

Invoice Processing Agility

Installation Guide

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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

The full documentation set for Invoice Processing Agility is available from https://docshield.kofax.com/Portal/Products/en_US/100-88b5k77qh3/IPA.htm.

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

Invoice Processing Agility Administrator's Guide

The *Invoice Processing Agility Administrator's Guide* provides instructions for customizing Invoice Processing Agility so that it meets your specific requirements.

Help for Invoice Processing Agility Validation

This help provides detailed information about how to use the Validation module when processing documents with Invoice Processing Agility.

Invoice Processing Agility Validation User's Guide

The *Invoice Processing Agility Validation User's Guide* provides detailed information in PDF format about how to use the Validation module when processing documents with Invoice Processing Agility.

Help for Invoice Processing Agility PIX Correction

This help 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.

Invoice Processing Agility PIX Correction User's Guide

The *Invoice Processing Agility PIX Correction User's Guide* provides details about how to use PIX Correction when processing documents with Invoice Processing Agility.

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 7.3.2.3

Kofax TotalAgility version 7.3.2.3 must be installed on the system when installing Invoice Processing Agility 1.0.0.

Note Multi-tenant and Azure environments are not supported by Invoice Processing Agility.

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](#).

Important Installation Note

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.

Chapter 2

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. [Create](#) the Invoice Processing Agility client database.
3. [Create](#) the Solution Configuration Manager database.
4. [Run](#) the Invoice Processing Agility installer.
5. [Import](#) the Invoice Processing Agility Package into Kofax TotalAgility.
6. [Install](#) the Solution Configuration Manager.
7. [Configure](#) resource access.
8. [Configure](#) the Solution Configuration Manager.
9. Optionally, [update](#) the MarkView database.
This step is necessary only if you are using MarkView and want to integrate it with Solution Configuration Manager.
10. [Create](#) CSV files for required database lookups.
11. [Update](#) references to the CSV databases in the TransformationDesigner.
12. Optionally, [modify](#) the recognition engines in the TransformationDesigner.
This step is necessary only if you are processing documents in languages other than English.
13. [Prepare](#) ingestion.
 - Configure [filesystem](#) ingestion.
 - Configure [scan](#) ingestion.
 - Configure [email](#) ingestion.
14. [Configure](#) page renditions.

15. [Configure](#) the Invoice Processing Agility-specific session timeout form.
16. Optionally, [install](#) PIX.
17. [Restart](#) services.

Extract the ZIP File

All of the installation files necessary to install Invoice Processing Agility are available in the `KofaxInvoiceProcessingAgility-<version>.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.
The contents of the ZIP file are now available as follows.

Database_Scripts

This folder contains both the create and update folders for creating and updating various databases used by Invoice Processing Agility.

Create

This folder contains the following creation scripts.

- `InvoiceProcessingAgility_Config_MSSQL.sql`
This script creates the Invoice Processing Agility default tables and configuration entries for a new Invoice Processing Agility solution.
- `SCM_CreatedB_MSSQL.sql`
This database script creates the default Solution Configuration Manager database schema.

Update

This folder contains the following update script.

Use this update script if you are also using MarkView.

- `UpdateMarkView.sql`
This script creates the `BRWCompany` table, updates the required XML export settings, and configures PO lookups.

Documentation

This folder contains the following documents.

Invoice Processing Agility Administrator's Guide

This document contains information for maintaining and administrating an Invoice Processing Agility installation.

Invoice Processing Agility User's Guide

This document contains instructions on how to process Invoice Processing Agility documents for Validation users.

PIX_Install

This folder contains the `Pixsetup.exe` PIX installer file. Install this only when you are using PIX.

SCM_Install

This folder contains the following files in order to install the Solution Configuration Manager.

SCMWEB

This is the web configuration contents needed to create a website for the Solution Configuration Manager.

SCM_IPA<version>.zip

This ZIP file represents the Invoice Processing Agility package that is imported into the Solution Configuration Manager application.

TotalAgility

This folder contains the following folders.

Installer

This folder contains the following:

Assemblies

This folder contains the assemblies required during installation.

For example, it includes DLLs.

IPInstaller.exe

This executable file installs Invoice Processing Agility.

Package

This folder contains the following file.

IP Agility.zip

This folder contains the package that represents the Invoice Processing Agility solution.

InvoiceProcessingAgilityInstallGuide_EN.pdf

This document contains the information and instructions necessary for installing Invoice Processing Agility.

KOFAX EULA.pdf

This document contains the full-text of the end user's license agreement that is displayed in the installer.

versions.txt

This file contains information about the installer version.

Create the Invoice Processing Agility Client Database

The Invoice Processing Agility client database is used to store all of the configuration settings for Invoice Processing Agility.

Note The client database is supported for Microsoft SQL Server only. Because of this, the following steps assume that you are familiar with Microsoft SQL Server Management Studio. If you need more information about this product, please refer to the documentation provided with Microsoft SQL Server Management Studio.

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

1. Open the Microsoft SQL Server Management Studio.

2. Create a new database.

Enter a name for the database. For example, "InvoiceProcessingAgility_Client".

Tip You can provide your own name for this database, but this means additional work in subsequent installation steps.

3. Optionally, if you do not use the suggested database name in the previous step, edit the database creation script.

1. Open the "<Extracted Files>\Database_Scripts\Create \InvoiceProcessingAgility_Config_MSSQL.sql" script that is included in the [extracted ZIP file](#).
2. Locate the `@DB_Name = 'InvoiceProcessingAgility_Client'` entry and replace the existing database name with the name you provided in step 2 above.
3. **Save** the database script.

