

Kofax TotalAgility Installation Guide

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KOFAX

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Table of Contents

Preface.....	8
Related documentation.....	8
Offline documentation.....	9
Training.....	9
Getting help with Kofax products.....	9
Chapter 1: Installation planning.....	11
Utilities.....	11
License Proxy.....	12
Licensing information.....	12
Concurrent user licensing.....	12
Activate a license in TotalAgility.....	12
KofaxMessage Connector.....	13
System limits.....	14
Reporting Server.....	14
Kofax VRS Elite.....	14
Web Capture Service.....	15
Scan Agent Service.....	15
Chapter 2: TotalAgility installation.....	16
Perform a silent installation.....	17
Silent installation for Database Only.....	17
Silent installation for upgrading databases.....	22
Silent installation of Web and Application on the same server.....	28
Silent installation on a separate Web or Application server.....	38
Silent installation for Real Time Transformation Server.....	41
Silent installation of multiple instances of Message Connectors.....	49
Perform a standard installation.....	50
Express installation.....	51
Standard installation of Database Only.....	52
Standard installation for upgrading databases.....	55
Standard installation of the Web Server.....	56
Standard installation of the Application Server.....	57
Standard installation of the Web and Application Server.....	65
Standard installation of Real Time Transformation Server.....	73
Upgrade Transformation Designer Help.....	75

Perform TotalAgility installation in a Docker container.....	76
Overview.....	76
Limitations.....	76
Prerequisites.....	76
Install Docker on the Windows server 2016 and higher.....	77
Create a TotalAgility Docker container image.....	79
Silent installation configuration in Docker.....	80
Run a Docker container.....	88
Using secrets.....	91
Import SSL certificate on the container.....	98
Use Windows authentication with IIS and SQL server.....	99
Install TotalAgility on a non-standard port.....	102
Edit bindings.....	102
Update the base address.....	102
Restart the Streaming Service.....	103
Install databases manually.....	103
Configure MSDTC.....	103
Start MSDTC manually.....	104
Manually install databases.....	105
Import Artifacts.....	107
Configure TotalAgility for high availability.....	108
Access TotalAgility through iPad or iPhone.....	108
Federated Security-Generate a common machine key.....	108
Encrypt and decrypt the TotalAgility configuration files.....	109
Encrypt and decrypt Web.config.....	109
Encrypt and decrypt the configuration files of executables.....	109
Encrypt the configuration files in a Docker container.....	113
Edit the TotalAgility configuration settings.....	114
Update the parameter values.....	114
Update the settings for a license server.....	115
Support export vertical scaling.....	115
Anti-Cross Site Request Forgery (CSRF) measures.....	116
Update settings to prevent stored Cross-Site Scripting vulnerabilities.....	117
Configure the wait time for export activities.....	120
Update the settings for manual authentication.....	120
Update the settings for manual and Windows authentication.....	122
Update settings for the TotalAgilitylinked servers.....	123
Add custom job thread pools.....	123

Add a thread pool monitoring interval.....	125
Install the language pack.....	127
Install the .NET Framework language packs.....	127
Exclude folders from antivirus scan.....	127
Access TotalAgility documentation.....	127
Online documentation.....	127
Offline documentation.....	128
Run EVRSCheck utility.....	131
Chapter 3: Transformation Server Bundle installation.....	132
Perform a silent installation.....	132
Perform a standard installation.....	134
Encrypt and decrypt the configuration file.....	136
Use Kofax.CEBPM.EncryptConfig.exe.....	136
Decrypt the configuration file.....	138
Edit the configuration file.....	139
Install the NLP language packs manually.....	140
Upgrade Transformation Server using silent installation.....	140
Uninstall the Transformation Server.....	141
Chapter 4: Reporting Server installation.....	142
Perform a silent installation.....	142
Perform a standard installation.....	143
Uninstall the Reporting Server.....	144
Chapter 5: Integrate Microsoft Dynamics CRM with TotalAgility.....	145
Install Dynamics CRM.....	145
Update Web.config for Dynamics CRM.....	145
Update Web.config for the CRM virtual directory.....	147
Chapter 6: Integrate Microsoft Dynamics AX with TotalAgility.....	149
Create Dynamics AX service reference to the TotalAgility web service.....	150
Create Dynamics AX 09 service reference to the TotalAgility web service.....	150
Create Dynamics AX 12 service reference to the TotalAgility web service.....	150
Add a reference in Dynamics AX.....	151
In Dynamics AX 09.....	151
In Dynamics AX 12.....	151
Copy files manually.....	151
Import the TotalAgility connector class into Dynamics AX.....	152
Edit database X++ event methods.....	152
Register the database log events.....	152
Verify the Application Pool account.....	153

Chapter 7: Integrate Micro Focus Content Manager with TotalAgility.....	154
Identify the Content Manager SDK Version.....	154
Set up the Micro Focus Content Manager server.....	154
Install and configure TotalAgilityTrimCommunicatorService.....	154
Configure the event handler in Content Manager.....	156
Chapter 8: Integrate Kofax SignDoc with TotalAgility.....	159
Set up the Kofax SignDoc server.....	159
Chapter 9: KCM Proxy installation on the Web server.....	160
Silent installation.....	160
Standard installation.....	160
Docker installation.....	160
Update the KCM Server URL in TotalAgility Web.config.....	161
Manually update the KCM Server URL in TotalAgility Web.config.....	161
Use the Configuration Utility.....	162
Install KCM Proxy manually.....	162
Chapter 10: Configure HTTPS communication.....	163
Configure TotalAgility for HTTPS communication.....	163
Enable SSL for the TotalAgility application in IIS.....	163
Update the TotalAgility configuration files.....	163
Configure the Transformation Designer for HTTPS communication.....	167
Chapter 11: Install TotalAgility License Proxy.....	168
Modify the TotalAgility license proxy information.....	169
Modify the TotalAgility license proxy information.....	170
Chapter 12: Configure VRS Elite for TotalAgility.....	171
Kofax VRS Basic or Professional OEM installations.....	171
Standalone installations.....	171
Kofax VRS Elite licensing managed by the TotalAgility License Server.....	171
Install VRS Server.....	171
Use Kofax VRS Elite with the TotalAgility Scan Client.....	172
Chapter 13: Kofax Web Capture Service installation.....	173
Install at the default location.....	173
Install at custom location.....	173
Use the Web Capture Service on multiuser environment.....	173
Use the Web Capture Service on MS Terminal Server.....	173
Use the Web Capture Service on Citrix.....	174
Install the Web Capture Service as Windows Service.....	174
Upgrade the Web Capture Service.....	174
Chapter 14: Scan Agent Service installation.....	175

Standard installation.....	175
Scanning with Scan Agent Service.....	176
Chapter 15: Launch TotalAgility.....	177
Launch TotalAgility Workspace.....	177
Launch TotalAgility Apps.....	177
Guidance notes on logon.....	177
Chapter 16: Repair the TotalAgility installation.....	179
Chapter 17: Uninstall TotalAgility.....	180
Use the installation wizard.....	180
Use the silent mode.....	180
Chapter 18: Upgrade TotalAgility.....	181
Capture data migration.....	181
Capture binary data storage.....	183
Upgrade TotalAgility in silent mode.....	183
Upgrade process.....	184
Upgrade TotalAgility components.....	184
Upgrade TotalAgility databases.....	185
Upgrade TotalAgility components including databases.....	185
Check for latest updates to perform capture data migration.....	186
Upgrade TotalAgility databases manually using database scripts.....	187
Upgrade reporting databases 2.0.2.....	190
Upgrade TotalAgility in silent mode.....	190
Upgrade Message Connectors instances.....	192
Chapter 19: Troubleshooting.....	194
TotalAgility AppPool exists.....	194
Download software updates.....	194
Installation failure in IPv4 and IPv6 environment.....	194
Images not displayed in Workspace after scanning.....	195
Exception during Transformation Designer projects import.....	195
Search feature not working in TotalAgility help.....	196
(405) Method not allowed error.....	197
MimeType error.....	197

Preface

This guide includes instructions for installing and upgrading to Kofax TotalAgility 7.10.0, including:

- Preparations, decisions, precautions, settings, and tips to help you install Kofax TotalAgility.
- Instructions for installing Kofax TotalAgility in silent mode or using the wizard in a client/server or standalone configuration.
- Information about installing other Kofax products used with Kofax TotalAgility.
- Information about updating various TotalAgility configuration files post installation, instead of manually updating each configuration file and the settings separately.

Read this guide completely before installing the software.

Related documentation

The full documentation set for Kofax TotalAgility is available at the [Product documentation page](#).

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

- *Kofax TotalAgility Prerequisites Guide*: Provides system requirements for installing TotalAgility, instructions for running the prerequisite utility, and a software checklist for various installation types.
- *Kofax TotalAgility Integration Server Installation Guide*: Describes how to install Kofax Integration Server and integrate it with other products.
- *Kofax TotalAgility On-Premise Multi-Tenant Installation Guide*: Describes how to install and configure On-Premise Multi-Tenant system.
- *Kofax TotalAgility Configuration Utility Guide*: Explains how to use the Configuration Utility to update settings across various configuration files for different types of installation and deployment.
- *Kofax TotalAgility Administrator's Guide*: Provides information to the administrator on configuring and maintaining a TotalAgility installation.
- *Kofax TotalAgility Architecture Guide*: Provides an overview of the TotalAgility architecture, covering various deployments for on-premise, on-premise multi-tenancy and Azure environments.
- *Kofax TotalAgility Best Practices Guide*: Describes the best practices you must follow when using TotalAgility to improve performance, cost, maintenance, availability and security.
- *Kofax TotalAgility Features Guide*: Provides an overview of the TotalAgility features.
- *Kofax TotalAgility Migration Guide*: Provides information on TotalAgility upgrades from different versions and post upgrade configuration.

- *Kofax TotalAgility Help*: Provides details about using TotalAgility to design business jobs and cases, assign resources, create forms, integrate with external applications, and more.
- *Kofax TotalAgility Workspace Help*: Describes how to use the Workspace to manage activities, jobs, and resources.
- *Kofax TotalAgility On-Premise Multi-Tenant System Help*: Describes how to create and manage tenants using the TotalAgility On-Premise Multi-Tenant system.
- *Kofax TotalAgility Web Capture Control Help*: Provides details on using a Web Capture control in creating multi-page documents, creating a new document in a new folder, deleting pages that have been incorrectly scanned, and more; also, describes the buttons available in a Web Capture control toolbar.
- *Kofax Analytics for TotalAgility Product Features Guide*: Provides an overview of the dashboards that help you track data through the workflow, analyze the effectiveness of the processes and resources, and address business problems.
- *Kofax TotalAgility Tables*: Describes the Kofax TotalAgility tables and fields used by Kofax Analytics for TotalAgility.
- *Migration From Kofax Products Guide*: Provides information about migrating TotalAgility files and Kofax Transformation Modules projects to TotalAgility.

Offline documentation

Customers who require offline documentation can download the individual zip files available on a per language basis, such as Kofax TotalAgilityDocumentation7.10.0_EN.zip and Kofax TotalAgilityDocumentation7.10.0_DE.zip from the [Kofax Fulfillment Site](#).

See [Access the TotalAgility documentation](#) for more information

Training

Kofax offers both classroom and online training to help you make the most of your product. To learn more about training courses and schedules, visit the [Kofax Education Portal](#) on the Kofax website.

Getting help with Kofax products

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

To access the Kofax Knowledge Base:

1. Go to the [Kofax website](#) home page and select **Support**.
2. When the Support page appears, select **Customer Support > Knowledge Base**.

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

The Kofax Knowledge Base provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.
Scroll through the Kofax Knowledge Base home page to locate a product family. Then click a product family name to view a list of related articles. Please note that some product families require a valid Kofax Portal login to view related articles.

From the Knowledge Base home page, you can:

- Access the Kofax Community (for all customers).
Click the **Community** link at the top of the page.
- Access the Kofax Customer Portal (for eligible customers).
Click the **Support** link at the top of the page. When the Customer & Partner Portals Overview appears, click **Log in to the Customer Portal**.
- Access the Kofax Partner Portal (for eligible partners).
Click the **Support** link at the top of the page. When the Customer & Partner Portals Overview appears, click **Log in to the Partner Portal**.
- Access Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Go to the **General Support** section, click **Support Details**, and then select the appropriate tab.

Chapter 1

Installation planning

For information on supported operating systems and other system requirements, see the *Kofax TotalAgility Technical Specifications* document on the [Product Documentation page](#) site. The document is updated regularly, and we recommend that you review it carefully to ensure success with your TotalAgility product.

Review these important notes before you proceed with the installation.

- To view information on the system requirements for installing TotalAgility, instructions for running the prerequisite utility, and the software checklist for various installation types, download the Kofax TotalAgility Prerequisites Guide from the Kofax Fulfillment Site.
- If your solution includes multiple Kofax products, review the [Kofax Technical Specifications](#) document.
- Obtain a license key for TotalAgility from your Account Manager or Kofax Support.
- Before extracting the TotalAgility installation ZIP file, unblock the file from the file properties window.
- The TotalAgility servers should run on the same time zone, because issues may occur if they run on different time zones.
- Upgrade installations of Kofax Transformation Designer that connects to TotalAgility 7.10.0.
- TotalAgility includes a limited number of VRS Elite licenses. You may need to purchase additional licenses, depending on the number of scanners you plan to use with VRS. See the Kofax Scanner Configurator to verify VRS certification and licensing requirements for your scanner.

Utilities

The following utilities are available on the TotalAgility installation media.

- **Prerequisite utility:** use this utility to ensure all the required software is installed on your computer before installing TotalAgility. For more information, see the *Kofax TotalAgility Prerequisites Guide*.
- **Configuration utility:** Run this utility after installing TotalAgility to modify or update the settings across multiple configuration files at one go instead of editing each file separately. See the *Kofax TotalAgility Configuration Utility Guide*.
- **EvrCheck utility:** Run this utility to test how an image will look once the eVRS setting is applied to it. For more information, see [EVRCheck utility](#).
- **Kofax.CEBPM.EncryptConfig.exe:** Use this utility to encrypt and decrypt configuration files of executables. See [Encrypt and decrypt the TotalAgility configuration files](#).

License Proxy

Use TotalAgility License Proxy when the license server is not directly accessible from VRS stations or the linked TotalAgility server. For example, due to security restrictions or on using Azure. Using the License Proxy, you can use a TotalAgility license configuration through TotalAgility web services rather than by directly addressing the license server.

A license proxy is also useful for network topologies where multiple networks are logically separate, such as Microsoft Azure cloud. A License proxy allows computers in Network A to use a TotalAgility license server in Network B. A license proxy uses TotalAgility web services (over HTTP/HTTPS) to communicate with the license server. The license proxy computer needs a working internet connection to facilitate the HTTP/HTTPS traffic to the License server.

See [TotalAgility License Proxy installation](#).

Licensing information

This section provides information on licensing details.

Concurrent user licensing

In the Concurrent User model, many users can simultaneously log into the system. Each user session consumes a license. For example, if a single user logs into the TotalAgility Designer and the TotalAgility Workspace simultaneously or the user logs into the Designer in two browsers such as Internet Explorer and Chrome, the user consumes two concurrent licenses. When a user logs off from a session, the license server automatically releases the license.

When the number of concurrent users reaches the maximum, the system automatically checks for available reserved licenses. If any reserved license is available, a new user can log on and the count of available reserve licenses is reduced by 1. Keep the following items in mind when managing reserved licenses:

- A reserved license expires seven days after you begin using the license.
- You can use each reserved license only twice within 12 months.

If the user tries to log on after the number of concurrent logons reaches the limit and there are no reserved licenses, the system displays an error message and additional users cannot log on.

If a reserved license expires, an error message appears in the TotalAgility Designer and TotalAgility Workspace.

Activate a license in TotalAgility

The license period starts once the license is activated. So you can skip activation during installation and only activate it when you are ready to use TotalAgility.

Activate a license in TotalAgility On-Premise

If you log on to TotalAgility for the first time and the license is not activated, the License Activation window opens.

1. In the **License Activation** window, either click **Next** to accept the default values for the **License Server** and **Port Number**, or enter the new values.
2. Click **Set license server** to save the information.
3. For further instructions, see Activate the License Server step in Perform a standard installation.

i If you have issues activating your licence, contact Kofax support at: <http://www.Kofax.com/support/tools/>

Automatic recovery

After TotalAgility installation, it is possible to manually configure the Kofax License Server Service to automatically restart in the event of a service error.

1. Go to **Service Control Manager**.
2. Edit the properties for the Kofax License Server Service.
3. Go to the **Recovery** tab.
4. Configure options for how the service should respond after the first, second, and subsequent failures.

You do not need to restart the service for the changes to take effect.

i You can also do this configuration at the command line. Example:

```
sc.exe failure KSALicenseService actions= restart/660000/  
restart/660000/"/660000 reset= 86400
```

KofaxMessage Connector

Kofax Message Connector is a Windows service responsible for importing messages and files in many electronic formats. It can retrieve documents using one of the following connection modes:

- Storage mode: Retrieves documents from various sources and saves them in its internal storage which are available for retrieval using a web service interface. TotalAgility connects to the Message Connector web service interface and retrieves the documents for import.
- Direct Mode: Retrieves documents from various sources and directly import them in TotalAgility.

Kofax Message Connector can import messages and files from a number of sources:

- Email messages including attachments using various email protocols (SMTP, POP3, IMAP, EWS).
- Fax messages (via internal fax over IP server or external fax servers: Kofax Communication Server, RightFax, Biscom).
- Files from a local or network folder.

For information on prerequisites for the Kofax Message Connector, see the *Kofax TotalAgility Prerequisites Guide* and for information on deployment scenarios and advanced configurations, see the *Kofax TotalAgility Administrator's Guide*.

System limits

Following system limits are applicable for 64-bit installations. For 32-bit installations, these limits may vary.

- The maximum size of a message in Message Connector storage is 8 GB.
- Up to three Message Connector instances on a single computer are allowed.
- For KfxConverter, the maximum system memory usage limit is up to 4 GB.

i The limit of the input file size may vary depending on the number of pages in a document, type of document and type of conversion.

Reporting Server

Kofax Reporting provides centralized storage of historical operational metrics and audit data. Kofax Reporting includes components, such as the reporting service and databases.

! Due to high process utilization by Transformation Server (99%), Reporting Server is known to produce **SQL Timeout** error when installed on the same machine as Transformation Server. Therefore, you must install Reporting Server separately from Transformation Server.

Kofax VRS Elite

We highly recommend Kofax VRS Elite, a patented image perfection software that dramatically improves scanning productivity and document capture efficiency when used with a VRS-certified scanner. If your scanner is not VRS-certified, you can use the Kofax image processing technology included with TotalAgility.

Several Kofax VRS licensing options are available:

Kofax VRS Basic or Professional OEM

Automatically activate a Kofax VRS Basic or Professional OEM license that is included with many industry-standard scanners. License activation for these scanners is required only when upgrading to Kofax VRS Elite.

Standalone workstation

Manually activate a standalone license, which stays on the workstation until it is deactivated. The standalone license can only be activated on one scan station at a time.

TotalAgility license server

Centrally manage concurrent VRS Elite licenses from the TotalAgility license server.

To centrally manage VRS licenses through the TotalAgility license server, each VRS station needs to communicate with the license server directly or through a license proxy.

Web Capture Service

To enable web scanning, you must install the Kofax Web Capture Service. When installing through the browser, you must have administrative rights to complete the installation.

Install the Kofax Web Capture Service either at the default location or to a custom location.

You must install the Web Capture Service only once, and web scanning is enabled across all the supported browsers.

Temporary files are created under the folder "Interprocess". The user must have read/write access to this folder.

You can also use the Web Capture Service on multiuser environments.

Scan Agent Service

The Scan Agent Service is an asynchronous upload capability, which allows scan operator to continue on to the next batch, without needing to wait for the previous scan job to complete upload.

This service is useful in remote scanning scenarios, where the scan station has limited network bandwidth to the main TotalAgility site.

The capability allows scan operator to keep up with physical scanning throughput, while image upload is done in the background, thus enhancing the scan operator efficiency.

This feature is only available for Scan Create New Job forms.

A Scan Create New Job form automatically uses the asynchronous image upload mode if it detects Scan Agent Service installed on the scan station. Otherwise, it uses the synchronous image upload mode if the Scan Agent Service is not detected.

For Device Create New Job form, a pre-condition of [SCANNED] > 0 must be added to the first activity in a process, to allow the process to wait for all images to be uploaded before moving on to the first activity.

Chapter 2

TotalAgility installation

This chapter describes two methods for installing TotalAgility:

- [Silent installation](#) for multiple servers that use the same configuration.
- [Standard installation](#) using the installation wizard.

You can install TotalAgility as one of the following types:

- **Database Only:** Installs only the database component of Kofax TotalAgility only; no other components are installed.
- **Upgrade Databases:** Upgrades all the databases to the latest version of TotalAgility when TotalAgility is not installed locally.

i Upgrading the databases prior to version TotalAgility 7.4.0 is not supported when TotalAgility is not installed locally.

- **Web Server:** Installs a server to point to any Application server. In case you install TotalAgility on a computer other than the default port, you must enter the Application Server machine name and port number. For example, <appserver_name:82>. A Web server installs the SDK Services and user interfaces for the TotalAgility Designer and TotalAgility Workspace.
- **Application Server:** Installs a server to which remote clients will connect and sets up their Web servers. An Application server only installs Core services and does not install user interfaces and any shortcuts for the TotalAgility Designer and Workspace.
- **Web and Application Server:** Installs the Web and Application servers on a single computer.
- **Real Time Transformation Service:** Installs the Real Time Transformation Service.



- You must have administrator account to install TotalAgility.
- Ensure that the user who will run TotalAgility has "Log on as Service" rights.
- You can use hotkeys to navigate to next screen.
- Post installation, you can modify the configuration settings by editing each configuration file separately or running the configuration utility. The configuration utility is available on the installation media. You must manually copy the utility onto each server where the configuration settings are to be modified. See the *Kofax TotalAgility Configuration Utility Guide*.

Perform a silent installation

Use the TotalAgility silent installation to install TotalAgility automatically from a command line or a batch file. After you edit the silent installation file, the installation proceeds without any user interaction.

See also:

- [Silent installation for Database Only](#)
- [Silent installation for upgrading databases](#)
- [Silent installation of Web and Application on the same server](#)
- [Silent installation on a separate Web or Application server](#)
- [Silent installation for Real Time Transformation Server](#)

Silent installation for Database Only

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and open `SilentInstallConfig.xml` using a text editor.
2. In `SilentInstallConfig.xml`, update the following parameters.

Parameter	Default Value	Description
DatabaseInformation		
InstallDatabases	true	Installs the databases. Set to false to ignore installing databases.
OverwriteIfExists	false	If set to true, overwrites the existing databases. <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e6f2ff;"> <p>i If the existing database details are not valid, or if the databases does not exist, an errors occurs and the installation fails.</p> </div>
Main Database		
DatabaseName	TotalAgility	Specify the name of the Main database.

Parameter	Default Value	Description
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server. <div style="background-color: #e6f2ff; padding: 5px;"> <p>i When installing TotalAgility with a remote database, update <code>SilentInstallConfig.xml</code> with the server name (<code><Server>servername</Server></code>) of the machine on which the database resides. The account used to connect to the database during the installation requires DB_CREATOR rights.</p> </div>
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Audit Database		
DatabaseName	TotalAgility	Specify the name of the Audit database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Create_Audit.sql	Accept the default.
DropScript	Drop_Audit.sql	Accept the default.
InitializeScript	Initialise_Audit.sql	Accept the default.
ConversionScript	Convert_Audit.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.

Parameter	Default Value	Description
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Finished Jobs Database		
DatabaseName	TotalAgility	Specify the name of the Finished Jobs database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Create_Archive.sql	Accept the default.
DropScript	Drop_Archive.sql	Accept the default.
Conversion Script	Convert_Archive.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
DataLayer - TotalAgility_Documents Database		
DatabaseName	TotalAgility_Documents	Specify the name of the TotalAgility_Documents database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Repository2012_TablesCreate .sql	Accept the default.
DropScript	Repository2012_Drop.sql	Accept the default.
Conversion Script	Repository2012_Convert.SQL	Only required for patch when there are SQL changes.
Security		

Parameter	Default Value	Description
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Analytics Database		
DatabaseName	TotalAgility_Reporting	Specify the name of the TotalAgility_Reporting database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Kofax.Reporting.Analytics.SQL_TablesCreate.sql	Accept the default.
DropScript	Kofax.Reporting.Analytics.SQL_Drop.sql	Accept the default.
InitializeScript	Kofax.Reporting.Analytics.SQL_Initialize.sql	Accept the default.
Conversion Script	empty	Only required for patch when SQL changes are needed.
Security		
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Staging Database		
DatabaseName	TotalAgility_Reporting_Staging	Specify the name of the TotalAgility_Reporting_Staging database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		

Parameter	Default Value	Description
CreateScript	Kofax.Reporting.Analytics. Staging.SQL_TablesCreate.sql	Accept the default.
DropScript	Kofax.Reporting.Analytics. Staging.SQL_Drop.sql	Accept the default.
InitializeScript	Kofax.Reporting.Analytics. Staging.SQL_Initialize.sql	Accept the default.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Install Info		
InstallType	Both	Change the value to DatabaseOnly. <div style="background-color: #e0f2f7; padding: 5px; border: 1px solid #ccc;"> <p>i When you install only databases, the system ignores the services, and does not install services such as CoreworkerService, ImportService and ExportService.</p> </div>
<SiteRoot>	Default Web Site	Install TotalAgility under a custom site that uses a non-standard port other than the standard ports (80 and 443). For example, create a custom site called "testsite" under IIS using the port number 85.
KTAResourceName	empty	Specify a username for the TotalAgility user to be created on installation.
KTAResourcePassword	empty	Specify a password (minimum 6 alphanumeric characters) for the TotalAgility user to be created on installation.

Parameter	Default Value	Description
RunAsSystemAccount	false	<p>If set to true, the IIS Application Pool and Kofax TotalAgility services run as the LocalSystem account.</p> <p>i If you set this parameter to true, the user can still logon using the credentials specified in the TotalAgility Resource Credentials window when installing TotalAgility.</p>

3. Save and close the file.
4. On the Command Prompt, change the command line to the root directory of the Setup.exe file.
5. Run `Setup.exe /Silent`.

The databases are installed automatically.

The system generates a log file that reports errors (if any).

The success or failure of installation is indicated in the event log.

When automating the installation, if you run `setup.exe` from the command line, or run `setup.exe` as a silent installation, one of the codes returns to indicate the following:

- 0= Success
- 1= Success with warnings
- 2= Failure

See also:

- [Silent installation for upgrading databases](#)
- [Silent installation of Web and Application on the same server](#)
- [Silent installation on a separate Web or Application server](#)
- [Silent installation for Real Time Transformation Server](#)

Silent installation for upgrading databases

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and open `SilentInstallConfig.xml` using a text editor.
2. In `SilentInstallConfig.xml`, update the following parameters.

Parameter	Default value	Description
<ServicesInstallOptions>		
	true for all services	<p>Set to false for all the services.</p> <p>i When you upgrade TotalAgility databases, the services, such as Core Worker Service, Reporting Service, License Service, Transformation Server are ignored and not installed.</p>

Parameter	Default value	Description
DatabaseInformation		
InstallDatabases	true	Set to false to ignore installing databases. If set to true, installs the databases.
OverwriteIfExists	true	If set to true, overwrites the existing databases. <div style="background-color: #e0f2f7; padding: 5px;"> <p>i If the existing database details are not valid, or if the databases does not exist, an errors occurs and the installation fails.</p> </div>
Main Database		
DatabaseName	TotalAgility	Specify the name of the Main database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server. <div style="background-color: #e0f2f7; padding: 5px;"> <p>i When installing TotalAgility with a remote database, update SilentInstallConfig.xml with the server name (<Server>servername</Server>) of the machine on which the database resides. The account used to connect to the database during the installation requires DB_CREATOR rights.</p> </div>
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Accept the default. If set to true, creates new database.
Audit Database		

Parameter	Default value	Description
DatabaseName	TotalAgility	Specify the name of the Audit database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Create_Audit.sql	Accept the default.
DropScript	Drop_Audit.sql	Accept the default.
InitializeScript	Initialise_Audit.sql	Accept the default.
ConversionScript	Convert_Audit.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Finished Jobs Database		
DatabaseName	TotalAgility	Specify the name of the Finished Jobs database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Create_Archive.sql	Accept the default.
DropScript	Drop_Archive.sql	Accept the default.
Conversion Script	Convert_Archive.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	

Parameter	Default value	Description
NewDatabase	false	Set to true to create new database.
DataLayer - TotalAgility_Documents Database		
DatabaseName	TotalAgility_Documents	Specify the name of the TotalAgility_Documents database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Repository2012_TablesCreate.sql	Accept the default.
DropScript	Repository2012_Drop.sql	Accept the default.
Conversion Script	Repository2012_Convert.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Analytics Database		
DatabaseName	TotalAgility_Reporting	Specify the name of the TotalAgility_Reporting database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Kofax.Reporting.Analytics.SQL_TablesCreate.sql	Accept the default.
DropScript	Kofax.Reporting.Analytics.SQL_Drop.sql	Accept the default.
InitializeScript	Kofax.Reporting.Analytics.SQL_Initialize.sql	Accept the default.
Conversion Script	empty	Only required for patch when SQL changes are needed.
Security		

Parameter	Default value	Description
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Staging Database		
DatabaseName	TotalAgility_Reporting_Staging	Specify the name of the TotalAgility_Reporting_Staging database.
Server	server name	Enter the Fully Qualified Domain Name (FQDN) of the server.
SqlScript		
CreateScript	Kofax.Reporting.Analytics.Staging.SQL_TablesCreate.sql	Accept the default.
DropScript	Kofax.Reporting.Analytics.Staging.SQL_Drop.sql	Accept the default.
InitializeScript	Kofax.Reporting.Analytics.Staging.SQL_Initialize.sql	Accept the default.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Install Info		

Parameter	Default value	Description
InstallType	Both	<p>Change the value to UpgradeDatabasesOnly. All the databases are upgraded to the latest version of TotalAgility.</p> <p>i Upgrading databases prior to TotalAgility 7.4.0 is not supported when TotalAgility is not installed locally.</p>
<SiteRoot>	Default Web Site	<p>Install TotalAgility under a custom site that uses a non-standard port other than the standard ports (80 and 443). For example, create a custom site called "testsite" under IIS using the port number 85.</p>
KTAResourceName	empty	Specify a username for the TotalAgility user to be created on installation.
KTAResourcePassword	empty	Specify a password (minimum 6 alphanumeric characters) for the TotalAgility user to be created on installation.
RunAsSystemAccount	false	<p>If set to true, the IIS Application Pool and Kofax TotalAgility services run as the LocalSystem account.</p> <p>i If you set this parameter to true, the user can still logon using the credentials specified in the Kofax TotalAgility Resource Credentials window when installing TotalAgility.</p>

3. Save and close the file.
4. On the Command Prompt, change the command line to the root directory of the Setup.exe file.

5. Run `Setup.exe /Silent`.

The databases are installed automatically.

The system generates a log file that reports errors (if any).

The success or failure of installation is indicated in the event log.

When automating the installation, if you run `setup.exe` from the command line, or run `setup.exe` as a silent installation, one of the codes returns to indicate the following:

- 0= Success
- 1= Success with warnings
- 2= Failure


See also:

- [Silent installation for Database Only](#)
- [Silent installation of Web and Application on the same server](#)
- [Silent installation on a separate Web or Application server](#)
- [Silent installation for Real Time Transformation Server](#)

Silent installation of Web and Application on the same server

Update the following parameters for a Web-Application server installation.

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and open `SilentInstallConfig.xml` using a text editor.
2. In `SilentInstallConfig.xml`, update the following parameters.

 Fix the line breaks if you copy and paste the code from this guide.



Parameter	Default value	Description
ServicesInstallOptions		
CoreWorkerService	true	Installs the Core Worker Service. You can set it to false, if needed.
ImportService	true	Installs the Import Service. You can set it to false, if needed.
ExportService	true	Installs the Export Service. You can set it to false, if needed.
ReportingService	true	Installs the Reporting Service. You can set it to false, if needed.
LicenseService	true	Installs the License Service. You can set it to false, if needed.
TransformationService	true	Installs the Transformation Service. You can set it to false, if needed.

Parameter	Default value	Description
CoreServices	true	<p>Installs the Core services. You can set it to false, if needed.</p> <p>i Set to false to install only Transformation Server on the Application server so that IIS prerequisite is not needed. IIS is not required for standalone installation of the Transformation Server.</p>
LicenseServer		
LicenseServerName	localhost	Enter the name of the license server.
PortNumber	3581	Do not change this value.
SerialNumber	empty	Enter your TotalAgility serial number.
ProductCode	empty	Enter your TotalAgility product code.
SkipLicense	true	<p>Skips activating the license.</p> <p>Set to false to activate the license; you must enter the serial number and product code to install TotalAgility.</p>
InstallDirectory	C:\Program Files\ Kofax\TotalAgility	Specify the TotalAgility destination directory.
DatabaseInformation		
InstallDatabases	true	<p>Installs the databases.</p> <p>Set to false to ignore installing databases.</p>
OverwriteIfExisting	true	<p>If set to true, overwrites the existing databases.</p> <p>i If the existing database details are not valid, or if the databases does not exist, an errors occurs and the installation fails.</p>
ScriptsLocation	C:\Program Files \Kofax\TotalAgility\ DatabaseScripts\SQL Server\	Specify the directory for installing scripts.
Main Database		
DatabaseName	TotalAgility	Specify the name of the Main database.

Parameter	Default value	Description
Server	server name	Specify the fully qualified domain name (FQDN) of the server. <div style="background-color: #e0f2f1; padding: 5px;"> <p>i When installing TotalAgility with a remote database, update SilentInstallConfig.xml with the server name (<Server>servername</Server>) of the machine on which the database resides. The account used to connect to the database during the installation requires DB_CREATOR rights.</p> </div>
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Audit Database		
DatabaseName	TotalAgility	Specify the name of the Audit database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Finished Jobs Database		
DatabaseName	TotalAgility	Specify the name of the Finished Jobs database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.

Parameter	Default value	Description
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Forms	empty	
DataLayer - TotalAgility_Documents Database		
DatabaseName	TotalAgility_Documents	Specify the name of the TotalAgility_Documents database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Analytics Database		
DatabaseName	TotalAgility_Reporting	
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Staging Database		

Parameter	Default value	Description
DatabaseName	TotalAgility_Reporting_Staging	Specify the name of the TotalAgility_Reporting_Staging database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
Security		
WindowsAuthentication	true	Uses Windows credentials for logging in. If set to false, provide the user name and password. Otherwise, leave the user name and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Identity Information		
UserName	username	Enter the user name of the Windows service account for the TotalAgility services.
Password	password	Enter the password of the windows service account for the TotalAgility services. i If the service account name ends with a \$ (dollar), do not specify the password.
RunAsSystemAccount	false	If you set this parameter to true: <ul style="list-style-type: none"> The Application Pool and Kofax TotalAgility services are created with LocalSystem account. The user can still logon using the credentials specified in the Kofax TotalAgility Resource Credentials window when installing TotalAgility. The databases should be created using SQL authentication.
RunAsNetworkServiceAccount	false	If set to true, the IIS Application Pool and Kofax TotalAgility services run as the NT Authority\Network Service username. i Set RunAsNetworkServiceAccount to true only for Docker installations that want to make use of a Group Managed Service Account (gMSA).

Parameter	Default value	Description
Prerequisite Info		
ValidOS	true	Checks if the Operating System is valid.
SQLServerInstalled	true	Set to true to check if the SQL Server is installed.
SQLClientInstalled	false	Set to true to check if the SQL Client is installed.
IISInstalled	true	Checks if IIS is installed.
SslEnabled	false	Set to true to enable https. See Configure for HTTPS communication .
Install Info		
InstallAction	Install	Accept the default.
InstallMode	Silent	Accept the default.
InstallType	Both	Accept the default.
AuthenticationMode	Windows	Set the authentication mode to Windows.
Transformation Server Info		
<p> Configure these settings if TransformationService is true.</p>		
TSConfigFile	empty	<p>Specify the path to .ini file along with the name for Transformation Server to configure.</p> <p> If you provide the .ini file, the TransformationServerInfo settings are taken from the .ini file; the parameters mentioned in the SilentInstallConfig are ignored. See the .INI file Sample for the parameters.</p>
LogFile	C:\Program Files\Kofax\TotalAgility\TransformationServer\Tslog.txt	<p>Set the location where the Transformation Server log file will be created. If the log file path is not valid, the Transformation Server installation fails.</p> <p>Example:</p> <pre>C:\Program Files \Kofax\TotalAgility \TransformationServer \TSLog.txt</pre>
InstallLocation	C:\Program Files\Kofax\TotalAgility\TransformationServer	To install to a different location, specify the Transformation Server destination directory.

Parameter	Default value	Description
WindowsServiceAccount	username	<p>Enter the name of the user who will run the Transformation Server.</p> <p>To specify a domain user, enter the user name in the format Domain\User.</p> <p>Ensure that the account details are correct, as under this account Transformation Server authenticates in all places where Windows authentication is used. Example: TA database.</p> <p>All communication and resource access will be run under this account. Therefore, the account under which Transformation Server is running must be not some dummy account.</p>
WindowsServicePassword	password	Enter the password for the user.
UseSpecificPool	false	<p>Set this parameter to true to add this Transformation Server to a pool.</p> <p>Any other value, including no value, is treated as false and the Transformation Server process all activities regardless of pool.</p>
PoolName	empty	<p>If you set UseSpecificPool=true, enter the Transformation Server pool name.</p> <p>i If you leave the pool name empty, all activities are processed regardless of their pools.</p>
OLEnabled	true	<p>Enables online learning tasks on this Transformation Server instance.</p> <p>Set to false or any other value to disable online learning tasks.</p> <p>i In case where multiple instances of Transformation Server are installed for improving the throughput of the capture activities, online learning should be enabled only on a single transformation server instance in the cluster.</p>
WcfPort	9001	Enter the port that is used by TotalAgility to communicate with Transformation Server during synchronous calls, such as fuzzy searches and pushed activities.

