segmentNumber="2" name="Department">000<GlSegment> <GlSEgment segmentNumber="3" name="Account">1100<GlSegment> <GlSegment segmentNumber="4" name="SubAccount">0000<GlSegment> <GlSegment segmentNumber="5" name="Project">000<GlSegment>*	NON-PO/ Credit Invoices : APD-DIST-COMPANYr0 APD-DIS-ACCT-UNITr0 APD-DIS-ACCOUNTr0 APD-DIS-SUB-ACCTr0 ADD-ON-COST: API-COMPANY MISC-ACCT-UNITr0 MISC-ACCOUNTr0 MISC-SUB-ACCTr0 PO-Invoices: N/A	Based on the line type different logic is used to map fields
Invoice/LineItem/ ConditionCount	Not used for export in ERP. *SAP only - refers to planned conditions*	N/A	N/A
Invoice/LineItem/ ConditionStepNo	Not used for export in ERP. *SAP only - refers to planned conditions*	N/A	N/A
Invoice/LineItem/ConditionType	Not used for export in ERP. *SAP only - refers to planned conditions*	N/A	N/A
Invoice/LineItem/FreightVendor	Not used for export in ERP. *SAP only - also related to planned conditions*	N/A	N/A
Invoice/LineItem/GrDocItem	The receipt line item number. It is populated only if 3-way line pairing has been successful for this item.	N/A	N/A
Invoice/LineItem/GrDocNo	The receipt number, and is populated only if 3-way line pairing is successful for this item.	N/A	N/A
Invoice/LineItem/GrDocYear	Not used for export in ERP.	N/A	N/A
Invoice/LineItem/SheetItem	Not used for export in ERP.	N/A	N/A
Invoice/LineItem/SheetNo	Not used for export in ERP.	N/A	N/A
Invoice/LineItem/ IpaBusinessUnit	PeopleSoft business unit, copied over from PO line. *APA doesn't seem to support that in its data model?*	N/A	N/A

Tag	Description	Lawson API Field	Interface Notes
Invoice/LineItem/IpaLineType	Invoice line item type populated by IPA (see the Line Type field above). This is lifted from the purchase order line item to which an invoice line is paired.	N/A	N/A

PeopleSoft integration

Once you have added an ERP connection and assigned it to an organization, you can use these to integrate your PeopleSoft ERP with Invoice Processing Agility.

You can integrate your PeopleSoft ERP with Invoice Processing Agility by following these steps.

1. Extract the `KofaxInvoiceProcessingAgilityConnector_For_Lawson.zip` file.

    a. Navigate to the `ERP Integration\PeopleSoft` folder.
    The `KofaxConnector_For_PeopleSoft.ZIP` file is displayed.

    b. Extract `KofaxConnector_For_PeopleSoft.zip`.
    The `KOFAX_CONNECTOR` folder is extracted. Use this to copy the project.

2. Start the PeopleSoft Application Designer.

3. From the menu select **Tools** > **Copy Project** > **From File**.
    The **Copy From File : Select Project** window is displayed.

4. Select the `KOFAX_CONNECTOR` project and follow these steps.

    a. Navigate to and select the `KOFAX_CONNECTOR` folder.

    b. Click **Select to the right of the Select Project from the List Below** box.
    The **Copy From File** window is displayed.

    c. Click **Select All** to select all definition types.

    d. Click **Copy**.
    The project and its definition types are installed.

5. Open PeopleSoft in a compatible web browser and configure the KOFAX_APA_SERVICE as follows.

    a. Go to **PeopleTools** > **Integration Broker** > **Integration Setup** > **Services**.

    b. Open the KOFAX_APA_SERVICE.
    Information about the KOFAX_APA_SERVICE and a list of service operations is displayed.

    c. Open the first of the KOFAX_APA_SERVICE service operations and click **Service Operation Security**.

    d. Set the PTPT1000 permission to **Full Access** and then click **Save**.

    e. Repeat the previous two steps until all service operations are configured.

6. Create a PeopleSoft ERP connection as shown in Add ERP connections.

7. Add an organization to use the above ERP connection as shown in Add ERP organizations.

8. Locate the web.config file in the web folder used by the ErpConnector service and open it with a text editor.

   a. Under `<configuration><erpConnector><plugins>` locate the `<plugin>` with the type `PeopleSoft`.

      Ensure that the default plugin is as follows:

      ```
      <plugin type="PeopleSoft"
      class="Kofax.ApAgility.ErpConnector.Plugins.PeopleSoft.PeopleSoftErpPlugin,
       Kofax.ApAgility.ErpConnector.Plugins.PeopleSoft, Version=1.0.0.0,
      Culture=neutral, PublicKeyToken=0a00a7449ea4c480"/>
      ```

      Note There can be one PeopleSoft plugin only.

   b. Under `<configuration><erpConnector><connections>` add a `<connection>` element and sub-elements for your PeopleSoft ERP connection as follows.

      ```
      <connection name="PeopleSoft" type="PeopleSoft">
            <add name="url" value="https://peoplesoft:8443/PSIGW/
      PeopleSoftServiceListeningConnector/PSFT_EP"/>
            <add name="username" value="VP1" />
            <add name="password" value="vp1" />
            <add name="page_size" value="10000"/>
         </connection>
      ```

      For the `<connection>`, the `name` attribute must match the name of the ERP connection defined when you added the ERP connection.

      The `type` attribute in `<connection>` should match the `type` attribute in `<plugin>`.

      For each of the `<add>` elements, provide the following values.

      - `url`: Enter the URL to the PeopleSoft web service.
      - `username` and `password`: Enter the authentication credentials for the PeopleSoft web service.
      - `page_size`: Enter a positive integer with the mount of master data records that are returned by the web service for each call.

        For example, if `page_size` is set to 1000 and the number of vendors in the PeopleSoft ERP is 5000, the PeopleSoft ERP plugin makes 5 requests to the web service. Each time the web service returns 1000 records of data.

      Note The paths specified here much be accessible to Invoice Processing Agility

   c. Save the web.config file.

Create a job for Data Import

You can import the data from the CSV files that are specified in the web.config file to your database using a manual job by following these steps.

1. Open the **Invoice Processing Agility Workspace**.
2. From the **Jobs** menu, select **Create**.
   The **Jobs - Create** page is displayed.
3. From the **Category** list select **AP Agility**.
   The **Process** list is populated with processes for that category.

4. From the **Process** list, select **AP Data Import**.

5. Click **Create**.

    A message is displayed when the job is created successfully.

6. Optionally, close the **Invoice Processing Agility Workspace**

7. Optionally, schedule this job to run automatically.

Automate the Data Import job

If you want to ensure that the data in your web service CSV files is regularly updated, you can create a scheduled job that does this automatically.