4. Select your newly created database and then execute the "<Extracted Files>\Database_Scripts \Create\InvoiceProcessingAgility_Config_MSSQL.sql" script.
The query runs and the database tables are created.

5. Check for errors and ensure that the tables are available.

Important The Vendor (`Dbo.BRWVendorMaster`) and Employee (`Dbo.BRWEmployeeMaster`) database tables are empty at this point in the overall installation procedure.

Create the Solution Configuration Manager Database

The Solution Configuration Manager database is where all of the client-specific settings and corresponding processing behavior are maintained.

You can create the Solution Configuration Manager database by following these steps.

1. Open Microsoft SQL Server Management Studio.
2. Create a new database.

Enter a name for the database. For example, "IPASCM".

Tip You can provide your own name for this database, but additional changes are required in subsequent installation steps.

3. Select your newly created database and then execute the "<Extracted Files>\Database_Scripts \Create\SCM_CreateDB_MSSQL.sql" script.

This script is included in the [extracted ZIP file](#).

The query runs and the database tables are created.

Run the IPAINstaller.exe file

Now that you have created the client database and the Solution Configuration Manager database, it is necessary to run the Invoice Processing Agility installer. This installs the user exit scripting framework, integrations with SAP and Oracle, as well as installing the Invoice Processing Agility business logic DLLs to the GAC.

Important The Invoice Processing Agility installer and all the other third party installers, such as Oracle and SAP, must be executed on every server that performs Invoice Processing Agility processing. The Invoice Processing Agility package however, is executed only once on the Kofax TotalAgility server. Once the package is installed, all other servers reference it from the Invoice Processing Agility database.

You can run the IPAINstaller.exe by following these steps.

1. Open the "Command Prompt" window as an Administrator.

It is necessary to run the installer via the "Command Prompt" window. If you simply double-click on the executable, no parameters are applied and you cannot see any warnings or error messages.

2. Change the path to the location where you extracted the zip file.

The installer is located in `TotalAgility\Installer`.

3. Enter a command and press **Enter**.

For example, type `"IPAINstaller -basic"`.

You can use any of the following parameters to customize your command.

Note It is possible to apply any of the following parameters to an already existing installation. For example, if you install MarkView at a later time, you can ensure that the necessary components needed to use MarkView for Invoice Processing Agility are added without installing everything from scratch. To do this, repeat steps 1 - 3 above and add the relevant parameter or parameters. Once the updated installation is complete, restart the following services.

- Kofax TotalAgility Core Worker
- Kofax Transformation Server
- World Wide Web Publishing Service

-basic

Installs or updates the core assemblies that are required. Basic installation copies

`ICAL.ComponentAccess`, `ICAL.Framework`, `ICAL.Invoices` and `MatchingUtils` to GAC and verifies the success by loading `ICAL.Invoices`.

-sap

Installs or updates the assemblies for connecting to SAP. This is optional. Before using this option for the first time, the instructions for installing the SAP .NET connector must be followed.

-markview

Installs or updates the MarkView connector assembly. This is necessary only when installing MarkView. In addition, the `-oracle` parameter is required for MarkView.

-oracle

Installs or updates the assemblies for connecting to the Oracle databases. This requires customers to download the Oracle Data Provider for .NET 2 from [Oracle](#). This is optional and needed only when customer data is stored in an Oracle database.

Note This parameter is mandatory when installing MarkView.

-custom <assemblyname>

Installs or updates a custom assembly. This is required for deploying assemblies containing user exit implementations. Custom installation copies the given assemblies to GAC.

The following examples show how the above parameters are used.

- `IPAIInstaller -basic`
Called to install the basic assemblies.
- `IPAIInstaller -basic -sap`
Called to install the basic assemblies and SAP support.
- `IPAIInstaller[-basic][-sap][-markview][-oracle][-custom assemblyname.dll]`
Called to install all the assemblies related to the Invoice Processing Agility installer.
- `IPAIInstaller -custom myextractionsuserexits.dll myvalidationuserexits.dll`
Called to install the custom assemblies. The files must be copied to the "Assemblies" subdirectory as a prerequisite.
- `IPAIInstaller -uninstall -basic`
Called to uninstall the basic assemblies.
- `IPAIInstaller -uninstall -basic -sap`
Called to uninstall the basic assemblies and SAP support call from the GAC.

After pressing Enter, the specified command is executed and the Invoice Processing Agility installer runs.

4. When the command is finished, close the "Command Prompt" window.

Import Invoice Processing Agility Package into Kofax TotalAgility

In order to install Invoice Processing Agility, it is necessary to import the Invoice Processing Agility package into Kofax TotalAgility. For more information about importing packages in Kofax TotalAgility, refer to the *Kofax TotalAgility Help*.

Once the package is imported, the various Invoice Processing Agility settings needed to process documents are available in Kofax TotalAgility.

You can import the Invoice Processing Agility package into Kofax TotalAgility by following these steps.

1. Launch the TotalAgility Designer.
The TotalAgility Designer Home page opens.
2. Optionally, log in with your Kofax TotalAgility Administrator user credentials 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, next to **Package**, click **Browse**.
6. Select the "IP Agility.Zip" file located in the `TotalAgility\Package` directory of your [extracted files](#), and then click **Open**.

The contents of the ZIP file, including all forms, global variables and server variables are displayed on the **Import Package** page.
7. In the upper right corner, click **Import**.

After several minutes, the package is added to the TotalAgility Designer.

Note Errors and warnings may be displayed during import. A successful import should occur without errors, but warnings may be present.

8. In the upper right corner, click **Close** to close the package.

Note If the import does not work, you must clean the Kofax TotalAgility system by deleting the following artifacts from the Invoice Processing Agility category.

