

# **AssetWorx! Software Installation Instructions**



## TABLE OF CONTENTS

Getting Ready .....	4
Introduction.....	5
Software License Agreement.....	6
Product Key .....	7
Software Connectivity .....	8
IIS Options .....	9
Installation Summary .....	10
Installation Results.....	11
Setting Up SQL Server for AssetWorx! .....	12
Step 1: Installing SQL Server .....	12
Step 2: Connecting to SQL Server Management Studio .....	13
Step 3: Creating Database .....	14
Step 4: Creating Login.....	15
Step 5: Assigning Login Permissions .....	16
Troubleshooting .....	17
AssetWorx! website returns handler error after install .....	17
AssetWorx! website gives me a warning about my certificate .....	19

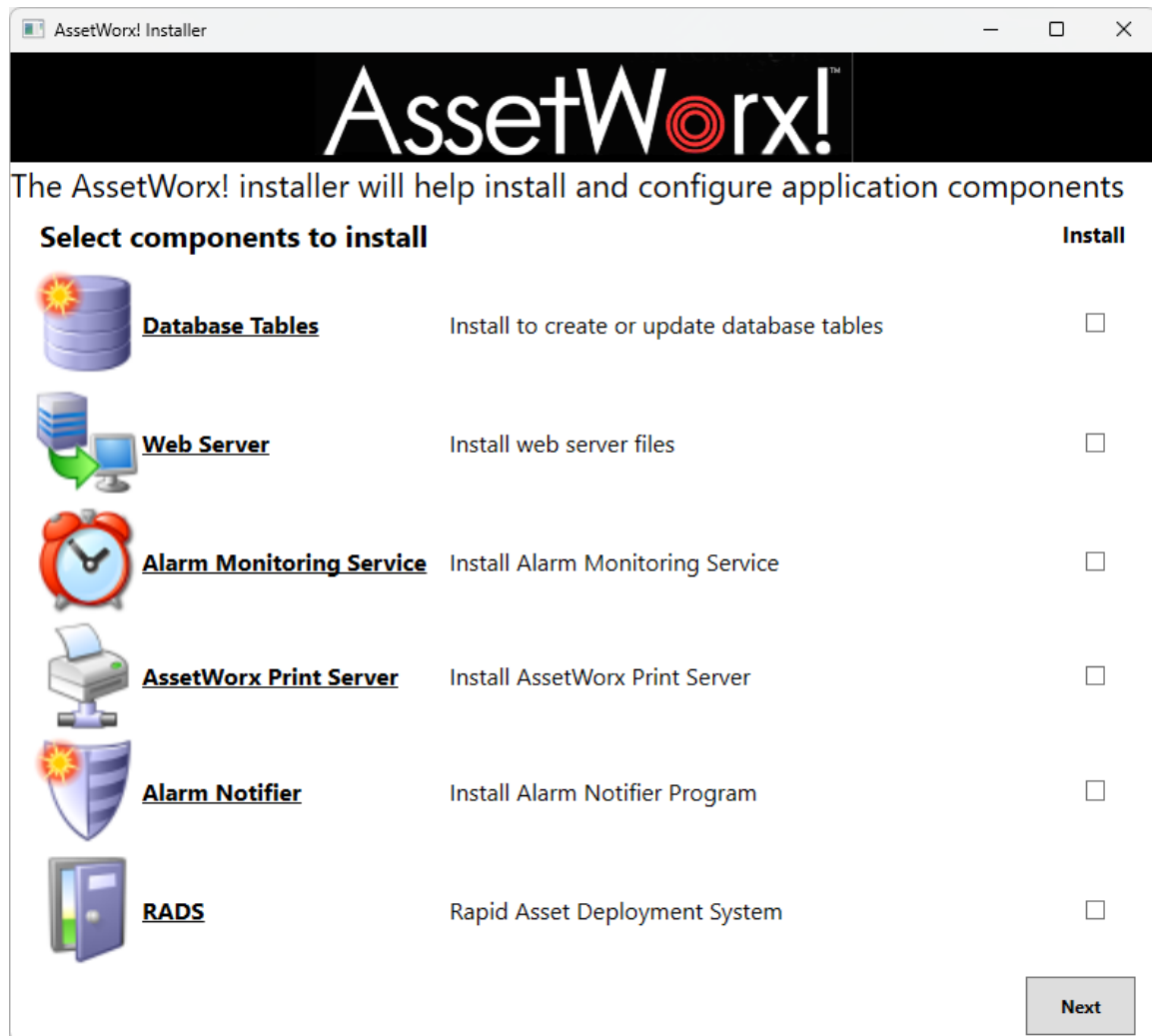
## Getting Ready

Before starting installation of AssetWorx!, some initial steps must be followed in order to be ready for the actual installation process.

The AssetWorx! installer runs as a .NET application, so the .NET Framework 4.8 or greater must be installed. If, for security concerns, the client elects not to have the .NET Framework installed on the database server machine, the database installer must then be run from a separate machine that has the .NET Framework installed.