Parameter	Default value	Description
ReservedSlots	0	Enter the number of slots on this Transformation Server that are reserved for pushed activities and high-priority activities.
OverrideDefSlots	Empty	By default, the Transformation Server determines the number of simultaneously working Transformation Server controlled processes that do actual processing based on the machine CPU cores. To specify your own values, enter the value here.
MaxSlots	0	If you set CPUSERVER_OVERRIDE_DEF_SLOTS to true, enter the number of processing slots for this Transformation Server.
InstallOCRAAddons	1	Installs additional OCR engines (A2iA CheckReader and A2iA FieldReader).
EnableSyncCalls	true	Enables synchronous calls. Set to false to disable synchronous calls.
NlpWestern	false	If set to true, installs the Natural Language Processing language bundle for English, Spanish, Portuguese, French, and German.
NlpWesternExtended	false	If set to true, installs the Natural Language Processing language bundle for Italian, Romanian, and Dutch.
NlpExtended	false	If set to true, installs the Natural Language Processing language bundle for Japanese, Chinese, and Korean.
IsIntegration Server	false	Set to true to install the TotalAgility Integration Server.
InstallLicenseProxy	false	Set to true to install License Proxy. If set to true, provide the username and password. Otherwise, leave the username and password blank.
KTAResourceName	empty	Specify a username for the TotalAgility user to be created on installation.
KTAResourcePassword	empty	Specify a password (minimum 6 alphanumeric characters) for the TotalAgility user to be created on installation.
StartServices	true	Starts the services.

Parameter	Default value	Description
ImportWorkspacePackage	false	Set to true to import Workspace package.
<SiteRoot>	Default Web Site	Install TotalAgility under a custom site that uses a non-standard port other than the standard ports (80 and 443). For example, create a custom site called "testsite" under IIS using the port number 85.
CaptureConfiguration		
CloudStorageType	SQLServer	By default, the capture data is stored in the SQL Server. Change the Cloud Storage Type to "Azure" for Windows Azure Blob Storage, "AWS" for Amazon S3 storage and "SqlFileStream" for SQL Server and File System.
AzureBlobStorageConnectionString	empty	The Account Connection String to connect to the Blob storage service.
AzureBlobStorageContainerName	empty	The Container Name of the storage service.
AmazonS3AccessKey	empty	The access key to connect to the Amazon S3 storage service.
AmazonS3SecretKey	empty	The secret key to the Amazon S3 storage service.
AmazonS3BucketName	empty	The bucket name of the storage service. Bucket is a fundamental container in Amazon S3 for data storage.
AmazonS3RegionName	empty	The S3 region name.
FileStreamFileGroup	empty	The FILESTREAM file group name.

3. Save and close the file.
4. On the Command Prompt, change the command line to the root directory of the Setup.exe file.

5. Run `Setup.exe /Silent`.

Based on the parameters set to **True** in the silent configuration file, the following items are installed:

- Kofax TotalAgility
- Kofax Import Connector (KIC)
- Kofax Transformation Designer.



- Transformation Designer is installed only when the `TransformationDesignerInstaller.exe` is available in the TotalAgility build folder.
- When you install Kofax TotalAgility from a network share, make sure the user has the Write permissions to the share; otherwise, the Import Connector will not get installed successfully.

- Utility for Kofax Export Connector
- Licensing Service
- Transformation Server, if the **TransformationService** parameter is set to true and the following parameters are set for Transformation Server:
 - `WindowsServiceAccount`
 - `WindowsServicePassword`

The system generates a log file that reports any errors.

The success or failure of installation is indicated in the event log.

When automating the installation, if you run `setup.exe` from the command line, or run `setup.exe` as a silent installation, one of the codes returns to indicate the following:

- 0= Success
- 1= Success with warnings
- 2= Failure

.INI file sample

```
TS_SERVICE_ACCOUNT=username
TS_SERVICE_PASSWORD=password
TS_USE_SPECIFIC_POOL=FALSE
TS_POOL_NAME=
TS_OL_ENABLED=TRUE
TS_WCF_PORT=9001
TS_RESERVED_SLOTS=0
TS_OVERRIDE_DEF_SLOTS=
TS_MAX_SLOTS=0
TS_ENABLE_SYNC_CALLS=TRUE
TS_MAIN_DB_CONNECTION_STRING=Server=servername;Trusted_Connection=Yes;Database=
TotalAgility;
TS_SYNCHRONOUS_ONLY=false
```

See also:

- [Silent installation for Database Only](#)
- [Silent installation for upgrading databases](#)

- [Silent installation on a separate Web or Application server](#)
- [Silent installation for Real Time Transformation Server](#)

Silent installation on a separate Web or Application server

Install TotalAgility on a separate Web or Application server.

Silent installation on an Application Server

Update the following parameters for an Application Server.

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and open `SilentInstallConfig.xml` using a text editor.
2. In `SilentInstallConfig.xml`, update the following parameters.
 - `InstallType = ApplicationServer`.
 - For other parameters, see [Silent installation of Web and Application on the same server](#).

i You can choose to install or not to install certain components by setting the values to True/False in the **ServicesInstallOptions** section of the Silent Configuration file.

3. Save and close the file.
4. On the Command Prompt, change the command line to the root directory of the `Setup.exe` file.
5. Run `Setup.exe /Silent`.

Based on the parameters set to **True** in the silent configuration file, the following items are installed:

- Kofax TotalAgility
- Kofax Import Connector (KIC)
- Kofax Transformation Designer

i

- Transformation Designer is installed only when the `Transformation DesignerInstaller.exe` is available in the TotalAgility build folder.
- When you install Kofax TotalAgility from a network share, make sure the user has the Write permissions to the share; otherwise, the Import Connector will not get installed successfully.

- Utility for Kofax Export Connector
- Licensing Service
- Transformation Server, if the **TransformationService** parameter is set to true and the following parameters are set for Transformation Server:
 - `WindowsServiceAccount`

- WindowsServicePassword

i When you choose to install only Transformation service on the Application server, set Transformation Service to true and Core Worker Service to false. If you do not exclude Core Services, TotalAgility will prompt for IIS requirement, and IIS is not required for installing the Transformation service on an Application Server.

The system generates a log file that reports errors (if any).

The success or failure of installation is indicated in the event log.

When automating the installation, if you run setup.exe from the command line, or run setup.exe as a silent installation, one of the codes returns to indicate the following:

- 0= Success
- 1= Success with warnings
- 2= Failure

Silent installation on a Web Server

1. On the installation media, navigate to `\\TotalAgilityInstall` and open `SilentInstallConfig.xml` using a text editor.
2. In `SilentInstallConfig.xml`, update the following parameters.

Parameter	Default	Description
InstallDirectory	C:\Program Files \TotalAgility\ TotalAgility	Specify the TotalAgility destination directory.
ApplicationServerName	no default	Enter the Fully Qualified Domain Name (FQDN) of the application server. i If the Application server is installed on a non-standard port, you must modify the <code><ApplicationServerName></code> parameter in the <code>SilentInstallConfig.xml</code> on the Web server as follows: <code><ApplicationServerName>FQDN:portnumber</code> <code><ApplicationServerName>"</code>
Identity Information		
UserName	username	Enter the name of the user who will run TotalAgility if <code>RunAsSystemAccount</code> is false.
Password	password	Enter the password for the user who will run TotalAgility if <code>RunAsSystemAccount</code> is false. i If the service account name ends with a \$ (dollar), do not specify the password.

Parameter	Default	Description
RunAsSystemAccount	false	<p>If set to true, the IIS Application Pool and Kofax TotalAgility services run as the LocalSystem account.</p> <p>i If you set this parameter to true, databases should be created using SQL authentication.</p>
RunAsNetworkService Account	false	<p>If set to true, the IIS Application Pool and Kofax TotalAgility services run as the NT Authority\Network Service username.</p> <p>i</p> <ul style="list-style-type: none"> • Set RunAsNetworkServiceAccount to true only for Docker installations that want to make use of a Group Managed Service Account (gMSA). • If you set this parameter to true, databases should be created using SQL authentication.
Prerequisite Info		
ValidOS	true	Set to true to check if the Operating System is valid.
SQLServerInstalled	true	Set to true to check if the SQL Server is installed.
SQLClientInstalled	false	Set to true to check if the SQL Client is installed.
IISInstalled	true	Set to true to check if IIS is installed.
SslEnabled	false	Set to true to enable https. See Configure for HTTPS Communication .
Install Info		
InstallAction	Install	Accept the default.
InstallMode	Silent	Accept the default.
InstallType	Both	Enter WebServer.
<SiteRoot>	Default Web Site	<p>Install TotalAgility under a custom site that uses a non-standard port other than the standard ports (80 and 443).</p> <p>For example, create a custom site called "testsite" under IIS using the port number 85.</p>

3. Save and close the file.
4. On the Command Prompt, change the command line to the root directory of the Setup.exe file.

5. Run Setup.exe /Silent.

The Kofax TotalAgility is installed automatically.

The system generates a log file that reports errors (if any).

The success or failure of installation is indicated in the event log.

When automating the installation, if you run setup.exe from the command line, or run setup.exe as a silent installation, one of the codes returns to indicate the following:

- 0= Success
- 1= Success with warnings
- 2= Failure

See also:

- [Silent installation for Database Only](#)
- [Silent installation for upgrading databases](#)
- [Silent installation of Web and Application on the same server](#)
- [Silent installation for Real Time Transformation Server](#)

Silent installation for Real Time Transformation Server

1. On the TotalAgility installation media, navigate to \\TotalAgilityInstall and open SilentInstallConfig.xml using a text editor.
2. In SilentInstallConfig.xml, update the following parameters.

Parameter	Default Value	Description
InstallDirectory	C:\Program Files\ Kofax\ TotalAgility	Specify the TotalAgility destination directory.
DatabaseInformation		
InstallDatabases	false	Set to false to ignore installing databases.
OverwriteIfExisting	false	If set to true, overwrites the existing databases. <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e6f2ff;"> <p>i If the existing database details are not valid, or if the databases does not exist, an errors occurs and the installation fails.</p> </div>
Main Database		
DatabaseName	TotalAgility	Specify the name of the Main database.

Parameter	Default Value	Description
Server	Server name	Specify the fully qualified domain name (FQDN) of the server. <div style="background-color: #e0f2f7; padding: 5px;"> <p>i When installing TotalAgility with a remote database, update SilentInstallConfig.xml with the server name (<Server>servername</Server>) of the machine on which the database resides. The account used to connect to the database during the installation requires DB_CREATOR rights.</p> </div>
SqlScript		
CreateScript	Create_Main.SQL	Accept the default.
DropScript	Drop_Main.sql	Accept the default.
InitializeScript	Initialise_Main.sql	Accept the default.
ConversionScript	Convert_Main.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Audit Database		
DatabaseName	TotalAgility	Specify the name of the Audit database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
SqlScript		
CreateScript	Create_Audit.sql	Accept the default.
DropScript	Drop_Audit.sql	Accept the default.
InitializeScript	Initialise_Audit.sql	Accept the default.
ConversionScript	Convert_Audit.SQL	Only required for patch when there are SQL changes.
Security		

Parameter	Default Value	Description
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Finished Jobs Database		
DatabaseName	TotalAgility	Specify the name of the Finished Jobs database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
SqlScript		
CreateScript	Create_Archive.sql	Accept the default.
DropScript	Drop_Archive.sql	Accept the default.
Conversion Script	Convert_Archive.SQL	Only required for patch when there are SQL changes.
Security		
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
DataLayer - TotalAgility_Documents Database		
DatabaseName	TotalAgility_Documents	Specify the name of the TotalAgility_Documents database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
SqlScript		
CreateScript	Repository2012_TablesCreate.sql	Accept the default.
DropScript	Repository2012_Drop.sql	Accept the default.
Conversion Script	Repository2012_Convert.SQL	Only required for patch when there are SQL changes.
Security		

Parameter	Default Value	Description
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Analytics Database		
DatabaseName	TotalAgility_Reporting	Specify the name of the TotalAgility_Reporting database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
SqlScript		
CreateScript	Kofax.Reporting.Analytics. SQL_TablesCreate.sql	Accept the default.
DropScript	Kofax.Reporting.Analytics. SQL_Drop.sql	Accept the default.
InitializeScript	Kofax.Reporting.Analytics. SQL_Initialize.sql	Accept the default.
Conversion Script	empty	Only required for patch when SQL changes are needed.
Security		
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Reporting_Staging Database		
DatabaseName	TotalAgility_Reporting_Staging	Specify the name of the TotalAgility_Reporting_Staging database.
Server	server name	Specify the fully qualified domain name (FQDN) of the server.
SqlScript		
CreateScript	Kofax.Reporting.Analytics. Staging.SQL_TablesCreate.sql	Accept the default.

Parameter	Default Value	Description
DropScript	Kofax.Reporting.Analytics.Staging.SQL_Drop.sql	Accept the default.
InitializeScript	Kofax.Reporting.Analytics.Staging.SQL_Initialize.sql	Accept the default.
Conversion Script	empty	Only required for patch when SQL changes are needed.
Security		
WindowsAuthentication	true	Set to true to use Windows credentials for logging in. If set to false, provide the username and password. Otherwise, leave the username and password blank.
UserName	empty	
Password	empty	
NewDatabase	false	Set to true to create new database.
Identity Information		
UserName	username	Enter the user name of the Windows service account for the TotalAgility services. i If the service account name ends with a \$ (dollar), do not specify the password.
Password	password	Enter the password of the windows service account for the TotalAgility services. i If the service account name ends with a \$ (dollar), do not specify the password.
RunAsSystemAccount	false	If set to true, the IIS Application Pool and Kofax TotalAgility services run as the LocalSystem account. i When you set this parameter to true, databases should be created using SQL authentication.

Parameter	Default Value	Description
RunAsNetworkServiceAccount	false	<p>If set to true, the Application Pool and Kofax TotalAgility services are created with the NT Authority\Network Service username.</p> <div style="background-color: #e6f2ff; padding: 5px;"> <p>i</p> <ul style="list-style-type: none"> Set RunAsNetworkServiceAccount to true only for Docker installations that want to make use of a Group Managed Service Account (gMSA). When you set this parameter to true, databases should be created using SQL authentication. </div>
Install Info		
InstallType	RTTS	<p>Accept the default.</p> <div style="background-color: #e6f2ff; padding: 5px;"> <p>i When you install RTTS, it ignores the services. The services such as CoreworkerService, ImportService, ExportService are not installed.</p> </div>
SslEnabled	false	<p>You can set to true to enable https. See Configure for HTTPS Communication.</p>
Transformation Server Info		
TransformationService	true	<p>Accept the default.</p>
TSConfigFile	no default	<p>Specify the path to .ini file along with the name for Transformation Server to configure.</p> <div style="background-color: #ffe6e6; padding: 5px;"> <p>! If you provide the .ini file, the TransformationServerInfo settings are taken from the .ini file; the parameters mentioned in the SilentInstallConfig are ignored. See the .INI file Sample for the parameters.</p> </div>

Parameter	Default Value	Description
LogFile	C:\Program Files \Kofax\TotalAgility \Transformation Server \Tslog.txt	Specify the location where the Transformation Server log file will be created. If the log file path is not valid, the Transformation Server installation fails. Example: C:\Program Files \Kofax\TotalAgility \TransformationServer \Tslog.txt
InstallLocation	For example, C:\Program Files (x86)\Kofax\TotalAgility\TransformationServer	Specify the Transformation Server destination directory.
WindowsServiceAccount	username	Enter the name of the user who will run the Transformation Server.
WindowsServicePassword	password	Enter the password for the user.
UseSpecificPool	false	Set true to add this Transformation Server to a pool. Set false (or leave blank or assign any other value) to have Transformation Server process all activities regardless of pool.
PoolName	empty	If you set UseSpecificPool=true, enter the Transformation Server pool name. i If you leave the pool name empty, all activities are processed regardless of their pools.
OLEnabled	true	Set to true to enable online learning tasks on this Transformation Server instance. Set to false or any other value to disable online learning tasks. i In case where multiple instances of Transformation Server are installed for improving the throughput of the capture activities, online learning should be enabled only on a single transformation server instance in the cluster.
WcfPort	9001	Enter the port that is used by TotalAgility to communicate with Transformation Server during synchronous calls (such as fuzzy searches and pushed activities).

Parameter	Default Value	Description
ReservedSlots	0	Enter the number of slots on this Transformation Server that are reserved for pushed activities and high-priority activities.
OverrideDefSlots	empty (false)	To override the default number of processing slots for this Transformation Server, set this parameter to true. Any other value, including empty, is treated as false and the system automatically sets the default number of processing slots based on the system configuration.
MaxSlots	0	If you set CPUSERVER_OVERRIDE_DEF_SLOTS to true, enter the number of processing slots for this Transformation Server.
EnableSyncCalls	true	Set to true to enable synchronous calls or false to disable these calls.
NlpWestern	false	If set to true, installs the Natural Language Processing language bundle for English, Spanish, Portuguese, French, and German.
NlpWesternExtended	false	If set to true, installs the Natural Language Processing language bundle for Italian, Romanian, and Dutch.
NlpExtended	false	If set to true, installs the Natural Language Processing language bundle for Japanese, Chinese, and Korean.
<InstallSynchronous>	false	<p>Set true to install the Transformation Server in a synchronous mode. Specify the port number (default: 9001) for the Transformation Server service. The port number is stored in the TotalAgility Web.config file as an application setting:</p> <pre><add key="TSExternalServicePortForSyncProcessing" value="9001" /></pre> <p>❗ If you wish to change the default port number, you must update the Web.config file and restart the Kofax TotalAgility IIS Application Pool.</p>
StartServices	true	

Parameter	Default Value	Description
<SiteRoot>	Default Web Site	Install TotalAgility under a custom site that uses a non-standard port other than the standard ports (80 and 443). For example, create a custom site called "testsite" under IIS using the port number 85.

3. Save and close the file.
4. On the Command Prompt, change the command line to the root directory of the Setup.exe file.
5. Run `Setup.exe /Silent`.
The Real Time Transformation Server is installed. The Real Time Transformation Service sets up Transformation Server in a synchronous mode and configures the core and SDK APIs of TotalAgility which clients can invoke.
The system generates a log file that reports errors (if any).
The success or failure of installation is indicated in the event log.
When automating the installation, if you run `setup.exe` from the command line, or run `setup.exe` as a silent installation, one of the codes returns to indicate the following:
 - 0= Success
 - 1= Success with warnings
 - 2= Failure
6. To ensure that the installation works as expected, perform the following steps:
 - a. Navigate to `<Program Files>/Kofax/ TotalAgility/Agility.Server.Web` and open the `Web.config` in a text editor.
 - b. Locate the `TransformationServerExternalService_Binding` binding parameter and ensure that the `<transport ClientCredentialType>` value is set to `Windows`.
 - c. Save and close the web configuration file.

See also:

- [Silent installation for Database Only](#)
- [Silent installation for upgrading databases](#)
- [Silent installation of Web and Application on the same server](#)
- [Silent installation on a separate Web or Application server](#)

Silent installation of multiple instances of Message Connectors

You can install up to three instances of Message Connector on a computer.

1. To install the first instance of Message Connector, before installing TotalAgility, set the value of `ImportService` parameter to `true` in `SilentInstallConfig.xml`. See [Silent installation of Web and Application on the same server](#) or [Silent installation on a separate Web and Application server](#).

2. To install the second instance of Message Connector, run the following command on the Command Prompt:

```
msiexec /i <\\TotalAgility\KIC\Export\MC\MC.msi> TRANSFORMS=:I02
MSINewInstance=1 Kofax="<path>" <options>
```

Where, <\\TotalAgility\KIC\Export\MC\MC.msi> is the path of TotalAgility setup folder. In <path>, specify the installation path for second instance of Message Connector. \KIC-ED\MC02 is appended to this path at the time of installation.

3. To install the third instance of Message Connector, run the following command on the Command Prompt:

```
msiexec /i <\\TotalAgility\KIC\Export\MC\MC.msi> TRANSFORMS=:I03
MSINewInstance=1 Kofax="<path>" <options>
```

Where, <\\TotalAgility\KIC\Export\MC\MC.msi> is the path of TotalAgility setup folder. In <path>, specify the installation path for third instance of Message Connector. \KIC-ED\MC03 is appended to this path at the time of installation.

i For second and third instances of message Connector, optionally, in <options> use the following command options:

- /qn - silent installation
- /qb - silent installation with elementary user interface (progress bar)
- ALLUSERS=1 - install for all users

Following command assumes that TotalAgility setup folder is in the C: drive and Message Connector's second instance will be installed at C:\Program Files (x86)\Kofax.

```
msiexec /i C:\TotalAgility\KIC\Export\MC\MC.msi TRANSFORMS=:I02
MSINewInstance=1 Kofax="C:\Program Files (x86)\Kofax" /qn /norestart
ALLUSERS=1
```

Perform a standard installation

You can install TotalAgility using the standard installer wizard.

When you run the installation wizard for the Application Server or the Web/Application Server, based on the installation type selected, following items are installed:

- TotalAgility
- Kofax Import Connector
- Transformation Designer



- Transformation Designer is installed only when the TransformationDesignerInstaller.exe is available in the TotalAgility installation folder.
- When you install Kofax TotalAgility from a network share, make sure the user has the Write permissions to the share; otherwise, the Import Connector will not get installed successfully.

- Utility for Kofax Export Connector
- Licensing Service
- Reporting Service

i The reporting client is installed automatically on the Transformation Server and during the TotalAgility server installation.

When installing TotalAgility using the standard installer wizard, you can select Standard or Express as the installation option type:

- **Standard installation:** TotalAgility is installed depending on the installation type (such as Database Only, Web Server, Application Server and more) and the settings you specify.
- **Express installation:** TotalAgility is installed with all default settings with minimal user interaction. The express mode installs Combined Web Application server, SQL Express and Transformation Server. You can configure license server while installing TotalAgility or post installation.

Express installation

Use the Express installation to install TotalAgility with minimal user interaction.

1. Navigate to `\\TotalAgilityInstall` on the installation media and run one of the following commands:
 - If UAC (User Account Control) is enabled, right-click Setup.exe and select **Run as administrator**.
 - If UAC is not enabled, run **Setup.exe**.

The system starts the installation.

2. In the Kofax TotalAgility Installation Program window, click **Next** or press Enter to move to the next window.

i To exit the setup, click **Cancel** or press Esc.

3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.
The **Install Option Type** window opens.
4. Select **Express**.
5. Leave the **Skip License** checkbox clear to provide licensing details while installing TotalAgility. If you select this option and confirm to skip providing the licensing details, the Licensing window does not appear. You must configure the license server post installation.
6. Click **Next**.
The **Licensing** window opens if you have not selected the **Skip License** checkbox.
7. Enter the License Server details and click **Next**.
The **Credentials** window opens.
8. Enter the username and password of the Windows account to run Kofax TotalAgility.
The **Installation Progress** window displays the progress of installation. The setup installs the required files, databases, and other integrated products.

9. Click **Finish**.

Your installation is now complete. Review the Summary Panel for the installation report.

Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where setup.exe exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.

Standard installation of Database Only

1. Navigate to `\\TotalAgilityInstall` on the installation media and run one of the following commands:

- If UAC (User Account Control) is enabled, right-click Setup.exe and select **Run as administrator**.
- If UAC is not enabled, run **Setup.exe**.

The system starts the installation.

2. In the **Kofax TotalAgility Installation Program** window, click **Next** or press Enter to move to the next window.

i To exit the setup, click **Cancel** or press Esc.

3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.

The **Install Option Type** window opens.

4. Select your installation option as **Standard** and click **Next**.

5. In the **Type of Install** window, select **Database Only** (default: Web/Application Server) and click **Next**.

The **Databases** window opens.

6. Do one of the following:

- By default **Install Databases** is selected. Click **Next** to install the databases.
- If the database server already contains the same databases and you want to overwrite the existing databases, select the **Overwrite databases if they exist?** check box. The **Test connections** option becomes available. Click **Test connections** to test the database connections. Once the databases are successfully connected, click **OK**.

i If the database details are not valid, or if the database does not exist, connection to database fails.

- If you want to provide the database server for each database do the following: enter a database name; click ellipsis for **Server** and choose the mode of database server; in the **Security** group, either use **Windows Authentication**, or select the SQL Server authentication providing the user name and password, and then click **OK**. If all the databases reside on the same server, select the **Apply these settings to all other Databases** check box.

7. Click **Next**.

The **DB Connection Results** window opens and displays the results of connection to databases. If the connection to databases fails, the installation cannot be progressed. Click **Back** and make changes as needed.

i The **DB Connection Results** window opens only if the check box for "Install Databases" or "Overwrite databases if they exist?" is selected in the previous step.

8. Once the databases are successfully connected, click **Next**.

The **Capture Binary Data Storage** window opens.

9. By default, the binary data such as capture documents, .NET Store DLLs and CCM Packs are stored in the TotalAgility database. You can use the preconfigured external cloud data storage services such as Amazon S3 or Windows Azure Blob Storage for saving and processing the binary data. The cloud services helps to reduce the SQL Server maintenance costs, delegate maintenance to external service and provide encryption.

i If you change the storage type to Azure/Amazon blob storage or SQL Server and File System, the binary data is saved in the selected storage type. Once the storage type is changed, you cannot turn it off later.

Select one of the following capture data storage types:

Storage type	Description
SQL Server (default)	Stores capture data in the SQL Server.
SQL Server and File System	<p>Stores the FILESTREAM file groups.</p> <p>The capture documents are stored in the file system, and the database has a particular filegroup called 'FILESTREAM'. You can perform actions on the documents using the SQL Server database. The Administrator creates these file groups. For these file groups to appear under the File storage settings, you must enable the FILESTREAM feature in the SQL Server Configuration Manager from Start > Programs > SQL Server Configuration Manager > SQL Server properties > 'FILESTREAM'.</p> <p>Under the File storage settings, the file groups configured in the SQL Server configuration manager are listed. Select a file group to store the capture binaries.</p> <p>i The FILESTREAM is not supported with SQL Server authentication or when the databases do not exist.</p>
Windows Azure Blob Storage	<p>Stores capture data in Azure Blob Storage service.</p> <p>Configure the following Cloud Account Settings:</p> <ol style="list-style-type: none"> a. Enter the Account Connection String to connect to the Blob storage service. b. Enter the Container Name of the storage service.

Storage type	Description
Amazon S3	Configure the following Cloud Account Settings: <ol style="list-style-type: none"> a. Enter the Access Key to connect to the Amazon S3 storage service. b. Enter the Secret Key. c. On the Region list, select a predefined S3 region, for example Asia Pacific (Sydney). (Default: US East (Ohio)) d. Enter the Bucket Name. Bucket is a fundamental container in Amazon S3 for data storage.

10. Click **Next**.
The **Kofax TotalAgility Resource Credentials** window opens.
11. Enter the credentials (**Username**, **Password** (minimum 6 alphanumeric characters) and **Confirm** password) for the user to be created on installation.
By default, the username field displays the name of the logged on user. You can specify a different user name, as required.
12. Click **Next**.
The **Installation Review** window opens and displays the settings.
13. Review the settings and click **Next** to start the installation.
The **Installation Progress** window displays the progress of installation. The setup installs the required files, databases, and other integrated products.
The **Licensing** window opens.
14. To connect to the license server, do the following:
 - a. In the **License Server** field, enter the location of the License Server.

i To connect to a shared License Server, enter the name or the IP address of a shared License Server.
 - b. In the **Port Number** field, enter the port number on which the License Server listens. Alternatively, click **Skip** if you want to skip connecting to the License Server now but connect when launching TotalAgility.
15. Click **Next**.
The Kofax TotalAgility Installation Complete window displays the installation summary.
Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where setup.exe exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.
16. Click **Finish**.
Your installation is now complete.

Standard installation for upgrading databases

You can upgrade all the databases to the latest version of TotalAgility when TotalAgility is not installed locally.

i Upgrading databases prior to TotalAgility 7.4.0 is not supported.

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and run one of the following commands:
 - If UAC (User Account Control) is enabled, right-click Setup.exe and select **Run as administrator**.
 - If UAC is not enabled, run **Setup.exe**.

The system starts the installation.

2. In the **Kofax TotalAgility Installation Program** window, click **Next** or press Enter to move to the next window.

i To exit the setup, click **Cancel** or press Esc.

3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.
4. Select your installation option as **Standard** and click **Next**.
5. In the **Type of Install** window, select **Upgrade Databases** (default: Web/Application Server). To import the Workspace package, select the check box for **Import system Workspace package** (default: Clear).
6. Click **Next**.
The **Databases** window opens.
7. To specify the lower version databases to upgrade, do the following for the databases as needed: enter the database name to upgrade; click ellipsis for **Server** and choose the mode of database server; in the **Security** group, either use **Windows Authentication**, or select the SQL Server authentication providing the user name and password, and then click **OK**. If all the databases reside on the same server, select the **Apply these settings to all other Databases** check box.
8. Click **Next**.
The **Installation Review** window opens.
9. Review the settings and click **Next** to start the installation.

The **Installation Progress** window displays the progress of installation. The setup upgrades TotalAgility databases.

Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where setup.exe exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.


10. The Kofax TotalAgility Installation Complete window displays the summary for the installation. Click **Finish**.
Your installation is now complete.

Standard installation of the Web Server

1. On the TotalAgility installation media navigate to \\TotalAgilityInstall and run one of the following commands:
 - If UAC (User Account Control) is enabled, right-click Setup.exe and select **Run as administrator**.
 - If UAC is not enabled, run **Setup.exe**.

The system starts the installation.

2. In the **KKofax TotalAgility Installation Program** window, click **Next** or press Enter to move to the next window.

 To exit the setup, click **Cancel** or press Esc.

3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.
4. Select your installation option as **Standard** and click **Next**.
5. In the **Type of Install** window, select **Web Server** (default: Web/Application Server) and click **Next**.


The **Software Checks** window displays the list of detected software. TotalAgility requires certain software to be installed on your system before installing TotalAgility.

6. Review the **Detected Software** list and proceed as follows:
 - If your system does not have all the required software, click **Cancel** to close the installer and install the software.
 - If your system has all the required software, click **Next**.


The **Destination** window opens.

7. Use the default installation folder or click **Browse** to select a different path, and click **Next**. The **Choose Server Location with Options** window opens.

8. In the **Server Name** field enter the name of your existing TotalAgility application server. The name must be a fully qualified, such as <machinename>.<fullyqualifieddomainname>:<portnumber>.

 The port number is only required if it is other than port 80.

9. To support SSL, select the **Support SSL** check box.

 The SSL option is only available if you have configured the https binding in IIS. See [Configure TotalAgility for HTTPS Communication](#).

10. Click **Next**.
The **Credentials** window opens.
11. Enter the credentials (Password and Confirm password) for the user who will run TotalAgility.

12. On the **Root Website to host TotalAgility Application** list, select the website to host the TotalAgility application. By default, the **Default Web Site** is selected.

i The websites added in IIS Manager appear on this list. To add a website in IIS Manager, click `Start > Run > Inetmgr > Sites > Add Web Site`.

13. Do either of the following for **Windows Authentication**:
 - To log on automatically to TotalAgility Designer and Workspace, keep the **Windows Authentication** check box selected (default).
 - To log on manually to TotalAgility Designer and Workspace, clear the **Windows Authentication** check box.
14. Click **Next**.
The **Installation Review** window opens and displays the settings.
15. Review the settings and click **Next** start the installation.
The **Installation Progress** window opens. The setup installs the required files, databases, and other integrated products.
Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where `setup.exe` exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.
16. Click **Finish**.
Your installation is now complete.

See also:

- [Express installation](#)
- [Standard installation of Database Only](#)
- [Standard installation for upgrading databases](#)
- [Standard installation of the Application Server](#)
- [Standard installation of the Web and Application Server](#)
- [Standard installation of Real Time Transformation Server](#)

Standard installation of the Application Server

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and run one of the following commands:
 - If UAC (User Account Control) is enabled, right-click `Setup.exe` and select **Run as administrator**.
 - If UAC is not enabled, run **Setup.exe**.


The system starts the installation.

2. In the **Kofax TotalAgility Installation Program** window, click **Next** or press Enter to move to the next window.

i To exit the setup, click **Cancel** or press Esc.


3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.
4. Select your installation option as **Standard** and click **Next**.
5. In the **Type of Install** window, select **Application Server** (default: Web/Application Server) and click **Next**.
The **Application Server** window opens.
6. By default, the Windows Services and WCF Services are selected and installed. If you do not want to install any service, clear the check box for the service.
The Windows Services include:
 - Core Services
 - Reporting Service
 - License Service (Primary license server or Backup license server)
By default, the Primary server is selected. If the primary license server fails to connect, you can connect to the backup server by manually updating the license server configuration file, or run the Configuration Utility post TotalAgility installation to automatically update the setting. Also, after upgrading TotalAgility from versions prior to 7.7.0, you must reconfigure the license server by updating the settings to use the new licensing behavior. See [Update the settings for a license server](#).
 - Transformation Service
When you choose to install only Transformation service on the Application server by excluding all other Windows services, you must also clear the check box for WCF Core Services. If you do not exclude WCF Core Services, TotalAgility setup.exe will prompt for IIS requirement, and IIS is not required for installing the Transformation service on an Application Server.
 - Import Service
You can now install multiple instances of the Message Connector. Select the check box for Instance 2 and Instance 3 for Import Service. When you uninstall TotalAgility, all the instances of Message Connector are also uninstalled.
 - Export ServiceThe WCF Services include Core Services.
7. Click **Next**.
The **Software Checks** window opens. The system displays a list of required software based on services and databases selection and whether the required software is installed.
8. Review the **Detected Software** list and proceed as follows:
 - If your system does not have all the required software, click **Cancel** to close the installer and install the software.
 - If your system has all the required software, click **Next**.
The **Destination** window opens.
9. Use the default installation folder for installing TotalAgility, or click **Browse** to select a different folder, and click **Next**.
The **Credentials** window opens.

10. Enter the credentials (password and confirm password) for the user who will run TotalAgility. When you enter the credentials of a non-admin account, changes need to be made to ensure the Streaming Service will run.

 If the service account name ends with a \$ (dollar), do not specify the password.

11. Click **Next**.
The **Databases** window opens.

12. Do one of the following:

Option	Description
Use the default settings.	Keep the Install Databases check box selected and follow Step 13 .
A database with the same name already exists, and you want to overwrite the existing database.	<ol style="list-style-type: none"> a. Select the Overwrite databases if they exist? check box. The Test connections option becomes available. b. Click Test connections. A popup displays the database connection results. If the database details are not valid, or if the database does not exist, connection to database fails. c. Click Next. d. Click Yes to confirm overwriting databases. <div style="background-color: #e1f5fe; padding: 5px; margin-top: 10px;">  </div>
Point to an existing database on your local machine.	<ol style="list-style-type: none"> a. Clear the Install Databases and Overwrite databases if they exist? check boxes. b. Enter a name for each database and follow Step 13.
Point to existing databases on a different machine.	<ol style="list-style-type: none"> a. Select the Install Databases and Overwrite databases if they exist? check boxes b. For each database do the following: <ol style="list-style-type: none"> 1. Enter a database name. 2. Click ellipsis for Server; select the mode of database server. 3. In the Security group, either use Windows Authentication, or select the SQL Server authentication providing the user name and password, and then click OK. 4. If all the databases reside on the same server, select the Apply these settings to all other Databases check box.



- If Application Pool is running under a System account, the System displays an error.
- You must have a trusted account to interact with databases. Provide the SQL credentials and click **OK**.
- If you install TotalAgility without any databases, you can use the Configuration Utility to point to the databases when they are available at a later a stage. See the *Kofax TotalAgility Configuration Utility Guide*.

13. Click Next.

The **DB Connection Results** window opens and displays the results of connecting to databases. If the connection to databases fails, the installation cannot be progressed. Click **Back** and make changes as needed.

i The **DB Connection Results** window opens only if the check box for "Install Databases" or "Overwrite databases if they exist?" is selected in the previous step.

14. Once the databases are successfully connected, click Next.

The **Capture Binary Data Storage** window opens.

15. By default, the binary data such as capture documents, .NET Store DLLs and CCM Packs are stored in the TotalAgility database. You can use the preconfigured external cloud data storage services such as Amazon S3 or Windows Azure Blob Storage for saving and processing the binary data. The cloud services helps to reduce the SQL Server maintenance costs, delegate maintenance to external service and provide encryption.

i If you change the storage type to Azure/Amazon blob storage or SQL Server and File System, the binary data is saved in the selected storage type. Once the storage type is changed, you cannot turn it off later.

Select one of the following capture data storage types:

Storage type	Description
SQL Server (default)	Stores capture data in the SQL Server.
SQL Server and File System	<p>Stores the FILESTREAM file groups.</p> <p>The capture documents are stored in the file system, and the database has a particular filegroup called 'FILESTREAM'. You can perform actions on the documents using the SQL Server database. The Administrator creates these file groups. For these file groups to appear under the File storage settings, you must enable the FILESTREAM feature in the SQL Server Configuration Manager from Start > Programs > SQL Server Configuration Manager > SQL Server properties > 'FILESTREAM'.</p> <p>Under the File storage settings, the file groups configured in the SQL Server configuration manager are listed. Select a file group to store the capture binaries.</p> <p>i The FILESTREAM is not supported with SQL Server authentication or when the databases do not exist.</p>
Windows Azure Blob Storage	<p>Stores capture data in Azure Blob Storage service.</p> <p>Configure the following Cloud Account Settings:</p> <ol style="list-style-type: none"> a. Enter the Account Connection String to connect to the Blob storage service. b. Enter the Container Name of the storage service.