- Processes
- Forms
- Global Variables
- Server Variables
- Extraction Group
- .NET DLLs
- PDF profile
- Job Schedule
- Scan VRS profile
- Category
- **Assemblies** from `C:\ProgramData\Kofax\TotalAgility\Generated Assemblies\`.NET Assemblies

This is similar to [removing](#) the entire Invoice Processing Agility product.
Once these are successfully removed, reboot and then repeat the above steps.

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 Access to Solution Configuration Manager from Kofax TotalAgility Installed on Different Server

If the Solution Configuration Manager and Kofax TotalAgility are installed on two different servers, you must configure the Solution Configuration Manager access from Kofax TotalAgility.

In order to accomplish this, create a new user that has the same settings on both the Solution Configuration Manager and the Kofax TotalAgility servers. Ensure that the application pool used with

the Solution Configuration Manager is running as the same service account that the Kofax TotalAgility services are using.

1. On the server where Kofax TotalAgility is installed, navigate to **Local Users and Groups > Users**.
2. Click **New User**.
3. Enter a user name and password.
For example, **SCMUser**.
4. Clear the **User must change password at next logon** check box.
5. Clear the **Password never expires** check box.
The new Windows user is created on the Kofax TotalAgility server.
6. Repeat the same steps for the Solution Configuration Manager server.
Enter the **SCMUser** user name and provide the same password that you entered for the Kofax TotalAgility server.

Note The application pool identity is set to this user.

7. In the Solution Configuration Manager server, provide the newly created user **Full Control** access to the directory where the application artifacts are stored.
8. Open Microsoft SQL Server Management Studio.
9. In the **Object Explorer** pane, expand **Security**.
A list of security related items is displayed.
10. Right-click **Logins**, and then click **New Login**.
11. Enter the **SCMUser** user name and provide the same password that you entered for the Kofax TotalAgility server.
The user is added to the database and the access to Solution Configuration Manager from Kofax TotalAgility is configured.

Install the Solution Configuration Manager

The Solution Configuration Manager is used to configure Invoice Processing Agility, but is not installed automatically. As a result, it is necessary to install the Solution Configuration Manager by first creating the Solution Configuration Manager website and then editing the Web.config file.

Create the Solution Configuration Manager Website

Since Solution Configuration Manager is a web-based interface to edit the Invoice Processing Agility settings, it is necessary to set up a web application via Internet Information Services (IIS).

You can create the Solution Configuration Manager website by following these steps.

1. Copy the <Extracted Files>\SCM_Install\SCMWEB folder to a location that is accessible by IIS.
2. Optionally, rename the folder to meet your requirements.
3. Launch IIS.
4. In the **Connections** pane, expand `http://localhost` represented by your computer name.
A list of Application Pools and Sites is displayed.
5. Select and then right-click on **Application Pools**. Select **Add Application Pool**.

The **Add Application Pool** window is displayed.

6. In the **Add Application Pool** window, enter a name for your application pool such as "SCMAppPool."
 1. From the **.NET Framework version** list, select ".NET Framework v2.0.XXXX."
 2. From the **Managed pipeline mode** list, select **Integrated**.
 3. Select the **Start application pool immediately**.
 4. Click **OK**.

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

7. Select your newly created application pool and perform the following steps.
 1. In the **Actions** pane, under the **Edit Application Pool** heading, click **Advanced Settings**. The **Advanced Settings** window is displayed.
 2. In the **General** group, set **Enable 32-Bit Applications** to **True**.
 3. In the **Process Model Group**, set **Identity** to an available user group.
Identity has access to database and filesystem (application service account).

Note If you use **Network Service**, it must be in the Administrator windows group.

4. Click **OK**.

The window closes and your application pool advanced settings are saved.

8. In the **Connections** pane, expand **Sites**.
9. Right-click **Default Web Site** and then select **Add Application**. The **Add Application** window is displayed.
10. Enter the following settings.
 1. In the **Alias** field, enter a name for the application such as "**IPASCM**".
 2. From the **Application pool**, click **Select** and choose your newly created application pool and click **OK**.
 3. In the **Physical path**, click on the **Browse** button and navigate to and select the folder you copied in step 1.
 4. Optionally, test the connection.
 5. Click **OK**.

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

11. In the **Connections** pane, click on your newly created application. The configuration settings are listed in the central pane.
12. In the IIS group, double-click on the **Default Document** setting. The central pane is updated with a list of documents.
13. Optionally, add a new default document.
 1. In the right **Actions** pane, click **Add**. The **Add Default Document** window is displayed.
 2. In the **Name** field, enter "**login.aspx**".

Note The name of this document is case-sensitive.

3. Click **OK**.
The newly added default document is added to the top of the list of documents.
14. Restart the **World Wide Web Publishing Service**.
15. Close IIS.
16. If your installation is on Windows Server 2008 R2, perform the following steps.
These additional steps are not necessary for any other operating systems.
 1. Open a **Command Prompt** as Administrator.
 2. Enter the following command and press **Enter**.
`bcdedit.exe /set {current} nx AlwaysOff`
The command runs and a message is displayed to indicate that the command is successful.
 3. Close the **Command Prompt** window.

Edit the Web.config file

The `Web.config` file defines the location and connection details for the Solution Configuration Manager. Before you can use the Solution Configuration Manager this file needs updated with specific details of your configuration.

You can edit the `Web.config` file by following these steps.

1. Navigate to the `SCMWEB` folder that is referenced in IIS.
2. Update the `SCMWEB` folder so that its permissions match those assigned to the **"Identity"** value in the Solution Configuration Manager Application Pool.
3. In the `SCMWEB` folder, edit the **Web.config** file.
4. Locate and update the `connectionString` value so that it points to the [Solution Configuration Manager database](#) that you created earlier.

