ALVARADO
dormakaba Group

GateKeeper v3
Installation Guide

PUD3907 Version 4.1

Alvarado Manufacturing Company, Inc.
12660 Colony Street, Chino, CA 91710
Phone: +1 (909) 591-8431
Fax: +1 (909) 628-1403

Contents

Preface 3
Document Overview 3
Before You Begin 3
Minimum Host Computer Requirements 3
Minimum Software Prerequisites 3
Required Files 4
Initial Software Configuration 5
Enable IIS Roles 5
Install and Configure SQL 8
Install and Configure SQL Server Management Studio 13
Configure SQL Login 15
Configure .NET 4.0 19
GateKeeper Installation 21
Test for Correct Installation 29
From Host Computer 29
From a Networked Device 30
Password Reset 31
Set Up Password Reset Email Account 31
Set Up Default Admin Email Account 33
Appendix 1 – Web Deploy 3.5+ Additional Configuration 36
Appendix 2 – Linking to LaneConfig 40
Appendix 3 – ARGUS Gate Setup 41
Required Software 41
Com Port Setup 41
GateKeeper Setup 45
Configure IIS 47

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Preface

Document Overview

This document instructs qualified personnel how to install and configure Alvarado's GateKeeper software. Qualified personnel include IT personnel and anyone else who has experience working with Windows and SQL. After completing this guide, GateKeeper will be ready for use.

This guide only covers installation and initial configuration. For more information on using the GateKeeper application, refer to the *GateKeeper User Guide*. Contact Alvarado Technical Support for a copy.

Before You Begin

The GateKeeper host machine requires third-party software be installed prior to beginning this installation process. This guide lists the required configuration settings for this software when applicable, but installing and configuring this software beyond what is required to run GateKeeper is beyond the scope of this guide.

NOTE This guide uses screenshots taken on a **Windows 10** computer using **SQL Server 2019 Express** edition. There may be visual differences when installing GateKeeper on other operating systems and SQL versions, but the overall process remains the same.

Minimum Host Computer Requirements

Operating System:	Windows 7 Professional or Windows Server 2008 R2
CPU:	1.4 GHz, 64-bit
RAM:	2 GB
Available Disk Space:	20 GB

IMPORTANT You must have **Administrator** privileges on your computer to complete the installation.

Minimum Software Prerequisites

The software versio0ns indicated below are the minimum versions required for GateKeeper, but GateKeeper will work with higher software versions as well. Ensure all required software is installed on your host computer before you begin the GateKeeper installation process. See below for instructions on configuring these applications specifically for use with GateKeeper.

- .NET Framework 4.0
- Web Deploy 3.0
- IIS Roles 7.0

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Required Files

You must have access to these files on your host machine before beginning the installation process.

- SQL Server or SQL Server Express installer (.exe file available from Microsoft)

NOTE	GateKeeper will work with SQL version 2008 R2 or higher.

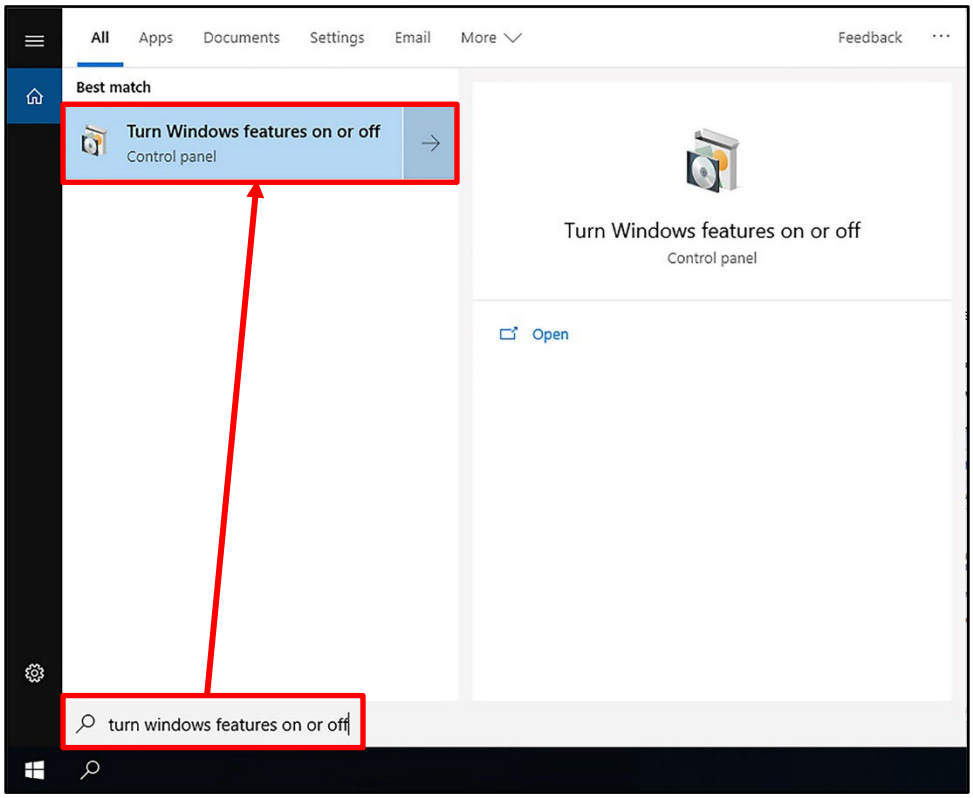
- SQL Server Management Studio installer (.exe file available from Microsoft)
- *GateKeeperWeb.zip* file (provided by Alvarado)

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Initial Software Configuration

Enable IIS Roles

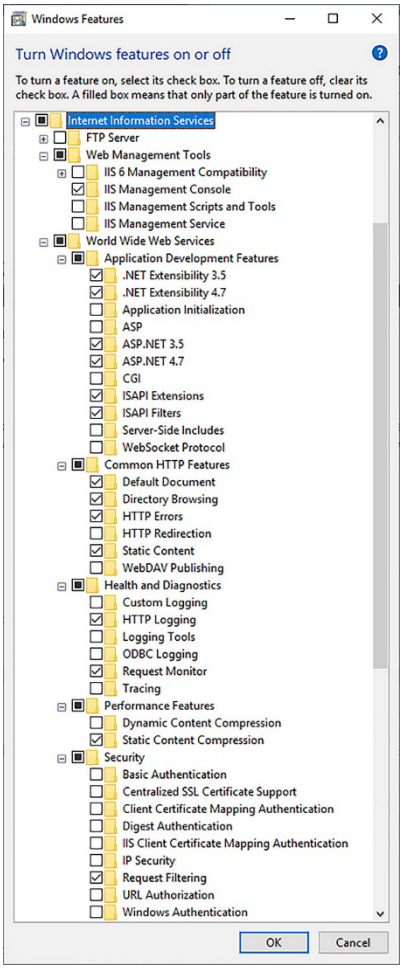
1. Click **Start** and begin typing **Turn Windows features on or off**.
2. Click **Turn Windows features on or off** when it appears. The *Windows Features* box will open and load a list of features. It may take some time for the list to load.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

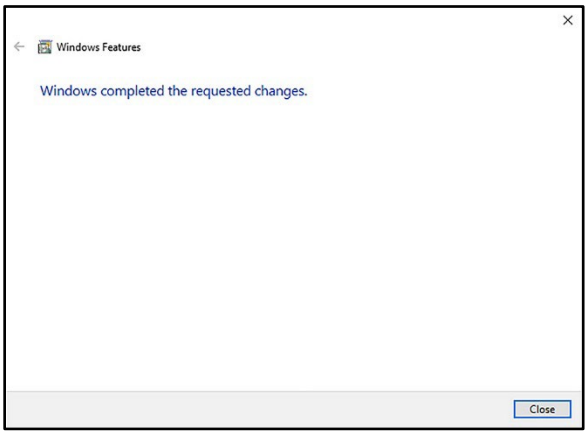
3. Click the **+** next to *Internet Information Services* to expand the folder.
4. Expand the subfolders and check the box for the bolded features shown below.

Internet Information Services
- Web Management Tools
  - **IIS Management Console**
- World Wide Web Services
  - Application Development Features
    - **.NET Extensibility***
    - **ASP.Net***
    - **ISAPI Extensions**
    - **ISAPI Filters**
  - Common HTTP Features
    - **Default Document**
    - **Directory Browsing**
    - **Static Content**
  - Health and Diagnostics
    - **HTTP Logging**
    - **Request Monitor**
  - Performance Features
    - **Static Content Compression**
  - Security
    - **Request Filtering**



* Check the box for each version of .NET you have installed.

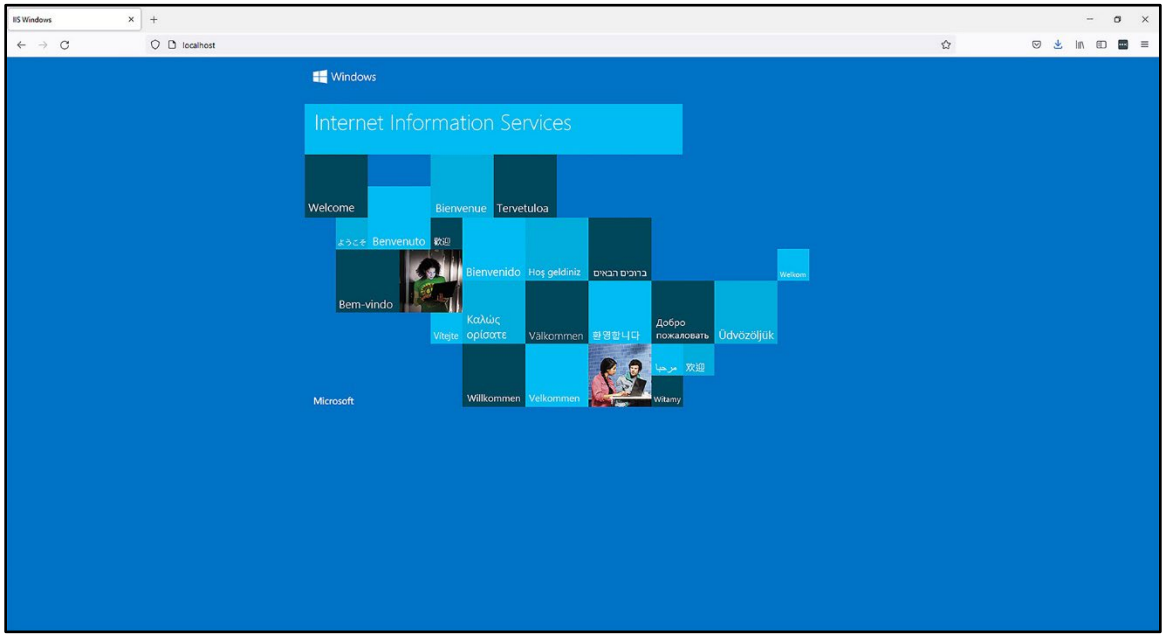
5. Click **OK**. It may take several minutes for the change to apply. The *Windows Features* box will close automatically when the change is applied.



6. Click **Close**.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

1. Verify IIS is working properly.
    a. Open a web browser.
    b. Type **http://localhost** into the address bar and press **Enter**.
    c. Verify the browser displays the IIS screen, shown below.



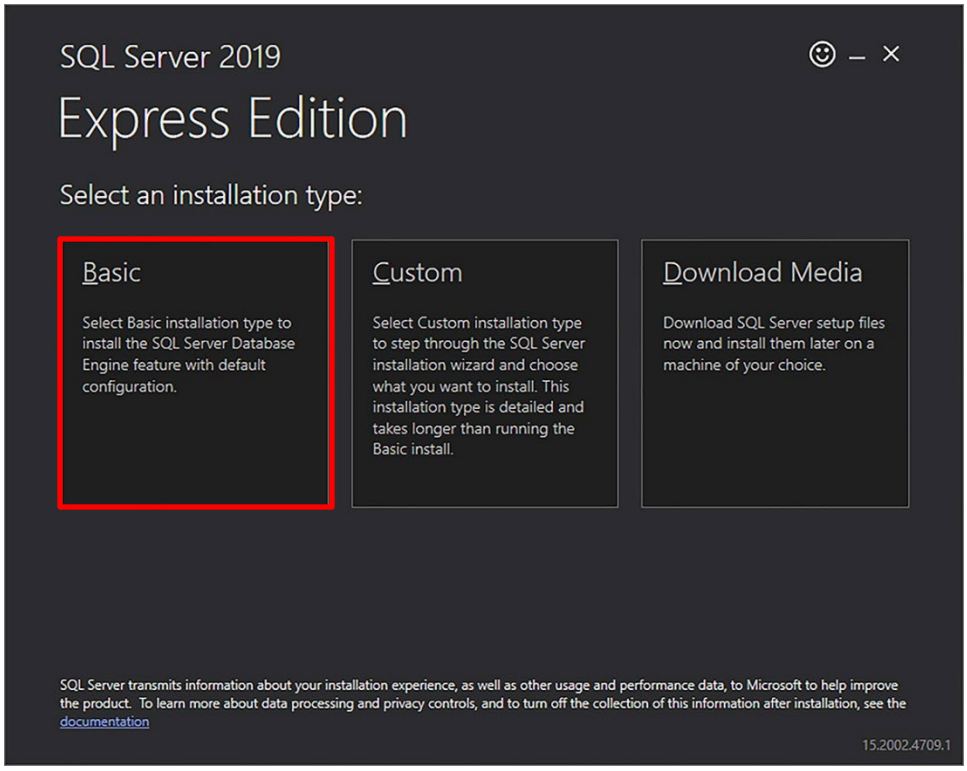
NOTE	If you encounter an error instead of the IIS screen, reinstall .NET framework.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Install and Configure SQL

This section describes how to install a new version of **SQL Server 2019 Express** and configure it for use with GateKeeper. Other versions of SQL (2008 R2, 2012, etc.) may appear different, but the overall process remains the same.

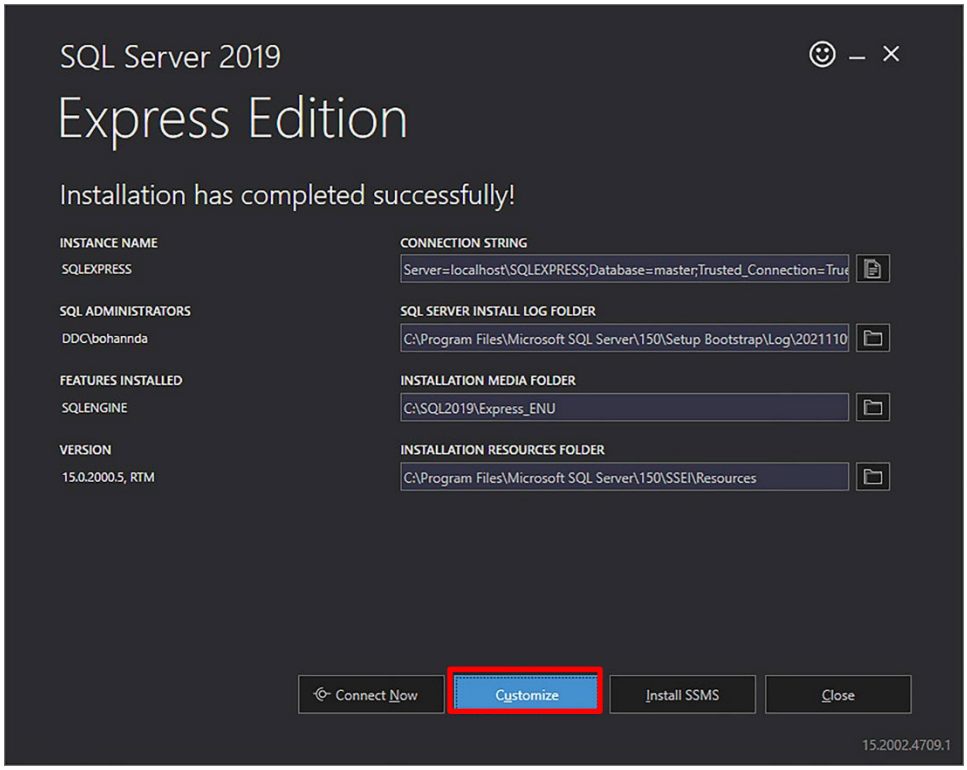
1. Run the SQL installer.
2. Click **Basic**.



3. Click **Accept** to accept the license terms.
4. Leave the *INSTALL LOCATION* set to the default value and click **Install**. Wait for the installation to complete. It may take several minutes to complete the installation.

