



Aras Innovator 15

Installation Guide

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- Did you find any errors?
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If you have usage issues with the software, visit <https://www.aras.com/support/>

Document Conventions

The following table highlights the document conventions used in the document:

Table 1: Document Conventions

Convention	Description
Bold	This shows the names of menu items, dialog boxes, dialog box elements, and commands. Example: Click OK .
Code	Code examples appear in <code>courier</code> font. It may represent text you type or data you read.
Yellow highlight	Code highlighted in yellow draws attention to the code that is being indicated in the content.
Yellow highlight with red text	Red text highlighted in yellow indicates the code parameter that needs to be changed or replaced.
<i>Italics</i>	Reference to other documents.
Note:	Notes contain additional useful information.
Warning	Warning contains important information. Pay special attention to information highlighted this way.
Successive menu choices	Successive menu choices may appear with a greater than sign (-->) between the items that you will select consecutively. Example: Navigate to File --> Save --> OK .

1 Overview

Aras Innovator is a Web-based system for providing control and distribution of product information throughout the internal and extended enterprise and during the entire life cycle of a product. Aras Innovator is more than typical document management – it links configuration management, workflow, and dynamic tracking of product data.

By leveraging the infrastructure of the Internet, suppliers and customers can become more tightly involved within a product life cycle, which directly improves process efficiency, speed, quality, and lowers overall cost of business.

Aras Innovator is enterprise software that is 100% browser-based making it easy to use, learn and administer. Aras Innovator is an open solution based on standard Internet protocols such as HTTP/HTTPS, SOAP, and XML making integration with legacy applications straightforward and fast.

1.1 Getting Started

This document provides detailed instructions for the installation of a new Aras Innovator server instance. The procedures described in this document are intended to allow a novice administrator to install Aras Innovator. However, more general knowledge of system administration, databases, and high-level programming (HTML, JavaScript, C#) is required to fully customize an Aras Innovator package with required business rules.

The following is the sequence of steps to fully install and ready Aras Innovator for customization.

1. Verify System Prerequisites
2. Aras Innovator Server/Vault Server/OAuth Server/Agent Service Installation
3. Client Setup
4. Aras Innovator Server/Vault Server Uninstall

Note: The following installation and setup process assumes that the Aras Innovator Server instance, the Web Server, the Vault Server, and the Aras Innovator Database are located on the same machine. However, each of these components can be located on different machines if the host and directory paths can be resolved over your network.

2 Prerequisites

Aras Innovator requires several components for proper operation:

- Web Server
- Database Server
- File Server

2.1 Minimum System Requirements

The following is a list of Minimum System Requirements to install and operate Aras Innovator.

2.1.1 Client

Table 2: Platform

Component	Platform	Version
Operating System	MS Windows	Windows 10 Windows 8.1
	Mac	OS X 10.15 (Catalina)
Web Browser	Edge	
	Mozilla Firefox	78 ESR 91 ESR
	Google Chrome	Chrome 96 (minimum)

Table 3: Configuration

System Requirement	
Processor Speed	2.0 GHz
Free Disk Space	80.0 MB
Main Memory	2.0 GB
Monitor	1024x768 resolution with 16-bit color.

2.1.2 Server

Note: Administrative privileges are required for each server component to be properly installed and/or configured. You must restart Aras Innovator after you install the components listed in Table 4.

Table 4: Platform

Component	Platform	Version
Operating System	MS Windows Server	2019 2016 2012 R2 2012
Web Server	MS Internet Information Server	10 8.5 8
.NET	.NET Framework	4.7.2
	ASP.NET Core/.NET Core Runtime and Hosting Bundle	3.1.8
Relational Database	MS SQL Server	2019 2017 2016 2012
Microsoft Visual C++ Redistributable		2015
Report Server (Optional)	MS SQL Server	2019 2017 2016 2012

Table 5: Configuration

System Requirement	
Processor Speed	2.0 GHz
Free Disk Space	1.0 GB
Main Memory	4.0 GB
Monitor	1024x768 resolution with 16-bit color.

Table 6: Network Configuration

System Requirement	
Network	Microsoft TCP/IP Ethernet Network Adapter
File systems	NTFS

2.2 Obtaining a Framework License

Aras Innovator software requires a special license key to run. The license key is unique to each server running the Aras Innovator software. To obtain a license key, you must know the MAC address of your server.

To automatically generate a License Key, visit the licensing page at <https://www.aras.com/support/>.

2.2.1 Obtaining Your Server MAC Address

The MAC Address (Physical Address) of the Aras Innovator server is required to generate a license key. The MAC address has the following format: 00-50-04-2A-C1-E2. This machine id can be determined by running the following command in a Command Prompt window:

```
C:\>ipconfig/all
```

The command returns the machine's configuration information, including the Physical Address (MAC address) as below:

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\>ipconfig/all

Windows IP Configuration

    Host Name . . . . . : galab01
    Primary Dns Suffix . . . . . :
    Node Type . . . . . : Unknown
    IP Routing Enabled. . . . . : No
    WINS Proxy Enabled. . . . . : No
    DNS Suffix Search List. . . . . :