Storage type	Description
Amazon S3	Configure the following Cloud Account Settings: <ol style="list-style-type: none"> <li data-bbox="716 386 1422 441">a. Enter the Access Key to connect to the Amazon S3 storage service. <li data-bbox="716 457 1003 485">b. Enter the Secret Key. <li data-bbox="716 501 1455 556">c. On the Region list, select a predefined S3 region, for example Asia Pacific (Sydney). (Default: US East (Ohio)) <li data-bbox="716 573 1401 667">d. Enter the Bucket Name. Bucket is a fundamental container in Amazon S3 for data storage.

- 16.** Click **Next**.
 The **Kofax TotalAgility Resource Credentials** window opens
- 17.** Enter the credentials (**Username**, **Password** (minimum 6 alphanumeric characters) and **Confirm** password) for the user to be created on installation.
 By default, the username field displays the name of the logged on user. You can specify a different user name, as required.
- 18.** Click **Next**.
 The **Install Options** window opens
- 19.** To automatically start the services, keep the **Automatically Start Services** check box selected, and click **Next**.
 The **Installation Review** window opens and displays the settings.
- 20.** Click **Next** to start installation.
 The **Installation Progress** window opens. The setup installs the required files, databases, and other integrated products.
- 21.** Click **Next**.
 The **Licensing** window opens.

22. Do one of the following:

Option	Description
Connect to the License Server	<p>a. In the License Server field, enter the location of the License Server.</p> <p>i To connect to a shared License Server, enter the name or the IP address of a shared License Server.</p> <p>b. In the Port Number field, enter the port number on which the License Server listens.</p> <p>c. Click Next. The second Licensing window opens. Follow the next step.</p>
<p>Skip connecting to the License Server now but connect when launching TotalAgility.</p> <p>OR</p> <p>If you have selected to install databases manually (in Step 12).</p>	<p>a. Click Skip.</p> <p>b. Click Finish.</p>

23. Enter your TotalAgility **Serial Number** and **Product code**.
The Serial Number and Product code appear by default, if the License Server is a shared license server.
24. The ID of the selected License Server appears in the **Machine ID** field.
25. To activate the license, select the license activation method:
- **Automatic:** Use this option when internet connectivity is available. The license is activated online.

- **Manual:** Use this option when there is no internet connectivity, or if automatic activation is not successful from the installer or license utility for your Kofax product. The Activation Code box is displayed where you can specify the activation code.
 - a. To obtain the activation code:
 - 1. Enter the following URL in your browser:
`http://activatelegacy.kofax.com/support/Activation/manual.aspx`
The Kofax Product License Activation page opens.
 - 2. Enter the **Serial Number** issued to you at the time of purchase. If you have a hardware key, the serial number (usually 7 characters) is printed on the key.
 - 3. Enter the email address where Kofax can send the information you need to activate the product license.
 - 4. Click **Next** to proceed with the activation process.

i Ignore the **Version** selection field if you do not have Kofax Capture or Ascent Capture.
 - 5. Copy and paste the **Activation Code** into the field on the **Licensing** window.
 - 6. Click **Activate** to activate the license, or click **Skip**. If you skip activating the license, a warning informs that you need to activate the license later.
 - b. Once you get the activation code, copy the code.
 - c. Paste the code in the **Activation Code** field on the **Licensing** window.
 - d. Click **Activate** to activate the license, or click **Skip** to activate the license later. If you skip activating the license, the summary panel displays the warning that you need to activate the license later.

26. Click Finish.

Your installation is now complete.

After TotalAgility is installed, the installer prompts you to [install](#) the Kofax Transformation Server bundle.



- If you want to install any further services, you should uninstall TotalAgility and reinstall by selecting the required services in the Application Server window.
- Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where setup.exe exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.

After you install TotalAgility, further configure TotalAgility to:

- [Launch TotalAgility](#)
- [Integrate with Dynamics CRM](#)
- [Integrate with Dynamics AX](#)
- [Integrate with Micro Focus Content Manager](#)



To view the TotalAgility version you installed, login to TotalAgility Designer and navigate to System > System settings. The version information is available at the bottom right corner of the System settings page. The last three digits correspond to the build number.

See also:

- [Express installation](#)
- [Standard installation of Database Only](#)
- [Standard installation for upgrading databases](#)
- [Standard installation of the Application Server](#)
- [Standard installation of the Web Server](#)
- [Standard installation of the Web and Application Server](#)
- [Standard installation of Real Time Transformation Server](#)

Standard installation of the Web and Application Server

This installation type installs the Web and Application servers on a single machine.

1. On the TotalAgility installation media, navigate to `\\TotalAgilityInstall` and run one of the following commands:
 - If UAC (User Account Control) is enabled, right-click Setup.exe and select **Run as administrator**.
 - If UAC is not enabled, run **Setup.exe**.

The system starts the installation.

2. In the **Kofax TotalAgility Installation Program** window, click **Next** or press Enter to move to the next window.

i To exit the setup, click **Cancel** or press Esc.

3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.

4. Select your installation option as **Standard** and click **Next**.

5. In the **Type of Install** window, select **Web/Application Server** (default: Web/Application Server) and click **Next**.

The **Application Server** window opens.

6. By default, the Windows Services and WCF Services are selected and installed. If you do not want to install any service, clear the check box for the service.

The Windows Services include:

- Core Services
- Reporting Service
- License Service (Primary license server or Backup license server)

By default, the Primary server is selected. If the primary license server fails to connect, you can connect to the backup server by manually updating the license server configuration file, or run the Configuration Utility post TotalAgility installation to automatically update the setting. Also, after upgrading TotalAgility from versions prior to 7.7.0, you must reconfigure the license server by updating the settings to use the new licensing behavior. See [Update the settings for a license server](#).

- Transformation Service
- Import Service

You can now install multiple instances of the Message Connector. Select the check box for Instance 2 and Instance 3 for Import Service. When you uninstall TotalAgility, all the instances of Message Connector are also uninstalled.

- Export Service

The WCF Services include Core Services.

Clear the check box for Core Services to install only Transformation Server on the Application server so that IIS prerequisite is not needed. IIS is not required for standalone installation of the Transformation Server.

7. Click Next.

The **Software Checks** window opens. The system displays a list of required software based on services and databases selection and whether the required software is installed.

8. Review the **Detected Software** list and proceed as follows:

- If your system does not have all the required software, click **Cancel** to close the installer and install the software.
- If your system has all the required software, click **Next**.

The **Destination** window opens.

9. Use the default installation folder or click **Browse** to select your desired location where TotalAgility will be installed.

10. Click **Next**.

The **Credentials** window opens.

11. Enter the credentials (**Password** and **Confirm** password) for the user who will run TotalAgility.

i If the service account name ends with a \$ (dollar), do not specify the password.

12. On the **Root Website to host TotalAgility Application** list, select the website to host the TotalAgility application. By default, the **Default Web Site** is selected.

i The websites added in IIS Manager appear on this list. To add a website in IIS Manager, click `Start > Run > Inetmgr > Sites > Add Web Site`.

13. To support SSL, select the **Support SSL** check box. (Default: Clear)

i

- The SSL option is only available if you have configured the https binding in IIS. See [Configure TotalAgility for HTTPS communication](#).
- If HTTPS is being used in TotalAgility Designer, when you link TotalAgility servers in some browser a prompt appears for you to select a client certificate and authenticate yourself. Ignore the prompt as TotalAgility will automatically pass any specified client certificate when required.

14. Do either of the following for **Windows Authentication**:

- To log on automatically to TotalAgility Designer and Workspace, keep the **Windows Authentication** check box selected (default).
- To log on manually to TotalAgility Designer and Workspace, clear the **Windows Authentication** check box.

15. Click **Next**.
The **Databases** window opens.

16. Do one of the following:

Option	Description
<p>Use the default settings. This means, new databases are installed.</p>	<p>Ensure the following:</p> <ul style="list-style-type: none"> a. The Install Databases check box is selected. b. The Overwrite databases if they exist? check box is clear.
<p>A database with the same name already exists, and you want to overwrite the existing database.</p>	<ul style="list-style-type: none"> a. Select the Overwrite databases if they exist? check box. The Test connections option becomes available. b. Click Test connections. A popup displays the database connection results. If the database details are not valid, or if the database does not exist, connection to database fails. c. Click Next. d. Click Yes to confirm overwriting databases. <div style="border: 1px solid #add8e6; padding: 5px; margin-top: 10px;"> <p>i If you choose to overwrite the existing databases but the database details are not valid database, or if the database does not exist, an error occurs.</p> </div>
<p>Point to an existing database on your local machine.</p>	<ul style="list-style-type: none"> a. Clear the check boxes for Install Databases and Overwrite databases if they exist? b. Enter a name for each database and follow Step 13.
<p>Point to existing databases on a different machine.</p>	<ul style="list-style-type: none"> a. Clear the Install Databases and Overwrite databases if they exist? check boxes b. For each database do the following: <ul style="list-style-type: none"> 1. Enter a name. 2. Click ellipsis for Server; select the database server where the databases reside. 3. In the Security group, either use Windows Authentication, or select the SQL Server authentication providing the user name and password, and then click OK. 4. If all the databases reside on the same server, select the Apply these settings to all other Databases check box.
<p>Manually install the databases.</p>	<ul style="list-style-type: none"> a. Run the setup.exe wizard to this screen. b. Clear the Install Databases and Overwrite databases if they exist? check boxes. c. Install the databases. d. After installing the databases, configure appropriate settings on this screen, and follow Step 13.



- If Application Pool is running under a System account, the System displays an error.
- You must have a trusted account to interact with databases. Provide the SQL credentials and click **OK**.
- If you install TotalAgility without any databases, you can use the Configuration Utility to point to the databases when they are available at a later a stage. See the *Kofax TotalAgility Configuration Utility Guide*.

17. Click Next.

The **DB Connection Results** window opens and displays the results of connecting to databases. If the connection to databases fails, the installation cannot be progressed. Click **Back** and make changes as needed.



The **DB Connection Results** window opens only if the check box for "Install Databases" or "Overwrite databases if they exist?" is selected in the previous step.

18. Once the databases are successfully connected, click Next.

The **Capture Binary Data Storage** window opens.

19. By default, the binary data such as capture documents, .NET Store DLLs and CCM Packs are stored in the TotalAgility database. You can use the preconfigured external cloud data storage services such as Amazon S3 or Windows Azure Blob Storage for saving and processing the binary data. The cloud services helps to reduce the SQL Server maintenance costs, delegate maintenance to external service and provide encryption.



If you change the storage type to Azure/Amazon blob storage or SQL Server and File System, the binary data is saved in the selected storage type. Once the storage type is changed, you cannot turn it off later.

Select one of the following capture data storage types:


Storage type	Description
SQL Server (default)	Stores capture data in the SQL Server.
SQL Server and File System	<p>Stores the FILESTREAM file groups.</p> <p>The capture documents are stored in the file system, and the database has a particular filegroup called 'FILESTREAM'. You can perform actions on the documents using the SQL Server database. The Administrator creates these file groups. For these file groups to appear under the File storage settings, you must enable the FILESTREAM feature in the SQL Server Configuration Manager from Start > Programs > SQL Server Configuration Manager > SQL Server properties > 'FILESTREAM'.</p> <p>Under the File storage settings, the file groups configured in the SQL Server configuration manager are listed. Select a file group to store the capture binaries.</p> <div style="background-color: #e0f0ff; padding: 5px; margin-top: 10px;"> <p> The FILESTREAM is not supported with SQL Server authentication or when the databases do not exist.</p> </div>

Storage type	Description
<p>Windows Azure Blob Storage</p>	<p>Stores capture data in Azure Blob Storage service. Configure the following Cloud Account Settings:</p> <ul style="list-style-type: none"> a. Enter the Account Connection String to connect to the Blob storage service. b. Enter the Container Name of the storage service.
<p>Amazon S3</p>	<p>Configure the following Cloud Account Settings:</p> <ul style="list-style-type: none"> a. Enter the Access Key to connect to the Amazon S3 storage service. b. Enter the Secret Key. c. On the Region list, select a predefined S3 region, for example Asia Pacific (Sydney). (Default: US East (Ohio)) d. Enter the Bucket Name. Bucket is a fundamental container in Amazon S3 for data storage.

20. Click **Next**.

The **Kofax TotalAgility Resource Credentials** window opens.

21. Enter the credentials (**Username**, **Password** (minimum 6 alphanumeric characters) and **Confirm** password) for the user to be created on installation.

 By default, the username field displays the name of the logged on user. You can specify a different user name, as required.

22. Click **Next**.

The **Install Options** window opens.

23. To automatically start the services, keep the **Automatically Start Services** check box selected and click **Next**.

The **Installation Review** window opens and displays the settings.

24. Review the settings and click **Next** to start the installation.

The **Installation Progress** window displays the progress of installation. The setup installs the required files, databases, and other integrated products.

The **Licensing** window opens.

25. Do one of the following:

Option	Description
Connect to the License Server	<p>a. In the License Server field, enter the location of the License Server.</p> <p>i To connect to a shared License Server, enter the name or the IP address of a shared License Server.</p> <p>b. In the Port Number field, enter the port number on which the License Server listens.</p> <p>c. Click Next. The second Licensing window opens. Follow the next step.</p>
Skip connecting to the License Server now but connect when launching TotalAgility. OR If you have selected to install databases manually (in Step 13).	<p>a. Click Skip.</p> <p>b. Click Finish.</p>

26. Click **Next**.

The **Installation Progress** window opens. The setup installs the required files, databases, and other integrated products.

27. Click **Next**.

The **Licensing** window opens.

28. To connect to the License Server:

- a. In the **License Server** field, enter the location of the License Server.

i To connect to a shared License Server, enter the name or the IP address of a shared License Server.

- b. In the **Port Number** field, enter the port number on which the License Server listens.

- c. Click **Next**. The second Licensing window opens.

Alternatively, click **Skip** and proceed to Step 24 in the following cases:

- If you want to skip connecting to the License Server now but connect when launching TotalAgility.
- If you had selected to install databases manually (in Step 12).

29. Enter your TotalAgility **Serial Number** and **Product Code**.

i The **Serial Number** and **Product Code** appear by default if the License Server is a shared license server.

30. The ID of the selected License Server appears in the **Machine ID** field.

31. To activate the license, select the license activation method:

- **Automatic:** Use this option when internet connectivity is available. The license is activated online.

- **Manual:** Use this option when there is no internet connectivity, or if automatic activation is not successful from the installer or license utility for your Kofax product. The Activation Code box is displayed where you can specify the activation code.

a. To obtain the activation code:

1. Enter the following URL in your browser:

`http://activatelegacy.kofax.com/support/Activation/manual.aspx`
The Kofax Product License Activation page opens.

2. Enter the **Serial Number** issued to you at the time of purchase. If you have a hardware key, the serial number (usually 7 characters) is printed on the key.
3. Enter the email address where Kofax can send the information you need to activate the product license.
4. Click **Next** to proceed with the activation process.

i Ignore the "Version" selection field if you do not have Kofax capture or Ascent Capture.

5. Copy and paste the **Activation Code** into the field on the **Licensing** window.
6. Click **Activate** to activate the license, or click **Skip**. If you skip activating the license, a warning informs that you need to activate the license later.

b. Once you get the activation code, copy the code.

c. Paste the code in the **Activation Code** field on the **Licensing** window.

- d.** Click **Activate** to activate the license, or click **Skip** to activate the license later. If you skip activating the license, the summary panel displays the warning that you need to activate the license later.

i The license period starts once the license is activated. So you can skip activation during installation and only activate it when you are ready to use TotalAgility. You are required to activate the license when you log in to TotalAgility for the first time.

32. Click Finish.

Your installation is now complete.

After TotalAgility is installed, the installer prompts you to [install](#) Transformation Server.



- To install any further services, you must uninstall TotalAgility and reinstall by selecting the required services in the Application Server window.
- Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where setup.exe exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.

After you install TotalAgility, further configure TotalAgility to:

- [Launch TotalAgility](#)
- [Integrate with Dynamics CRM](#)
- [Integrate with Dynamics AX](#)
- [Integrate with Micro Focus Content Manager](#)



To view the TotalAgility version you installed, login to TotalAgility Designer and navigate to System > System settings. The version information is available at the bottom right corner of the System settings page. The last three digits correspond to the build number.

See also:

- [Express installation](#)
- [Standard installation of Database Only](#)
- [Standard installation for upgrading databases](#)
- [Standard installation of the Application Server](#)
- [Standard installation of the Web Server](#)
- [Standard installation of Real Time Transformation Server](#)

Standard installation of Real Time Transformation Server

1. Navigate to `\\TotalAgilityInstall` on the installation media and run one of the following commands:
 - If UAC (User Account Control) is enabled, right-click Setup.exe and select **Run as administrator**.
 - If UAC is not enabled, run **Setup.exe**.

The system starts the installation.

2. In the **Kofax TotalAgility Installation Program** window, click **Next** or press Enter to move to the next window.

i To exit the setup, click **Cancel** or press Esc.

3. In the **Kofax Inc. Software License Agreement** window, accept the terms in the License Agreement and click **Next**.
4. Select your installation option as **Standard** and click **Next**.
5. In the **Type of Install** window, select **Real Time Transformation Service** and click **Next**. The **Software Checks** window opens. The system displays a list of required software based on services and databases selection and whether the required software is installed.
6. Review the **Detected Software** list and proceed as follows:
 - If your system does not have all the required software, click **Cancel** to close the installer and install the software.
 - If your system has all the required software, click **Next**.
The **Destination** window opens.
7. Use the default installation folder or click **Browse** to select a different path and click **Next**. The **Credentials** window opens.
8. Enter the credentials (password and confirm password) for the user who will run TotalAgility.

i If the service account name ends with a \$ (dollar), do not specify the password.

9. On the **Root Website to host TotalAgility Application** list, select the website to host the TotalAgility and Workspace application. By default, the **Default Web Site** is selected.

i The websites added in IIS Manager appear on this list. To add a website in IIS Manager, click `Start > Run > Inetmgr > Sites > Add Web Site`.

10. To support SSL, select the **Support SSL** check box.

i The SSL option is only available if you have configured the https binding in IIS. See [Configure TotalAgility for HTTPS communication](#).

11. Do either of the following in **Windows Authentication** option:
 - To log on automatically to TotalAgility and Workspace, keep the **Windows Authentication** check box selected (default).
 - To log on manually to TotalAgility and Workspace, clear the **Windows Authentication** check box.

12. Click **Next**.
The **Databases** window opens.

13. Use the default settings or do the following:
 - If you want to point to an existing database in your local machine, enter a name for each database and enter the credentials (password and confirm password) for the user to be created on installation.
 - If you want to point to the existing databases on a different machine, enter a name for each database; click ellipsis for **Server**; select the database server where the databases reside; in the **Security** group, either use **Windows Authentication**, or select the SQL

Server authentication providing the user name and password, and then click **OK**. If all the databases reside on the same server, select the **Apply these settings to all other Databases** check box.

14. Click Next.

The **Installation Review** window opens.

15. Review the settings and click Next.

The **Installation Progress** window opens. The setup installs the required files, databases, and other integrated products.

16. Click Finish.

Your installation is now complete.

i Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file **KofaxTotalAgilityInstallErrorLog.log** at the same location where setup.exe exists if the path in the System diagnostics section of the `Setup.exe.config` is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>"`. The log file is also created on the desktop. Fix those errors and repeat the above steps.

17. To ensure that the installation works as expected, perform the following steps.

- a. Navigate to `<Program Files>/Kofax/TotalAgility/Agility.Server.Web` and edit the `Web.config` file.
- b. Locate the `TransformationserverExternalService_Binding` binding parameter and ensure that the `<transport clientCredentialType>` value is set to `Windows`.
- c. Save and close `Web.config`.

See also:

- [Express installation](#)
- [Standard installation of Database Only](#)
- [Standard installation for upgrading databases](#)
- [Standard installation of the Application Server](#)
- [Standard installation of the Web Server](#)
- [Standard installation of the Web and Application Server](#)

Upgrade Transformation Designer Help

The Transformation Designer help is not automatically upgraded when you install Kofax TotalAgility 7.10.0. As a result, you need to follow these manual steps to upgrade the documentation.

1. Navigate to the location where the Transformation Designer documentation is installed. By default, this is `%ProgramData%/Kofax/Transformation`. A directory called "Help" is displayed.
2. Rename the folder to "Help_7.10.0" or something similar. Leave the window open as you will need it again later.

3. In the Kofax TotalAgility 7.10.0 ISO file, navigate to `\\Transformation Designer`. A ZIP file called "Help.zip" is displayed.
4. Extract the "Help.zip" to `%ProgramData%/Kofax/Transformation` and ensure that the resulting directory is called "Help"
5. Open Transformation Designer and press F1 to open the help. The upgraded help is displayed.
If the help does not display, ensure that the structure of the Help directory matches that of the "Help_7.10.0" directory and try again.

Perform TotalAgility installation in a Docker container

Overview

A Docker is an open platform for developing, shipping, and running applications. Docker enables you to separate an application from its infrastructure. Using Docker, you can manage your infrastructure in the same way you manage your applications.

Docker provides the ability to package and run an application such as TotalAgility in a loosely isolated environment called a Container. The isolation and security allows you to run many containers simultaneously on a given host using fewer resources than virtual machines.

You can deploy TotalAgility application into your production environment, as an independent container or an orchestrated set of containers. This works the same whether your production environment is a local datacenter, a cloud provider, or a hybrid of the two. You do not need to use the TotalAgility installation program when TotalAgility is deployed in a Docker container. Instead, TotalAgility is already installed and only the relevant configuration settings, such as database connection strings, are required when the container runs.

By default, all TotalAgility containers do not have limits for memory or CPU. SQL Server runs either on another Windows container or another machine, it does not run in the TotalAgility container.

Limitations

The following are the limitations:

- Currently, Microsoft does not officially support MSDTC on the Docker Windows containers. Due to this limitation, TotalAgility cannot have out-of-box support for split databases (main and archive). As a workaround, enable Active Directory support for the containers by making use of Globally Managed Service Accounts (GMSA). Once the container is in the same domain as host machine and SQL server machine, MSDTC will be able to execute distributed transaction among live and archive databases by resolving machine names using Active Directory.
- Export Connectors are not supported in a container.

Prerequisites

We recommend using a standalone server for your database (not a container). Therefore before running TotalAgility inside a container, make sure the TotalAgility databases is setup and remotely accessible (using either IP address or fully qualified domain name).

To use this setup, you need the following configuration on the SQL server being used:

- Firewall should allow remote access to SQL Server.
- SQL Server itself should be configured to allow remote access with Mixed mode since the user is also allowed to access without Windows Authentication.
- TCP/IP protocols should be enabled for SQL Server. Note Named pipes protocol does not work.

Install Docker on the Windows server 2016 and higher

Set up Docker on your Windows server. This requires Windows Server 2016 or higher to support running a TotalAgility Windows container.

i Image Quality Analysis, Mobile ID and Mobile Card Capture are not supported when you set up Docker on Windows Server 2016.

1. Open an elevated PowerShell command prompt, and type the following commands:

```
Install-Module DockerMsftProvider -Force
Install-Package Docker -ProviderName DockerMsftProvider -Force
```

2. If a reboot is required, restart your instance using the following command:

```
(Install-WindowsFeature Containers).RestartNeeded
```

If the output of this command is Yes, restart the server using the following command:

```
Restart-Computer.
```

3. Test your Docker Engine - Enterprise installation by running the "docker info" command.

```
docker info
Containers: 1
  Running: 0
  Paused: 0
  Stopped: 1
Images: 26
Server Version: 18.09.3
Storage Driver: windowsfilter
  Windows:
Execution Driver: <not supported>
Logging Driver: json-file
Plugins:
  Volume: local
  Network: ics l2bridge l2tunnel nat null overlay transparent
Kernel Version: 10.0 14393 (14393.2828.amd64fre.rs1_release_inmarket.190216-1457)
Operating System: Windows Server 2016 Standard Version 1607 (OS Build 14393.2828)
OSType: windows
Architecture: x86_64
CPUs: 4
Total Memory: 10.04 GiB
Name: HV-Docker-QA
ID: HI53:GJSY:3BWT:Z3S5:3NWU:DEFN:6D3X:KCXO:2EMJ:ITZR:QAVY:VXFK
Docker Root Dir: C:\ProgramData\docker
Debug Mode (client): false
Debug Mode (server): false
Registry: https://index.docker.io/v1/
Labels:
Insecure Registries:
  127.0.0.0/8
```

4. Optional. NLP support for Transformation Server within Docker is not enabled by default. To make Docker work with NLP within the Transformation server, and to increase the default maximum size for the Docker container images, perform the following steps:
 - a. Open **daemon.json** available at "C:\ProgramData\docker\config". If the file does not exist at that location, create the file.
 - b. Append the following text to daemon.json:

```
{  
  "storage-opts": ["size=50GB"]  
}
```

- c. Restart the Docker Engine service.

Use Image Quality Analysis, Mobile ID and Mobile Card Capture on Docker

To use Image Quality Analysis, Mobile ID and Mobile Card Capture in a container, Windows Server 2019 or higher must be used as a container host with the following Docker base container specified in the Docker file: `mcr.microsoft.com/windows:1809`

Make the following changes in the Docker file:

- Add the following line: `RUN powershell "Set-ExecutionPolicy -ExecutionPolicy RemoteSigned"` before the line, `RUN powershell C:\KTA\PowershellScripts\ConfigureContainer.ps1`

Make the following changes in the `InstallWindowsFeatures.ps1` powershell script:

- Identify the following line:

```
Install-WindowsFeature -Name NET-Framework-Features -Source C:\kta\NET-Framework35-  
Features -Verbose  
(Install-WindowsFeature cmdlet is not supported in Windows 1809 image)
```

- Replace the preceding line with the following:

```
dism /Online /Add-Package /PackagePath:c:\kta\NET-Framework35-Features\Microsoft-  
Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~en-US~.cab  
dism /Online /Add-Package /PackagePath:c:\kta\NET-Framework35-Features\microsoft-  
windows-internetexplorer-optional-package~31bf3856ad364e35~amd64~~.cab  
  
dism /Online /Add-Package /PackagePath:c:\kta\NET-Framework35-Features\Microsoft-  
Windows-NetFx3-OnDemand-Package~31bf3856ad364e35~amd64~en-US~.cab  
dism /Online /Add-Package /PackagePath:c:\kta\NET-Framework35-Features\microsoft-  
windows-netfx3-ondemand-package~31bf3856ad364e35~amd64~~.cab
```



- Additionally, Mobile ID and Mobile Card Capture has a prerequisite for the VC++ 2013 x86 redistributable. This can be automatically downloaded and installed in the Docker file.
- Make sure that following dlls are present when you run Image Quality Analysis, Mobile ID and Mobile Card Capture applications (32 bit dll dependency) on Windows server 2016 or 2019. Copy the 32-bit version of DLLs (avicap32.dll, avifil32.dll, msacm32.dll, msvfw32.dll) from the host's C:\Windows\SysWOW64 and paste the DLLs in the Docker container's C:\Windows\SysWOW64 folder. You must copy these DLLs to all containers running the Transformation Service.

Create a TotalAgility Docker container image

A container is defined by its image as well as any configuration options you provide when you create or start it.

To create a Docker image, you need internet connectivity because Docker uses the Microsoft "microsoft/aspnet" image as a base onto which the prerequisites are installed (from the base OS or from the Internet when any feature is not available on the image).



For a TotalAgility Docker container to be successfully built, approximately 100 GB of free disk space is needed.

On-premise

To create a TotalAgility Docker image in an on-premise environment, perform the following steps.

1. Extract the contents of Kofax TotalAgility-7.10.0.ZIP to a <source directory>.
2. Create a new folder, <workingdirectory>.
Your Docker commands will be run from this directory.
3. Copy the contents of <source directory>\Utilities\Docker to <working directory>.
4. Move the contents from <source directory> folder to <working directory>\ContainerFiles.

The file structure should be as follows:

```
<working directory>\Dockerfile  
<working directory>\ContainerFiles\all contents from <source directory>  
<working directory>\ContainerFiles\PowerShellScripts
```

5. Update the parameters as needed for each container type. See Silent installation configuration. For container types that are not dependant on IIS, update the Docker file by doing the following: comment out the line, #FROM microsoft/aspnet by adding # and uncomment the line by removing # from line #FROM mcr.microsoft.com/dotnet/framework/runtime.

- To create the image, open a PowerShell window on the container host and run the following command:

```
docker build -t <imagenamegoeshere> "<fullpathtoworkingdirectory>"
```

i Container host is the machine where Docker server is installed. Performance of a build command depends on the number of processors in the container host machine. The command may take approximately one hour to complete with a quad core processors configuration.

Example The following command generates the image with the name "kofaxop" using the contents inside C:\Docker\Kofax TotalAgility:

```
docker build -t kofaxop "C:\Docker\ Kofax TotalAgility "
```

Silent installation configuration in Docker

- On the TotalAgility installation media, navigate to \\TotalAgilityInstall and open SilentInstallConfig.xml using a text editor.
- The following are the available Docker container types for this deployment and the required configuration parameters to be updated in SilentInstallConfig.xml.

- Demo
- Application Server (Core Services and Core Worker)
- Web Server
- Web Server and Application Server (Core Services and Core Worker)
- Reporting Server
- License Server
- Transformation Server
- Real Time Transformation Service

i You can create a Docker container with any combinations of App server, Web server, Reporting Server, Licensing Server and Transformation Server. Real Time Transformation Server (RTTS) is supported only in a dedicated Docker container.

Demo

Update the following parameters for a Demo server installation.

i Fix the line breaks if you copy and paste the code from this guide.

Parameter	Value	Description
ServicesInstallOptions		
ImportService	true	
ExportService	false	The Export Service is not supported inside Docker containers.
LicenseService	true	

Parameter	Value	Description
CoreWorkerService	true	
ReportingService	true	
TransformationService	true	<p>i If the TransformationService is set to true, you must copy the fonts by running the powershell script from the following path: <Working directory>/containerfiles/poweshellscripts/copyfonts.ps1. By running the script, the fonts are copied from windir/fonts to <Working directory>/containerfiles/poweshellscripts/fonts on the Docker container for PDF generation.</p>
CoreServices	true	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	<p>When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA).</p> <p>i If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA).</p>
Install Info		
InstallType	Both	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.

Application Server (Core Services and Core Worker)

Update the following parameters for the Application server installation.

Parameter	Value	Description
ServicesInstallOptions		
ImportService	true	
ExportService	false	The Export Service is not supported inside Docker containers.
ReportingService	false	

Parameter	Value	Description
LicenseService	false	
CoreWorkerService	true	
CoreService	true	
TransformationService	false	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA). <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e6f2ff;"> <p>i If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA).</p> </div>
Install Info		
InstallType	ApplicationServer	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.

Web Server

Update the following parameters for the Web server installation.

Parameter	Value	Description
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).

Parameter	Value	Description
RunAsNetworkServiceAccount	false	When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA). <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e6f2ff;"> ⓘ If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA). </div>
Install Info		
InstallType	WebServer	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.

Web Server and Application Server (Core Services and Core Worker)

Update the following parameters for both Web and Application server installation.

Parameter	Value	Description
ServicesInstallOptions		
ImportService	true	
ExportService	false	The Export Service is not supported inside Docker containers.
ReportingService	false	
LicenseService	false	
CoreWorkerService	true	
CoreService	true	
TransformationService	false	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA). <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e6f2ff;"> ⓘ If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA). </div>

Parameter	Value	Description
Install Info		
InstallType	Both	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.

Reporting Server

Update the following parameters for the Reporting server installation.

Parameter	Value	Description
ServicesInstallOptions		
ImportService	false	
ExportService	false	The Export Service is not supported inside Docker containers.
ReportingService	true	
LicenseService	false	
CoreWorkerService	false	
CoreService	false	
TransformationService	false	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA). <div style="background-color: #e0f2f7; padding: 5px; border: 1px solid #ccc;"> <p>i If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA).</p> </div>
Install Info		
Install Type	ApplicationServer	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.

License Server

Update the following parameters for a License server installation.

Parameter	Value	Description
ServicesInstallOptions		
LicenseService	true	
CoreWorkerService	false	
ReportingService	false	
TransformationService	false	
CoreServices	false	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA). <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e6f2ff;"> <p>i If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA).</p> </div>
Install Info		
InstallType	ApplicationServer	
StartServices	false	Services are started only after the container is running.

i After configuring and starting the container, licensing is not activated. You must activate licensing through the TotalAgility Designer.

Transformation Server

Update the following parameters for the Transformation server installation.

Parameter	Value	Description
ServicesInstallOptions		
CoreWorkerService	false	
ImportService	false	

Parameter	Value	Description
ExportService	false	The Export Service is not supported inside Docker containers.
ReportingService	false	
LicenseService	false	
TransformationService	true	<p>i If the TransformationService is set to true, you must copy the fonts by running the powershell script from the following path: <Working directory>/containerfiles/poweshellscripts/copyfonts.ps1. By running the script, the fonts are copied from Windir/fonts to <Working directory>/containerfiles/poweshellscripts/fonts on the Docker container for PDF generation.</p>
CoreServices	false	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	<p>When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA).</p> <p>i If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA).</p>
Install Info		
InstallType	ApplicationServer	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.
NlpWestern	false	If set to true, installs the Natural Language Processing language bundle for English, Spanish, Portuguese, French, and German.
NlpWesternExtended	false	If set to true, installs the Natural Language Processing language bundle for Italian, Romanian, and Dutch.
NlpExtended	false	If set to true, installs the Natural Language Processing language bundle for Japanese, Chinese, and Korean.

i NLP support for Transformation Server within Docker is not enabled by default. To make Docker work with NLP within the Transformation server, and to increase the default maximum size for the Docker container images, perform the following steps:

1. Open **daemon.json** available at "C:\ProgramData\docker\config". If the file does not exist at that location, create the file.
2. Append the following text to daemon.json:

```
{
  "storage-opts": ["size=50GB"]
}
```

3. Restart the Docker Engine service.

Real Time Transformation Service

Update the following parameters for the Real Time Transformation Service installation.

Parameter	Value	Description
ServicesInstallOptions		
CoreServices	true	
DatabaseInformation		
InstallDatabases	false	Skips installing databases as part of the Docker image installation.
Identity Information		
RunAsSystemAccount	true	When set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. This can also be used to run container as a Group Managed Service Account (gMSA).
RunAsNetworkServiceAccount	false	When set to true, the IIS AppPool and Kofax TotalAgility services run as the NT Authority\Network Service account. This can also be used to run container as a Group Managed Service Account (gMSA). i If RunAsSystemAccount or RunAsNetworkServiceAccount is true, this can be used to run container as a Group Managed Service Account (gMSA).
Install Info		
InstallType	RTTS	
AuthenticationMode	Anonymous	Set the authentication mode to Windows or Anonymous.
StartServices	false	Services are started only after the container is running.

Install legacy wrapper on a Docker container

You can install the legacy wrappers through PowerShell scripts on a Docker container.

1. On the TotalAgility installation media, navigate to \\Utilities\Docker\ContainerFiles\PowershellScripts\Startup.psl.

2. Open the Startup.psl in a text editor.
3. Uncomment the following snippet in this script file to install the legacy wrappers.

```
#if (Test-path -Path 'C:\Program Files\ Kofax \ TotalAgility \LegacyWrappers
\WrapperInstaller.exe')
#{
#     'C:\Program Files\ Kofax \ TotalAgility \LegacyWrappers
\WrapperInstaller.exe'
#}
```

4. Save the changes.

Run a Docker container

A Docker container runs on any machine that supports the container's runtime environment. Applications are not required to be tied to the host operating system, so both the application environment and the underlying operating environment can be kept clean and minimal.

When a container stops running, changes to its state are not lost unless they are saved in persistent storage.

Before running a Docker container, the databases must already be set up (using [Database only](#) installation mode).

To use this setup, you need the following configuration on SQL Server:

- Firewall should allow remote access to SQL Server.
- SQL Server itself should be configured to allow remote access with Mixed mode since the user is also allowed access without Windows Authentication.
- TCP/IP protocols should be enabled for SQL Server.

i Named pipes protocol does not work.

- To use split databases, the Main and Finished Jobs databases must point to the same database and reside on the same database server. Microsoft does not support MSDTC on Docker containers.

i Verify that you are able to remotely connect to the database server where the databases were set up using SQL Server Management Studio that uses the IP address. The verification ensures that the Docker containers are connected to the database server without any issues.

1. Generate "dockersettings.env" using Configuration Utility in Docker mode. The file will be used later for the container initialization. Refer the *Kofax TotalAgility Configuration Utility Guide* for more information.

i The authentication mode for accessing TotalAgility can be set using the Configuration Utility.

2. Container access can be limited to the container host or can be port forwarded for global access. Enable the required exposed port number in the firewall settings for the host machine.

- `http://<ipaddressofthecontainerhost>:<exposedportofthecontainerhost>/TotalAgility/Forms`

For containers hosting IIS - TotalAgility website

Due to different default behavior with case-insensitive URL resolution within Docker containers, it is necessary to perform extra configuration to ensure the TotalAgility website can be resolved in a case insensitive way.

When you configure the container for the Designer / Workspace, we recommend that you use a VirtualHost file to configure the port and URI exposure through the host OS before you access the URL. You may also consider using a rewrite rule to ensure that any URL access is redirected to a lowercase representation.

As per RFC 2616, "...a client SHOULD use a case-sensitive octet-by-octet comparison of the entire URIs...Comparisons of host names MUST be case-insensitive."

The Docker daemon and cache hold case-sensitive resolutions of the URL, which can cause issues if the case of the URL is changed prior to first access. This caching issue occurs as a result of Docker's use of WSL v1 and should be resolved in WSL v2. Within Docker you cannot expose the same container port for multiple protocols, and having previously cached a case-sensitive URL, the cache must be cleared to replace with the lowercase URL.

Access Message Connector

To access the Message Connector within the container host or from outside the host, perform the following steps.

