

IQSweb
Installation Instructions
Version 7.1.2

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Additional References

The following documents, which can be downloaded separately, provide additional support for the installation, upgrade and backup processes used for IQSweb.

IQSweb Reference A – System Security Requirements

This document describes the system requirements the three basic scenarios in which IQSweb can be configured. Security is discussed for each scenario.

IQSweb Reference B – SQL Server Install Instructions (2017 and Express)

This document contains instructions for installing SQL Server 2017 and SQL Server 2017 Express.

IQSweb Reference C – IQSweb Uninstall Instructions

This document details the steps to un-install any version of IQSweb.

IQSweb Reference D – IQSweb Database Backup/Restore Instructions

If your IT department does not have scheduled periodic backups for your IQSweb database, this document contains instructions to manually create a backup of your IQSweb database. It is recommended that you talk to your IT department to understand what backup procedures are in place before manually backing up your database.

IQSweb Reference G – Microsoft Workstation Firewall Settings

This document addresses the Microsoft Windows Workstation Firewall settings related to IIS, when using Desktop Operating Systems for IQSweb servers for Windows 7 and later.

IQSweb Reference H – IQSweb Migration Steps

This document details the steps in migrating an existing IQSweb installation to a new server.

IQSweb Reference I – IQSweb-IRWIN Integration Connection

This document details the steps in requesting IRWIN credentials, configuring IQSweb to use the credentials, and describes the changes IQSweb makes to IIS and the computer to run batch processing for IRWIN.

Note: If you find errors or other problems during installation, please email or call your IQSweb representative.

IQSweb IRWIN Connection

The IQSweb V7.1 installer will create a local certificate to encrypt and decrypt your IRWIN credentials. The installer will also modify the IIS application pool IQSweb utilizes to automatically start when the computer boots up and to always be running in the background. This enables IQSweb to run batch processing jobs overnight to synchronize the IQS data with the IRWIN integration

service. This will ensure that resources and their capabilities in your IQS system will be up to date in IROC.

To see more details about the IRWIN integration and to see instructions on requesting the IRWIN credentials and configuring IQSweb to use the credentials, please see the Reference I – IQSweb IRWIN Connection document on <http://www.vdatasys.com>.

IQSweb V7.1 Install/Upgrade Scenarios

Determine the install or upgrade scenario that applies to you in the Upgrade Path below. Then, follow the guidance in the Special Instructions column before continuing.

Upgrade Path	Special Instructions
1. Installing IQSweb for the first time	Follow the installation instructions.
2. Upgrading from Legacy IQS V5 or V6	After following the installation instructions, contact your IQSweb representative for advice on transferring persons between systems. NOTE: It is recommended that you upgrade to IQS V6 prior to installing IQSweb.
3. Upgrading from IQSweb V3.1.2 or lower	Uninstall IQSweb. Be sure to validate the database server and login information for your existing IQSweb database when prompted for the location of the database (lines 3, 4, 5 and 6 in the Installation Check List). Your IQSweb database will be automatically upgraded during the installation.
4. Upgrading from IQSweb V4.0.0 or later	Run the installer. The installer will import the configuration settings, upgrade the database and application.
5. Re-installing IQSweb	<ul style="list-style-type: none">• Use my existing IQSweb database<ul style="list-style-type: none">○ Create a backup of the IQSweb database.○ Uninstall IQSweb.○ Follow the installation instructions as if installing IQSweb for the first time.• Start with a new IQSweb database<ul style="list-style-type: none">○ Follow the instructions for upgrade scenario #1.• Use my Legacy IQS V5/6 database<ul style="list-style-type: none">○ Follow the instructions for upgrade scenario #2.• Use my IQSweb database<ul style="list-style-type: none">○ Follow the instruction for upgrade scenarios #3 or #4.
6. Moving IQSweb to a new server	Create a backup of the IQSweb database on the existing server using Reference F for instruction. Restore the IQSweb database on the new server, creating a new user account for the IQSweb database. Follow the installation instructions as if installing IQSweb for the first time with the exception of Step 3 which can be omitted due to the database already existing.

IQSweb Configuration Options

From the configurations listed below, determine the IQSweb installation configuration that applies to your organization.

A. Single Computer/Server (e.g., laptop, non-networked PC, single networked server)

This computer will need to meet all of the installation prerequisites (See Installation Prerequisites). This is the simplest option where the Database and Web Application are installed on one machine. Run the installer on this one machine.