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . :
    Description . . . . . : Intel(R) PRO/1000 MT Network Connect
    Physical Address. . . . . : 00-0C-F1-EA-99-8B
    Dhcp Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes
```

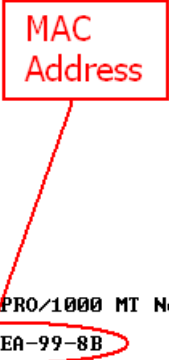


Figure 1.

2.2.2 Requesting a Framework License

Once you have obtained the MAC Address of your server, go to the licensing page on the Aras website to **automatically generate a License Key** at <https://www.aras.com/support/>.

Alternately, a community member with an active subscription package can send an email to licenses@aras.com or to your account representative in the following format:

- Subject – Framework License needed
- Body
 - MAC Address of the machine being installed on
 - Release of Aras Innovator

You receive a reply containing the following information

- License Key generated

Be prepared, the Aras Innovator Setup Wizard requests this information, so have it ready.

2.2.3 Upgrading from Previous Versions

The Aras Innovator Installer **cannot** be used to upgrade your Aras Innovator code tree or database from a previous release of Aras Innovator.

The database and code tree release must match.

If you wish to upgrade from a previous release of Aras Innovator, refer to the *Aras Innovator 15 – Release Notes* to see what path to take or contact Aras at info@aras.com to discuss your upgrade options.

3 Installing Aras Innovator

3.1 Client Browser Configuration

The *Aras Innovator 15 - Installation Guide* walks you through the steps needed to install Aras Innovator and upon completion your IT System Administrators should review the relevant document for client settings configuration.

- *Aras Innovator 15 - Client Settings for Chrome on Windows*
- *Aras Innovator 15 - Client Settings for Edge on Windows*
- *Aras Innovator 15 - Client Settings for Firefox on Windows*
- *Aras Innovator 15 - Client Settings for Chrome on Mac*
- *Aras Innovator 15 - Client Settings for Firefox on Mac*

The client settings document walks you through the necessary steps to configure client PC machines to run the Aras Innovator software. These documents can be found in the Documentation folder of the Aras Innovator CD image.

3.2 Installing Aras Innovator Server

The Aras Innovator installation file may be obtained from the Aras Innovator CD Image. It is recommended not to delete this copy of the MSI file when the installation is complete.

3.3 Run the InnovatorSetup.msi File

Double click on the file `InnovatorSetup.msi` to start the Aras Innovator Installer.

3.3.1 Welcome Page

Click **Next** to proceed or **Cancel** to exit setup.

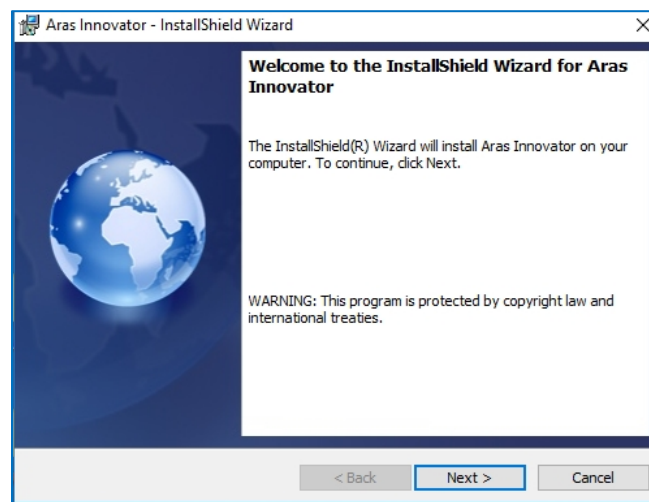


Figure 2.

3.3.2 License Agreement

Make sure that you read the license agreement carefully before agreeing and proceeding with the install.

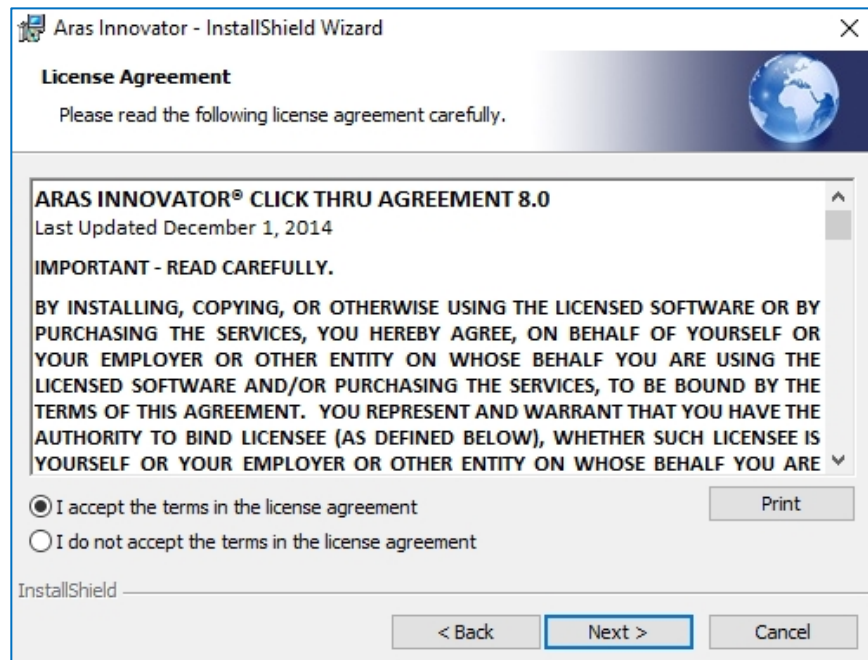


Figure 3.

This screen allows you to print the license agreement using a rich text editor, such as Wordpad, by clicking **Print**. The **Next** button remains disabled, until the **I accept the terms in the license agreement** option is selected.

1. Click **Next** to proceed with the installation.
2. Click **Back** to return to the previous screen.
3. Click **Cancel** to exit setup.

3.3.3 Prerequisites and Documentation

Ensure you have reviewed the *Aras Innovator – Installation Guide* and have all necessary components installed and configured on the server.

Note: Before you do a complete installation of Aras Innovator 15, make sure that you have installed all of the prerequisites otherwise you will not be able to configure an OAuth password for OAuth certificates.

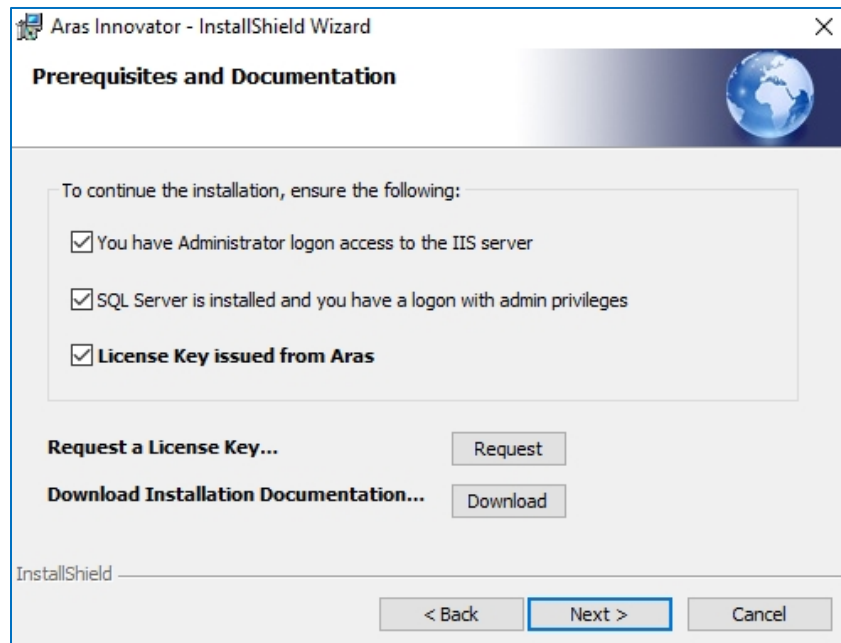


Figure 4.

- Select the following checkboxes:
 - **You have Administrator login access to the IIS server:** You have administrative rights on the computer you are installing to and have the IIS server installed and configured.
 - **SQL Server is installed, and you have a login with admin privileges:**
 - You have installed an MS SQL Server instance on the database server.
 - You must have SQL Server Authentication enabled.
 - You know the SQL Server login/passwords needed for installation.
 - **License Key issued from Aras**

If you have not obtained a license key at this time, do so now.

Note: The **Next** button is enabled only after you select all three options.

If you do not have a license key, click the **Request** button associated with **Request a License Key** to automatically go to the license request page at <https://www.aras.com/support/>. A license key will be emailed to you. See section 2.2 [Obtaining a Framework License](#).

Click **Download** to automatically go to the documentation page at <https://www.aras.com/support/>

- Click **Next** to proceed with installation.

- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

3.3.4 Aras Innovator Destination Folder

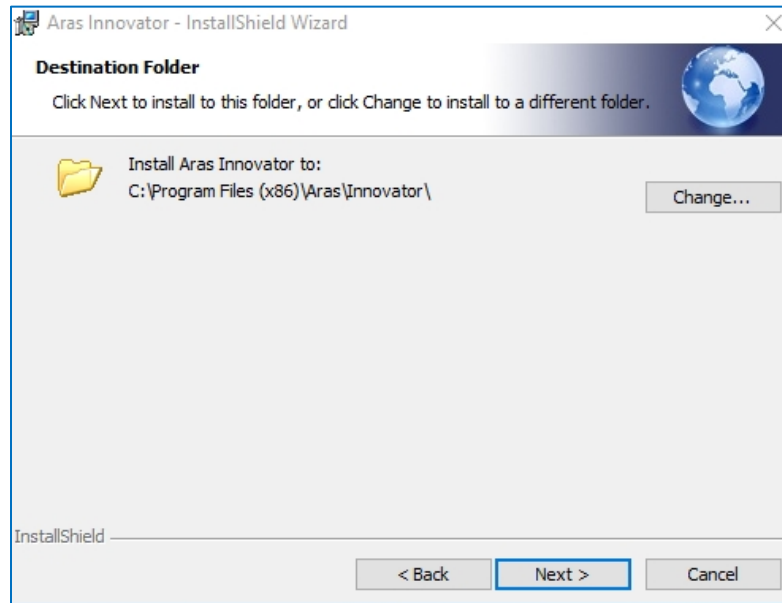


Figure 5.

This screen allows you to specify the directory to which Aras Innovator should be installed. The default directory path is `C:\Program Files (x86)\Aras\Innovator\`. But you can click **Change...** to select a directory of your choice. This document assumes the default value.

- Click **Next** to proceed with installation.
- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

3.3.5 Setup Type

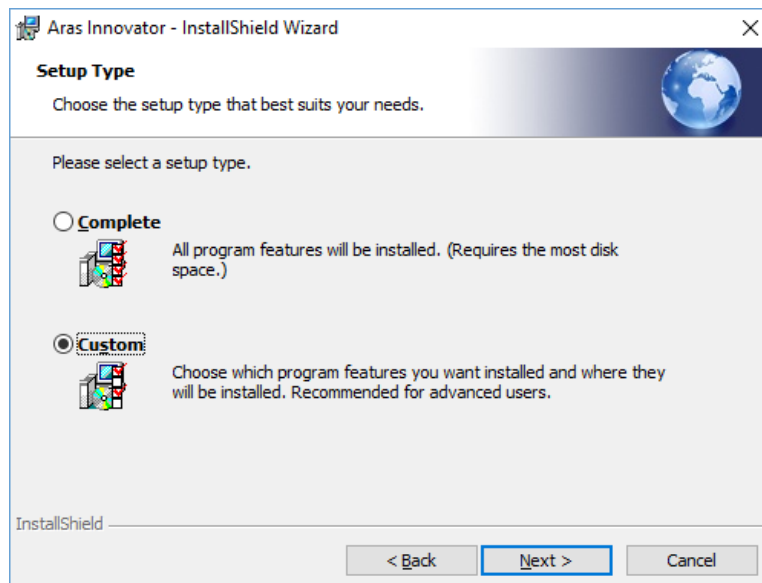


Figure 6.

Specify either the **Complete** or **Custom** option for installation.

- **Complete:** This option installs Aras Innovator with all the features. If you select this option, the OAuth Server Setup screen will not appear, and you will not be able to create a custom OAuth password. A random password will be automatically generated instead.
- **Custom:** This option allows you to select only the feature set necessary. By default, the **Custom** option is selected. The default custom installation installs the Aras Innovator Server, Vault Server, Database Server, and OAuth Server, but not the Conversion Server or Agent Service. Choosing Custom enables you to configure a password for OAuth certificates.
 - Click **Next** to proceed with installation.
 - Click **Back** to return to the previous screen.
 - Click **Cancel** to exit setup.

3.3.6 Custom Setup

If you choose **Custom Setup**, the following dialog appears. If you choose **Complete Setup Type**, go to section 3.3.7 [License Configuration](#) and follow that procedure.

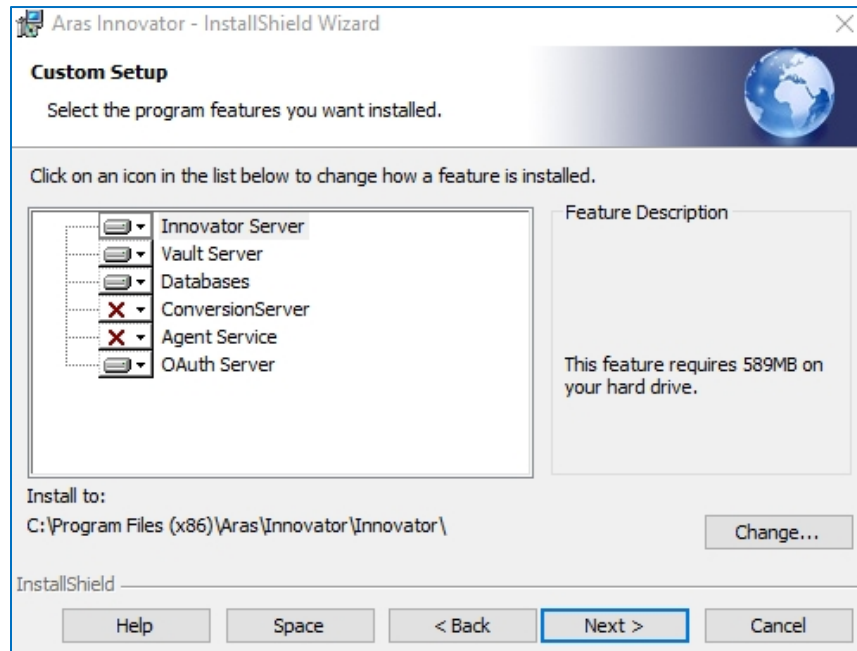


Figure 7.

1. Choose the Aras Innovator features that you want to install on your system:
 - Aras Innovator Server
 - Vault Server
 - Databases
 - Conversion Server
 - Agent Service
 - OAuth Server
2. Select/deselect the services by clicking on the appropriate service.

Note: This document assumes a custom installation was chosen, excluding the Conversion Server and Agent Service. It is assumed the Conversion Server and Agent Service will be installed on a separate server from the Aras Innovator Server in a production instance. For more information, refer to section 5 [Configuring Aras Innovator \(Optional\)](#).

3.3.7 License Configuration

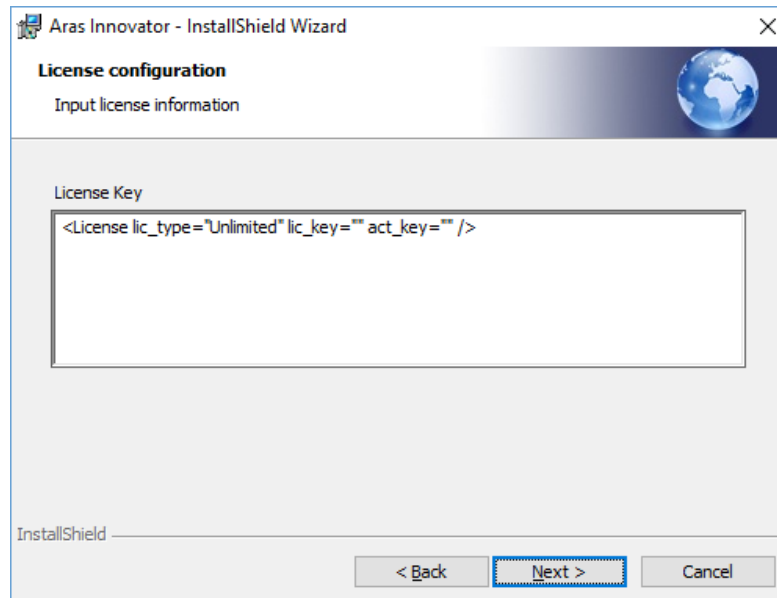


Figure 8.

License Key: A Framework License key obtained from Aras Corporation. If you have not obtained a license key at this time, do so now. (Refer to section 2.2 [Obtaining a Framework License](#))

- Click **Next** to proceed with installation.
- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

3.3.8 Server Web Alias Setup

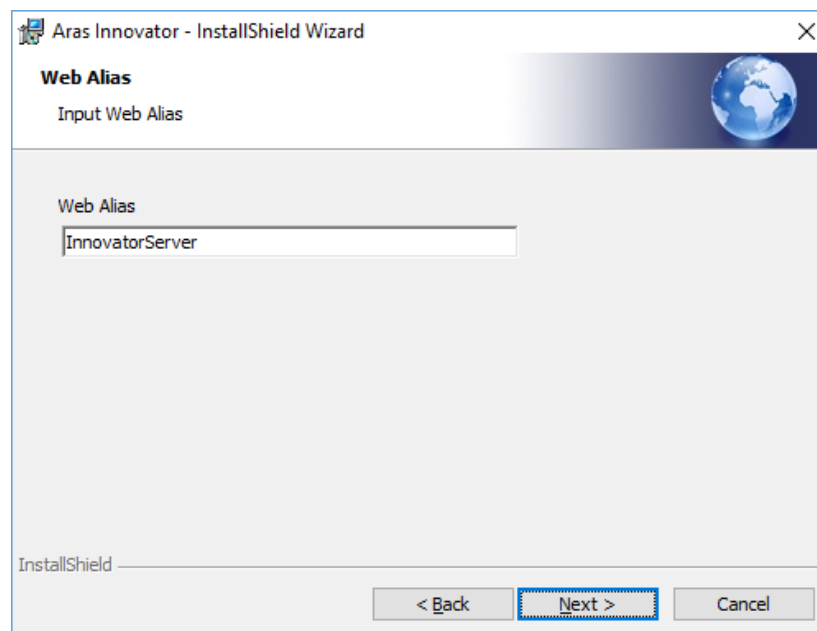


Figure 9.

Web alias - is used to create the virtual directory for the Aras Innovator Server and therefore to access Aras Innovator. To access Aras Innovator, type a URL of the form:

`http://<servername>/<web_alias>`

For example, if you were to select the default Web Alias InnovatorServer, then access it as:

`http://<servername>/InnovatorServer`

where,

`<servername>` is the name or IP address of the server hosting Aras Innovator (if it is installed locally, then you can refer to the server as localhost)

Note: It is recommended that you follow standard Web Alias restrictions when selecting a name. If you are unsure what this means, restrict yourself to alphanumeric characters. It is also recommended that the complete URL should not contain underscore characters, because it can interfere with the loading of session cookies.

3.3.9 SMTP Setup

This screen allows you to specify the SMTP server to be used within Aras Innovator to send emails on lifecycle promotions, workflow tasks, etc.

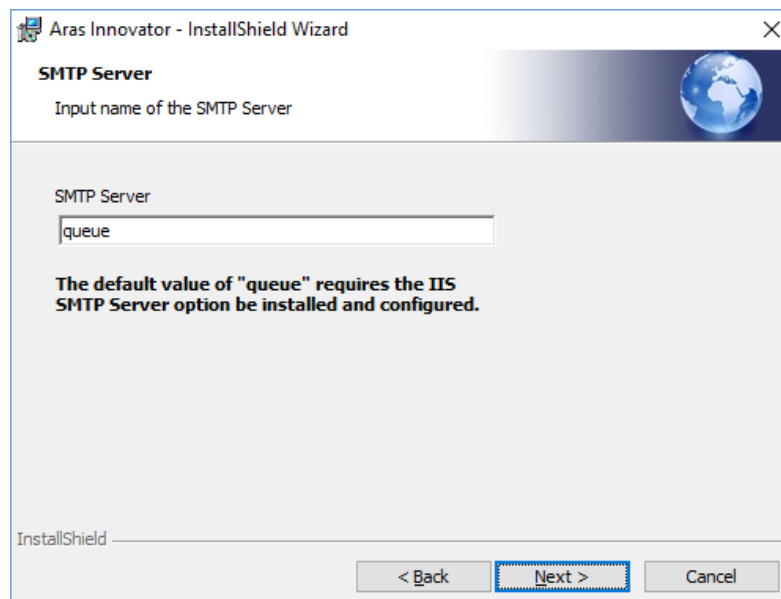


Figure 10.

In the **SMTP Server** field, specify a direct URL to your SMTP Server. This allows Aras Innovator to send email directly to your SMTP Server for immediate processing.

By default, the SMTP Server value is set to **queue**. You should update it to point to a valid SMTP server on your network.

- Click **Next** to proceed with installation.
- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

3.3.10 Languages Configuration

This screen allows you to choose what additional languages to install.

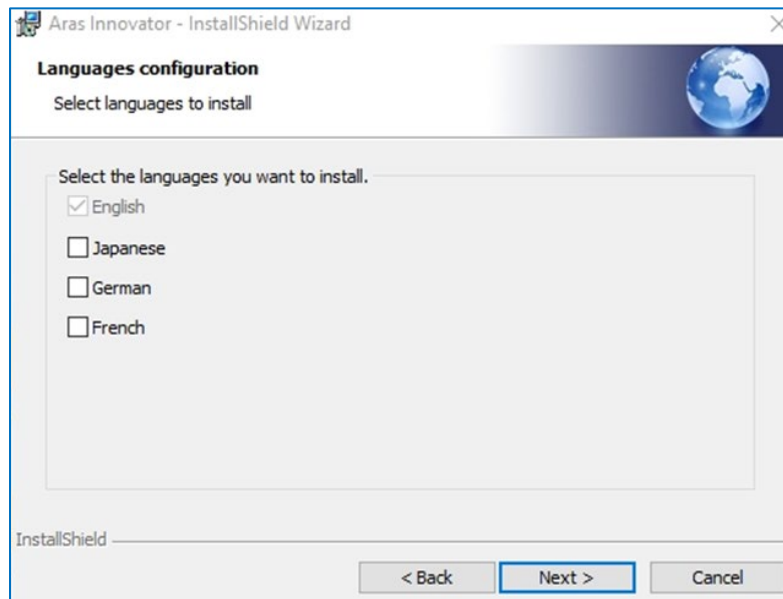


Figure 11.

- English – By default, the en-US locale is installed with the English language.
- Japanese – Selecting this option installs the ja-JP locale with the Japanese language.
- German – Selecting this option installs the ger-deu locale with the English language.
- French – Selecting this option installs the fr-fre locale with the French language.
 - Click **Next** to proceed with installation.
 - Click **Back** to return to the previous screen.
 - Click **Cancel** to exit setup.

3.3.11 OAuth Server Preferences

When you select the OAuth Server, the following screen appears prompting you to specify the Password for OAuth Certificates.

Note: Before you do a complete installation of Aras Innovator 15, make sure that you have installed all of the prerequisites otherwise you will not be able to configure an OAuth password for OAuth certificates.

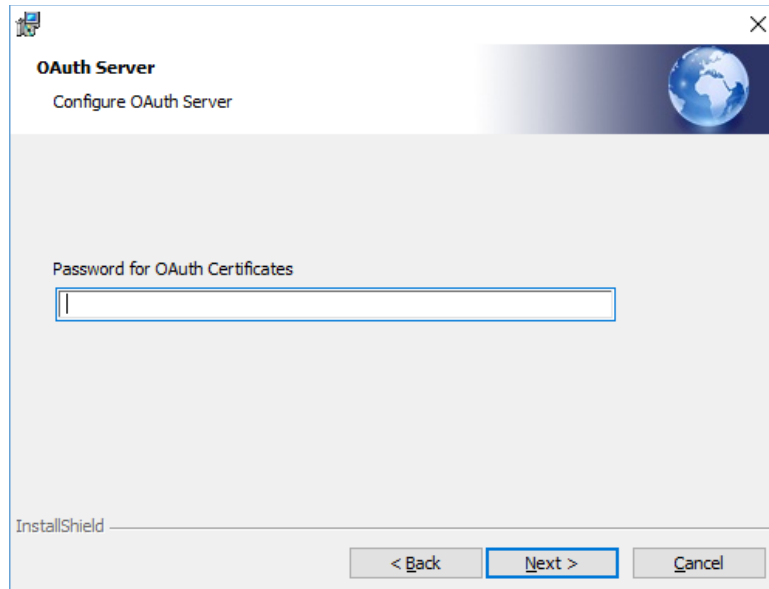


Figure 12.

- **Password for OAuth Certificates** – Enter the password to protect the private keys of certificates. The password can only contain alphanumerical symbols (a-z, A-Z, 0-9) and any of the standard printable ASCII characters (:_#\$%&<> and others). The password cannot contain spaces. Click **Next**.

Note: The OAuth server is a requirement. If you try to login without first installing the OAuth server, the following error appears:

Cannot access OAuth server due to incorrect Discovery configuration

You can install the OAuth server separately. For information about this procedure, refer to section [5.9](#) Installing Separate OAuth Server.

3.3.12 Vault Server Preferences

This screen enables you to specify the Vault Name, the Application Server URL, and the local path for files for the Vault Server which is used with the Aras Innovator Server.

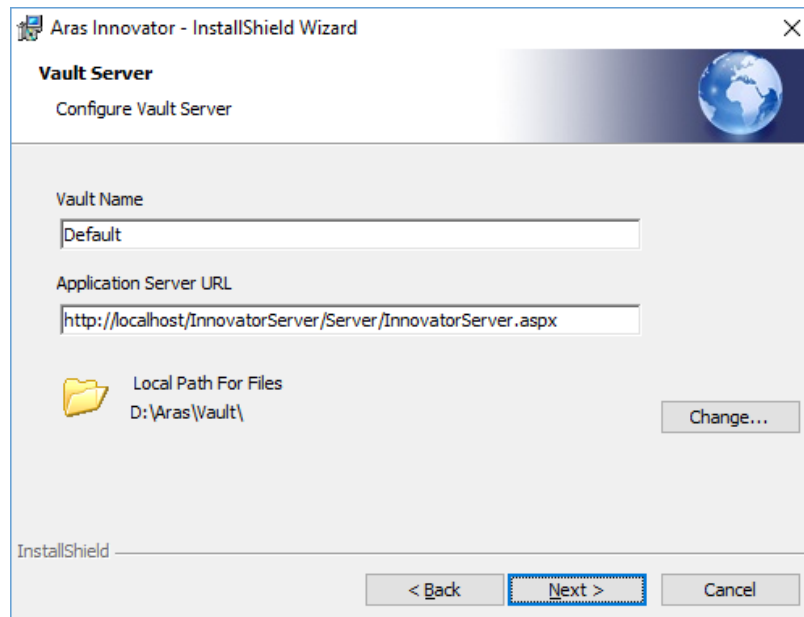


Figure 13.

- **Vault Name** - The Vault instance to be installed. All new instances of Aras Innovator must contain one vault named 'Default'. Alternate or additional vaults may be configured separately after the initial installation.
- **Application Server URL** - Since Vault Server is not a standalone application and is useful only along with the Aras Innovator Server, this field allows you to specify the Application Server URL for the instance of Aras Innovator you are going to use with this Vault Server. The Application Server URL is of the following format:

```
http://<servername>/<web_alias>/Server/InnovatorServer.aspx
```

where:

<servername> is the name of the server where the Aras Innovator Server is running. For example, if it is running on the local machine, the server is localhost

<web_alias> is the name of the Aras Innovator Server Virtual Directory and consequently the name that is used to access the Aras Innovator Server. This is the same Web Alias that you specified earlier in section 3.3.8 [Server Web Alias Setup](#).

A best practice is for a standard install is