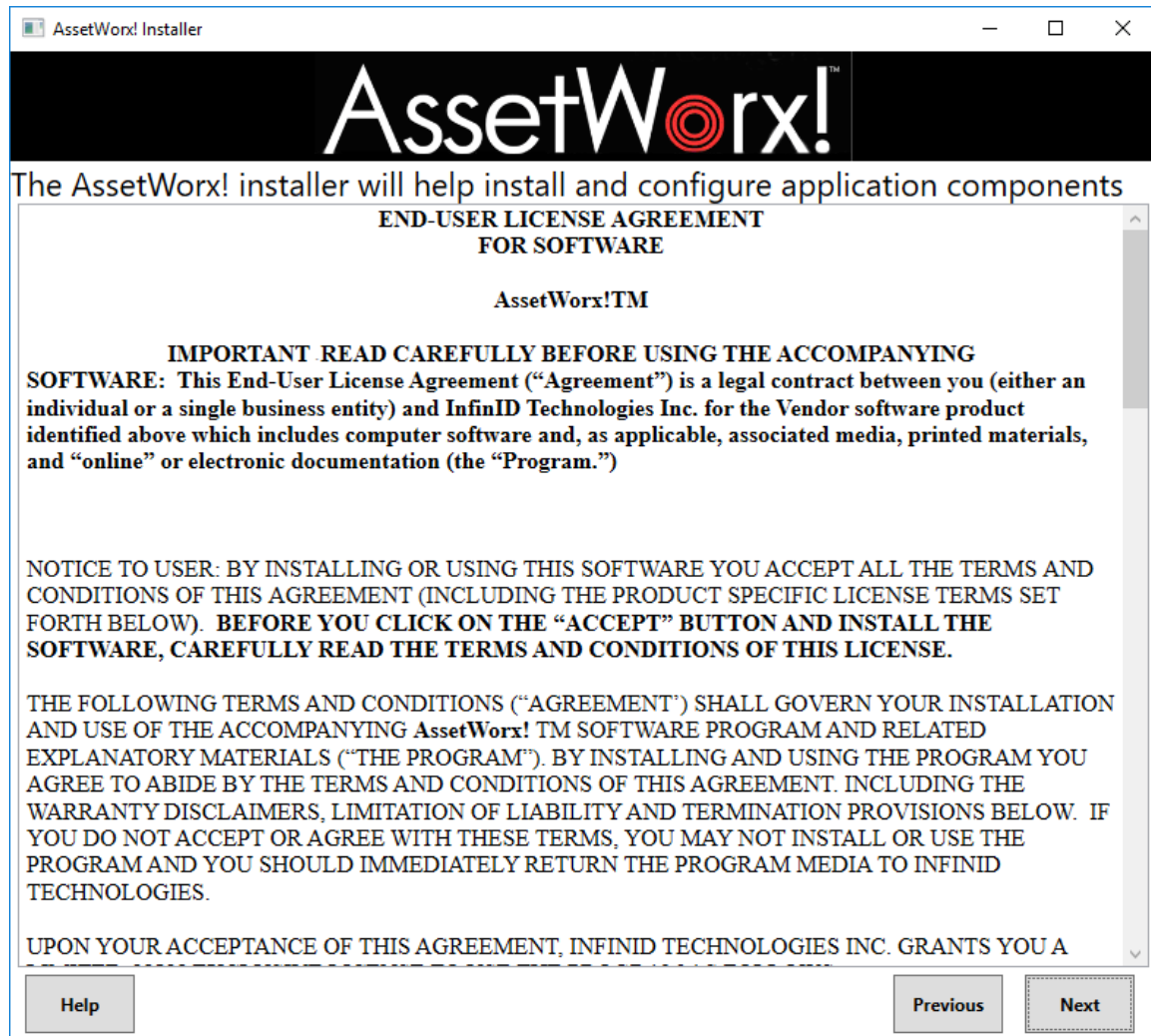
## Introduction

Please choose which features you wish to install. The Web Server is the primary application that users will utilize to modify the system. The Alarm Monitoring Service will be used to manage connections to RFID Portals and V-Tag Gateways. The Handheld Application is used for synchronizing the database on handheld RFID scanners. The Alarm Notifier is an application used to show alarm notifications and manage Alarm Acknowledgements. It is always a good polity to first update the Database Tables when upgrading to a new version of AssetWorx.



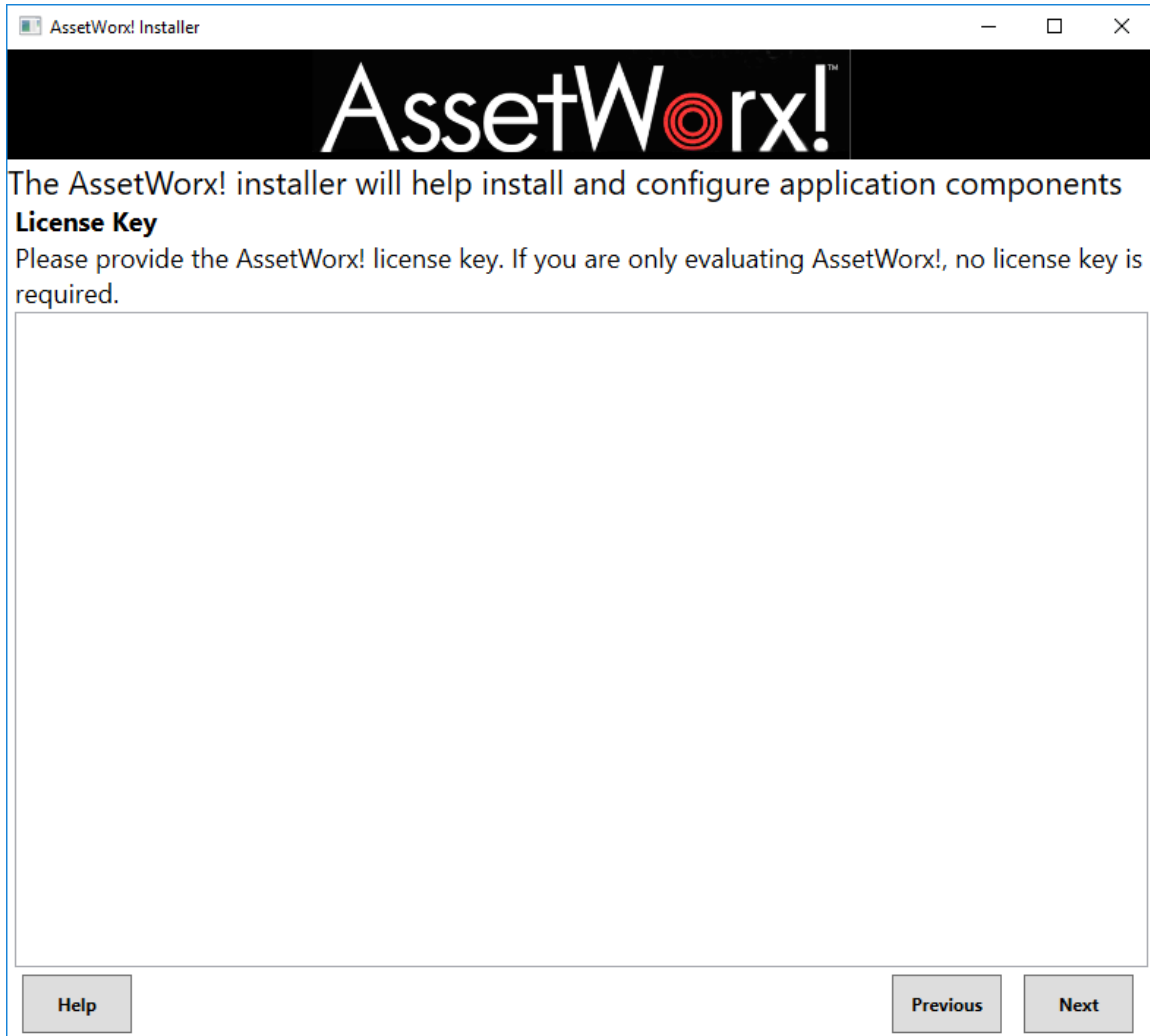
## Software License Agreement

Please read the entire license agreement before continuing with the database installation. The agreement is a legal contract that the user is bound to upon acceptance and installation.