1. Use the following URL: `http: DockerServerIP:5003/en/file/index.html`
Where DockerServerIP is the IP of the Docker Container host and 5003 is the configured forwarded port number to access the Message Connector. Use the forwarded port number you have configured for Message Connector.
The Message Connector Monitor appears.
2. To access Message Connector configuration, click the **Configuration Tool**.
The Message Connector Configuration tool appears.
3. Make the necessary configuration changes and save.
4. Optionally, to restart the Message Connector service, click the **Restart service** button.
To stop and restart Message Connector service from the Docker container, use the following commands: `Start-service KIC-ED-MC`
`Stop-service KIC-ED-MC`

Additional information

This table includes some useful Docker commands.

Docker command	Purpose
<code>docker images</code>	Gets the list of all Docker images currently available on the server.
<code>docker ps -a</code>	Gets a list of all containers available on the server.
<code>docker start <containerID></code>	Starts the container with the ID <containerID> on the server.

Docker command	Purpose
<code>docker stop <containerID></code>	Stops the container with the ID <containerID> on the server.
<code>docker rm <containerID></code>	Deletes the container with the ID <containerID> on the server.
<code>docker rmi <imagename></code>	Deletes the image with the ID <imagename> on the server. Deletion is successful only if no child containers use this image.
<code>docker inspect -f "{{ .NetworkSettings.Networks.nat.IPAddress }}" <containerID></code>	Gets the IP address of the container with the ID <containerID>.
<code>docker cp "<containerID>:/<fullfilepathoncontainer>" "<pathtofolderonserver>"</code>	Copies a file from the container to the server.
<code>docker cp "<fullfilepathonserver>" "<containerID>:/<fullfilepathoncontainer>"</code>	Copies a file from server to the container.
<code>docker logs <containerID></code>	Displays all logs for a particular container.
<code>docker logs - tail n <containerID></code>	Displays the last "n" logs for a particular container.
<code>type <FQDN of text file></code>	Displays the content of text file within a powershell instance.
<code>Get-Process</code>	Gets the list of all processes.
<code>Get-Service</code>	Gets the list of all services (running and stopped).
<code>start-service ServiceNameGoesHere</code>	Starts a particular service.
<code>Stop-service ServiceNameGoesHere</code>	Stops a particular service.
<code>Get-WMIObject Win32_Service select status, name, name</code>	Gets a list of all services with some additional columns.
<code>Get-EventLog -LogName Application -newest 10 format-table -auto -wrap</code>	Gets the last 10 application logs from the event viewer.
<code>import-module webadministration</code>	Runs before the following commands.
<code>get-iisapppool</code>	Gets the name of the Application pool.
<code>get-itemProperty -path IIS:\VAPPPOOLS\TotalAgilityAppPool -names</code>	Gets the identity information for the Application pool.

Using secrets

If you are using Kubernetes secrets to store sensitive information, such as database connection string, passwords and more, you must do the following changes before building the Docker images and deploying to Kubernetes. For example, consider using the MainDBConnectionString application setting as the secret.

Kubernetes secrets

If using secrets as volumes

1. Create a secret <maindbsecret> in Kubernetes that contains the MainDBConnectionString details. Refer to the Kubernetes documentation on secrets to create a secret.
2. On the Docker container installation media, navigate to `\\Utilities\Docker\ContainerFiles\PowershellScripts\`. Replace the line `"$appSetting.value = $_.Value;"` with the following lines which will check for 'maindbconnectionstring' setting

and update its value in all the Kofax TotalAgility configuration files with the contents of the <maindbsecret> file mounted in a <target path>.

```
if($appSetting.key -eq "<MainDBConnectionString>")
{
    $dbconnstring = (Get-Content "<target path>\<maindbsecret>") -as [string];
    if($dbconnstring -ne $null)
    {
        $appSetting.value = $dbconnstring;
    }
    else
    {
        $appSetting.value = $_.Value;
    }
}
```

i All the corresponding MaindbConnectionString values in the DockerSettings.env no longer needs to be provided as it is pulled from the secrets.

3. Save the Changes.
4. Similarly, update the UpdateConfigAppSettings.ps1 script file for other application settings, as needed.
5. Modify the Pod definition to add a volume <maindbvol> along with the <maindbsecret> to a chosen <target path>, for example, </kta/maindb/> in the container. Refer to the Kubernetes documentation on secrets to add a volume.
6. When the pod is deployed, this should create a secret file <maindbsecret> which contains the connection string value under the path c:\kta\maindb\ in the container and also update the corresponding TotalAgility configuration file settings with the secret value.

If using secrets as environmental variables

1. Create a secret <maindbsecret> in Kubernetes that contains the MainDBConnectionString details. Refer to the Kubernetes documentation on secrets to create a secret.
2. Modify the Pod definition to add an environmental variable <env variable name> for the secret <maindbsecret>. The <env variable name> must be same as in dockerSettings.env, for example, "KTA_Agility.Server.Web--web.config_MainDBConnectionString". This should set the environment variable "KTA_Agility.Server.Web--web.config_MainDBConnectionString" with the value of the secret <maindbsecret> which contains the connection string value, once the pod is deployed. Refer to Kubernetes documentation on secrets to add as environment variable.
3. Similarly multiple environment variables can be added to the pod definition that needs to get the value form a secret. No changes are needed to the script files.

Docker Secrets

If you are using Docker secrets to store sensitive information, it is only available in the Swarm mode; so the standalone containers cannot use this feature.

i The following changes need to be made before building the Docker images and deploying to swarm.

1. Create a secret <maindbsecret> in the swarm that contains the MainDBConnectionString details. Refer to the Docker documentation on Docker secrets to create a secret.

- On the Docker container installation media, navigate to `\\Utilities\Docker\ContainerFiles\PowershellScripts` and update the `UpdateConfigAppSettings.ps1` Powershell script file. Replace the line `" $appSetting.value = $_.Value; "` with the following lines which will check for 'maindbconnectionstring' setting and update its value in all the Kofax TotalAgility configuration files with the contents of the `<maindbsecret>` file located in a default target location (For windows containers, the default target is under 'C:\ProgramData\Docker\secrets'):

```
if($appSetting.key -eq "<MainDBConnectionString>")
{
    $dbconnstring = (Get-Content "<target location>\<maindbsecret>") -as [string];
    if($dbconnstring -ne $null)
    {
        $appSetting.value = $dbconnstring;
    }
    else
    {
        $appSetting.value = $_.Value;
    }
}
```

i All the corresponding `MaindbConnectionString` values in the `DockerSettings.env` no longer needs to be provided as it is pulled from the secrets.

- Save the Changes. Similarly, you can update the `UpdateConfigAppSettings.ps1` script file for other application settings as needed.
- Create/update a Docker service and provide access to the `<maindbsecret>` secret along with the Docker environment file. This should create a secret file `<maindbsecret>` in the container and also update corresponding settings of the Kofax TotalAgility configuration files with the secret value. Refer to the Docker documentation on Docker secrets to create a service.

AWS Secrets

If you are using AWS Secrets to store sensitive information, such as database connection string, passwords, do the following changes to dynamically retrieve the secrets from the container. You can do this via AWS tools for powershell or via a custom .Net library. (For example, consider using the `MainDBConnectionString` application setting as the secret.)

i Make the following changes before building the docker images

Using AWS Tools for Powershell

- Create a secret `<mainsecret>` in AWS Secret Manager that contains the `MainDBConnectionString` details.
Refer to AWS documentation to create a secret.
- Install NuGet provider and `AWS.Tools.SecretsManager` in the container to retrieve secrets from AWS.
- On the docker installation media, navigate to `\\TotalAgility\Utilities\Docker\ContainerFiles\PowershellScripts\` and update the `UpdateConfigAppSettings.ps1` Powershell script file. In the 'Update-ConfigFile' Function, add the following script lines before

the line “Get-ChildItem env:* | ...” which will install the required AWS tools for powershell and updates the contents of the <mainsecret> retrieved from AWS secret:

```
Set-PSRepository -Name 'PSGallery' -InstallationPolicy Trusted
Install-PackageProvider -Name NuGet -MinimumVersion 2.8.5.201 -Force
If(-not(Get-InstalledModule AWS.Tools.SecretsManager -ErrorAction
  silentlycontinue))
{
  Install-Module AWS.Tools.SecretsManager -RequiredVersion 4.1.4.0 -Confirm:
  $False -Force
}
$awsAccessKeyId = [Environment]::getEnvironmentVariable('KTA_AWS_ACCESSKEYID');
$awsSecretAccessKey =
  [Environment]::getEnvironmentVariable('KTA_AWS_SECRETACCESSKEY');
$awsRegion = [Environment]::getEnvironmentVariable('KTA_AWS_REGION');
Set-AWSCredential -AccessKey $awsAccessKeyId -SecretKey $awsSecretAccessKey
Initialize-AWSDefaultConfiguration -Region $awsRegion

$awsMainSecretName =
  [Environment]::getEnvironmentVariable('KTA_AWS_MAINSECRETNAME');
$awsMainSecret_response = Get-SECSecretValue -SecretId $awsMainSecretName
$mainSecretJsonobj = ConvertFrom-Json -inputObject
  $awsMainSecret_response.SecretString
```

4. Replace the line “\$appSetting.value = \$_.Value;” with the below lines which will check for ‘maindbconnectionstring’ setting and update its value in all the Kofax TotalAgility configuration files with the contents of the <mainsecret> retrieved from AWS secret:

```
        if($appSetting.key -eq "<MainDBConnectionString>")
        {
            $dbconnstring = $mainSecretJsonobj.$awsMainSecretName;
            if($dbconnstring -ne $null)
            {
                $appSetting.value = $dbconnstring;
            }
        }
        else
        {
            $appSetting.value = $_.Value;
        }
    }
```

5. Add the below script lines before the 'Update-License-Config' Function which will clean up the AWS environment variables.

```
$awsAccessKeyId = [Environment]::setEnvironmentVariable('KTA_AWS_ACCESSKEYID',
  $null);
$awsSecretAccessKey =
  [Environment]::setEnvironmentVariable('KTA_AWS_SECRETACCESSKEY', $null);
$awsRegion = [Environment]::setEnvironmentVariable('KTA_AWS_REGION', $null);
$awsMainSecretName =
  [Environment]::setEnvironmentVariable('KTA_AWS_MAINSECRETNAME', $null);
```

6. Save the Changes.
7. When running the docker container, pass the KTA_AWS variables mentioned in above script as environment variables. The docker run commands as mentioned in 'Run a Docker Container' section must now also pass in these **--env** variables along with **--env-file**.

```
docker run -d --hostname "<host>" --name "<name>" --env
  KTA_AWS_ACCESSKEYID=<access id> --env KTA_AWS_SECRETACCESSKEY=<key> --env
```

```
KTA_AWS_REGION=<region> --env KTA_AWS_MAINSECRETNAME=<mainsecret> -env-file
"dockersettings.env" -p <port> <image>
```

i All the corresponding 'MaindbConnectionString' values in the DockerSettings.env no longer needs to be provided as it is pulled from the secrets.

8. When the container is running, get the secret <mainsecret> which contains the connection string value and also update the corresponding Kofax TotalAgility configuration file settings with the secret value.
9. Similarly, you can update the UpdateConfigAppSettings.ps1 script file and docker run command to get other application settings from AWSsecret by adding new variables similar to \$ awsMainSecretName and KTA_AWS_MAINSECRETNAME respectively .

Using Custom Library

1. Create a secret <mainsecret> in AWS Secret Manager that contains the MainDBConnectionString details.
Refer to AWS documentation to create a secret.
2. Create a .Net custom library 'AWSSecretManager.dll' with a GetAWSecret() method that will retrieve the AWS secret. This will need AWSSDK.Core & AWSSDK.SecretsManager SDK for .Net installed. The method code will be as follows:

```
class AWSSecretManager::
public static string GetAWSecret(string awsAccessKeyId, string awsSecretAccessKey,
string region , string awsSecretName)
{
    string secret = string.Empty;
    IAmazonSecretsManager client = new
AmazonSecretsManagerClient(awsAccessKeyId, awsSecretAccessKey,
RegionEndpoint.GetBySystemName(region));
    GetSecretValueRequest request = new GetSecretValueRequest();
    request.SecretId = awsSecretName;
    request.VersionStage = "AWSCURRENT"; // VersionStage defaults to
AWSCURRENT if unspecified.
    GetSecretValueResponse response = null;
    // In this sample we only handle the specific exceptions for the
'GetSecretValue' API.
    // See https://docs.aws.amazon.com/secretsmanager/latest/apireference/
API_GetSecretValue.html
    // We rethrow the exception by default.
    try
    {
        response = client.GetSecretValueAsync(request).Result;
    }
    catch (DecryptionFailureException e)
    {
        // Secrets Manager can't decrypt the protected secret text using
the provided KMS key.
        // Deal with the exception here, and/or rethrow at your
discretion.
        throw;
    }
    catch (InternalServiceErrorException e)
    {
        // An error occurred on the server side.
        // Deal with the exception here, and/or rethrow at your
discretion.
        throw;
    }
}
```

```

        catch (InvalidParameterException e)
        {
            // You provided an invalid value for a parameter.
            // Deal with the exception here, and/or rethrow at your discretion
            throw;
        }
        catch (InvalidRequestException e)
        {
            // You provided a parameter value that is not valid for the
current state of the resource.
            // Deal with the exception here, and/or rethrow at your
discretion.
            throw;
        }
        catch (ResourceNotFoundException e)
        {
            // We can't find the resource that you asked for.
            // Deal with the exception here, and/or rethrow at your
discretion.
            throw;
        }
        catch (System.AggregateException ae)
        {
            // More than one of the above exceptions were triggered.
            // Deal with the exception here, and/or rethrow at your
discretion.
            throw;
        }

        // Decrypts secret using the associated KMS CMK.
        // Depending on whether the secret is a string or binary, one of these
fields will be populated.
        if (response.SecretString != null)
        {
            secret = response.SecretString;
        }
        else
        {
            MemoryStream memoryStream = new MemoryStream();
            memoryStream = response.SecretBinary;
            Stream reader = new StreamReader(memoryStream);
            secret =
System.Text.Encoding.UTF8.GetString(Convert.FromBase64String(reader.ReadToEnd()));
        }

        return secret;
    }

```

3. On the docker installation media, navigate to \\TotalAgility\Utilities\Docker\ContainerFiles\PowershellScripts\ and copy the utility DLLs - AWSSecretManager.dll, AWSSDK.Core.dll & AWSSDK.SecretsManager.dll
4. Update the UpdateConfigAppSettings.ps1 Powershell script file. In the 'Update-ConfigFile' Function, add the following script lines before the line "Get-ChildItem env:* |" which will Load the custom library and update the contents of the <mainsecret> retrieved from AWS secret into :

```

$add = [Reflection.Assembly]::LoadFile("C:\KTA\PowershellScripts
\AWSSecretManager.dll")
$add = [Reflection.Assembly]::LoadFile("C:\KTA\PowershellScripts
\AWSSDK.SecretsManager.dll")
$add = [Reflection.Assembly]::LoadFile("C:\KTA\PowershellScripts\AWSSDK.Core.dll")

```



```

$awsAccessKeyId = [Environment]::getEnvironmentVariable('KTA_AWS_ACCESSKEYID');
$awsSecretAccessKey =
[Environment]::getEnvironmentVariable('KTA_AWS_SECRETACCESSKEY');
$awsRegion = [Environment]::getEnvironmentVariable('KTA_AWS_REGION');
Set-AWSCredential -AccessKey $awsAccessKeyId -SecretKey $awsSecretAccessKey
Initialize-AWSDefaultConfiguration -Region $awsRegion

$awsMainSecretName =
[Environment]::getEnvironmentVariable('KTA_AWS_MAINSECRETNAME');
Try {
    $awsMainSecret_response =
    [AWSecretManager.AWSecretManager]::GetAWSecret($awsAccessKeyId,
$awsSecretAccessKey,$awsMainSecretName)
}
Catch {
    Write-Host "Exception:."
    Write-Host $_.Exception
}
$mainSecretJsonobj = ConvertFrom-Json -inputObject
$awsMainSecret_response.SecretString

```

5. Replace the line "`$appSetting.value = $_.Value;`" with the following lines which will check for 'maindbconnectionstring' setting and update its value in all the TotalAgility configuration files with the contents of the <mainsecret> retrieved from AWS secret:

```

        if($appSetting.key -eq "<MainDBConnectionString>")
        {
            $dbconnstring = $mainSecretJsonobj.$awsMainSecretName;
            if($dbconnstring -ne $null)
            {
                $appSetting.value = $dbconnstring;
            }
        }
        else
        {
            $appSetting.value = $_.Value;
        }
    }
}

```

6. Add the following script lines before the 'Update-License-Config' Function which will clean up the AWS environment variables.

```

$awsAccessKeyId =
[Environment]::setEnvironmentVariable('KTA_AWS_ACCESSKEYID', $null);
$awsSecretAccessKey =
[Environment]::setEnvironmentVariable('KTA_AWS_SECRETACCESSKEY', $null);
$awsRegion = [Environment]::setEnvironmentVariable('KTA_AWS_REGION',
$null); $awsMainSecretName =
[Environment]::setEnvironmentVariable('KTA_AWS_MAINSECRETNAME', $null);

```

7. Save the Changes.
8. When running the docker container, pass the KTA_AWS variables mentioned in above script as environment variables. The docker run commands as mentioned in 'Run a Docker Container' section must now also pass in these **--env** variables along with **--env-file**.

```

docker run -d --hostname "<host>" --name "<name>" --env
KTA_AWS_ACCESSKEYID=<access id> --env KTA_AWS_SECRETACCESSKEY=<key> --env

```

```
KTA_AWS_REGION=<region>--env KTA_AWS_MAINSECRETNAME=<mainsecret> -env-file
"dockersettings.env" -p <port> <image>
```

i All the corresponding 'MaindbConnectionString' values in the DockerSettings.env no longer needs to be provided as it is pulled from the secrets.

9. When the container is running, this should get the secret <mainsecret> which contains the connection string value and also update the corresponding Kofax TotalAgility configuration file settings with the secret value.
10. Similarly, you can update the UpdateConfigAppSettings.ps1 script file and docker run command to get other application settings from AWSsecret by adding new variables similar to \$ awsMainSecretName and KTA_AWS_MAINSECRETNAME respectively .

Import SSL certificate on the container

You can import a custom SSL certificate for use by TotalAgility on a Docker container.

You can import password-protected certificates with a private key. See SSL Support Desk for more information on certificate export.

1. Create a new folder, such as "HostMachineFolder" on the host machine.
2. Copy the certificate file, such as CertificateName.pfx to the newly created folder (HostMachineFolder).
3. You can pass the certificate password to the container as text or in a file. The file can be passed to the container as a secret (if using Docker compose, Kubernetes, and so on) or as a mapped volume. To pass password file using mapped volume, do the following:
 - a. Create new text file, such as password.txt in the HostMachineFolder.
 - b. Open the newly created file and enter the certificate's password in the first line of the file.
 - c. Save the file and ensure to that you change the file attribute to hidden.
4. Create a Docker container using the "docker run" command as documented in previous sections with two additional switches, "-v" and "-e".
 - a. -v: Container can access contents of HostMachineFolder via mapped ContainerFolder.
 - b. -e: additional environment variables are created to store SSL certificate path "KTA_SSL_CERT_PATH" and password ("KTA_SSL_CERT_PASSWORD" or password "KTA_SSL_CERT_PASSWORD_PATH").
 - c. Following are the examples of the "docker run" command with new -v and -e:

For on-premise:

 - `docker run --env-file "C:\Docker\TotalAgility\dockersettings.env" -e SSL_CERT_PASSWORD="password" -e SSL_CERT_PATH="HostMachineFolder\CertificateName.pfx" -v "HostMachineFolder:ContainerFolder" -p 5000:443 -d kofax/kta_771`
 - `docker run --env-file "C:\Docker\TotalAgility\dockersettings.env" -e KTA_SSL_CERT_PASSWORD_PATH="C:\folder\password.txt" -e KTA_SSL_CERT_PATH="C:\folder\Cert.pfx" -v "C:\folder:C:\folder2" -p 5000:443 -d kofax/kta_771`
 - d. Replace HostMachineFolder with the actual certificate path on the host machine.

- e. Replace the CertificateName with the actual certificate name.
- f. Replace the ContainerFolder with the actual folderpath and name on the container (folder will be created).

i Ensure that folder paths or names do not have spaces.

Use Windows authentication with IIS and SQL server

Use GSMA to configure Windows authentication for Docker containers.

Use Windows authentication with IIS and SQL server

Docker containers cannot join an Active Directory domain. However, when running a container, you can specify that it should use a specific AD Group Managed Service Account (gMSA) for any local Windows services and IIS Application pool in the container that are configured to run as LocalSystem or NetworkService accounts.

When running as these accounts in the container, the services and App pool will automatically get the access rights of the gMSA to allow them to use Windows authentication to access other VMs/ machines outside of the container.

When setting up a TotalAgility Docker container to use Windows authentication, you must modify the SilentInstallConfig.xml file to specify LocalSystem as the account to use for all TotalAgility services and IIS App pool. This account will be used when the container is built.

Ensure the following prerequisites are met:

- Add Docker server, SQL server machine and machines that will use gMSA under required domain controller.
- Add these machines in the Active Directory under "Computer" folder.
- Create a Global Security group, such as " ContainerHostGroupName" in the Active Directory under "Builtin" folder.
- Add Docker server, SQL server machine or machines that will use gMSA as members to the new group.

Perform the following steps to use Windows authentication with IIS and SQL server.

1. Create the KDS root key.

This key is used by the KDS service on DCs (along with other information) to generate passwords. You can generate this key only once per domain.

a. Login to domain controller and execute the following commands:

```
Import-module ActiveDirectory  
Add-KdsRootKey -EffectiveImmediately
```

b. Verify your key using the following command:

```
Get-KdsRootKey
```

2. Create a gMSA account.

- a. Login to domain controller and execute the following command:

```
GMSA account name : containerhost
Domain name: TotalAgility example.com

New-ADServiceAccount -Name containerhost -DNSHostName TotalAgility
example.com -PrincipalsAllowedToRetrieveManagedPassword "Domain Controllers",
"domain admins", "CN= ContainerHostGroupName,CN=Builtin, DC= TotalAgility
example, DC=COM" -KerberosEncryptionType RC4, AES128, AES256
```

- b. Verify the new gMSA account using the following command: .

```
Get - ADServiceAccount - Identity containerhost
```

- c. A new gMSA object appears in your domain's Managed Service Account.

3. Add gMSA account to the servers you want to use.

- a. Open the Active directory Admin Center and go to Managed service accounts.

- b. Select the gMSA account and click **Properties**.

- c. Select the security and click **Add**.

- d. Select the computers where you want to use gMSA such as Docker server and SQL server machine.

- e. Reboot Domain controller for the changes to take effect.

- f. Reboot the computers that will be using gMSA.

4. Install gMSA Account on servers.

- a. Login to the machine that will be used as Docker server.

- b. If Active Directory features are not available, execute the following command:

```
Enable-WindowsOptionalFeature -FeatureName ActiveDirectory-Powershell
-online -all
```

- c. To install and test gMSA, execute the following commands:

```
// check whether you are able to account
Get-ADServiceAccount -Identity containerhost //Name of GMSA

// install on machine
Install-ADServiceAccount -Identity containerhost

// test
Test-AdServiceAccount -Identity containerhost
```

If the output does not contain any errors, it will look like as follows:

```
Path :
Online : True
RestartNeeded : False
DistinguishedName : CN=containerhost,CN=Managed Service Accounts, DC=local
Enabled : True
Name: containerhost
objectClass : msDs-GroupManagedServiceAccount
ObjectGUID : containerhost$
SamAccountName : containerhost$
SID : S-1-5-21-3914853822-719528391-929614657-1606
UserPrincipalName :
```

```
True
```

5. Associate Service Principal Name with the gMSA:

- a. This step is required for kerberos authentication to work and for automatic login in Chrome and Internet Explorer browsers. If you skip this step, authentication still works but will always prompt for username/password since it will fallback to NTLM.

GMSA account : containerhost

Domain name: TotalAgilityexample .com

Container host machine: machine1

- b. Login to domain controller and execute the following command:

```
setspn -c -s HTTP/ machine1 TotalAgility example \ containerhost
setspn -c -s HTTP/ machine1. TotalAgility example.com TotalAgility example
\ containerhost
```

6. To test Active Directory access on the container host, run the following command on the host machine: `nltest /parentdomain`

At this point, if no errors occurs, the LocalSystem account on the container will be a proxy for the configured gMSA account. Any process run as the LocalSystem principal on the container will appear to be the GMSA principal to all assets on the Active Directory domain.

7. Generate credential specifications file which must be passed to the Docker during container creation to utilize this service account. Run the following commands to download module which will create this file from Microsoft github account and will create a JSON file containing required data.

```
GMSA account : containerhost
Domain name: TotalAgility example.com

Invoke-WebRequest "https://raw.githubusercontent.com/Microsoft/Virtualization-Documentation/live/windows-server-container-tools/ServiceAccounts/CredentialSpec.psm1" -UseBasicParsing -OutFile $env:TEMP\cred.psm1

import-module $env:temp\cred.psm1

New-CredentialSpec -Name win -AccountName containerhost
#This will return location and name of JSON file
Get-CredentialSpec

Name Path
---- ----
win C:\ProgramData\docker\CredentialSpecs\win.json
```

8. For SQL server configuration to allow gMSA, enter the gMSA account as "containerhost" and domain name as "TotalAgilityexample.com" and run the following SQL commands on your SQL database:

```
CREATE LOGIN " TotalAgility example \containerhost$"
FROM WINDOWS
GO
```

To create user for all the TotalAgility databases:

```
CREATE USER containerhost FOR LOGIN " TotalAgility example \ containerhost$"
GO

EXEC sp_addrolemember 'db_datareader', containerhost
EXEC sp_addrolemember 'db_datawriter', containerhost
```

9. If there are no errors, the LocalSystem account on the container will be a proxy for the configured gMSA account. Any process run as the LocalSystem principal on the container will appear to be the gMSA principal to all assets on the Active Directory domain. To test Active Directory access on the container, run the following command on the container: `nltest /parentdomain`

Install TotalAgility on a non-standard port

To install TotalAgility on a non-standard port, you must first edit bindings to specify the port number, and update the base address and restart the streaming service.

Edit bindings

1. Click `Start > Run > InetMgr > Sites > Default Web Site`. By default, the **Default Web Site** is selected.
2. Right click on the Default Website and click **Edit Bindings**.
3. Select the default port 80 and click **Edit**.
4. In the **Edit Site Binding** window, change the port number to 81 and click **OK**.
5. Install Kofax TotalAgility. See [TotalAgility installation](#).
6. Enter the following URL in your browser and change the port number to 81 in the URL to logon. `http://ServerName:81/TotalAgility/forms/GeneralWorkQueue.form`.

Update the base address

You can edit the base address setting either manually or using the Configuration Utility.

Manually

1. On the TotalAgility installation media, open the `Agility.Server.StreamingService.exe.configuration` file available at `\\TotalAgilityInstall\Agility.Server.Web\bin>` and change the base address section.

```
< baseAddresses >
<add baseAddress="http://<ServerName>.<DomainName>:
<non default port>/ TotalAgility /Services/Sdk/StreamingService.svc" />
</ baseAddresses >
```

2. Similarly, change the base address section in the `Agility.Server.StreamingService.exe.config` file available at `\\TotalAgilityInstall\CoreWorkerService>`.

```
< baseAddresses >
<add baseAddress="http://<ServerName>.<DomainName>:
<non default port>/ TotalAgility /Services/Core/StreamingService.svc" />
</ baseAddresses >
```

3. The streaming service hosts an http server. If the Streaming service, Package Streaming service and the Capture Streaming service are running under a non-admin account on a non-standard

port, you need to reserve a namespace for them. To do so, on the Command Prompt, run the following command using an account that has administrator rights on the local machine:

- For StreamingService.svc:
 - For the Web server and Combined Web App server installations:

```
netsh http add urlacl url=http://+:<non default port>/TotalAgility/Services/Sdk/StreamingService.svc user=%domainuser%
```
 - For the Application server installation:

```
netsh http add urlacl url=http://+:/TotalAgility/Services/Core/StreamingService.svc user=%domainuser%
```
- For PackageStreamingService.svc:

```
netsh http add urlacl url=http://+:<non default port>/TotalAgility/Services/Sdk/PackageStreamingService.svc user=%domainuser%
```
- For CaptureStreamingService.svc:

```
netsh http add urlacl url=https://+:<non default port>/TotalAgility/Services/Sdk/CaptureStreamingService.svc user=%domainuser%
```

If the aforementioned URLs are not reserved, the Streaming service will not start when using a non-admin service account.

Use the Configuration Utility

Run the Configuration utility and update the base address property for the streaming service. The streaming service must be restarted for the change to take effect. Restart the Streaming Service

Restart the Streaming Service

Once the base address is changed or the command to reserve the namespace is completed, restart the Streaming service.

Install databases manually

The following procedure describes installing databases manually.

You can either create a single database for Main, Audit and Finished databases or create separate Main, Audit and Finished databases.

By default, the Document Repository is installed into its own database. However, you can create tables for the document repository within the main TotalAgility database by running the scripts. See [Manually install databases](#).

Configure MSDTC

❗ If the Application Server and databases are installed on the same server, it is not required to start MSDTC.

When you have scaled out (separate) TotalAgility databases such as Main and Archive, you require the Microsoft Distributed Transaction Coordinator (MSDTC).

By default, the security configuration for the Microsoft Distributed Transaction Coordinator is set to not allow network transactions.

As the MSDTC is responsible for coordinating transactions that span multiple resource managers, such as databases, message queues, and file systems you must configure MSDTC if your databases are split and the TotalAgility application reside on separate servers. In this case, do the following to select the settings:

1. Navigate to **Control Panel > System and Security > Administrative Tools**.
2. Click **Component Services**.
The Component Services window appears.
3. In the left panel, under **Console Root** expand the Component Services, navigate to **Computers > My Computer > Distributed Transaction Coordinator** and select **Local DTC**.
4. From the Local DTC context menu, select **Properties**.
5. In the **Local DTC Properties** window, click the **Security** tab.
6. Under Security Settings, select the checkboxes for **Network DTC Access** and **Enable SNA LU 6.2 Transactions** (if JDBC is used).
7. Select **Enable SNA LU 6.2 Transactions** if required. Ensure that Microsoft SNA server is installed and SNA resources are correctly configured.
8. Under Transaction Manager Communication, select the checkboxes for **Allow Inbound** and **Allow Outbound** (configure the desired level of security for authentication).
9. After the settings are completed, start the Distributed Transaction Coordinator service.

Start MSDTC manually

To start MSDTC manually, on the Command Prompt window, run the following command: `net start msdtc`. Alternatively, at Run, type `Services.msc` and press **Enter**. Right-click the Distributed Transaction Coordinator service and click **Start**.

i The remote SQL server will also require MSDTC configuration. In addition to the above Security Settings, select **Allow Remote Clients**. The Allow Remote Administration setting is optional.

If there are additional network and security rules required for TotalAgility to communicate, there are a number of Microsoft tools that can help you troubleshoot some common issues. These tools are not Kofax products and carry no warranty or liability.

- **DTCTester**: This tool verifies the transactions between two computers if SQL Server is installed on one computer, using ODBC to verify transaction support against an SQL Server database.
- **DTCPing**: This tool verifies transaction support between two computers if SQL Server is not installed on either computer. The DTCPing tool must be run on both the client and server computers.

TotalAgility license tables are installed by [running the Create_KLS_OnPremise.sql](#).

Manually install databases

Perform the following steps to install databases manually.

1. Ensure that you create the following databases:
 - TotalAgility
 - Finished Jobs
 - Audit
 - TotalAgility_Reporting
 - TotalAgility_Reporting_Staging
2. Edit the Initialise_Main.sql script by using the comments in the script. For example, update the details of the user who will log on to TotalAgility initially by editing the following:
 - a. @NTNAME = 'INSTALL_NTUSERID', where the User Domain and User ID replaces INSTALL_NTUSERID. For example, 'DomainName\USERA'
 - b. @FULLNAME = 'INSTALL_FULLNAME', where the User name replaces INSTALL_FULLNAME. For example, 'USER A'
3. Run the scripts in the following order across databases and follow the instructions inside each script.
 - a. Main(Create, Initialise)
Run the following scripts on the Main database:
 - Create_Main.sql
 - Initialise_Main.sql
 - Create_Forms.sql
 - Initialise_Forms.sql
 - Create_KFS.sql
 - Initialise_KFS.sql
 - LicenseScripts\Create_KLS_OnPremise.sql
 - b. Finished Jobs(Create)
Run the following script on the Finished Jobs database (can exist on the Main database):
 - Create_Archive.sql
 - c. Audit(Create, Intialise)
Run the following scripts on the Audit database (can exist on the Main database):
 - Create_Audit.sql
 - Initialise_Audit.sql
4. The following scripts are used for installing reporting databases manually.
 - Scripts for creating the Staging database.
 - Kofax.Reporting.Analytics.Staging.SQL_TablesCreate.sql
 - Kofax.Reporting.Analytics.Staging.SQL_Initialize.sql
 - Scripts for creating the Reporting database.
 - Kofax.Reporting.Analytics.SQL_TablesCreate.sql

- Kofax.Reporting.Analytics.SQL_Initialize.sql

i Before running these scripts, verify that a compatible database server is already installed. The Reporting tables must be in the default schema.

5. In the Installation wizard, in the **Databases** window, do the following:
 - a. Clear the check boxes for **Install Databases** and **Overwrite databases if they exist**.
 - b. Rename the databases under Database Name to match with the name given while creating databases manually.
Change the name of the Data Layer database to either Repository2012 or the name given while creating the databases.
 - c. Click **Next**. Ensure the installation completes before updating the configuration files.
6. You can edit the value of the database connections in the Web.config manually or run the Configuration Utility available on the installation media.
 - Open **Web.config** available at `\\TotalAgilityInstall\Agility.Server.Web`. In the **appSettings** section, update the value of the following database connections:
 - MainDBConnectionString
 - ArchiveDBConnectionString
 - AuditDBConnectionString
 - ReportingMainDBConnectionString
 - ReportingStagingDBConnectionString

i The database should point to the machine where Kofax TotalAgility is installed.

- Run the Configuration Utility and modify the values of the preceding database connections available on the Common settings tab.
7. To modify the value of database connections in Agility.Server.Core.WorkerService.exe.config, do either of the following:
 - Open **Agility.Server.Core.WorkerService.exe.config** available at `\\TotalAgilityInstall\CoreWorkerService` and modify the values of following connection strings:
 - MainDBConnectionString
 - ArchiveDBConnectionString
 - AuditDBConnectionString
 - ReportingMainDBConnectionString
 - ReportingStagingDBConnectionString

i The database should point to the machine where the Kofax TotalAgility is installed.

- Run the Configuration Utility and modify the values of the preceding connection strings available on the Common settings tab.

8. To modify the values of database connections in the Agility.Server.StreamingService.exe.config, do either of the following:

- Open **Agility.Server.StreamingService.exe.config** available at `\\TotalAgilityInstall\CoreWorkerService` and update the following connection strings:
 - MainDBConnectionString
 - ArchiveDBConnectionString
 - AuditDBConnectionString
 - ReportingMainDBConnectionString
 - ReportingStagingDBConnectionString

i The database should point to the machine where Kofax TotalAgility is installed.

- Run the Configuration Utility and modify the values of the preceding connection strings available on the Common settings tab.
9. To connect Kofax TotalAgility to the desired documents database:
- a. Go to the TotalAgility Main database > SERVER_DATA table > CEBPM_SETTINGS column.
 - b. Open the CEBPM_SETTINGS XML file.
 - c. In the <Common Settings> section, update the Data Source value to your computer name, Integrated Security to True, and the value of the Initial Catalog to the Data Layer Database name.

```
<Common_Settings>
  <ReportingSettings />
  <DataLayerConfiguration RepositoryDBConnectionString=";
Data Source=<computer name> ; Initial Catalog = Data Layer
Database ;User ID=;Password=; Integrated Security=True ;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False"
RepositoryBlobStorageAccountConnectionString="{DATA_LAYER_BLOB_CONNSTRING}"
RepositoryBlobStorageContainerName="{DATA_LAYER_BLOB_CONTAINER}" />
</Common_Settings>
```

10. Restart the TotalAgilityCoreWorker service for the change to take affect.
11. Generate the security key. To generate the key, navigate to **System > Settings > System > General** in the TotalAgility Designer.

Import Artifacts

You must import the standard forms, style sheets and custom assets after installing TotalAgility databases.

i On upgrading TotalAgility, you must manually import the System maps and standard forms.

You can import all the artifact from WorkspacePackage.zip available at the following location:

```
\\TotalAgilityInstall\Agility.Server.Web\Packages
```

Configure TotalAgility for high availability

You can install a second License Server on a different computer and use it as a backup server for Kofax TotalAgility.

1. On the TotalAgility installation media, navigate to **\\TotalAgilityInstall > Licensing > Installs**.
2. Click **KSALicServerSetup**.
The **License Server Setup** window opens.
3. Click **Next**.
4. In the Destination Folder window, select the default folder (C:\Program Files (x86)\Kofax\License Server\) for the License Server or click **Change** to select a different folder.
5. Click **Next** and follow the instructions to complete the installation.

Access TotalAgility through iPad or iPhone

To access TotalAgility through iPad or iPhone, update the **Web.config** file. You can use Windows authentication between the Web and Application servers and still use TotalAgility authentication from the client device to the Web server.

1. Access TotalAgility **Web.config** file from the following directory on the Web server: C:\Program Files\Kofax\TotalAgility\Agility.Server.Web\Web.config.
2. Search the **.config** file for the following: `<binding name="BasicHttpBinding_Service">`.
3. Copy the entire block of code, from `<binding>` to `</binding>`.
4. Paste the block under the copied block and rename it to: `<binding name=BasicHttpBindingCore_Service`.
5. In the copied binding, ensure HTTP with Windows authentication is enabled. This enables the authentication from the Web server to the Application server.
6. Navigate to the start of the core end points, search for: `<!--START CORE END POINTS -->`.
7. For each core end point replace `BasicHttpBinding_Service` with `BasicHttpBindingCore_Service`.
8. To use the authentication from the client device to the web server, update the original `BasicHttpBinding_Service` binding to use Anonymous authentication and SSL (if required).
9. Save the **Web.config** file.
10. Log on to TotalAgility ensuring you have been previously added as a TotalAgility user.