Single Computer

Prerequisites

- Microsoft .NET 4.5.2 Framework or higher
- IIS
- Windows Installer 3.1 or higher
- Crystal Reports Runtime
- SQL Server 2012 or higher/SQL Server 2012 Express or higher

Database

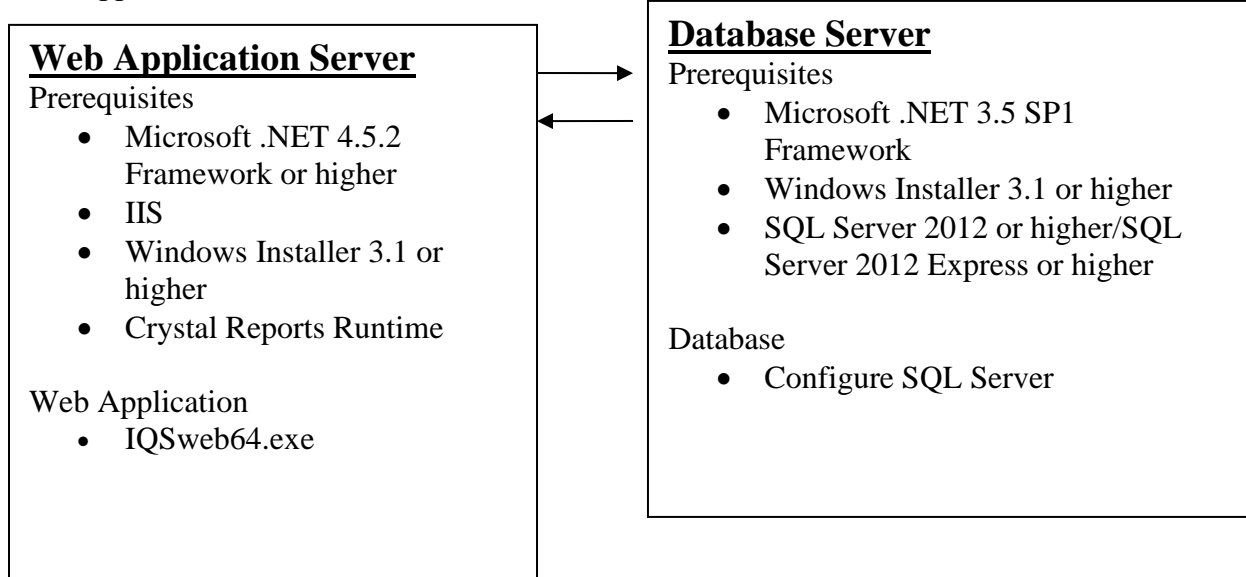
- Configure SQL Server

Web Application

- IQSweb64.exe

B. Two computers (Web Application and Database Servers)

The web application server will need to have the Microsoft .NET 4.5.2 Framework installed. The database server will need to have Microsoft .NET 4.0 Framework or later installed along with SQL Server 2012 or higher (or SQL Server 2012 Express or higher). The Web server will need to have IIS and the Crystal Reports Runtime (distributed specifically for IQSweb) installed. Run IQSweb.exe on the Web Application Server.



Installation Prerequisites

The following software is required on the appropriate PC or server (based on your configuration identified in the previous section) before installing the IQSweb software. You will need administrator rights to the server or PC where IQSweb will be installed. **Involve your IT staff if you need assistance.**

If installed, these prerequisites appear in the Add/Remove Programs dialog in the Control Panel with the exception of the Windows Operating System.

NOTE: IQSweb is a 64-bit application. **IQSweb will only work with a 64-bit version of Crystal Reports.**

Microsoft .NET Framework 4.5.2

NOTE: Higher versions of .NET Framework (e.g. 4.6 or 4.7) will also work with IQSweb.

- If installed, appears as 'Microsoft .NET Framework 4.5.2'
- If not installed, download and install from <http://www.microsoft.com/en-us/download/details.aspx?id=42642>. If not already installed, this will also install Microsoft .NET Framework 4.0.
- **Important NOTES:**
 - This install may require a reboot of the PC or Server!
 - If you are using Windows 2012 or Windows 2012 R2, please download and run the 4.5.2 installer. These versions of Windows include .NET 4.5.1, but 4.5.2 is needed in addition to run IQSweb.