## Product Key

The Product Key section allows the user to enter in the unique product key designated for the installation. It provides hidden information for the system to unlock software modules as well as assure the validity of purchase. You can find the product key by logging into the InfinID Technologies portal at <http://my.infinidtech.com>. To evaluate AssetWorx!, simply leave the product key blank and the system will be limited to 50 assets.



The screenshot shows the 'AssetWorx! Installer' window. At the top, there is a black header with the 'AssetWorx!' logo in white. Below the header, the text reads: 'The AssetWorx! installer will help install and configure application components'. Underneath this, the section is titled 'License Key' in bold. The text continues: 'Please provide the AssetWorx! license key. If you are only evaluating AssetWorx!, no license key is required.' Below this text is a large, empty rectangular text input field. At the bottom of the window, there are three buttons: 'Help' on the left, and 'Previous' and 'Next' on the right.

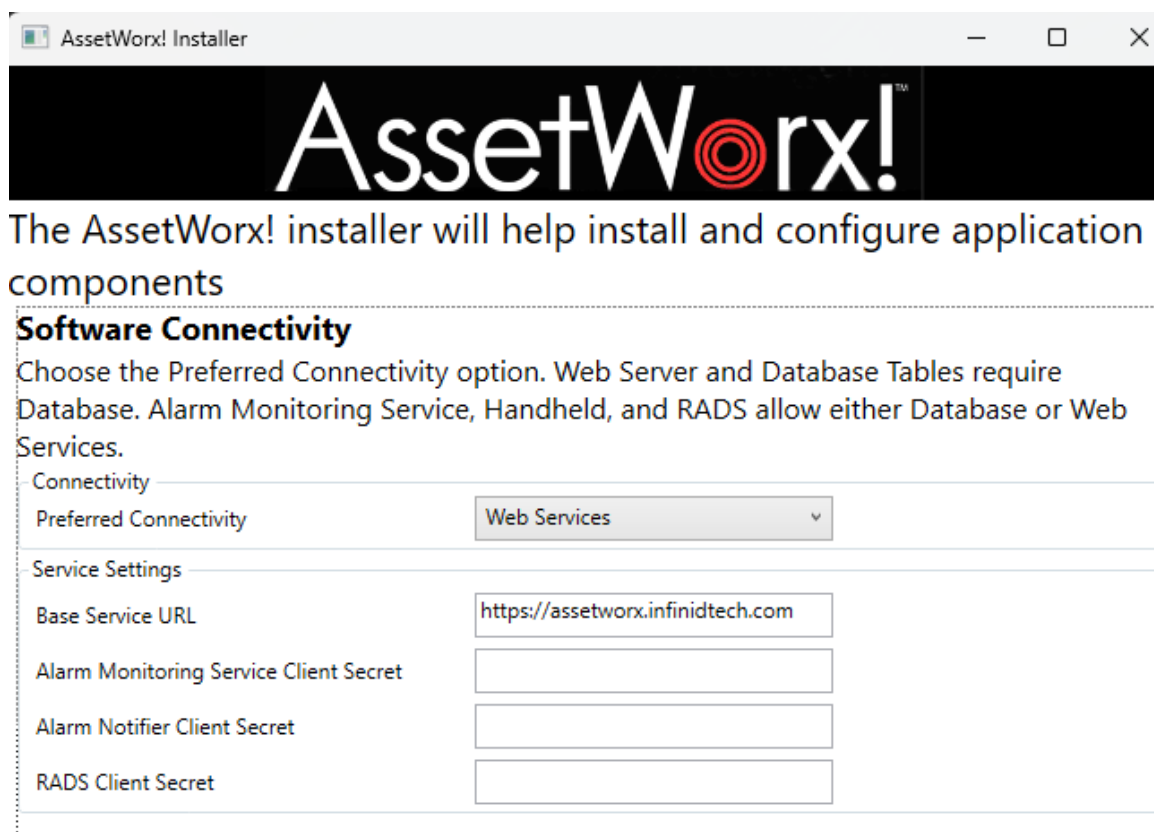
## Software Connectivity

The Software Connectivity screen allows you to configure how AssetWorx! manages its connections.

While installing the web server, the only option available for Preferred Connectivity is “Database”. Using database as connectivity means that only direct database connections will be used. The Database option requires the user to use an installed version of Microsoft SQL Server or PostgreSQL. The rest of these database specific instructions will only include SQL Server instructions. The system will automatically create a database if the supplied database name doesn’t exist. Make sure that the login has database owner permissions for the supplied database. This will allow the installer to create tables and columns for the database. Please refer to the [Setting up SQL Server For AssetWorx!](#) section for more information.

If one of the clients are being installed such as the Alarm Monitoring Service or Handheld Sync program, “Web Services” is available as the connectivity option. Choosing this option means that all the data will be passed through web service calls sent through the web server. To use this option, first enter the Base Service URL. AssetWorx uses the OpenID Connect protocol. Each client that you are installing has a Client Secret which must be supplied. You can find this by logging into AssetWorx and clicking Tools->Options->System Settings.

Connectivity options for the Print Server and database and MQTT. Create an MQTT Print Server username and password by logging into the AssetWorx web app and going to Tools->Options->MQTT. Make sure you have enabled the MQTT Broker on the same screen and clicked Save.



The screenshot shows the 'AssetWorx! Installer' window. At the top is the AssetWorx! logo. Below it, the text reads: 'The AssetWorx! installer will help install and configure application components'. The main section is titled 'Software Connectivity' and contains the following text: 'Choose the Preferred Connectivity option. Web Server and Database Tables require Database. Alarm Monitoring Service, Handheld, and RADS allow either Database or Web Services.' Below this text is a form with two sections: 'Connectivity' and 'Service Settings'. The 'Connectivity' section has a 'Preferred Connectivity' dropdown menu set to 'Web Services'. The 'Service Settings' section has four input fields: 'Base Service URL' (containing 'https://assetworx.infinidtech.com'), 'Alarm Monitoring Service Client Secret', 'Alarm Notifier Client Secret', and 'RADS Client Secret'.