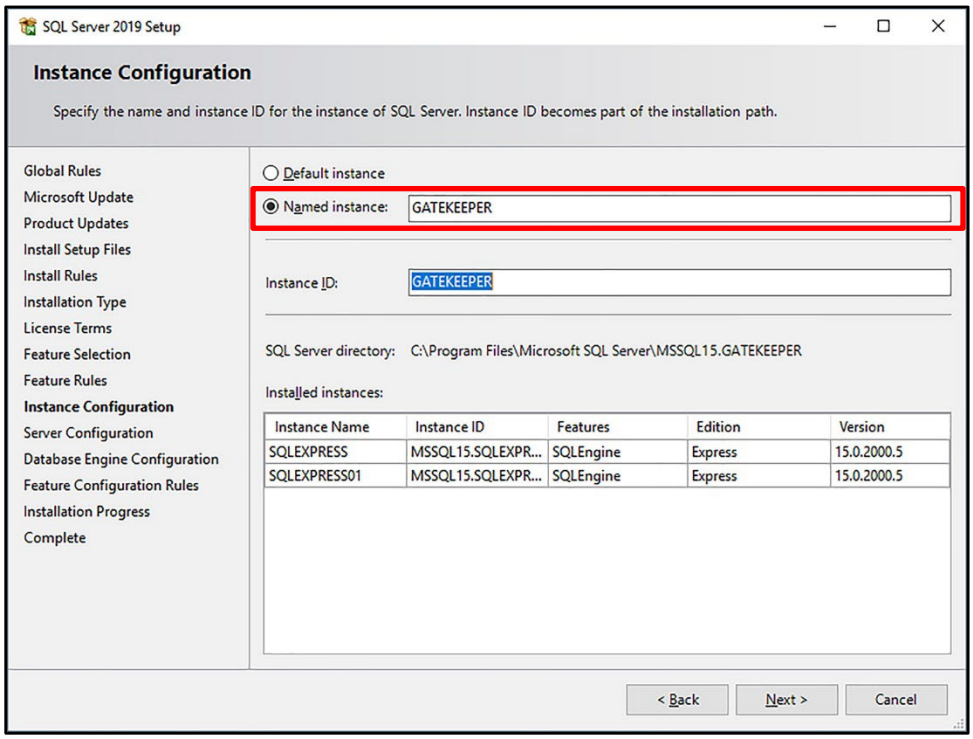
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

5. Click **Customize**.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

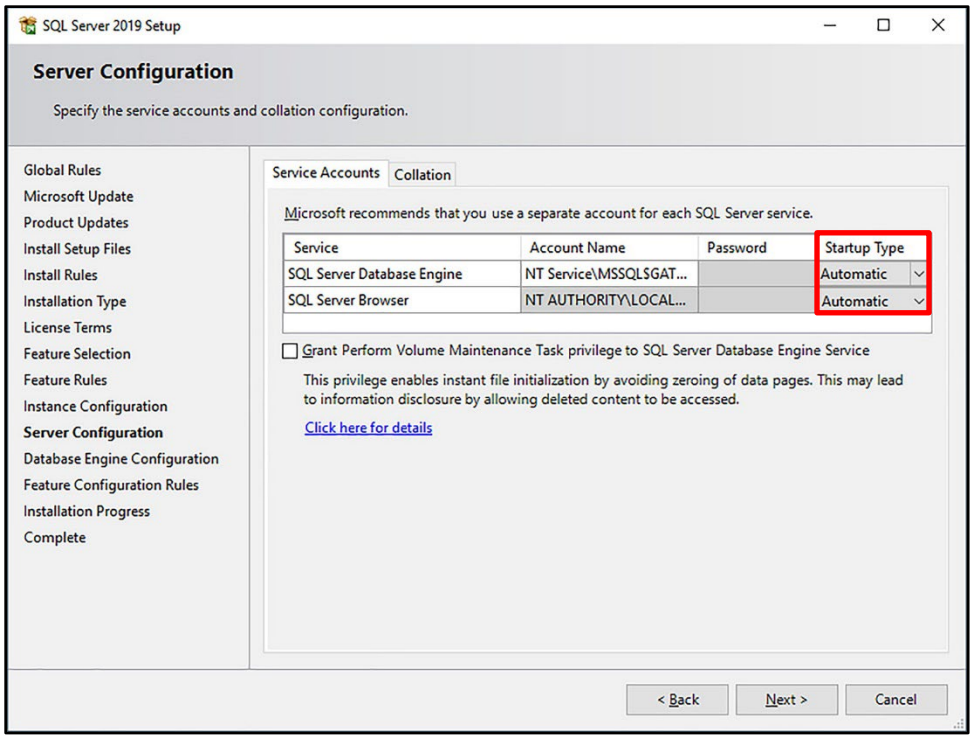
6. Leave settings set to default and click **Next** until you get to the *Instance Configuration* screen.
7. Enter **GATEKEEPER** into the *Named instance* field and press **Tab**. The *Instance ID* field will be automatically filled in.



8. Click **Next**.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

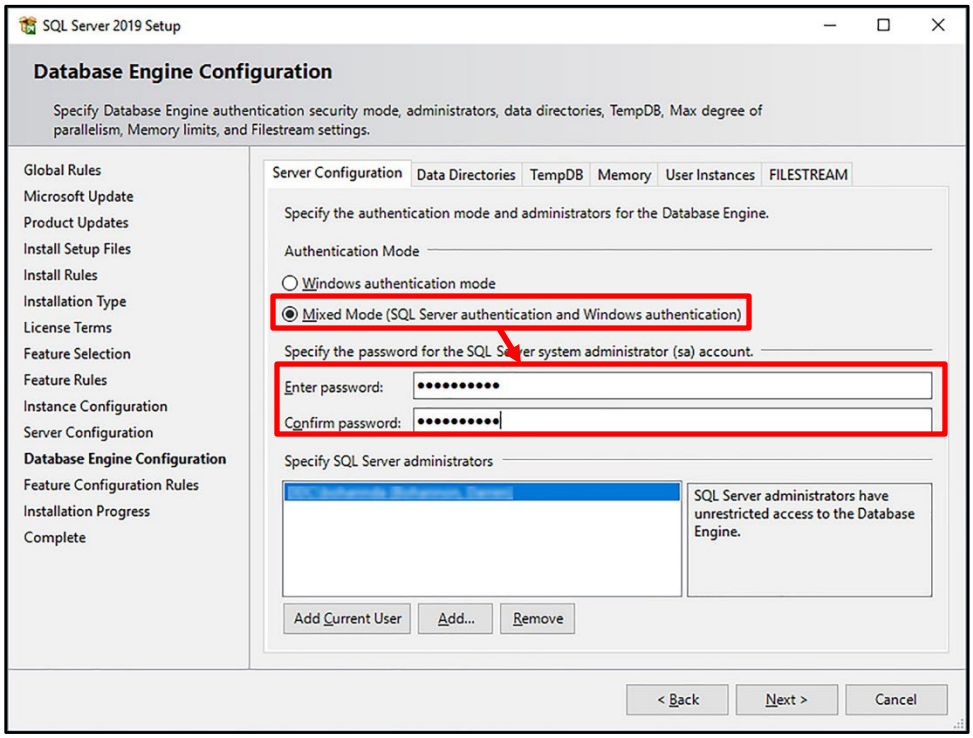
9. On the *Server Configuration* screen, ensure both *SQL Server Database Engine* and *SQL Server Browser* have their *Startup Type* set to **Automatic**.



10. Click **Next**.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

11. On the *Database Engine Configuration* screen:
    a. Select **Mixed Mode (SQL Server authentication and Windows authentication)**
    b. Enter a password for the system administrator account according to your local policies into the *Enter password* and *Confirm password* fields.



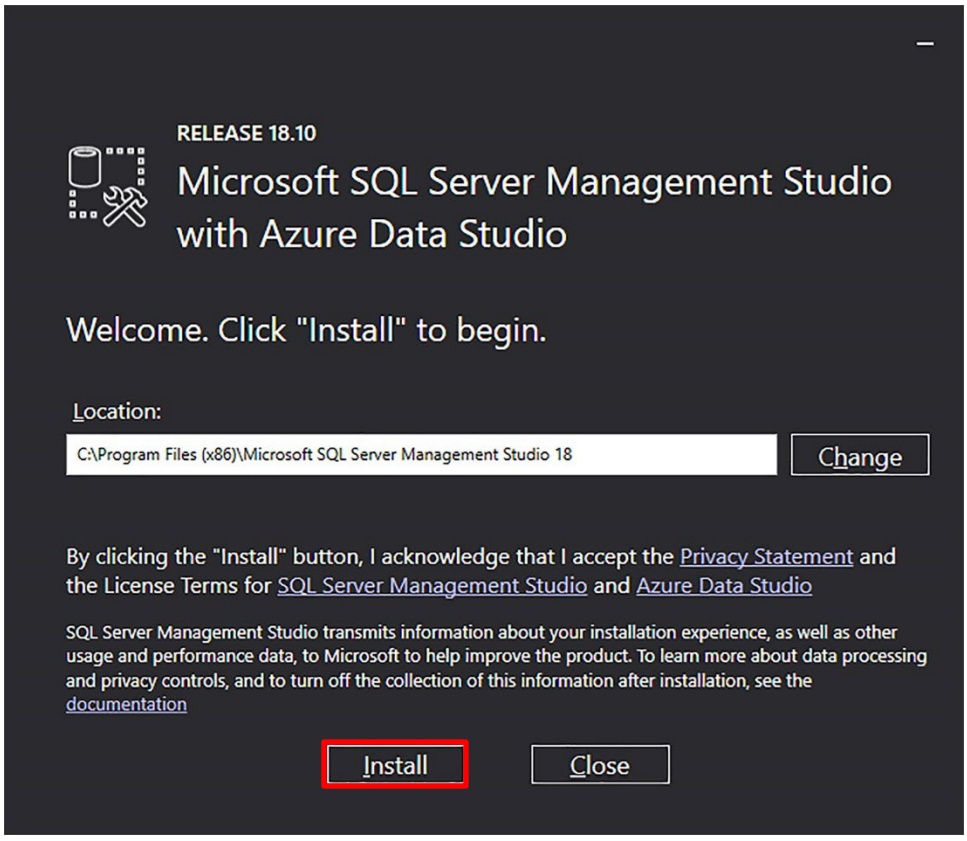
12. Click **Next**.
13. Wait for the installation process to finish successfully and click **Close**.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Install and Configure SQL Server Management Studio

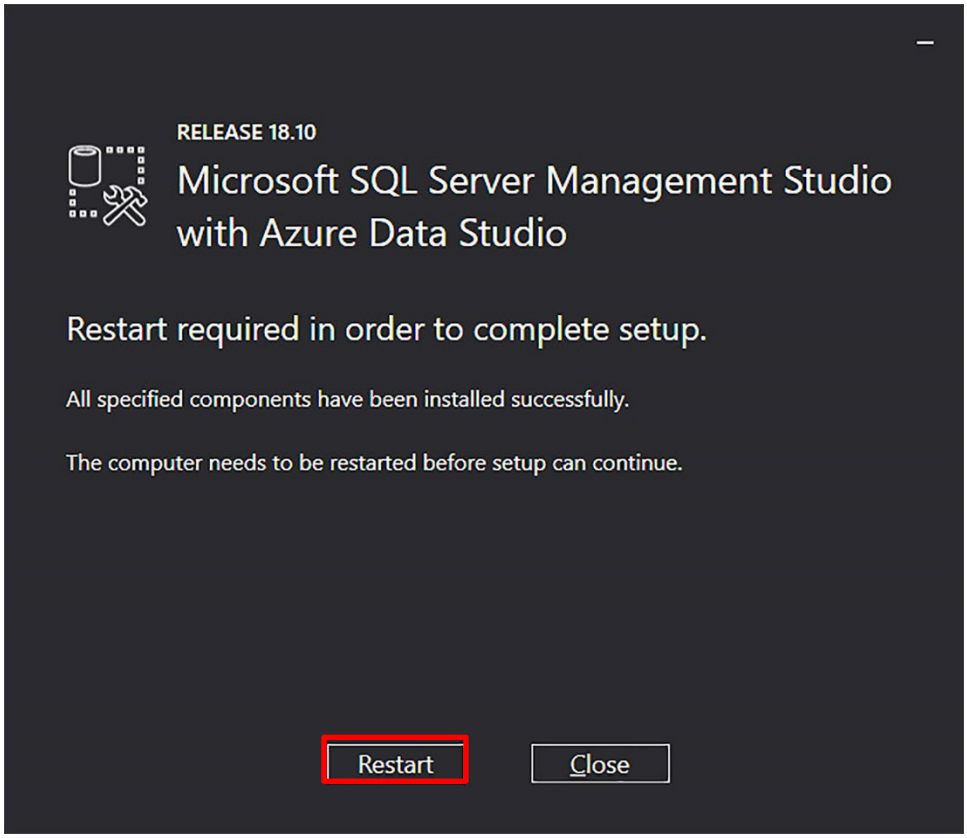
NOTE	You will need to restart your computer to complete the steps in this section. Save your work and close all other programs before installing SQL Server Management Studio.

1. Run the *SQL Server Management Studio* installer.
2. Leave the *Location* set to default and click **Install**.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

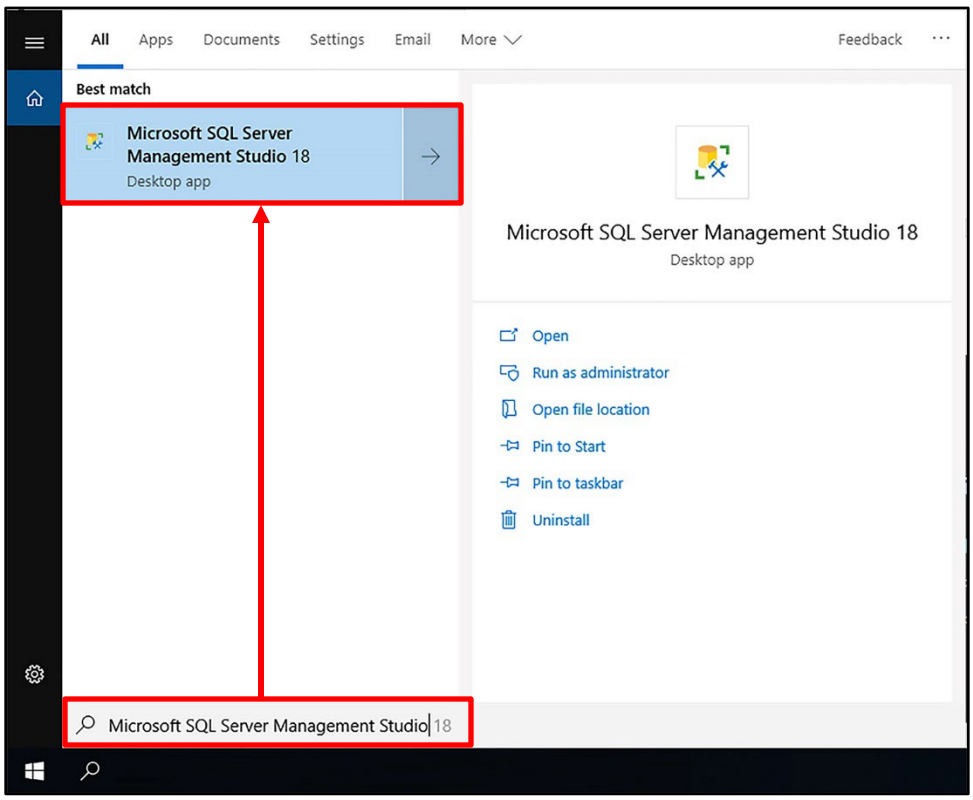
3. Click **Restart** to restart your computer and complete the installation process.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

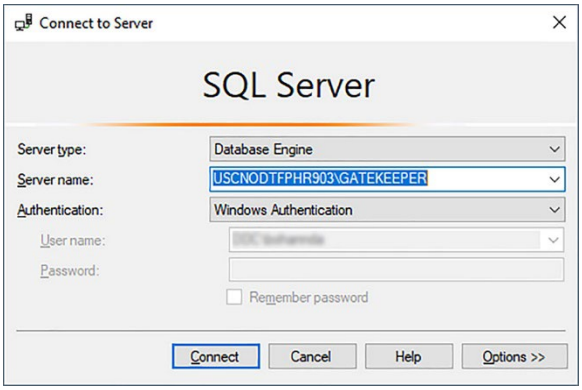
Configure SQL Login

1. When your computer restarts, click **Start** and begin typing **Microsoft SQL Server Management Studio**.
2. Click **Microsoft SQL Server Management Studio** when it appears. Your version may be different than the one shown in the image below.