Crystal Reports 2013 Runtime

- If installed, appears as 'SAP Crystal Reports Runtime Engine for .NET Framework.' The version number will be 13.0.13.1597 Crystal Reports Basic for Visual Studio 2008.'
- If not installed:
 - Download and install the file **CRforVS_redist_install_64bit_13_0_13.zip** from <http://www.vdatasys.com/>
- Right-click on My Computer, click on Properties, and look at the version listed under System to find your Windows OS version.

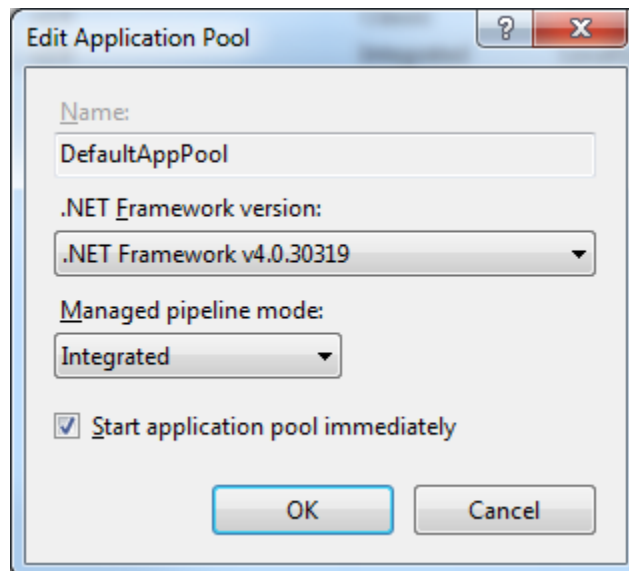
Internet Information Services (IIS)

Windows 7, 8, 10: Go to Control Panel->Programs>Programs and Features ->Turn Windows Features On or Off.

- If IIS is installed, there will be a grayed out checkbox by 'Internet Information Services (IIS)' in the dialog that appears.
- Install by going to Add or Remove Programs in the Control Panel and selecting Add/Remove Windows Components. Select the Internet Information Services (IIS) checkbox in the dialog

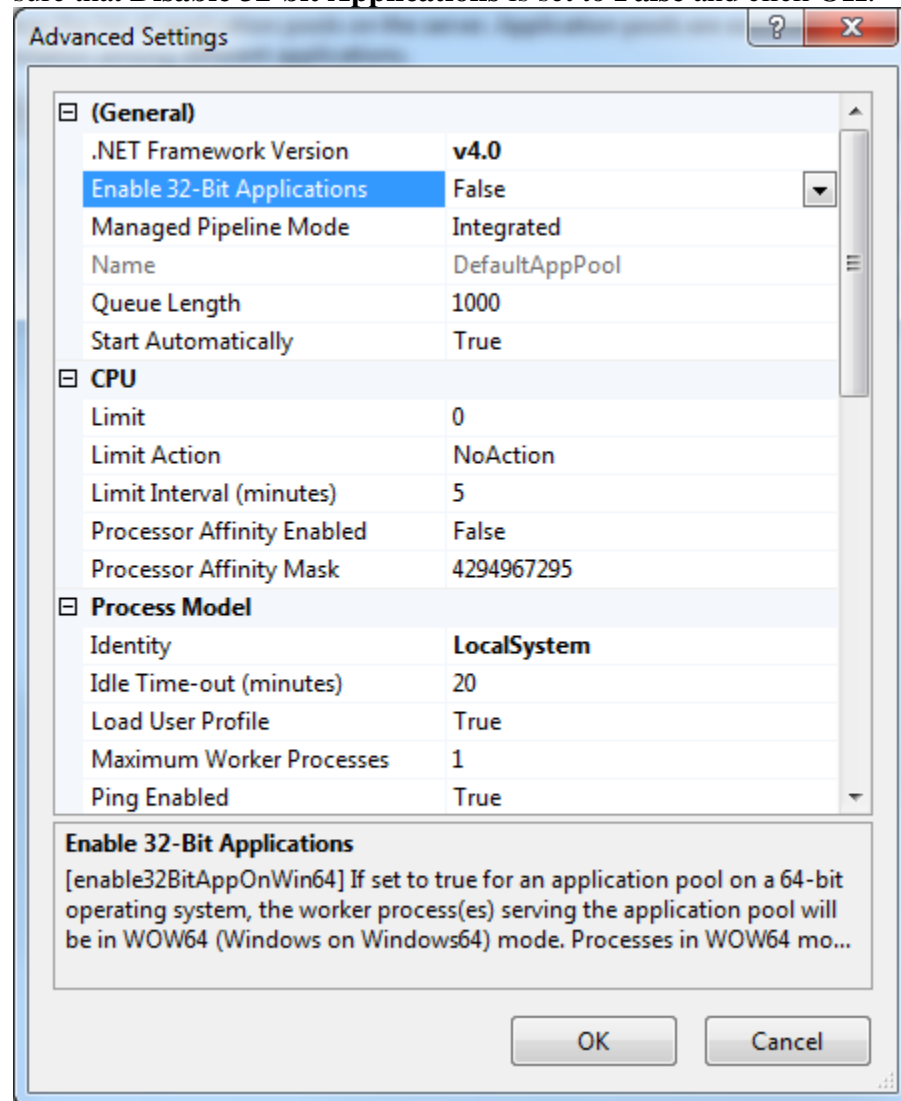
that appears, click Next, and follow the prompts. **Note: You may need your Windows installation cd.**