Alternately, import the necessary AP Agility data manually.

You can configure a scheduled job to import data on a regular basis by following these steps..

1. Launch the **TotalAgility Designer**.

    The **TotalAgility Designer** Home page is displayed.

2. Optionally, log on if prompted.

3. On the **Home** page, click **System Settings**.

4. In the **Manage** group, select **Job Schedules**.

5. From the **Categories** list, select **AP Agility**.

6. Beside **Job Schedules**, click **Add** +.

    The **Job Schedule** window is displayed.

7. Enter a **Name** such as "Import Data."

8. Set the **Category** to **AP Agility**.

    a. On the left **Consume** pane, select **Categories**.

    b. From the list of categories, select **AP Agility**, drag, and then drop it to the **Category** in the **Job Schedule**.

    The **Category** is now set to **AP Agility**.

9. Set **Active** to **Yes**.

10. Set the **Process** as follows.

    a. In the left panel, click **Back** to return to the default **Consume** list.

    b. From the **Consume** pane, select **Processes**.
        The list of processes for the **Default Category** are displayed.

    c. Select the **AP Agility** category.
        The list of processes are updated.

    d. Drag the **AP Data Import** from the **Cosume** pane to the **Process** field on the **Job Schedule**.

    The **Process** is updated to **AP Data Import**.

11. Configure the **Frequency** and **Range of Recurrence** so that the job is performed when appropriate for your needs.

12. Click **OK** to save your schedule job.
    Your newly created **Job Schedule** is now listed.

13. Optionally, **Close** the **Job Schedules** and return to the **System Settings** page.

PIX installation

PIX is a Windows application that processes structured XML invoice formats and then converts them to PDF format. This generated PDF is a rendition of the electronic content for visualization purposes. When processed by Invoice Processing Agility, the electronic invoices data is automatically copied to the respective invoice fields.

PIX generates the field content and a PDF based on out-of-the-box mappings for the following electronic standards.

- OIOUBL Invoice
- OIOUBL Credit Note
- OIOXML
- General XML
- E2B
- ZUGFeRD
- ebInterface
- Facturae
- ESXML
- Finvoice
- Svefaktura

Important PIX should only be installed and configured if you need to process the above types of XML documents.

PIX also comes with a thin-client mapping correction utility that allows users to improve and advance the default XML-to-Field mappings. For more information, see the PIX Correction *Help*.

PIX is comprised of two components, a server and a client. It is common for the PIX Server and the PIX Client to be installed together on the same server. For the best results, install these together, but on a separate machine from Invoice Processing Agility and Kofax TotalAgility.

If necessary, the PIX Server and the PIX Client can be installed on separate servers.

Note PIX supports Western character sets only. This means that it does not support CJKT characters or extended characters required for languages such as Russian or Greek.

PIX prerequisites

Before you can install PIX, the following prerequisites are required.

- Microsoft SQL Server
- Internet Information Services with ASP.NET 3.5, ASP.NET 4.5, and WebSockets

Install PIX client and server on the same server

In most situations, it is recommended that you install the PIX Server and the PIX Client on the same server, but a different server to Kofax TotalAgility. If you anticipate processing documents through PIX on a regular basis, consider installing PIX on a separate server. This ensures that PIX does not compete with Kofax TotalAgility or Invoice Processing Agility for resources. Also, Kofax TotalAgility and Invoice Processing Agility must both be installed before you can install PIX.

The PIX installer is included in the extracted files under the `PIX_Install` folder.

You can install and configure PIX by following these steps.

1. Decide where to install PIX.

   Note If you are installing PIX on a separate server than Invoice Processing Agility, copy over the `PIX_Install/PixSetup.exe` file from your extracted files.

2. Double-click on the **PixSetup.exe** file located in the `PIX_Install/PixSetup.exe` folder of the extracted files.
   The Kofax PIX installation window opens.

3. On the Kofax PIX Installer, select **I agree to the license terms and conditions**.

   Leave both **Install PIX Server** and **Install PIX Client** selected.

4. Click **Install**.
   The PIX installation starts and the **PIX Server Setup Wizard** is displayed.

5. Click **Next** twice, and stop when you get to the **Database settings** step.

6. If your user account does not have the necessary permission to create a database, clear the **Create database** option.

   A Database Administrator can create the PIX Server database manually after the PIX Server installation finishes.

   If you do have permission to create a database, select **Create database** and then provide the **Database server name** and the **Instance** name if needed.

7. Click **Next**.
   The **Web site** step is displayed.

8. For the best results, modify only the **Log Folder**, if necessary. Leave the other settings as default.

   Make a note of the **Port** number. This is needed when configuring Invoice Processing Agility later.

9. If you do not have access to a user account that has permission to create a website, clear the **Create website** option.

   An Administrator can manually create the PIX Server website manually after the PIX Server installation finishes.

   If you do have access to a user account that has permission to create a website, select **Create website**.

10. Click **Next**.
    The **Kofax TotalAgility Connection** screen is displayed.

11. On the **Kofax TotalAgility Connection** screen, enter the **TotalAgility URI**.

    For example, `http://<servername>/TotalAgility/`

12. Click **Next**.

If you are creating a website, the **User credentials** screen is displayed. If you chose not to create a website, click **Next** and then skip to step 15.

13. If you are creating a website, modify the **Domain name**, **User name**, and associated **Password**.

14. Click **Next.**

    This user must have permissions to create a database and a web site in IIS.

    The **Install** screen is displayed.

15. Click **Install**.
    PIX Server is installed.

16. Click **Finish**.
    The **PIX Client Setup Wizard** is displayed.

17. Click **Next**.
    The **Destination Folder** page is displayed.

18. Optionally, click **Change** to modify where the PIX Client is installed.

19. Click **Next**.
    The **PIX Client settings** page is displayed.

20. Take note of the **PIX server URI** as this is needed later and ensure that the **Create website** option is selected.

21. Click **Next** and then **Install**.
    The PIX Client is installed.

22. When the installation completes, click **Finish**.
    A message that confirms a successful installation is displayed.

23. Click **Close**.

24. Configure the PIX Web.config file.

Install PIX server only

It is common to install both the PIX Server and the PIX Client on the same server. However, in certain situation, you may not want the PIX Client and PIX Server installed on the same server. Even though the PIX Server and the PIX Client use the same installer, it is possible to install them on separate machines.

You can install the PIX Server only by following these steps.

1. Decide where to install PIX Server.

   Note If you are installing PIX on a separate server than Invoice Processing Agility, copy over the `PIX_Install/PixSetup.exe` file from your extracted files.

