Kofax TotalAgility
Tenant Management System Installation Guide

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Preface

This guide includes instructions for installing Kofax TotalAgility Tenant Management.

Read this guide completely before using the software.

TotalAgility documentation

Access the full documentation set online, from the Kofax TotalAgility Documentation page.

You can also access the TotalAgility documentation in offline mode by downloading it from the Kofax Fulfillment Site for each language separately.

For a full documentation set, and how to access the documentation in offline mode, refer to the *Kofax TotalAgility 8.0.0 Release Notes*.

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 Portal repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Kofax Knowledge Portal, go to https://knowledge.kofax.com.

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

The Kofax Knowledge Portal provides:
- Powerful search capabilities to help you quickly locate the information you need.

   Type your search terms or phrase into the **Search** box, and then click the search icon.

- Product information, configuration details and documentation, including release news.

  To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:

- Access the Kofax Community (for all customers).

  On the Resources menu, click the **Community** link.
- Access the Kofax Customer Portal (for eligible customers).

  Go to the Support Portal Information page and click **Log in to the Customer Portal**.
- Access the Kofax Partner Portal (for eligible partners).

  Go to the Support Portal Information page and click **Log in to the Partner Portal**.
- Access Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.

  Go to the Support Details page and select the appropriate article.

Chapter 1

Installation planning

This chapter describes the system requirements, prerequisites, licensing details, and recommendations for installing and using Kofax TotalAgility Tenant Management System.

System requirements

See the Kofax TotalAgility Technical Specifications document on the Product Documentation page site.

- For supported operating systems and other system requirements.
- If your solution includes multiple Kofax products.

The document is updated regularly, and we recommend that you review it carefully to ensure success with your TotalAgility product.

Prerequisites

- Before extracting the TotalAgility installation ZIP file, unblock the file from the File Properties window.
- Run the Prerequisites Utility to ensure all the required software is installed on your computer before installing TotalAgility. For more information on prerequisites and the software checklist for various installation types, refer to the *Kofax TotalAgility Prerequisites Guide*.
- You must have an administrator account to install TotalAgility.
- The user who will run TotalAgility must have "Log on as Service" rights.
- When using Windows Authentication for database access in on-premise multi-tenancy, the following permissions are required for the Tenant Management System database account, that is, the Windows account user:
  - **db_datareader**
  - **db_datawriter**
  - **Execute permission**
- The Database Creator server role is required for creating the tenant databases.

> ℹ️ When using Windows Authentication for DB access in on-premise multi-tenancy, tenant logon users are not created in the Tenant Management System.

Chapter 2

TotalAgility Tenant Management System installation

This chapter describes two methods for installing TotalAgility Tenant Management:

- Silent installation using the command line parameters.
- Standard installation using the standard installer wizard.

Silent installation of Tenant Management System

Use the TotalAgility Tenant Management silent installation to install TotalAgility Tenant Management automatically from a command line or a batch file. After you edit the silent install file, the TotalAgility Tenant Management installation proceeds without any further user interaction and SSL is automatically set to True.

1. From your TotalAgility installation files, navigate to the `\TenantManagementInstall` folder and open SilentInstallConfig.xml using a text editor.
2. In SilentInstallConfig.xml, update the following parameters.

Parameter	Default Value	Description
SerialNumber	Not Applicable	Not Applicable
ProductCode	Not Applicable	Not Applicable
InstallDirectory	`C:\Program Files\Kofax` `\TotalAgility Tenant` `Management`	Specify the Kofax TotalAgility destination directory.
MasterTenants	MasterTenants	Enter the MasterTenants database name.
WindowsAuthentication	true	Set to true to use windows credentials for logging in.
NewDatabase	false	Set to true to create a new database.
UserName	empty (false)	Enter the name of the user who will run TotalAgility Tenant Management. ⓘ If the service account name ends with a $ (dollar), do not specify the password.