- After the installation is complete
 - Check to make sure that any firewalls that might be running on the PC or Server are configured to allow http traffic on TCP port 80.
 - Apply any security updates to IIS.
 - Please test that IIS is running by starting your browser and going to `http://<computer name>`.
- Ensure that the desired application pool has the correct settings for IQSweb. The .NET Framework version must be set to v4.0 and 32-bit applications must be disabled for a 64-bit computer.
 - Open Internet Information Services (IIS) Manager.
 - Go to the Application Pools section.
 - Make sure that the desired application pool has a .NET Framework version of v4.0.30319. This can be changed by selecting the application and clicking on **Basic Settings** in the Actions pane.



- To disable 32-bit applications (only applicable for 64-bit computers), select the desired application pool and click on **Advanced Settings** in the Actions Pane. Make

sure that **Disable 32-bit Applications** is set to **False** and click **OK**.



IQSweb V7.1.2 IIS Configuration

The IQSweb V7.1.2 installer will automatically configure Internet Information Services (IIS) to have the IQSwebPool application pool's Start Mode to be AlwaysRunning and to have Auto Start enabled. The installer will also configure the IQSweb web application to have ServiceAutoStart enabled and create a ServiceAutoStartProvider for the application to utilize.

These configuration changes are required to allow IQSweb to be running at all times and perform overnight batch processing updates needed to keep IRWIN up-to-date with the latest information from IQSweb and to import experience records. If the IQSweb system is offline when the batch processing jobs are scheduled to run, the jobs will begin once the system is back online.

If IQSweb V7.1.2 is being deployed to a production server via a file copy (e.g. running an installer on a QA or development machine and copying the files and manually configuring IIS to run the application), IIS will need to be manually configured to allow the batch processing in IQSweb. Please contact your IQS regional representative to get a PowerShell script and instructions on performing the configuration.

SQL Server 2012 or higher (or SQL Server Express 2012 or higher)

If installing SQL Server, please install the latest version, SQL Server 2019.

If installed, appears as Microsoft SQL Server 201x'

- If not installed, go to IQSweb Reference B for Instructions.

Installation Check List

Please use the following check list to capture information used throughout the installation of IQSweb.

Fill in the Item Name for lines 1 – 2.

If you are upgrading from IQSweb V3.1.2 or earlier, fill in the Item Name for lines 3 – 7 and any others that will be the same.

Proceed with the installation. The remaining items will be captured during the following installation steps. You may want to print this page now for easier reference during the installation.

NOTE: For lines 1 and 2, you will need to get the name of the appropriate computer based on your install configuration. If you are installing on a single machine, the names recorded for lines 1 and 2 will be the same name.

Line No.	Install Item	Item Name
1	IQSweb Server Computer Name (Right click on My Computer, choose Properties, Computer Name tab. Copy Full Computer Name.)	
2	Database Server Name (Launch SQL Server Management Studio (e.g., Start/Programs/Microsoft SQL Server X/Microsoft SQL Server Management Studio <Express>.) Copy the Server Name)	
3	Database Name	
4	Database Server Login Name	
5	Database Server Login Password	
6	IQS Application Virtual Directory	

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7	IQSweb Address	
8	Integration Certificate Passphrase (this information will be entered by the IQS Manager in IQSweb after they login to V7 and connect to IRWIN)	

Installation Instructions

IMPORTANT NOTE:

- If an error occurs during installation of the web application, a log file called **IQSWebSetup.log** is written to the desktop of the PC from where the installation is running.