Federated Security-Generate a common machine key

When using Federated Security with TotalAgility in a load balance environment, TotalAgility cannot consistently decrypt the encrypted token passed from an Identity Provider using WsFed tokens. This is because, by default, each load balanced server has a unique machine key identifier used for token encryption/decryption.

We recommend that you generate a common machine key and propagate it to all servers in the load balanced environment. For example, if you generate a machine key for the TotalAgility application, the Web.config file gets automatically updated with the machine key element. The configuration of a machine key can be done at Web Server, Site or Application level.

To generate a machine key, perform the following steps:

1. Open Internet Information Services(IIS) manager.
2. Select the TotalAgility application, website or web server from the left panel to generate a machine key.
3. In **Features View**, right-click **Machine Key**, and then click **Open Feature**.
4. On the **Machine Key** page, select an encryption method from the **Encryption method** drop-down list.
5. Select a decryption method from the **Decryption method** drop-down list.
6. Optionally, configure settings for **Validation** and **Decryption** keys.
7. In the **Actions** panel, click **Generate Keys**, and then click **Apply**.

When you click apply, the changes are automatically saved in the Web.config file.

To encrypt and decrypt the machine key, see [Encrypt and decrypt the TotalAgility configuration files](#).

Encrypt and decrypt the TotalAgility configuration files

The TotalAgility configuration files include the DB Connection settings, including sensitive information. Therefore, we recommend that you encrypt the following TotalAgility files.

- Web.config (Use Microsoft ASP.NET IIS Registration Tool)
- Configuration files of executables (Use the Kofax.CEBPM.EncryptConfig.exe utility)

i Kofax.CEBPM.EncryptConfig.exe cannot work with Web.config; it can only work with configurations of executables.

Encrypt and decrypt Web.config

Use the Microsoft ASP.NET IIS Registration Tool (aspnet_regiis) to encrypt or decrypt any section of the Web.config file. Refer to the Encrypting and Decrypting Configuration sections On the Microsoft website.

1. Navigate to TotalAgility Web.config located at <Kofax Install location>\TotalAgility\Agility.Server.Web.
2. Run the Microsoft ASP.NET IIS Registration Tool (aspnet_regiis).
At a minimum, encrypt the appSettings section that includes the Database connection information.

Encrypt and decrypt the configuration files of executables

Use the Kofax.CEBPM.EncryptConfig.exe utility (located in the TotalAgility installation_folder) to encrypt (-enc) or decrypt (-dec) the configuration files of executables.

Before encrypting the configuration files of executables, you must add a security provider.

List of configuration files of executables that can be encrypted

The following table includes the list of configuration files of executables that can be encrypted.

Configuration file name	Location
<ul style="list-style-type: none"> Agility.Server.ExportConnector.exe.config Agility.Server.StreamingService.exe.config 	Agility.Server.Web files: <Kofax Install location>\TotalAgility\Agility.Server.Web
<ul style="list-style-type: none"> Agility.Server.Core.WorkerService.exe.config Agility.Server.Core.Executor.exe.config Agility.Server.Core.ExportService.exe.config Agility.Server.Core.ExportWorker.Host.exe.config 	Core Worker Service files: <Kofax Install location>\TotalAgility\CoreWorkerService
<ul style="list-style-type: none"> Kofax.CEBPM.Reporting.TAService.exe.config 	Reporting Server Service file: <Kofax Install location>\TotalAgility\Reporting
<ul style="list-style-type: none"> Kofax.CEBPM.CPUServer.ServiceHost.exe.config 	Transformation Server Service file: <Kofax Install location>\TotalAgility\Transformation Server
<ul style="list-style-type: none"> KSALicenseService.exe.config 	License Server Service file: <Kofax Install location>\TotalAgility\LicenseServer
<ul style="list-style-type: none"> ExtractionProcess.exe.config 	C:\ProgramFiles (x86)\Common Files\Kofax\Server\
<ul style="list-style-type: none"> RegAscSc.exe.config 	<Kofax Install location>\TotalAgility\ExportConnectors\bin\

Add a security provider

Add the following security provider in the configuration file before encrypting them:

```
<configProtectedData>
  <providers>
    <add useMachineProtection="true"
      name="DPAPIProtection"
      type="System.Configuration.DpapiProtectedConfigurationProvider,
      System.Configuration, Version=2.0.0.0, Culture=neutral,
      PublicKeyToken=b03f5f7f11d50a3a" />
    <add name="RSAProvider"
      type="System.Configuration.RsaProtectedConfigurationProvider,
      System.Configuration,
      Version=2.0.0.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a,
      processorArchitecture=MSIL"
      keyContainerName="CPUServerKeys" useMachineContainer="true" />
  </providers>
</configProtectedData>
```

Encrypt the configuration files of executables

The Kofax.CEBPM.EncryptConfig.exe utility encrypts (-enc) or decrypts (-dec) any section of the configuration file.

At a minimum, encrypt the `appSettings` section as it includes the user ID and password as well as other information. Use the optional `-h` flag to display help for the command.

The TotalAgility Server supports two encryption methods depending on command line parameters using the `Kofax.CEBPM.EncryptConfig.exe` utility:

- [DPAPI encryption](#)
- [RSA encryption](#)

Use the DPAPI encryption method

Use this utility to encrypt one server at a time because you must decrypt the file on the same machine where it was encrypted.

Run the utility on each TotalAgility Server individually.

1. Stop the TotalAgility Core Worker Server service.
2. Navigate to the TotalAgility Core Worker installation directory.
3. Copy the **Kofax.CEBPM.EncryptConfig.exe** to the same folder where **Agility.Server.Core.WorkerService.exe.config** resides.
4. Open a Command Prompt window and run the following command:
Kofax.CEBPM.EncryptConfig.exe -f Agility.Server.Core.WorkerService.exe.config -s "appSettings" -p DPAPIProtection -enc

Use the RSA encryption method

An algorithm for public key encryption and digital signatures that uses two separate keys. Create a key and encrypt the configuration file on one Server, and export the key to all the other Servers. All the TotalAgility Servers with the exported key installed can access the configuration file. Use this method if you have several Servers with the same configuration.

The following instructions differentiate between the source TotalAgility Server where you create the key and the target TotalAgility Servers onto which you import the key.

Prepare the key

Perform these steps on one source TotalAgility Server.

1. Create the custom RSA key container:
 - a. Log on to the TotalAgility Server with administrator rights.
 - b. Open a command-line window.
 - c. Navigate to the .NET Framework version 4.0 directory. For example, enter the following command:
cd \WINDOWS\Microsoft.Net\Framework\v4.0.*
 - d. Run the following command:
aspnet_regiis -pc "<KeysFile>" -exp
where:
 - `<KeysFile>` is the name of the key file.
 - The `-exp` option makes the key exportable.

2. Run the following command to grant the TotalAgility Core Worker Server service user permission to read the <KeysFile> RSA container file.

```
aspnet_regiis -pa <KeysFile> <TotalAgilityserviceuser>
```

where:

- <KeysFile> is the name of the key file you created in Step 1d.
- <TAserviceuser> is the TotalAgility Core Worker Server service user.

3. Encrypt the file:

- a. Log on to the TotalAgility Server as the TotalAgility Core Worker Server service user.
- b. Navigate to the installation directory for the TotalAgility Server and open a command-line window.
- c. Run the following command:

```
Kofax Kofax.CEBPM.EncryptConfig.exe -f  
Agility.Server.Core.WorkerService.exe.config -s "appSettings" -p  
RSAProvider -enc
```

This command encrypts the appSettings section of the configuration file. The appSettings section includes the user ID, password and other information.

4. Export the key by running the following command:

```
aspnet_regiis -px "<KeysFile>" "c:\keys.xml" -pri
```

where:

- <KeysFile> is the default keystore keyContainerName.
- <c:\keys.xml> is the path and file name of the exported key file.

Import the key

Perform these steps on every target TotalAgility Server.

1. Import the key:

- a. Log on to the TotalAgility Server with administrator rights.
- b. Copy the keys.xml file from the source TotalAgility Server to the root C:\ directory of the target TotalAgility Server.
- c. Open a command-line window.
- d. Run the following command:

```
aspnet_regiis -pi "<KeysFile>" "c:\keys.xml"
```

where:

- <KeysFile> is the default name of the key file.
 - <c:\keys.xml> is the path and file name to the imported key file.
- e. Delete the keys.xml because it contains the unprotected private key.

2. Run the following command to grant the TotalAgility Core Worker Server service user permissions to use the <KeysFile> RSA container file:

```
aspnet_regiis -pa "<KeysFile>" "TotalAgilityserviceuser"
```

where:

- <KeysFile> is the name of the key file you imported in step 1.
- <TotalAgilityserviceuser> is the TotalAgility Core Worker Server service user.

3. Repeat these steps on all remaining TotalAgility Servers.

Decrypt the configuration file

1. Stop the **TotalAgility Core Worker Server** service.
2. Navigate to the TotalAgility Server installation directory and open a command-line window.
3. Run the following command:

```
KofaxKofax.CEBPM.EncryptConfig.exe -f  
Agility.Server.Core.WorkerService.exe.config -s "appSettings" -p  
DPAPIProtection -dec
```

! Repeat the encrypt and decrypt procedures for Export configuration file also.

Encrypt the configuration files in a Docker container

You can encrypt the Web.config files and all executable configuration files using the "DPAPI" or "RSA" methods.

Encrypting the configuration files using "DPAPI"

Add the following to your Docker run command.

```
-e KTA_CONFIG_ENCRYPTION_PROVIDER_TYPE="DPAPI"
```

For example, "docker run -d --hostname "opdemo2" --name "opdemo2" --env-file "C: \\\u0026gt; Docker\\TotalAgility\\dockersettings.env" -p 5000:80 -e KTA_CONFIG_ENCRYPTION_PROVIDER_TYPE="DPAPI" kofaxop"

Encrypting the configuration files using "RSA"

Add the following to your docker run command.

```
-e KTA_CONFIG_ENCRYPTION_PROVIDER_TYPE="RSA"
```

For example, "docker run -d --hostname "opdemo2" --name "opdemo2" --env-file "C: \\\u0026gt; Docker\\TotalAgility\\dockersettings.env" -p 5000:80 -e KTA_CONFIG_ENCRYPTION_PROVIDER_TYPE="RSA" kofaxop"

Edit the TotalAgility configuration settings

After installing TotalAgility, to change or update any parameters, edit the following configuration files available in the installation directory.

- Agility.Server.Core.WorkerService.exe.config
- Agility.Server.Core.ExportService.exe.config
- Web.config
- KSALicenseService.exe.config

You can either edit each of these files separately or run the TotalAgility configuration utility to modify all the settings at one go. The configuration utility is available on the installation media and must be manually copied to your TotalAgility server. See the *TotalAgility Configuration Utility Guide*.

Update the parameter values

When you initially install the TotalAgility Server, the system stores the configuration settings in a .NET file, Agility.Server.Core.WorkerService.exe.config. To change the value of any parameters, do the following.

1. If you encrypted the configuration file after you installed the TotalAgility server, decrypt the file. See [Encrypt and decrypt the TotalAgility configuration files](#).

i If you use RSA encryption, decrypt the configuration file only on the source TotalAgility server where you initially encrypted the file.

2. Navigate to the installation directory for the TotalAgility server.
3. Open Agility.Server.Core.WorkerService.exe.config in a text editor.
4. Locate the following section:

```
<appSettings>  
  <add key="KeyNameString" value="which may contain passwords;" />  
</appSettings>
```

5. Edit the parameter values as needed.
6. Save and close the configuration file.
7. To re-encrypt the configuration file, run the encryption utility.

i If you use RSA encryption, export the key, and install the encryption key file on any target TotalAgility servers imported the original encrypted configuration file.

8. Restart the Kofax TotalAgility Core Worker Server service.

Update the settings for a license server

When installing TotalAgility, by default, the primary license server is used. If the primary license server fails, you can connect to the backup server post installation manually, or run the Configuration utility.

Manually

After installing TotalAgility, you can update the license server parameters in the KSALicenseService.exe available in the installation directory.

1. Stop the Kofax Licenser Server service.
2. Navigate to the installation directory for the TotalAgility server.
3. In a text editor, open KSALicenseService.exe.config from the following directory: \\Kofax\TotalAgility\LicenseServer.
4. Locate the following section and update the serverID and connectionStrings parameters. By default, serverId value is "1", which means primary license server is connected.

```
<appSettings>
  <!-- Specify "1" for a primary license server or "2" for a backup license
  server. -->
  <add key="serverId" value="1"/>
</appSettings>
<connectionStrings>
  <add name="LicensingDatabase"
  connectionString="Server=<machinename>;Trusted_Connection=Yes;Database='
  TotalAgility ';"/>
</connectionStrings>
```

- a. To connect to the backup license server, modify the serverId value as "2".
 - b. Update the LicensingDatabase connection string to point to Main DB for on premise environment.
5. Save and close the configuration file.

Use the Configuration Utility

Run the Configuration utility and select **Backup** license server setting on the **Licensing** tab. See the *Kofax TotalAgility Configuration Utility Guide*.

Support export vertical scaling

By default, there is no export instance. An export instance is only spawned if there is an export activity that is ready for export. More export instances are spawned if there are more export activities that are ready for export. You can configure TotalAgility to support multiple export instances on an export server.

1. Navigate to the installation directory for the TotalAgility Server.
2. Open Agility.Server.Core.ExportService.exe.config in a text editor.
3. Locate the <appSettings> section and change the value of MaxExportProcessesNumber as needed. (Default: 0)

```
<appSettings>
  <add key="MaxExportProcessesNumber" value="0"/>
```

```
</appSettings>
```

i Maximum number = Round of ((The number of machine processor count) * 1.25)

```
Maximum number = Round of ((The number of machine processor count) * 1.25)
```

The formula is only used if MaxExportProcessesNumber is less than or equal to 0. If the number is >= 1, the export processes count is equal to the defined value (MaxExportProcessesNumber).

Anti-Cross Site Request Forgery (CSRF) measures

Use the following anti-CSRF measures to protect the site against Cross-site Request Forgery attacks.

- [Configure the Anti-CSRF tokens](#)
- Specify the Samesite attribute with value as Strict or Lax in the <hostCookies> tag of the web.config to prevent CSRF attacks. See the Microsoft website for more information.
- [Enable Host prefix for cookies](#)

Anti-Cross Site Request Forgery (CSRF) tokens

A CSRF attack relies on a user being authenticated on a website. The attack usually comes as an email or website hyperlink on which the user clicks while still authenticated. This URL then points back to the user's website and attempts to perform a privileged action (such as add an administrator account) without the user's knowledge. In TotalAgility, the TargetHostName and TargetPortNo settings are added as Anti-CSRF tokens in the Web.config file. The TargetHostName is the fully qualified domain name of the webserver and the TargetPortNo is the website port number. When you provide for these settings, the Anti-CSRF origin and referrer validations are performed on the request URL. If the validation fails, the request will be terminated considering it as a potentially dangerous request.

You can configure the Anti-CSRF tokens in the Web.config manually or using the Configuration Utility.

Manually

1. Navigate to the installation directory for the TotalAgility server.
2. In a text editor, open Web.config from the following directory: .
`\\TotalAgilityInstall\Agility.Server.Web`
3. Locate the following section and specify the target host name and target port number.

```
<appSettings>
  <add key= "TargetHostName" value="<hostnamegoeshere"/>
  <add key= "TargetPortNo" value="443"
</appSettings>
```

4. Save and close the configuration file.

Use the Configuration Utility

Run the Configuration utility and specify the TargetHostName and TargetPortNo settings. See the *Kofax TotalAgility Configuration Utility Guide*.

Enable Host prefix for cookies

Use the "Host Prefix for Cookies", a browser functionality which makes the cookies more secure by prefixing the TotalAgility cookie names with "__HOST-". When a cookie name starts with this flag, it triggers additional browser policy on the cookie in supporting browsers. A __Host--prefixed cookie is only accessible by the same domain it is set on, which means a subdomain can no longer overwrite the cookie value. It also makes a cookie accessible from HTTPS sites only. This protects the cookie even if an attacker uses a forged insecure site to overwrite a secure cookie.

Edit the setting manually or use the Configuration Utility for enabling or disabling the cookies security.

Perform the following steps on the Web or combined Web/Application server.

1. On the Kofax TotalAgility installation media, navigate to `\\TotalAgilityInstall\Agility.Server.Web`.
2. Open `web.config` in a text editor.
3. Locate the **<appSettings>** section and make sure the value of "UseHostPrefixForCookies" value="true".

```
<appSettings>
  <add key="UseHostPrefixForCookies" value="true"/>
</appSettings>
```

Use the Configuration Utility

Run the Configuration Utility and change the Host Prefix for Cookies setting on the Web settings tab as needed.

Update settings to prevent stored Cross-Site Scripting vulnerabilities

You can provide enhanced security to prevent stored Cross Site Scripting vulnerabilities in TotalAgility.

If TotalAgility is on https protocol and needs to prevent stored Cross Site Scripting vulnerabilities and enable additional security layer so that data remains secure.

Make sure URL redirect module is installed on your computer where TotalAgility is installed.

1. Navigate to the installation directory for the TotalAgility server.
2. In a text editor, open `Web.config` from the following directory:
`\\TotalAgilityInstall\Agility.Server.Web`
3. Do one of the following:
 - If KCM is not installed, locate the rule: "**HTTP to HTTPS redirect**" and uncomment the `rewrite` section where this rule is available.
 - If KCM is installed and if you need additional layer of security, do the following:
 - a. Locate the "**HTTP to HTTPS redirect**" rule (shown in bold) and copy it.

```
<rewrite>
  <rules>
    <rule name="HTTP to HTTPS redirect" stopProcessing="true">
```

```

        <match url="(.*)" />
        <conditions>
            <add input="{HTTPS}" pattern="off" ignoreCase="true" />
        </conditions>
        <action type="Redirect" url="https://{HTTP_HOST}/{R:1}"
redirectType="Permanent" />
    </rule>
</rules>
<outboundRules>
    <rule name="Add Strict-Transport-Security when HTTPS"
enabled="true">
        <match serverVariable="RESPONSE_Strict_Transport_Security"
pattern=".*" />
        <conditions>
            <add input="{HTTPS}" pattern="on" ignoreCase="true" />
        </conditions>
        <action type="Rewrite" value="max-age=31536000;
includeSubDomains" />
    </rule>
</outboundRules>
</rewrite>

```

- b. Locate the following section and paste the copied rule (as displayed in bold).

```

<rewrite>
    <rules>
        <rule name="CCMInteractiveProxy" stopProcessing="true">
            <match url="CCM/Proxy/Interactive/(.*)" />
            <action type="Rewrite" url="{http://ccmserver:port}/ccm/
Interactive/{R:1}" />
        </rule>
        <rule name="CCMDesignerProxy" stopProcessing="true">
            <match url="CCM/Proxy/Repository/(.*)" />
            <action type="Rewrite" url="{http://ccmserver:port}/ccm/
Repository/{R:1}" />
        </rule>
        <rule name="ComposerUIJavascriptProxyRule" stopProcessing="true">
            <match url="CCM/Proxy/ccmcomposerui.js" />
            <action type="Rewrite" url="{http://ccmserver:port}/proxy/
ccmcomposerui.js" />
        </rule>
        <rule name="ComposerUICssProxyRule" stopProcessing="true">
            <match url="CCM/Proxy/ccmcomposerui.css" />
            <action type="Rewrite" url="{http://ccmserver:port}/proxy/
ccmcomposerui.css" />
        </rule>
        <rule name="ComposerTinyMCEProxyRule" stopProcessing="true">
            <match url="CCM/Proxy/tinymce/(.*)" />
            <action type="Rewrite" url="{http://ccmserver:port}/proxy/tinymce/
{R:1}" />
        </rule>
        <rule name="ComposerUIImgProxyRule" stopProcessing="true">
            <match url="CCM/Proxy/img/(.*)" />
            <action type="Rewrite" url="{http://ccmserver:port}/proxy/img/
{R:1}" />
        </rule>
        <rule name="CCMDesignerStaticProxyRule" stopProcessing="true">
            <match url="CCM/Proxy/static/(.*)" />
            <action type="Rewrite" url="{http://ccmserver:port}/ccm/static/
{R:1}" />
        </rule>
        <rule name="ComposerUIFontProxyRule" stopProcessing="true">
            <match url="CCM/Proxy/fonts/(.*)" />

```

```

    <action type="Rewrite" url="{http://ccmserver:port}/proxy/fonts/
{R:1}" />
  </rule>
  <rule name="HTTP to HTTPS redirect" stopProcessing="true">
    <match url="(.)" />
    <conditions>
      <add input="{HTTPS}" pattern="off" ignoreCase="true" />
    </conditions>
    <action type="Redirect" url="https://{HTTP_HOST}/{R:1}"
redirectType="Permanent" />
  </rule>
</rules>

```

- c. Locate the following outbound rule: **"Add Strict-Transport-Security when HTTPS"** (shown in bold) and copy it.

```

<rule name="Add Strict-Transport-Security when HTTPS" enabled="true">
  <match serverVariable="RESPONSE_Strict_Transport_Security"
pattern=".*" />
  <conditions>
    <add input="{HTTPS}" pattern="on" ignoreCase="true" />
  </conditions>
  <action type="Rewrite" value="max-age=31536000;
includeSubDomains" />
</rule>
<rewrite>
  <rules>
    <rule name="HTTP to HTTPS redirect" stopProcessing="true">
      <match url="(.)" />
      <conditions>
        <add input="{HTTPS}" pattern="off" ignoreCase="true" />
      </conditions>
      <action type="Redirect" url="https://{HTTP_HOST}/{R:1}"
redirectType="Permanent" />
    </rule>
  </rules>
  <outboundRules>
    <rule name="Add Strict-Transport-Security when HTTPS"
enabled="true">
      <match serverVariable="RESPONSE_Strict_Transport_Security"
pattern=".*" />
      <conditions>
        <add input="{HTTPS}" pattern="on" ignoreCase="true" />
      </conditions>
      <action type="Rewrite" value="max-age=31536000;
includeSubDomains" />
    </rule>
  </outboundRules>
</rewrite>

```

- d. Paste it before the closing bracket of outbound rules of CCM (as displayed in bold).

```

<outboundRules>
  <rule name="HTTPCookie" precondition="IncomingNoSSLSecureCookie">
    <match serverVariable="RESPONSE_Set_Cookie" pattern="(.)";
Secure(.)" />
    <action type="Rewrite" value="{R:1}{R:2}" />
  </rule>
  <rule name="HTTPScookie" precondition="IncomingSSLNoSecureCookie">
    <match serverVariable="RESPONSE_Set_Cookie" pattern="(.)";
HttpOnly" />
    <action type="Rewrite" value="{R:1}; Secure; HttpOnly" />
  </rule>
</preConditions>

```

```

        <preCondition name="IncomingNoSSLSecureCookie">
            <add input="{CACHE_URL}" pattern="^http://" />
            <add input="{RESPONSE_Set_Cookie}" pattern=".*; Secure.*" />
        </preCondition>
        <preCondition name="IncomingSSLNoSecureCookie">
            <add input="{CACHE_URL}" pattern="^https://" /><add
input="{RESPONSE_Set_Cookie}" pattern=".*; Secure.*" negate="true"/>
        </preCondition>
    </preConditions>
    <rule name="Add Strict-Transport-Security when HTTPS" enabled="true">
        <match serverVariable="RESPONSE_Strict_Transport_Security"
pattern=".*" />
        <conditions>
            <add input="{HTTPS}" pattern="on" ignoreCase="true" />
        </conditions>
        <action type="Rewrite" value="max-age=31536000;
includeSubDomains" />
    </rule>
</outboundRules>

```

4. Save and close the configuration file.

Configure the wait time for export activities

You can configure the wait time for export activities in seconds so that the Export Service will wait for the configured seconds for new export activities to progress based on the availability of the child export processes.

If all the child export processes are in inactive mode (that is, there are no export activities available), TotalAgility Export Service will wait for the configured seconds for new export activities to process. If any child export process is in an active mode (that is, any child process is executing the Export activity), TotalAgility Export Service will instantaneously take new export activities to export without waiting for the configured seconds.

1. On the TotalAgility installation media, navigate to \\TotalAgilityInstall\CoreWorkerService.
2. Open Agility.Server.Core.ExportService.exe.config in a text editor.
3. Locate the **<appSettings>** section and change the value of "WaitForAvailableExportActivitiesTimeoutInSeconds" as needed. (Default: 30)

```

<appSettings>
    <add key="WaitForAvailableExportActivitiesTimeoutInSeconds" value="30"/>
</appSettings>

```

i The minimum value for WaitForAvailableExportActivitiesTimeoutInSeconds is 1 and maximum value is 600.

You must restart the TotalAgility Export Service for the change to take effect.

Update the settings for manual authentication

Perform the following steps on the Web or combined Web/Application server and Application Server.

Edit the setting manually or use the Configuration Utility for manual authentication.

Web server or combined Web/Application server

Perform the following steps on the Web or combined Web/Application server and Application Server.

Manually

1. Open the TotalAgility **Web.config** file from the following directory: C:\Program Files\Kofax\TotalAgility\Agility.Server.Web.
2. Locate the following bindings: "CustomBinding_CoreService", "BasicHttpBinding_Service" and "WebHttpBinding_Service" and comment out all the three security mode configurations for manual logon over http.

```
<!-- The following are the different options for securing the services -->
  <!-- All commented out is application manual logon over HTTP -->
  <!-- Only one option should be uncommented at a time -->
  <!-- Azure should use HTTPS SSL with application logon-->
  <!-- On premise default: HTTP with Windows authentication-->
  <!-- HTTPS SSL with application logon-->
  <!--<security mode="Transport">
    <transport clientCredentialType="None"/>
  </security>-->
  <!-- HTTP with Windows authentication-->
  <security mode="TransportCredentialOnly">
    <transport clientCredentialType="Windows" />
  </security>
  <!-- HTTPS SSL with Windows authentication-->
  <!--<security mode="Transport">
    <transport clientCredentialType="Windows" />
  </security>-->
```

i In the TotalAgility Web.config file, under the section, TransformationServerExternalService_Binding, the **security mode** and **transport clientCredentialType** should be same as specified in the Transformation Server Web.config file.

Use the Configuration Utility

Run the Configuration Utility and change the mode of authentication on the Web settings tab as needed.

Application server

Manually

1. Open the TotalAgility **Web.config** file from the following directory: C:\Program Files\Kofax\TotalAgility\Agility.Server.Web.
2. Locate the following bindings, "CustomBinding_CoreService", "BasicHttpBinding_Service" and "WebHttpBinding_Service" and comment out all the three security mode configurations for manual logon over http.

```
<!-- The following are the different options for securing the services -->
  <!-- All commented out is application manual logon over HTTP -->
  <!-- Only one option should be uncommented at a time -->
  <!-- Azure should use HTTPS SSL with application logon-->
```

```

<!-- On premise default: HTTP with Windows authentication-->
<!-- HTTPS SSL with application logon-->
<!--<security mode="Transport">
  <transport clientCredentialType="None"/>
</security>-->
<!-- HTTP with Windows authentication-->
<security mode="TransportCredentialOnly">
  <transport clientCredentialType="Windows" />
</security>
<!-- HTTPS SSL with Windows authentication-->
<!--<security mode="Transport">
  <transport clientCredentialType="Windows" />
</security>-->

```

Use the Configuration Utility

Run the Configuration Utility and change the mode of authentication on the Web settings tab as needed.

Update the settings for manual and Windows authentication

When you install TotalAgility, you can choose the logon mode as manual or Windows authentication. However, post installation, you can switch the logon mode to use both Windows and manual (mixed) authentication by running the Configuration Utility. If the Windows authentication fails, you will be redirected to the manual logon page.

Use mixed authentication on the Web server or combined Web/ Application server

Perform the following steps on the Web server or combined Web/Application server to set up mixed authentication (Windows and manual).

1. Open the TotalAgility **Web.config** file from the following directory: C:\Program Files\Kofax\TotalAgility\Agility.Server.Web.
2. Locate the following Bindings: BasicHttpBinding_Service and WebHttpBinding_Service and comment out the security mode configurations for manual logon over http.
3. Locate the following ClientWindowsService Bindings: BasicHttpWindowsUserBinding_Service and WebHttpWindowsUserBinding_Service and comment out the security mode configurations for Windows Authentication logon over http.

```

<!-- The following are the different options for securing the services -->
<!-- All commented out is application manual logon over HTTP -->
<!-- Only one option should be uncommented at a time -->
<!-- Azure should use HTTPS SSL with application logon-->
<!-- On premise default: HTTP with Windows authentication-->
<!-- HTTPS SSL with application logon-->
<!--<security mode="Transport">
  <transport clientCredentialType="None"/>
</security>-->
<!-- HTTP with Windows authentication-->
<security mode="TransportCredentialOnly">
  <transport clientCredentialType="Windows" />
</security>
<!-- HTTPS SSL with Windows authentication-->
<!--<security mode="Transport">
  <transport clientCredentialType="Windows" />
</security>-->

```

```
</security>-->
```

Use the Configuration Utility

After installing TotalAgility, to use the mixed authentication, run the Configuration Utility and switch the mode of authentication (HTTP with manual and Windows authentication or HTTPS with manual and Windows authentication) on the Web settings tab, as needed.

i To use mixed authentication, you must enable both the Anonymous and Windows Authentication options in the IIS.

Update settings for the TotalAgilitylinked servers

Edit the setting manually or use the Configuration Utility for manual authentication.

Manually

On installing TotalAgility, the Web.config is updated automatically with machine name / TotalAgility for linked servers. If you want to connect from a public IP Address, you must update the Web.config file.

1. Open the TotalAgility **Web.config** file from the following directory: \\TotalAgilityInstall\Agility.Server.Web
2. Locate the following section and replace the IP Address with your machine name.

```
<add key="TotalAgilityHostNameLive" value = "<ip_address>/TotalAgility" />
<add key="TotalAgilityHostNameDev" value = "<ip_address>/TotalAgility"/>
```

See the *Kofax TotalAgilityHelp* for more information.

Use the Configuration Utility

Run the Configuration Utility and update the TotalAgilityHostNameLive key.

Alter the virtual root for the Kofax TotalAgility website

1. Open the TotalAgility **Web.config** file from the following directory: \\TotalAgilityInstall\Agility.Server.Web
2. Modify the following configuration keys to alter the virtual root for the Kofax TotalAgility website:

```
<add key="WebsiteBaseName" value="TotalAgility"/>
<add key="ProcessDocumentsRootFolder" value="/TotalAgility/documents/process"/>
```

i The value for the "WebsiteBaseName" should be the name of the virtual directory used within the IIS.

Add custom job thread pools

A job thread performs multiple operations at a time, such as job evaluation, raising an exception job or ingestion through Kofax Import Connector. Multiple operations can lead to bottlenecks in the production systems. For example, when there are thousands of jobs to be archived, ingestion and

job evaluation take longer time because the job threads are busy archiving jobs. Adding custom job thread pools, helps in achieving better throughput and prioritizing the background tasks.

You can add custom job thread pools, specify the number of threads in the thread pool and assign the worker task to a thread pool manually or use the Configuration Utility.

Manually

1. Navigate to the installation directory for the TotalAgility server.
2. In a text editor, open **Agility.Server.Core.WorkerService.exe.config** from the following directory:

```
\\TotalAgilityInstall\Agility.Server.Web
```

3. Locate the following section:

```
<configSections>
  <section name="CoreWorker" type="Agility.Server.Core.Worker.Configuration,
  Agility.Server.Core.Worker"/>
</configSections>
```

4. Add one or more job thread pools within the `CoreWorker` section and add worker tasks, as required. The following is a sample from the configuration file.

Example

```
<CoreWorker>
  <JobThreadPools>
    <add Id ="1" Size ="16" WorkerTasks ="ArchiveJobTask, DeleteItemTask,
    CreateExceptionTask, CreateJobTask, EvaluateJobTask,
    ProcessStateActionTask, IngestSystemTask, CaptureBatchTask "/>
  </JobThreadPools>
</CoreWorker>
```

i You must assign the following worker tasks to some thread pool, otherwise, an error message is displayed and the Core Worker Service stops working. You cannot assign the same worker task to more than one thread pool.

- ArchiveJobTask
- EvaluateJob Task
- CreateException Task
- CreateJob Task
- IngestSystem Task
- CaptureBatch Task
- DeleteItem Task
- ProcessStateAction Task

5. Save and close the configuration file.
6. Restart the TotalAgility Core Worker service.

Use the Configuration Utility

Run the Configuration utility and add or update the custom job thread pools, specify the number of threads in the thread pool and assign the worker task to a thread pool.

Add a thread pool monitoring interval

When long running automatic activities are processed by the Core Worker, the threads in the automatic activity thread pool are not freed up when the taken activity is reset due to timeout. Configure a thread pool monitoring interval to free up the threads for these long running taken activities to allow other activities to progress once they timeout.

You can configure the thread pool monitoring interval manually or use the Configuration Utility.

Manually

1. Navigate to the installation directory for the TotalAgility server.
2. In a text editor, open **Agility.Server.Core.WorkerService.exe.config** from the following directory:

```
\\TotalAgilityInstall\Agility.Server.Web
```

3. Locate the following section and add a thread pool monitoring interval (default:60).

```
<appSettings>  
  <add key="CoreWorkerThreadPoolMonitoringIntervalInSeconds" value="60"/>  
</appSettings>
```

The default value is 60.

4. Save and close the configuration file.
5. Restart the TotalAgility Core Worker service.

Use the Configuration Utility

Run the Configuration utility and add the thread pool monitoring interval. See the *TotalAgility Configuration utility Guide*.

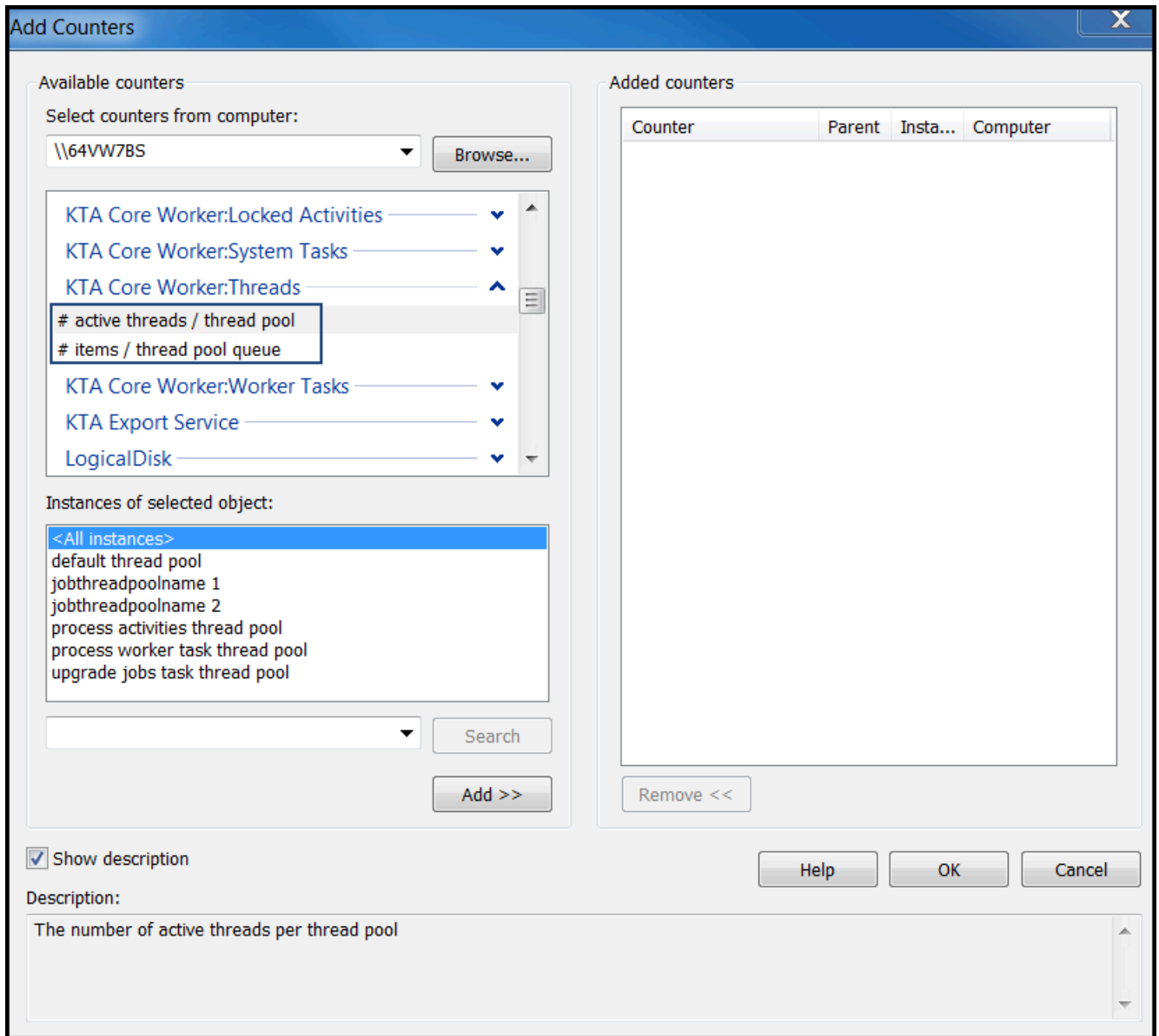
Add performance monitoring counters

Use the performance counters to record application states and activities.

The following categories for TotalAgility performance monitoring counters are automatically installed on the target machine when the Core Worker Service and the Export Service are installed:

- TotalAgility Core Worker: Locked Activities
- TotalAgility Core Worker: System Tasks
- TotalAgility Core Worker: Threads
- TotalAgility Core Worker: Worker Tasks
- TotalAgility Export Service
- TotalAgility Child Export Processes

Each category is associated with the performance counters. When the performance monitor is launched, you can select the installed counters and add to the current monitoring session. Each instance is recorded for a performance counter. For example, the Active Threads Per Thread pool performance counter records an instance per thread pool as shown in the image below.