Connectivity	
Preferred Connectivity	Web Services

Service Settings	
Base Service URL	https://assetworx.infinidtech.com
Alarm Monitoring Service Client Secret	
Alarm Notifier Client Secret	
RADS Client Secret	



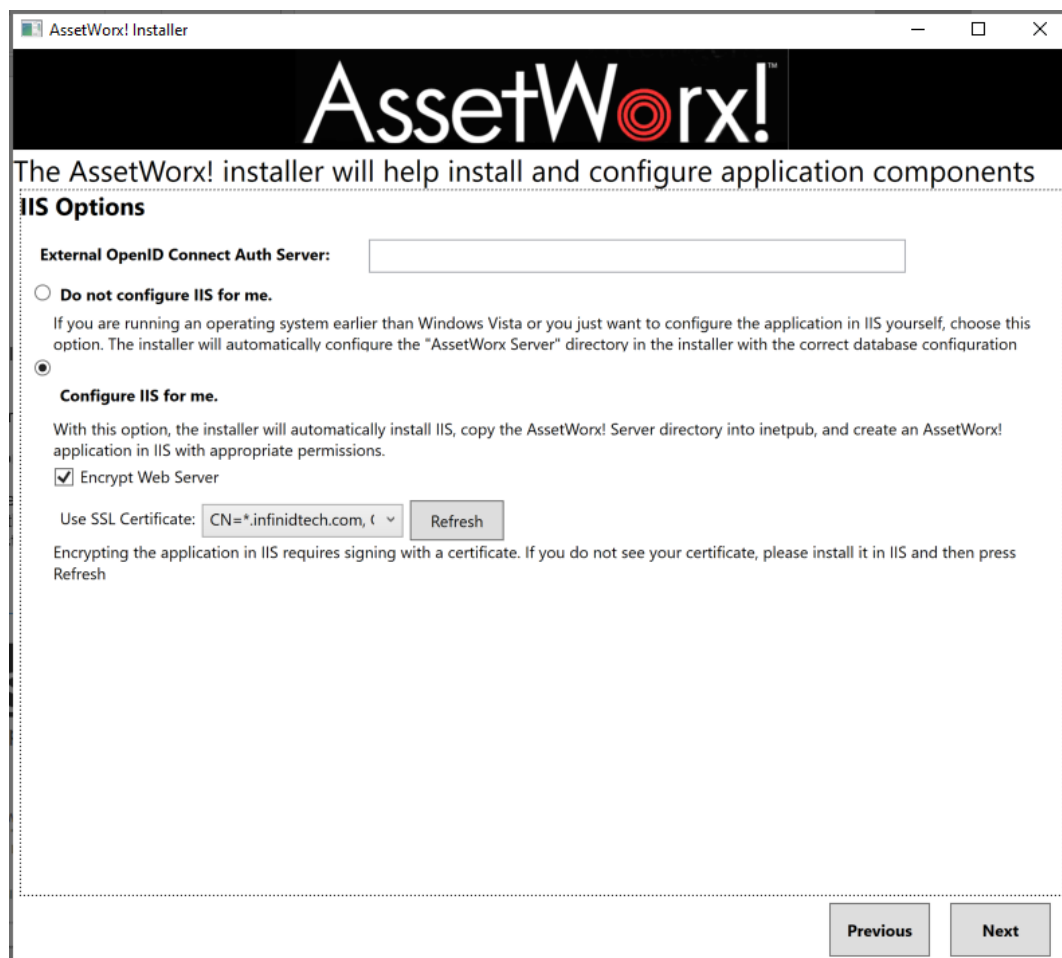
## IIS Options

This step shows up only when installing the web server and lets you decide how you want to configure it.

If you choose “Do not configure IIS for me”, you will need to manually copy the “AssetWorx.Web” directory to your inetpub directory and manually configure the website using the IIS Manager. For users with complex IIS requirements or custom web application settings, this may be the best fit.

Choosing “Configure IIS for me” means that the installer will install and configure the web application for you within IIS. With this option, if “Encrypt Web Server” is checked, a list of available SSL Certificates already installed in the Windows Certificate Store will show up in the “Use SSL Certificate” combo box.

AssetWorx can be configured to use an external server for authentication to enable functionality such as Single Sign-On. This feature requires the external authentication server to support the Open ID Connect protocol.



The screenshot shows the "AssetWorx! Installer" window. At the top, the title bar reads "AssetWorx! Installer". Below the title bar is a large black banner with the "AssetWorx!" logo in white. Underneath the banner, a text line states: "The AssetWorx! installer will help install and configure application components".