The following is the default string.

```
<connectionStrings>
<add name="SCM" connectionString="Data Source=MyWindows2008R2Server\SQLSERVER2008R2;
Initial Catalog=SCM;Integrated Security=False;User ID=sa;Password=*****;
MultipleActiveResultSets=True" providerName="System.Data.SqlClient" />
```

You need to edit this file to match your installation requirements. Ensure that your settings match the italic text in the following example.

```
<connectionStrings>
<add name="SCM" connectionString="Data Source=SQLServerName;Initial
Catalog=IPASCM;Integrated Security=False;User ID=User ID;Password=
Password;MultipleActiveResultSets=True" providerName="System.Data.SqlClient" />
```

Note If you are using Integrated Security, set this value to **"True"** in your connection string.

5. Locate the `DefaultImportPath` and update its value so that it points to a location where import packets are stored.

Tip As you edit your project configuration, almost every change you make in the Solution Configuration Manager is written to a packet. You can use these packets to configure other Invoice Processing Agility installations with minimal effort.

It is recommended that you do not store these files on the local C:\ drive. Instead, use a separate drive or a network share so the packets are more easily accessible across the network.

6. Locate the `DefaultExportPath` and update its value so that it points to a location where export packets are stored.
7. **Save** and close the `Web.config` file.

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.

Configure User Access without Windows Authentication

In certain cases, Kofax TotalAgility may be configured to not use Windows Authentication. In this case, it is necessary to modify your Invoice Processing Agility, installation so that it also does not use Windows Authentication.

This step is optional, and needed only when Kofax TotalAgility is configured to not use Windows Authentication.

You can configure Invoice Processing Agility to not use Windows Authentication by following these steps.

1. Login 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 **Workspace_Logon** form to the **Default Form** option in the **Desktop Settings** group.
9. Click **Save** in the upper left corner.
The **Form Designer** page is displayed once more.
10. Click **Close**.
11. Optionally, close the TotalAgility Designer.

Configure Database Access

Now that you have created the Solution Configuration Manager database and configured the web.config file, it is also necessary to ensure that the configured user has the necessary permissions for both the Solution Configuration Manager and the Invoice Processing Agility databases.

You can configure database access by following these steps.

1. Open Microsoft SQL Management Studio.
2. In the **Object Explorer** pane, expand **Security**.
A list of security related items is displayed.
3. Expand **Logins** and then double-click on the required user account.
The **Login Properties** window for that user is displayed.
4. In the **Select a page** group, click **User Mapping**.
A list of all databases is displayed in a table to the right and their associated permissions are displayed below.
5. Select the Invoice Processing Agility client database by selecting the **Map** checkbox.
The associated permissions for your user are displayed for the selected database.
6. The user needs to be able to read and write to the database. Select the following permissions:
 - db_datareader
 - db_datawriter

These are the minimum user permissions required. You can select additional permissions to suit your needs.

7. Select the Solution Configuration Manager database by selecting the **Map** checkbox.
The associated permissions for your user are displayed for the selected database.

8. The user needs to be able to read and write to the database. Select the following permissions:

- db_datareader
- db_datawriter

These are the minimum user permissions required. You can select additional permissions to suit your needs.

9. Click **OK** to save your changes.

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/`.
The Kofax TotalAgility Workspace for Invoice Processing Agility is loaded.
2. In the **Workspace** menu, select **IP Agility > Settings**.
The **IPA Settings** page is loaded.
3. Change the **URL** to match the application you [created](#) earlier, and then click **Save SCM Settings**.
4. To configure the connection to the Invoice Processing Agility client database, edit the **Connection String** so that it points to the client database you created, and then click **Save Client Database Settings**.

If you used the suggested name, enter **"InvoiceProcessingAgility_Client"**.

Important This connection string must contain the provider. For example, `Provider=SQLOLEDB.1.`

This change automatically updates the Invoice Processing Agility connection string that is listed in the **TotalAgility Designer > Data > Server Variables**.

5. Configure logging by following these steps.
 1. Create a folder to hold your log files.
 2. Update the **Directory** value to match the newly created log file.
 3. Optionally, change the log level.
 4. Optionally, increase the number of log files retained.
 5. Click **Save Logging Settings**.
 6. Restart the following services in order for your changes to take effect.
 - Kofax TotalAgility Core Worker
 - Kofax Transformation Server
 - World Wide Web Publishing Service

6. Click **Launch SCM**.

Important If the Solution Configuration Manager does not display correctly, refer to the [Troubleshooting](#) section before continuing with this installation.

The Solution Configuration Manager opens so that you can perform additional configuration settings.

Manage Database Connections

Now that you can open the Solution Configuration Manager, further configuration steps are required so that the Invoice Processing Agility client database is configurable via the Solution Configuration Manager.

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 you [created](#) the Invoice Processing Agility client database.
4. In the **Database Name** field, enter the name of the Invoice Processing Agility client database.
This name must match the database name you used when you created the Invoice Processing Agility client database.
5. Enter a **User Name** and a corresponding **Password**.
If you entered a **User Name** and **Password** in the `Web.config` file, add the same user credentials here.
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.

Adding 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 **Change** to choose a file next to the **Select File** field.
3. Navigate to and select the zip package in the `SCM_Install` folder from the [extracted zip files](#).
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**.

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.

Finalize the Solution Configuration Manager Settings

Now that the Invoice Processing Agility client database is configured and the Solution Configuration Manager package is installed, there are a few final setting changes needed.