2. Double-click on the **PixSetup.exe**.
   The Kofax PIX installation window opens.

3. On the Kofax PIX Installer, select **I agree to the license terms and conditions**.

4. Clear **Install PIX Client**.
   This installs the PIX Server only.

5. Click **Install**.
   The PIX installation starts and the **PIX Server Setup Wizard** is displayed.

6. Click **Next** twice, and stop when you get to the **Database settings** step.

7. If your user account does not have the necessary permission to create a database, clear the **Create database** option.

A Database Administrator can create the PIX Server database manually after the PIX Server installation finishes.

If you do have permission to create a database, select **Create database** and then provide the **Database server name** and the **Instance** name if needed.

8. Click **Next**.
   The **Web site** step is displayed.

9. For the best results, modify only the **Log Folder**, if necessary. Leave the other settings as default.

   Make a note of the **Port** number. This is needed when configuring Invoice Processing Agility later.

10. If you do not have access to a user account that has permission to create a website, clear the **Create website** option.

    An Administrator can manually create the PIX Server website manually after the PIX Server installation finishes.

    If you do have access to a user account that has permission to create a website, select **Create website**.

11. Click **Next**.
    The **Kofax TotalAgility Connection** screen is displayed.

12. On the **Kofax TotalAgility Connection** screen, enter the **TotalAgility URI**.

    For example, `http://<servername>/TotalAgility/`

13. Click **Next**.
    If you are creating a website, the **User credentials** screen is displayed. If you chose not to create a website, click **Next** and then skip to step 16.

14. If you are creating a website, modify the **Domain name**, **User name**, and associated **Password**.

15. Click **Next.**

    This user must have permissions to create a database and a web site in IIS.

    The **Install** screen is displayed.

16. Click **Install**.
    PIX Server is installed.

17. When the installation completes, click **Finish**.
    A message that confirms a successful installation is displayed.

18. Click **Close**.

Install PIX client only

Although it is not common, it is possible to install the PIX Client on a different server than the PIX Server.

You can install PIX Client on a separate server by following these steps.

1. Decide where to install PIX Server.

   > **Note** If you are installing PIX on a separate server than Invoice Processing Agility, copy over the `PIX_Install/PixSetup.exe` file from your extracted files.

2. Double-click on the **PixSetup.exe**.
   The Kofax PIX installation window opens.

3. On the Kofax PIX Installer, select **I agree to the license terms and conditions**.

4. Clear **Install PIX Server**.

This installs the PIX Client only.

5. Click **Next**.
   The **Destination Folder** step is displayed.

6. Optionally, click **Change** to modify the installation path

7. Click **Next**.

8. Enter a value in the **PIX server URI** field.

   This refers to the server name and port number recorded during the PIX Server installation.

   For example, `http://<servername>:<port>`.

9. If you do not have access to a user account that has permission to create a website, clear the **Create website** option.

   An Administrator can manually create the PIX Client website manually after the PIX Client installation finishes.

   If you do have access to a user account that has permission to create a website, select **Create website**.

10. Click **Next**.

11. Click **Install**.
    The PIX Client installs.

12. When the installation completes, click **Finish**.
    A message that confirms a successful installation is displayed.

13. Click **Close**.

Configure PIX web.config

Regardless of where the PIX Server is installed, it is necessary to configure the PIX Server web.config file after installation. This is true if you installed both PIX Server and PIX Client on the same server, of if you installed PIX Server on a different server to the PIX Client.

If you do not update the configuration file, it is likely that documents will fail PIX processing and that users cannot access PIX Correction.

You can update the PIX Web.config file by following these steps.

1. Navigate to `<Program Files>\Kofax\PIX\PIXServer` or wherever you installed PIX.

2. Edit the Web.config file.

3. Search for the **`<add key "hostname"`** value and edit it so that the hostname uses the fully-qualified domain server name.

4. Save the Web.config file.

5. Restart the **World Wide Web Publishing Service** for your change to take effect.

Manually create PIX server database

When PIX Server is installed, that user may not have the necessary permissions to create the PIX Server database. It is common for a company to restrict database creation to dedicated Database Administrators, so they must create the database by following these steps.

1. Open Microsoft SQL Server Management Studio.

2. Create a new database.

Name the database "SmartXML."

It is recommended that you use this name, but if you want to use another, the connection string in the Web.config file needs updated to use this new name.

3. In Windows Explorer, navigate to where you installed PIX Server.

By default, this path is `<Program Files>\Kofax\PIX\PIXServer`.

4. In Microsoft SQL Server Management Server, execute the **CreateTables.sql** script located in the **DbScripts** folder.
The script is executed and the necessary database tables are created.

Manually create PIX server website

If the user that installed PIX Server does not have the necessary permissions to install the PIX Server Website, an Administrator can do so by following these steps.

1. Launch IIS.

2. In the **Connections** pane, expand `http://localhost` represented by your computer name.
A list of Application Pools and Sites is displayed.

3. Select and then right-click on **Application Pools**. Select **Add Application Pool**.
The **Add Application Pool** window is displayed.

4. In the **Add Application Pool** window, enter a name for your application pool such as "PIXAppPool."

   a. From the **.NET Framework version** list, select **.NET Framework v4.0.XXXXX**.

   b. From the **Managed pipeline mode** list, select **Integrated**.

   c. Select the **Start application pool immediately**.

   d. Click **OK**.

   The new application pool is created is added to the list.

5. Right-click on **Sites** and select **Add Web Site**.
The Add Web Site window is displayed.

6. In the **Site name** field, enter "PixServer".

7. Select the newly added **PIXAppPool** from the **Application Pool**.

8. Browse to find the physical path of the **Physical path**.

By default, this is `<Program Files>\Kofax\Pix\PixServer`.

9. In the **Binding** group, set the **Port** to "53060."

This is the port number specified during installation.

10. Configure all other settings as appropriate for your needs and then click **OK**.
The new site is added to the list of sites.

Manually create PIX client website

If the user that installed PIX Client does not have the necessary permissions to install the PIX Client Website, an Administrator can do so by following these steps.

1. Launch IIS.

2. In the **Connections** pane, expand `http://localhost` represented by your computer name.
A list of Application Pools and Sites is displayed.

3. Expand **Site**.

A list of applications is displayed.

4. Right click on the **Default Web Site** and select **Add Application**.
   The Add Application window is displayed.

5. In the **Alias** field, enter "Pix."

6. Select the "PixAppPool" from the **Application Pool**.

7. Browse and select `<Program Files>\Kofax\Pix\PixClient\src` for the **Physical path**.

8. Configure all other settings as appropriate for your needs and then click **OK**.
   The new application is added to the Default Web Site list.