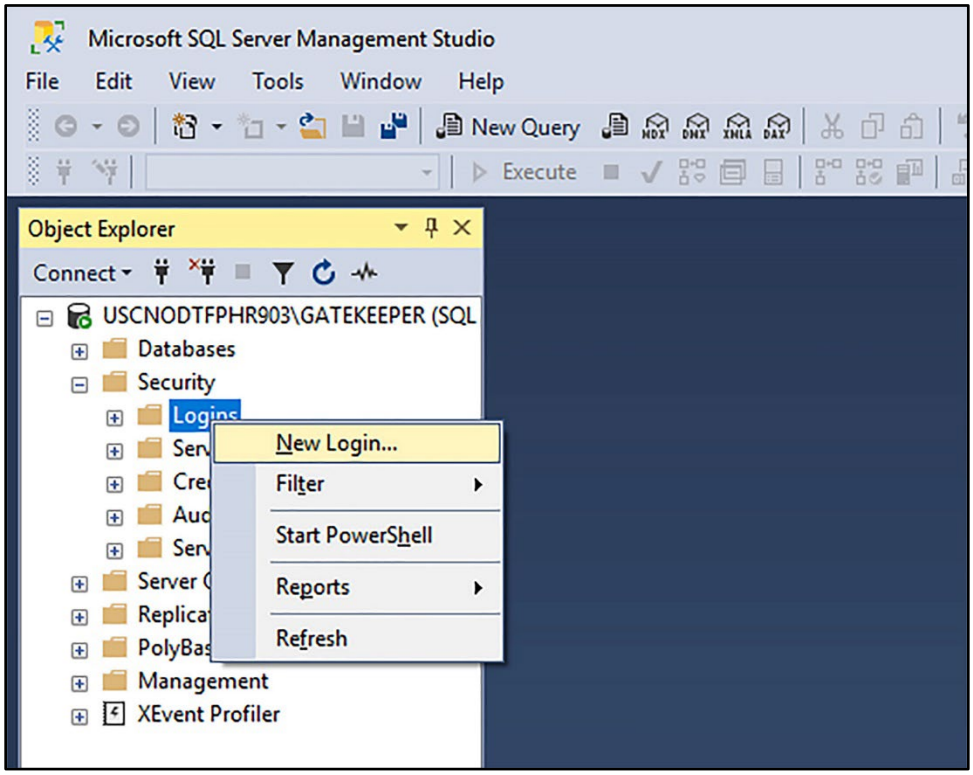


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

3. Enter the appropriate information into the *Connect to a Server* box and click **Connect**.
    a. The *Server name* field should automatically display the GateKeeper instance you created. If you have more than one SQL server instance, enter the **Host Machine Name\GATEKEEPER** into this field. In the example below, the host machine name is USCNODTFPHR903.
    b. Set *Authentication* to **Windows Authentication** to use the login credentials for the Windows user currently logged in. The current Windows user must be an approved server administrator to use this login method. See step 0 on page 12.
    c. Set *Authentication* to **SQL Server Authentication** to use the system administrator password you set up in step 0 on page 12.

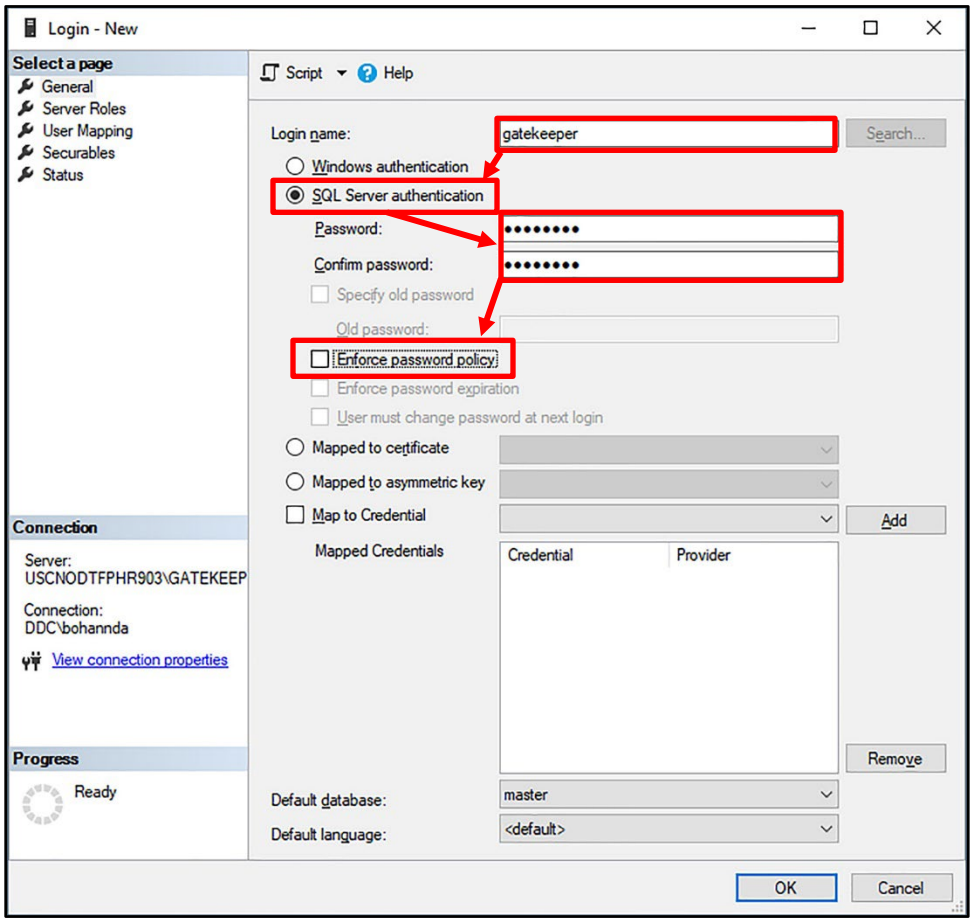


4. Click the **+** to expand the **Security** folder.
5. Right-click the **Logins** folder and click **New Login…**.



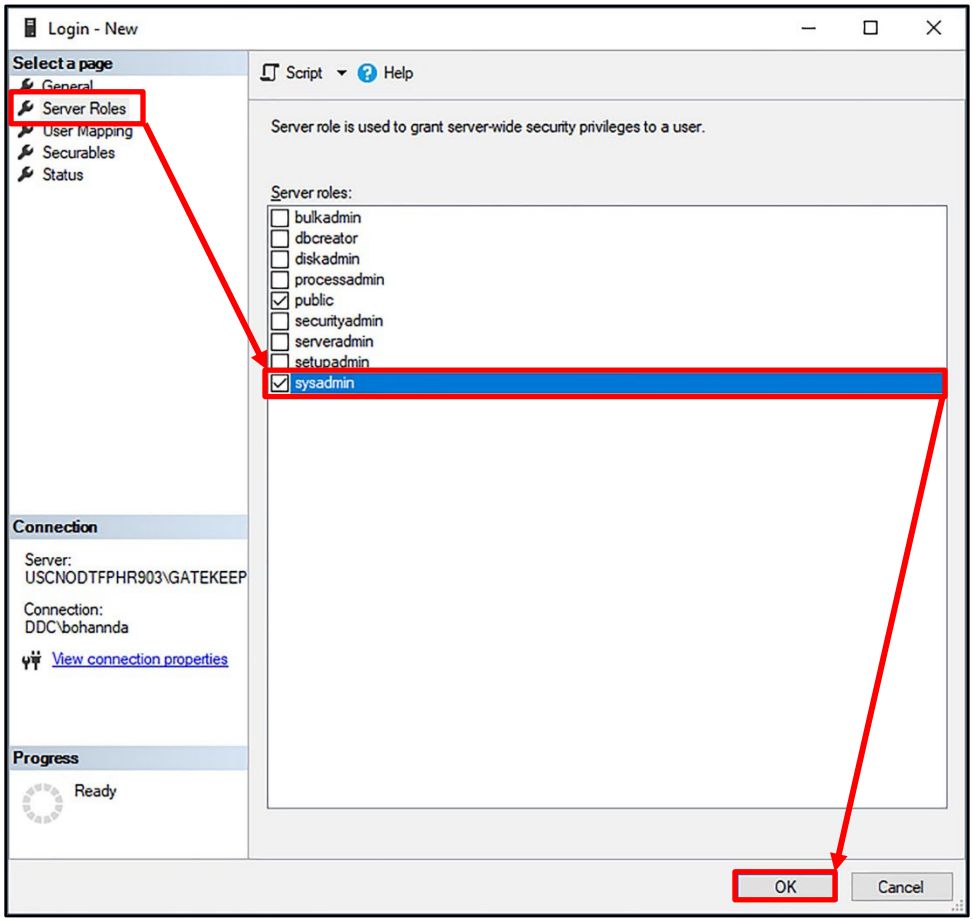
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

6. Enter **gatekeeper** into the *Login name* field.
7. Select **SQL Server authentication**.
8. Create a password according to your local policies and enter it into the *Password* and *Confirm password* fields.
9. Uncheck the **Enforce password policy** box.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

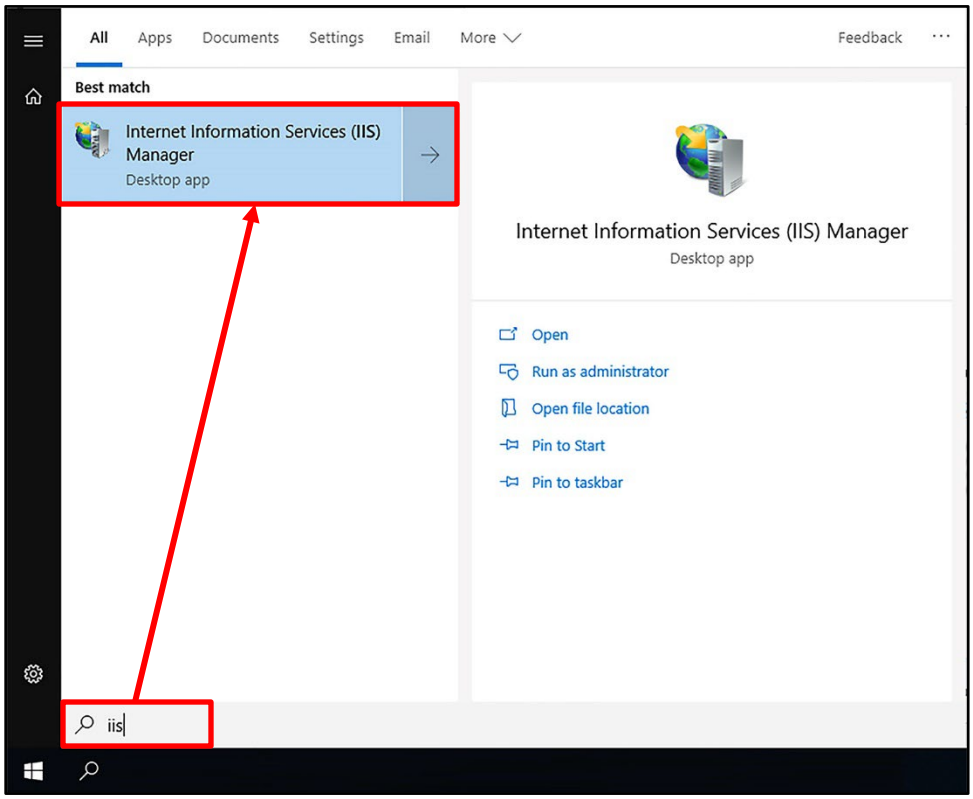
10. Click **Server Roles** in the *Select a page* section.
11. Check the **sysadmin** box.
12. Click **OK**.



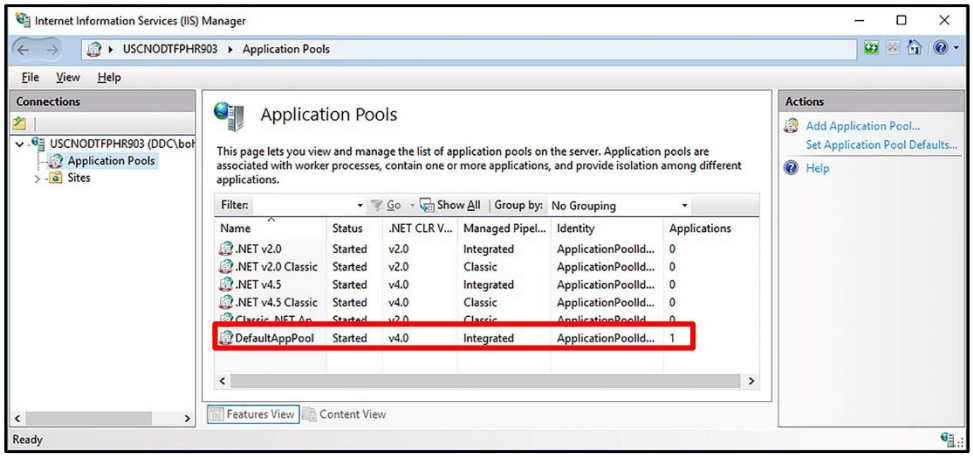
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Configure .NET 4.0

1. Click **Start** and type **IIS** into the search bar.
2. Click **Internet Information Services (IIS) Manager**.

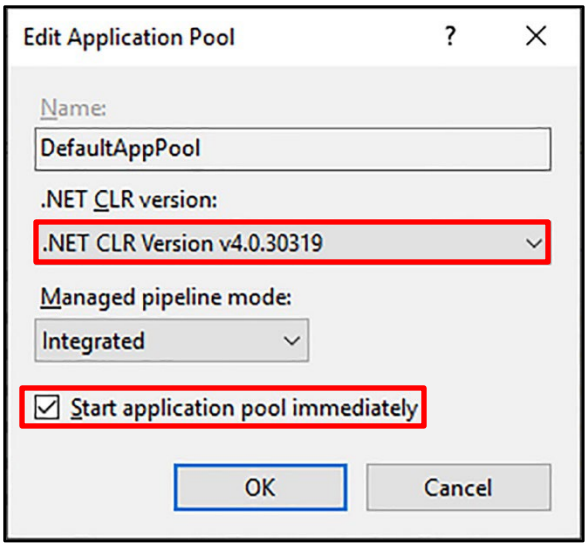


3. Double-click the host computer's name to expand the list and select **Application Pools**.
4. Double-click **DefaultAppPool**.

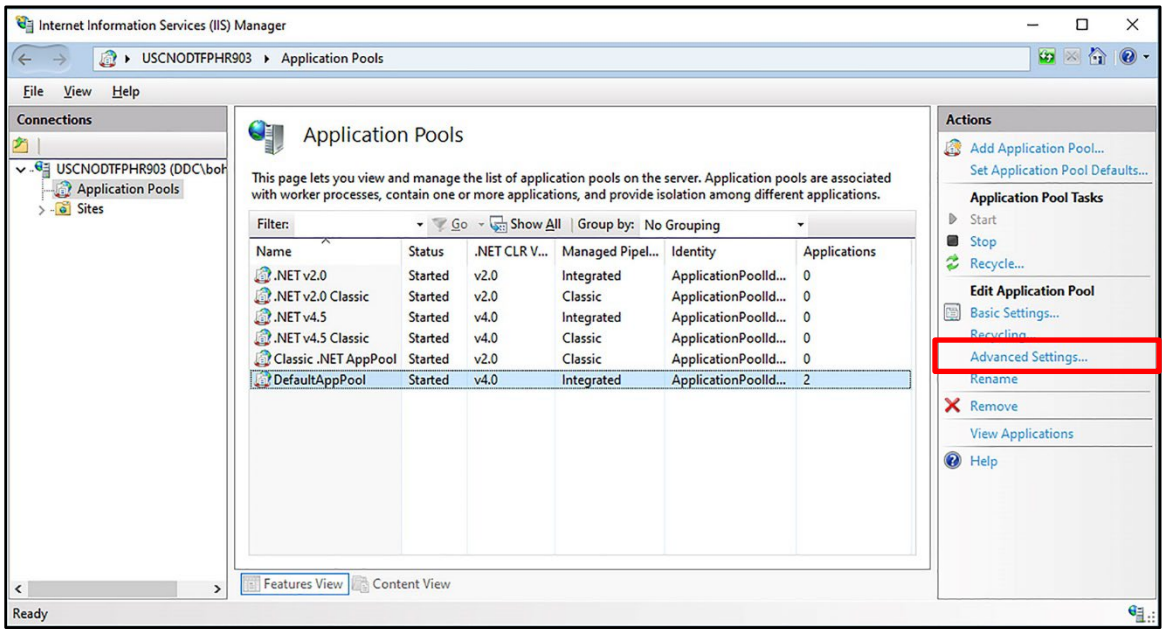


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

5. Ensure the *.NET Framework version* is set to **.NET Framework v4.0.30319** (or higher) and ensure the **Start application pool immediately** box is checked.