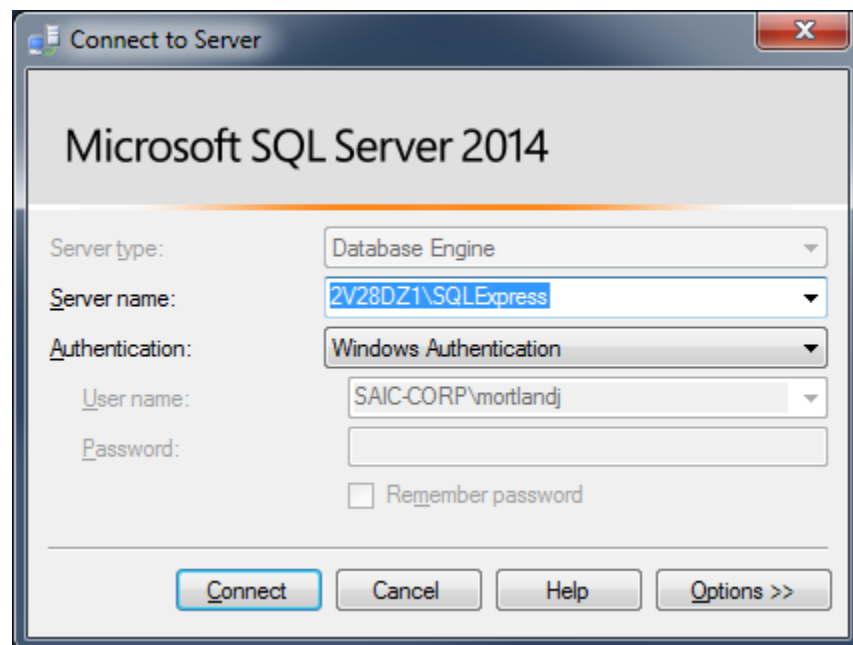
Step 1: Download the IQSweb Installation Files

There is one setup file for IQSweb. This file comes in a 64-bit version.

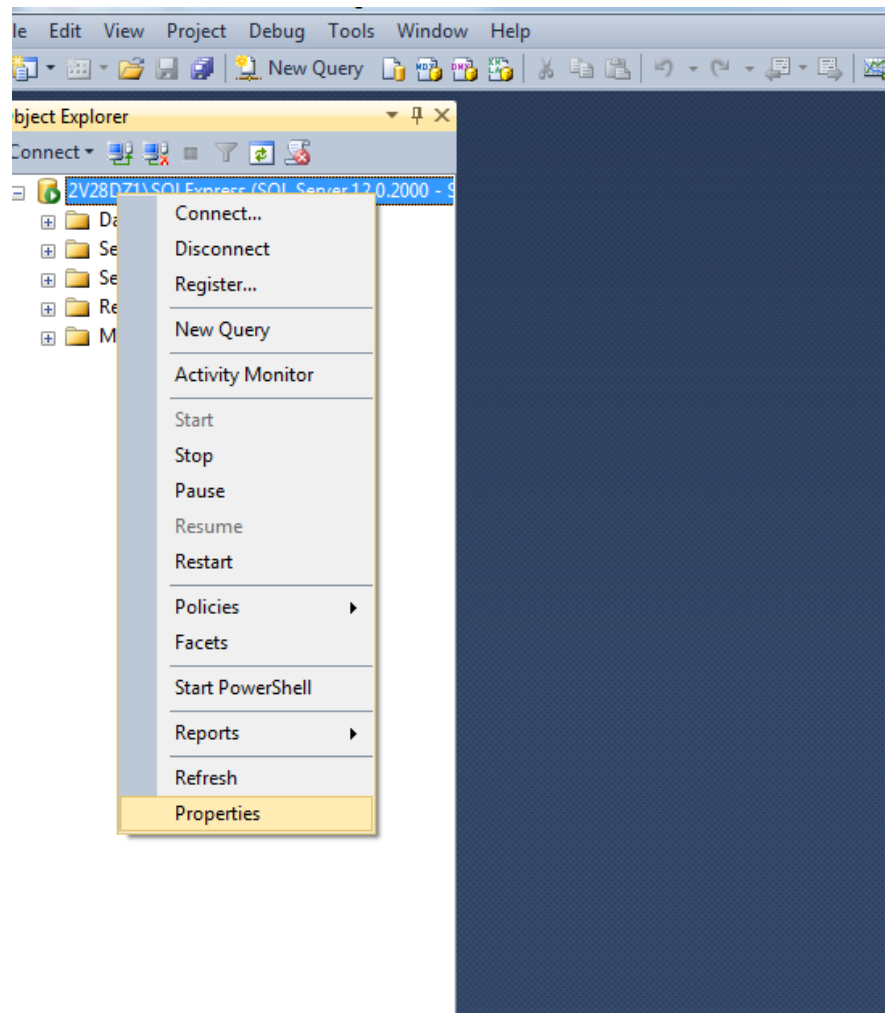
Download the IQSweb setup file from **IQSweb64.exe** from <http://www.vdatasys.com> in the Software/Downloads section.