Configure Invoice Processing Agility to use PIX

Now that you have installed PIX you need to tell Invoice Processing Agility where it is installed and how to access it.

You can configure Invoice Processing Agility to use PIX by following these steps.

1. Log on to the Invoice Processing Agility Workspace.
   The Kofax TotalAgility Workspace for Invoice Processing Agility is loaded.

2. Click **IP Agility** > **Settings**.
   The **Settings** page is loaded.

3. Under PIX, enter the **Web client URI**.

   For example, `http://localhost/PIX`.

4. Enter the **Web server URI**.

   This is the path recorded when you installed the **PIX Client**.

   For example, `http://localhost:53060`.

5. Click **Save PIX Settings**.

Configure XML handling to use PIX

When you first install Invoice Processing Agility and then PIX, XML handling is done by Kofax TotalAgility. If you want to use PIX to process and correct documents, a change to the existing configuration is necessary. XML handling is configured in the Kofax Message Connector.

You can configure XML handling to use PIX by following these steps.

1. Click **Start** > **Kofax** > **Message Connector** > **Message Connector Configuration**.
   The **Message Connector Configuration** window is displayed.

2. Expand the **Structured (XML) Input Handling** section.
   A list of XML options is displayed.

3. In the **Types** field, replace the existing content with **.none.**

4. Scroll to the top and click **Save**.
   A message confirming that your changes have saved is displayed.

5. Click **Exit and restart service**.
   The service is restarted and the Message Connector window is closed.

User Exit Assemblies

Before you can use the various User Exits, you must first implement their assemblies and then install them. For more information on the various User Exits, see the *Kofax Invoice Processing Agility Installation Guide*.

Implement User Exit assemblies

In order to make use of the available user exits, you must first implement the user exit assemblies by following these steps.

1. Create a new project for a .NET class library.
2. Include references to the following assemblies.
   - `ICAL.ComponentAccess`
   - `ICAL.Framework`
   - `ICAL.Invoices`

   > **Note** These assemblies are located in the Assemblies directory of your Invoice Processing Agility installation files.

3. If you are using SAP, add references to the following assemblies.
   - `ICAL.Framework.SAP`
   - `ICAL.Invoices.SAP`
4. If you are using an Oracle database, add references to the following assemblies.
   - `ICAL.Framework.Oracle`
5. Sign your new assembly.
   This is necessary for installation to the global assembly cache.
6. Create a class that implements `ICAL.Invoices.Custom.ICustomInitializer`.
7. Implement the `Initialize(ProjectContext)` method.
8. Within the `Initialize(ProjectContext)` method, register your user exits in the `UserExitsRegistry` that is available as the `ProjectContext` property.
   You can implement and register as many user exits as are required.
9. Compile your assembly and give it a meaningful name such as `UserExitAssembly.dll`.
   A DLL file is generated with the provided name.
10. Install it to the global assembly cache.

Example: Modify Vendor Addresses

You want to modify vendor addresses after that are loaded from the vendor pool or database. To do this, implement and register the `ReadVendorAddress` delegate and then:

```
using ICAL.ComponentAccess;
using ICAL.Invoices;
using ICAL.Invoices.Data;
using ICAL.Invoices.Custom;

namespace UserExits
```

```
{
    public class MyUserExits : ICustomInitializer
    {
        public void ReadVendorAddress(IField field,
          string vendorId, IVendorAddress vendorAddress)
        {
            // your code here
        }

        public void Initialize(ProjectContext ctx)
        {
            ctx.UserExits.ReadVendorAddress = ReadVendorAddress;
        }
    }
}
```

Install User Exit assembly to GAC

After compiling your assembly, it needs installed to the global assembly cache (GAC) before it is usable. Even though you can use a tool like gacutil to install the DLL file, it is recommended that you use the provided `Install2GAC.exe` tool to install your assembly to the GAC.

You can install your assembly DLL to the GAC by following these steps.

1. Copy the **UserExit** folder that is included with your installation files to the machine where you are installing the assemblies.

   This folder contains the `Install2GAC.exe` tool.

2. Copy your recently implemented User Exit Assembly dll file to the **UserExit** folder that you copied in the previous step.

3. Open a command line with administrative privileges and enter the following.

   `Install2GAC.exe <YourUserExitAssembly>.dll`

   Press **Enter**.

   Your user exit assembly is installed to the GAC.

4. Optionally, if your assembly has any dependencies to additional third-party assemblies, install those assemblies to the GAC as well.

5. Edit the server variables in TotalAgility Designer

   Depending on whether you register an assembly for the 32-bit extraction phase, or the 64-bit validation, line pairing, and export phase, you need to set **one** of the following combinations in the `InvoiceProcessingAgility` category.

   • `IPAUserExitExtractionAssembly` and `IPAUserExitExtractionClass`

   • `IPAUserExitValidationAssembly` and `IPAUserExitValidationClass`

   The `IPAUserExitExtractionAssembly` and `IPAUserExitValidationAssembly` must contain the strong name of your assembly. For example, `IPAUserExitDemo, Version=1.0.0.0, Culture=neutral, PublicKeyToken=6a3a0087b9ef9c25, processorArchitecture=MSIL`.

   The `IPAUserExitExtractionClass` and `IPAUserExitValidationClass` must contain the name of the class that implements the `ICustomeInitializer` interface.

Secure connections

If you are running Kofax TotalAgility and Invoice Processing Agility using a secure connection (https://), it is necessary to make some changes to the web.config file so that the Solution Configuration Manager can also run in secure mode. The web.config file is installed alongside the Solution Configuration Manager.

To ensure that the service connection is running in a secure mode, edit the following line:

```
<security mode="TransportCredentialOnly">
```

By changing it as follows:

```
<security mode="Transport">
```

For the resource service connection the address must be updated for a secure connection. The following example shows a non-secure connection.

```
    <client>
      <!--For https resource service connection please change the address value to the
 https url with the server name e.g : https://servername/TotalAgility/Services/Sdk/
ResourceService.svc" -->
      <endpoint name="SdkResourceServiceEndpoint" address="http://localhost/
TotalAgility/Services/Sdk/ResourceService.svc"
                binding="basicHttpBinding"
                bindingConfiguration="BasicHttpBinding_Service"
                contract="ResourceServiceReference.IResourceService"/>
      <endpoint address="http://localhost/TotalAgility/Services/Sdk/
DocumentTypeVariantService.svc"
        binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_Service"
        contract="DocumentTypeVariantServiceReference.IDocumentTypeVariantService"
        name="SdkDocumentTypeVariantServiceEndpoint" />
    </client>
```

Note The localhost need to be updated with the server name to which the SSL certificate is assigned.