Parameter	Default Value	Description
Password	empty (false)	Enter the password for the user.
RunAsSystemAccount	false	If set to true, the IIS AppPool and Kofax TotalAgility services run as the LocalSystem account. ℹ️ If running on Docker, you must set RunAsSystemAccount to true.
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.
IISInstalled	true	Set to true to check if IIS is installed.
UpdateDatabases	true	Set to false if installing on Docker.
InstallAction	TenantManagementInstall	Accept the default.
InstallMode	Silent	Accept the default.
InstallType	Both	Select the install type. The Install Type can be ApplicationServer, WebServer, or Both.
<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. Navigate to the root directory of the Setup.exe file.
5. Run `Setup.exe /Silent`.
   The Tenant Management System is installed.
   - A summary of silent installation log is created in KofaxTotalAgilityTenantManagementSilentInstall.txt on the desktop.
   - If any errors occur, KofaxTotalAgilityInstallErrorLog.txt is created on the desktop. Fix the errors and complete the process.

Standard installation of Tenant Management System

You can install Tenant Management System using the standard installer wizard in either of the following ways:

- Separate installation
- Combined installation (while installing On-Premise Multi-Tenant)

Separate installation

1. From your TotalAgility installation files, navigate to `\TenantManagementInstall` folder 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 **Kofax TotalAgility Tenant Management** installation.
2. Click **Next**.
   The **Kofax Inc. Software License Agreement** window opens.
3. Accept the terms in the License Agreement and click **Next**.
   The **Type of Install** window opens.

   Available options are: **Database Only**, **Upgrade Databases**, **Web Server**, **Application Server**, and **Web/Application Server**.
4. Select the installation type (default: Web/Application server) ayou select a nd click **Next**.
   The **Software Checks** window opens. The system detects and displays a list of required software required for installation.
5. 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. Install the missing software and repeat the steps for installation.
   - If your system has all the required software, click **Next**.

   The **Destination** window opens.
6. Use the default installation folder or click **Browse** to select a different path. Then click **Next**.
   The **Email Configuration** window opens.
7. Enter the details for the **SMTP Configuration**.
   a. **Host Name**, such as smtp.office.com

   b. **Port Number**, such as 587

   c. **User Name**, such as kofax@kofaxindiapvtlimited.com

   d. **Password**

   e. **From Address**: Email address from where the email is sent. For example, kofax@kofaxindiapvtlimited.com

   f. **Bcc**: Email addresses of the users who need to receive the copy of the email.

   g. Select **Enable SSL** to use HTTPS communication.

   h. Select **Enable Support International Characters** to support using international characters in the email address.

An email is triggered from the configured SMTP server when the tenant is created.

8. Click **Next**.
The **Credentials** window opens.

9. Enter the credentials for the user who will run TotalAgility Tenant Management System.

If you run TotalAgility Tenant Management System under a System Account, you must have a trusted account to interact with databases. This account requires the following runtime privileges: db_datareader, db_datawriter, and Execute permissions. When using Windows Authentication, the Tenant Management System database account, that is, the Windows account user must have the aforementioned runtime privileges. The Database Creator server role is only required for creating the tenant databases and not the tenant logon users as they are not created in the Tenant Management System.

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

10. 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.

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

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

12. Do one of the following:

Option	Description
Use the default settings. This means new databases are installed.	Ensure the following: a. The **Install Databases** check box is selected. b. The **Overwrite databases if they exist?** check box is clear.
A database with the same name already exists, and you want to overwrite the existing database.	a. Select the **Overwrite databases if they exist?** check box. The **Test connections** option becomes available. b. Click **Test connections**. A message lists the database connection results. If the database details are not valid, or if the database does not exist, the connection to the database fails. c. Click **Next**. d. Click **Yes** to confirm overwriting databases. ⓘ If you choose to overwrite the existing databases, the databases are re-initialized and the existing data will be lost. If the database details are not valid, or if the database does not exist, an error occurs.
Point to an existing database on your local machine.	a. Clear the check boxes for **Install Databases** and **Overwrite databases if they exist?**. b. Enter a name for the MasterTenants database.