```
http://localhost/${HTTP_PATH_SERVER}/Server/innovatorserver.aspx
```

- **Local Path for Files** - the full local path to the directory on this machine where you would like the files to be stored. This folder should be in a location where there is sufficient disk space to accommodate the files you expect users to check into the system and should also be in a location where the files will not be deleted by processes other than the Vault Server, as these files are being managed by Aras Innovator.
 - A best practice to select a folder with a known label that will not be deleted in a location with adequate disk space.
 - The installer defaults to the local drive with the most available disk space and recommend the \Aras\Vault folder. (Example: C:\Aras\Vault)
 - Click **Next** to proceed with installation.
 - Click **Back** to return to the previous screen.
 - Click **Cancel** to exit setup.

3.3.13 Agent Service Preferences (Optional)

This tier of the installation is disabled by default. It is necessary to install the Agent Service if you plan to use Vault Replication or the Conversion Server.

If you are not installing the Agent Service at the same time as the Aras Innovator Server, skip to section [3.3.15 Configure Database](#). For more information on installing the Agent Service after the installation of Aras Innovator Server, refer to section 5.12 [Installing the Agent Service](#).

When you select the Agent Service the following screen appears. Enter the host name, port, and alias for the Agent Service as shown:

Figure 14.

- Specify the **host name** and **port number** as follows:

<ServerName>:<PortNumber>.

Note: The Agent Service can only be installed on a free port.

- Specify the **Agent Service** alias. The **Agent Service alias** is a unique identifier for the Windows service name. The full name is `ArasInnovatorAgent_<Alias>`, the displayed name is `Aras Innovator Agent (<Alias>)`.
- Click **Next** to proceed with installation.
- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

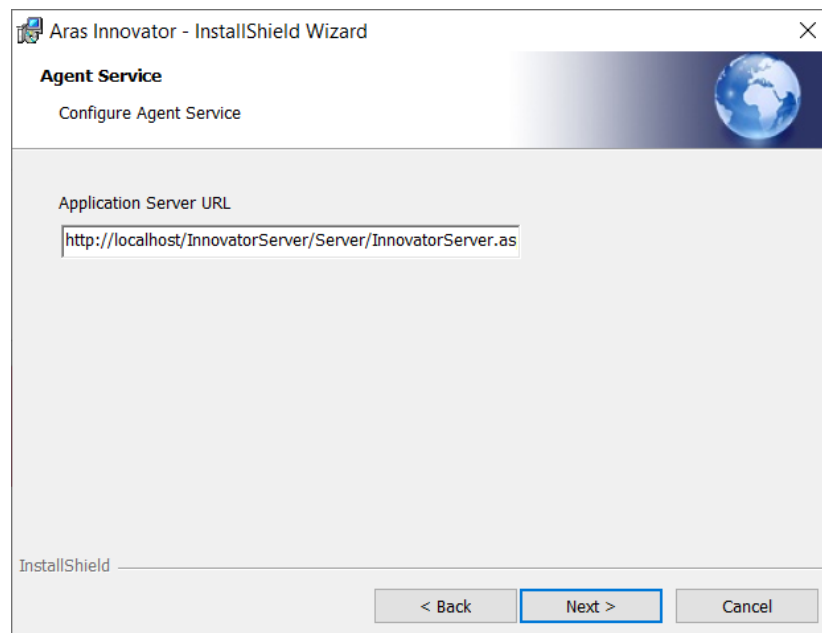


Figure 15.

- **Application Server URL** - since the Agent Service is not a standalone application and is useful only along with the Aras Innovator Server, this field allows you to specify the Application Server URL for the instance of Aras Innovator you are going to use with this Agent Service. The Application Server URL uses the following format:

`http://<servername>/<web_alias>/Server/InnovatorServer.aspx`

Where:

- `<servername>` is the name of the server where the Aras Innovator Server is running. For example, if it is running on the local machine, this is `localhost`
- `<web_alias>` is the name of the Aras Innovator Server Virtual Directory. This is the same Web Alias as specified in the section 3.3.8 [Server Web Alias Setup](#)
- Click **Next** to proceed with installation.
- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

3.3.14 Conversion Server Preferences (Optional)

This tier of the installation is disabled by default as Conversion Servers are typically installed on a separate server in production. For more information, refer to section 5.11 [Installing Separate Conversion Server](#).

If you are not installing a Conversion Server on the same Server as the Aras Innovator Server, skip to section [3.3.15 Configure Database](#).

This screen allows you to specify the Conversion Server Name and the Application Server URL for the Aras Innovator Server.

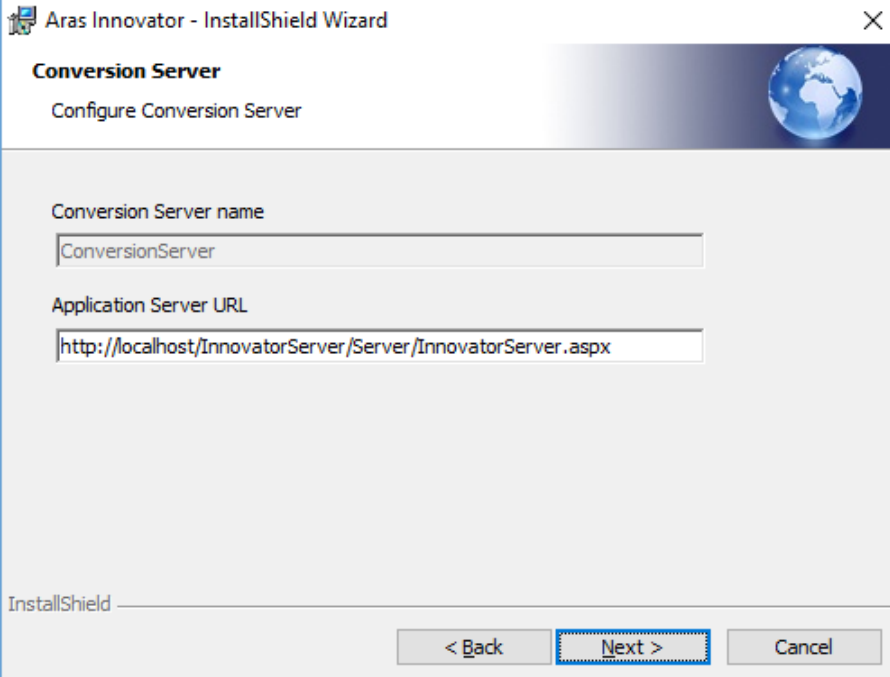


Figure 16.

- **Conversion Server Name** - The Conversion Server instance to be installed. If the Aras Innovator Server is being installed as well, this field is disabled.

This is the name of the application installed in IIS. Additional Conversion Servers may be configured separately after the initial installation.

- **Application Server URL** - since Conversion Server is not a standalone application and is useful only along with the Aras Innovator Server, this field allows you to specify the Application Server URL for the instance of Aras Innovator you are going to use with this Conversion Server. The Application Server URL is of the following format:

`http://<servername>/<web_alias>/Server/InnovatorServer.aspx`

Where:

- `<servername>` is the name of the server where the Aras Innovator Server is running. For example, if running on the local machine, this is `localhost`
 - `<web_alias>` is the name of the Aras Innovator Server Virtual Directory. This is the same Web Alias as specified in the section 3.3.8 [Server Web Alias Setup](#).
- Click **Next** to proceed with installation.

3.3.15 Configure Database

This screen allows you to set up one or more Aras Innovator databases. You must have SQL Server Authentication enabled on your Microsoft SQL Server instance to install and run Aras Innovator.

Figure 17.

- **Database Server** – This refers to the SQL Server instance you wish to install to. By default, this is set to the first available SQL Server instance on the local machine, but can be set to any valid SQL Server Registration instance. To set this value, simply key in the name of a known instance or select 'Browse...' to see what SQL Server registrations the installer recognizes as available.
- **Configuration Options** – This is the method by which you choose to install the Aras Innovator database. Each option is explained separately in the following sub-sections.

[Create a new database](#)

[Populate an existing database](#)

[Use an existing database](#)

[Configure only \(no validations\)](#)

Note: The **Next** button is enabled only after you complete the database installation and configuration. You must configure at least one database before proceeding with the installation.

3.3.15.1 Create a new database

This option is used to create a new database. This is the most common configuration for new installations of Aras Innovator.

The screenshot shows the 'Configure Database' window of the Aras Innovator - InstallShield Wizard. The window has a title bar with the text 'Aras Innovator - InstallShield Wizard' and a close button. Below the title bar is a header area with the text 'Configure Database' and a sub-header 'Select install new or use existing database.' with a globe icon. The main content area is divided into several sections: 'Database server:' with a dropdown menu set to '(local)' and a 'Browse...' button; 'Configuration Options' with four radio buttons, the first of which is selected; 'DBA Login Options' with two radio buttons, the second of which is selected, and fields for 'Login ID' and 'Password'; 'Database Login Options' with fields for 'DB owner login', 'Password', 'DB client login', and 'Password'; and 'Database Options' with a 'Database template' dropdown set to 'InnovatorSolutions' and a 'Database name' dropdown set to 'InnovatorSolutions'. At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'. A 'Configure database' button is also visible near the bottom right of the main content area.

Figure 18.

- **DBA Login Options** – In order to install a database, we must first connect to the database server. There are two methods of establishing a connection to the database server.

Windows Authentication – Connect to SQL server as the current logged in user.

SQL Server Authentication – Connect as the SQL Server Administrator

- **Login ID** – the login of the DBA with permissions to create new databases. Check with your system's DBA what this parameter should be.
- **Password** – the password for the login used to create the database. Again, check with your system's DBA what this parameter should be.

You need to click '**Connect...**' once the login details are provided. This allows the installer to confirm connection to the SQL Server instance before proceeding further.

- **Database Login Options – Create a new database** also creates the Aras Innovator database user and the SQL Server login defined in this section of the Configure Database screen with privileges as a database owner of the database created. The Aras Innovator database user will be associated with the SQL server login defined in the “DB owner login field.” The Aras Innovator database user must be the database owner in MS SQL Server and does **NOT** use the SA login to log into the database. (See also section 8 [Database Owner Configuration](#))
 - **DB owner login** - This is the login that is used by the *innovator* database user. The installer maps this login to the *innovator* database user after the *innovator* database user is created. The installer creates the *innovator* database user with rights as a database owner. This user has elevated permissions for certain security-related functions. **Do not use the SA login.**
 - The **Create a new database** option creates the *innovator_regular* database user with regular (limited) privileges. The *innovator_regular* database user is associated with the SQL server login defined in the “DB client login” field. The *innovator_regular* database user does **NOT** use the SA login.
 - **DB client login** - This is the login that is used by the *innovator_regular* database user. The installer maps this login to the *innovator_regular* database user after the *innovator_regular* database user is created. **This user has limited (regular) permissions for security reasons.** By default, all regular database requests from Aras Innovator are executed on behalf of the *innovator_regular* database user. **Do not use the SA login. Do not use the DB owner login that you used previously.**
 - **Password** - You need to specify the passwords for the corresponding DB owner and DB client logins.
- **Database Options –** The name and type of database to be installed.
 - **Database Template** - Select either Innovator Solutions or Innovator Core as the template to be used for the creation of the new database. The Innovator Core database contains only the core data structures of Aras Innovator. The Innovator Solutions database includes the core components plus additional data elements for the Program Management and Product Engineering solutions.
 - **Database Name** - Specify the name you wish your new Aras Innovator SQL Server database to be called or accept the default name provided.

When all fields are complete, click **Configure Database** to install the database.

Note: The **Next** button is enabled only after you complete the database installation and configuration. Once you have installed a database, you may change the database configuration options and install again, or you can select **Next** to proceed with the installation. You must configure at least one database before proceeding with the installation.

3.3.15.2 Populate an existing database

This option is used to populate an existing empty database with the required data and to add this data base to the Aras Innovator configuration file to be used with this installation of Aras Innovator. You must know the user logins mapped to both the *innovator* database user and the *innovator_regular* database user. Two logins for two users are required to use this option.

The screenshot shows the 'Configure Database' window in the Aras Innovator - InstallShield Wizard. The window has a title bar with the application name and a close button. Below the title bar is a header area with the text 'Configure Database' and 'Select install new or use existing database.' The main content area is divided into several sections: 'Database server:' with a dropdown menu set to '(local)' and a 'Browse...' button; 'Configuration Options' with four radio buttons, where 'Populate an existing database' is selected; 'DBA Login Options' with a 'Connect using:' section where 'Server authentication using the Login ID and password below' is selected, and fields for 'Login ID:' (sa) and 'Password:'; 'Database Login Options' with fields for 'DB owner login:' (innovator), 'Password:', 'DB client login:' (innovator_regular), and 'Password:'; and 'Database Options' with a 'Database template:' dropdown set to 'InnovatorSolutions' and a 'Database name:' dropdown set to 'InnovatorSolutions', with a 'Browse...' button. At the bottom right is a 'Configure database' button. At the very bottom are navigation buttons: '< Back', 'Next >', and 'Cancel'.

Figure 19.

- **Database Login Options – DB owner login** is associated with the *innovator* database user and must be the database owner in MS SQL Server but does **NOT** use the super admin (SA) login to log into the database. **DB client login** is the login associated with the *innovator_regular* database user (do **NOT** use either the SA login or the DB owner login). See also section 8 [Database Owner Configuration](#).
 - **DB owner login** - This is the login that is used by the *innovator* database user. This user has elevated permissions for certain security-related functions.
 - **DB client login** - This is the login that is used by the *innovator_regular* database user. This user should **NOT** be the database owner. **Do not use the SA login. Do not use the DB owner login that you used previously.**

Note: Do not use the SA login.

- **Password** - You need to specify the passwords for the corresponding DB owner and DB client logins.

You need to click **Connect...** once the login options have been filled out. This allows the installer to confirm connection to the SQL Server instance before proceeding.

- **Database Options** – The name and type of database to be installed.
 - **Database Template** - Select either Innovator Solutions or Innovator Core as the template to be used for the creation of the new database. The Innovator Core database contains only the core data structures of Aras Innovator. The Innovator Solutions database includes the core components plus additional data elements for the Program Management, Product Engineering and Quality Planning solutions.
 - **Database Name** - Specify the name of the database you are installing to. This value may be keyed in or click **Browse...** to see what SQL Server registrations the installer recognizes as available.

When all fields are complete, click **Configure Database** to install the database.

Note: The **Next** button is enabled only after you complete the database installation and configuration. Once you have installed a database, you may change the database configuration options and install again, or you can select **Next** to proceed with the installation. You must configure at least one database before proceeding.

3.3.15.3 Use an existing database

This option is meant to add an existing Aras Innovator database to the configuration file used with the newly installed Aras Innovator. The database must be compliant with the version of Aras Innovator being installed; meaning that the data it is populated with must be compliant with the current version of Aras Innovator. Also, you must know the user login mapped to the *innovator* database user and the SQL server login mapped to the *innovator_regular* database user.

The screenshot shows the 'Configure Database' window in the Aras Innovator - InstallShield Wizard. The window has a title bar with the application name and standard window controls. Below the title bar is a header area with the title 'Configure Database' and a subtitle 'Select install new or use existing database.' The main content area is divided into several sections: 'Database server:' with a dropdown menu showing '(local)' and a 'Browse...' button; 'Configuration Options' with four radio buttons: 'Create a new database', 'Populate an existing database', 'Use an existing database' (which is selected), and 'Configure only (no validations)'; 'DBA Login Options' with a 'Connect using:' section containing two radio buttons: 'Windows authentication credentials of current user' and 'Server authentication using the Login ID and password below' (which is selected). Below this are fields for 'Login ID:' (containing 'sa') and 'Password:', followed by a 'Connect...' button; 'Database Login Options' with fields for 'DB owner login:' (containing 'innovator'), 'Password:', 'DB client login:' (containing 'innovator_regular'), and 'Password:', followed by a 'Connect...' button; and 'Database Options' with a 'Database template:' dropdown (showing 'InnovatorSolutions') and a 'Database name:' dropdown (showing 'InnovatorSolutions') with a 'Browse...' button. At the bottom right of the main content area is a 'Configure database' button. The footer of the window contains the 'InstallShield' logo and three buttons: '< Back', 'Next >', and 'Cancel'.

Figure 20.

- **Database Login Options** – This is the **DB owner login** associated with the *innovator* database user and must be the database owner in MS SQL Server but does **NOT** use the SA login to log into the database. The **DB client login** is associated with the *innovator_regular* database user (do **NOT** use either the SA or the DB owner login). See section [8.Database Owner Configuration](#).
 - **DB owner login** - This is the login that is used by the *innovator* database user. This user has elevated permissions for certain security-related functions.
 - **DB client login** - This is the login that is used by the *innovator_regular* database user. This user has limited (regular) permissions for security reasons. **Do not use the SA login. Do not use the DB owner login that you used previously.**
 - **Password** - You need to specify the passwords for the corresponding DB owner and DB client logins.
- **Database Options** – The name and type of database to be installed.
 - **Database Name** - Specify the name of the database you are installing to. This value may be keyed in or click **Browse...** to see what SQL Server registrations the installer recognizes as available.

When all fields are complete, click **Configure Database** to install the database.

Note: The **Next** button is enabled only after you complete the database installation and configuration. Once you have installed a database, you may change the database configuration options and install again, or you can select **Next** to proceed with the installation. You must configure at least one database before proceeding.

3.3.15.4 Configure only (no validations)

This option is meant to add an existing Aras Innovator database to the configuration file used with the newly installed Aras Innovator. The database must be compliant with the version of Aras Innovator being installed; meaning that the data it is populated with must be compliant with the current version of Aras Innovator. Also, you must know the user login mapped to the *innovator* database user as well as the SQL server login mapped to the *innovator_regular* database user. The difference between this option and **Use an existing database** option is that the login does not validate the login credentials against the database. This option is mainly provided for development purposes.

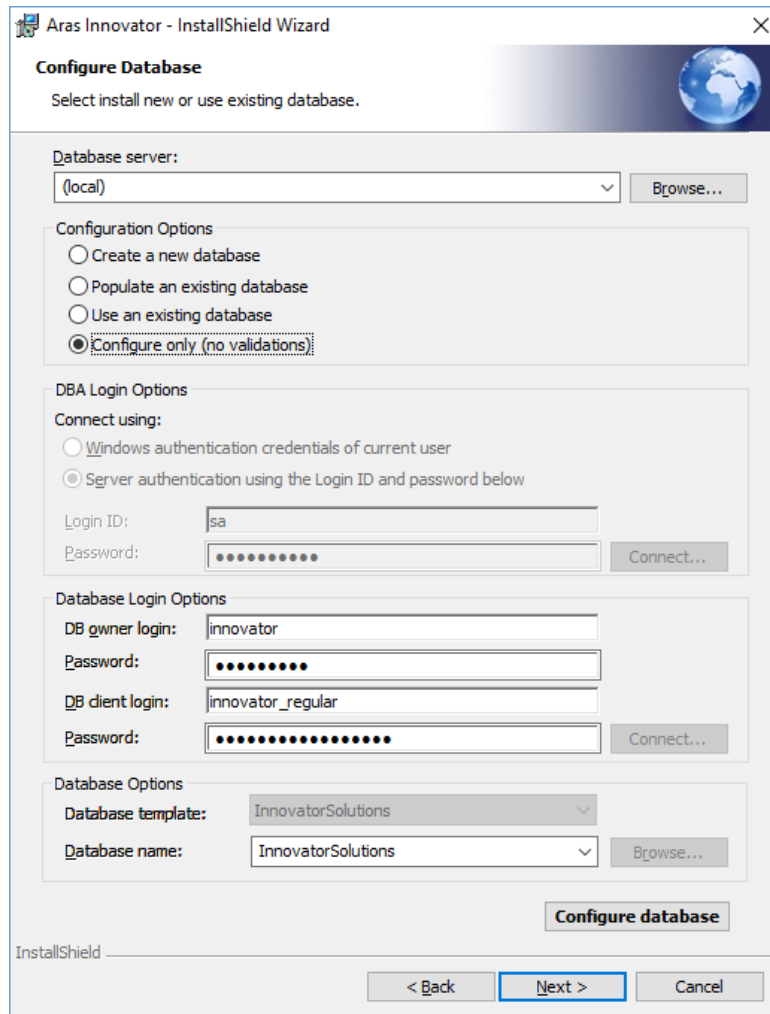


Figure 21.

- **DB owner login** – This is the login associated with the *innovator* database user and must be the database owner in MS SQL Server but does **NOT** use the SA login to log into the database. The **DB Client login** is the login associated with the *innovator_regular* user (do **NOT** use the SA login). See also section 8 [Database Owner Configuration](#).
 - **DB owner login** - This is the login that is used by the *innovator* database user. This user has elevated permissions for certain security-related functions.
 - **DB client login** - This is the login that is used by the *innovator_regular* database user. The user has limited (regular) permissions for security reasons.
- Note:** Do not use the SA login.
- **Password** - You need to specify the passwords for the corresponding DB owner and DB client logins.
 - **Database Options** – The name and type of the database to be installed.
 - **Database Name** - Specify the name of the database you are installing to. This value may be keyed in or select **Browse...** to see what SQL Server registrations the installer recognizes as available.

When all fields are complete, click **Configure Database** to install the database.

Note: The **Next** button is enabled only after you complete the database installation and configuration. Once you have installed a database, you may change the database configuration options and install again, or you can select **Next** to proceed with the installation. You must configure at least one database before proceeding.

3.3.16 Begin the Installation

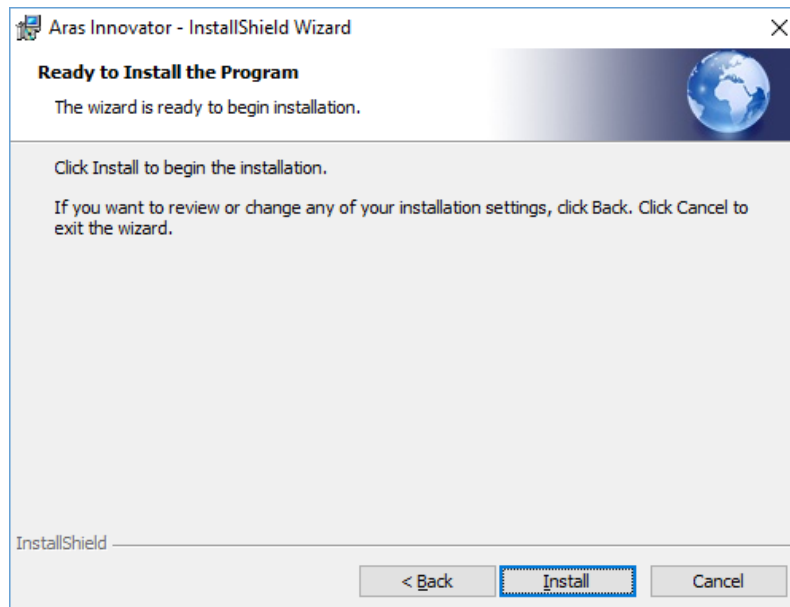


Figure 22.

This screen is displayed next, whether you chose **Custom** or **Complete** Install. Click **Install** to start the installation of the features.

Warning You no longer can make any changes once you click **Install**.

If User Access Control (UAC) is enabled on the Server, you are prompted to grant higher permissions. Click **Yes**.

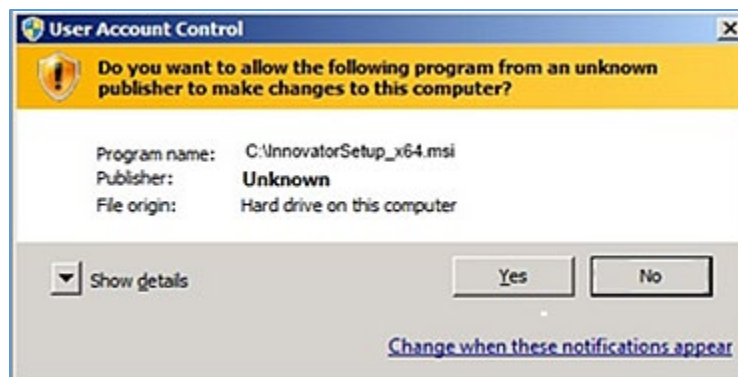


Figure 23.

- Click **Back** to return to the previous screen.
- Click **Cancel** to exit setup.

3.3.17 Installation Status

This screen shows the installation status.

Click **Cancel** to exit setup.

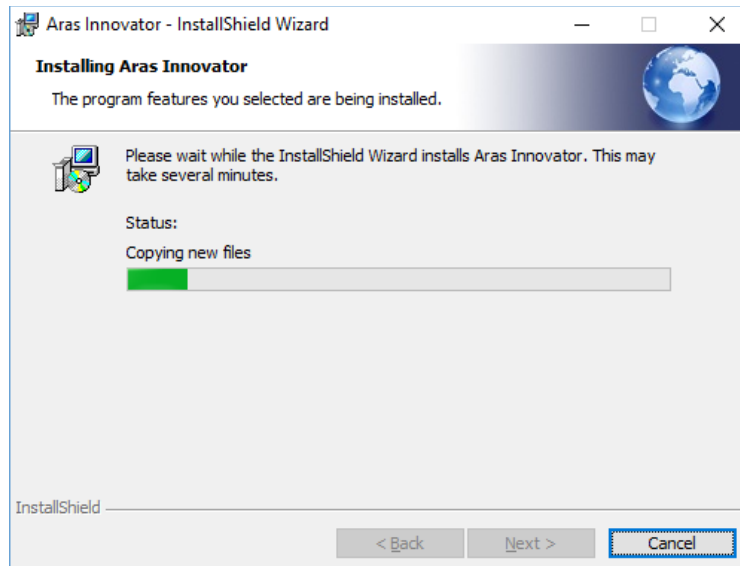


Figure 24.

3.3.18 Installation Completed

The following screen is the last in the installation wizard.

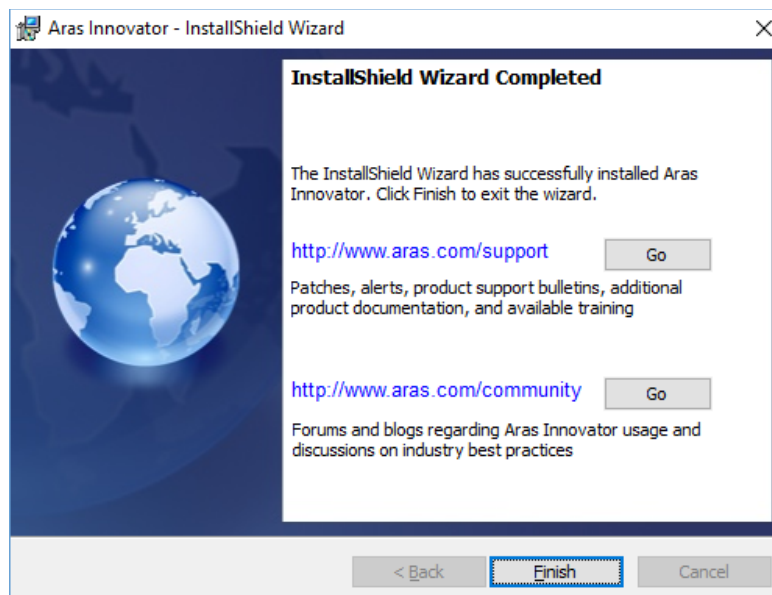


Figure 25.

The **Go** buttons open up a web browser to the Aras web page.

<https://www.aras.com/support/> – Location for downloads, documentation, and other Aras Innovator support information.

<http://www.aras.com/community> – Location of forums and blogs relating to usage, best practices, and overall enhancement of the Aras Innovator experience.

Click **Finish** to complete the installation process and close the installer.

Note: Make sure **not** to delete your installer from your hard drive when you are done with an installation. You must reuse the same installer to install other instances of Aras Innovator or its components.

4 Logging into Aras Innovator

Aras Innovator uses a Web Browser as the container for its administration and end-user interface. Refer to the relevant document for client settings configuration.

- *Aras Innovator 15 – Client Settings for Chrome on Windows*
- *Aras Innovator 15 – Client Settings for Edge on Windows*
- *Aras Innovator 15 – Client Settings for Firefox on Windows*
- *Aras Innovator 15 – Client Settings for Chrome on Mac*
- *Aras Innovator 15 – Client Settings for Firefox on Mac*

A user with 'administrator' rights typically performs customization of Aras Innovator. Initial setup of Aras Innovator determines the 'admin' user name logon. By default, the user 'admin' has a logon password of 'innovator'.

To log on as administrator

1. Open a browser and point your web browser at http://<servername>/<web_alias>

Note: The complete login URL is determined by the Web Server virtual directory name setup. (e.g., <http://myserver/InnovatorServer>).

2. Enter the default login information.
 - a. Enter the default administrator's designated username and password (username 'admin', password 'innovator').
 - b. Select the correct database from the drop-down menu. This is the database you named in the 'InnovatorServerConfig.xml'
3. Click **Login**.

Note: Anyone can log in with administrative accesses with this default user. While this is acceptable in a development environment, it is recommended that you set up a new account for production databases with administrative privileges and disable this login.

5 Configuring Aras Innovator (Optional)

Aras Innovator uses a configuration file to manage licensing and server information that is required to successfully start, locate, and connect to active components in its operation. You can customize and configure various aspects as per your requirements.

5.1 Time Zones

Aras Innovator supports Corporate Time Zone.

5.1.1 Corporate Time Zone

If your users access Aras Innovator from multiple time zones, you should configure Aras Innovator to have one corporate time zone that the Innovator Server can reference. This time zone is used for calculating things like when Project Activities become active.

Setting the Corporate Time Zone should be done before users begin to work with the system in production. If it is done after users have begun to use the system, you must get all users to log out of the system before enabling the Corporate Time Zone.

To set the Corporate Time Zone, use the following steps:

1. Log into Aras Innovator as an administrator.
2. From the TOC, select **Administration --> Variables**.
3. From the main toolbar, select **Create a New Item**.

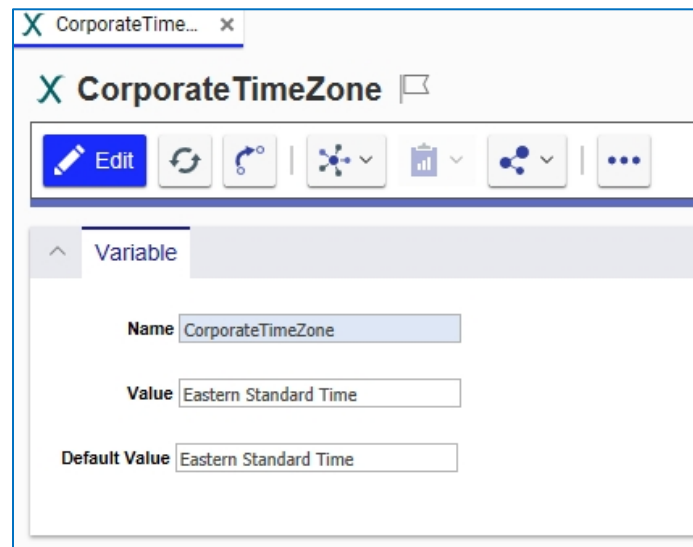


Figure 26.

4. Set the **Name = CorporateTimeZone**
5. Set the **Value** according to the registry key name of the required time zone.

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Time  
Zones
```