To make this a secure connection, edit the path so that the address starts with https:// instead of an http:// prefix. The updated example is as follows:

```
    <client>
      <!--For https resource service connection please change the address value to the
 https url with the server name e.g : https://servername/TotalAgility/Services/Sdk/
ResourceService.svc" -->
      <endpoint name="SdkResourceServiceEndpoint" address="https://localhost/
TotalAgility/Services/Sdk/ResourceService.svc"
                binding="basicHttpBinding"
                bindingConfiguration="BasicHttpBinding_Service"
                contract="ResourceServiceReference.IResourceService"/>
      <endpoint address="https://localhost/TotalAgility/Services/Sdk/
DocumentTypeVariantService.svc"
        binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_Service"
        contract="DocumentTypeVariantServiceReference.IDocumentTypeVariantService"
        name="SdkDocumentTypeVariantServiceEndpoint" />
    </client>
```

Restart the services

You need to restart the following services to complete the installation of Invoice Processing Agility.

- World Wide Web Publishing Service
- Kofax TotalAgility Core Worker Service
- Kofax Transformation Server

Change Invoice Processing Agility

It is possible to remove or change the features that are installed on your server. This is possible using the same installer that you used to install Invoice Processing Agility in the first place. In fact, if you run the installer on a server where any component of Invoice Processing Agility is installed already, the installer only lets you Change, Repair, or Remove Invoice Processing Agility.

You can also use the Change option to update any configuration settings as necessary. For example, the Web Server where the Solution Configuration Manager is installed is replaced with a newer server. As a result, it is necessary to install and configure the Solution Configuration Manager again.

You can change your Invoice Processing Agility installation by following these steps.

1. Navigate to your extracted files and open the **Installer** folder.
   The contents of the **Installer** folder are displayed.
2. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
   The Setup Wizard recognizes that Invoice Processing Agility is installed already.
3. Click **Next**.
   The **Change, Repair, or Remove Installation** window is displayed.
4. Click **Change** and then click **Next**.
   The **Prerequisites** Setup Wizard step is displayed along with any information about missing prerequisites.
5. The information displayed on the **Prerequisites** step is relevant if you are installing the listed components only.

   For example, if you receive a message that the SAP .NET connector is missing, but you are not using SAP, ignore this message. However, if you are using one of the components listed, click **Cancel** and then **Finish** to exit the Setup Wizard, install the required prerequisite, and then restart the installer. Otherwise, click **Next**.

   If you did not install the necessary prerequisites, the corresponding options are not available for installation.

   The **Custom Setup** Wizard step is displayed along with a list of installed features.
6. To remove an already installed feature, change it so that the **Entire feature will be unavailable**. To install a feature that was previously not included, or make changes to an already installed feature, select **Will be installed on local hard drive**.

   Once you select the necessary components, click **Next**.

   Use the links below to change or install each of the following features as appropriate for your installation.
   - Invoice Processing Agility assemblies
   - Invoice Processing Agility client database connection
   - Kofax TotalAgility Integration/package
   - The Solution Configuration Manager

Once you have made the necessary changes, click **Change**.

A progress indicator shows the progress of the Kofax Invoice Processing Agility installation.

7. Click **Finish**.

Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

The installer closes and if selected, the log file opens.

Remove a feature

If you no longer need an Invoice Processing Agility feature, you can remove that individual feature rather than the entire product.

For example, you have the Solution Configuration Manager installed on your computer but you have a new dedicated Web Server. You can use the installer to remove the Solution Configuration Manager so that you do not have to do this manually. You can then run the installer in custom mode on your new Web Server to install the Solution Configuration Manager there.

Another example would be a change to your ERP system. If you previously used Oracle but now use SAP, you can remove the Oracle assemblies and add the SAP assemblies, assuming that the SAP prerequisites are installed.

> **Note** If you do remove assemblies, this does not remove the prerequisites themselves. You need to remove these separately.

You can remove an Invoice Processing Agility feature by following these steps.

1. Navigate to your extracted files and open the **Installer** folder.
   The contents of the **Installer** folder are displayed.
2. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
   The installer opens and enables you to remove or change your Invoice Processing Agility installation.
3. Click **Next**.
   The **Change, Repair, or Remove Installation** window is displayed.
4. Click **Change**.
   The **Prerequisites** Setup Wizard step is displayed along with any information about missing prerequisites.
5. The information displayed on the **Prerequisites** step is relevant if you are installing the listed components only.

   For example, if you receive a message that the SAP .NET connector is missing, but you are not using SAP, ignore this message. However, if you are using one of the components listed, click **Cancel** and then **Finish** to exit the Setup Wizard, install the required prerequisite, and then restart the installer. Otherwise, click **Next**.

   If you did not install the necessary prerequisites, the corresponding options are not available for installation.

   The **Custom Setup** step is displayed indicating the features that are already installed.
6. For the feature or features that you are removing, select **Entire feature will be unavailble** and then click **Next**.

The **Ready to Change Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

7. Click **Change**.
   A progress indicator shows the progress of the Kofax Invoice Processing Agility installation.

8. Click **Finish**.

   Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

   The installer closes and if selected, the log file opens.

Add a feature

Because environments change regularly, it is possible to add an Invoice Processing Agility at a later time if necessary.

For example, if you use SAP and the prerequisites were not installed when you first installed Invoice Processing Agility, you can go back at a later time and install this feature once the necessary prerequisites are installed.

Another example is changing your ERP system. You can install the necessary prerequisites for Oracle or MarkView and then install their required assemblies.

You can add a feature to Invoice Processing Agility by following these steps.

1. Navigate to your extracted files and open the **Installer** folder.
   The contents of the **Installer** folder are displayed.

2. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
   The installer opens and enables you to remove or change your Invoice Processing Agility installation.

3. Click **Next**.
   The **Change, Repair, or Remove Installation** window is displayed.

4. Click **Change**.
   The **Prerequisites** Setup Wizard step is displayed along with any information about missing prerequisites.

5. The information displayed on the **Prerequisites** step is relevant if you are installing the listed components only.

   For example, if you receive a message that the SAP .NET connector is missing, but you are not using SAP, ignore this message. However, if you are using one of the components listed, click **Cancel** and then **Finish** to exit the Setup Wizard, install the required prerequisite, and then restart the installer. Otherwise, click **Next**.

   If you did not install the necessary prerequisites, the corresponding options are not available for installation.

   The **Custom Setup** step is displayed indicating the features that are already installed.