6. Click **OK**.
7. While *DefaultAppPool* is selected, click **Advanced Settings** in the *Actions* pane.

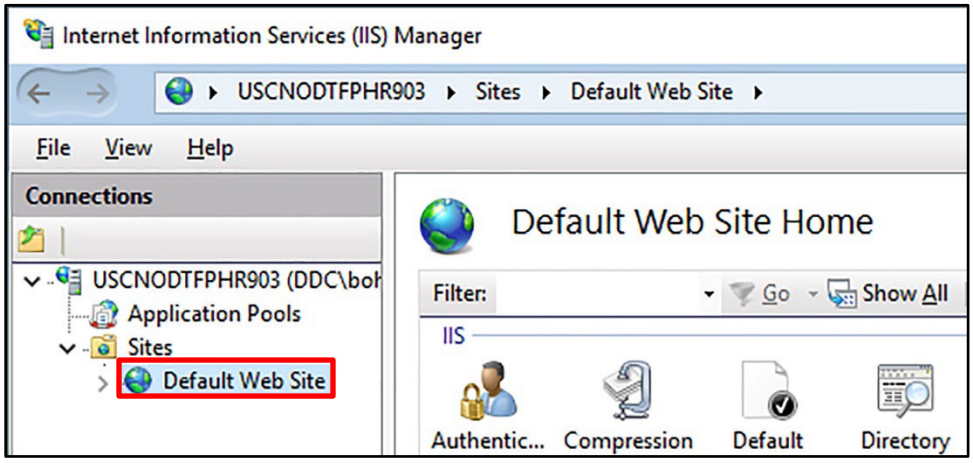


8. Change the *General* > *Start Mode* setting to **Always Running**.
9. Change the *Process Model* > *Idle Time Out (minutes)* setting to **0**.
10. Change the *Recycle* > *Regular Time Interval (minutes)* setting to **0**.
11. Press **OK**.

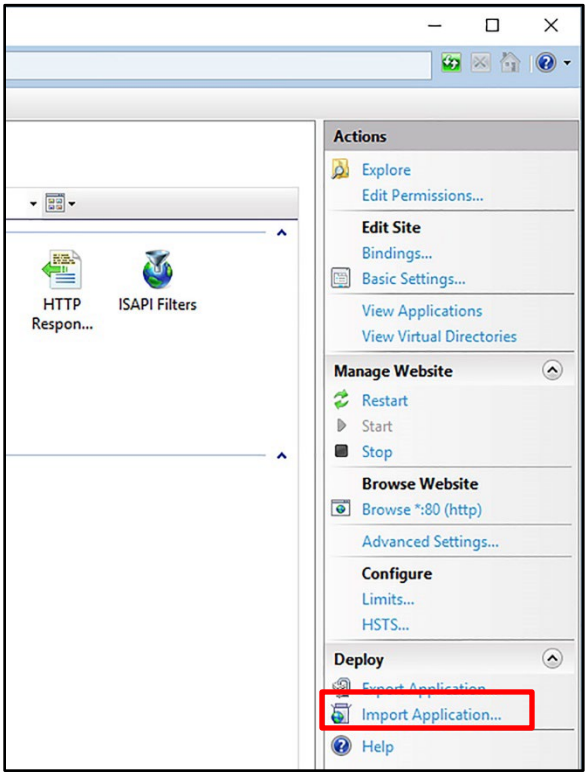
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

GateKeeper Installation

1. In the *IIS Manager*, double-click the **Sites** to expand the list and select **Default Web Site**.



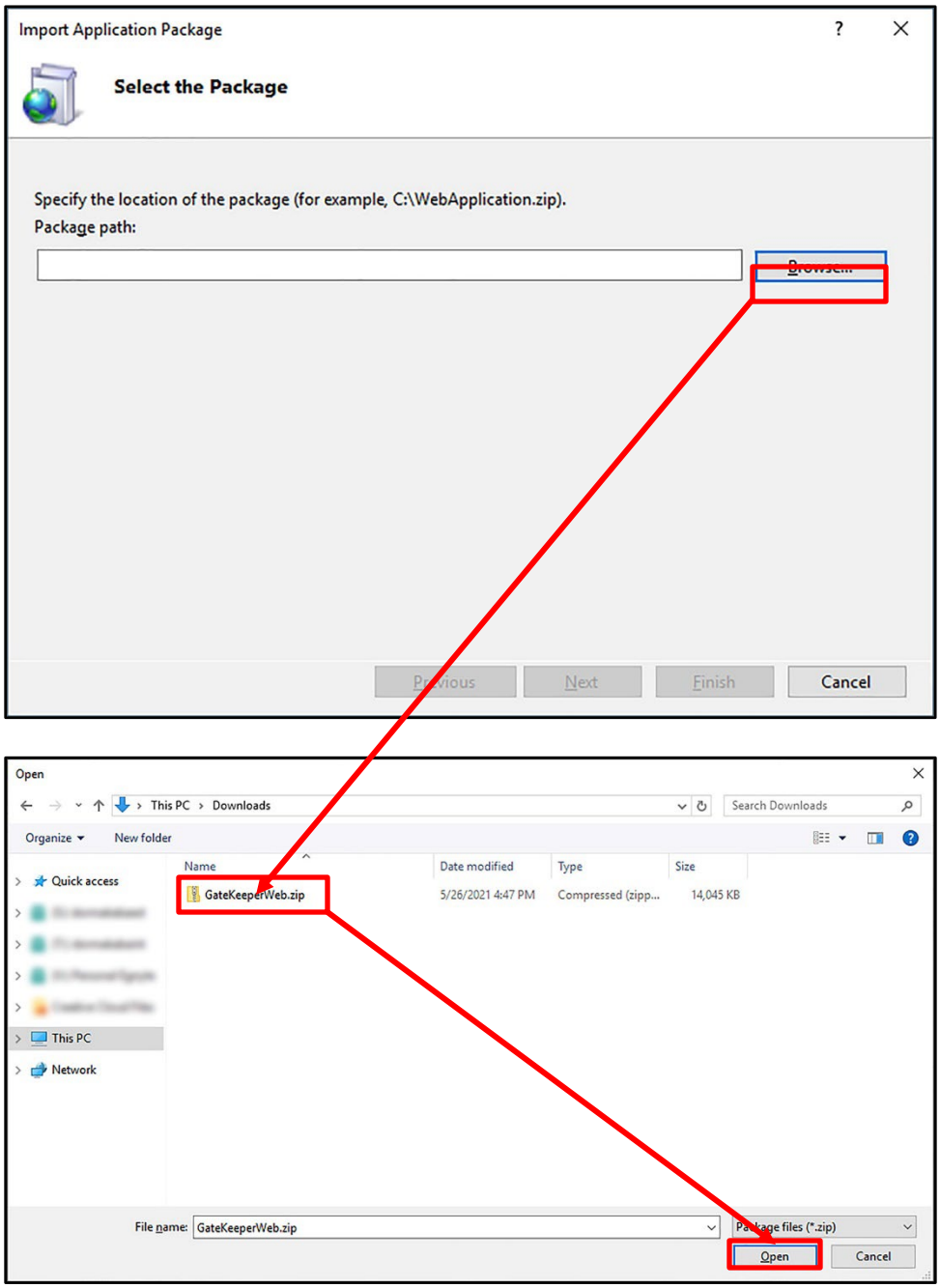
2. Click **Import Application** in the *Actions* pane.



NOTE	If the *Deploy* section does not appear, and you are using Web Deploy 3.5 or above, see **Appendix 1** on page 36.

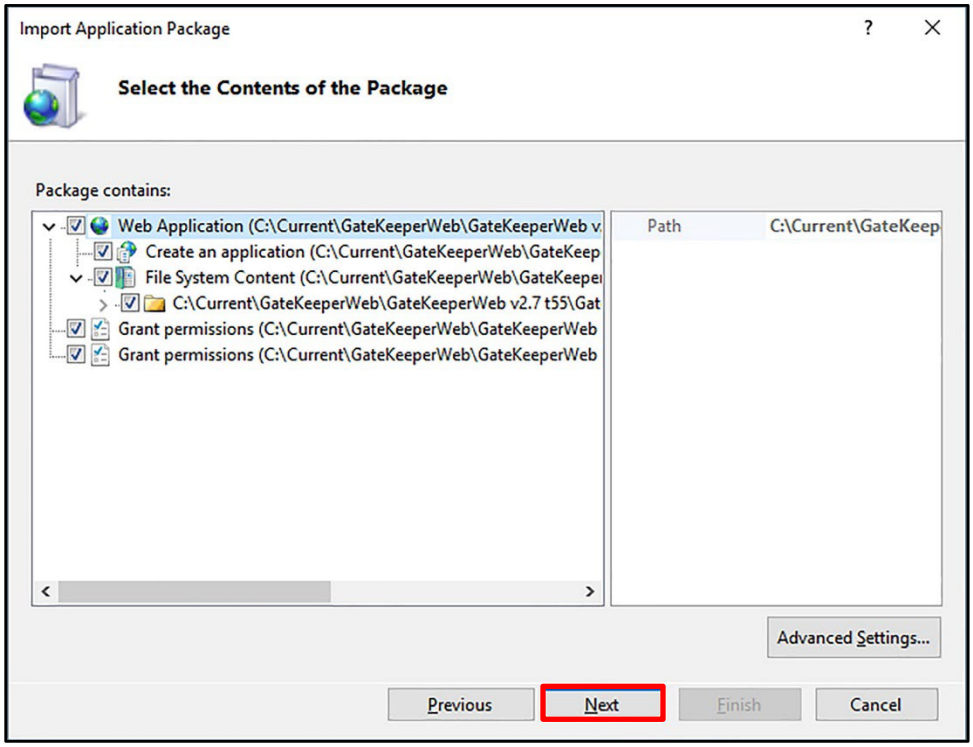
3. Click **Browse**, select the **GateKeeperWeb.zip** file, click **Open**, and click **Next**.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.



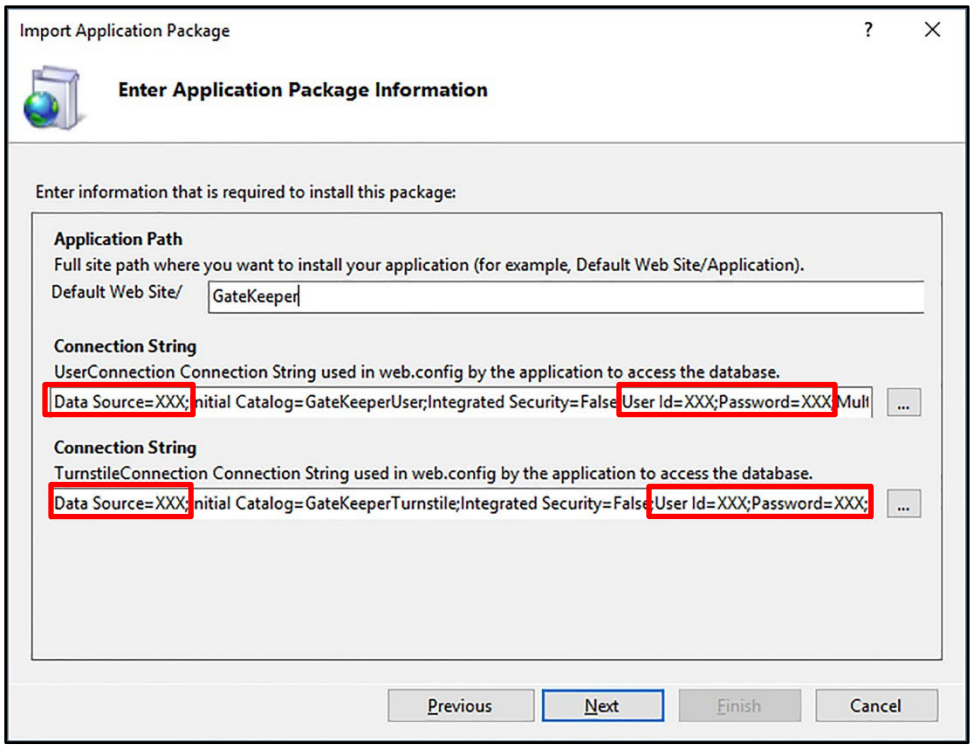
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

4. Accept the default selections on the *Select the Contents of the Package* screen and click **Next**.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

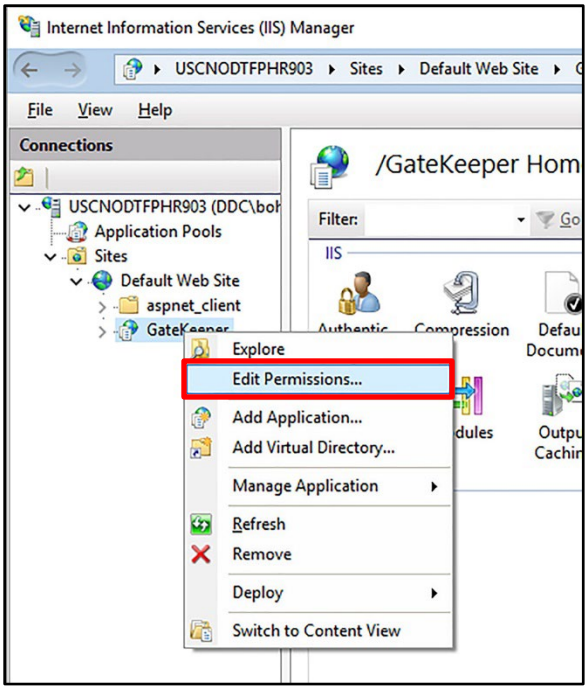
5. Replace the “XXX” values in the *TurnstileConnection* and *UserConnection* fields with the values indicated below and click **Next**.
    a. Change all instances of **Data Source=XXX** to the *Server name* you entered in step 11 on page 12.
    b. Change all instances of **User Id=XXX** to the *Login name* you created in step 6 on page 17.
    c. Change all instances of **Password=XXX** to the *Password* you created in step 8 on page 17.



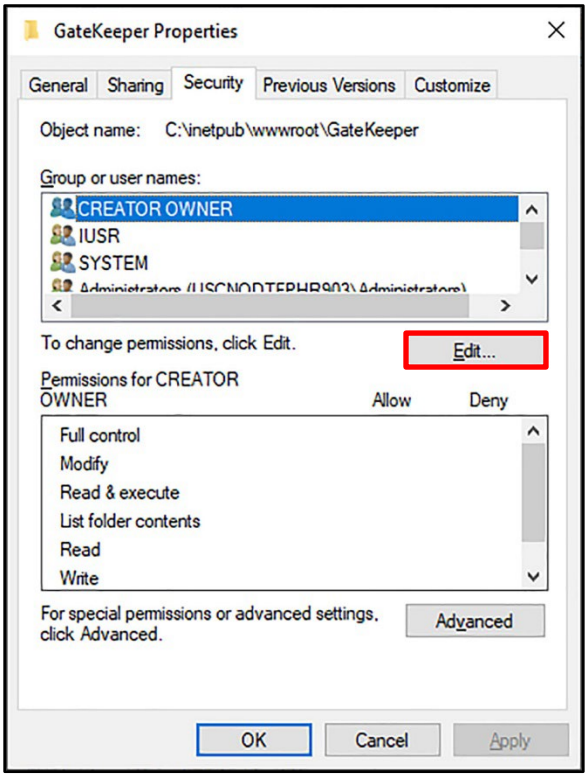
6. Verify the installation completes successfully and click **Finish**.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

7. Double-click **Default Web Site** to expand the list and select **GateKeeper**.
8. Right-click **GateKeeper** and select **Edit Permissions**.