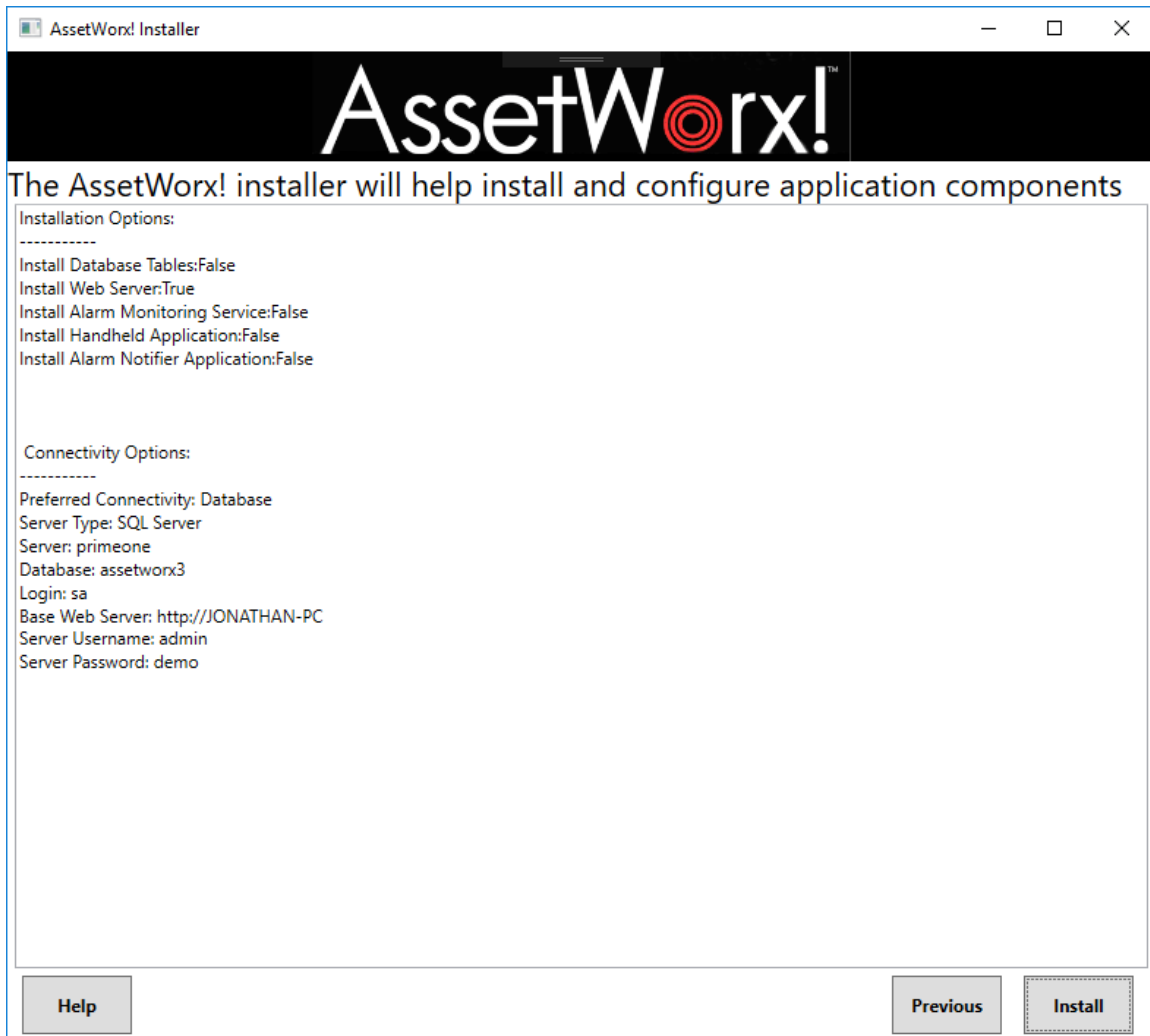
The main section is titled "IIS Options". It contains the following elements:

- A text field labeled "External OpenID Connect Auth Server:".
- Two radio button options:
  - ☐ Do not configure IIS for me.  
If you are running an operating system earlier than Windows Vista or you just want to configure the application in IIS yourself, choose this option. The installer will automatically configure the "AssetWorx Server" directory in the installer with the correct database configuration
  - ☒ Configure IIS for me.  
With this option, the installer will automatically install IIS, copy the AssetWorx! Server directory into inetpub, and create an AssetWorx! application in IIS with appropriate permissions.
- A checkbox labeled "Encrypt Web Server" which is checked.
- A "Use SSL Certificate:" label followed by a dropdown menu showing "CN=\*.infinidtech.com, C" and a "Refresh" button.
- A note at the bottom: "Encrypting the application in IIS requires signing with a certificate. If you do not see your certificate, please install it in IIS and then press Refresh"

At the bottom right of the window, there are two buttons: "Previous" and "Next".

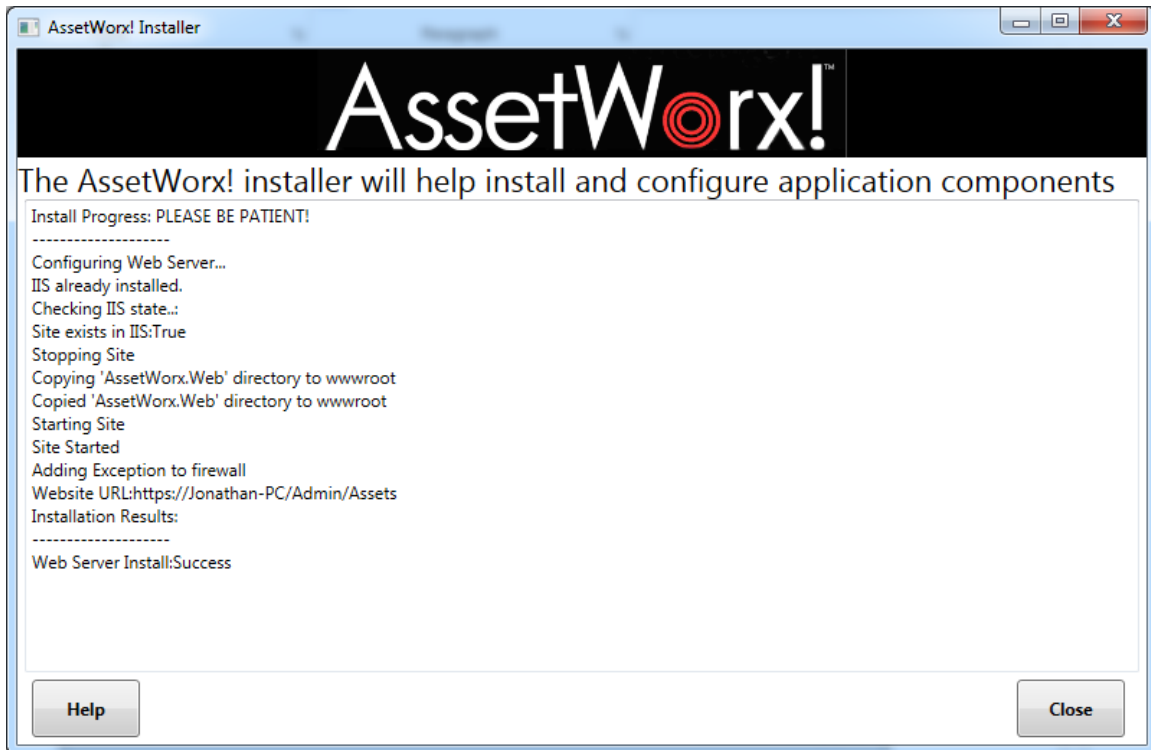
## Installation Summary

Before the final installation step, Installation Summary gives the user all the information about the installation that they are about to do.



## Installation Results

Installation Results will display the results of each installer that was run.



The default login/password for the web client is admin/demo.