6. For any feature that you want to install that is not already installed, select **Will be installed on local hard drive** and then click **Next**.
   The **Ready to Change Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

7. Click **Change**.
   A progress indicator shows the progress of the Kofax Invoice Processing Agility installation.

8. Click **Finish**.

Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

The installer closes and if selected, the log file opens.

Repair Invoice Processing Agility

If your Invoice Processing Agility installation fails because some files are corrupted or missing, you can run the repair option from the installer.

This repair option reinstalls some of the features that you originally installed, such as assemblies and Solution Configuration Manager IIS and Website settings.

The repair does not however, recreate the Invoice Processing Agility client database, the Solution Configuration Manager database, nor does it re-install the Kofax TotalAgility Package. This ensures that you do not lose any configurations made up to this point.

How to repair Invoice Processing Agility

In most cases the repair occurs automatically. All features are updated and repaired without user interaction.

However, if you have the Solution Configuration Manager installed, and depending on how you installed this in the first place, some manual user interaction may be required. The following two situations require manual interaction.

- You selected Custom Account for the Pool Identity when setting up the Solution Configuration Manager website.
- You selected SQL Server Authentication when creating the Solution Configuration Manager database.

In either of the above scenarios you are asked to provide the user credentials for the specified user account before you can repair your Invoice Processing Agility installation.

You can repair Invoice Processing Agility by following these steps.

1. Navigate to your extracted files and open the **Installer** folder.
   The contents of the **Installer** folder are displayed.
2. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
   The installer opens and enables you to remove or change your Invoice Processing Agility installation.
3. Click **Next**.
   The **Change, Repair, or Remove Installation** window is displayed.
4. Click **Repair**.

   Depending on how the Solution Configuration Manager is configured, two additional steps may be displayed before you can finalize the repair of your installation.

   a. Optionally, if the Solution Configuration Manager uses a **Custom Account** for the Pool Identity, enter the Custom Account details and then click **Next**.

       b. Optionally, if the Solution Configuration Manager uses **SQL Server Authentication** for its database, enter the account details and then click **Next**.

    The **Ready to Repair Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

5. Click **Repair**.

    A progress indicator shows the progress of the Kofax Invoice Processing Agility installation.

6. Click **Finish**.

    Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

    The installer closes and if selected, the log file opens.

Chapter 6

Upgrade considerations

You can upgrade from an older version of Invoice Processing Agility to the next released version while maintaining the customizations to the Invoice Processing Agility process. The Invoice Processing Agility product activities are presently implemented as sub-processes. These activities are automatically upgraded to the new package that is installed.

You must not modify any processes, business rules, or forms with the exception of the following artifacts.

- **Classification Group**
  - `InvoiceProcessingAgility`
- **Document Group**
  - `InvoiceProcessingAgility`
- **Forms**
  - `CaptureDocument_Scan`
  - `GeneralWorkQueue`
  - `Invoices_Validation`
  - `RescanRejectedDocs_Re Scan_Scan`
  - `XMLDisplay`
  - `IPA_SessionTimeout`
- **Processes**
  - `CaptureDocument`
  - `ParkNAIDocuments`
  - `PostLinePairing`

In most cases, changes to the Invoice Processing Agility project in Transformation Designer are required. This is because your organization may have specific requirements that are not available in the out-of-the-box solution.

The following guidelines should be met when customizing your project. These guidelines ensure that any customizations are still available in future versions of Invoice Processing Agility.

Tip Keep notes of all changes made to a project. This is so that you can manually redo them if necessary, or to confirm if a future upgrade and merge are successful.

- It is important that you do not delete, move, or rename the following.
  - Classes
  - Field Groups
  - Fields
  - Locators

If you delete one of these items and then add it back, the internal ID is no longer the same, so the item does not behave as it should.

- All new Classes, Field Groups, Fields, or Locators should have a name that will not conflict with future releases of the solution. For example, add the "Custom_" prefix to all new items.
- Do not remove any Databases, Dictionaries, Recognition Profiles, Table Models, or other dependent settings.
- You can modify Recognition Profiles by adding an additional language.
- Add script below the marking line that says `'Modify script only below this line.` Any modifications above this line can cause problems with the package and are not included in a future merge.
- In script, refer to lookup fields and other items by their name and not by their index IDs. This is because the indexes can change and the names are not likely to change.

Note Document sets and training sets are not included in the merge process. This means that if you have documents in either the classification training set or the extraction training set, make a copy of these outside of the project folder to ensure that they are not lost during the merge. You can copy them back after the merge.

Upgrade Invoice Processing Agility

If you already have a version of Invoice Processing Agility installed already, it is possible to upgrade this by running the installer.

Note Ensure that Kofax TotalAgility is upgraded to version 7.5.0 before upgrading Invoice Processing Agility.

However, if you have already added the Invoice Processing Agility client database and the Solution Configuration Manager database, these do not need installed again. Instead, you need to run an upgrade script.

You can upgrade Invoice Processing Agility by following these steps.

1. Open the **Internet Information Services Manager (IIS)**.
2. In the **Connections** pane, expand `http://localhost` represented by your server name.
   A list of Application Polls and Sites is displayed.
3. Expand **Sites** and then **Default Web Site**.
   A list of sites and applications is displayed.
4. Right-click on the application created when you installed the Solution Configuration Manager and click **Remove**.
   When prompted to confirm the removal, click **Yes**.
   The application is removed from the list.
5. Select **Application Pools**.
   A list of **Application Pools** is displayed.
6. If a dedicated application pool was created for the Solution Configuration Manager, right-click on that application pool and select **Remove**.

When prompted to confirm the removal, click **Yes**.

The application pool is deleted.

7. Optionally, close the **Internet Information Services Manager (IIS)**.

8. Open **Microsoft SQL Mangement Studio** and select the **IPASCM** database.

   If you provided an alternative name for the Solution Configuration Manager database during install, select that instead.

9. Right-click the database and select **Delete**.

   When prompted to confirm the removal, click **OK**.

   The database is removed and the Solution Configuration Manager is now ready for installation.

10. Optionally, close the **Microsoft SQL Mangement Studio**.

11. Navigate to your extracted files and open the **Installer** folder.
    The contents of the **Installer** folder are displayed.

12. Double-click on the **Kofax Invoice Processing Agility** installer to begin the Setup Wizard.
    The installer opens and calculates if there is enough space on disk for the installation.

13. Once the Install Wizard confirms that there is enough disk space, click **Next**.
    The **End-User License Agreement** Setup Wizard step is displayed.

14. Select **I accept the terms in the License Agreement** and then click **Next**.
    The **Prerequisites** Setup Wizard step is displayed along with any information about missing prerequisites.

15. The information displayed on the **Prerequisites** step is relevant if you are installing the listed components only.