You can finalize the Solution Configuration Manager settings by following these steps.

1. Click **Configure Project**.
This opens the **Configure Project** screen.
2. From the **Project** list, select a project.
A second list becomes available.
3. Navigate to **Solution Configuration Manager > Global Settings > Database Connection Settings**.
The **Database Connection Settings** page is displayed.
4. This is the database that is needed to access Invoice Processing Agility from the Solution Configuration Manager. Edit the existing **Connection String** accordingly.
If you used the suggested name when creating the database, the only parts that require updating are the **User ID** and **Password**.
If you used a different database name, update the **Database name** as well.
5. **Save** your changes.
If you are prompted to save the packet, follow the instructions on the window.
6. **Close** the Solution Configuration Manager.
7. Restart the following services for your changes to take effect.
 - Kofax TotalAgility Core Worker
 - Kofax Transformation Server
 - World Wide Web Publishing Service

Troubleshoot Solution Configuration Manager Settings

If you launch the Solution Configuration Manager and the labels or menus do not display correctly, you can review the `trace.log` file that is located in the website folder that you [configured](#) when creating the Solution Configuration Manager website.

The log file errors can provide information on what is causing the problem. The most common problems are:

- The connection string is incorrect in the `web.config` file.
- The user does not have the necessary permissions to access the database.

For example, the following log example provides details of an error.

```
2017-03-21 01:06:51,679 [1] ERROR Configurator.Web.Core.Localization.LocalizationHelper (null)
- System.Data.SqlClient.SqlException: A network-related or instance-specific error occurred
while establishing a connection to SQL Server. The server was not found or was not accessible.
Verify that the instance name is correct and that SQL Server is configured to allow remote
connections. (provider: SQL Network Interfaces, error: 26 - Error Locating Server/Instance
Specified)
```

The above error indicates that the Solution Configuration Manager cannot connect to its database. This could be because the connection string is incorrect or the permissions are insufficient for the current user.

To start troubleshooting, open the `web.config` file and then refer to the [Edit the Web.config File](#) topic to ensure that the connection string matches the format required. Before trying to launch the Solution Configuration Manager again, restart the "World Wide Web Publishing Service."

If the menus are still incorrect, refer to the [Configure Database Access](#) topic to confirm that the database settings are correct. After making changes, try to launch the Solution Configuration Manager again.

If the error is still visible, refer to the `trace.log` file to see if the error has changed.

Configure MarkView Integration 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. This means that the `-oracle` parameter is needed when installing Invoice Processing Agility.

It is important that you perform each of the previous installation steps before attempting to configure the MarkView integration. If the necessary Invoice Processing Agility settings are not in place, the integration may fail.

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*.

Update the IPAINstaller.exe for MarkView

In order for MarkView to work with Invoice Processing Agility, it is necessary to run the `IPAINstaller.exe` with the MarkView parameter. If you installed Invoice Processing Agility without this parameter, you can re-install Invoice Processing Agility with this parameter without causing any problems with the installation.

You can run the `IPAINstaller.exe` with the MarkView parameters by following these steps.

1. Open the "Command Prompt" window as an Administrator.
2. Change the path to the location where you extracted the zip file.
The installer is located in `TotalAgility\Installer`.
3. Type "`IPAINstaller -markview -oracle`" and press **Enter**.
The Invoice Processing Agility installer runs and the MarkView files are added to the installation.

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** 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.

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.
 1. 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.
 2. 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*.
 1. Open the Solution Configuration Manager.
 2. Select a **Project** from the list.
An additional **Settings** list is displayed.
 3. From the **Settings** list, select **Profile Settings**.
An additional **Profile** list and two buttons are displayed.
 4. Click **Update Document Variants**
The document variants for all profiles are updated.
7. Optionally, **Close** the Solution Configuration Manager.

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** 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.

CSV Files for Database Lookups

Before you can use Invoice Processing Agility it is necessary to create the CSV files that are used by the database lookups. This is because the Associative Search Engine imports a CSV file. To aid in this, there is an automatic process to convert the `BRWVendorMaster` and `BRWEmployeeMaster` tables from the [Invoice Processing Agility client](#) database into CSV format.

Important There is no Company Code table in the Invoice Processing Agility client database. Because of this, if you want to use the Company Code lookup, the data must be stored elsewhere and exported into CSV format.

By default, there are three databases available in TransformationDesigner. For more information on TransformationDesigner and how to use this tool, please refer to the *TransformationDesigner Help*.

These databases that are available in TransformationDesigner are as follows.

- VendorASE
- EmployeeASE
- CompanyCode

It is mandatory to create a CSV database for the [Vendor](#) and [Employee](#) data. The Company Code CSV is optional.

Before you create the CSV files, it is mandatory that the corresponding databases contain data. For the vendor data and the employee data, you can do one of the following.

1. Add mock data to the `BRWVendorMaster` and `BRWEmployeeMaster` tables so you can create a temporary CSV file and continue with the Invoice Processing Agility installation.
You can add more data to the master databases at a later time, and either manually update the databases, or allow the Transformation Server to update them automatically.
For more information on Transformation Server, refer to the *Transformation Server Help*.
2. Import actual data into the `BRWVendorMaster` and `BRWEmployeeMaster` tables before creating the CSV files.

After you export the data to the relevant CSV files from their corresponding database tables, the CSV file is a point-in-time representation of its data. If the database itself is updated, the CSV file is not automatically updated by default. If you want to update the CSV files, there are two possibilities.

- Set up an automatic process that periodically updates the CSV files.
This is possible only for the `BRWVendorMaster` and `BRWEmployeeMaster` tables.
- Manually update the CSV files by repeating the [CSV creation](#) steps.
If you are using Company Code data, the only option is to update the CSV file manually.