6. Set the **Default Value** to the value which the variable should default to if the **Value** field is empty.
7. Save, Unclaim, and Close the Variable Item.
8. Log out of Aras Innovator.
9. Restart the World Wide Web Publishing service on the server running the Innovator Server tier of Aras Innovator.

The result is shown in the main Aras Innovator window. Aras Innovator displays only one time:

5.1.2 Update Time Zone Data

With the periodic changes to Time Zone information as well as Daylight Savings it is necessary that the time zone data within Aras Innovator be updated. Similar to Windows Updates, this new information needs to be loaded into your system.

To update the time zone data for your instance, use the following steps:

1. Log into Aras Innovator as an administrator.
2. From the TOC, either click the search icon  that appears when you hover over **Actions** or select **Administration>Actions>Search Actions**:

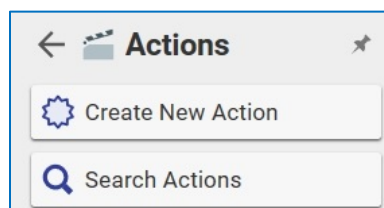


Figure 27.

The Search Grid appears.

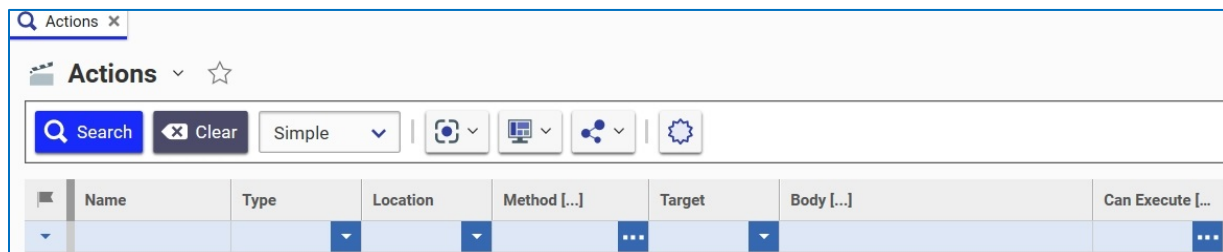


Figure 28.

3. Select **Actions>UpdateTimeZoneInfo** from the toolbar.
This saves the tzupdate.xml to your Working Directory.
4. Once the file is finished downloading, a File Dialog appears. Select the tzupdate.xml file that is downloaded.
5. Click **OK** when the update has completed.

5.2 DB Connection

This section provides the fundamental data enabling the Aras Innovator server to connect to the Aras Innovator database. Use this section to manually create custom connections to existing databases.

Variable	Definition
id	Any alphanumeric name to be used to identify the database when using Innovator.
database	The name of the Aras Innovator database in SQL Server
server	The name of the server where the database is installed.
dbo_uid	The username to connect to the "Aras Innovator" database user.
dbo_pwd	The password to connect to the "Aras Innovator" database user.
regular_uid	The username to connect to the "innovator_regular" database user.
regular_pwd	The password to connect to the "innovator_regular" database user.

The following is an example of a properly formatted DB Connection section of the InnovatorServerConfig.xml.

Microsoft SQL Server database

```
<DB-Connection
  id="Innovator"
  database="InnovatorSolutions"
  server="localhost"
  regular_uid="innovator_regular" regular_pwd="innovator_regular"
  dbo_uid="innovator"
  dbo_pwd="innovator" />
```

Edit the InnovatorServerConfig.xml file located in root of the install directory.