    For example, if you receive a message that the SAP .NET connector is missing, but you are not using SAP, ignore this message. However, if you are using one of the components listed, click **Cancel** and then **Finish** to exit the Setup Wizard, install the required prerequisite, and then restart the installer. Otherwise, click **Next**.

    If you did not install the necessary prerequisites, the corresponding options are not available for installation.

    The **Choose Setup Type** Setup Wizard step is displayed.

16. Select **Custom** and then click **Next**.

    It is also possible to select the **Full** setup type if you are installing all features. Follow the instructions on screen until you come to the **Invoice Processing Agility Client Database Connection** Setup Wizard step and then continue with step 18.

    The **Custom Setup** step is displayed along with a list of available components.

17. Select the features you are installing and click **Next**.

    The **Invoice Processing Agility Client Database Connection** Setup Wizard step is displayed.

18. Since you do not need to create the client database a second time, click **Next**.

    The Setup Wizard detects if a client database exists already and then runs an upgrade script automatically.

    The **Kofax TotalAgility Connection** Setup Wizard step is displayed.

19. On the **Kofax TotalAgility Connection** step, enter the following information.

    a. If the default Kofax TotalAgility URL that is provided is not correct, update the **TotalAgility URL**.
       For example, `http://<Server name>/TotalAgility/`.

    b. Select your **Authentication type** from one of the following options.

- **Authentication by username and password**.
- **Provide Session ID**.

  This ID is found by navigating to the TotalAgility Designer home page. Select **System Settings** > **Settings**.

- **Windows authentication**.

Is you are using **Authentication by username and password** enter a **User name** and **User password**.

If you are using **Provide Session ID**, enter the **Session ID**.

If you are using **Windows authentication**, no further action is required.

    c. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

    d. Once your connection test is successful, click **Next**.

The **Solution Configuration Manager** Setup Wizard step is displayed.

20. On the **Solution Configuration Manager website** window, enter the following information.

Note A default set of values is presented by this step of the installer. If you do not want to use the default values, enter or select alternative values.

    a. Optionally, enter an alternate **Web Site**.

Important A web site must exist in IIS before it can be added here. All other items are created dynamically.

    b. Optionally, enter a different **Virtual Directory**.

    c. Optionally, enter a different **Application Pool**.

    d. Optionally, select a **Pool Identity**.

If you select **Custom Account**, enter a **User name**, **User domain**, and the corresponding **User password**.

    e. Click **Next**.

The **Solution Configuration Manager Database** Setup Wizard step is displayed.

21. On the **Solution Configuration Manager Database** step, enter the following information.

Note A default set of values is presented by this step of the installer. If you do not want to use the default values, enter or select alternative values.

    a. Optionally, enter an alternate **Database name**.

    b. Optionally, enter an alternate **Server name**.

    c. Select your **Authentication Type** from one of the following.

- **Windows Authentication**
- **SQL Server Authentication**

Tip Ensure that the user specified here has at least `db_owner` permissions.

      d. If you selected **SQL Server Authentication**, enter a **User name** and **User password**.

      e. Click **Test connection** to ensure that your information is correct. If not, repeat the previous steps and try again.

      f. Once your connection is successful, click **Next**.

      The **Ready to Install Kofax Invoice Processing Agility 1.1.0** Setup Wizard step is displayed.

22. On the **Ready to install Kofax Invoice Processing Agility 1.1.0** step click **Install** to proceed with your installation.

    Otherwise, click **Back** to return to previous steps in the Setup Wizard.

    A progress indicator shows the progress of the Kofax Invoice Processing Agility installation.

23. Click **Finish**.

    Optionally, select the **View Installation Log** option. This opens the log file once the installer is closed.

    The installer closes and if selected, the log file opens.

24. Now that the installer has successfully upgraded Invoice Processing Agility, you must now configure your installation so that it works in your environment.

Upgrade Invoice Processing Agility Configurations

After upgrading Invoice Processing Agility, it is still necessary to perform several configuration steps. However, after an upgrade, you do not need to perform some of the configurations that are required after an initial install.

As a result, after upgrading Invoice Processing Agility, configure your upgraded installation by following these steps.

1. Update the Kofax TotalAgility theme form style sheet

2. If using Windows Authentication, configure the authentication type as well as the session timeout behavior.

3. Configure the Solution Configuration Manager.

4. Optionally, if you are integrated with MarkView it is necessary to execute the new `UpdateMarkview.sql` script against the Invoice Processing Agility client database.

5. Optionally, if you are integrated with AP Agility and it has also been upgraded, it is necessary to execute the `UpdateAPAgility.sql` script against the Invoice Processing Agility client database.

6. Optionally, merge the Transformation Designer project. Perform this merge if you made any modifications other than database CSV file locations to the project.

7. Optionally, if you are using an ERP, configure the ERP connection.

8. Optionally, if you are using PIX, do the following.

> **Important** Whether you installed PIX Client and PIX Server on the same machine or not, it is necessary to remove the PIX database and website wherever they are installed before you upgrade to a newer version for PIX.

    a. Remove the PIX database and website.

     b. Depending on your PIX configuration, do one or more of the following.

- Install PIX client and server on the same server
- Install PIX server only
- Install PIX client only

     c. Update the PIX settings on the Settings.

Merge Transformation Designer project customizations

If you made any changes to the Transformation Designer project in a previous version, those changes must be merged to the upgraded project. For example, merge the project if you added any custom items such as fields, field groups, classes, or locators.

Note If the only changes made to the Transformation Designer project were the database CSV paths, these are now handled automatically. You do not need to merge the project in this case because the path you provided in an earlier version is no longer applicable.

You can merge the Transformation Designer project by following these steps.

1. Open **Transformation Designer** and then open the **InvoiceProcessingAgility** project.

   The project opens.
2. Click on the **Kofax** button and then select **Merge Local Changes from Previous Version**.

   The **Choose Version with Desired Local Changes** window is displayed.
3. Select the version that contains the local changes and then click **OK**.

   In many cases this is the version with the highest version number.

   After the two projects are compared the **Select Items to Merge** window is displayed.
4. All highlighted items represent a change in the project. These may be development changes or manual changes made by you in the previous version of Invoice Processing Agility.

   Review each change and select those to include in the upgrade. Hover over the information icon to get more details about the specific changes between the project versions.
5. Select individual changes or click **Select all** to select all changes and then click **OK**.

   The merge is performed and a completion message is displayed.
6. Click **OK**.

   The message window closes and you are returned to your newly merged project.
7. Optionally, make further modifications to the project if needed.
8. From the **Project** tab, click **Release Project**.

   The project is saved, released, and ready for use in production.

Remove PIX database and website

Before you can upgrade PIX, it is necessary to first remove the PIX database and website.