Vendor Master Database

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

Column	Type	Description	Example
IndexID	varchar	<p>A unique key for vendor addresses across all partitions. This <code>IndexID</code> is a compound string that is made up from the <code>PartitionID</code>, the <code>ID</code> (Vendor), and if available, the <code>SiteID</code>.</p> <p>The <code>PartitionID</code> and the <code>ID</code> are separated by a hyphen (-). By default, the <code>ID</code> and <code>SiteID</code> are separated by a tilde (~).</p> <p>This separator between the <code>ID</code> and the <code>SiteID</code> is configurable under Solution Configuration Manager > Profile Settings > Vendor Settings > "Alpha Num Site Separator."</p>	<p>0-12345~5</p> <p>In the above example, the <code>PartitionID</code> is 0, the <code>ID</code> (Vendor) is 12345, and the <code>SiteID</code> is 5.</p>
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	<p>The <code>SiteID</code> for the associated Vendor. This may not be used for some Vendors.</p> <p>If this is used, it is part of the <code>IndexID</code>.</p> <p>Note The <code>SiteID</code> is commonly used by Oracle or PeopleSoft.</p>	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	<p>Country of the Vendor address.</p> <p>This must be given as an ISO 3166 Alpha-2 character code.</p>	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 <code>VendorVATRegNo</code> 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 <code>PO</code> or <code>NPO</code> 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. <code>BankAccount, SortCode, ERPBankAccountCode:</code> 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. <code>CompanyCode, WithholdingTaxType, WithholdingTaxCode:</code> 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 .	
PORSubscriberNo	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 ALTERNATIVEPAYEE 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.

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
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

Column	Type	Description	Example
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.	

Create the CSV Databases

There is a process within Kofax TotalAgility that lets you automatically create CSV files from both the `BRWVendorMaster` and `BRWEmployeeMaster` tables in the [Invoice Processing Agility client](#) database. The Company Code CSV file is created manually, but only when needed.

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

1. Ensure that vendor and employee data is available in the Invoice Processing Agility client database in the following tables.
 - `BRWVendorMaster`
 - `BRWEmployeeMaster`
2. Open the **Solution Configuration Manager** and select your project from the list.
3. Navigate to **Global Settings > ASE Database Settings** and configure the following:

Note The filename must be `Vendor.csv` and its path must be on a network share or other location that is readily available to Invoice Processing Agility processing.

1. For the **"VendorASSA"** field, edit the **Path**.

By default, this path is configured as `C:\InvoiceProcessingAgility\CSV`. Edit the path so that the location is on a network share or other location that is readily available to Invoice Processing Agility during processing.

Do **not** edit the **Import File Name**. The `Vendor.csv` filename is required for the automatic CSV generation.

2. For the **"EmployeeASSA"** field, edit the **Path**. Specify the same location as the `Vendor.csv`.

By default, this path is also configured as `C:\InvoiceProcessingAgility\CSV`. Edit the path so that the location is on a network share or other location that is readily available to Invoice Processing Agility during processing.

Do **not** edit the **Import File Name**. The `Employee.csv` filename is required for the automatic CSV generation.

This path is where the CSV files are generated in subsequent steps.

4. **Save** your changes.
5. Optionally, close the Solution Configuration Manager.
6. Open the Invoice Processing Agility Workspace.
7. From the **Jobs** menu, select **Create**.
The **Jobs - Create** page is displayed.
8. From the **Category** list, select **InvoiceProcessingAgility**.
The **Process** list is populated with processes.
9. From the **Process** list, select **DumpAddressFiles**.
10. Click **Create**.
A message is displayed when the job is created successfully and the Vendor.csv and Employee.csv files are created in the path specified in step 2 above.
11. Open the path specified in step 2 above.
The newly generated Vendor.csv and Employee.csv files are available.
12. Optionally, create the Company Code CSV database.
Export your company code data into a CSV file with the following three fields only.
 - Company Code
 - Company Name
 - Address

To simplify things, locate this file in the same location as the Vendor.csv and Employee.csv files.

Configure the CSV Databases to Update Automatically

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

This is not possible for the Company Code data. If anything relating to the company code changes in the source database, re-export it manually to the `CompanyCode.csv` file.

You can update the `Vendor.csv` and `Employee.csv` databases automatically 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.
11. **Close** the TotalAgility Designer.

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.

You can create a document variant for a profile by following these steps.

1. **Open** 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.

Update TransformationDesigner Database References

When Invoice Processing Agility is installed, three CSV databases are created automatically. Now that you have [created](#) your CSV files, it is necessary to update the references to the databases in the TransformationDesigner. These databases have a temporary location that you can update to match your configuration.

You can configure the database by following these steps.

1. Open the TransformationDesigner.
2. From the **Project** tab, click **Open Project**.
The **Open Project** window is displayed.
3. From the **Select category** group, select the **InvoiceProcessingAgility** category.
The **Select project** area is updated.
4. In the **Select project** area, expand **Shared** and then double-click on the **InvoiceProcessingAgility** project.
The project opens and the **Warnings** window is displayed with warnings about incorrect database settings. Click **Close**.
5. On the **Project** tab, click **Project Settings**.
The **Project Settings** window is displayed.
6. On the **Project Settings** window, click the **Databases** tab.
A list of three databases is displayed.
A red icon is displayed beside each database. This indicates that there is a problem with the database configurations. This is because the default path provided for these databases does not exist.
7. Select the "VendorASE" database and click **Properties**.
The **Properties** window is displayed.
8. In the **Import from a semicolon-separated CSV file** field, click the browse icon and navigate to the location where the Vendor.csv file is located.
A Windows browser window is displayed.
9. Navigate to where your Vendor.csv file is located, and select it. Click **Open**.
The Windows browser window closes and you are returned to the **Database Properties** window for the VendorASE database.
After updating the path, do not edit any of the other settings in the **Input Source** group. These settings are already configured so that it reads your CSV file correctly, and so that any changes made to the CSV file are updated automatically.
10. Optionally, in the **Field Configuration** table, select what fields are searchable.
Modify the selected fields only if you do not want to include one or more of the fields in the search.
For example, exclude any field that you do not use.
11. On the **Properties** window, click **OK** to save your changes to the VendorASE database.
The **Properties** window is closed.
12. Repeat steps 7 - 11 for the EmployeeASE and the CompanyCodeASE databases.