Point to existing databases on a different machine.	a. Clear the **Install Databases** and **Overwrite databases if they exist?** check boxes.
	
	b. For MasterTenants database, do the following:
	
	  1. Enter a **Database Name**.
	
	  2. Click ellipsis for **Server** and select the mode of the database server as SQL Server NonSSL or SQL Azure.
	
	  3. Select the SQL server database server to install from the list of available servers.
	
	  4. In the **Security** group, on the **Authentication** list, either use **Windows Authentication** or **SQL Server Authentication** if the database server mode is SQL Server NonSSL, or use **SQL Server Authentication** if the database server mode is SQL Azure. Provide the user name and password for the SQL Server authentication and then click **OK**.
	
	  5. If all the databases reside on the same server, select the **Apply these settings to all other Databases** check box.
	
	  6. Click **OK**.

Manually install the databases.	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.

> 🛈
> * If the Application Pool is running under a System account, the System displays an error.
> * You must have a trusted account to interact with databases.

13. Click **Next**.

    The **DB Connection Results** window opens.

14. Click **Next**.

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

15. Click **Finish**.

    Your installation is now complete.

    * A summary of installation log is created in KofaxTotalAgilityTenantManagementInstall.txt on the desktop.
    * If any errors occur, KofaxTotalAgilityInstallErrorLog.txt is created on the desktop.

Combined installation

Install Tenant Management System while installing On-Premise Multi-Tenancy.

1. From your TotalAgility installation files, navigate to `\OnPremiseMultiTenancyInstall` folder 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 **Kofax TotalAgility MultiTenancy installation**.

2. Click **Next**.

    The **Kofax Inc. Software License Agreement** window opens.

3. Accept the terms in the License Agreement and click **Next**.

    The **Type of Install** window opens.

    Available options are: **Database Only**, **Upgrade Databases**, **Web Server**, **Application Server**, and **Web/Application Server**.

4. Select the installation type (default: Web/Application Server) and click **Next**.

    The **Environment Type** window opens. Choose the mode of environment to setup. Available options are Production deployment and Additional deployment (non-production).

5. Under **Production deployment**(default), select **Install Tenant Management System** (default: Clear).

    * **Production deployment**(default): Installs production environment. To install the Tenant Management System while installing On-Premise Multi-Tenancy, select **Install Tenant Management System** (default: Clear), click **Next** and follow the wizard instructions to install the Tenant Management System components.
    * **Additional deployment (non-production)**: If selected, installs the additional deployment. Enter a Name for the additional deployment. The additional deployment name should not exceed 10 characters and cannot contain special characters.

The **Destination** window opens.

6. To install the Tenant Management System while installing On-Premise Multi-Tenancy, do the following:

    a. Select **Install Tenant Management System** (default: Clear).

    b. Click **Next**.
       The **Kofax TotalAgility Tenant Management Installation** window opens.

    c. Click **Next** and follow the wizard instructions.

7. Click **Finish**.
    Your installation is now complete.

    • A summary of installation log is created in KofaxTotalAgilityTenantManagementInstall.txt on the desktop.

    • If any errors occur, KofaxTotalAgilityInstallErrorLog.txt is created on the desktop.

Tenant Management System Configuration

This chapter provides the instructions for configuring TotalAgility Tenant Management System, such as changing or updating any installation parameters post installation, encrypting and decrypting the TotalAgility configuration files, and more.

Log on to TotalAgility Tenant Management System

After you install TotalAgility Tenant Management System application, a shortcut to Tenant Management System appears under **All Programs**.

1. Navigate to **Start** >**All Programs Kofax TotalAgility Tenant Management TenantAdmin**. TotalAgility Tenant Management application is launched.
2. Enter the **Username** and the **Password**.