C:\Program Files\Aras\Innovator

1. Id = Innovator → Name you wish to appear in the drop-down list when accessing Innovator. If the id attribute is not present in the entry, then database name is used to identify the database when using Innovator. Select this name carefully, as it is also the name of the folder you vault files are stored in.
2. database = InnovatorSolutions → name of the database you are connecting to.
3. server = Localhost → the name of the SQL Server instance where the database is installed.
4. regular_uid = innovator_regular → the login to connect to the *innovator_regular* database user.
5. regular_pwd = innovator_regular → the password to connect to the *innovator_regular* database user.
6. dbo_uid = innovator → the login to connect to the *innovator* database user.
7. dbo_pwd = innovator → the password to connect to the *innovator* database user.

5.3 Customizing/Tailoring User Interface

If desired, edit the UI Tailoring section of the 'InnovatorServerConfig.xml'. This section of the InnovatorServerConfig.xml file allows the customer to modify the login screen, the main screen title bar, and the banner page (if any).

Variable	Definition
login_splash	The URL (relative to the Innovator home directory) to the image to be used on the Innovator login screen
branding_img	The URL (relative to the Innovator home directory) to the image to be used on the Innovator login screen
product_name	The title to be used on the main Innovator window title bar
banner_url	The URL (relative to the Innovator home directory) to the HTML page to be used as the Innovator banner.
banner_height	The height of the banner section of the main Innovator window, if no banner is desired, set this value to 0.
opener_focus_on_logout	<p>If false, then Aras Innovator does not try to give the opener window focus when the user logs out of Aras Innovator.</p> <p>– This defaults to true. If false then the /Client/scripts/default.aspx does not try to do a history.back() after it creates the logon pop-up window in which the /Client/scripts/innovator.aspx run.</p>
window_history_back_before_login	<p>By default, this is true. If false then the /Client/scripts/default.aspx does not try to do a history.back() after it creates the logon pop-up window in which the /Client/scripts/innovator.aspx run.</p>

The following is an example of a properly formatted UI Tailoring section of the InnovatorServerConfig.xml file.

```
<UI-Tailoring
  login_splash="../../../images/aras-innovator.svg"
  branding_img="../../../images/aras-innovator.svg"
  product_name="Aras Innovator"
  banner_url="../../../scripts/banner.aspx"
  banner_height="50" />
```


5.4 Enabling the Debugging of Methods

Aras Innovator Methods are compiled before execution. The default behavior of Aras Innovator is not to generate these methods temporary files. If this setting is enabled, these files are stored in the file system in the \Innovator\Server\dll folder of the installation. Because the files are generated at runtime, the DLL files generated in this folder do not list the Aras Corporation company name or the Aras Innovator product name in file properties. Further, the DLL files generated in this folder at runtime do not have a digital signature.

To enable the generation of these files in the file system, you need to add the following tag to the InnovatorServerConfig.xml, found in the root of your installation folder.

```
<Innovator>
  <UI-Tailoring login_logo="...
  <IEClient RequiredSyncMode5="Never"/>
  <operating_parameter key="DebugServerMethod" value="true" />
  <operating_parameter key="debug_log_flag" value="false" />
```

To disable the use of this folder again, you simply need to change the value to false.

```
<Innovator>
  <UI-Tailoring login_logo="...
  <IEClient RequiredSyncMode5="Never" />
  <operating_parameter key="DebugServerMethod" value="false" />
  <operating_parameter key="debug_log_flag" value="false" />
```

Disabling the use of this folder has no negative effect on a production system.

5.5 Installing the Reporting Service

Aras Innovator uses integration with the Microsoft SQL Server Reporting Service. This service must be installed and configured to run Aras Innovator reports. Refer to the *Aras Innovator - Microsoft Reporting Services Guide* for details on installing and configuring the service. This document can be found at <https://www.aras.com/support/> or in the *Documentation* folder of the Aras Innovator CD Image.

5.6 Configuring Aras Innovator for Single Sign-On

The Aras Innovator Single Sign-On feature provides a mechanism for customers to take advantage of their existing user authentication scheme so that an Innovator login can be processed without the user entering an Innovator specific password. This new feature has been architected so that it can be easily configured to adapt to an Active Directory environment or, if the customer has another user authentication scheme, hooks have been included to integrate a non-standard method.

Refer to the *Aras Innovator 15 – Windows Authentication* document. This document can be found in the *Documentation* folder of the CD Image and outlines configuring your Aras Innovator installation for user authentication.

5.7 Configuring the Aras Innovator Service

The Aras Innovator Service is a Windows executable program that runs as a Windows Service. It is used to automatically run Aras Innovator Methods on a periodic schedule, as specified in the *InnovatorServiceConfig.xml* file. A single running instance of the Aras Innovator Service can be configured to periodically connect to any number of Aras Innovator Servers and for each Aras Innovator Server run any number of Methods. The standard Windows Event Viewer is used for logging of program status and error messages.

Refer to the *Aras Innovator 15 - Service Instructions* document for information on configuring your Aras Innovator installation to use this service. This document can be found in the *Documentation* folder of the CD Image.

5.8 Configuring Custom Installations

Note: This section assumes a custom installation was chosen, excluding the Conversion Server and Agent Service. It is assumed the Conversion Server and Agent Service are installed on a separate server from the Aras Innovator Server in a production instance.

When using the custom install option certain files must be configured to allow Aras Innovator components to work together.

The Aras Innovator Server must know where the database is installed. For the system where Aras Innovator Server is installed, follow the steps outlined in section 0 [DB Connection](#).

The Database must point to the designated vault location. Use the following procedure to set up the vault:

1. Log in as administrator.
2. From the TOC, either click the search icon  that appears when you hover over **Vaults** to access the Search grid or select **Administration>File Handling>Vaults**. The following menu appears:

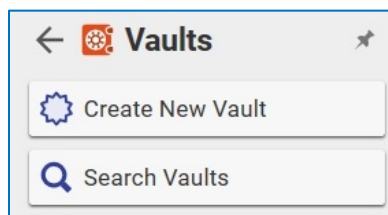
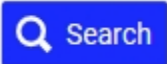


Figure 29.

3. Click **Search Vaults**. The Search grid appears.
4. Click . The Default vault appears in the Search grid.

5. Double-click **Default** to view the dialog box:

The screenshot shows a dialog box titled 'Default'. It has a 'Default' tab and a 'Replication Rule' tab. The 'Default' tab contains the following fields:

- Name:** Default
- Vault Url Pattern:** \${HTTP_PREFIX_SERVER}\${HTTP_HOST_SERVER}\${HTTP_PORT_SERVER}\${HTTP_PATH_SERVER}/vault/vaultserver.aspx
- Vault Url:** http://localhost/Support/InnovatorServer12/vault/vaultserver.aspx

The 'Replication Rule' tab is active, showing a table with the following data:

Name	Initiator Type	Replication ...	Filter [...]	Replication T...	Is Active	Label
All Employees	onChange	Scheduled		Copy	<input checked="" type="checkbox"/>	

Figure 30.

The following information appears in the fields:

- a. **Name** – Default (we are configuring the Default vault server)
- b. **Vault Url Pattern** – This is the IIS path to the VaultServer.aspx. By default, this path should be:
`[HTTP_PREFIX_SERVER][HTTP_HOST_SERVER][HTTP_PORT_SERVER][HTTP_PATH_SERVER]/vault/vaultserver.aspx`

Note: If the Vault Server is installed on a separate machine than the Innovator Server, then the web alias may need to be hard coded:
`http://<servername>/<web_alias>/vault/VaultServer.aspx`

- c. **Vault Url** – This field is updated automatically after the vault information is saved.

6. Click the  on the Replication Rule tab to specify who can create replication rules for the vault.
7. Click the **Add Conversion Servers** icon  on the Conversion Server Priority tab to add another conversion server to the list.
8. Click the  and  buttons to save, and unclaim the file.

9. The Vault Server should have access to the Aras Innovator Server and Database Server – The vault server must know the location of the InnovatorServer.aspx. Here is how to configure it:
 - a. Open the file vault.config. This file should be in the root of the installed directory for the Vault server, for example:

C:\Program Files\Aras\Innovator\vault.config

- b. Change the key InnovatorServerUrl to point to the InnovatorServer.aspx. So,

```
<add key="InnovatorServerUrl"
value="${HTTP_PREFIX_SERVER}${HTTP_HOST_SERVER}${HTTP_PORT_SERVER}${
HTTP_PATH_SERVER}/Server/innovatorserver.aspx" />
```

becomes:

```
<add key="InnovatorServerUrl"
value="http://<servername>/<web_alias>/Server/innovatorserver.aspx"
/>
```

5.9 Installing Separate OAuth Server

The Aras OAuth server is an authorization server designed to handle the OAuth 2.0 protocol. You can install the Aras OAuth server on a different server than the Aras Innovator server which is suitable for a cluster environment.

Use the following procedure to install the OAuth server separately and then configure other Aras servers to use it:

Select the OAuth Server feature and click **Next**.

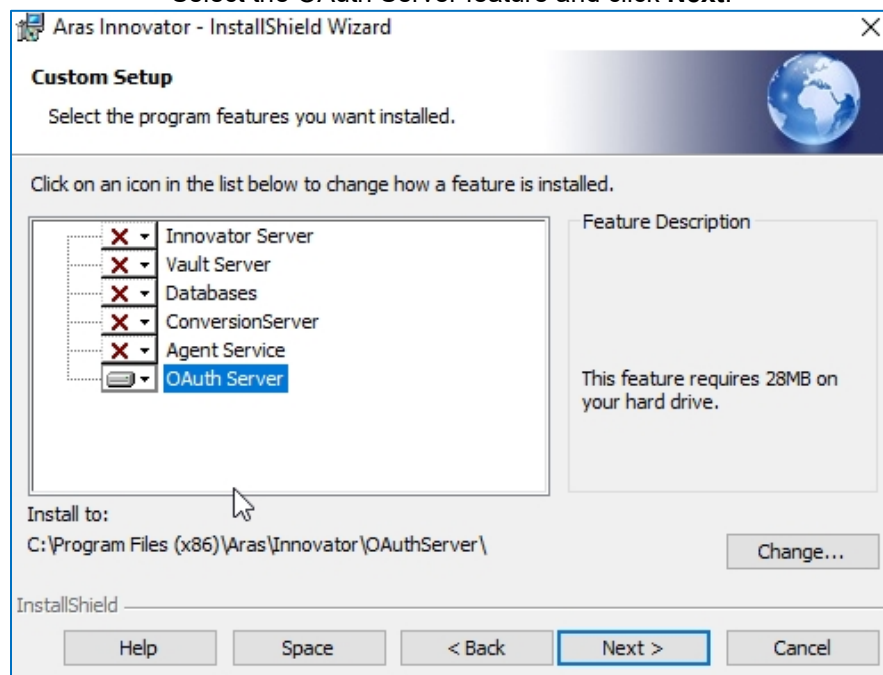


Figure 31.

The following screen appears.

Figure 32.

10. Specify the OAuth Server name, the password for the OAuth certificates and the Application Server URL.

OAuth Server Name – Enter the name of the Aras OAuth Server instance that you want to install. It should be the name of the application installed in IIS.

Password for OAuth Certificates – Enter the password to protect the certificate private keys. The password can only contain alphanumeric symbols (a-z, A-Z, 0-9) and any of the standard printable ASCII characters (:_#\$%&<> and others). The password cannot contain spaces.

Application Server URL – since OAuth Server is not a standalone application and is useful only along with the Aras Innovator Server, this field allows you to specify the Application Server URL for the instance of Aras Innovator you are going to use with this OAuth Server. The Application Server URL is of the following format:

`http://<servername>/<web_alias>/Server/InnovatorServer.aspx`

Where:

- <servername> is the name of the server where the Innovator Server is running. For example, if running on the local machine, this is `localhost`
- <web_alias> is the name of the Aras Innovator Server Virtual Directory. This is the same Web Alias as specified in the section 3.3.8 [Server Web Alias Setup](#).

11. Complete the installation.

Once you have installed the OAuth Server, you will need to complete the installation of the other Application servers and specify the required information for connecting to the OAuth Server.

Install the Aras Agent Service or the Aras Innovator Server and configure them on a separately installed instance of the Aras OAuth server. You should deselect the OAuth Server feature and press **Next**.

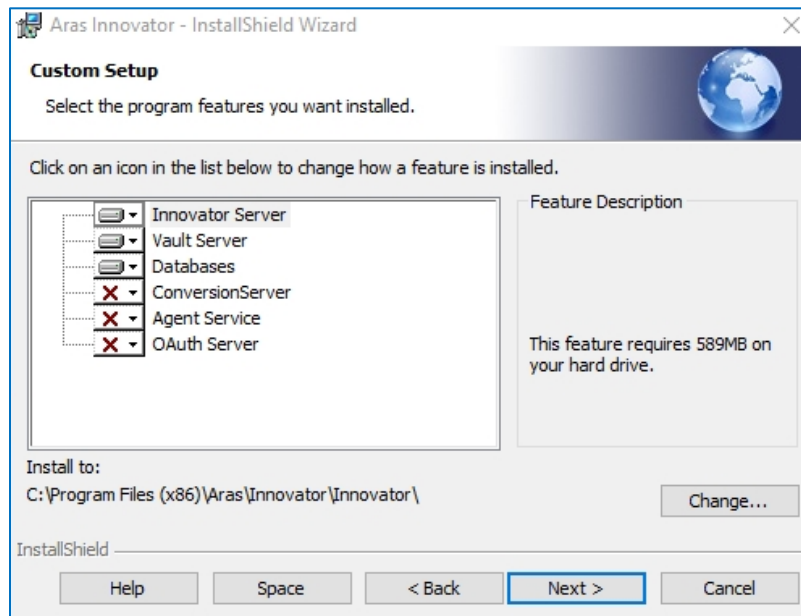


Figure 33.

The following screen appears.

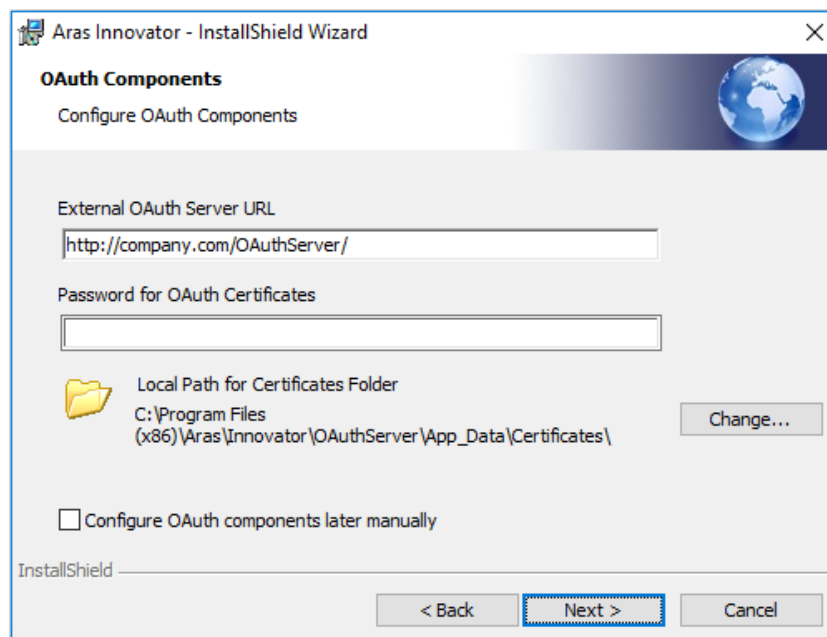


Figure 34.

12. Enter the following information:

External OAuth Server URL – URL used by other OAuth components to access the previously installed Aras OAuth server. The URL has the following format:

`http://<servername>/<oauth_server_name>`

where:

- `<servername>` is the name of the server where the OAuth server is running. The name of the server should be accessible from the external host, so “localhost” and other loopback addresses are not appropriate for `servername`
- `<oauth_server_name>` is the name of the Aras OAuth Server Virtual Directory. This is the same OAuth Server Name that you specified in the previous screen.

Password for OAuth Certificates – Enter the password to access private certificates (.pfx) from the **Local Path for Certificates** folder.

- **Local Path for Certificates Folder** – the full local path to the OAuth Certificate folder or to a copy of this folder where OAuth certificates were generated during the separate installation of the OAuth Server. The certificate folder must contain all the necessary certificates before this installation.

13. You may check **Configure OAuth components later manually** and continue with the installation. This will require changing the OAuth.config files and deploying certificates manually.

5.10 Configuring Alternate Vault Installations

When using the custom install option certain files must be configured to allow Aras Innovator components to work together.

1. Run a custom installation to set up the new vault, which in this example, we call New.

The Database must point to the designated vault location. To set up the vault:

- a. Log in as administrator.
- b. Select **Administration>File Handling>Vaults** from the TOC. The Vaults menu appears.

- c. Click **Create New Vault**. The following dialog appears:

Figure 35.