Note If you are not using the Company Code database, do not edit its database settings. You receive a warning each time the project is saved or opened explaining that the `CompanyCodeASE` database is not configured. Ignore this warning, as your project works fine without this database. Removing the database, or disabling it in any way causes problems if you upgrade Invoice Processing Agility at a later time.

13. On the **Project Settings** window, click **OK** to save your changes. The **Project Settings** window is closed.
14. If you are processing documents in languages other than English, [update the default recognition engine](#).
Otherwise, from the **Project** tab, click **Release Project**.
15. Close the TransformationDesigner.

Modify the Recognition Engines in the TransformationDesigner

If you are processing documents in languages other than English, it is recommended that you update the recognition engines in the TransformationDesigner. 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 TransformationDesigner.

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.

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.
 1. From the Windows Start menu, select **Start > Kofax > Message Connector > Message Connector Monitor**.
The **Message Connector Web Portal** website is displayed.
 2. 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**" `CaptureDocument` process into the **Process** field under **Associated Actions**.
A list of **Map Variables** are displayed below.

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 TransformationDesigner. 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 *TransformationDesigner 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.
 1. In the email account specified above, enable POP download in the account settings.
 2. 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**.

Install Session Timeout Form

By default, if an Invoice Processing Agility session times out, the user is redirected to the Kofax TotalAgility general work queue form. From here, it is not very straight-forward for a user to return to Invoice Processing Agility.

To avoid this, there is an Invoice Processing Agility-specific session timeout form included when the Invoice Processing Agility package is installed. This form redirects users to the Invoice Processing Agility general work queue after a session times out.

The Invoice Processing Agility session timeout form is not configured by default. You can configure the redirection to the Invoice Processing Agility session timeout form by following these steps.

1. Open TotalAgility Designer.
2. Open the **System Settings**.
3. In the **Manage** pane, click on **Settings**.
A list of settings is displayed.
4. In the **General** tab, locate the **Session Timeout Form** option, and then select **IPA_SessionTimeout** from the list.

When a Session Times Out

If the Invoice Processing Agility Work Queue encounters a session timeout and you click the "Log in" link, you are redirected to the Kofax TotalAgility Work Queue.

You can return to the **IPA Settings** page on the Invoice Processing Agility Work Queue by following these steps.

1. On the top menu of the Kofax TotalAgility Work Queue, click **IP Agility**.
A submenu is displayed.
2. From the submenu, select **Settings**.
The **IPA Settings** page is displayed.

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.

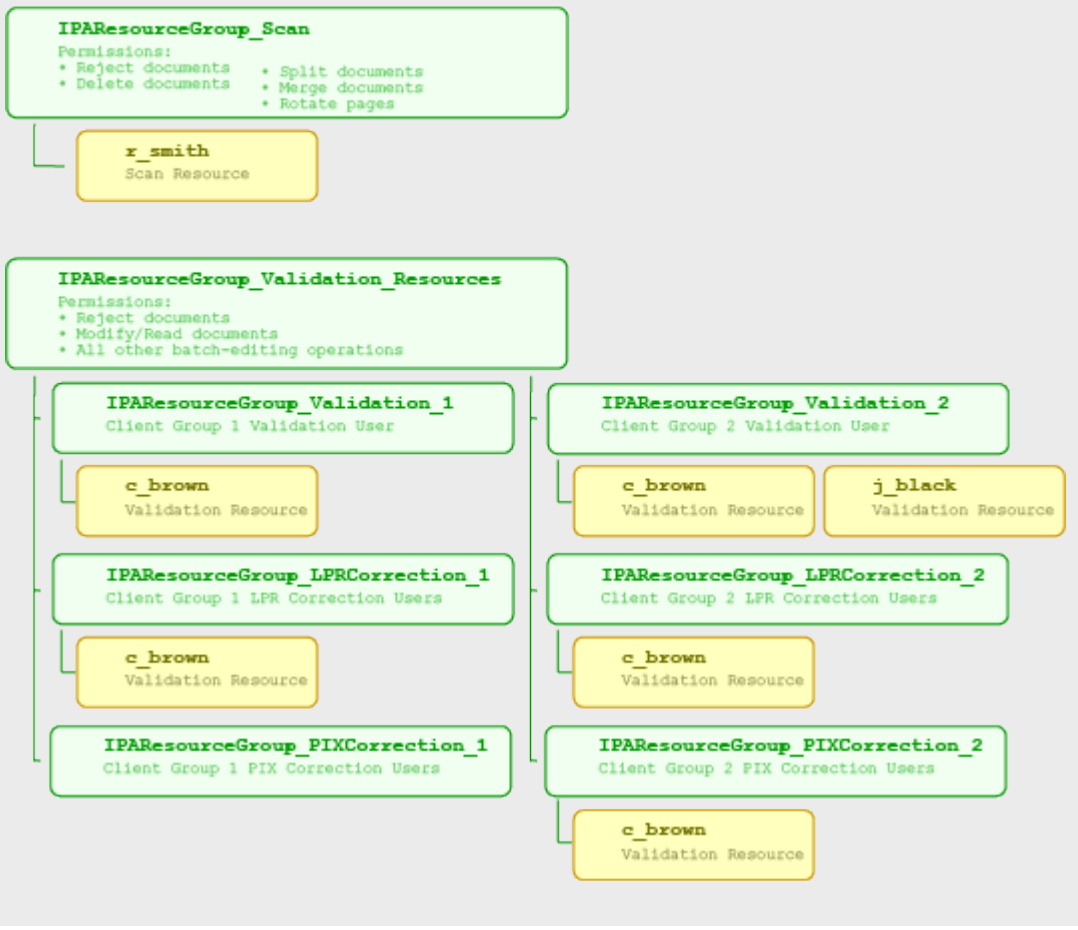
However, even though these Resource Groups are available automatically, no Access Permissions via Kofax TotalAgility are configured when first installed. Because of this, manual Access Permission configuration is required.