You can log each performance counter to the TotalAgility log file by enabling the logging function. For more information on performance monitoring counters, see the *Kofax TotalAgilityAdministrator's Guide*.

Install the language pack

The languages files are available at the following location in the installation directory:

```
\\TotalAgilityInstall\Agility.Server.Web
```

After installing TotalAgility, import <Language>.zip using the "Import Languages" feature of the TotalAgility menu.

When you change your browser to one of the supported languages, the corresponding translation is displayed.

i Only the Workspace is localized according to the browser display language after installing the language pack.

Install the .NET Framework language packs

To localize the system error messages from .NET, you must install the .NET Framework language packs on both the Web and Application servers.

You can download the .NET Framework language pack from the Microsoft website.

Exclude folders from antivirus scan

In your antivirus application, add the following TotalAgility folders to the list of items which are excluded from scanning:

- \\ProgramData\Kofax
- \\Program Files (x86)\Common Files\Kofax
- \\Program Files\Kofax\TotalAgility\

Access TotalAgility documentation

You can access help online as well as in offline mode.

Online documentation

The product documentation for Kofax TotalAgility 7.10.0 is now available at the following location:

<https://docshield.kofax.com/Portal/Products/KTA/7.10.0-vmhad0mru4/KTA.htm>

To launch the online help for the installed version of the product, click the Help icon on the application.



- On upgrading to TotalAgility 7.10.0 from an earlier version, to view the TotalAgility Workspace help, you must import the WorkspaceHeader form from the TotalAgility Workspace package.
- When upgrading to TotalAgility 7.10.0 from an earlier version, ensure that the check box for "Import system Workspace package" is selected to view the Workspace help online; otherwise, you must import the WorkspaceHeader form from the TotalAgility Workspace package.

Offline documentation

To access the documentation offline, you can download it from the [Kofax Fulfillment Site](#). For each language, a separate documentation package is available to download as a compressed file, such as Kofax TotalAgilityDocumentation7.10.0_EN.zip for English or Kofax TotalAgilityDocumentation7.10.0_FR.zip for French.

The English .zip file includes both help and print folders. The print folder contains all guides, such as installation guide and administrator's guide. The .zip files for other languages contain only the localized files as applicable.

The following procedure describes accessing TotalAgility documentation offline for English.

1. From the Kofax Fulfillment Site, download the documentation.zip file for the applicable language.
2. Extract the contents of the compressed documentation file to your local machine.

3. On the TotalAgility installation media, inside the `Agility.Server.Web\Help` folder, create a folder for the desired language. For example, for accessing TotalAgility documentation offline for English, create EN folder as follows:

i In a distributed environment, perform copying files on the Web server, and the Web.config changes on the Application and Web servers.

- Copy the contents from Designer folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\TotalAgility_designer\EN
```

i TotalAgility installer creates the TotalAgility_designer and API folders inside the Help folder. You must manually create other folders such as Workspace and TotalAgilityApps and then copy the contents into the respective folders.

- Copy the contents from Workspace folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\Workspace\EN
```

- Copy the contents from WebCaptureControl folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\WebCaptureControl\EN
```

- Copy the contents from TransformationDesigner folder to:

```
<%ProgramData%>\Kofax\Transformation\en_US\help\TransformationDesigner
```

- Copy the contents from KCKTM_Converter folder to:

```
<%ProgramData%>\Kofax\Transformation\en_US\help\KCKTM_Converter
```

- Copy the contents from XDocBrowser folder to:

```
<%ProgramData%>\Kofax\Transformation\en_US\help\XDocBrowser
```

- Copy the contents from TenantManagementSystem folder to:

```
\\TotalAgilityInstall\Agility.Server.Web.TenantManagement  
\TenantManagement\Help\TenantManagementSystem\EN
```

- Copy the contents from TotalAgilityApps folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\TotalAgilityApps\EN
```

- Copy the contents from ExportConnector folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\ExportConnector_help\EN
```

- Copy the contents from the activity (such as DocumentReviewActivity) folder within CaptureClient folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Forms\Controls\Capture\Help  
\DocumentReviewActivity\EN
```

- Copy the contents from Devices folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\bin\Administrative\Help\Devices  
\EN
```

- Copy the contents from RepositoryBrowser folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\RepositoryBrowser\EN
```

- Copy the contents from SDK_Documentation folder to:

```
\\TotalAgilityInstall\Agility.Server.Web\Help\API\EN
```

- Copy the contents from DocumentConverter folder to:

```
\\Kofax\Document Converter\web\en\WebHelp
```

- Copy the contents from MessageConnector folder to:
 `\\Kofax\KIC-ED\MC\web\en\WebHelp`
 - 4. Navigate to the installation folder and do the following:
 - For TotalAgility Designer help, Devices help, Transformation Designer help, XDoc Browser help and KC_KTM Converter help:
 - a. Open TotalAgility Web.config in a text editor from the following location:
 `\\TotalAgilityInstall\Agility.Server.Web`
 - b. Locate the <appSettings> section and remove `http://docshield.kofax.com/KTA` from the key value: `<add key="OnlineHelpURL" value="http://docshield.kofax.com/KTA"/>`.

 Alternatively, run the Configuration Utility (available from the Installation media at `\\TotalAgilityInstall\Utilities\ConfigurationUtility`) and remove the URL for online help from the OnlinehelpURL setting.
- i** For Transformation Designer, XDoc Browser and KC_KTM Converter Help to work offline, make sure that TotalAgility is actively connected to Transformation Designer. To connect TotalAgility to Transformation Designer, log in to Transformation Designer and click **File > Connections** and provide the connection path.
- For TotalAgility Export Connector help:
 - a. Open `Agility.Server.ExportConnector.exe.config` in a text editor from the following location:
 `\\TotalAgilityInstall\Agility.Server.Web\bin`
 - b. Locate the <appSettings> section and remove `http://docshield.Kofax.com/KTA` from the key value: `<add key="OnlineHelpURL" value="http://docshield.kofax.com/KTA"/>`.
 - For TotalAgility Message Connector help:
 - a. Open `configuration.xml` in a text editor from the following location:
 `\\Kofax\KIC-ED\MC\web`
 - b. Locate the `<OnlineHelp>1</OnlineHelp>` section and replace 1 with 0.
 - For TotalAgility Document Converter help:
 - a. Open `configuration.xml` in a text editor from the following location:
 `\\Kofax\Document Converter\web`
 - b. Locate the `<OnlineHelp>1</OnlineHelp>` section and replace 1 with 0.
5. Save and close the configuration file.
Clicking the Help icon will launch the help for the installed product.

Run EVRSCheck utility


The EversCheck utility helps in testing how an image will look once the eVRS setting is applied to it. The left half of the application window displays the original image and the right half displays the processed image once the setting is applied to it.

1. Run the **EversCheck.exe** available at the following location in the TotalAgility Installation folder:

```
\\TotalAgilityInstall\Utilities\EversCheck
```

The Before and After window opens.

2. Click **Choose** and select an image.
The selected image with its metadata appears in the left half of the window. If the selected image is a multi-page image, you can use the "<" and ">" buttons to navigate between pages.
3. Copy the desired eVRS setting and paste it into the **eVRS Settings** box.
The image is processed based on the eVRS settings. The output along with its metadata is displayed in the right half of the window.

 You can edit the eVRS setting; the image starts reprocessing as you type.

Chapter 3

Transformation Server Bundle installation

The Transformation Server Bundle includes:

- Transformation Server
- Transformation Core modules

To install any component, you must install the entire Transformation Server Bundle.

You can install the Transformation Server Bundle when you install TotalAgility, or install the Transformation Server Bundle separately.



- Before installing the Transformation Server Bundle, it may be necessary to install the USERTrust Certificate and the DigiCert Assured ID Root CA Certificate in your environment. The installation may fail if these certificates are missing.
- For development environments, install the Transformation Server Bundle where you installed TotalAgility. For production environments, install the Transformation Server Bundle on a separate computer.
- If you install the Transformation Server or Transformation Designer independent of TotalAgility, make sure the supported version of .NET Framework is already installed on that machine.
- The user who will run the Transformation Server must have "Log on as Service" rights. Also, the user who is running Transformation Server will be used for all communication channels where Windows authentication is used. For example, if Windows authentication is being used for SQL Server, this user must have rights on this server, otherwise Transformation Server does not work.
- After installing the Transformation Server, you can modify the configuration settings by editing the Transformation Server configuration file or by running the configuration utility. See the *Kofax TotalAgility Configuration Utility Guide*.

Perform a silent installation

This section describes installing the Transformation server Bundle silently, independent of TotalAgility.

1. On the TotalAgility installation media, navigate to \\Transformation server.
2. On the Command prompt window, run the following command:

```
TransformationServerSetup.exe /quiet /log %LogFile% TS_INSTALLLOCATION=  
%InstallLocation% TS_SERVICE_ACCOUNT=%WindowsServiceAccount%  
TS_SERVICE_PASSWORD=%WindowsServicePassword% TS_USE_SPECIFIC_POOL=  
%UseSpecificPool% TS_POOL_NAME=%PoolName% TS_OL_ENABLED=%OLEnabled
```

```
% TS_WCF_PORT=%WcfPort% TS_RESERVED_SLOTS=%ReservedSlots%
TS_OVERRIDE_DEF_SLOTS=%OverrideDefSlots% TS_MAX_SLOTS=%MaxSlots%
TS_ENABLE_SYNC_CALLS=%EnableSyncCalls% TS_SYNCHRONOUS_ONLY=FALSE
TS_STARTSERVICE=TRUE TS_MAIN_DB_CONNECTION_STRING=
%MainDBConnectionString% TS_AUDIT_DB_CONNECTION_STRING=
%AuditDBConnectionString% TS_REPORTING_STAGING_DB_CONNECTION_STRING=
%ReportingStagingDBConnectionString% TS_ARCHIVE_DB_CONNECTION_STRING=
%ArchiveDBConnectionString% %TS_INSTALL_OCR_ADDONS=%
```

i Optionally, call `TS_SETUP_CONFIG_FILE` in the installation command. This property requires an absolute path to a configuration file for the installer. The configuration file can have one parameter per line only. Using such a configuration file will prevent the `setup.exe` from logging sensitive data.

TS_SETUP_CONFIG_FILE example:

```
TS_INSTALLLOCATION= "<Installation path>\Kofax\TotalAgility\Transformation Server
\"
TS_SERVICE_ACCOUNT=**account name**
TS_SERVICE_PASSWORD=**Password**
TS_SERVER_SERVICE_URL= https://**Name/IP**/TotalAgility/Services/Core/
ServerService.svc
TS_USE_SPECIFIC_POOL=FALSE
TS_POOL_NAME=
TS_OL_ENABLED=TRUE
TS_WCF_PORT=9001
TS_RESERVED_SLOTS=0
TS_OVERRIDE_DEF_SLOTS=
TS_MAX_SLOTS=0
TS_ENABLE_SYNC_CALLS=TRUE
TS_MAIN_DB_CONNECTION_STRING=Server=**Name/
IP**;Trusted_Connection=Yes;Database=**DB Name**;
TS_AUDIT_DB_CONNECTION_STRING=Server=localhost;Trusted_Connection=Yes;
Database=TotalAgility;
TS_ARCHIVE_DB_CONNECTION_STRING=Server=localhost;Trusted_Connection=Yes;
Database=TotalAgility;
TS_REPORTING_STAGING_DB_CONNECTION_STRING=Server=localhost;
Trusted_Connection=Yes;Database=TotalAgility_Reporting_Staging;
TS_STARTSERVICE=TRUE
TS_SYNCHRONOUS_ONLY=false
TS_INSTALL_OCR_ADDONS=1
```

See the Transformation Server Info section in [Silent installation of Web and Application on the same server](#) for more information on the Transformation Server parameters.

The parameter names are case-sensitive. If the value of a parameter has spaces, enclose the value in quotation marks.

3. To ensure that the installation works as expected, perform the following steps:
 - a. Navigate to `<Program Files>/Kofax/TotalAgility/Agility.Server.Web` and open the `Web.config` in a text editor.
 - b. Locate the `TransformationServerExternalService_Binding` binding parameter and ensure that the `<transport ClientCredentialType>` value is set to `Windows`.
 - c. Save and close the web configuration file.

Perform a standard installation

1. Ensure that the user who will run the Transformation server has **Log on as Service** rights.
2. Access the Transformation server Bundle installer using one of the following ways:
 - **Production systems:** Install the Transformation server Bundle separately from TotalAgility. Navigate to `\\Transformation Server\Transformation Server` on the installation media and run one of the following commands:
 - To install without creating a log file, run **Transformation serverSetup.exe**.
The **Kofax Transformation Server 7.10** window opens.
 - To install and create a log file, run **setup.exe/log <path\install_log.txt>** where `<path \install_log.txt>` is the path and name of the log file.
 - **Development systems:** If you are installing the Transformation server as part of the TotalAgility installation, the Transformation server Bundle installer opens automatically.
3. In the **Kofax Transformation Server 7.10** window, click **Options** and do the following:

Setup Options	
Multitenant installation	If selected, installs the Transformation Server on an on-premise multi-tenancy environment. (Default: Clear)
Additional A2iA engines [unsupported]	If selected, installs additional OCR engines (A2iA CheckReader and A2iA FieldReader). (Default: Selected)
Natural Language Processing language bundles	
Western (en, es, pt, fr, de) (default: selected)	If selected, installs natural processing language bundles.
Western extended (it, ro, nl)	
Extended (ja, zh, ko)	

4. Click **Install**.
The system installs any necessary prerequisites.
5. Click **Next**.
The **Kofax Transformation Server Setup Wizard** window opens.
6. Click **Next**.
7. In the license agreement window, accept the terms in the License Agreement.
This window is not displayed if the Transformation Server is installed automatically as part of TotalAgility installation.
8. Click **Next**.
The system prompts you for a destination folder for the Transformation server.
9. Enter the destination and click **Next**.
10. In the **Service Account Setup** window, enter the credentials for the user who will run the Transformation server. These credentials are also used to encrypt sensitive data.
 - a. In the **Username** field, enter the user name. To specify a domain user, enter the user name in the format `Domain\User`.
 - b. Enter and confirm the **Password**.

c. Click **Next**.

The **Setting up connection data** window opens.

11. Enter the connection string for the Main, Audit, Archive and Reporting_Staging databases to connect to and authenticate with the databases.

Use the following syntax:

```
Server=<server address>;Database=TotalAgility;User ID=<user_name>;
Password=<password>;
```


If installing on split web/app, use the following syntax:

```
Server=<server name>; Trusted_Connection=yes; Database=<database name>;
```


Specify the address of the database server and the user name and password to authenticate with database where indicated. Example:

```
Server=dbserver\dbinstance;Database=TotalAgility;User
ID=dbo_id;Password=dbopassword;
```

12. Click **Next**.
13. Specify the connection options to TotalAgility server:
 - a. To enable the Transformation server to process online learning tasks, select **Enable Online Learning processing by this Transformation Server instance**.
 - b. Optionally, select **Process activities from specific Transformation Server pool** and enter a **Pool name**.

 To select the default pool, select **Default Transformation Server Thread Pool**.

14. Click **Next**.
The **Advanced execution options** window opens. These options control the slots reserved for incoming high-priority activities.
15. Select the advanced execution options:
 - **Enable support for Quick Capture:** Select this option to provide the back end service necessary to support the Quick Capture Solution service.
 - **Enable synchronous calls processing:** Select this option to configure the TCP/IP port and the number of reserved processing slots. The default TCP/IP port is 9001, and the number of reserved processing slots is 0.

 If you are upgrading from version 7.0.0, "Enable synchronous calls processing" is not enabled if the number of reserved processing slots is zero and it is enabled if there are one or more reserved processing slots.

 - **Override default* number of processing slots:** Select this option to specify number of slots other than the default.

16. Click **Next**.

The Kofax Transformation server is now ready to install.

17. Click **Install** to install the Transformation server.

The system displays the installation status and a message when Transformation server setup is complete.

18. Click **Finish** to continue.
The system displays the Transformation server Bundle setup status and a message when the Transformation server Bundle setup is successful.
19. Click **Close** to close the success message window.
20. To ensure that the installation works as expected, perform the following steps:
 - a. Navigate to <Program Files>/Kofax/ TotalAgility/Agility.Server.Web and open the Web.config in a text editor.
 - b. Locate the TransformationServerExternalService_Binding binding parameter and ensure that the <transport ClientCredentialType> value is set to Windows.
 - c. Save and close the web configuration file.
21. From the Service console, start the Kofax Transformation Server service.
22. If applicable, restart the anti-virus or firewall applications.

Encrypt and decrypt the configuration file

The configuration file includes the Transformation Server settings, including sensitive information. Therefore, we recommend that you encrypt this file. The Transformation Server supports two encryption methods depending on command line parameters:

- **DPAPI encryption:** Because you must decrypt the file on the same machine where it was encrypted, use this utility to encrypt one server at a time. See [Use Kofax.CEBPM.EncryptConfig.exe](#).
- **RSA encryption:** An algorithm for public key encryption and digital signatures that uses two separate keys. Create a key and encrypt the configuration file on one Transformation Server, and export the key to all the other Transformation Servers. All the Transformation Servers with the exported key installed can access the configuration file. Use this method if you have several Transformation Servers with the same configuration (TASession ID, pool name, and so on). See [Use RSA Encryption](#).

To decrypt the configuration file, see [Decrypt the configuration file](#).

Use Kofax.CEBPM.EncryptConfig.exe

The Kofax.CEBPM.EncryptConfig.exe utility encrypts (-enc) or decrypts (-dec) the CPUserver and appSettings sections of the configuration file. The CPUserver section includes the TotalAgility Session ID. The AppSettings section includes the user ID and password as well as other information. Use the optional -h flag to display help for the command.

Encrypt a File with Kofax.CEBPM.EncryptConfig.exe

Run the utility on each Transformation Server individually.

1. Stop the Transformation Server service.
2. Navigate to the Transformation Server installation directory and open a command Prompt window.

3. Run the following command:

```
Kofax.CEBPM.EncryptConfig.exe -f Kofax.CEBPM.CPUServer.ServiceHost.exe.config -s "appSettings" -p DPAPIProtection -enc
```

Use RSA encryption

Use RSA encryption to encrypt the configuration file, export the encryption key, and install the encryption key file on multiple Transformation Servers. Use this method if you have several Transformation Servers with the same configuration (TAService ID, pool name, and so on).

The following instructions differentiate between the source Transformation Server where you create the key and the target Transformation Servers onto which you import the key.

Prepare the key

Perform these steps on one source Transformation Server.

1. Create the custom RSA key container:

- a. Log on to the Transformation Server with administrator rights.
- b. Open a Command Prompt window.
- c. Navigate to the .NET Framework version 4.5 directory. For example, enter the following command:

```
cd \WINDOWS\Microsoft.Net\Framework\v4.5.*
```

- d. Run the following command:

```
aspnet_regiis -pc "<KeysFile>" -exp
```

where:

- **<KeysFile>** is the name of the key file.
- The **-exp** option makes the key exportable.

2. Run the following command to grant the Transformation Server service user permission to read the <KeysFile> RSA container file.

```
aspnet_regiis -pa "<KeysFile>" "<TSserviceuser>"
```

where:

- **<KeysFile>** is the name of the key file you created in Step 1d.
- **<TSserviceuser>** is the Transformation Server service user.

3. Encrypt the file:

- a. Log on to the Transformation Server as the Transformation Server service user.
- b. Navigate to the installation directory for the Transformation Server and open a Command Prompt window.
- c. Run the following command:

```
Kofax.CEBPM.EncryptConfig.exe -f  
Kofax.CEBPM.CPUServer.ServiceHost.exe.config -s "appSettings" -p  
RSAProvider -enc
```

This command encrypts the CPUServer and AppSettings sections of the configuration file. The CPUServer section includes the TotalAgility Session ID. The AppSettings section includes the user ID, password and other information.

4. Export the key by running the following command:

```
aspnet_regiis -px "<KeysFile>" "c:\keys.xml" -pri
```

where:

- **<KeysFile>** is the default keystore keyContainerName.
- `c:\keys.xml` is the path and file name of the exported key file.

Import the key

Perform these steps on every target Transformation Server.

1. Import the key:
 - a. Log on to the Transformation Server with administrator rights.
 - b. Copy the keys.xml file from the source Transformation Server to the root directory of the target Transformation Server.
 - c. Open a Command Prompt window.
 - d. Run the following command:

```
aspnet_regiis -pi "<KeysFile>" "c:\keys.xml"
```

where:
 - **<KeysFile>** is the default name of the key file.
 - `c:\keys.xml` is the path and file name to the imported key file.
 - e. Delete the keys.xml because it contains the unprotected private key.
2. Run the following command to grant the Transformation Server service user permissions to use the <KeysFile> RSA container file:

```
aspnet_regiis -pa "<KeysFile>" "TSserviceuser"
```

where:
 - **<KeysFile>** is the name of the key file you imported in step 1.
 - **<TSserviceuser>** is the Transformation Server service user.
3. Repeat these steps on all remaining Transformation Servers.

Decrypt the configuration file

1. Stop the Transformation Server service.
2. Navigate to the Transformation Server installation directory and open a command-line window.
3. Run the following command:

```
Kofax.CEBPM.EncryptConfig.exe -f  
Kofax.CEBPM.CPUServer.ServiceHost.exe.config -s "appSettings" -p  
DPAPIProtection -deC
```

Edit the configuration file

Modify the Transformation Server configuration file, **Kofax.CEBPM.CPUServer.ServiceHost.exe.config** if the system configuration has changed, or when you need to resolve a technical or performance issue.

1. If you encrypted the configuration file after you installed the Transformation Server, decrypt the file. See [Decrypt the configuration file](#).

i If RSA encryption is used, decrypt the configuration file only on the source Transformation Server where you initially encrypted the file.

2. Navigate to the installation directory for the Transformation Server and locate **Kofax.CEBPM.CPUServer.ServiceHost.exe.config**.
3. Back up the file and save it in a secure location.
4. Open the configuration file in a text editor.
5. To change the system configuration options, modify the keys in the `<appSettings>` section. The section contains a list of keys for setting configuration options. The ones that can be modified have comments that describe the setting and supported values, as in this example.

```
<!-- Maximum number of instances allowed for Executor Process -->
  <add key="MaxNumberOfTenantProcesses" value="1"/>
```

6. Change the value within the quotation marks to a supported value, as indicated in the comments.
7. To change how errors are reported in the application event log, which can be viewed in the Event Viewer, modify the **<system.diagnostics>** section as follows:

- a. Under **<switches>**, locate the following element:

```
<add name="TraceLevelSwitch" value="Warning"/>
```

By default, the value is set to `Warning`, which reports error and warning messages. Change the value to any of the options listed in the comment to change the type of messages reported.

- b. Under **<sharedListeners>**, locate the following line:

```
<add name="CPUServerLogTxt" type="
Kofax .CEBPM.CPUServer.Common.Diagnostics.DateTimeTaggedTraceListener,
Kofax .CEBPM.CPUServer.Common" initializeData=" Kofax CPUServerLog.log" >
```

To specify a different log file or change the format for **timestamps**, change the value of **initializeData** as shown in the comments in the file.

8. Save and close the configuration file.
9. To re-encrypt the configuration file, run the encryption utility. See [Encrypt and Decrypt the configuration file](#).

i If you used RSA encryption, export the key, and install the encryption key file on any target Transformation Servers imported the original encrypted configuration file.

10. Restart the Kofax Transformation Server service.

Install the NLP language packs manually

If the Transformation Designer is installed on a separate server than the Transformation Server Bundle in your solution, then you need to install the Kofax NLP engine language packs on the machine where Transformation Designer is installed. This is because the Kofax NLP engine language packs are installed by the Transformation Server Bundle only, and these languages are required to use the Kofax NLP functionality in Transformation Designer and in production.

To install the Kofax NLP engine language packs, you need access to the original Kofax TotalAgility installation zip file.

You can install the Kofax NLP engine language packs by following these steps.

1. Navigate to the `TotalAgility\TransformationServer\KofaxTransformation_Salience6.4` path inside the extracted Kofax TotalAgility installation zip file.
2. Double-click on one of the following `.MSP` files depending on what languages you are supporting.
 - **KofaxTransformation_SalienceV6.4.0_LanguageBundle_western-default.**
Run to install English, Spanish, Portuguese, French, and German support.
 - **KofaxTransformation_SalienceV6.4.0_LanguageBundle_western-extended.**
Run to install Italian, Romanian, and Dutch support.
 - **KofaxTransformation_SalienceV6.4.0_LanguageBundle_extended.**
Run this to install Japanese, Chinese, and Korean support.

A Windows Installer window appears and then installs the selected Kofax NLP languages automatically.

The installer window closes when the installation is complete.

3. Optionally, double-click on another language installer if you want to support additional languages.

Upgrade Transformation Server using silent installation

To upgrade the Transformation Designer in silent mode, use the following command, replacing the example content with your own environment.

```
setup.exe /quiet /Upgrade /log installation.log TS_SERVER_SERVICE_URL=http://  
<Server> /TotalAgility/Services/Core/ServerService.svc TS_INSTALLLOCATION="  
<Program Files> \Kofax\TotalAgility\Transformation Server"  
TS_MAIN_DB_CONNECTION_STRING="Server=servername;Database=databasename;User  
Id=sa;Password=password" TS_SERVICE_ACCOUNT=serviceAccountName  
TS_SERVICE_PASSWORD=password TS_STARTSERVICE=TRUE
```

Uninstall the Transformation Server

Uninstall Transformation Server depending on how you have installed it.

- When you install Transformation Server as part of Kofax TotalAgility standard installation, uninstalling TotalAgility will automatically uninstall Transformation Server.
- When you install Transformation Server on a separate system, uninstall the Transformation Server Bundle from the Control Panel.
- To uninstall in a silent mode, do the following:
 - Navigate to the root directory of TransformationServerSetup.exe.
 - Run `TransformationServerSetup.exe / uninstall / quiet`.

The system uninstalls the Transformation Server and automatically creates a log file in the temporary files folder. This log file contains information on errors, if any.

Chapter 4

Reporting Server installation

This chapter describes two methods for installing the Kofax Reporting Server:

- Silent installation of Reporting Server independent of TotalAgility
- Standard installation using the installation wizard.

For development environments, install the Reporting Server where you installed TotalAgility. Otherwise, install the Reporting Server on a separate system in the same domain where you installed TotalAgility.

i If you choose to install the Reporting Server on a separate system in the same domain where you installed TotalAgility, then you must assign the following roles to service account:

- For the Staging database: kfx_staging
- For the data warehouse: kfx_etl, kfx_reader, kfx_advanced_reader

Perform a silent installation

The section describes the silent installation of the Reporting Server, independent of TotalAgility.

See the following table for the silent installation parameters required to install the Reporting Server.

i Parameter names are case-sensitive.

Parameter	Default Value	Description
INSTALLLOCATION	C:\Program Files\Kofax \TotalAgility\ Reporting Server\	Specify the Reporting Server destination directory.
WINSERV_ACCOUNT	no default	Enter the name of the user who will run the Reporting Server. To specify a domain user, enter the user name in the format Domain \User. Ensure that the account details are correct, as under this account Reporting Server authenticates in all places where Windows authentication is used. Example, TotalAgility database. All communication and resource access is run under this account. Therefore, the account under which Reporting Server is running must not be a dummy account.

Parameter	Default Value	Description
WINSERV_PASSWORD	no default	Enter the Password for the user.
MAIN_DB_CONNECTION_STRING	no default	Enter the connection string for the Main database. Example: "Server=<hostname>;Trusted_Connection=Yes;" "Database=TotalAgility;"
AUDIT_DB_CONNECTION_STRING	no default	Enter the connection string for the Audit database.
REPORTING_STAGING_DB_CONNECTION_STRING	no default	Enter the connection string for the Reporting Staging database.
REPORTING_WORKHOUSE_DB_CONNECTION_STRING	no default	Enter the connection string for the Reporting Workhouse database.

1. On the TotalAgility installation media, navigate to **\\TotalAgilityInstall\Reporting\TAReportingService**.
2. Run the following command:

```
msiexec.exe /i KofaxKofax.Reporting.TAService.msi /q WINSERV_ACCOUNT=
%WindowsServiceAccount% WINSERV_PASSWORD=%WindowsServicePassword
% MAIN_DB_CONNECTION_STRING="%MainDBConnectionString%"
INSTALLLOCATION="%InstallLocation%"
AUDIT_DB_CONNECTION_STRING="%AuditDBConnectionString
%" REPORTING_STAGING_DB_CONNECTION_STRING=
"%ReportingStagingDBConnectionString%"
REPORTING_WAREHOUSE_DB_CONNECTION_STRING="%ReportingConnection%"
```

Perform a standard installation

1. On the TotalAgility installation media, navigate to **TotalAgility > Reporting > TAReportingService > Kofax.Reporting.TAService.msi**.
The TotalAgility Reporting Server Setup window opens.
2. Click **Next**.
3. In the End-User License Agreement window, accept the terms in the License Agreement and click **Next**.
4. In the Destination Folder window, select the default folder (C:\Program Files (x86)\Kofax\TotalAgility\Reporting Server\) for the Reporting server or click **Change** to choose another folder.
5. Click **Next**.

6. In the Service Account Setup window, enter the credentials for the user who will run the Kofax TotalAgility Reporting Server service:
 - a. In the **Username** field, enter the username.

i To specify a domain user, enter the username in the format Domain\User.
 - b. Enter and confirm the **Password**.
 - c. Click **Next**.
7. In the Obtaining TotalAgility Configuration window:
 - a. Specify TotalAgility Server service URL in the following format: `http://<server_name>/TotalAgility/Services/Core/ServerService.svc`
Here <server_name> is the TotalAgility server name.

i To install Web Service over SSL, use 'https://' instead of 'http://' in the URL.
 - b. In the Main DB connection string box, enter the connection string for the TotalAgility database.
 - c. Click **Next**.
The system downloads the configuration settings.
8. Click **Install** to begin the installation.
9. Click **Finish**.

Uninstall the Reporting Server

Uninstall the Reporting Server depending on how you have installed it.

- When you install the Reporting Server as part of Kofax TotalAgility standard installation, uninstalling TotalAgility will automatically uninstall the Reporting Server.
- When you install the Reporting Server on a separate system using the Wizard, uninstall the Reporting Server from the Control Panel.
- If you install the Reporting Server in a silent mode, you must do the following to uninstall the Reporting Server in a silent mode:
 1. On the Command Prompt, change the command line to the root directory of the `Kofax.Reporting.TAService.msi` file.
 2. Run `msiexec.exe/quiet/x Kofax.Reporting.TAService.msi/L*V"%LogFileName%".`
The system uninstalls the Reporting Server and automatically creates a log file in the temporary files folder. This log file contains information on errors, if any. You can use "msiexec/help" (Windows installer help) to check options for the installation and logging.

Chapter 5

Integrate Microsoft Dynamics CRM with TotalAgility

You can integrate Microsoft Dynamics CRM and Microsoft Dynamics 365 CRM with TotalAgility . To install both, the users must have the administrator rights.

See also:

- [Dynamics CRM installation](#)
- [Update the Web configuration file for Dynamics CRM](#)

Install Dynamics CRM

Follow the same steps to install Dynamics CRM and Dynamic 365 CRM.

1. Navigate to `\\DynamicsCRMInstall` on the installation media, and double-click **Setup.exe**.
For Dynamics 365 CRM, navigate to `\\Dynamics365CRMInstallation` on the installation media, and double-click `Dynamics365CRM_Setup.exe`.
The installation wizard appears.
2. Click **Next**.
3. In the **CRM Server** field, enter the IP address or machine name of the CRM server.
4. In the **CRM Port** field, enter the port on which CRM is running.
5. To enable SSL (Secure Sockets Layer), select **Use SSL** (default: Clear).
6. In the **Domain** field, enter the domain name.
7. Enter the **Username** and **Password**.
8. Click **Finish**.
The installation starts and registers Event Handler in CRM and places necessary files in Global Assembly Cache (GAC).

Update Web.config for Dynamics CRM

Add the following script for the TotalAgility components to support event handlers in Dynamics CRM and Dynamics 365 CRM:

i If you copy and paste the code from this guide, correct any incorrect line breaks.

```
<configSections>  
<section name="exceptionHandling"  
type="Microsoft.Practices.EnterpriseLibrary.
```

```
ExceptionHandling.Configuration.ExceptionHandlingSettings,
Microsoft.Practices.EnterpriseLibrary.ExceptionHandling,
Version=5.0.505.0,
Culture=neutral,
PublicKeyToken=31bf3856ad364e35" requirePermission="true" />
<section name="loggingConfiguration"
type="Microsoft.Practices.EnterpriseLibrary.Logging.Configuration.LoggingSettings,
Microsoft.Practices.EnterpriseLibrary.Logging,
Version=5.0.505.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" requirePermission="true" />
</configSections>

<loggingConfiguration
name=""
tracingEnabled="true"
defaultCategory="General">
<listeners>
<add name="Event Log Listener"
type="Microsoft.Practices.EnterpriseLibrary.Logging.TraceListeners.
FormattedEventLogTraceListener,
Microsoft.Practices.EnterpriseLibrary.Logging,
Version=5.0.505.0,
Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
listenerDataType="Microsoft.Practices.EnterpriseLibrary.Logging.
Configuration.FormattedEventLogTraceListenerData,
Microsoft.Practices.EnterpriseLibrary.Logging,
Version=5.0.505.0,
Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
source="Total Agility" formatter="Text Formatter"
log="" machineName="." traceOutputOptions="None" />
</listeners>
<formatters>
<add type="Microsoft.Practices.EnterpriseLibrary.Logging.Formatters.TextFormatter,
Microsoft.Practices.EnterpriseLibrary.Logging,
Version=5.0.505.0,
Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
template="Timestamp: {timestamp}{newline}&#xA;Message: {message}
{newline}&#xA;Category: {category}{newline}&#xA;Priority:
{priority}{newline}&#xA;EventId: {eventid}
{newline}&#xA;Severity: {severity}{newline}&#xA;Title:
{title}{newline}&#xA;Machine: {localMachine}
{newline}&#xA;App Domain: {localAppDomain}
{newline}&#xA;ProcessId: {localProcessId}
{newline}&#xA;Process Name: {localProcessName}
{newline}&#xA;Thread Name: {threadName}
{newline}&#xA;Win32 ThreadId:{win32ThreadId}
{newline}&#xA;Extended Properties:
{dictionary({key} - {value}{newline})}"
name="Text Formatter" />
</formatters>
<categorySources>
<add switchValue="All" name="General">
<listeners> <add name="Event Log Listener" />
</listeners>
</add>
</categorySources>
<specialSources>
<allEvents switchValue="All" name="All Events" />
<notProcessed switchValue="All" name="Unprocessed Category" />
<errors switchValue="All" name="Logging Errors & Warnings">
<listeners> <add name="Event Log Listener" />
```

```

</listeners>
</errors>
</specialSources>
</loggingConfiguration>

<exceptionHandling>
<exceptionPolicies>
<add name="Agility Exception Policy">
<exceptionTypes>
<add name="All Exceptions" type="System.Exception, mscorlib,
Version=4.0.0.0,
Culture=neutral,
PublicKeyToken=b77a5c561934e089"
postHandlingAction="NotifyRethrow">
<exceptionHandlers>
<add name="Logging Exception Handler"
type="Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.
Logging.LoggingExceptionHandler,
Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.Logging,
Version=5.0.505.0,
Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
logCategory="General" eventId="100" severity="Error"
title="Total Agility"
formatterType="Microsoft.Practices.EnterpriseLibrary.
ExceptionHandling.TextExceptionFormatter,
Microsoft.Practices.EnterpriseLibrary.ExceptionHandling,
Version=5.0.505.0,
Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
priority="0" />
</exceptionHandlers>
</add>
</exceptionTypes>
</add>
</exceptionPolicies>
</exceptionHandling>

```

Update Web.config for the CRM virtual directory

```

<system.serviceModel>
<bindings>
  <basicHttpBinding>
    <binding name="BasicHttpBinding_Service" openTimeout="00:10:00"
closeTimeout="00:10:00"
sendTimeout="00:10:00" receiveTimeout="00:10:00" allowCookies="true"
maxBufferSize="2147483647"
maxReceivedMessageSize="2147483647" maxBufferPoolSize="524288">
      <readerQuotas maxDepth="2147483647" maxStringContentLength="2147483647"
maxArrayLength="2147483647" maxBytesPerRead="2147483647"
maxNameTableCharCount="2147483647" />
      <security mode="TransportCredentialOnly">
        <transport clientCredentialType="None" />
      </security>
    </binding>
  </basicHttpBinding>
</bindings>
<client>
  <endpoint name="CoreIntegrationEventServiceEndpoint"
binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_Service"

```

```
contract="Agility.Server.Core.Model.Interfaces.Services.IIntegrationEventService"  
address="http://<TotalAgility server name or IP Address>/TotalAgility/Services/Core/  
IntegrationEventService.svc"/>  
  </client>  
</system.serviceModel>
```

i Replace <TotalAgility server name or IP Address> with the IP Address of TotalAgility.

Chapter 6

Integrate Microsoft Dynamics AX with TotalAgility

To install Dynamics AX,

- Users created in TotalAgility must have Deployment Administrator rights.
- If a user does not use the *default Deployment Administrator* to install the TotalAgility Dynamics AX integration, the user must meet the following conditions:
 - Be the system administrator in AX.
 - Have full CAL access.

Failure to meet the preceding criteria generates the following error message during installation: "System unable to process request error."

1. Navigate to `\\DynamicsAXInstall` on the installation media and double-click **Setup.exe**. The TotalAgility for Dynamics AX Setup wizard appears.
2. Click **Next**. The window displays a list of prerequisite software for Dynamics AX.

i If the required software is not installed, first install the software and then install Dynamics AX. If using Dynamics AX 2009, install .NETFramework 3.5. If using Dynamics AX 2012, install .NETFramework 4.0.