- d. Enter the following information in the appropriate fields:
- Name – New (The name of the vault server we are configuring)
 - Vault Url Pattern – This is the IIS path to the VaultServer.aspx. Because this is not the default vault the URL should be hard coded:
`http://<servername>/<web_alias>/vault/VaultServer.aspx`
 - When a vault is installed stand-alone, the default web alias is:
`http://<servername>/vault/VaultServer.aspx`
 - Vault Url – Leave blank. It gets filled automatically when you save the new vault.
- e. Click the Save, unclaim, and close button.
2. The Vault Server should have access to the Aras Innovator Server and Database Server, meaning that the vault server must know the location of the InnovatorServer.aspx. Use the following procedure to configure it:
- a. Open the file vault.config. This file should be located in the root of the installed directory for the Vault server, for example:
- ```
C:\Program Files\Aras\Innovator\VaultServer\vault.config
```
- b. Change the key InnovatorServerUrl to point to the InnovatorServer.aspx. So,
- ```
<add key="InnovatorServerUrl"
value="${[HTTP_PREFIX_SERVER]}${[HTTP_HOST_SERVER]}${[HTTP_PORT_SERVER]}${[HTTP_PATH_SERVER]}/Server/innovatorserver.aspx" />
```
- becomes:
- ```
<add key="InnovatorServerUrl"
value="http://<servername>/<web_alias>/Server/innovatorserver.aspx" />
```



- c. Change the vault name in the file, to the name of the server we are using, in this case 'New'.

```
<add key="VaultServerName" value="default" />
```

becomes:

```
<add key="VaultServerName" value="new" />
```

## 5.11 Installing Separate Conversion Servers

This tier of the installation is disabled by default. It is necessary to install the Agent Service if you plan to use Vault Replication or the Conversion Server. For more information about the Agent Service, refer to the Agent Service Guide.

Conversion Servers are used to convert specific File Types into another file format. For example, the Aras CAD to PDF Converter converts CAD drawing files into its PDF files for use as viewable files on the CAD Document ItemType.

In a typical Aras Installation, the Conversion Server is recommended to be installed on a separate server. Installing a Conversion Server on the server that has Aras Innovator installed causes a significant performance impact.

Refer to the *Aras Innovator – Conversion Server Setup Guide* for information on installing and configuring a Conversion Server. This document can be found in the Documentation folder of the CD Image.

### 5.11.1 Microsoft Visual C++ Redistributable Package

You must install The Microsoft Visual C++ 2010, 2012, 2013, and 2015 Redistributable Packages on the Conversion Server. The links to these downloads can be found at Microsoft's latest supported Visual C++:

**Microsoft Visual C++ 2010, 2012, 2013, and 2015 Redistributable Packages (x64):**

<https://support.microsoft.com/en-us/help/2977003/the-latest-supported-visual-c-downloads>

## 5.12 Installing the Agent Service

This tier of the installation is disabled by default. It is necessary to install the Agent Service if you plan to use either Vault Replication or the Conversion Server.

The Agent Service is a Windows Service designed to handle other add-on services such as Conversion Server and Vault Replication. It works by actively listening to http/https requests from Aras Innovator Server on a dedicated port.

The Aras Agent Service may be installed on a different server than the Aras Innovator Server. If installing on the same machine as Aras Innovator, you should run the *ChangeGUID.exe* file on the Installer as described in section 9.2 to avoid conflicts in current Aras Innovator installation. The Agent Service application should be installed to a separate physical directory.

**Note:** The following instructions assume that the Agent Service is being installed on the same machine as Aras Innovator Server.

1. When prompted for the installation directory, click **Change** and select a new directory, for example: C:\ProgramFiles (x86)\Aras\AgentService\

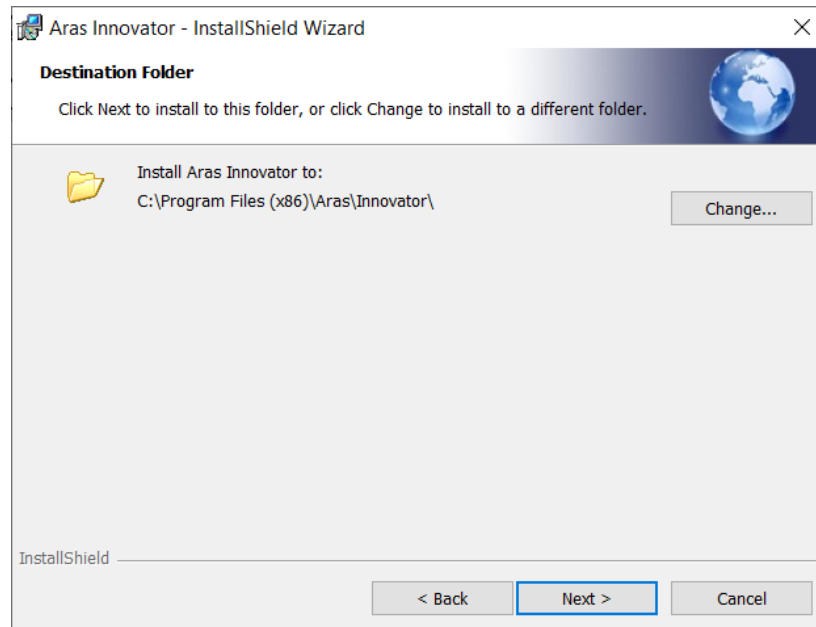


Figure 36.

2. When selecting setup, choose **Custom** and then select only the **Agent Service** to install.

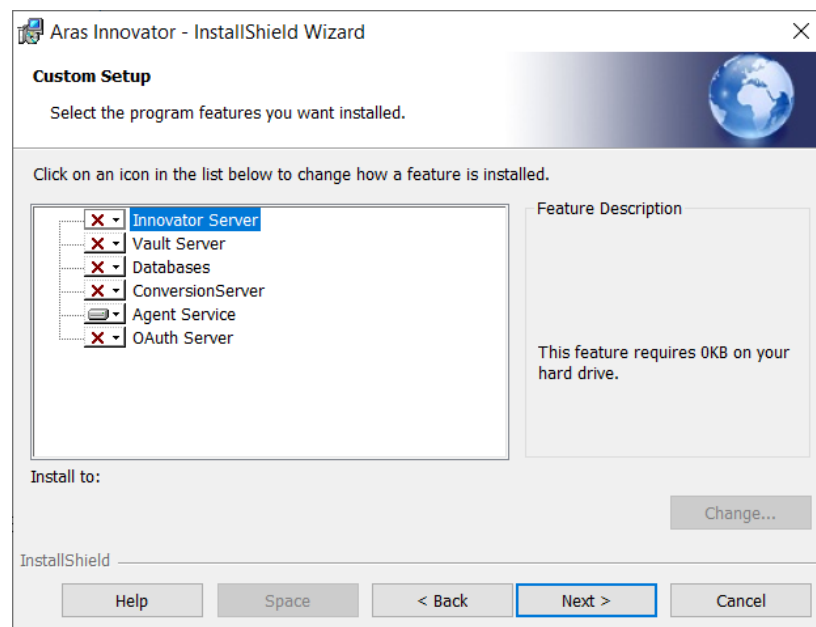


Figure 37.

3. Specify the **host name**, **port number** as follows: **<ServerName> : <PortNumber>**.

4. The **Agent Service alias** is a unique identifier for the Windows service name. The Full name is ArasInnovatorAgent\_<alias>. The displayed name is Aras Innovator Agent (<alias>).

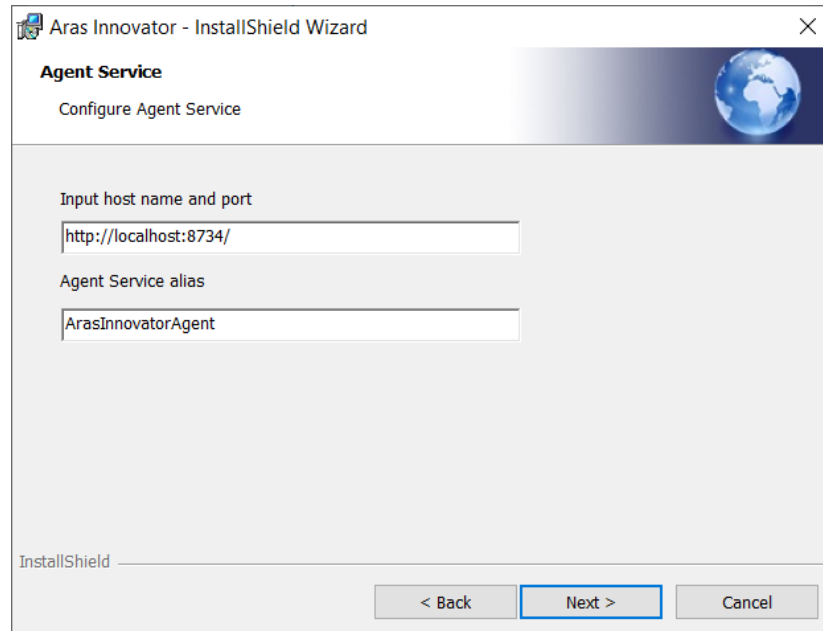


Figure 38.

**Note:** The Agent Service can only be installed on a free port.

5. Specify the connection URL for the Aras Innovator Server as follows:  
`<Protocol>://<ServerName>/<WebAlias>/Server/InnovatorServer.aspx`

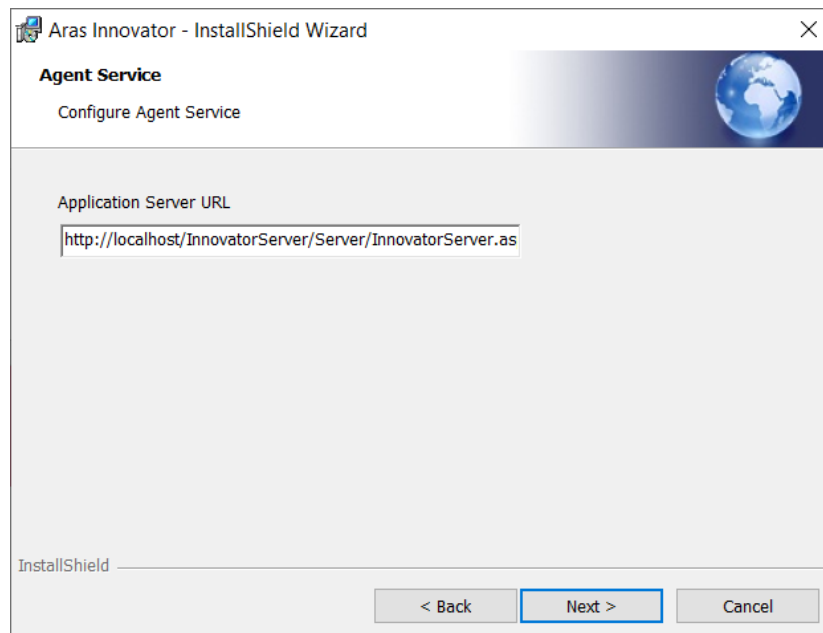


Figure 39.

- a) **Application Server URL** - Since the Agent Service is not a standalone application and is useful only along with the Aras Innovator Server, this field allows you to specify the Application Server URL for the instance of Aras Innovator you are going to use with this Agent Service. The Application Server URL is of the following format:

`http://<servername>/<web_alias>/Server/InnovatorServer.aspx`

where:

- `<servername>` is the name of the server where the Aras Innovator Server is running. For example, if it is running on the local machine, the server is localhost
- `<web_alias>` is the name of the Aras Innovator Server Virtual Directory and consequently the name that is used to access the Aras Innovator Server. This is the same Web Alias that you specified earlier in section 3.3.8 [Server Web Alias Setup](#).

A best practice for a standard install is:

`http://localhost/${HTTP_PATH_SERVER}/Server/innovatorserver.aspx`

6. Copy the Agent Service Tag generated by the installer and save it to be added to the InnovatorServerConfig.xml in the root directory of the main Aras Innovator installation.

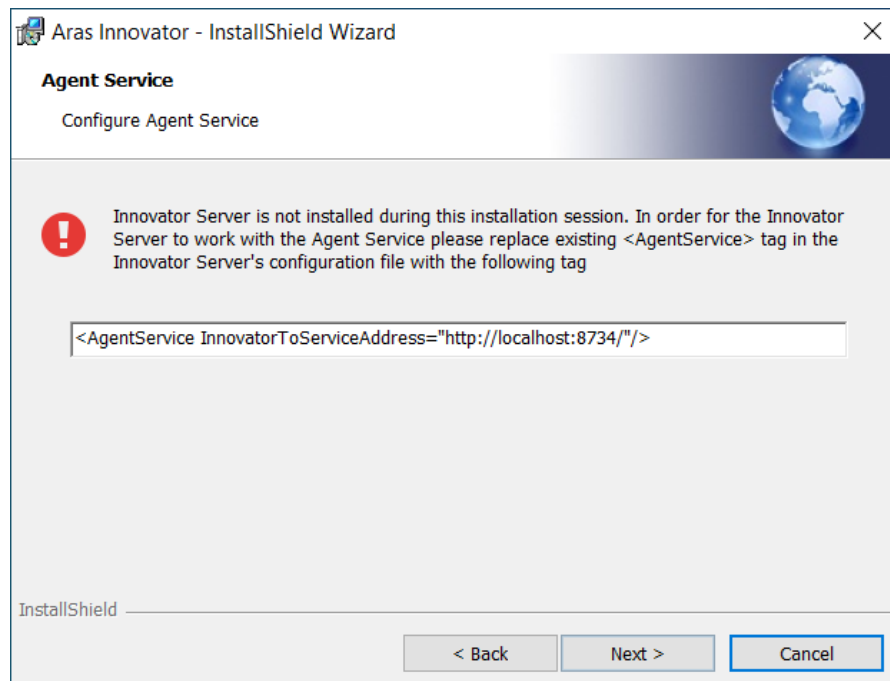


Figure 40.

7. Configure OAuth Certificates.

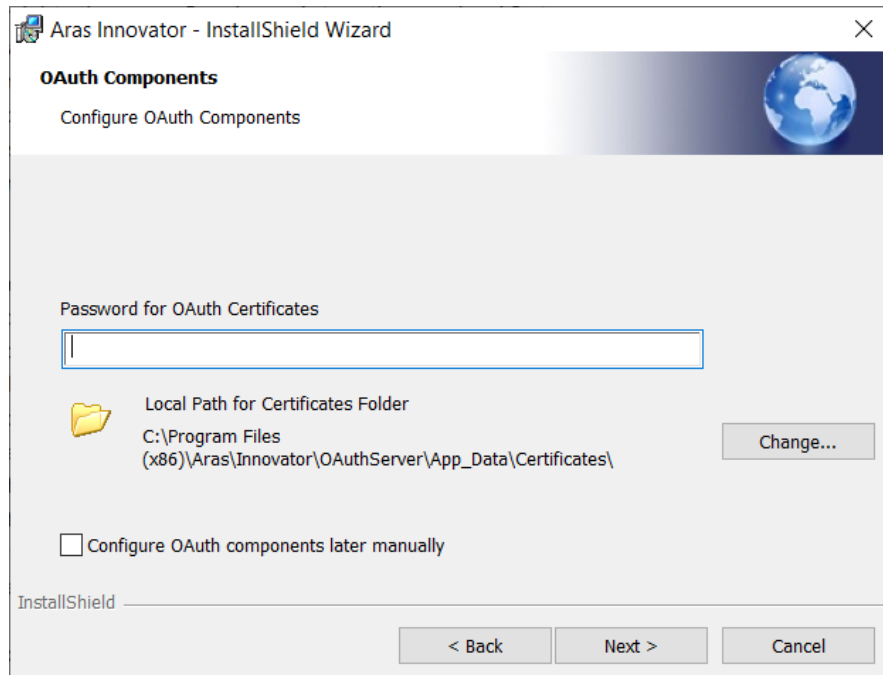


Figure 41.

- **Password for OAuth Certificates** – Enter the password to protect the private keys of certificates. The password can only contain alphanumerical symbols (a-z, A-Z, 0-9) and any of the standard printable ASCII characters (:\_#\$%&<> and others). The password cannot contain spaces.
- **Local Path for Certificates Folder** – the full local path to the OAuth Certificate folder or to a copy of this folder where OAuth certificates were generated during the separate installation of the OAuth Server. The certificate folder should contain all the necessary certificates.

You may check **Configure OAuth components later manually** and continue with the installation. This will require changing the OAuth.config files and deploying certificates manually.

8. Click **Next**.

9. Click **Install** to complete the installation.

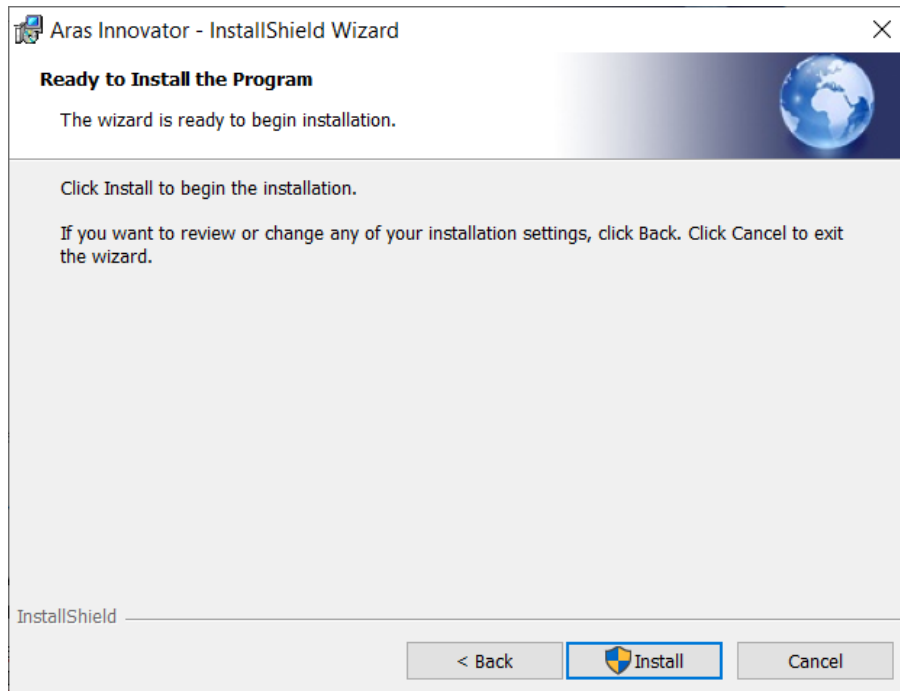


Figure 42.