> ℹ The default username and password is "Administrator". You must change the username and password for security reasons. See "Manage users" in the *Kofax TotalAgility Tenant Management System Help.*

Encrypt and decrypt Web.config

The TotalAgility Tenant Management System Web.config includes the DB Connection settings and sensitive information. Therefore, we recommend that you encrypt this file.

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\TenantManagementInstall
    \Agility.Server.Web.TenantManagement
    ```
2. At a minimum, encrypt the **appSettings** section that includes sensitive database connection information.

Configure TotalAgility Tenant Management System for https communication

Enable SSL (Secure Sockets Layer) communication for the Kofax TotalAgility web layer.

To enable SSL for Kofax TotalAgility Tenant Management Application:

1. Open **Internet Information Services (IIS) Manager**.
2. On the Features View, double-click **Server Certificates**.
3. Under Actions, click **Create Self-Signed Certificate**.
   The Create Self-Signed Certificate window appears.
4. Enter the name for the certificate and click **OK**.
5. Right-click the **Default Web Site** and click **Edit Bindings**.
6. Click **Add**.

   a. On the Type list, select **HTTPS**.

   b. On the SSL certificate list, select the certificate.

   c. Click **OK**.

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 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 adding 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. TargetHostName is the fully qualified domain name of the web server and TargetPortNo is the website port number. When you provide 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 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:

   `\\TenantManagementInstall\Agility.Server.Web.TenantManagement`
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 "Host Prefix for Cookies", a browser functionality that makes the cookies more secure by prefixing the TotalAgility cookie names with "__HOST-". When a cookie name starts with this flag, it triggers an 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. From the Kofax TotalAgility installation files, navigate to `\\TenantManagementInstall \Agility.Server.Web.TenantManagement`.
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** tab as needed.

Chapter 4

Launch TotalAgility Tenant Management System

1. Enter the following URL in the browser:

   ```
   http://<TA server hostname or IP>/TenantManagementWebSite/
   TenantManagement/TenantLogon.html
   ```

   Alternatively, click **Start > All Programs > Kofax TotalAgility Tenant Management > TenantAdmin**.

   The Kofax Tenant Management System logon page appears.
2. Enter the login credentials used during installation.

   TotalAgility Tenant Management System is launched in the browser.

   > ⓘ Change the password immediately for security reasons.

Activate the license

The license period starts once the license is activated. If you log on to TotalAgility Tenant Management and the license is not activated, the License Activation window opens.

1. In the **License Activation** window, do either of the following:
   - Click **Next** to accept the default values for **License Server** and **Port Number**
   - Enter the new values.
2. Click **Set license server** to save the information.

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

Uninstall TotalAgility Tenant Management System

Uninstalling TotalAgility Tenant Management only removes the application and not the databases.

Use the silent mode

1. On the Command Prompt, change the command line to the root directory of the **Setup.exe** file.
2. Run the command `Setup.exe/Silent/U`.

   The system uninstalls TotalAgility Tenant Management System.
   - A summary of installation log is created in KofaxTotalAgilityTenantManagementSilentUnInstallLog.txt on the desktop.
   - If any errors occur, KofaxTotalAgilityInstallErrorLog.txt is created on the desktop. Fix the errors and complete the process.

Use the installation wizard

1. Click **Start > All Programs > Kofax TotalAgility Tenant Management >** , right-click and select **Uninstall Kofax TotalAgility Tenant Management**.

   The **Uninstall** window opens.
2. Click **Next**.

   The **Uninstallation Progress** window opens.

   When the uninstallation is complete, the **Kofax TotalAgility Tenant Management Uninstallation Complete** window opens.

   The summary report lists the components, servers, applications and services uninstalled.
3. Click **Finish**.

   If any errors occur, KofaxTotalAgilityInstallErrorLog.txt is created on the desktop. Fix the errors and complete the process.

Upgrade Tenant Management System

This topic describes the steps for upgrading the Tenant Management System server to the latest version via the Tenant Management System installer.