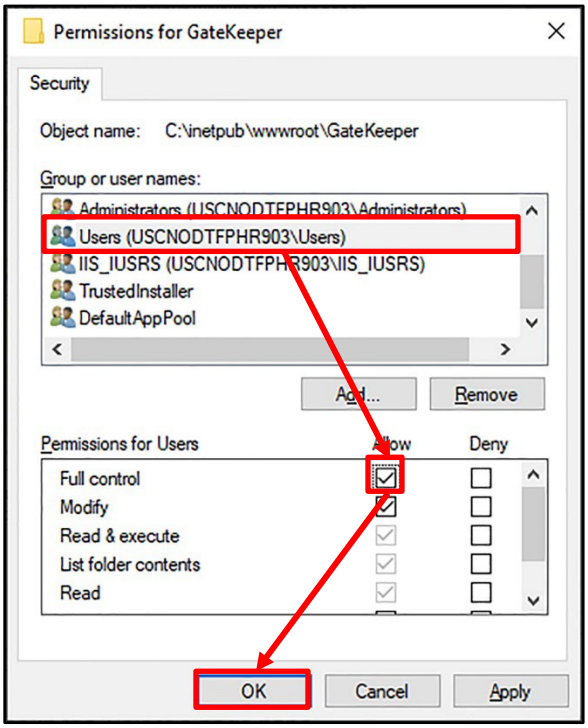


9. Click the **Security** tab and click the **Edit** button.



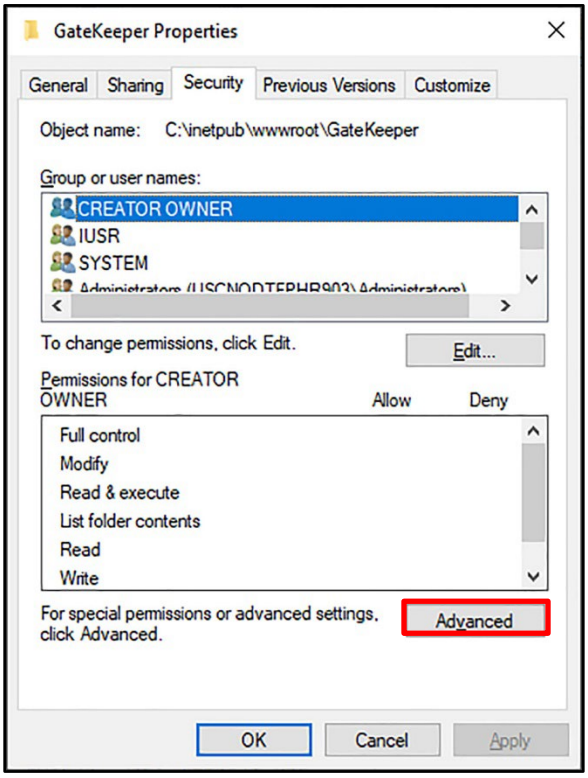
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

10. Select the **Users ([Host Name]\Users)** item from the *Group or user names* list and check the **Allow** box for *Full Control*. In the image below, the Host Name is USCNODTFPHR903.
11. Click **OK**.



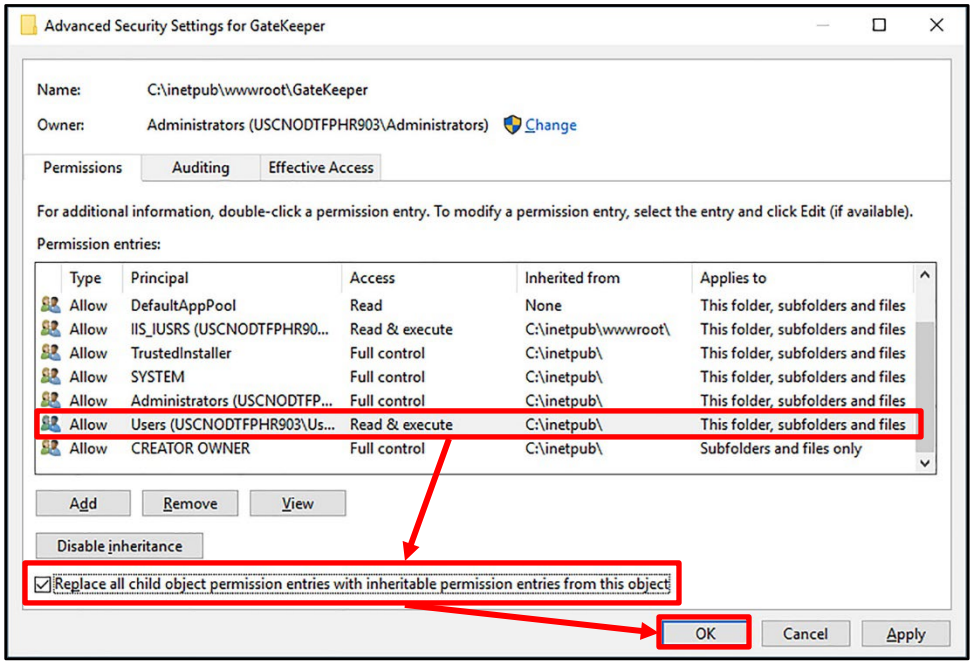
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

12. Click **Advanced**.

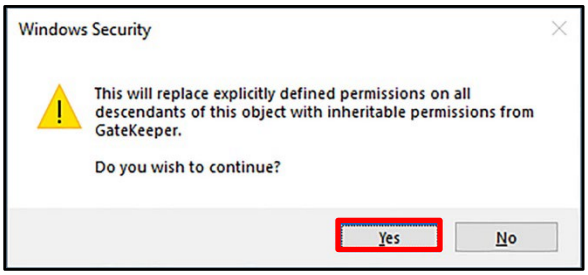


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

13. Select the **Users ([Host Name]\Users)** item from the *Permission entries* list. In the image below, the Host Name is USCNODTFPHR903.
14. Check the **Replace all child object permission entries with inheritable permission entries from this object**.
15. Click **OK**.



16. Click **Yes** when prompted to continue.



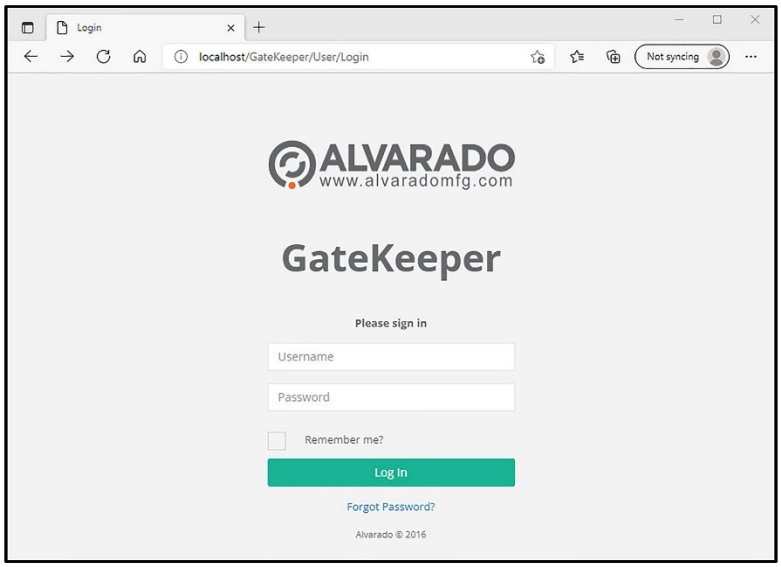
17. Click **OK**.
18. Close the *Internet Information Services (IIS) Manager*.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

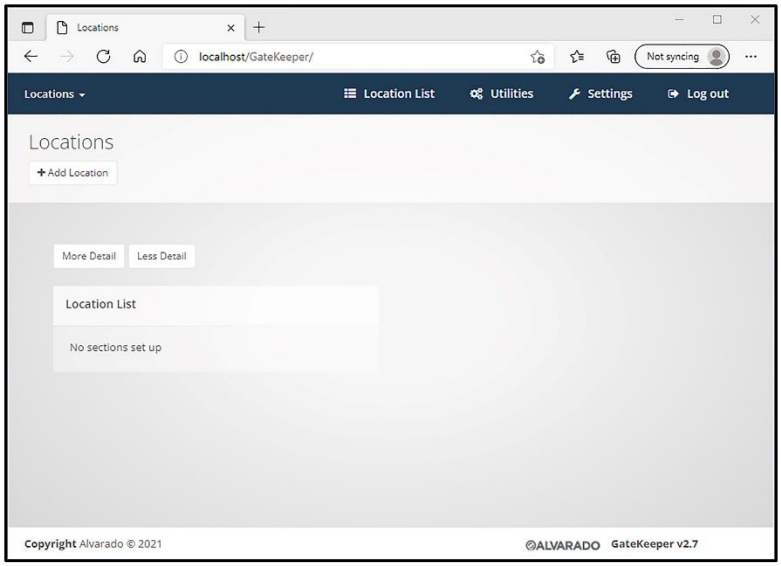
Test for Correct Installation

From Host Computer

1. Open a **web browser**.
2. Type **localhost/gatekeeper** into the address bar and press **Enter** to go to the GateKeeper *Login* screen.



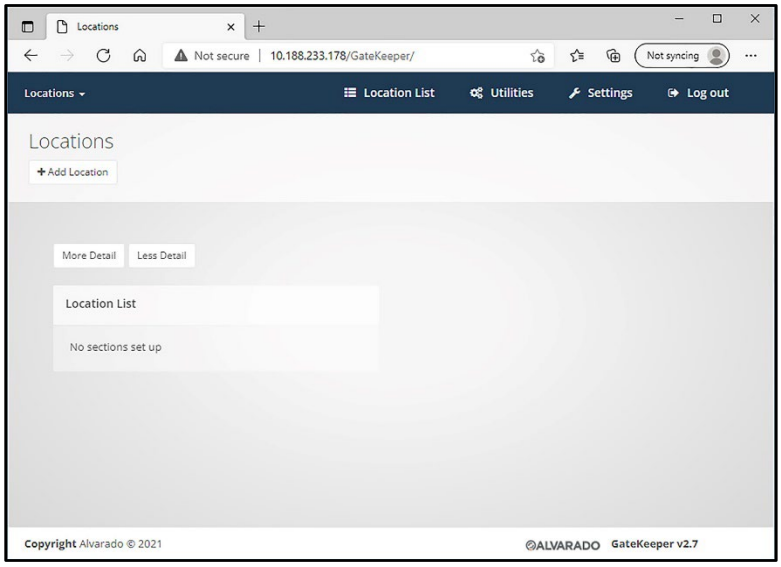
3. Type **admin** for the *Username* and **Admin@123** for the *Password* and click **Log In**. Verify the screen looks like the one shown below.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

From a Networked Device

1. Open a **web browser**.
2. Type **<IP Address>/gatekeeper** into the address bar and press **Enter** to go to the GateKeeper *Login* screen. Replace <IP Address> with your host computer's IP address.
3. Type **admin** for the *Username* and **Admin@123** for the *Password* and click **Log In**. Verify the screen looks like the one shown below. The IP address of the host computer in the image below is 10.188.233.178.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Password Reset

Follow the steps in this section to set up the password-reset system. To use this system, you must have either an **email account set up on an email server** or a free **Outlook.com email account**.

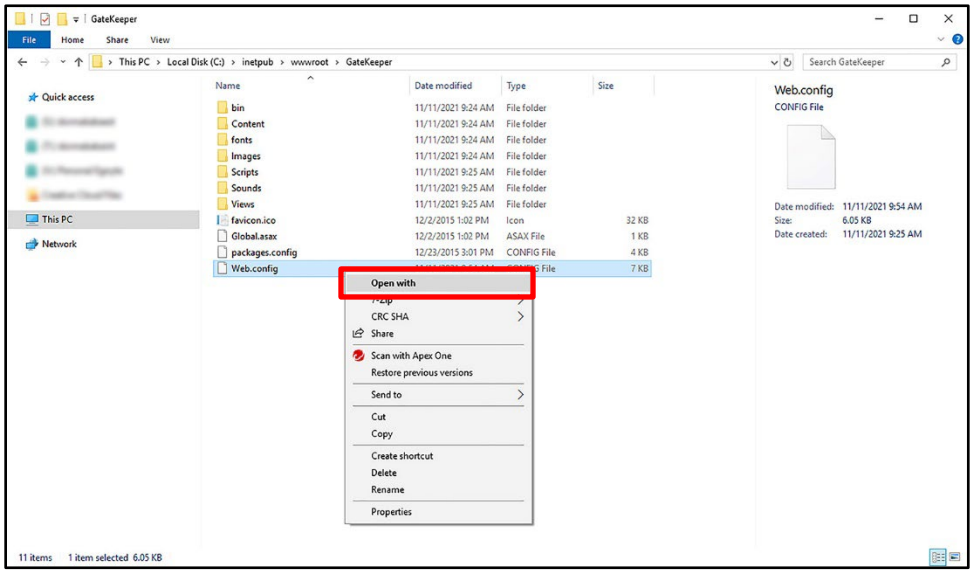
To use the GateKeeper password reset feature, you will first need to input the account information for the email address that will generate password reset instructions. Two types of email accounts may be used: 1) an email account setup on the facility's mail server, or 2) a free Outlook.com email account.

You must have the following email account information to set up the password reset feature:

- Host name of your email server
- Email address
- Password for the email address

Set Up Password Reset Email Account

1. Open **Windows Explorer** and go to the **C:\inetpub\wwwroot\GateKeeper** folder.
2. Right click the **Web.config** file and click **Open With**.



3. Select **Notepad**.

NOTE	You can edit the *Web.config* file with any application capable of editing XML files.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

4. Find the following text strings in the file. Change “XXX” in the text strings to the indicated values. Include the quotation marks.

```
    <add key="EmailHost" value="XXX" />
    <add key="EmailUsername" value="XXX" />
    <add key="EmailPassword" value="XXX" />
```

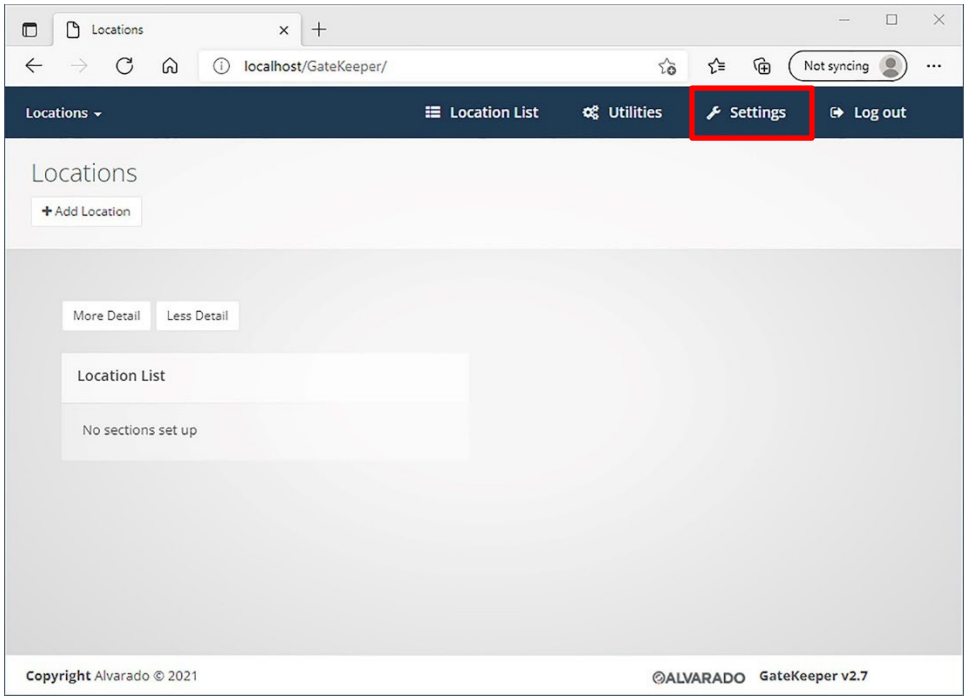
   - *“EmailHost”* should be set to your email host server’s name.
   - *“EmailUserName”* should be set to the email address of the account that will send the reset password message.
   - *“EmailPassword”* should be set to the password of the email address defined above.