10. After the Agent Service is installed, go to the Aras Innovator Server installation and add Agent Service tag, as copied from step 6 the into the **InnovatorServerConfig.xml** to specify the location of the Agent Service:

```
<AgentService InnovatorToServiceAddress="http://localhost:8734/" />
```

### 5.12.1 Installing the Agent Service as https

To use the Agent Service as an https service, you must configure the SSL certificate to be bound to an HTTPS endpoint in the default Kestrel configuration section. The "Certificate" subsection in the Kestrel HTTPS Endpoints configuration section is used for the certificate configuration from the file or from the certificate store.

**Note:** Refer to the following link for additional info:  
<https://docs.microsoft.com/en-us/aspnet/core/fundamentals/servers/kestrel?view=aspnetcore-3.1#listenoptionsusehttps>

#### 5.12.1.1 Using the certificate from the file

To use the certificate from the file it is necessary to specify the path to the certificate file and the certificate password in the "Certificate" subsection:

```
"Kestrel": {
 "Endpoints": {
 "HTTPS": {
 "Url": "https://0.0.0.0:8735/",
 "Certificate": {
 "Path": "SSLCertificate.pfx",
 "Password": "password"
 }
 }
 }
}
```

```
}
}
}
```

- Path - path to the file with private SSL certificate generated for current machine.
- Password - password for the private SSL certificate.

**Note:** Passwords for certificates should be encrypted to increase security. Agent service configuration supports passwords encrypted using the public RsaCrypt.exe tool that can be found on the CD Image.

### 5.12.1.2 Using RSACrypt

The RSACrypt utility enables the encryption and decryption of different text values including XML configuration files.

Usage: RsaCrypt.exe [-c {key container name}] [-m] [-d] [-w] [-t {content}] file x-path x-path...

where:

[]	Used for optional arguments
-c (key container name)	The Key container name used in keys storage.
-m	Uses machine key storage.
-d	Decrypts values using the x-path in an xml file.
-nw	The utility will finish without the additional confirmation of pressing the Enter key: (press <Enter> to exit).
-t {content}	Provides the content for encryption or decryption. Required parameters are ignored.
File	The full path to the xml file.
x-path	The x-path that is used to decrypt/encrypt xml-file values.

### 5.12.1.3 Using the certificate from the certificate store

To use the certificate from the certificate store it is necessary to import .pfx certificate in the store and configure "Certificate" subsection as in the following example:

```
"Kestrel": {
 "Endpoints": {
 "HTTPS": {
 "Url": "https://0.0.0.0:8735/",
 "Certificate": {
 "Subject": "subject",
 "Store": "TrustedPublisher",
 "Location": "LocalMachine",
 "AllowInvalid": false
 }
 }
 }
}
```

```
}
```

- `Subject` - The subject name for the certificate to load. Parameter is required.
- `Store` - The certificate store to load the certificate from. Parameter is required.
- `Location` - The store location to load the certificate from. Default is "CurrentUser".
- `AllowInvalid` - Indicates if invalid certificates should be considered, such as self-signed certificates. Default is "false".

## 5.13 Restarting the IIS Server After Configuration

It is recommended that you restart IIS (World Wide Web Publishing service) after any change to the `InnovatorServerConfig.xml` file to ensure the changes are enforced on client PC machines.

### ***To Restart IIS:***

1. From the Start menu select **Start --> Settings--> Control Panel --> Administrative Tools --> Services**.
2. Select the World Wide Web Publishing service.
3. Select **Action --> Restart** from the main menu.



## 6 Feature License

---

Some of the additional features and add-ons require a **Feature License** to run. For example, to run the Batch Loader or perform Vault Replication, you need a Feature License associated with an Aras Support Subscription.

The following standard features require a Feature License:

- Vault Replication
- Batch Loader
- Aras CAD to PDF Converter

Other Add-Ons can also require a Feature License, for instance:

- Aras Requirement Management Solution
- Aras Office Connector
- Aras EPDM Connector

To check what Feature Licenses, exist in Aras Innovator:

1. Log into Aras Innovator as an administrator.
2. From the TOC, select **Administration\Feature Licenses**.
3. If a feature license is found, check the expiration date to confirm that the license is still active.

### 6.1 Requesting a Feature License

In order to request a feature license, customers with an active Aras subscription can send an email to [licenses@aras.com](mailto:licenses@aras.com) or to your account representative in the following format:

- Subject – <Feature Name> activation key required
- Body - Version of Innovator

You receive a reply containing the Feature License activation key.

## 6.2 Installing the License

Once you have the activation key, install the feature license as follows:

1. Log into Aras Innovator as an administrator.
2. Click the User Menu button in the top right corner. The following dropdown menu appears:

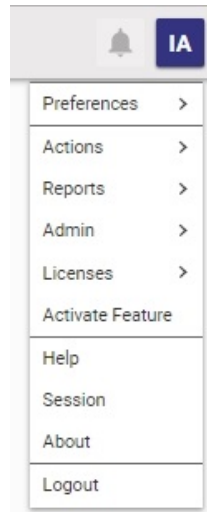


Figure 43.

3. Select **Activate Feature**. The following dialog box appears:

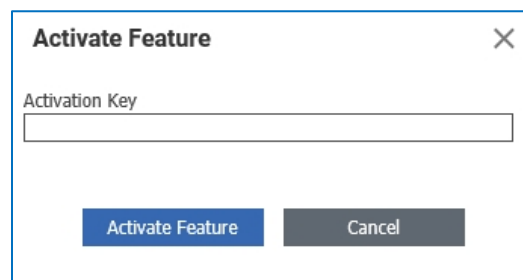


Figure 44.

4. Paste the acquired activation key and click **Activate Feature**.

A success message like the one shown here should pop up.

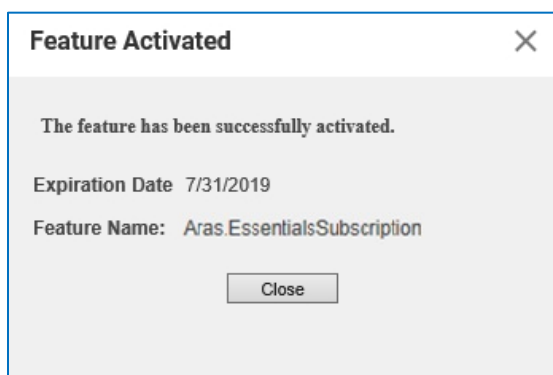


Figure 45.

## 7 Troubleshooting

### 7.1 HTTP Error 500.21 – Internal Server Error on Login

If when attempting to login into Aras Innovator you get a standard Internal Server Error:

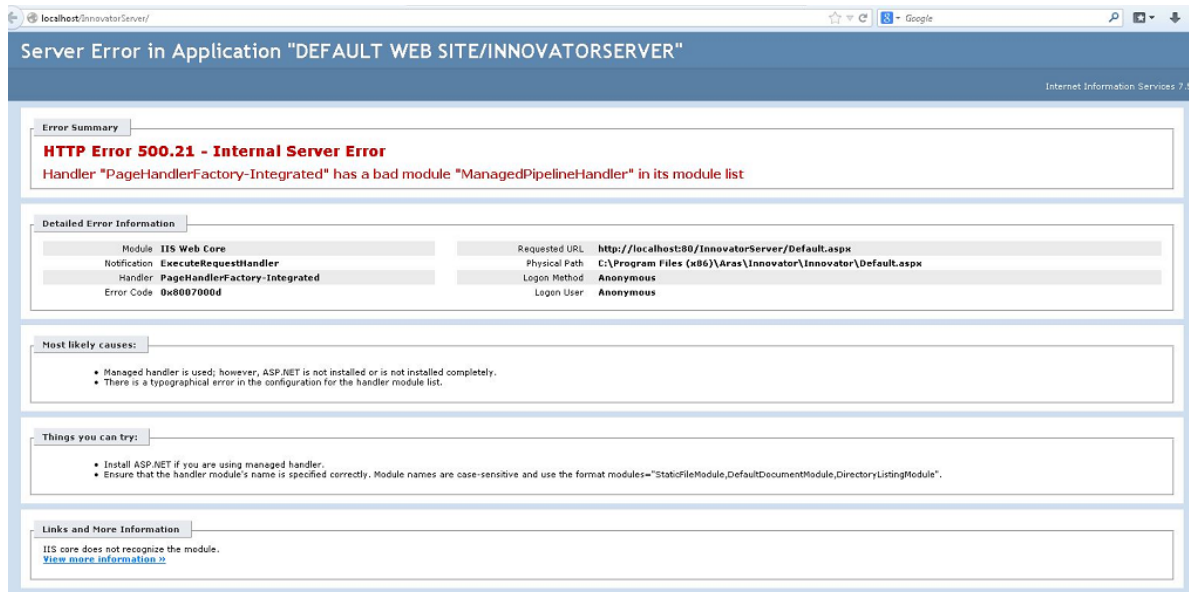


Figure 46.

The most common cause is that Microsoft .NET 4.7.2 is installed prior to IIS being enabled. Such a configuration results in the ASP.NET components for .NET 4.7.2 not being installed.

To resolve this issue, you need to install the ASP.NET components by running the following through the command prompt:

```
%windir%\Microsoft.NET\Framework\v4.7.2.0.30319\aspnet_regiis.exe -iru
```

### 7.2 HTTP 401 – Unauthorized Error after Successful Login

If after you have successfully logged into Aras Innovator, you receive a modal dialog that pops up with the text **Server Error in 'InnovatorServer/NotificationServer' Application...The remote server returned an error: (401) Unauthorized** there is most likely a missing component to your Internet Information Services (IIS) installation on your server.

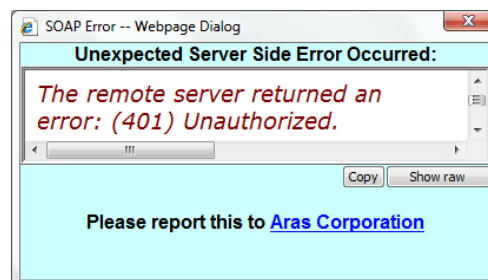


Figure 47.

The previous modal dialog is subsequently followed by the next error:

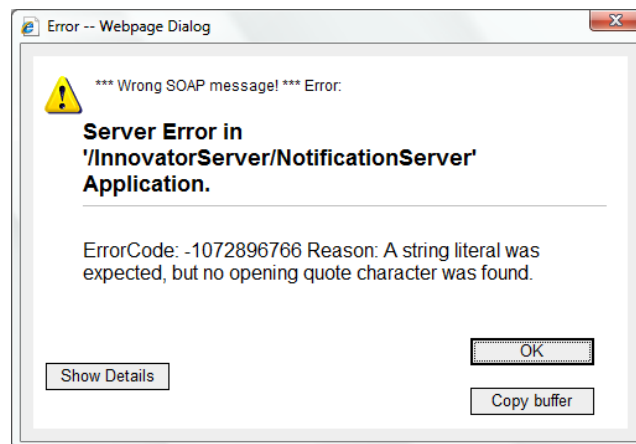


Figure 48.

To resolve this error, you need to install the Windows Authentication Role Service to into IIS by using the following steps:

1. Open **Control Panel --> Administrative Tools --> Server Manager**.
2. Right click on Web Server (IIS) under the Roles on the TOC and select **Add Role services**
3. Install the **Windows Authentication** role service located under Security

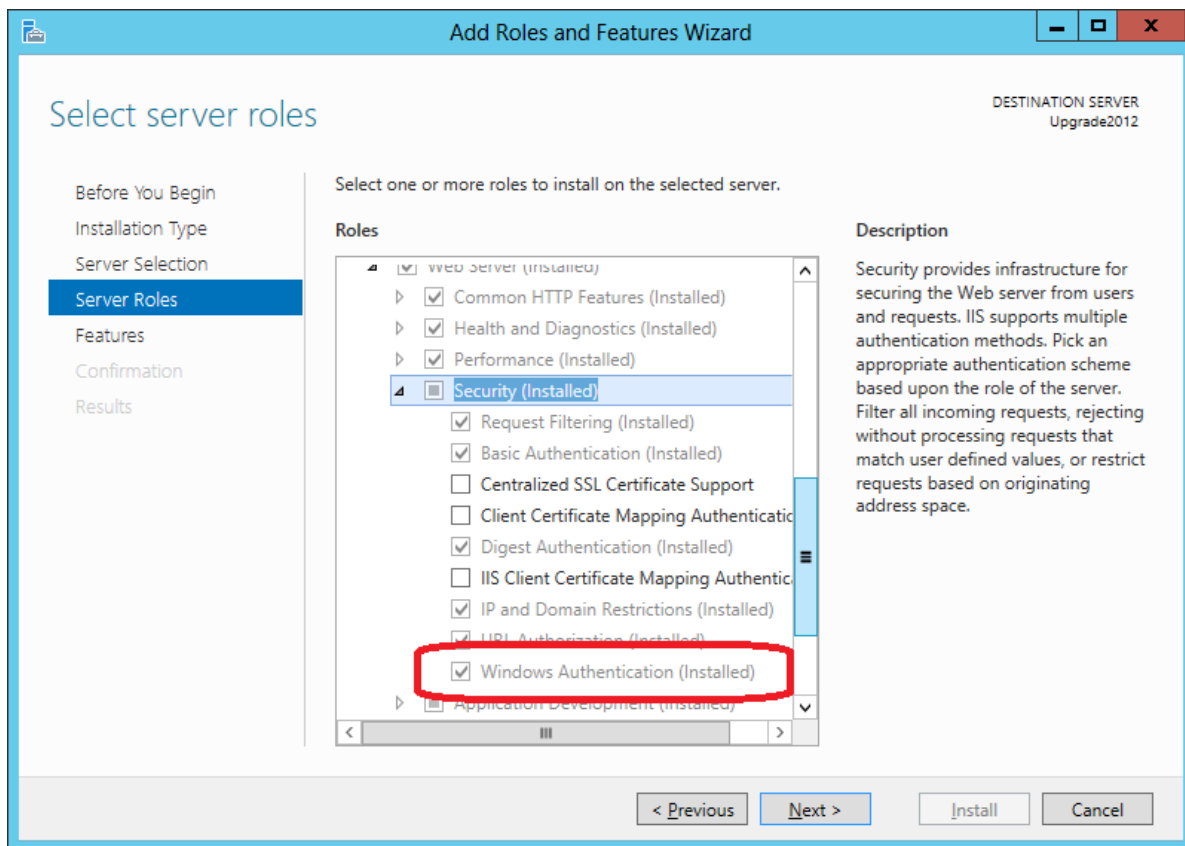


Figure 49.

After you have installed the new Role Service for IIS you may need to uninstall Aras Innovator and install again.

## 7.3 HTTP Error 404.0 - Not Found

When you log in to Aras Innovator and open any Item (for example, 'English' language Item), when attempting to open a tear off window, the following error is returned:

**Server Error in Application "DEFAULT WEB SITE/INNOVATOR10PUBLIC/CLIENT"**
Internet Information Services 7.5

**Error Summary**

**HTTP Error 404.0 - Not Found**

**The resource you are looking for has been removed, had its name changed, or is temporarily unavailable.**

**Detailed Error Information**

Module: <b>IIS Web Core</b> Notification: <b>MapRequestHandler</b> Handler: <b>StaticFile</b> Error Code: <b>0x80070002</b>	Requested URL: <b>http://localhost:80/Innovator10Public/Client/scripts/tabItemView?isTearOff=true&amp;noTabs=true&amp;isNew=false&amp;isEditMode=false&amp;databaseName=ArasSolutionsPlusDem20-%20English%20(read%20only)&amp;itemTypeLabel=Language&amp;itemName=Language&amp;itemID=EI</b> Physical Path: <b>C:\Aras\Apps\Innovator10Public\Innovator\Client\scripts\tabItemView</b> Logon Method: <b>Anonymous</b> Logon User: <b>Anonymous</b>
--------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Most likely causes:**

- The directory or file specified does not exist on the Web server.
- The URL contains a typographical error.
- A custom filter or module, such as URLScan, restricts access to the file.

Figure 50.

The cause of the error is an inability of IIS to handle the extensionless URLs.

## 7.4 Main Grid not Painting Columns or Headers

After you login into Aras Innovator Server the main grid would never paint columns or headers, however pages such as InBasket or relationshipTabs could work.