## Setting Up SQL Server for AssetWorx!

AssetWorx! requires Microsoft SQL Server 2014 or later as its database backend. The machine running SQL Server should be on at all times to ensure that anybody can connect at any time. If your company doesn't have a SQL Server instance, you have the choice of buying a licensed copy of Microsoft SQL Server or using the free version, SQL Server Express. If you choose to install SQL Server Express, choose the download that includes Advanced Services, which will have a name similar to "SQLEXPADV\_x64\_ENU.exe". The Advanced Services option will include SQL Server Management Studio, which will be needed for the tasks below, such as Creating Database and Creating Login.

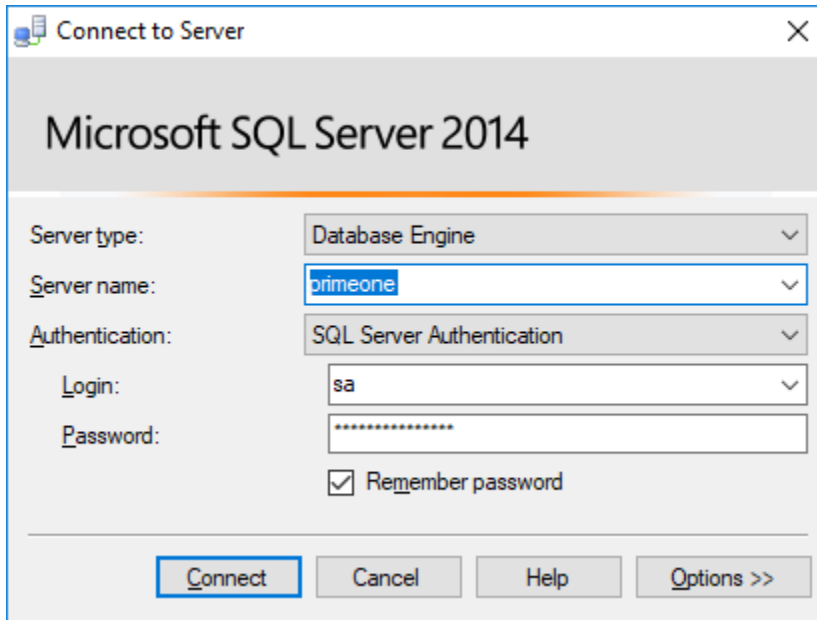
### Step 1: Installing SQL Server

From the SQL Server Installation Center, click "Installation", then click on "New SQL Server stand-alone installation". Below are some important steps in the installer:

1. "Feature Selection" – In this screen, make sure and check the "Database Engine Services" and "Management Tools – Complete" checkboxes.
2. Instance Configuration - Choose the Default Instance name.
3. Database Engine Configuration – In this screen, Mixed Mode is recommended. Set the admin password that will be used. Under SQL Server Administrators, click "Add Current User" to add the current user as an administrator. You can also add any users who you will want to be administrators using Windows Authentication.

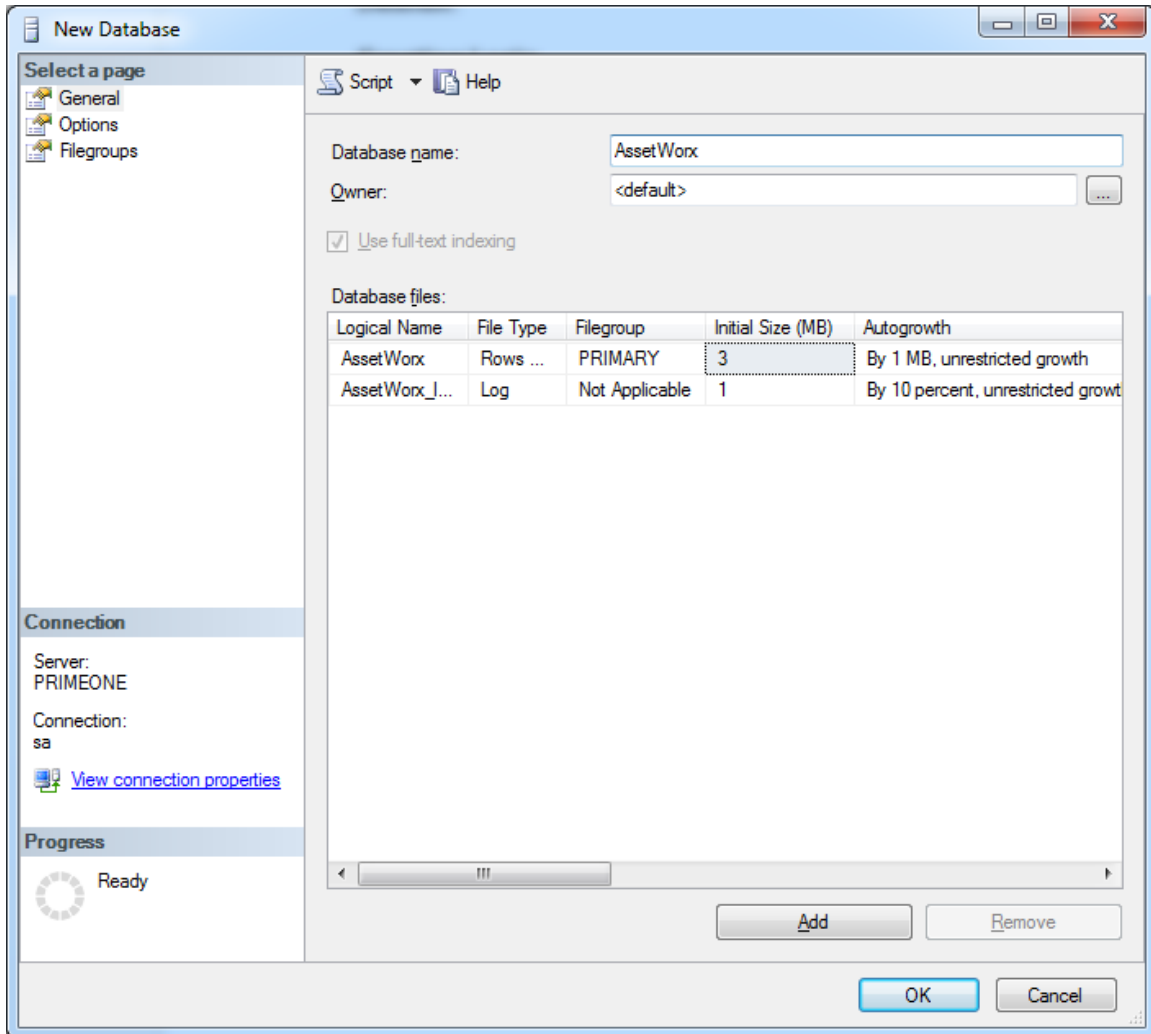
## Step 2: Connecting to SQL Server Management Studio

Open SQL Server Management Studio. The Connect to Server dialog should come up right away. If it doesn't, click File, Connect Object Explorer. In this dialog, provide the Server name. If choosing SQL Server Authentication, enter "sa" for login and provide the password that was used in Step 1.