5. **Save** the file and **close** it.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

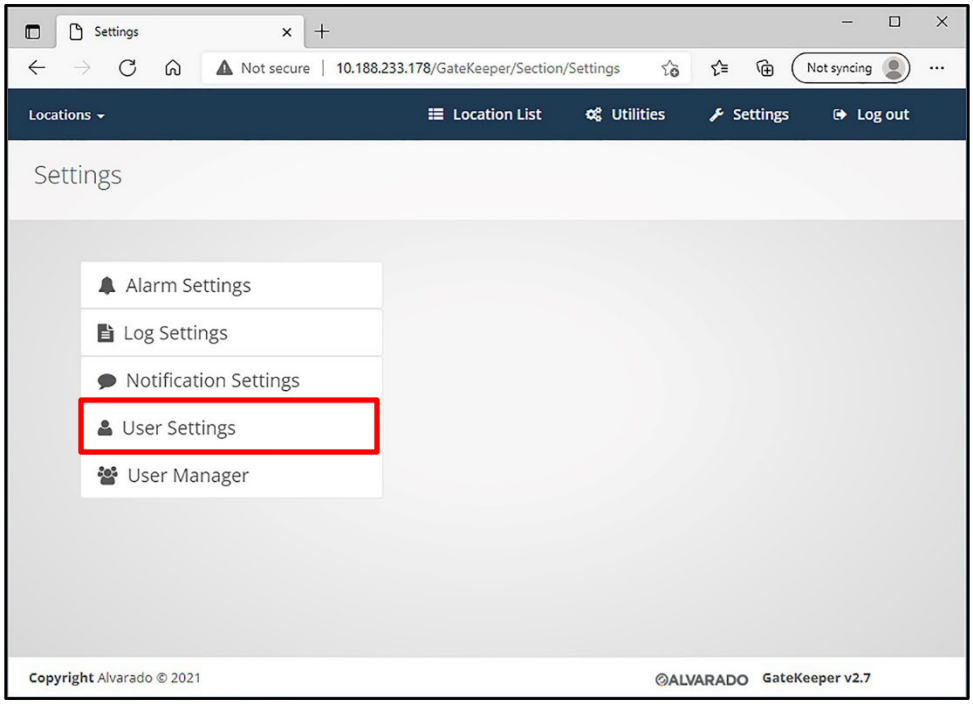
Set Up Default Admin Email Account

1. Follow the steps in the **Test for Correct Installation** section to log into GateKeeper.
2. Click **Settings**.

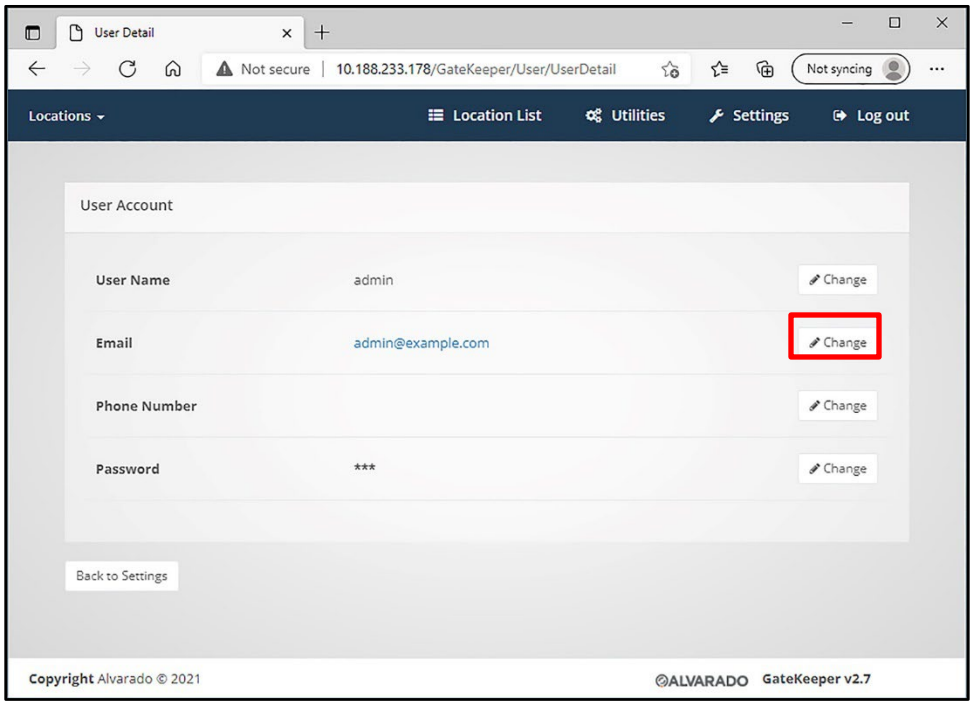


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

3. Click **User Settings**.

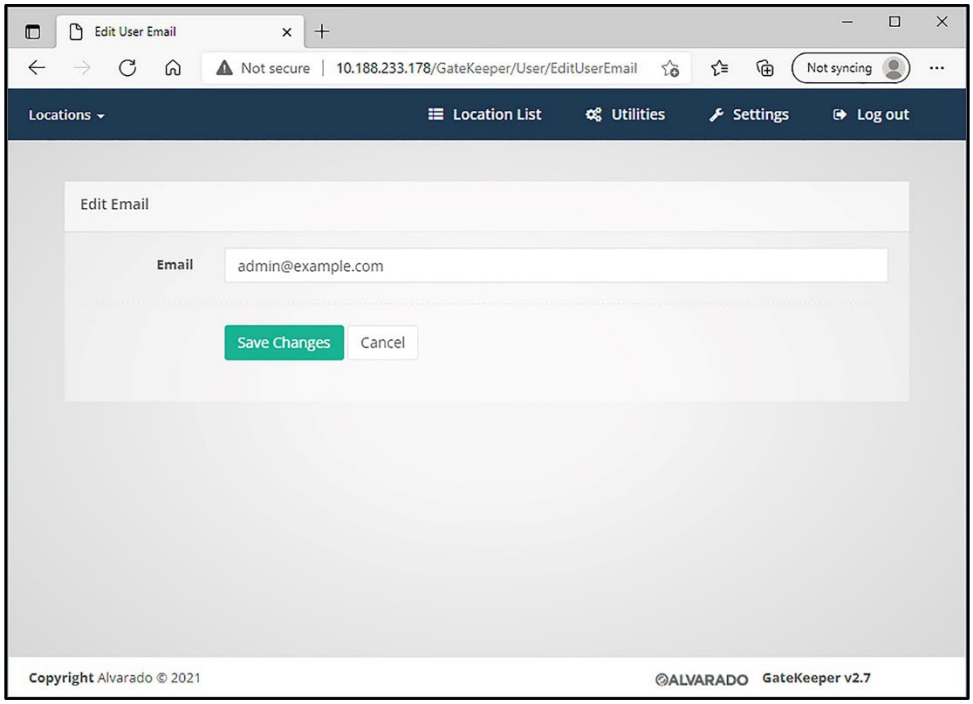


4. Click the **Change** button for *Email*.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

5. Enter the email address that will receive password reset information and click **Save Changes**.

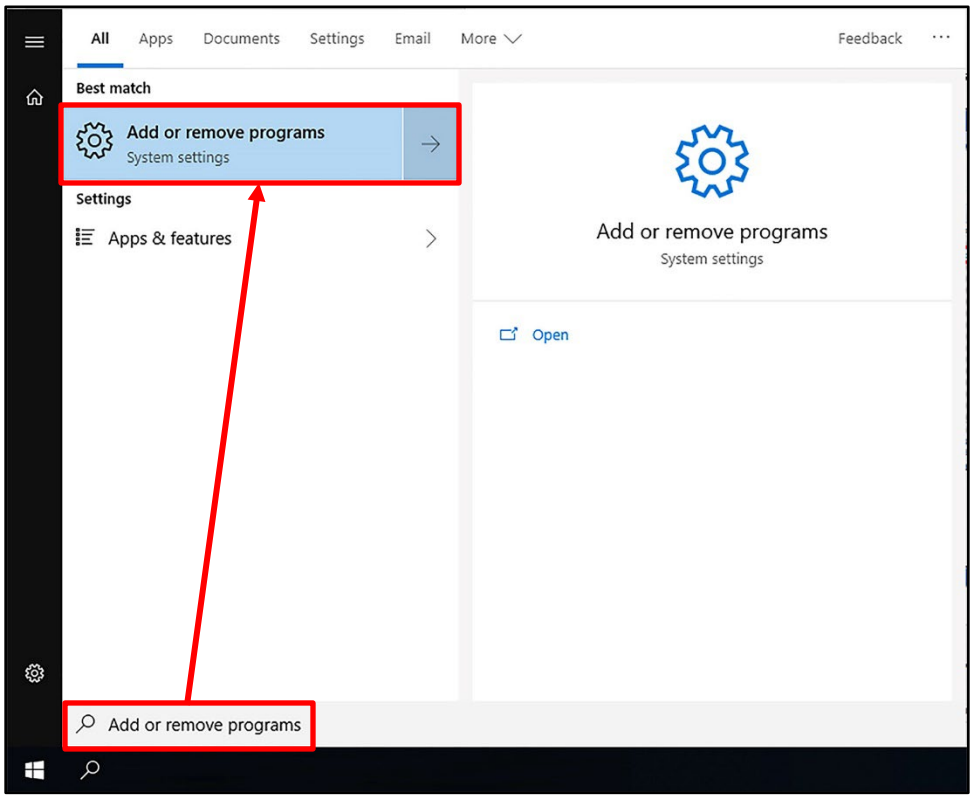


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Appendix 1 – Web Deploy 3.5+ Additional Configuration

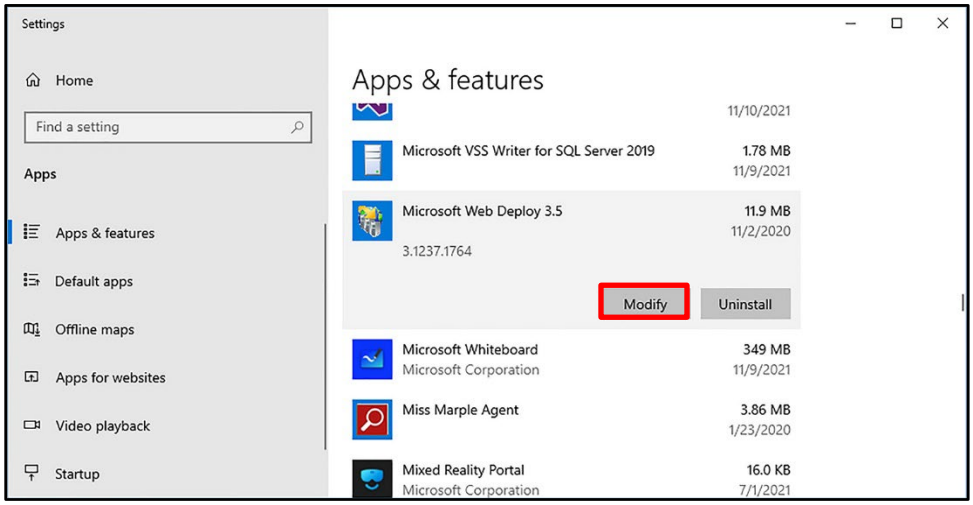
If you installed Web Deploy 3.5 or higher, you need to follow these additional steps at least before you do the steps in the **GateKeeper Installation** section on page 21. This section uses Web Deploy 3.5 for instructions and illustrative purposes.

1. Click **Start** and begin typing **Add or remove programs**.
2. Click **Add or remove programs** when it appears.

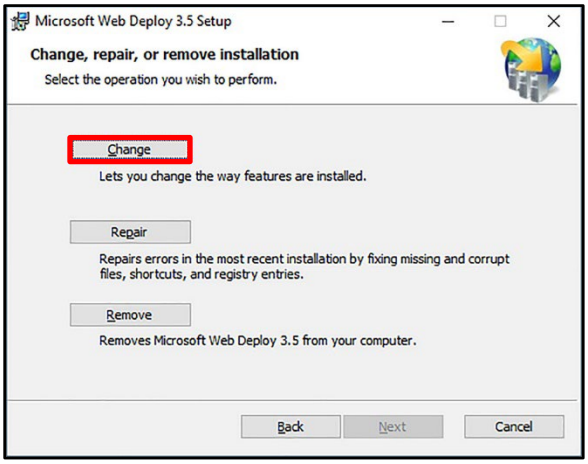


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

3. Click **Microsoft Web Deploy 3.5** in the list and click **Modify**.

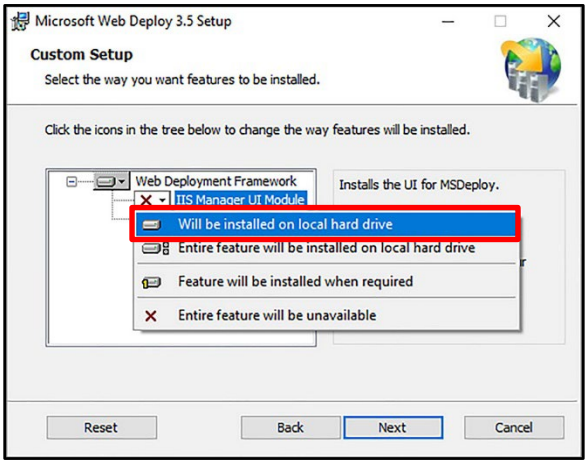


4. Click **Next**.
5. Click **Change**.

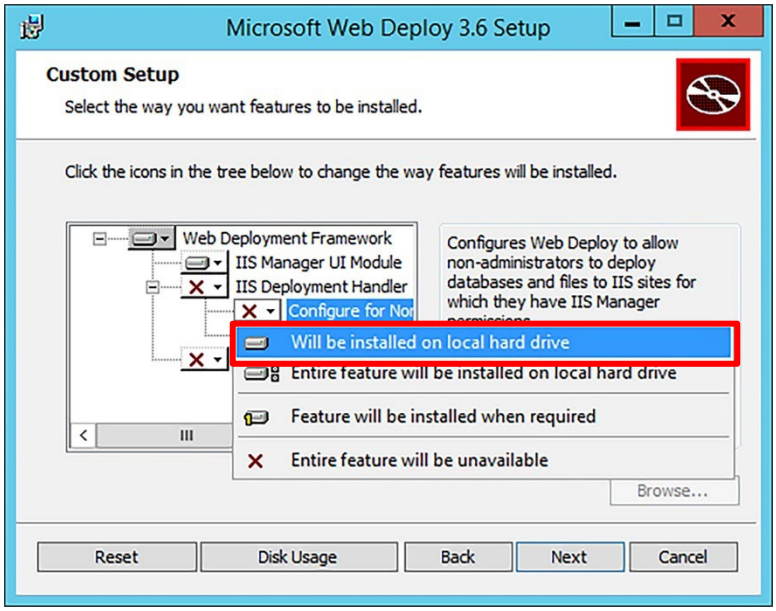


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

6. Change *IIS Manager UI Module* to **Will be installed on local hard drive** and click **Next**.



7. Click **Change**.
8. Click the arrow for **Configure for Non-Administrator Deployments** and select **Will be installed on local hard drive**.

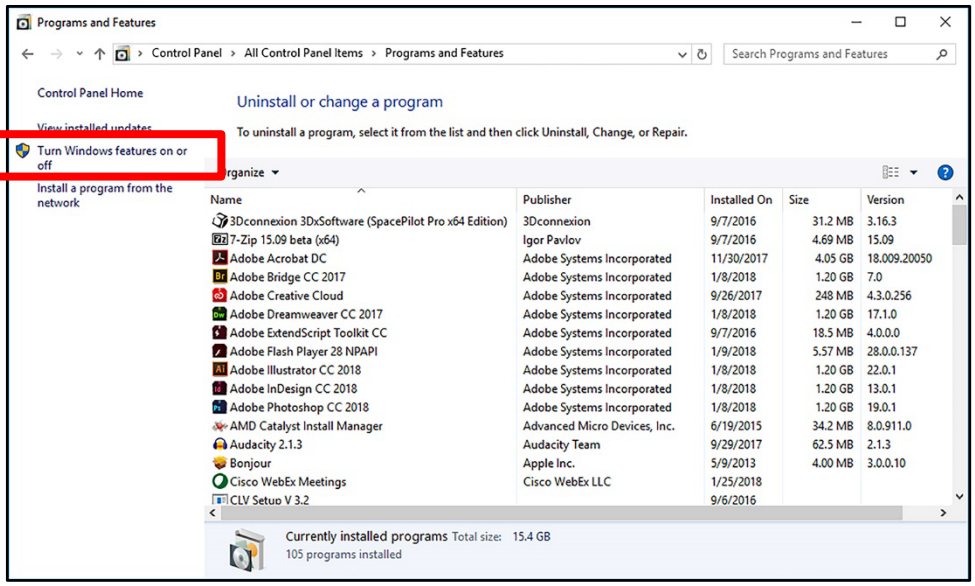


9. Click **Next**.
10. Click **Install** or **Change**.
11. Click **Finish** when the process is complete.

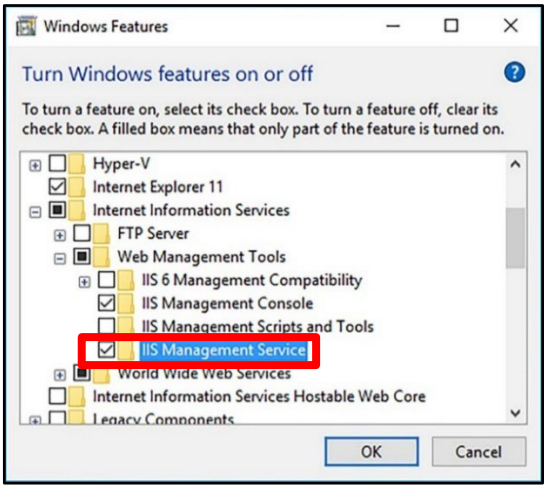
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Enabling IIS Management Services

1. Right-click the **Start** button and select **Control Panel**.
2. Click **Programs and Features**.
3. Click **Turn Windows Features on or off**.



4. Expand **Internet Information Services**, expand **Web Management Tools**, and check the **IIS Management Service** box.