Note You need the PIX installer used to install the previous version of PIX.

You can remove PIX using the PIX installer by following these steps.

1. Double-click on the **PixSetup.exe** file located in the `PIX_Install/PixSetup.exe` folder of the extracted files from the previous release.
   The Kofax PIX installation window opens. It recognizes that PIX is already installed, with options to Repair and Uninstall.

2. On the Kofax PIX Installer, click **Uninstall**.
   The PIX Server and PIX Client web sites, if installed, are removed.

3. Click **Close**.
   The PIX installer closes.

4. Optionally, if the PIX client is installed on a separate machine, run the installer there and click **Uninstall**.

5. Open **Microsoft SQL Mangement Studio** and select the **SmartXML** PIX database.

6. Right-click and select **Delete**.
   When prompted to confirm the removal, click **OK**.
   The database is removed and PIX is now ready for installation.

7. Optionally, close **Microsoft SQL Mangement Studio**.

Chapter 7

Remove Invoice Processing Agility

If you no longer want Invoice Processing Agility installed on your server, you can remove several components from your server using the installer.

Specifically, the following components are removed.
- The Invoice Processing Agility assemblies.
- The Solution Configuration Manager web site and associated files.

There are some Invoice Processing Agility components that are not removed using the installer. These include:
- The Invoice Processing Agility Client database.
- The Solution Configuration Manager database.
- The Kofax TotalAgility package.

You can remove the two databases manually by using the SQL Server Management Studio. However, Kofax recommends that you do not remove the Kofax TotalAgility package. Leaving the package installed does not affect Kofax TotalAgility performance.

You can remove several Invoice Processing Agility components by following these steps.
1. Double-click on the Kofax Invoice Processing Agility installer.
   The installer opens.
2. Click **Next**.
   The **Change, Repair, or Remove Installation** window is displayed.
3. Click **Remove**.
   The **Ready to Remove Kofax Invoice Processing Agility 1.1.0** window is displayed.
4. Click **Next**.
   Invoice Processing Agility is removed and the completion window is displayed.
5. Optionally, select **View Installation Log** to see the log file.
6. Click **Finish**.
   The Installer closes and several components of Invoice Processing Agility are no longer installed on your server. You can remove the remaining components manually if you want.

Access Invoice Processing Agility documentation

By default, the Invoice Processing Agility documentation is available online. However, if necessary, you can also configure Invoice Processing Agility to use help offline.

Default online documentation

The full documentation set for Invoice Processing Agility is available from https://docshield.kofax.com/Portal/Products/IPA/110-off8bue7sx/IPA.htm.

To launch the online help for the installed version of the product, click on the **IP Agility** menu, select **Help**, and then select the appropriate menu option.

Configure offline documentation

To access the documentation offline, download it from the Kofax Fulfillment Site. Since Invoice Processing Agility supports five languages, each language has a separate documentation compressed file.

For example, `KofaxInvoiceProcessingAgilityDocumentation_1.1.0_EN.zip` for English or `KofaxInvoiceProcessingAgilityDocumentation_1.1.0_DE.zip` for German.

Offline help for Invoice Processing Agility is available in English, German, French, Spanish, and Portuguese (Brazilian).

> **Note** The compressed files for languages other than English do not contain the help for the Solution Configuration Manager or PIX Correction. As a result, access to the Solution Configuration Manager and PIX Correction help offline must be done using the English compressed file. The English content also includes a print folder that contains the *Kofax Invoice Processing Agility Installation Guide*, *Kofax Invoice Processing Agility Administrator's Guide*, and the *Kofax Invoice Processing Agility Release Notes*.
>
> Because of this, we recommend that you install the English content as well as any of other available languages.

You can configure Invoice Processing Agility to use offline help by following these steps.

1. To configure the user help so that it is available offline, log on to the Invoice Processing Agility Workspace.

   For example, `http://<ServerName>/TotalAgility/forms/ipa/`.

The Kofax TotalAgility Workspace for Invoice Processing Agility is loaded.

2. From the menu, select **IP Agility** > **Settings**.
   The Settings page opens.

3. In the **Help** section, edit the **Help Base URL** so that it points to a location visible by IIS.

   For example, `http://localhost/TotalAgility/Help`. This path is also used by TotalAgility for its own offline help.

   If you want to use a different path, alter this link and subsequent paths accordingly.

4. Click **Save Help Settings**.
   Your changes are saved and the offline documentation mechanism is in place and ready for content.

5. Download the Invoice Processing Agility Documentation 1.1.0 ZIP file for English and any of the other available languages that you are using from the Kofax Fulfillment Site.

6. Extract the contents of the compressed documentation files.

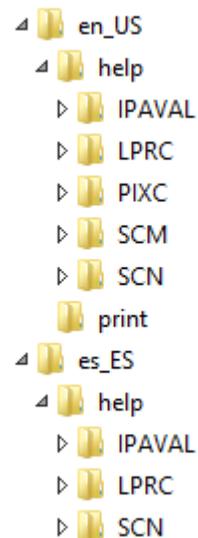7. Copy the extracted language files to the following location.

   `\\TotalAgility\Agility.Server.Web\Help\IPA\<Language>\help.`

   Create the `IPA` and `<Language>` folders as necessary.

   Optionally, copy the contents of the English extracted print folder to:

   `\\TotalAgility\Agility.Server.Web\Help\IPA\en_US\print.`

   For example, if you installed both the English and the Spanish help, the resulting file structure under `\\TotalAgility\Agility.Server.Web\Help\IPA\` should be as follows.

```
⊿ 📁 en_US
   ⊿ 📁 help
      ▷ 📁 IPAVAL
      ▷ 📁 LPRC
      ▷ 📁 PIXC
      ▷ 📁 SCM
      ▷ 📁 SCN
        📁 print
⊿ 📁 es_ES
   ⊿ 📁 help
      ▷ 📁 IPAVAL
      ▷ 📁 LPRC
      ▷ 📁 SCN
```

8. Return to the to the Invoice Processing Agility Workspace and select **IP Agility** > **Settings**.

9. From the menu, test each of the following.
   - **IP Agility** > **Help** > **Scan**
   - **IP Agility** > **Help** > **Validation**
   - **IP Agility** > **Help** > *PIX Correction*
   - **IP Agility** > **Help** > **Line Pairing Correction**
   - **IP Agility** > **Help** > **Solution Configuration Manager**

If the main language of your web browser is set to one of the supported languages, the user interface and documentation for Invoice Processing Agility appear in that language automatically. For any other language, and for the administrative documentation, it defaults to English.

If you have multiple languages configured, change your browser language to test each language.