### Step 3: Creating Database

In the Object Explorer panel on the left, right click on Databases and click New Database. Give it a name and then click OK to create the empty database.



## Step 4: Creating Login

In the Object Explorer panel on the left, right click on Security, Logins, and click New Login. Enter the Login Name that you want to use. If choosing SQL Server authentication, enter the password that you want to use for the login, then uncheck the Enforce Password Policy checkbox. Next, under Default database, choose the database you created in Step 3.

**Login - New**

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Login name: AssetWorxUser Search...

☐ Windows authentication

☒ SQL Server authentication

Password: ....

Confirm password: ....

☐ Specify old password

Old password:

☒ Enforce password policy

☐ Enforce password expiration

☐ User must change password at next login

☐ Mapped to certificate

☐ Mapped to asymmetric key

☐ Map to Credential

Add

Mapped Credentials

Credential	Provider
------------	----------

Remove

Default database: ASSETWORX

Default language: <default>

Server: PRIMEONE

Connection: sa

[View connection properties](#)

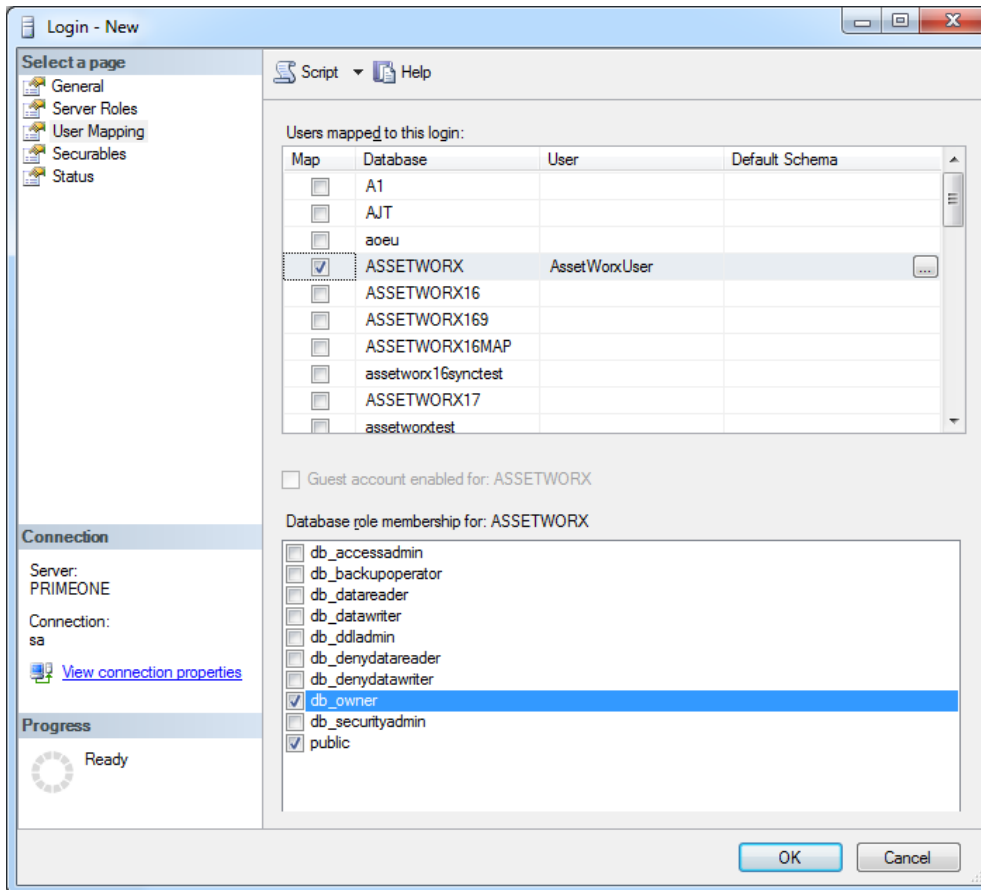
Progress

Ready

OK Cancel

## Step 5: Assigning Login Permissions

From the Login dialog in Step 4, Click on the User Mappings page on the left. Under “Users mapped to this login”, check the Database you created in Step 3. In the “Database role membership” section at the bottom, check db\_owner and click the OK button.





## Troubleshooting

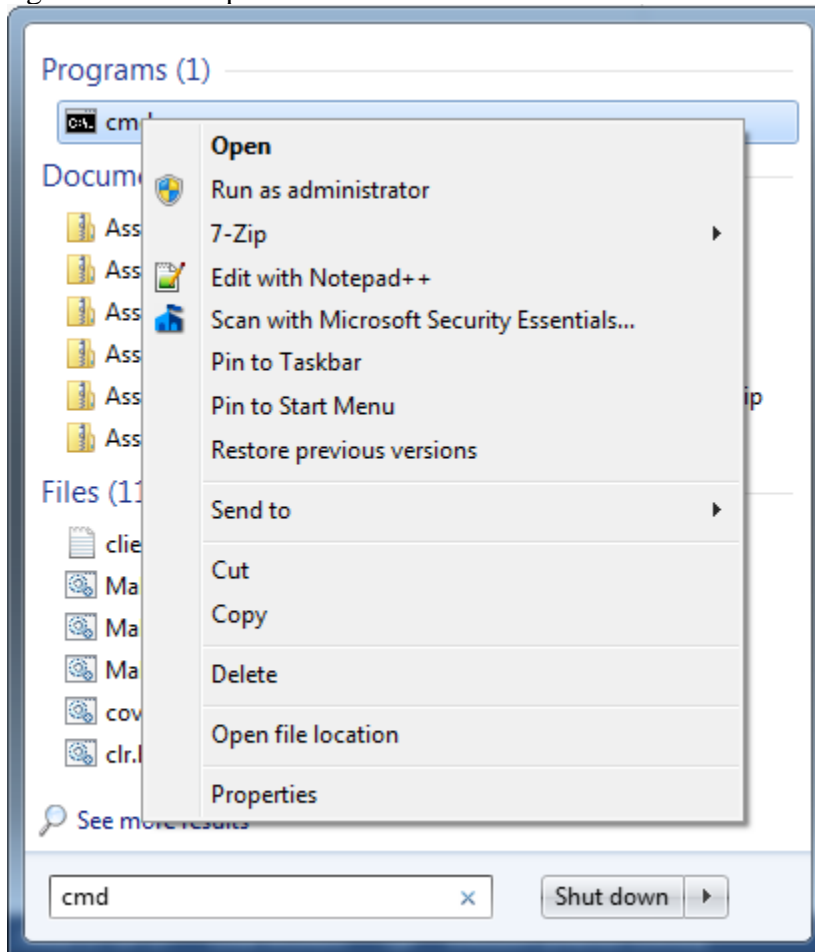
### AssetWorx! website returns handler error after install