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



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

Manual Access Permission Configuration

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. These permissions are listed above.

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.

PIX InstallationApplication

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 User's Guide*.

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 **KTA Server settings** screen is displayed.
11. On the **KTA Server settings** screen, enter the **KTA server 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 situations, 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 **KTA Server settings** screen is displayed.

12. On the **KTA Server settings** screen, enter the **KTA server 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, or 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."
 1. From the **.NET Framework version** list, select **.NET Framework v4.0.XXXX**.
 2. From the **Managed pipeline mode** list, select **Integrated**.
 3. Select the **Start application pool immediately**.
 4. 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 **IPA 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.

Restart the Services

You need to restart the following services to complete the installation of Invoice Processing Agility.

- World Wide Web Publishing Service
- TotalAgility Core Worker Service
- TotalAgility Streaming Service

Remove Invoice Processing Agility

You can remove Invoice Processing Agility by following these steps.

1. Launch the TotalAgility Designer.
2. Select **System Settings**.
 1. Using **Job Clear Down**, delete all data present.

Note Ensure that all jobs have finished processing because this deletes all jobs on the system, not just Invoice Processing Agility-related jobs.

2. Using **Job Schedules**, delete all job schedules for Invoice Processing Agility.
3. In TotalAgility Designer, select **Process Designer**.
 1. Delete the **CaptureDocument** process.
 2. Delete **PostValidation**.
 3. Delete **ParkNAIDocuments**.
 4. Delete **IPAServerVariables**.
 5. Delete **Update Markview Vendors**, **Update MarkView Companies**, and **Update MarkViewEmployees**.
 6. Delete **DumpAddressFiles**.
 7. Delete **PIXCorrection**.
 8. Delete **ParkExportFailedDocuments**.
 9. Delete **RescanRejectedDocuments**.
 10. Delete **ParkLPRFailedDocuments**.
 11. Delete **ParkPIXFailedDocuments**.
 12. Delete the **InvoiceProcessingAgility** process.
 13. Delete **HandleRejectedDocuments**.
 14. Delete **SendDocumentToContent**.
 15. Delete **PIXProcessing**.
 16. Delete **LinePairing_SplitFolder**, **Line Pairing Execution**, **LinePairingCorrection**, and **PostLinePairing**.

17. Delete **DocumentExport**.
18. Delete **AssignToTextExtensions** and **SaveDocumentTextExtensions**.
19. Delete **ForceVerify**.
20. Delete **SetFileImportValue** and **GetFileImportData**.
21. Delete **DeleteJobActivity**.
22. Delete **ContentSoftDelete**.
23. Delete **Resources**.
24. Delete **Validation**.
25. Delete **ContentStatusUpdate**.
26. Delete **ApplyDocumentVariants**.
27. Delete **Busines Rules**.
28. Delete **GetScannedEmailandData**.
4. In TotalAgility Designer, select **Data**.
 1. Delete the **Invoice Processing Agility Extraction Groups**.
 2. Delete all **database lookups**.
 3. Delete all **Documents Variants** for Invoice Processing Agility.
5. In TotalAgility Designer, select **Form Designer**.
 1. Delete all **Forms** in the "**InvoiceProcessingAgility**" category.
 2. Delete all **Global Variables** and **Server Variables** for Invoice Processing Agility.
6. In TotalAgility Designer, select **Integration**.
 1. Select **.NET Assemblies**.
 2. Select **Store**.
 3. Delete all **.dll files** in the "**InvoiceProcessingAgility**" category.
7. Navigate to `C:\ProgramData\Kofax\TotalAgility\Generated Assemblies\.NET Assemblies\` and delete the .dll file in that folder.

If you cannot delete this .dll, stop the **Kofax TotalAgility Core Worker Service** and the **World Wide Web Publishing Service** and then try again.
8. Delete the following additional artefacts.
 1. Delete **IPA Resources**.
 2. Delete **imported IPA Packages**.
 3. Delete IPA items from **Navigation**.
 4. Delete the **IPA Site** and **TotalAgilityWorkspace** from **Sites**.
 5. Delete IPA items from **Themes**.

Chapter 3

Post Installation Configuration

After Invoice Processing Agility is installed, you may need to make the following configuration changes.

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>
```

Chapter 4

Upgrade Considerations

You can upgrade from Invoice Processing Agility 1.0.0 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
- **Processes**
 - CaptureDocument
 - ParkNAIDocuments
 - PostLinePairing

In most cases, changes to the Invoice Processing Agility project in TransformationDesigner 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.