You can upgrade TotalAgility Tenant Management System from 7.8.0, 7.9.0, 7.10.0, or 7.11.0 to 8.0.0.

1. From your TotalAgility installation files, navigate to `\\TenantManagementInstall` folder and double click **Setup.exe**.

   The User Account control window opens.

2. In the **Kofax TotalAgility Tenant Management Upgrade** window, select one of the following options:
   - **TotalAgility components**: Upgrades only the components and not the databases.
   - **TotalAgility databases**: Upgrades only the databases.
   - **TotalAgility components including databases**: Upgrades both the components and the databases.

3. To use Windows authentication to connect to SQL Server, select the check box for **Windows authentication for databases**. (Default: Clear)

4. Click **Next**.

   The **Credentials** window opens.

5. Enter the credentials (password and confirm password) and click **Next**.
   The **Installation Progress** window opens. The setup upgrades the required components and databases.

6. Click **Finish**.

   Upgrade process is now complete.

   If any errors occur, KofaxTotalAgilityInstallErrorLog.txt is created on the desktop. Fix the errors and complete the process.

Upgrade databases manually using scripts

You can manually upgrade the TotalAgility databases using the scripts.

To run scripts manually, do the following:

1. Navigate to `\\TenantManagementInstall\Agility.Server.Web.TenantManagement` `\TenantScripts\Upgrade Database Scripts`.

2. For the Datacenter and Master databases, run the convert and post upgrade conversion scripts (if exist) for all releases and fix packs starting from the version upgrading from to the version upgrading to.

For example, if you are upgrading TotalAgility databases from 7.8.0 to 7.11.0, run all the following conversion scripts from each folder below.

Scripts:

- Convert_MasterTenants.sql
- Convert_DataCenterTenants.sql
- PostUpgrade_MasterTenants.sql
- PostUpgrade_DataCenterTenants.sql

Folders:

- 7.8.0.0 to 7.9.0.0 Conversion Scripts
- 7.9.0.0 to 7.10.0.0 Conversion Scripts
- 7.10.0.0 to 7.11.0.0 Conversion Scripts
- 7.11.0.0 to 8.0.0.0 Conversion Scripts

3. If upgrading from version earlier than TotalAgility 7.11.0, do the following for upgrading Master and Datacenter tables:

   a. Navigate to `\\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="UserName" value="" />` where the username is the currently logged on user's name.
      - `<add key="TenantDBConnectionString"value="Server=(local);Trusted_Con nection=Yes;Database=DataCenterTenants;" />`
      - `<add key="MasterTenantDBConnectionString"value="Server=(local);Tru sted_Connection=Yes;Database=<MasterTenants database>;" />`

        Point the connection strings to where the databases are installed.

   b. From the Command Prompt, run `Agility.Installation.Server.Upgrade.exe` by passing the "UpgradeMasterTenants" and "UpgradeDataCenter" parameters. For example, `Agility.Installation.Server.Upgrade.exe "UpgradeMasterTenants"` and `Agility.Installation.Server.Upgrade.exe "UpgradeDataCenter"`.

      > ⓘ To generate any logs, update the System diagnostics section of Agility.Installation.Server.Upgrade.exe.config to define the path of the log file in <add name="KTALog" type="System.Diagnostics.TextWriterTraceListener" initializeData="<log file path> <log file name>".

Chapter 7

Troubleshooting

This section describes the issues you may encounter and their resolution.

Downloading software updates

When downloading an installation package or a service pack from the **ftp.kofax.com** site, ensure that this site is added as a trusted site, otherwise the downloaded file may get corrupted.

Installation failure in IPv4 and IPv6 environment

If the 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**.

   > ⓘ This setting allows fine control over which interfaces the TAServerSQLInstance 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 (<TAServerInstance>) service where TAServerInstance is the actual instance used by TotalAgility (for example, Kofax TotalAgility).