After I install the Web Server, when I open the web application in my browser, I get this error:

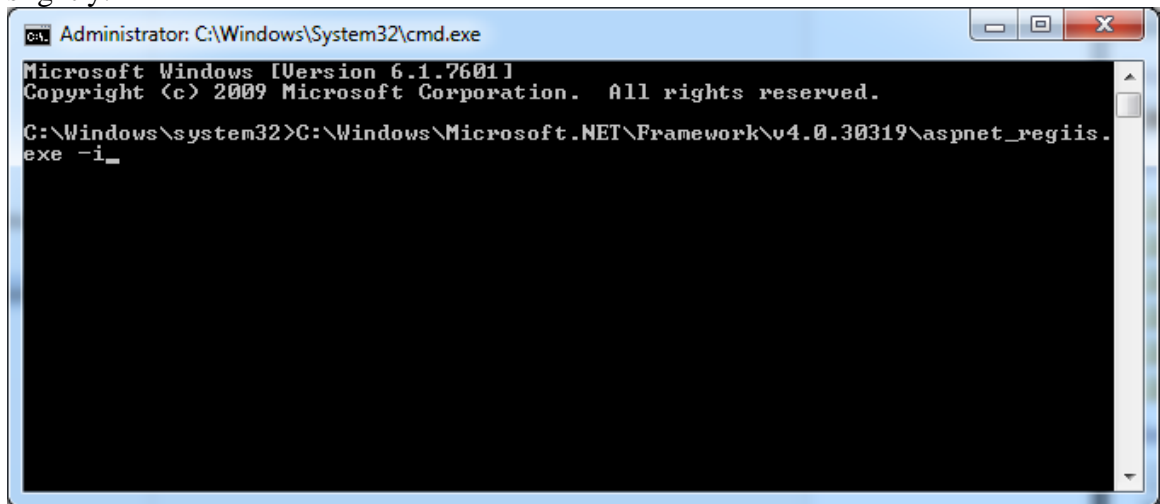
*"Handler 'ExtensionlessUrlHandler-Integrated-4.0' has a bad module 'ManagedPipelineHandler' in its module list"*

This error means that our installer was not able to successfully register asp.net with the computer when it installed IIS. To correct this error, follow these instructions:

1. Click the Windows Button, type "cmd". When the cmd executable shows up, right click it and press "Run as administrator"



2. In the cmd window, type  
“C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspnet\_regiis.exe -I” and  
hit enter. Please note that the exact path may vary  
slightly.

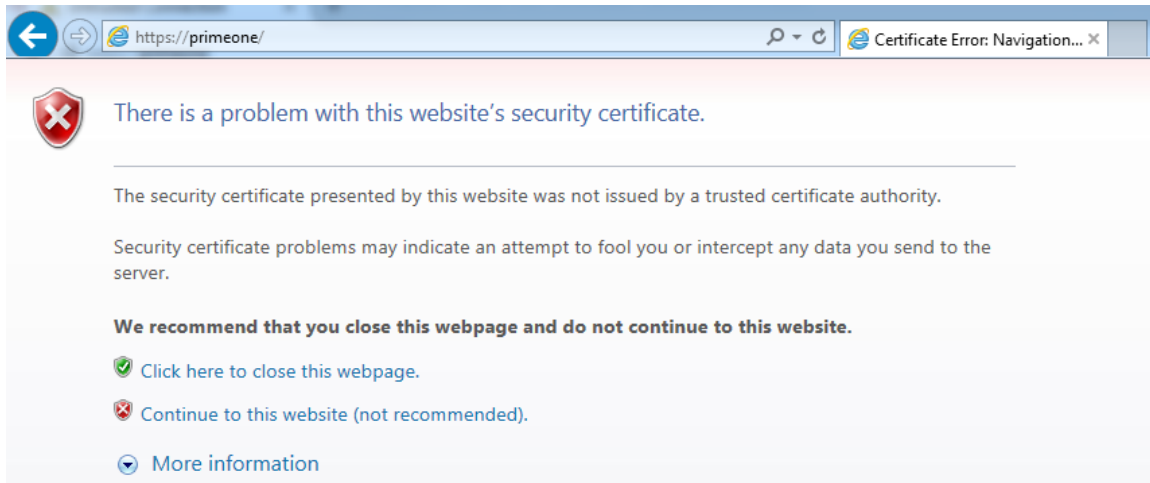


The screenshot shows a Windows command prompt window titled "Administrator: C:\Windows\System32\cmd.exe". The window displays the following text:

```
Microsoft Windows [Version 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
  
C:\Windows\system32>C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.  
exe -i_
```

## AssetWorx! website gives me a warning about my certificate

When you go to the AssetWorx! website which is using SSL (https), it may tell you there is a problem with the website's security certificate. This is because the self-signed certificate hasn't been installed in the computer's Trusted Root store.



To fix this, click on the Windows Start Menu (or hit the Windows key) and type “certmgr.msc” and hit enter. When the Certificates Manager comes up, right click the Trusted Root Certificate Authorities store and click All Tasks->Import. Click Next and then browse to find the CER file that was generated in the IIS Options section of the installer. Click Next followed by Finish. Next time you go to the AssetWorx! website, the warning message should have gone away.