3. Click **Next**. The Destination window appears.
4. Use the information in the following table to specify file paths in the Destination folder:

Destination Folder	Sample Path for Dynamics AX 2009	Sample Path for Dynamics AX 2012
DAX website Physical Location	C:\inetpub\wwwroot\ \MicrosoftDynamicsAXAif50\	C:\Program Files\Microsoft Dynamics AX\60\AifWebServices
DAX website URL	Default Web Site/ MicrosoftDynamicsAXAif50/	Default Web Site/ MicrosoftDynamicsAXAif60/
DAX Client Physical Location	C:\Program Files\Microsoft Dynamics AX\50\Client\Bin\	C:\Program Files (x86)\Microsoft Dynamics AX \60\Client\Bin
DAX Server Physical Location	C:\Program Files\Microsoft Dynamics AX\50\Server \DynamicsAx1\Bin	Not Applicable

5. Click **Next**. The Credentials window appears.
6. Enter your **Username** and **Password** to associate with DAX Application pool.

7. Click **Next**.

The system displays the installation status and a summary of installation report when installation is complete.

8. Click **Finish**.

❗ If you are using 64 bit operating system and Dynamics AX 2009 32 bit application, enable the Application Pool account associated with the DAX Communicator site. In the IIS Manager, click `Application Pools > DAXAppPool > Advanced Settings` and set `True` for `Enable 32-Bit Applications`.

Create Dynamics AX service reference to the TotalAgility web service

As AOT (Application Object Tree) is in the Development Workspace, ensure to deploy the Development Workspace to add in references. Otherwise, you cannot integrate TotalAgility with Dynamics AX. See the following URL for instructions: <http://msdn.microsoft.com/en-us/library/gg846350.aspx>.

Create Dynamics AX 09 service reference to the TotalAgility web service

1. Start Dynamics AX 09.
2. Click **AOT** (Application Object Tree) and press **Ctrl+D**.
3. In the application object tree, Right-click **References** and select **Add service reference**.
4. Complete the **Add service reference** window with the following information:
 - a. WSDL URL: Enter the web URL of the DynamicsAxIntegrationService within the Agility IIS web application, for example, `http://Server/Agility.Server.Web/Services/SDK/DynamicsAxIntegrationService.svc`.
 - b. .NET code namespace: **KtaEventsService**.
 - c. Reference name: **KtaEventsService**.
 - d. Service description: Description of the service reference.
5. Click **OK**.

Create Dynamics AX 12 service reference to the TotalAgility web service

1. Start Dynamics AX 12.
2. Click **AOT** (Application Object Tree) and press **Ctrl+Shift+W**.
3. In the application object tree, right-click **References** and select **Add Reference**.
4. Browse to the TotalAgility assembly, KtaEvents.Services.dll which was installed previously. For example,
`C:\Program Files (x86)\Microsoft Dynamics AX\60\Client\Bin`
5. Click **OK**.

Add a reference in Dynamics AX

Add a reference to the `Agility.Server.Integration.Common.dll` assembly in Dynamics AX.

In Dynamics AX 09

1. Right-click **References** and select **Add reference**.
The assembly browsing form opens.
2. Browse to the `... \client\bin` directory of the Dynamics AX 09 installation. For example, `C:\Program Files (x86)\Microsoft Dynamics AX\50\Client\Bin`
3. Select the **Agility.Server.Integration.Common.dll** assembly and click **OK**.
The newly added assembly appears under references.

In Dynamics AX 12

1. Right-click **References** and select **Add reference**.
2. Browse to the TotalAgility assembly, `Agility.Server.Integration.Common.dll`, that was installed previously. For example, `C:\Program Files (x86)\Microsoft Dynamics AX\60\Client\Bin`.
The newly added assembly appears under references.
3. Click **OK**.

Edit the service configuration file for Dynamics AX 12

1. Browse to the **client\bin** directory of the Dynamics AX where the WCF service configurations file, `KtaEvents.Services.dll.config` was copied by the installer.
2. Edit the endpoint to point to the valid TotalAgility Service for Dynamics AX notifications (... `Services/SDK/DynamicsAxIntegrationService.svc`).

Copy files manually

To successfully add a Dynamics AX 2012 R2 site in TotalAgility, you must perform the following steps manually:

1. Open Microsoft Dynamics AX 2012 and navigate to Dynamics AX server folder.
2. Copy version 6.2.0 of `Microsoft.Dynamics.BusinessConnectorNet.dll` and paste it to the bin directory of the `DAXCommunicatorService` that you install on to the Dynamics AX server.
3. On your TotalAgility installation media, navigate to `\\TotalAgilityInstall\DAXInstallation\Agility.Server.Integration.DynamicsAx.Web\Dax2012R2`.
4. Copy `Web.config` and paste it to the following location on your DAX Server:
`<\\Microsoft Dynamics AX\60\AifWebServices\DAXCommunicatorService>`
The service uses the 6.2.0 version of the dll from the `Web.config`.

i For DAX 2012 R3, the `Web.config` file needs updated to use 6.3.0 version of `Microsoft.Dynamics.BusinessConnectorNet.dll`.

Import the TotalAgility connector class into Dynamics AX

1. In the AOT, click **Import** or press Ctrl+Shift+I.
2. Click **Browse** and navigate to the Dynamics AX Setup installation folder (in the Program Files(x86) or Program Files directory). For example,
C:\Program Files\Dynamics AX Setup
3. Select the XPO class, such as Class_KtaController.xpo.
4. Click **OK** to initiate the import or compilation process.

i Once the class is imported, the Status tab in the compiler output page displays any errors.

Edit database X++ event methods

You can edit the database X++ event methods in the DAX Development Workspace under Classes and Application folders.

1. To alter the Application CUD (create, update and delete) class event methods, call the custom class method `EventChangeNotifyKtaWebService` when a CUD event has been performed within Dynamics AX.
2. Edit the Application class methods (**InsertLog**, **DeleteLog** & **UpdateLog**) by adding a single line to the appropriate location within each method:

- **Insertlog method:** new

```
ktaController().EventChangeNotifyKtaWebService("Create", recordInserted,  
null, conNull(), recordInserted.RecId);
```

- **Deletelog method:** new

```
ktaController().EventChangeNotifyKtaWebService("Delete", recordDeleted,  
null, conNull(), recordDeleted.RecId);
```

- **Updatelog method:** new

```
ktaController().EventChangeNotifyKtaWebService("Update", recordOrig,  
recordUpdated, changedFields, recordUpdated.RecId);
```

i The onsite AX Administrator registers the Databaselog events for various AX documents. For example, if the *Customer*, *SalesOrder* and *Purchase Requisition* documents have the Insert, Update and Delete events registered against them, and when one of these events execute for one of these documents, TotalAgility is informed through a WCF call.

Register the database log events

1. Open Microsoft Dynamics AX 2012.
2. In the left hand panel, expand the configure buttons » and select System Administration.
3. In the System Administration page, under Setup, click Database logsetup. Database log window appears.
4. Click **File> New**. Logging Database changes wizard appears where you can add and remove tables and fields from the database log.

5. Click **Next**. Tables and Fields window appears.
6. Select the **Show all tables** radio button.
7. In the **Tables and Fields** window, under **General Ledger**, select **Customers / Vendor Tables** as required and click **Next**.
8. Select the type of change (insert, update, delete, or rename) to register in the database log by selecting the appropriate check box for the table.
9. Click **Next**. Logging Database changes window appears with the details of the selected tables and fields.
10. Click **Finish**.

Verify the Application Pool account

Verify that the Application pool account is using the correct Business Connector.NET (BC.NET) Windows credentials.

1. On the Start menu, select **All Programs > Accessories** and click **Run**.
2. Enter **inetmgr** and click **OK**.
The IIS Manager appears.
3. Navigate to Application Pool accounts.
4. Select the **DAXKTA** account and verify that the identity is the same as the BC.NET Windows credentials.
5. If the credentials differ, do the following:
 - a. On the Actions panel, click **Advanced Settings**.
 - b. Select the identity and click **Edit**.
6. Click **OK**.
The Application Pool Identity window appears.
7. Click **Set**.
The Set Credentials window appears.
8. Enter the user credentials that are associated with the BC.NET account within Dynamics AX. (The Kofax WCF service uses the BC.NET account to connect to Dynamics AX).
9. Click **OK**.

Chapter 7

Integrate Micro Focus Content Manager with TotalAgility

This chapter provides the instructions for integrating Micro Focus Content Manager with TotalAgility Integration Server.

Prior to installing Content Manager server, install the following software:

- IIS
- .NET Framework 4.6.1
- TotalAgility (optional)

Identify the Content Manager SDK Version

These instructions only apply to Content Manager version below 8.

1. Navigate to the **C:\Program Files\Kofax\TotalAgility** directory.
2. Right-click **TrimSDKPIA20.dll** and select **Properties**.
The TrimSDKPIA20.dll properties window appears.
3. On the properties window, select the **Version** tab.

The File Version displays the current Content Manager version. For example, 7.3.0.

i For TRIM SDK 7.3.0 and later, you will require to enter this number in the `<assemblyBinding>` section of the Web.config (see [Set up the Micro Focus Content Manager server](#)).

Set up the Micro Focus Content Manager server

To set up the Content Manager server, install and configure TotalAgilitytrimCommunicatorService and then configure the event handler in Content Manager system.

Install and configure TotalAgilityTrimCommunicatorService

To install and work with Micro Focus Content Manager with version 9.4 or higher, do the following.

1. Log on to the Content Manager server with an account with Local Administrator privilege.
2. Navigate to `\\ContentManagerInstallation` on the Content Manager installation media, right click on the executable **Setup.exe** and select **Run as administrator**.
The User Account Control window appears.

3. Click Yes.

The installation wizard appears.

4. Click Next.

The setup is ready to install the TotalAgility integration components.



- If the Trim SDK already exists in your system, the **Trim SDK Detected** checkbox is by selected by default. Click **Finish**.
- If the Trim SDK does not exist in your system, the **Trim SDK Detected** checkbox is clear by default and an error message appears. Also, the **Finish** button is not enabled. To resolve this error, click **Cancel** and run Install CM_COMComponents_x64.msi from the Content Manager installation media to get the Trim SDK. Rerun the [Micro Focus Content Manager server setup](#).

5. Configure the Web configuration file as follows:

- In C:\Program Files\Kofax\TotalAgility\TotalAgilityTrimCommunicatorService, open the **Web.config** file in the text editor.

- Locate the configuration > runtime tag and edit the <assemblyBinding> section as follows:

```
<assemblyBinding>
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
<dependentAssembly>
<assemblyIdentity name="TrimSdkPIA20"
publicKeyToken="533fc65e30e543fa" />
<bindingRedirect oldVersion="6.2.2.8614"
newVersion=" <latest version> " />
</dependentAssembly>
</assemblyBinding>
```

Replace the <latest version> with the version of **TRIM SDK**. See [Integrate Content Manager with TotalAgility](#).

- Edit the <appsettings> as follows:

```
<appSettings>
<add key="TrimDocumentRecordType"
value="DocumentRecordType" />
<add key="TrimFolderRecordType"
value="FolderRecordType" />
<add key="WorkGroupServerName" value="ServerName" />
</appSettings>
```

- Replace the DocumentRecordType with the value taken from the Content Manager server by checking the record type of Document.
- Replace the FolderRecordType with the value taken from the Content Manager server by checking record type of Folder.

- Replace the ServerName with the computer name of the Server.
To identify the computer name of the server, open **Windows Explorer**, right-click **Computer** and click **Properties**. In the Computer name, domain, and workgroup settings group, click **Change Settings**. Copy the computer name.

❗ When you first install the TotalAgility Micro Focus Content Manager, a TrimIntegrationAppPool with a local system identity is created. This causes an error if the Content Manager server is remote.
To resolve this error, you must update the TrimIntegrationAppPool identity to account with Administrator permission.

Configure the event handler in Content Manager

Configure TotalAgility events for actions in the Content Manager System.

1. Copy the following DLLs.
 - If using Content Manager version below 8, copy the following DLLs to the TRIM binaries directory (usually c:\Program Files\Hewlett-Packard\HP Records Manager.)
 - **Agility.Server.Integration.Trim.dll**
 - **Agility.Server.Integration.Model.dll**
 - **Agility.Server.Integration.Common**
 - If using Content Manager version 8 and above, copy **Agility.Server.Integration.Trim.dll** to the TRIM directory.
2. For Content Manager to fire events in TotalAgility, register the **Agility.Server.Integration.Trim.dll** file using RegAsm (`regasm /codebase Agility.Server.Integration.Trim.dll`).
3. To register the dll:
 - a. Open **Content Manager**.
 - b. Select **Tools > Context Administration > External Links**.
The Content Manager Context External Links window appears.
 - c. Click **New Record AddIn**.
The Record AddIn Properties window appears.
 - d. Enter a Link Name.
 - e. In the **COM Add-In PROGID** field, enter the ProgId, **Agility.Server.Integration.Trim.TrimIntegrationEventHandler**.
 - f. Select **Add-In supports a multi-threaded environment**.
 - g. Click **OK**.
The Content Manager Context External Links window displays the new link.
 - h. Select the link and click **Properties**.
The Record AddIn Properties window appears.
 - i. Click the **Used By** tab.

- j. Check the Document and File Folder under Record list and click **OK**.
This configures the Event handler on Content Manager.
4. In the Explorer, find **trim.exe.config** file, open it in a text editor and add or replace the following tags:

i If you cut and paste code from this guide, correct any incorrect line breaks.

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<configSections>
<section name="loggingConfiguration"
type="Microsoft.Practices.EnterpriseLibrary.Logging.Configuration.LoggingSettings,
Microsoft.Practices.EnterpriseLibrary.Logging, Version=5.0.505.0,
Culture=neutral, PublicKeyToken=31bf3856ad364e35" requirePermission="true" />
<section name="exceptionHandling"
type="Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.Configuration.
ExceptionHandlingSettings,
Microsoft.Practices.EnterpriseLibrary.ExceptionHandling,
Version=5.0.505.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35"
requirePermission="true" />
</configSections>
<exceptionHandling>
<exceptionPolicies>
<add name="Agility Exception Policy">
<exceptionTypes>
<add name="All Exceptions" type="System.Exception, mscorlib, Version=4.0.0.0,
Culture=neutral, PublicKeyToken=b77a5c561934e089"
postHandlingAction="NotifyRethrow">
<exceptionHandlers>
<add name="Logging Exception Handler" type=
"Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.Logging.
LoggingExceptionHandler,
Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.Logging,
Version=5.0.505.0,
Culture=neutral, PublicKeyToken=31bf3856ad364e35" logCategory="General"
eventId="100" severity="Error" title="Total Agility"
formatterType=
"Microsoft.Practices.EnterpriseLibrary.ExceptionHandling.TextExceptionFormatter,
Microsoft.Practices.EnterpriseLibrary.ExceptionHandling, Version=5.0.505.0,
Culture=neutral, PublicKeyToken=31bf3856ad364e35" priority="0" />
</exceptionHandlers>
</add>
</exceptionTypes>
</add>
</exceptionPolicies>
</exceptionHandling>
<system.serviceModel>
<bindings>
<basicHttpBinding>
<binding name="BasicHttpBinding_Service" openTimeout="00:10:00"
closeTimeout="00:10:00"
sendTimeout="00:10:00" receiveTimeout="00:10:00" allowCookies="true"
maxBufferSize="2147483647"
maxReceivedMessageSize="2147483647" maxBufferPoolSize="524288"> <readerQuotas
maxDepth="2147483647"
maxStringContentLength="2147483647" maxArrayLength="2147483647"
maxBytesPerRead="2147483647"
maxNameTableCharCount="2147483647" />
<security mode="TransportCredentialOnly">
<transport clientCredentialType="Windows" />

```

```
</security>
</binding>
</basicHttpBinding>
</bindings>
<client>
<endpoint name="CoreIntegrationEventServiceEndpoint"
binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_Service"
contract="Agility.Server.Core.Model.Interfaces.Services.IIntegrationEventService"
address="http://<TotalAgility server name or IP Address>/TotalAgility/Services/
Core/IntegrationEventService.svc"/>
</client>
</system.serviceModel>
</configuration>
```

i Replace <TotalAgility server name or IP Address> with the IP Address of the TotalAgility server.

Chapter 8

Integrate Kofax SignDoc with TotalAgility

This chapter provides the instructions for integrating Kofax SignDoc with TotalAgility.

Set up the Kofax SignDoc server

Configure the Kofax SignDoc server to point to the relevant TotalAgility server to allow callback to occur when the signing is completed. The SignDoc server can be configured per SignDoc account to allow the same SignDoc server to callback to multiple TotalAgility servers.

Refer to the section on integration with TotalAgility in SignDoc documentation to know how to set up the SignDoc server to point to the TotalAgility server.

Chapter 9

KCM Proxy installation on the Web server

This chapter describes three methods for installing the KCM Proxy Web server:

- **Silent installation**
- **Standard installation**
- **Docker installation**

Ensure that the Microsoft plugin, Web Platform Installer is installed before installing the KCM Proxy Web server. You can install the Microsoft Web Platform from the Microsoft website.

Silent installation

1. On the installation media, navigate to `\\KCMProxyInstallation`.
2. Launch a Command Prompt window and run **Setup.exe** and enter the KCM Server URL in the following format: `http(s)://<CCMServer>:<Portnumber>`.
Provide the IP address and port number of the KCM server. The installer updates the Web.config with KCM server details and enables the proxy rewrite rules on the web server (IIS).
3. Press **Enter**.
The KCM Proxy is installed in the silent mode.
The system generates a log file at the same location where **Setup.exe** exists.

Standard installation

1. On the installation media, navigate to `\\KCMProxyInstallation` and double-click **Setup.exe**. The **KCM Proxy Configuration** window appears.
2. Enter the **KCM Server URL** in the following format: `http(s)://<CCMServer>:<Portnumber>`.
The Web.config file is automatically updated with the KCM Server IP and the Port number.
3. Click **Configure**.
4. Click **OK**.

Docker installation

While generating the "`dockersetting.env`" file, if the URL is specified in the "KCM Server URL" setting in the Configuration Utility tool, the same URL is used to install KCM Proxy and configure the deployment in the container.

Update the KCM Server URL in TotalAgility Web.config

You can manually update the KCM Server URL in TotalAgility Web.config or run the Configuration tool and update the settings before setting up the integration to KCM.

Manually update the KCM Server URL in TotalAgility Web.config

1. Navigate to the installation directory for the TotalAgility server.
2. In a text editor, open **TotalAgility Web.config** from the following directory:
`\\TotalAgilityInstall\Agility.Server.Web`
3. Locate the following section:

```
<rewrite>
  <rules>
    <rule name="CCMInteractiveProxy" stopProcessing="true">
      <match url="CCM/Proxy/Interactive/(.*)" />
      <action type="Rewrite" url="{http://ccmserver:port}/ccm/Interactive/
{R:1}" />
    </rule>
    <rule name="CCMDesignerProxy" stopProcessing="true">
      <match url="CCM/Proxy/Repository/(.*)" />
      <action type="Rewrite" url="{http://ccmserver:port}/ccm/Repository/
{R:1}" />
    </rule>
    <rule name="ComposerUIJavascriptProxyRule" stopProcessing="true">
      <match url="CCM/Proxy/ccmcomposerui.js" />
      <action type="Rewrite" url="{http://ccmserver:port}/proxy/
ccmcomposerui.js" />
    </rule>
    <rule name="ComposerUICssProxyRule" stopProcessing="true">
      <match url="CCM/Proxy/ccmcomposerui.css" />
      <action type="Rewrite" url="{http://ccmserver:port}/proxy/
ccmcomposerui.css" />
    </rule>
    <rule name="ComposerUIImgProxyRule" stopProcessing="true">
      <match url="CCM/Proxy/img/(.*)" />
      <action type="Rewrite" url="{http://ccmserver:port}/proxy/img/{R:1}" />
    </rule>
    <rule name="CCMDesignerStaticProxyRule" stopProcessing="true">
      <match url="CCM/Proxy/static/(.*)" />
      <action type="Rewrite" url="{http://ccmserver:port}/ccm/static/
{R:1}" />
    </rule>
    <rule name="ComposerUIFontProxyRule" stopProcessing="true">
      <match url="CCM/Proxy/fonts/(.*)" />
      <action type="Rewrite" url="http://{ccmserver:port}/proxy/fonts/
{R:1}" />
    </rule>
  </rules>
</rewrite>
```

4. Replace the `http://<kcmserver>:<port>` with the kcmserver URL.
5. Save and close the configuration file.

Use the Configuration Utility

Run the Configuration Utility and update the configuration settings. See the *Kofax TotalAgility Configuration Utility Guide*. (Navigate to Configuration settings >On-premise >App section).

Install KCM Proxy manually

You can install KCM proxy without using Web platform installer and KCM proxy installer.

1. Install IIS URL Rewrite 2.0.
2. Install Microsoft Application Request Routing 2.5 or higher for IIS.
3. In the IIS Manager, do the following:
 - a. On server level, double-click **Application** request routing cache.
 - b. Click **Server Proxy Settings**.
 - c. Select **Enable Proxy**.
 - d. Click **Apply**.
4. In TotalAgility Web.config, find `{http://ccmserver:port}` and replace with `http://servername:port` where `servername` is the host name of the KCM machine and `port` is the port KCM listed as (default 8081). See the previous section for manually updating the KCM Server URL in TotalAgility Web.config.
5. Uncomment the `<rewrite>` section.
6. Save and close the configuration file.

Chapter 10

Configure HTTPS communication

Configure TotalAgility and Transformation Designer for HTTP communication.

- [Configure TotalAgility for HTTPS communication](#)
- [Configure Transformation Designer for HTTPS communication](#)

Configure TotalAgility for HTTPS communication

Enable SSL (Secure Sockets Layer) communication for the TotalAgility web layer and Kofax TotalAgility Core Worker to communicate with core services and Transformation Server.

You can enable SSL for TotalAgility at the time of installation. However, if you have not enabled SSL at the time of installation, you can do so post installation by running the Configuration Utility available on the installation media. See the *Kofax TotalAgility Configuration Utility Guide*.

i Before changing the bindings in the TotalAgility configuration files, ensure that SSL is enabled for TotalAgility in the IIS.

Enable SSL for the TotalAgility application in IIS

1. Open **Internet Information Services (IIS) Manager**.
2. Right-click the **Default Web Site** and click **Edit Bindings**.
3. Click **Add**.
 - a. On the **Type** list, select **HTTPS**.
 - b. On the **SSL certificate** list, select the certificate.
 - c. If installing a separate web server, additionally specify the **IP address** of the web server, and **Port** number.
 - d. Click **Ok**.
4. Click TotalAgility and click **SSL settings** on the **Features** tab.
 - a. Select the check box for **Require SSL**.
 - b. **Accept** the Client certificates.
 - c. Click **Apply**.

Update the TotalAgility configuration files

Update the following configuration files:

- Web.config

- Agility.Server.Core.WorkerService.exe.config
- Agility.Server.StreamingService.exe.config

Update Web.config

1. Open **Web.config** located at your installed location. The default location is:

C:\Program Files\Kofax\TotalAgility\Agility.Server.Web

2. In `<servicebehaviors>`, update the `httpsGetEnabled` setting as follows:

```
<serviceBehaviors>
  <behavior name="Agility.Server.Web.Services.Behavior">
    <serviceMetadata httpGetEnabled="false" httpsGetEnabled="true" />
  </serviceBehaviors>
```

3. By default `<security mode="TransportCredentialOnly">`. If using HTTPS mode, update the `<security>` settings as follows:

- If using Windows Authentication, comment out the default Windows authentication section:

```
<!-- HTTPS SSL with Windows logon-->
<security mode="Transport">
  <transport clientCredentialType="Windows"/>
</security>
```

- If logging on manually, uncomment the HTTPS section:

```
<!-- HTTPS SSL with application authentication-->
<security mode="Transport">
  <transport clientCredentialType="None" />
</security>
```

4. Perform the above HTTPS transport authentication for all the bindings:

- BasicHttpBinding_TrimCommunicatorService
- BasicHttpBinding_ExchangeNotificationService
- BasicHttpBinding_DynamicsAxCommunicatorService
- BasicHttpBinding_DynamicsAxIntegrationService
- BasicHttpBinding_Service
- CustomBinding_CoreService
- BasicHttpBinding_RemoteLinkedService
- BasicHttpBinding_LicenseServerService
- BasicHttpStreamingBinding_Service
- BasicHttpBinding_DeviceManagerService
- BasicHttpBinding_InsightDataService
- BasicHttpBinding_SigningIntegrationService
- WebHttpBinding_Service
- WebHttpBinding_DeviceManagerService
- WebHttpBinding_SigningIntegrationService
- BasicHttpBinding_SharepointReceiverService

- If using HTTPS authentication, comment out the below HTTP section:

```
<!-- HTTPS SSL with application authentication-->
<security mode="TransportCredentialOnly">
  <transport clientCredentialType="None"/>
</security>
```

- If using HTTP authentication, comment out the above HTTPS section:

```
<!-- HTTP with application authentication-->  
<security mode="TransportCredentialOnly">  
<transport clientCredentialType="None" />  
</security>
```

i For Windows or Manual authentication, the SharePoint Receiver Service must use anonymous binding for both HTTP and HTTPS authentication.

5. The Secure attribute for sensitive cookies in HTTPS sessions is not set by default. This allows a browser to send these cookies in plain text over an HTTP session. To secure the cookies, uncomment the httpCookies tag.

```
<httpCookies requireSSL="true"/>
```

6. To connect TotalAgility to a specific SQL server, ensure that "encrypt=true" for the TotalAgility database connection string.

i If SSL encryption has been turned on globally at the SQL server level using force encryption, you do not need to update the TotalAgility connection strings.
If SSL encryption has been turned on globally at the SQL server level using force encryption, you do not need to update the TotalAgility connection strings.

7. Save the file.

Update Agility.Server.Core.WorkerService.exe.config

1. Open **Core Worker Agility.Server.Core.WorkerService.exe.config** located at your installed location. The default location is:

```
C:\Program Files\Kofax\TotalAgility\CoreWorkerService
```

2. Perform the HTTPS transport authentication for all the bindings:

- BasicHttpBinding_Service
- CustomBinding_CoreService
- BasicHttpBinding_TrimCommunicatorService

3. Save the file.
4. Restart the TotalAgility CoreWorker service.

Update Agility.Server.StreamingService.exe.config

1. Open the **Agility.Server.StreamingService.exe.config** located at your installed location. The default location is:

- **Web server:**

```
C:\ProgramFiles\Kofax\TotalAgility\Agility.Server.Web\bin
\Agility.Server.StreamingService.exe.config
```

- **Application server and combined Web/Application server:**

```
C:\ProgramFiles\Kofax\TotalAgility\CoreWorkerService
\Agility.Server.StreamingService.exe.config
```

i Edit the Agility.Server.StreamingService.exe.config for both the Application and Web servers.

2. In <servicebehaviors>, update the httpsGetEnabled setting as follows:

```
<serviceBehaviors>
  <behavior name="Agility.Server.Web.Services.Behavior">
    <serviceMetadata httpGetEnabled="false" httpsGetEnabled="true" />
  </serviceBehaviors>
```

3. By default, <security mode="TransportCredentialOnly">. If using HTTPS mode, update the <security> settings (for Windows authentication or logging on manually) as follows:

```
  <!-- HTTPS SSL with Windows logon-->
  <security mode="Transport">
    <transport clientCredentialType="None"/>
  </security>
```

4. Perform the HTTPS transport authentication for all the bindings as follows:

- **WebHttpExportBinding_Service**

```
<binding name="WebHttpExportBinding_Service" transferMode="StreamedResponse">
  <security mode="Transport">
    <transport clientCredentialType="None">
  </transport>
  </security>
</binding>
```

- **WebHttpImportBinding_Service**

```
<binding name="WebHttpImportBinding_Service" transferMode="StreamedRequest">
  <security mode="Transport">
    <transport clientCredentialType="None">
  </transport>
  </security>
</binding>
```

- **BasicHttpStreamingBinding_Service**

```
<binding name="BasicHttpStreamingBinding_Service" transferMode="Streamed">
  <security mode="Transport">
    <transport clientCredentialType="None">
  </transport>
  </security>
</binding>
```

- **BasicHttpBinding_Service**

```
<binding name="BasicHttpBinding_Service">
  <security mode="Transport">
    <transport clientCredentialType="Windows" />
```

```
</security>
</binding>
```

- **BasicHttpStreamingBinding_CoreService**

```
<binding name="BasicHttpStreamingBinding_CoreService" transferMode="Streamed"
<binding name="BasicHttpStreamingBinding_CoreService" transferMode="Streamed"
<security mode="Transport">
  <transport clientCredentialType="Windows" />
</security>
</binding>
```

i The streamed transfer mode causes the Microsoft WCF runtime to enforce some restrictions on security. The Windows authentication is not possible with streamed transfer mode. Therefore, we recommend that you use anonymous authentication. However, TotalAgility always validates the session ID before serving a request.

- **CustomBinding_CoreService**

```
<binding name="CustomBinding_CoreService">
<!--
  <httpTransport authenticationScheme="Negotiate" for http with windows
  authentication
  <httpsTransport authenticationScheme="Anonymous" for https with None
  authentication
  -->
  <httpsTransport authenticationScheme="Anonymous" allowCookies="true"
  maxBufferSize="2147483647" maxReceivedMessageSize="2147483647"
  maxBufferPoolSize="524288" />
</binding>
```

5. Change the `<baseAddresses>` from http to https.
6. Save the file.
7. Restart the TotalAgility Streaming Service to apply the new settings.

Configure the Transformation Designer for HTTPS communication

Update the Kofax Transformation Designer to use SDK SVC accessed via SSL by updating the connection within Kofax Transformation Designer options. For Kofax Transformation Designer, you need to do the following for HTTPS communication:

- Make sure you have installed a certificate that is trusted by the client on the server.
- If the Transformation Designer server is installed on-premise but is not part of a domain, disable Windows Authentication for `BasicHttpBinding_Service` and `WebHttpBinding_Service`.
- Specify the URL for Transformation Designer for HTTPS as follows:
 - For Azure: `https://<Azure host name>/Services/SDK`
 - For other configurations: `https://<host name>/TotalAgility/Services/SDK`

Chapter 11

Install TotalAgility License Proxy

TotalAgility License Proxy enables unconnected Scan Workstations and/or other TotalAgility components to get licensing from the TotalAgility Licence server.

We recommend that you install TotalAgility License Proxy on the machine where VRS Elite server is installed. Otherwise, you will need to run the license utility on each workstation and configure the server to point to the proxy machine.

Do not install the Licence Proxy on the same computer as the Licence server (computer running the 'Kofax License Server' service). The Licence Proxy must run on a separate computer, because it needs to route traffic to the licence server. As part of the License Proxy setup, the installer checks the local computer for the TotalAgility License Server, stops the service and sets the startup type to "Disabled".

You can install the License Proxy manually or when installing TotalAgility.

1. To install manually, on the Installation media, navigate to `\TotalAgilityInstall\ Licensing\Installs` and run `KofaxKofax.Licensing.TotalAgility.Proxy.Installer.msi`. TotalAgility. TheKofax TotalAgility License Proxy Setup wizard opens.
2. Click **Next**.
3. In the **End-User License Agreement** window, accept the terms in the License Agreement and click **Next**.
4. In the **Destination Folder** window, select the default path (`C:\Program Files (x86)\Kofax\TotalAgility License Proxy\`) where the Kofax TotalAgility License Proxy will be installed or click **Change** to choose another folder.
5. Click **Next**.
6. In the **Service account setup** window, enter the credentials for the user who will run the TotalAgility License Server service:
 - a. In the **Username** field, enter the user name.
To specify a domain user, enter the user name in the format `Domain\User`.
 - b. Enter and confirm the password.

i This account must have access to the specified TotalAgility URL. These credentials are used for Kofax License Proxy service.
 - c. Click **Next**.

7. In the **TotalAgility connection setup** window:

- a. Enter the URL of the License Server where the configuration settings reside.

Use the following format: `http://<server_name>/TotalAgility/Services/Core/LicenseServerService.svc` where `<server_name>` is the TotalAgility server name.

i If using SSL, you must have a trusted, valid certificate.

- b. Enter the System Session ID.

Obtain the Session ID value from the TotalAgility Designer(System Settings>Settings page).

- c. Click **Next**.

The system downloads the settings.

8. Click **Install** to begin installation.

9. Click **Finish**.

Once the Kofax TotalAgility License Proxy for VRS Server is installed, you can verify if the proxy is working properly by navigating to `C:\Program Files\Kofax\Imgctls\bin\Application` and running `KSALicenseUtility`. If the proxy is configured properly, the license information appears in the KofaxLicense Utility user interface; otherwise, an error appears. You may need to reconfigure the System Session ID to match with the TotalAgility Server.

Modify the TotalAgility license proxy information

You can modify the TotalAgility license proxy information after the installation, in one of the following ways.

- Run the `Kofax.Licensing.TotalAgility.ProxyConfig.exe` typically located at `C:\Program Files (x86)\Kofax\TotalAgility License Proxy\`. For example, if you regenerate the system session ID in TotalAgility, the same session ID must be reflected in the License Proxy configuration.
- Use command line parameters. Replace the parameters with the following values, if needed.

Parameter	Value
/URL	TotalAgility URL
/sessionID	System Session ID for the specified user.
/retrySpan	Length of time to retry connections to Kofax TotalAgility. Format is that accepted by <code>TimeSpan.Parse</code> , for instance "00:00:30" represents the default of 30 seconds.

Parameter	Value
/silent	Enables silent mode for configuration utility. User Interface does not appear.

For example, `Kofax.Licensing.TotalAgility.TenantProxyConfig /url https://tenantSpecific /sessionId {66FFD7D5-F618-4BEE-903A-54C151671BC8} /retrySpan:00:05:00.`

i When you run the command with any invalid parameters an error message is sent to the standard error file.

Modify the TotalAgility license proxy information

You can modify the TotalAgility license proxy information after the installation, in one of the following ways.

- Run the `Kofax.Licensing.TotalAgility.ProxyConfig.exe` typically located at `C:\Program Files (x86)\Kofax\TotalAgility License Proxy\`. Example: If you regenerate the system session ID in TotalAgility Designerr the same session ID must be reflected in the License Proxy configuration.
- Use command line parameters. Replace the parameters with the following values, if needed.

Parameter	Value
/URL	TotalAgility URL
/sessionId	System Session ID for the specified user.
/retrySpan	Length of time to retry connections to TotalAgility. Format is that accepted by <code>TimeSpan.Parse</code> , for instance "00:00:30" represents the default of 30 seconds.
/silent	Enables silent mode for configuration utility. User Interface does not appear.

For example, `Kofax.Licensing.TotalAgility.TenantProxyConfig /url https://tenantSpecific /sessionId {66FFD7D5-F618-4BEE-903A-54C151671BC8} /retrySpan:00:05:00.`

i When you run the command with any invalid parameters an error message is sent to the standard error file.

Chapter 12

Configure VRS Elite for TotalAgility

Install Kofax VRS and configure the VRS license server. Refer to the *Kofax VRS Elite Installation Guide* for more details.

Kofax VRS Basic or Professional OEM installations

If your scanner includes an OEM version of VRS Basic or Professional, install VRS by running **setup.exe** on the scan station. The VRS software is automatically activated based on the attached scanner model.

Standalone installations

If you purchased a standalone VRS license, install VRS by running **setup.exe** and select **Standalone** as the setup type. When prompted, specify the part number (such as VP-P005-0001), product code, and serial number to activate the software.

i VRS remains activated on the workstation unless you manually deactivate it.

Kofax VRS Elite licensing managed by the TotalAgility License Server

Use this configuration to manage VRS licenses through the TotalAgility License Server while also enabling VRS Elite shared profiles and auto profile training data.

This configuration requires installation of the VRS Elite 5.1.2 or higher.

i This configuration may be convenient if you have a large number of scanners.

Install VRS Server

1. Run **setup.exe** from the VRS Elite installation media.
2. When prompted, select **Server** as the setup type.

3. Confirm the TotalAgility license server information.

i If the VRS Server does not have a direct connection to the TotalAgility license server, you need to install a license proxy.

4. Complete the steps in the installation wizard.
5. Use the generated deployment Kofax VRS.msi to install VRS on the scan stations. Refer to the *Kofax VRS Elite Installation Guide* for details.

Use Kofax VRS Elite with the TotalAgility Scan Client



After you install VRS Elite, Kofax Software VRS - TWAIN appears in the list of scanners when you scan a document in TotalAgility. See the *TotalAgility Scan Client help* for more information.

Chapter 13

Kofax Web Capture Service installation

Install the Kofax Web Capture Service either at the default location or to a custom location.

Install at the default location

1. When opening a scan-enabled form for the first time, a prompt appears asking you to install the new Web Capture Service. See *Build a Scan Create New Job form in TotalAgility Help*.
2. Click **Run**.
3. Select **Save As** if you want to keep a copy of the msi installer. The msi installer can be used for Enterprise central deployment scenarios.
4. Refresh the page once installation completes.
5. The View and Change Settings icon  on the Scan Create New Job form becomes available after page refresh.
6. The Kofax Web Capture Service icon  in the System Tray icons indicates if the service is running.

Install at custom location

For enterprise deployment scenarios where a custom Web Capture service installation location is required, install Web Capture service as follows.

On the Command Prompt, type the following command:

```
msiexec /i Kofax.WebCapture.Installer.msi INSTALLFOLDER=<Installation Folder>
```

Use the Web Capture Service on multiuser environment

You can use the Web Capture Service on multiuser environments, such as MS Terminal Server and Citrix. Multiple users can work with Web Capture Service at the same time from different Windows logon sessions.

Use the Web Capture Service on MS Terminal Server

When using a Terminal Server, users can connect to the scan server simultaneously and perform scanning tasks or import files in parallel. The Web Capture Service Host determines who exactly has

made the request and forwards the request to the appropriate Web Capture Service Worker. The Web Capture Service Worker then works with devices and files that are available to the specific user.

i The Web Capture Service can only work with scanners attached to a remote Terminal Server; it cannot work with locally connected scanners.

Similarly, for file import, the Web Capture Service provides access to files on a Terminal Server.

Use the Web Capture Service on Citrix

When both the Browser app and Web Capture Service are installed on the Citrix Server, the Web Capture Service physically runs on a remote Citrix server, while a scanner is connected to the client user's computer. This works transparently for Web Capture Service when Citrix TWAIN Redirection is enabled.

i The number of simultaneously active user sessions for one Citrix Server is limited to 50 sessions.

Install the Web Capture Service as Windows Service

To deploy and upgrade the Web Capture Service installed as Windows Service, you must have Administrator rights.

To install the Web Capture Service as a Windows Service, enable the multiuser support features by using the `INSTALLASSERVICE` command line option as follows:

```
msiexec /I Kofax.WebCapture.Installer.msi INSTALLASSERVICE=1
```

The MSI installation package is available in the TotalAgility installation folder at:

```
\\TotalAgilityInstall\Agility.Server.Web\Forms\Controls\Capture\external  
\webcapture
```

Upgrade the Web Capture Service

To upgrade the Web Capture Service installed as Windows Service, use the same command line parameter that you used for installing the Web Capture Service.

i You cannot upgrade the Web Capture Service installed as a Windows Service to the standalone version. If you try to do so, the following message appears: This application cannot be installed because you already have Web Capture Service installed as Windows service.

However, you can upgrade from the standalone installation to Windows.

Chapter 14

Scan Agent Service installation

The Scan Agent Service is offered through lightweight local agents that can be deployed through an msi file included in the TotalAgility installation media.

You must have sufficient privileges to install system services, otherwise the Scan Agent Service (ScanAgentService) cannot be installed.

Service account to use for Scan Agent Service:

If TotalAgility is configured to use Windows authentication then Active Directory account must be specified that can authenticate within TotalAgility. Otherwise, the LocalSystem account can be used.

As Scan Agent Service needs access to user profile specific folders (to access scanned images) then service account that is used for Scan Agent Service must have access to different user profiles. This means that this account must have administrative privileges. For example, when Scan Agent Service is installed on terminal server and/or different users (scan operators) use the same computer.

If Scan Agent Service is going to be deployed to end user computer then you may not require administrator privileges. For example, if Scan Agent Service is going to upload images only for a particular user then you can install Scan Agent Service under this user account.

Standard installation

1. On the installation media, navigate to `\\ScanAgentService`.
2. Double-click **Kofax.TotalAgility.ScanAgentService.Installer.msi**.
The Kofax TotalAgility Scan Agent Service Setup wizard starts.
3. Click **Next**.
4. In the **End-user License Agreement** window, select **I accept the terms in the License Agreement**.
5. Click **Next**.
6. In the **Destination Folder** window, either accept the default location where the Scan Agent Service must be installed, or click **Change** to choose another folder.
7. Click **Next**.
8. In the **Service account setup** window, specify the logon account (Windows account) for the Kofax TotalAgility Scan Agent service.
9. Click **Next**.
10. Click **Install** to begin installation.
Once installed, a local service, "Kofax TotalAgility Scan Agent Service", is created on the workstation. A companion "Scan Agent Monitor" is available, which can be used to monitor job upload status.

Scanning with Scan Agent Service

The status bar of the Scan Create New Job form indicates if the session is connected to Scan Agent Service.

The Scan create new job form offloads actual upload of images to Scan Agent Service. However if image enhancement is enabled, the Scan create new job form performs image processing in a regular way.


Once image processing operation (if any) is done, the "Create Job" button becomes available, even if images have not been completely uploaded to the server. When you click "Create Job", the job appears in the Scan Agent Monitor.

The Scan Agent Monitor can be used to monitor job upload status. The job upload statuses include:

- **Pending:** Job is being prepared for upload.
- **In Progress:** Job is currently being uploaded.
- **Finished:** Job has successfully being uploaded.
- **Error:** Job encountered an error and has been stopped.
- **Paused:** Job has been paused.

Depending on the job status, the following actions are available.

- **Abort:** Aborts and cancels the corresponding job, and prompts you for a TotalAgility user account to cancel the job with.

 This action uses a separate TotalAgility user session; if "Allow Multiple Logon" is not enabled, the abort action ends any other session using the same user account.

- **Pause:** Pauses the upload session for the job. You must explicitly resume a paused job.
- **Retry:** Queues uploading job again if the job encounters an error. This action helps in recovering from an upload error.
- **Resume:** Resumes a paused job.
- **Clear Completed:** Removes all uploaded complete jobs from the list.

Chapter 15

Launch TotalAgility

1. Enter the following URL in the browser:
`http://<TotalAgility server hostname or IP>/TotalAgility/Designer`
2. Enter the login credentials provided during installation.
TotalAgility Designer is launched in the browser.
3. Alternatively, click **Start > All Programs > Kofax TotalAgility > Designer**.

Launch TotalAgility Workspace

1. Enter the following URL in the browser:
`http://<TotalAgility server hostname or IP>/TotalAgility/Forms`
2. Enter the login credentials provided during installation.
TotalAgility Workspace is launched in the browser.
3. Alternatively, click **Start > All Programs > Kofax TotalAgility > Workspace**.

Launch TotalAgility Apps

When you install or upgrade Kofax TotalAgility, TotalAgility Apps is automatically installed and available on the Start menu.

1. Click **Start > All Programs > Kofax TotalAgility > TotalAgility Apps**.
Alternatively, enter the following URL in the browser:
`http://<TotalAgility server hostname or IP>/TotalAgility/Designer/#/apps`
2. Enter the login credentials provided during installation.
The Kofax TotalAgility Apps landing page appears.

Guidance notes on logon


You can configure a single Kofax TotalAgility web installation using either of the following as these configurations are mutually exclusive:

- Windows Authentication
- Manual Logon

For example, if an organization requires "manual logon" for external users and "Windows authentication" for internal users, you cannot achieve this with a single web installation. You need

two separate web sites, one to use Windows authentication and the other to use Manual logon. You can use the following options to achieve this configuration.

- Two separate web servers where one web server will have a Kofax TotalAgility web installation using Windows authentication, and another web server will have a Kofax TotalAgility web installation using manual logon (preferred). You can upgrade the servers as they are installed using the Kofax TotalAgility installation program (by the Kofax TotalAgility installation / upgrade program).
- Single web server containing two TotalAgility web sites, where one website is configured to use manual logon and another website configured to use Windows authentication. The administrator setting up this server will install Kofax TotalAgility web installation and then clone the virtual directory.

 You can upgrade the original Kofax TotalAgility web installation, but not the cloned virtual directory.

Repair the TotalAgility installation

Repairing TotalAgility will only repair the application and not the database.

To repair any TotalAgility product components that are installed incorrectly:

1. Click **Start > All Programs > Kofax TotalAgility** and select **Uninstall or Repair**.
The **Repair/Uninstall** window opens.
2. Click **Repair** and click **Next**.
The **Components To Repair** window opens and lists all the components you can repair.
3. Select the components to repair.
4. Click **Browse** and select the installation files.
5. Click **Next**.
The **Credentials** window opens.
6. Enter the **Password** or select the **Run as System Account** check box to choose the system credentials.
7. Click **Next**.
The **Repair Progress** window opens. When the repair is complete, the **Repair Complete** window opens. The summary report lists the components, servers, applications and services repaired.
8. Click **Finish**.

Chapter 17

Uninstall TotalAgility

Uninstalling TotalAgility only removes the application and not the database.

Use the installation wizard

1. Click **Start > All Programs > TotalAgility** and select **Uninstall or Repair TotalAgility**. The **Repair/Uninstall** window opens.
2. Select **Uninstall** and click **Next**.
3. Follow the prompts until you are informed that the product is uninstalled, and then click **Finish**.

The summary report lists the components, servers, applications and services uninstalled. Ensure that no error log is created. If any errors occur, by default, a log file **KofaxTotalAgilityInstallErrorLog.log** is created at the same location where `setup.exe` exists if the path in the System diagnostics is not defined. However, you can define the path for the log file by specifying the path in the `<add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>" />`. Fix those errors and repeat the above steps.

Use the silent mode

1. On the Command Prompt, change the command line to the root directory of the `Setup.exe` file.
2. Run `Setup.exe /Silent /U`.

The system uninstalls TotalAgility and automatically creates a log file at the same location where `setup.exe` exists. This log file contains information on errors, if any. The removal of the product is indicated in the event log.

i Uninstalling TotalAgility in silent mode not only removes the applied fix pack or service pack but also removes the TotalAgility application completely. To reinstall TotalAgility, you must install its base version and then apply any patches.

Chapter 18

Upgrade TotalAgility

You can upgrade TotalAgility from 7.4.0 (or any interim patches) or 7.5.0 (or any interim patches) or 7.6.0 (or any interim patches) or 7.7.0 (or any interim patches) or 7.8.0 (or any interim patches) or 7.9.0 (or any interim patches) to 7.10.0.

i Before upgrading TotalAgility, ensure TotalAgility App Pool and all the TotalAgility Services are stopped, and the databases are backed up.

You can choose to upgrade only [TotalAgility components](#) (such as License Proxy, Transformation Designer and Transformation Server) and [TotalAgility databases](#) independent of each other or upgrade [TotalAgility components including databases](#). See [Upgrade process](#).

Upon upgrading, the TotalAgility installer restores the following configuration settings:

- All existing AppSettings
- All existing Security Bindings
- All HTTP URL Rewrites to be done for TotalAgility 7.10.0.

i After upgrading TotalAgility from versions prior to 7.7.0, you must reconfigure the license server by updating the settings to use the new licensing behavior. See [Update the settings for a license server](#).

Capture data migration

You can run the capture data migration process when upgrading TotalAgility. During the migration, capture data (such as folders, documents and fields) is transformed from old Data Layer tables into new format and stores in new Data Layer tables. The migration process never writes to existing old DL tables, only reads them. For higher migration throughput, the binary data (which is usually the biggest part of data) does not migrate.

i When upgrading TotalAgility, there are many live jobs in system. These jobs continue their execution after the upgrade and capture data migration. For any reason if the migration process is failed, the overall TotalAgility upgrade is considered as failed and you must revert database to its previous state.

When running database upgrade with Migration Utility directly on SQL Server, we recommend that you leave enough free memory on the SQL server for better migration performance.

See the following recommendations for faster capture data migration:

- It is highly recommended to have at least 4-6Gb of free memory available before migration is running.

- Make sure that no CPU consuming processes are running on machine where migration is running.
- If possible, run migration on machine where SQL Server is running.
- If you run migration on SQL Server's machine, make sure that 'Maximum Server Memory' option is reduced to have 50% or more free memory on the machine (database server restart may be needed to free up memory). This can significantly reduce the migration time.
- It is highly recommended to store SQL Server data files on SSD (solid-state drive) disks.

Perform the following steps for capture data migration:

1. Navigate to TotalAgility Installation media and double-click **Setup.exe**.
The User Account control window opens.
2. Click **Next**.
3. In the Kofax TotalAgility Upgrade window, select **TotalAgility databases** or **TotalAgility components including databases**.
4. By default, the system starts the services automatically. To manually start the services after the installation is complete, clear the **Automatically start services** check box.
5. To import the Workspace package, select the **Import system Workspace package** check box. (Default: Clear)
6. Click **Next**.
The **Check for updates** window prompts with a recommendation to check for the latest updates. Click either of the following:
 - **No**: Executes the normal installation flow.
 - **Yes**: Redirects to Download updates page and installer exits. (Installer can open text file with instructions on how to download and apply updates)
7. From the Download updates page, downloads ZIP file containing up-to-date versions of pre-check SQL script and Kofax TotalAgility.CaptureDataMigration.dll. Then run a new utility to apply downloaded updates. After updates are successfully applied, click **Next**.
8. In the Credentials window, enter the credentials (password and confirm password) and click **Next**.
The Installation Review window opens and displays the settings.

- Review the settings and click **Next** to start the installation. The Installation Progress window displays the following:
 - The **Data Read** progress bar shows how much data has been read so far.
 - The **Data Migrated** progress bar shows how much read data has been written.
 - The **Finish time ETA** progress bar shows the predicted finish time of migration (ETA may change during migration as read/write throughput may change over time).

To cancel the data migration, click **Cancel Migration**.



- Before running actual migration, TotalAgility installer performs pre-check of documents database. If database pre-check finds any broken root folders and data cannot be migrated, the **Capture Data Migration** summary panel displays the list of errors along with the error description. To ignore the broken folders, select the check box for **Ignore broken folders** and click **Next**. The **Kofax TotalAgility Installation Complete with errors** window displays the summary.
- If any non-recoverable exception occurs during migration, the upgrade fails.

- If the data migration is success, click **Finish** in the **Kofax TotalAgility Installation Complete** window to complete the installation.

If any errors occur during upgrade, TotalAgility creates a log file called **Kofax TotalAgilityInstallErrorLog.txt** in your installation directory. Fix the errors.

If any database script errors occur, TotalAgility creates a log file called **CEBPMDatabaseErrorLog.txt**. Fix the errors and run **Agility.server.upgrade.exe**.

Capture binary data storage

By default, the capture data is stored in the SQL Server. You can use the preconfigured external data storage services such as Amazon S3, Windows Azure Blob Storage or SQL Server and File System for saving and processing the capture data. When upgrading TotalAgility On-Premise Multi-Tenancy from previous versions of TotalAgility to 7.10.0 and higher, the existing SQL Server binary data is not moved to the new storage. Post upgrade, you can change the storage type to Amazon S3, Windows Azure Blob Storage or SQL Server and File System from the **Capture Storage** tab by running the Configuration Utility. See the *Kofax TotalAgility Configuration Utility Guide*.

Upgrade TotalAgility in silent mode

See [Upgrade TotalAgility in silent mode](#).

Upgrade process

You can choose to upgrade TotalAgility components and databases independent of each other or upgrade TotalAgility components including databases.

1. Navigate to TotalAgility Installation media and install a base version of TotalAgility.
2. Navigate to TotalAgility 7.10.0 Installation media and double-click **Setup.exe**.
3. In the **Kofax TotalAgility Upgrade** window, you can upgrade the following:
 - TotalAgility components
 - TotalAgility databases
 - TotalAgility components including databases

If any errors occur during upgrade, by default, TotalAgility creates a log file at the same location where setup.exe exists if the path in the System diagnostics is not defined. However, you can define the path for the log file by specifying the path in the <add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<log file path> <log file name>". The log file is also created on the desktop. Fix those errors.

Upgrade TotalAgility components

To upgrade TotalAgility components such as License Proxy, TotalAgility Designer and Transformation Server, perform the following steps.

1. In the **Kofax TotalAgility Upgrade** window, select **TotalAgility components**.
2. By default, the services are automatically started. To start services manually, clear the check box for **Automatically start services** and click **Next**.
The Credentials window opens.
3. Enter the credentials (password and confirm password) and click **Next**.
The Installation Review window opens. Review the settings and click **Next** to start the installation.
4. Click **Finish** to complete the installation.

If any errors occur during upgrade, by default, TotalAgility creates a log file at the same location where setup.exe exists if the path in the System diagnostics is not defined. However, you can define the path for the log file by specifying the path in the <add name="KTALog"

type="System.Diagnostics.TextWriterTraceListener" initializeData="<log file path> <log file name>". Fix those errors.

After upgrading TotalAgility components, if you also want to upgrade Kofax TotalAgility databases, do the following:

- a. Navigate to TotalAgility Installation media and double-click **Setup.exe**.

The Repair/Uninstall/Upgrade Databases window opens.

i Alternatively, you can select the Upgrade Databases option from the Repair/Uninstall/Upgrade Databases window by clicking **Start > All Programs > Kofax TotalAgility** and select **Uninstall** or **Repair** Kofax TotalAgility.

- b. Select **Upgrade Databases**.
- c. Click **Next** and follow the instructions.

Upgrade TotalAgility databases

Follow the steps to upgrade only TotalAgility databases.

1. In the **Kofax TotalAgility Upgrade** window, select **TotalAgility databases**.
2. By default, the services are automatically started. To start services manually, clear the check box for **Automatically start services**.
3. To import the Workspace package, select the check box for **Import system Workspace Package** and click **Next**. (Default: Clear)

When upgrading TotalAgility from version lower than 7.8.0 to 7.9.0, clicking **Next** will display a pop-up message recommending to [check for latest updates](#) to perform capture data migration.

The **Credentials** window opens.

4. Enter the credentials (password and confirm password) and click **Next**. The Installation Review window opens. Review the settings and click **Next** to start the installation.
5. Click **Finish** to complete the installation.

If any errors occur during upgrade, by default, TotalAgility creates a log file at the same location where setup.exe exists if the path in the System diagnostics is not defined. However, you can define the path for the log file by specifying the path in the <add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<log file path> <log file name>". Fix those errors and repeat the above steps. Fix the errors.

Upgrade TotalAgility components including databases

Follow the steps to upgrade TotalAgility components including databases.

1. In the **Kofax TotalAgility Upgrade** window, select **TotalAgility databases**.
2. By default, the services are automatically started. To start services manually, clear the check box for **Automatically start services**.

3. To import the Workspace package, select the check box for **Import system Workspace Package** and click **Next**. (Default: Clear)

When upgrading TotalAgility from version lower than 7.8.0 to 7.9.0, clicking **Next** will display a pop-up message recommending to [check for latest updates](#) to perform capture data migration.

The **Credentials** window opens.

4. Enter the credentials (password and confirm password) and click **Next**.
The Installation Review window opens. Review the settings and click **Next** to start the installation.
5. Click **Finish** to complete the installation.

If any errors occur during upgrade, by default, TotalAgility creates a log file at the same location where setup.exe exists if the path in the System diagnostics is not defined. However, you can define the path for the log file by specifying the path in the <add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>". Fix those errors and repeat the above steps. Fix the errors.

Check for latest updates to perform capture data migration

When upgrading TotalAgility databases and TotalAgility components including databases from version lower than 7.8.0 to 7.9.0, perform the following steps.

1. In the **Kofax TotalAgility Upgrade** window, select **TotalAgility databases**.
2. By default, the services are automatically started. To start services manually, clear the check box for **Automatically start services**.
3. To import the Workspace package, select the check box for **Import system Workspace Package** and click **Next**.
A pop-up message appears recommending to check for latest updates to perform capture data migration.
4. Click **Yes**.
The **Installation Review** dialog box displays the following link for downloading the precheck updates for capture data migration.
<https://edelivery.kofax.com/TotalAgility/7.9.0/MigrationPreCheck.ZIP>
5. Click the link to automatically download the MigrationPreCheck.zip to your local machine.
6. Click **Finish** in the **Installation Review** dialog box.
7. Run the utility, `Agility.Install.ApplyCaptureMigrationUpdates.exe` located at the installation directory to replace the DLLs and script files.
The **Capture Migration** pop-up appears.
8. Click **Browse** and select the **Zip file location** where the MigrationPreCheck.zip is downloaded and click **OK**.
The Capture Migration Updates Tool automatically extracts the zip and applies the updates into TotalAgility installer.
9. Click **OK** in the message.
10. Navigate to TotalAgility 7.10.0 Installation media and double-click **Setup.exe** to run the installation again
11. Click **No** when prompted to check for the updates to perform capture data migration..
The **Credentials** window opens.

12. Enter the credentials and continue with the upgrade.

If any errors occur during upgrade, by default, TotalAgility creates a log file at the same location where setup.exe exists if the path in the System diagnostics is not defined. However, you can define the path for the log file by specifying the path in the <add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<logfile path> <log file name>". Fix those errors and repeat the above steps. Fix the errors.

Upgrade TotalAgility databases manually using database scripts

When upgrading TotalAgility from 7.0.2, 7.1.0, 7.2.0, 7.3.0, 7.4.0, 7.5.0, 7.6.0, 7.7.0 or 7.8.0 to TotalAgility 7.10.0, do the following.



- To upgrade the TotalAgility databases manually from version less than or equal to 7.7.0, you must run a special Migration Utility to complete the database upgrade. Please contact Kofax Technical Support to request a copy of the Migration Utility and the appropriate instructions to complete a manual database upgrade.
- For a clean installation of TotalAgility 7.8.0, the Simulator database and any Simulator related SQL scripts are no longer available. On upgrading TotalAgility to 7.8.0 and higher, the connections to the Simulator database are automatically removed.

- 1.** To run scripts manually, go to `\\TotalAgilityInstall\DatabaseScripts\SQL Server \Upgrade Database Scripts`.

2. Run the conversion scripts (if exist) for all releases and patches starting from the version upgrading from to the version being upgraded to.

Example: If upgrading from 7.2.0.0 to 7.10.0, run the following conversion scripts.

- 7.2.0.0 to 7.2.1.0 Conversion Scripts
- 7.2.1.0 to 7.2.2.1 Conversion Scripts
- 7.2.2.1 to 7.3.0.0 Conversion Scripts
- 7.3.0.0 to 7.3.0.2 Conversion Scripts
- 7.3.0.2 to 7.3.1.0 Conversion Scripts
- 7.3.1.0 to 7.3.1.2 Conversion Scripts
- 7.3.1.2 to 7.4.0.0 Conversion Scripts
- 7.4.0.0 to 7.4.0.1 Conversion Scripts
- 7.4.0.1 to 7.4.1.0 Conversion Scripts
- 7.4.1.0 to 7.4.1.1 Conversion Scripts
- 7.4.1.1 to 7.5.0.0 Conversion Scripts
- 7.5.0.0 to 7.5.0.5 Conversion Scripts
- 7.5.0.5 to 7.5.0.10 Conversion Scripts
- 7.5.0.10 to 7.6.0.0 Conversion Scripts
- 7.6.0.0 to 7.6.0.5 Conversion Scripts
- 7.6.0.5 to 7.7.0.0 Conversion Scripts
- 7.7.0.0 to 7.7.0.1 Conversion Scripts
- 7.7.0.1 to 7.8.0.0 Conversion Scripts
- 7.8.0.0 to 7.9.0.0 Conversion Scripts
- 7.9.0.0 to 7.10.0.0 Conversion Scripts

Run the scripts in the following order across databases and follow the instructions inside each script.

- a. `Convert_Main.sql` on the TotalAgility database.
- b. `Convert_Audit.sql` on the Audit database.
- c. `Convert_Archive.sql` on the Finished Jobs database.

i If Audit and Archive databases are maintained with the same name as the TotalAgility database, then run the `Convert_Audit.sql` and `Convert_Archive.sql` scripts on the TotalAgility database.

- d. `Convert_Forms.sql` on the TotalAgility database.
- e. `Convert_KLS_OnPremise.sql` on the TotalAgility database.
- f. `Convert_KFS.sql` on the TotalAgility database.
- g. `Convert_DataLayer.sql` on the TotalAgility_Documents database.
- h. Run the following conversion scripts for the Reporting databases:
 - `Kofax_Reporting_Analytics.SQL_Convert.sql` on the TotalAgility_Reporting database.

- Kofax Reporting Analytics.Staging.SQL_Convert.sql on the TotalAgility_Reporting_Staging database.

If the previous version of TotalAgility, such as TotalAgility 7.0.2 did not include reporting databases, you must first create the TotalAgility_Reporting database and the TotalAgility_Reporting Staging database and update the Web.config file accordingly.

- a. Run all the PostUpgrade_ scripts on the database where the corresponding Convert_ scripts were executed."
3. Navigate to <C:\Program Files\Kofax\TotalAgility\Agility.Server.Web\bin> and open **Agility.Installation.Server.Upgrade.exe.config**. In the <appSettings> section, update the value for the following settings.
 - <add key="UpgradeFromVersion" value =""/> where the value is the TotalAgility version from which you want to perform an upgrade. For example, if you are upgrading TotalAgility from 7.7.0 to 7.8.0, set the value as follows: <key="UpgradeFromVersion" value ="7.7.0"/>.
 - <add key="SystemSessionId" value="" />. Take the system session ID from the TotalAgility Designer or from the database.
 - <add key="UserName" value="" /> where the user name is the currently logged on user's name.

If the TotalAgility components are already installed before the manual database upgrade, you can find the upgrade.exe and its configuration files under <C:\Program Files\Kofax\TotalAgility\Agility.Server.Web\bin>.

Otherwise, you can execute these files from the TotalAgility installation media. Open Agility.Installation.Server.Upgrade.exe.config. In the <appSettings> section, update the value for the following settings.

- <add key="UpgradeFromVersion" value =""/> where the value is the TotalAgility version from which you want to perform an upgrade. For example, if you are upgrading TotalAgility from 7.7.0 to 7.8.0, set the value as follows: <key="UpgradeFromVersion" value ="7.7.0"/>.
 - <add key="SystemSessionId" value="" />. Take the system session ID from the TotalAgility or from the database.
 - <add key="UserName" value="" /> where the user name is the currently logged on user's name.
 - If running from Installation media, ensure all the Database Connection string settings are correct and InstallDirectory setting is updated in the config file.
4. From the command prompt, run Agility.Installation.Server.Upgrade.exe by passing the Agility.Installation.Server.Upgrade.exe <ImportWorkspacepackage> as a parameter, such as Agility.Installation.Server.Upgrade.exe false. If you want to import the Workspace package, pass the Agility.Installation.Server.Upgrade.exe true as a parameter.
 5. Ensure that no error log is created. If any errors occur, by default, TotalAgility creates a log file, **KofaxUpgradeDatabaseUtilityError.txt** at the same location where setup.exe exists if the path in the System diagnostics section of the Setup.exe.config is not defined. However, you can define the path for the log file by specifying the path in the <add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<log file path> <log file name>". Fix those errors and repeat the above steps.

6. Start the Kofax TotalAgility Core Worker service manually:
 - a. At Run, type **Services.msc** and press **Enter**.
 - b. Right-click **Kofax TotalAgility Core Worker** and click **Start**.

Upgrade reporting databases 2.0.2

Run the following scripts to upgrade the Reporting databases 2.0.2 manually:

1. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts \ 7.0.2 -> 7.1.0`.
2. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.1.0 -> 7.2.0`.
3. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.2.0 -> 7.3.0`.
4. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.3.0 -> 7.4.0`.
5. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.4.0 -> 7.5.0`.
6. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.5.0 -> 7.6.0`.
7. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.6.0 -> 7.7.0`.
8. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.7.0 -> 7.8.0`.
9. Run the script from `TotalAgilityInstall\DatabaseScripts\SQL Server\Upgrade Database Scripts\ 7.8.0 -> 7.9.0`.

i If you are upgrading from TotalAgility 7.1.0 to 7.9.0 (with Reporting as a part of TotalAgility 7.8.0), ensure that all the Reporting Staging database tables are empty before performing any automatic or manual upgrade.

See also:

- [Upgrade process](#)
- [Upgrade TotalAgility in silent mode](#)

Upgrade TotalAgility in silent mode

Before upgrading TotalAgility from version 7.7.0 to 7.9.0 (any upgrade which includes databases, and components including databases) in silent mode, you must click the following link for downloading the precheck updates for capture data migration.


<https://edelivery.Kofax.com/TotalAgility/7.9.0/MigrationPrecheck.ZIP>

After downloading the zip, run the utility `Agility.Install.ApplyCaptureMigrationUpdates.exe` which is located at the installation directory to replace the DLLs and scripts.

For a silent upgrade of TotalAgility to version 7.10.0, do the following.

1. Go to the root directory of setup.exe.
2. Navigate to `\\TotalAgilityInstall` and open `SilentInstallConfig.xml` using a text editor.
3. In `SilentInstallConfig.xml`, update the following parameters.

Parameter	Default value	Description
Identity Information		
UserName	username	Enter the name of the user who will run TotalAgility.
Password	password	Enter the password for the user who will run TotalAgility.
Install Info		
InstallAction	upgrade	Use this setting to upgrade TotalAgility components including databases.
	upgradeTotalAgilitydatabases	Use this setting only if you are upgrading the databases before upgrading TotalAgility components. <div style="border: 1px solid #add8e6; padding: 5px; margin-top: 10px;"> <p>i If you wish to upgrade TotalAgility components before upgrading databases, you must do the following:</p> <ol style="list-style-type: none"> a. Open <code>SilentInstallConfig.xml</code> available at the following location: <code>\\TotalAgility Installation Information \Kofax TotalAgility</code> b. Update the <code><InstallAction></code> section with the following parameter: <code><InstallAction>=Upgradedatabasesforexisting TotalAgility</code> c. Run <code>Setup.exe /Silent /U</code> from the above mentioned path. </div>
	upgradeTotalAgilitycomponents	Use this setting to upgrade only TotalAgility components.
DatabaseInformation		
IgnoreBrokenFoldersOnUpgrade	false	If broken data is found during migration, the upgrade is failed. If set to true, ignores broken folders and proceeds with capture data migration when upgrading TotalAgility.

Parameter	Default value	Description
RunCaptureMigrationIgnoringErrors	false	If errors occur during migration, the root folders with broken data will not be migrated. If set to true, ignores the errors and proceeds with capture data migration.
StartServices	true	Starts the services automatically after upgrade installation. Set to false to start the services manually after upgrade installation.
ImportWorkspacepackage	false	Set to true to import the Workspace package after upgrade installation.  Review the Kofax TotalAgility Release Notes to import the required updates for the Workspace package.

4. Open the Command Prompt window as an Administrator and change the command line to the root directory of the Setup.exe file.
5. Run `Setup.exe /Silent /Upgrade`.
Based on the parameters set to true in the silent configuration file, the following items are upgraded automatically:
 - Kofax TotalAgility
 - Kofax Import Connector (KIC)
 - Kofax Transformation Designer
 - Utility for Kofax Export Connector

The system generates a log file which reports errors (if any).
The success or failure of installation is indicated in the event log.
6. Save and close the file.

See also:

- [Upgrade process](#)
- [Upgrade databases manually](#)

Upgrade Message Connectors instances

If you have installed more than one instance of Message Connector, you must upgrade all the instances of Message Connector at the time of upgrading TotalAgility. Do the following:

1. To upgrade the first instance of Message Connector, before upgrading TotalAgility, set the value of `ImportService` parameter to true in `SilentInstallConfig.xml`. See [Upgrade TotalAgility in silent mode](#).

2. To upgrade the second instance of Message Connector, run the following command on the Command Prompt:

```
<\\TotalAgility\KIC\Export\MC\MC.msi> TRANSFORMS=:I02 MSINewInstance=1  
Kofax="<path>" <options>
```

Where, <\\TotalAgility\KIC\Export\MC\MC.msi> is the path of TotalAgility setup folder.

In <path>, specify the upgrade path for second instance of Message Connector. \KIC-ED\MC02 is appended to this path at the time of upgrade.

3. To upgrade the third instance of Message Connector, run the following command on the Command Prompt:

```
<\\TotalAgility\KIC\Export\MC\MC.msi> TRANSFORMS=:I03 MSINewInstance=1  
Kofax="<path>" <options>
```

Where, <\\TotalAgility\KIC\Export\MC\MC.msi> is the path of TotalAgility setup folder.

In <path>, specify the upgrade path for third instance of Message Connector. \KIC-ED\MC03 is appended to this path at the time of upgrade.

i For second and third instances of message Connector, optionally, in <options> use the following command options:

- /qn - silent installation
- /qb - silent installation with elementary user interface (progress bar)
- ALLUSERS=1 - install for all users

Chapter 19

Troubleshooting

This section describes the issues you may encounter and their resolution.

TotalAgility AppPool exists

TotalAgility creates an application pool called TotalAgilityAppPool. Ensure you do not have an existing application pool of the same name as it may cause issues when installing or upgrading.

Download software updates

When downloading an installation package or a service pack from ftp.Kofax.com site, please ensure this site is added as a trusted site, otherwise the downloaded file may get corrupted.

Installation failure in IPv4 and IPv6 environment

If SQL server is configured to listen only on IPv6 addresses on a dual-stack (IPV46), client connection attempts using IPv4 address will fail and it may take longer than default timeout, contributed by default TCP timeout logic during connection establishment handshakes. Even though the subsequent IPv6 connection can succeed immediately, the connection may still fail.

To resolve this issue, disable IPv4 in SQL Server Configuration Manager.

1. Start **SQL Server Configuration Manager**.
2. Open the **Properties** for the TotalAgility server instance TCP/IP protocol.
3. Set **Listen All** to **No**.

i This setting allows fine control over which interfaces the TASServerSQLInstance will listen for connections.

4. Click the **IP Address** tab.
5. Set **Enabled** to **No** for all entries except for ::1 which is the IPv6 local host address.
6. Select **OK** to commit changes and **OK** at the service restart dialog.
7. Restart the SQL Server (<TASServerInstance>) service where TASServerInstance is the actual instance used by TotalAgility (for example, Kofax TotalAgility).

Images not displayed in Workspace after scanning

No images are displayed on Workspace after scanning if you log into machine as non-admin user. The images display normally if you login as admin user.

1. If you have not installed Dosadilog, the diagnostic logging tool for the WebCapture plugin, please do so now. See the instructions and download link at: <http://www.eztwain.com/dosadilog.htm>.
2. Edit the <system.diagnostics> section of the Web.config file as follows:

i If you copy and paste the code from this guide, fix the line breaks.

```
<system.diagnostics>
<!--<sources>
<source name="System.ServiceModel"
switchValue="Information, ActivityTracing"
propagateActivity="true">
<listeners>
<add name="traceListener"
type="System.Diagnostics.XmlWriterTraceListener"
initializeData="c:\log\Traces.svclog" /> </listeners> </source> </sources>-->
<trace autoflush="true">
<listeners> <add name="ThinClientServer" traceOutputOptions="DateTime,ThreadId"
type="System.Diagnostics.TextWriterTraceListener" initializeData="c:
\ThinClientServerLog.txt">
<filter type="System.Diagnostics.EventTypeFilter" initializeData="Verbose" /> </
add>
<!--<add type="Microsoft.WindowsAzure.Diagnostics.DiagnosticMonitorTraceListener,
Microsoft.WindowsAzure.Diagnostics, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
name="AzureDiagnostics">
<filter type="" />
</add>-->
</listeners>
</trace>
</system.diagnostics>
```

3. To ensure that non-admin users are able to log in, add the link to Trusted Sites:
 - a. Go to **Internet Options** in IE 11.
 - b. Click the **Security** tab.
 - c. Click **Sites**.
 - d. Add the domain to the trusted sites, for example, <http://<domain>>.

Exception during Transformation Designer projects import

An exception is thrown while importing projects using Transformation Designer that connects to a TotalAgility web service that uses SSL.

1. If you select to run your server using SSL, make sure the **Client certificates** option is set to **Ignore** under SSL Settings.

2. If you want to use Client certificates for authentication (Accept or Require), you must set the value for `uploadReadAheadSize` in IIS. Use either option to adjust this setting:

- In the IIS Manger:
 - a. Open the Configuration Editor of the TotalAgility site.
 - b. In the Section list, expand `system.webServer` and select **serverRuntime**.
 - c. In the From list, select **ApplicationHost.config <location path='Default Web Site/TotalAgility'/>**.
 - d. Set an appropriate value in bytes for **uploadReadAheadSize**.

Deepest Path: MACHINE/WEBROOT/APPHOST/Default Web Site/TotalAgility	
<code>alternateHostName</code>	
<code>appConcurrentRequestLimit</code>	5000
<code>authenticatedUserOverride</code>	UseAuthenticatedUser
<code>enabled</code>	True
<code>enableNagling</code>	False
<code>frequentHitThreshold</code>	2
<code>frequentHitTimePeriod</code>	00:00:10
<code>maxRequestEntityAllowed</code>	4294967295
<code>uploadReadAheadSize</code>	83886080

- Or, modify the IIS main config file:
 - a. Open the **applicationHost.config** file located under `C:\Windows\System32\inetsrv\config\`.
 - b. If the `<serverRuntime>` node does not exist yet, add it below the `<security>` node within `<system.webServer>`.

```
<location path="Default Web Site">
  <system.webServer>
    <security>
...
    </security>
    <serverRuntime uploadReadAheadSize="10485760" />
  </system.webServer>
</location>
```

- c. Set an appropriate value in bytes for **uploadReadAheadSize**.

Search feature not working in TotalAgility help

- The TotalAgility Help Search functionality does not work when Designer is run from **Start > All Programs**.

To resolve this issue, add the site as a trusted site in Internet Explorer: **Internet Options > Security > Trusted Sites > Sites**

- The TotalAgility Help Search functionality does not work in Designer and Workspace for Internet Explorer 9.

To resolve this issue, navigate to **Tools > Compatibility Settings** in Internet Explorer 9 and clear the following two options:

- **Include updated website lists from the Microsoft**
- **Display intranet sites in Compatibility View**

(405) Method not allowed error

While Installing TotalAgility, the error "(405) Method Not Allowed" may occur.

To resolve the issue, re-register ASP.NET 4.x for IIS.

1. Open the command prompt.
2. Navigate to %WINDIR%\Microsoft.NET\Framework\v4.0.30319 .
3. Execute `aspnet_regiis.exe-i`.

MimeType error

When trying to access the Tenant Management or TotalAgility websites from the IIS, and the web page does not render with the following error: `Cannot add duplicate collection entry of type mimeType with unique attribute field Extension set to .xap; this means there are conflicting mime types in two different configuration files (for example, one at the application level and the other at the site level).`

To resolve this issue, do either of the following:

1. Remove one of the two conflicting mimeType extensions from the configuration files.
2. If the IIS Administrator needs both the conflicting mime mappings, add the remove tag above the conflicting mimeType.

Example If your application has the following mimeType in the application level configuration file:

```
<mimeType fileExtension=".xap" mimeType="application/octet-stream" />
> (for example, located at //inetpub/wwwroot/web.config); if this mimeType creates
a conflict with the same mimeType in the applicationhost.config file, add <remove
fileExtension=".xap" /> above the mimeType as follows:
```

```
<remove fileExtension=".xap" />
<mimeType fileExtension=".xap" mimeType="application/octet-stream" />
```

where .xap is the mime type.