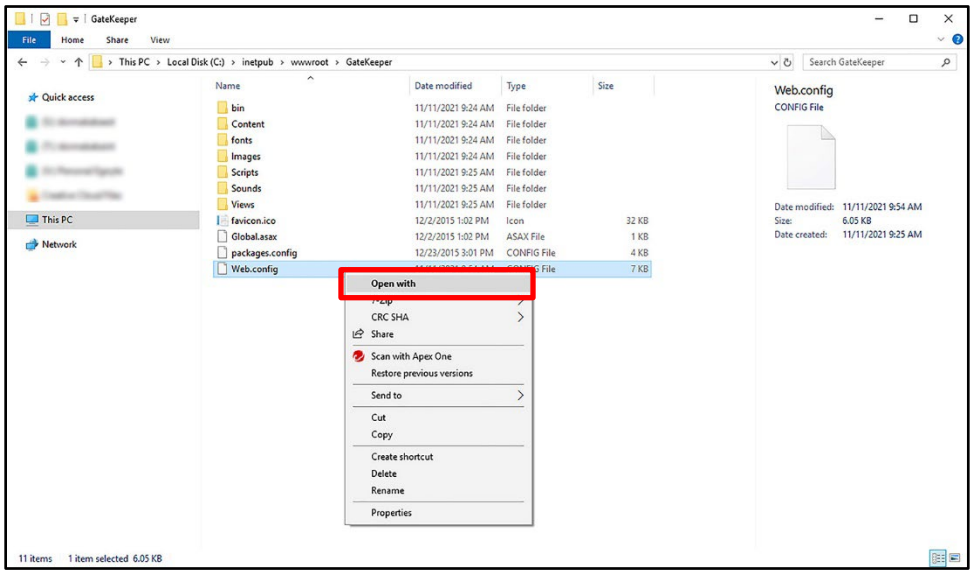
5. Click **OK.**
6. Click **Close** when Windows finishes installing the service.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Appendix 2 – Linking to LaneConfig

Follow the instructions below to link your LaneConfig application to GateKeeper.

1. Open **Windows Explorer** and go to the **C:\inetpub\wwwroot\GateKeeper** folder.
2. Right click the **Web.config** file and click **Open With**.



3. Select **Notepad**.

NOTE	You can edit the *Web.config* file with any application capable of editing XML files.

4. Find the following text string in the file. Change “XXX” in the text string to the **URL** for your LaneConfig server. For example, “192.168.0.101\LANECONFIG”. Include the quotation marks.

```
<add key="LaneConfigURL" value="XXX" />
```

NOTE	The value you enter into this field cannot include the term “localhost”.

5. **Save** the file and close it.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Appendix 3 – ARGUS Gate Setup

Follow the steps in this section if you are using GateKeeper with dormakaba ARGUS gates. Follow these steps after you install GateKeeper.

Required Software

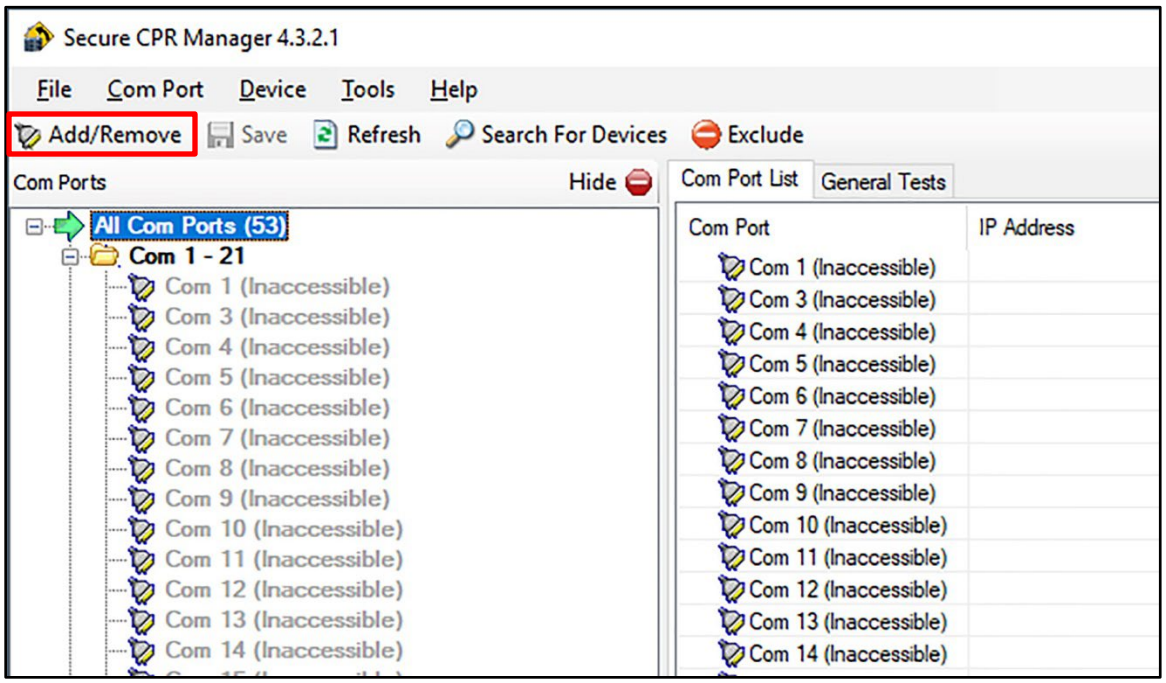
Download and extract the installer for the **Lantronix SCPR** software onto your computer prior to starting the installation process. The latest version of this software can be found on the developer's website:

https://ltrxdev.atlassian.net/wiki/spaces/LTRXTS/pages/106856722/Latest+version+of+the+Secure+Com+Port+Redirector

Com Port Setup

IMPORTANT	You must have **Administrator** privileges on your computer to complete the installation.

1. Run the **SCPR_x64CD_4.3.2.1.msi** installer. Follow the instructions to install the *Lantronix SCPR* using default settings.
2. Run the **Secure CPR Manager** application.
3. Click **Add/Remove**.

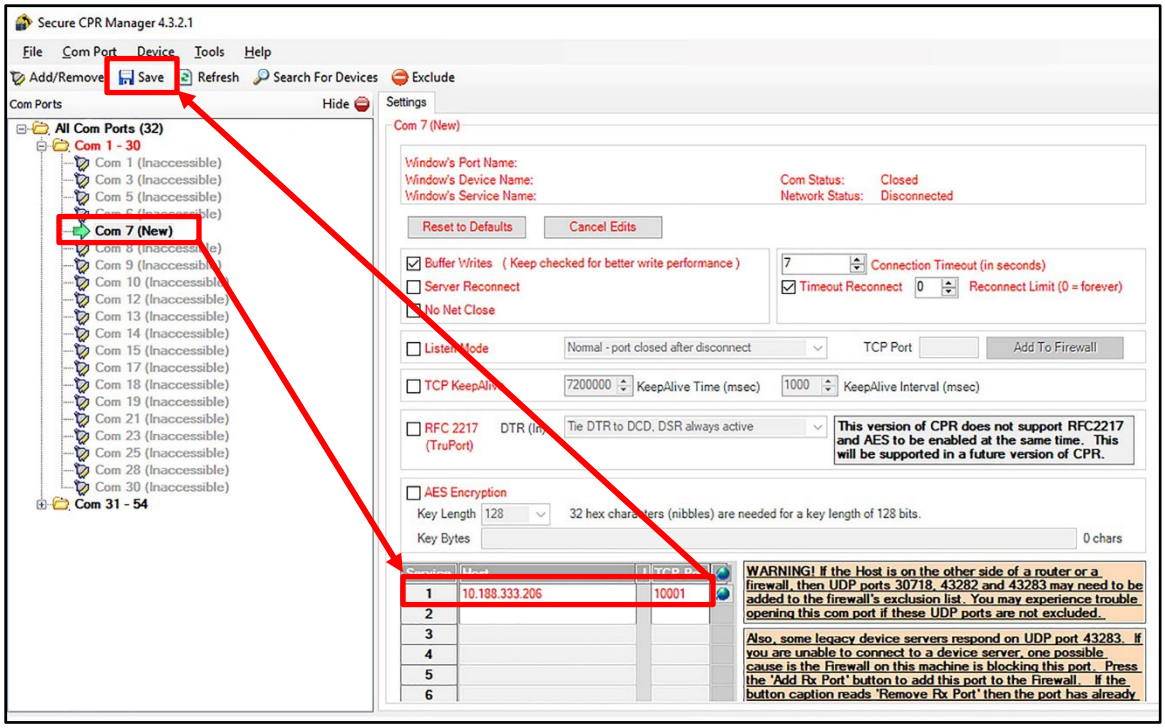


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

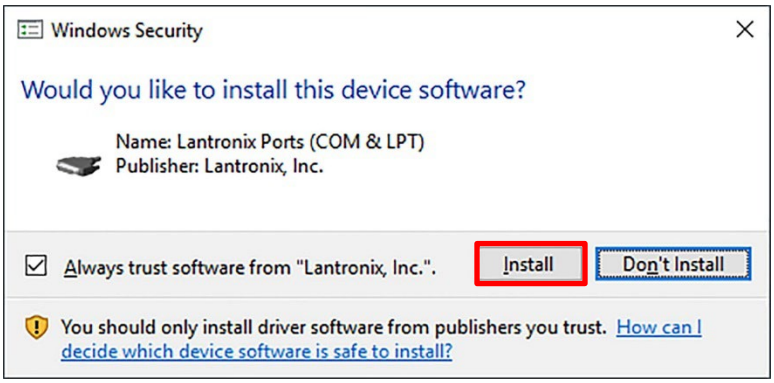
4. Check an available Com port and click **OK**. Com ports that are grayed out are already used and cannot be selected.

NOTE	Do not use Com ports 1-4.

5. Click the Com port you just selected in the *All Com Ports* pane on the left.
6. Type the IP address of the dormakaba RS232 LAN module installed in the ARGUS gate into the *Host* field.
7. Type **10001** into the *TCP Port* field.
8. Click **Save**.

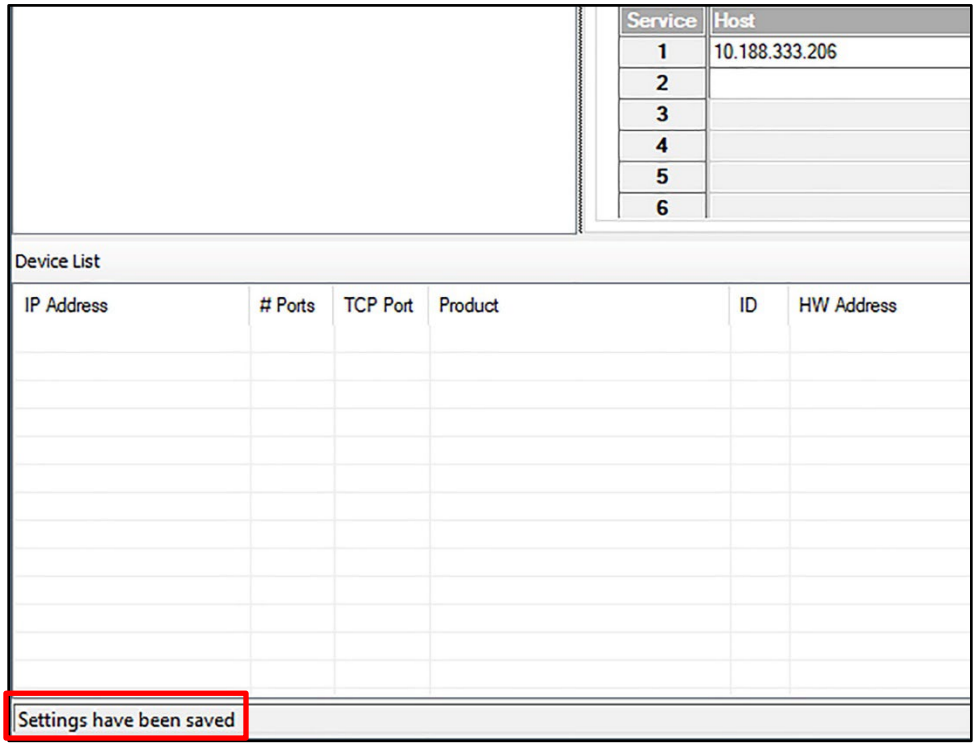


9. Click **Yes** when prompted to save settings.
10. Click **Install**.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

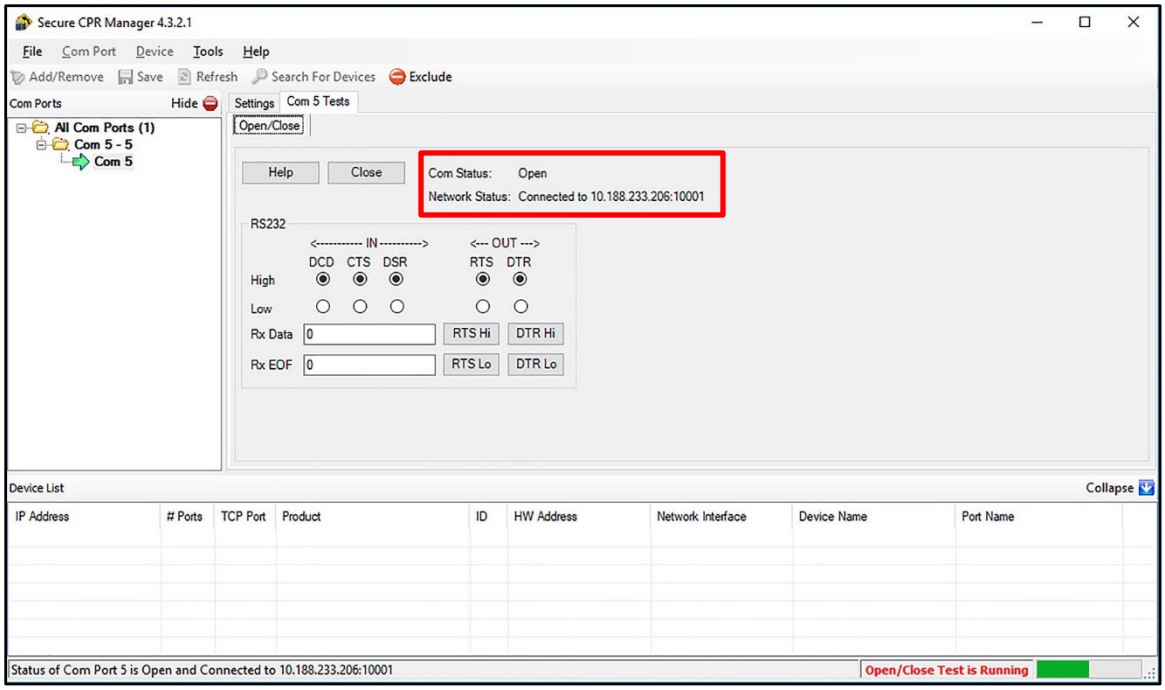
11. Wait for the process to complete, shown in the lower-left corner of the window.



NOTE	To test the connection, the ARGUS gate must be powered on and connected to your network.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

12. Click the **Com # Tests** tab.
13. Click **Open** and verify the Com port connects successfully.



14. Click **Close**.

NOTE	Com ports support only one connection at a time. If you do not close the connection after testing it, GateKeeper will not be able to connect to the ARGUS gate.

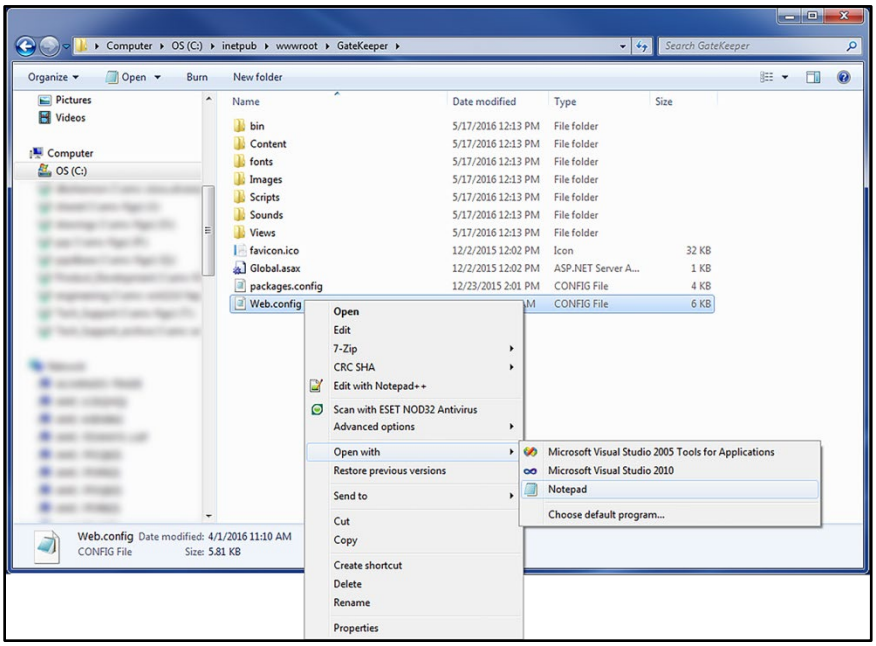
15. Repeat steps 3-13 for each ARGUS gate you want to set up.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

GateKeeper Setup

NOTE	This section assumes you have already installed GateKeeper using the default locations shown in the installation instructions above.