Attempt to open the browser and you might see the following message: **XML Exception: Incorrect comments tag**

This is a client-side problem and the root cause of it is that the wrong version of the XML parser is used (this could for example be caused by installing Visual Studio v6 with SP6, that changes the XML parser used by Innovator).

The solution for this is to un-install and then to re-install the XML parser.

## 7.5 Cookie Error Loading Login Screen

When installing Aras Innovator to a machine that contains an underscore in the server name or host name you may receive an error telling you cookies are disabled for your browser. This error is due a security patch released by Microsoft (<http://support.microsoft.com/kb/316112/en-us>) that blocks cookies when the host name does not contain only alphanumeric characters.

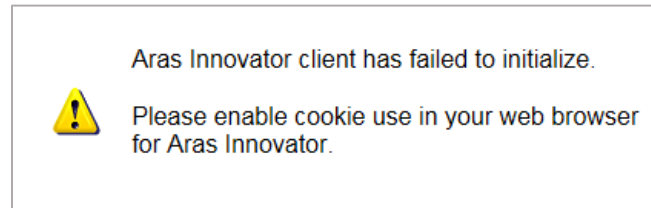


Figure 51.

To resolve the issue, it will be necessary to ensure the host name contains only alphanumeric characters.

## 7.6 HTTP Error 500.0 - Internal Server Error. Module "AspNetCoreModuleV2" could not be found

If when attempting to login into Aras Innovator you get a standard Internal Server Error:

### HTTP Error 500.0 - Internal Server Error

Module "AspNetCoreModuleV2" could not be found

#### Most likely causes:

- The module could not be found.
- IIS received the request; however, an internal error occurred during the processing of the request. The root cause of this error depends on which module handles the request and what was happening in the worker process when this error occurred.
- IIS was not able to access the web.config file for the Web site or application. This can occur if the NTFS permissions are set incorrectly.
- IIS was not able to process configuration for the Web site or application.
- The authenticated user does not have permission to use this DLL.

#### Things you can try:

- Verify that the module name is not misspelled in the configuration/system.webServer/globalModules config section. The error description may contain additional information to help you determine which module is causing the error.
- Ensure that the NTFS permissions for the web.config file are correct and allow access to the Web server's machine account.
- Check the event logs to see if any additional information was logged.
- Verify the permissions for the DLL.
- Create a tracing rule to track failed requests for this HTTP status code. For more information about creating a tracing rule for failed requests, click [here](#).

#### Detailed Error Information:

<b>Module</b>	IIS Web Core	<b>Requested URL</b>	http://localhost:80/innovator/
<b>Notification</b>	BeginRequest	<b>Physical Path</b>	C:\dev\Aras\Innovator\
<b>Handler</b>	Not yet determined	<b>Logon Method</b>	Not yet determined

Figure 52.

The most common cause is that ASP.NET Core IIS runtime support is not installed. To resolve this issue, you need to install the [Hosting Bundle](#) (Microsoft ASP.NET Core Module v2).

## 7.7 The page isn't redirecting properly

If when attempting to open root Aras Innovator page you get a next error:

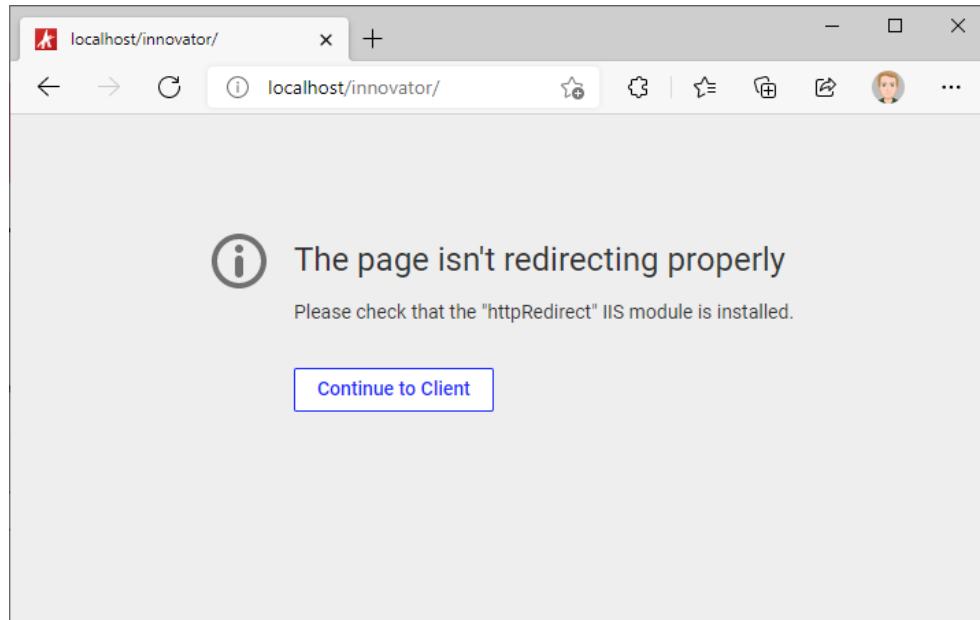


Figure 53.

To resolve this issue, you need to install the [HTTP Redirect](#) IIS module:

```
Enable-WindowsOptionalFeature -Online -FeatureName IIS-HttpRedirect
```



## 8 Database Users Configuration

---

Aras Innovator provides the option to create, populate existing, or configure existing databases in MS SQL Server. To allow continued upgrading of Aras Innovator certain guidelines should be followed regarding the MS SQL Server users and logins used to access the Aras Innovator database.

- The “innovator” user must have access to the database.  
This user is created as part of a standard installation when using the create option.  
This must be configured manually when an installation uses the populate or configure options.
- The ‘innovator’ user must have database owner privileges.  
This privilege is created as part of a standard installation when using the create option.  
This must be configured manually when an installation uses populate or configure options.
- The “innovator\_regular” user must have access to the database.  
This user is created as part of a standard installation when using the create option.  
This must be configured manually when an installation uses the populate or configure options.  
Innovator\_regulator database users should **NOT** have database owner privileges.
- The non-system database objects should be owned by the ‘innovator’ database user.  
Non-system objects are those not created by MS SQL in initial creation of the database in MS SQL  
All installed objects are created with this owner.  
All objects created by the Innovator Server are created with this owner.
- Logins used by the ‘innovator’ and ‘innovator\_regular’ database users should not be the same as the MS SQL Server System Administrator (SA) login.  
The ‘innovator’ and ‘innovator\_regular’ database user logins should not match the ‘SA’ login  
The ‘innovator’ and ‘innovator\_regular’ database user logins should not match any other MS SQL Server Administrator login used in addition to the ‘SA’ login.

## 9 Running Installer Multiple Times

### 9.1 Complete Install the First Time

Aras Innovator is designed to be installed, either as a whole or in components, to the same server multiple times. This means that every time the installer is run, it is treated as a new installation. Make sure you do not delete the installer from your hard drive when you are done with an installation. You must reuse the same installer to run the installation the next time.

### 9.2 Modify, Repair, or Remove

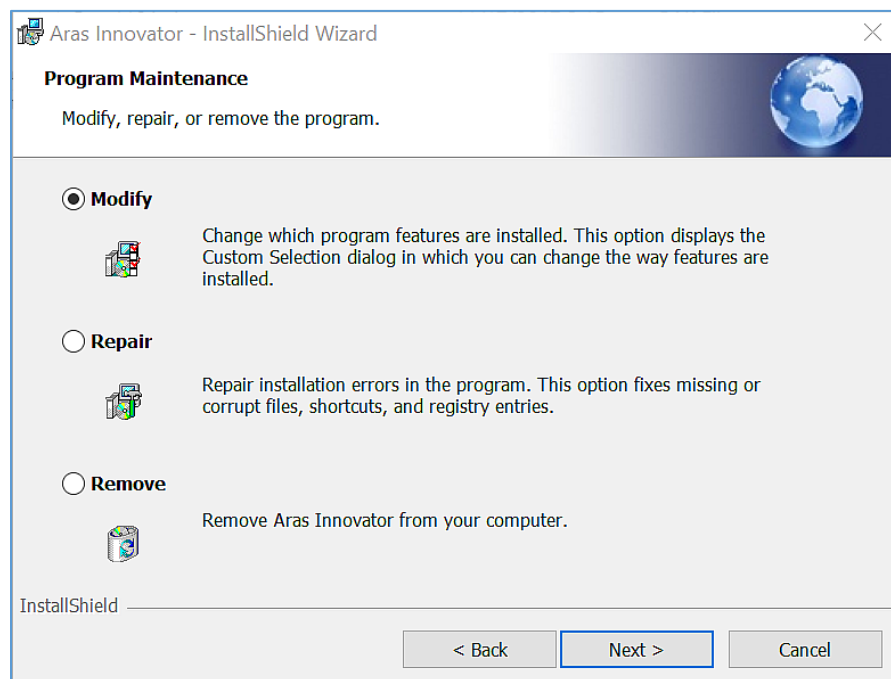


Figure 54.

If you see this screen the installation is not being treated as a new installation. This usually indicates that you are trying to install the same version of Aras Innovator that was previously installed. You should use the copy of the installer that was run to install the existing version of Aras Innovator. If this copy of `InnovatorSetup.msi` is not available, use the following steps to enable the installer to run as new.

1. Download the installer to your hard drive.
2. Locate the `ChangeGUID.exe` file. You can find this file in the Tools folder under the root directory of the existing Aras Innovator installation instance. You can also find it in the Utilities folder of the Aras Innovator CD Image.
3. Open a command prompt.

**Note:** `ChangeGUID` fails to run unless the command prompt is run as an administrator.

4. Change the directory to where the `ChangeGUID.exe` file is located
  - Use 'C:\' as my example.

5. Execute the file while specifying the full path to the installer

- ChangeGUID `<path>\InnovatorSetup.msi`

Where `<path>` is the directory path to where the `InnovatorSetup.msi` is located.

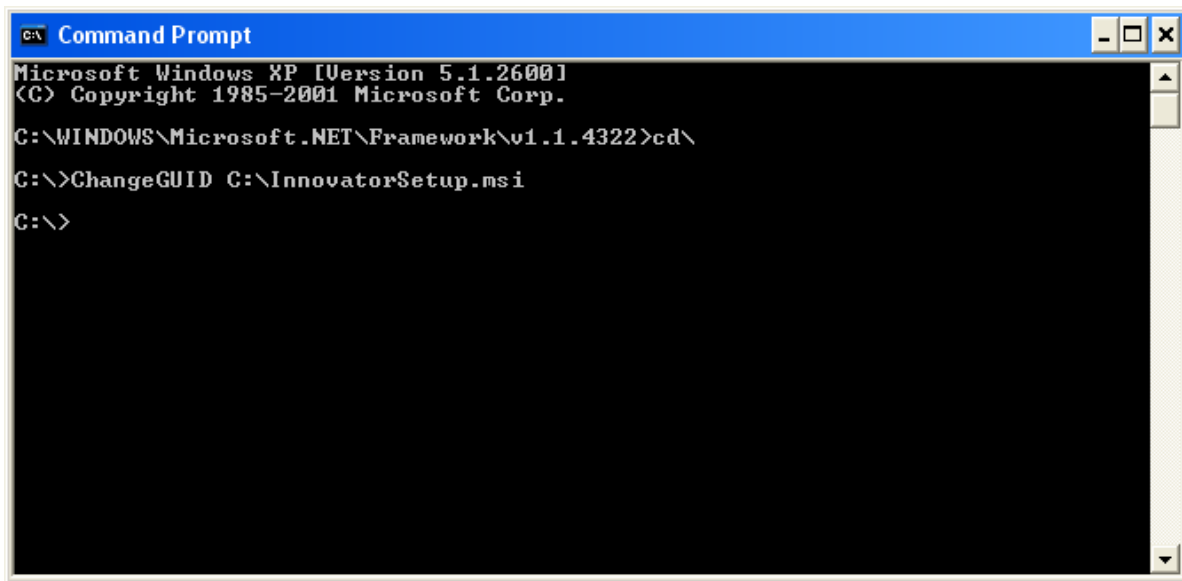


Figure 55.

## 10 Uninstalling Aras Innovator Server

### 10.1 Locating the Uninstaller

1. From the **Start Menu**, go to the **Control Panel**.
2. Select **Programs and Features**.
3. From the list, select **Aras Innovator**

**Note:** If more there is more than one installation, make sure you are in the details view.

- a. Right click the details grid and select 'more...' and make sure 'Comments' and 'Version' are checked off.

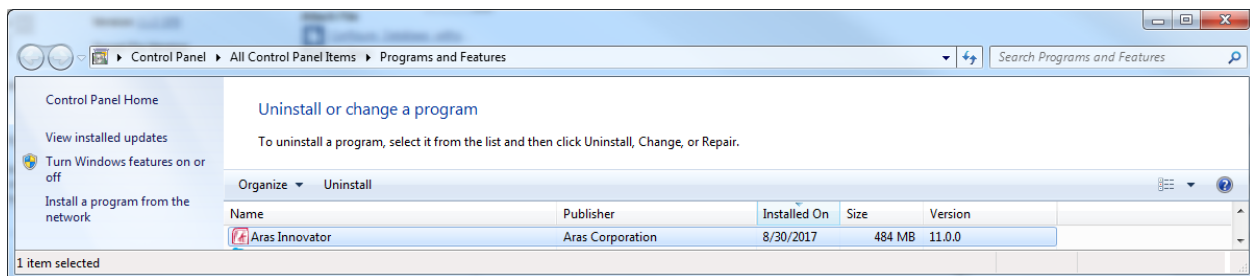


Figure 56.

- b. Under the 'Comments' and 'Version' section dialogue should tell you the install path and the version of Aras Innovator respectively (boxed in red above)
4. Click **Uninstall** to begin the uninstallation process.

### 10.2 Uninstalling

When the Uninstaller starts, the following screen appears.

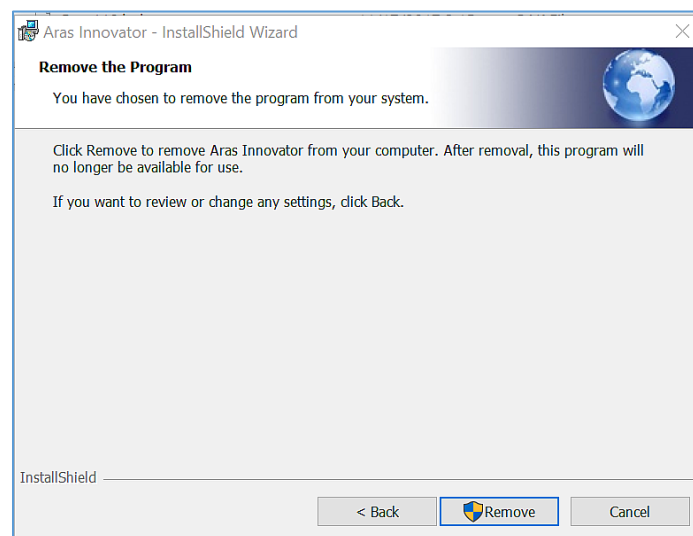


Figure 57.

1. Click **Remove** to proceed with the uninstallation process.
2. Click **Cancel** to exit the Uninstaller.

The status of the Uninstallation process appears on the screen.

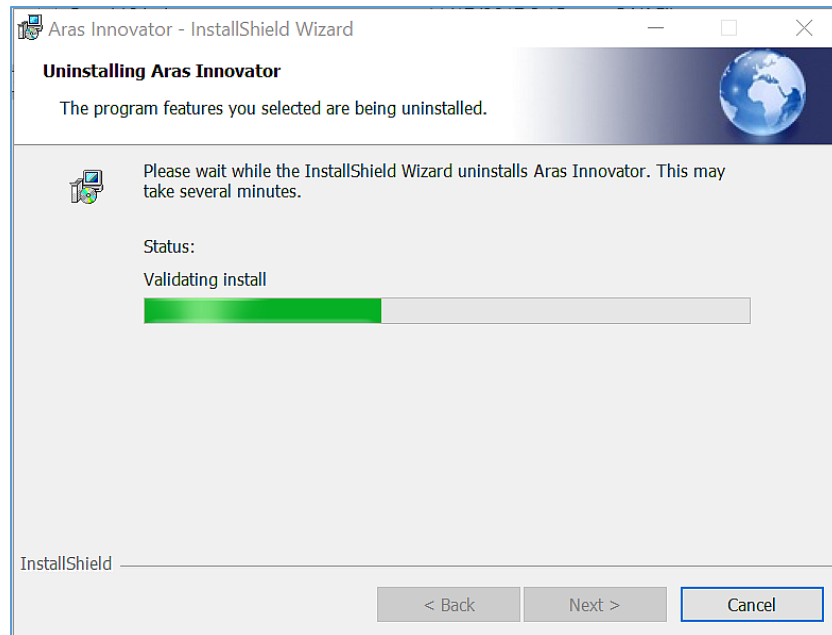


Figure 58.

3. Click **Cancel** to exit the Uninstaller.

When Uninstallation is complete, Aras Innovator is fully removed from your machine.