1. Open **Windows Explorer** and go to the **C:\inetpub\wwwroot\GateKeeper** folder.
2. Right click the **Web.config** file, select **Open With**, and click **Notepad**.



NOTE	You can edit the *Web.config* file with any application capable of editing XML files.

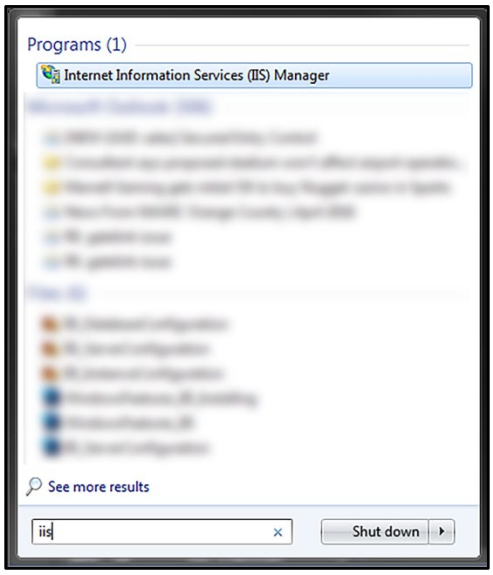
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

3. Find the line that starts with **<add key="CPRFolderPath" value=**. Enter the path to your computer's *Documents\Lantronix\SCPR* folder.
4. Save the *Web.config* file and close it.

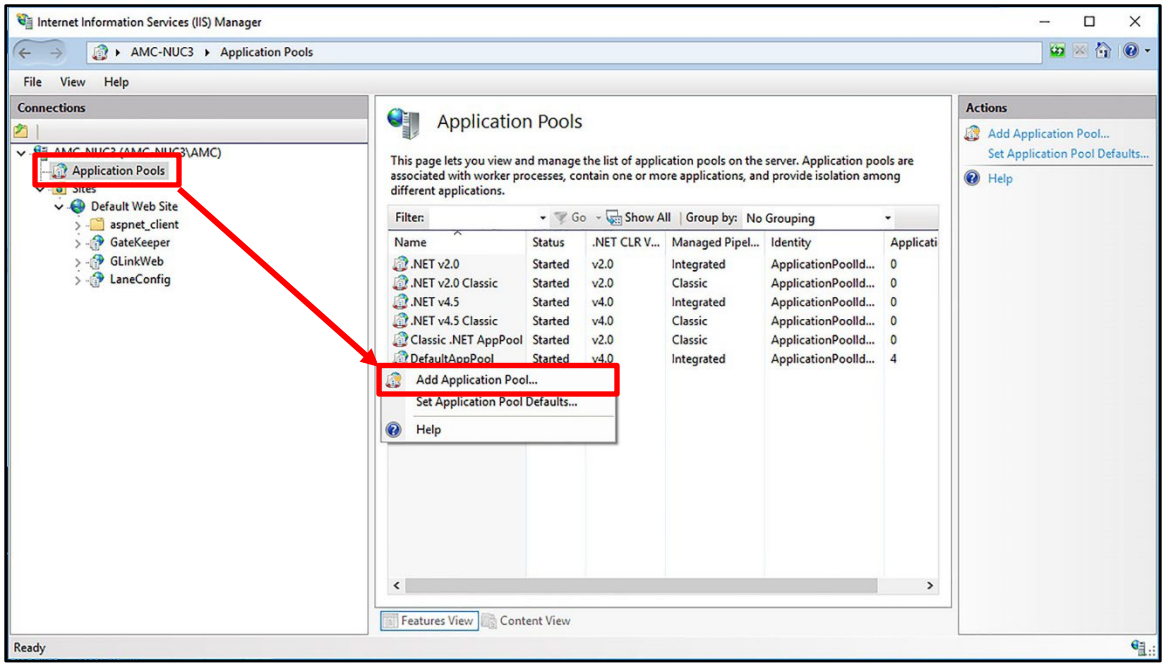
Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Configure IIS

1. Click **Start** and type **IIS** into the search bar.
2. Click **Internet Information Services (IIS) Manager**.

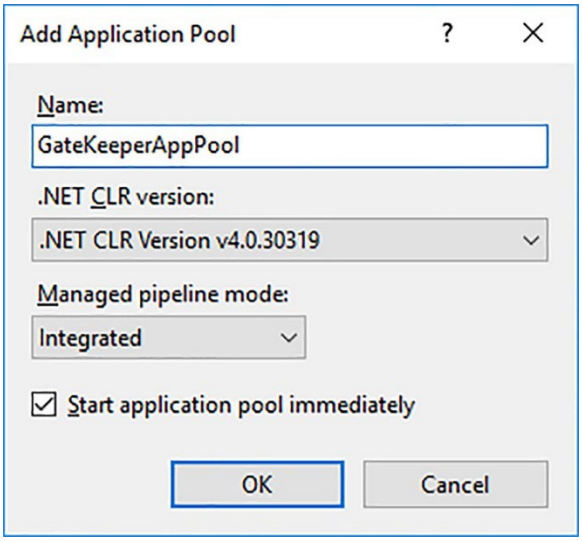


3. Double-click the host computer's name to expand the list and select **Application Pools**.
4. Right-click within the center pane and select **Add Application Pool…**.

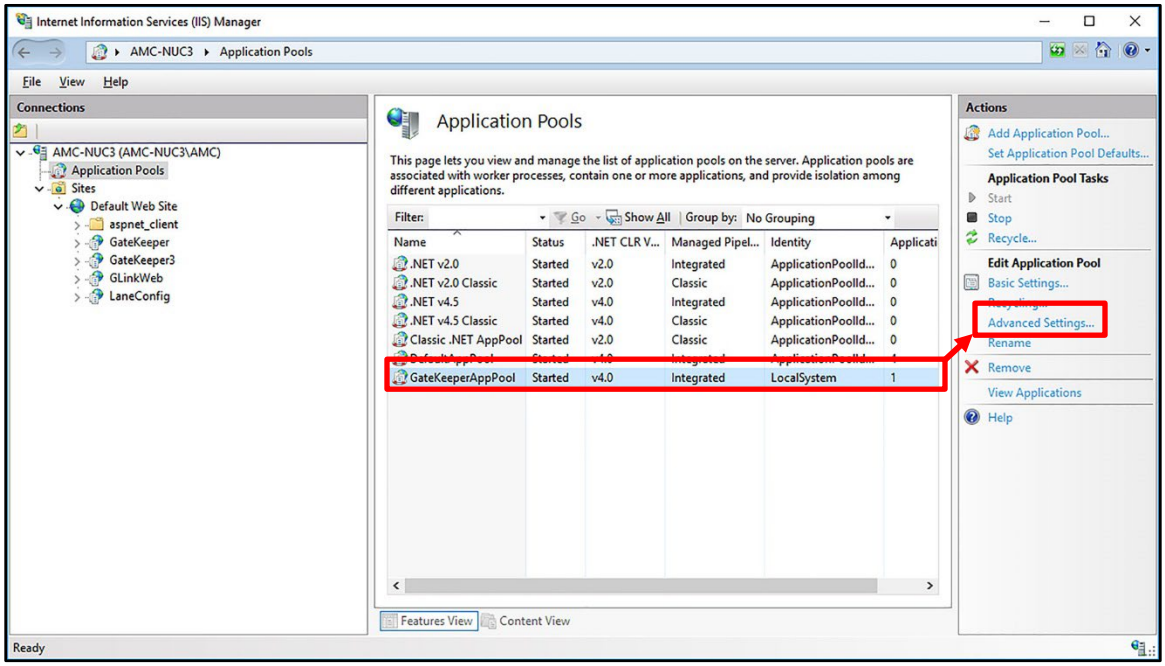


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

5. Enter **GateKeeperAppPool** for the name and click **OK**.

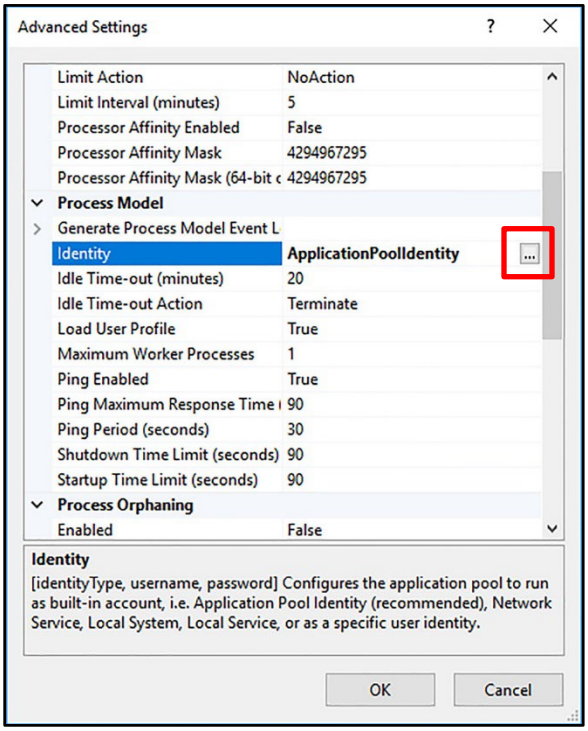


6. Click the App Pool you added and click **Advanced Settings…** in the right pane.

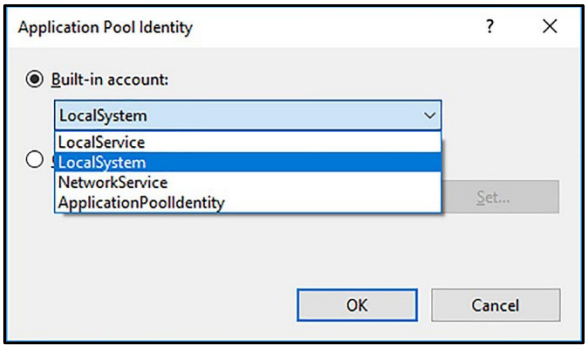


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

7. Click the **[…]** button for *Identity*.

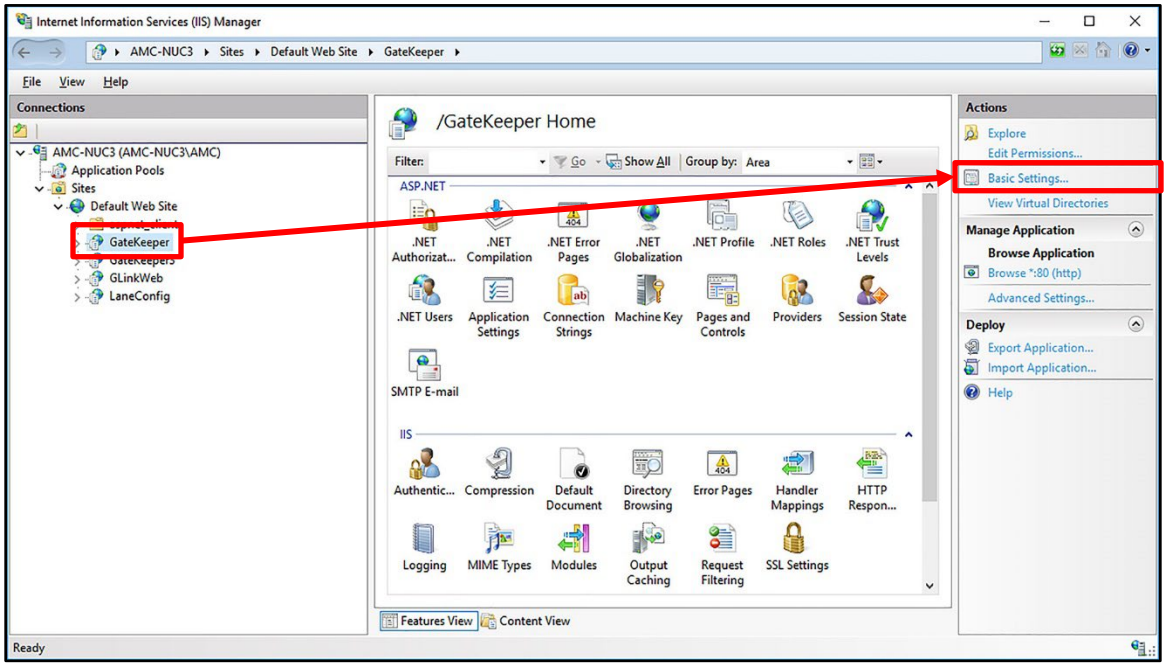


8. Select **Local System** from the *Built-in account* dropdown list and click **OK** until you return to the IIS screen.

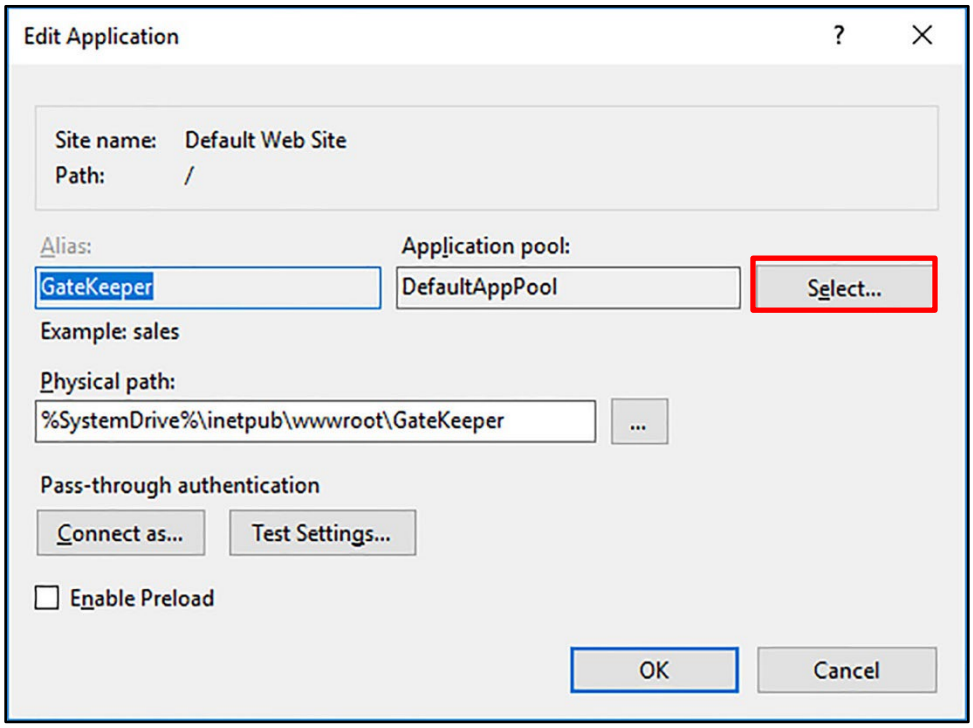


Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

9. Click **GateKeeper** in the left pane to select it and click **Basic Settings…** in the right pane.

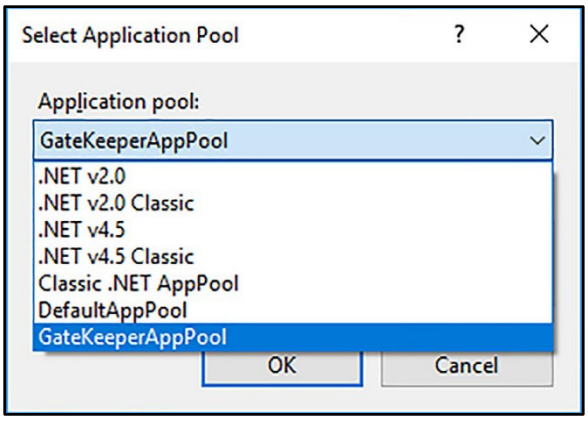


10. Click **Select**.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

11. Select **GateKeeperAppPool** from the *Application pool* dropdown list and click **OK** until you return to the IIS screen.



Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

Revision History

Revision	Creation Date	Author	Revision History/Description
1.0	7/12/2016	D Bohannon	Original Document
1.1	11/16/2016	D Bohannon	Updated Appendix 2.
2.0	11/2/2021	D Bohannon	Added Appendix 3.
3.0	11/11/2021	D Bohannon	Updated with steps for SQL 2019 and Windows 10.
4.0	4/17/2023		Updated document to corporate branding standards.
4.1	10/18/2024	C Maynez	Updated Appendix 1.

Copyright © 2021 Alvarado Mfg. Co., Inc.
All rights reserved.

© 2021 Alvarado Manufacturing Company, Inc.
This work may not be reproduced, published, or redistributed, in whole or in part, without the express prior written permission of Alvarado.