Step 2: Make Sure SQL Server Accepts Remote Connections

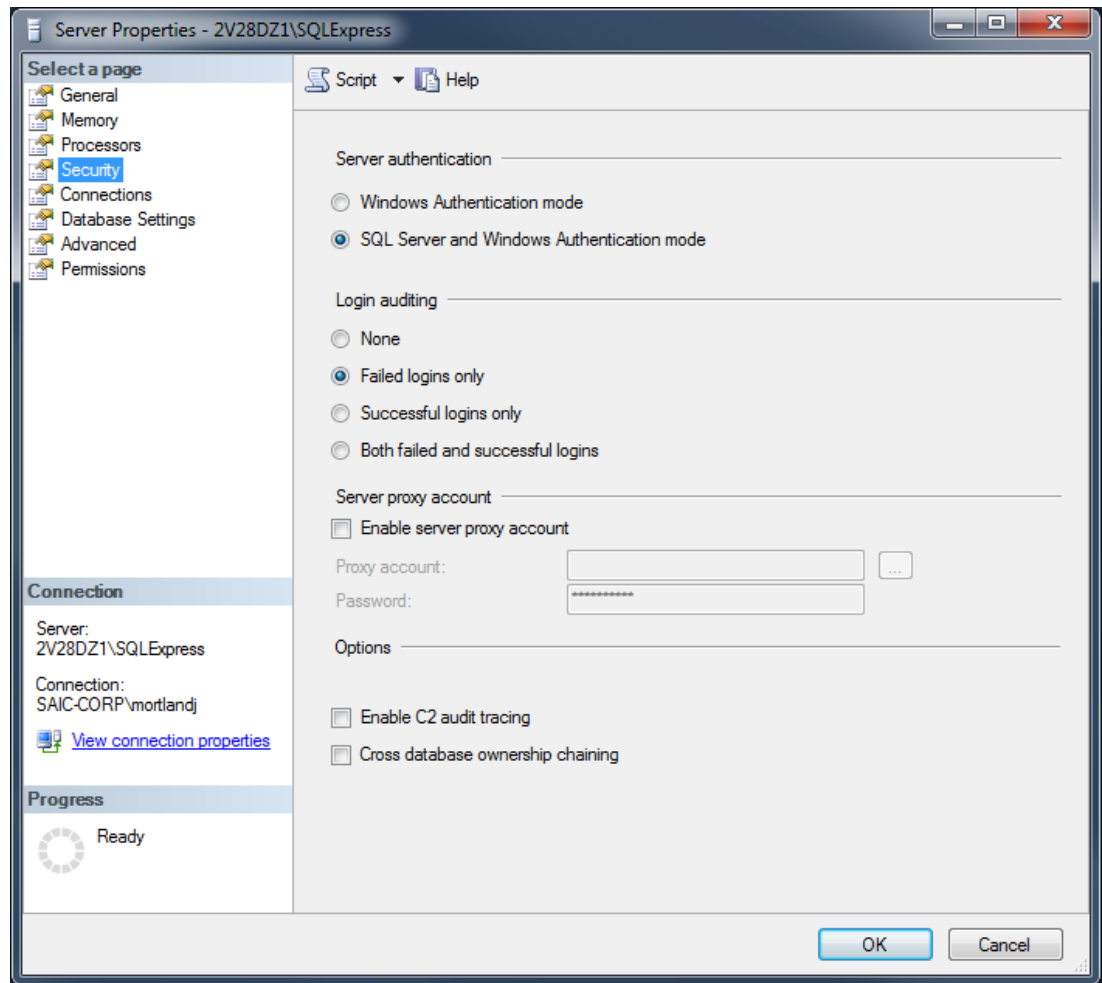
1. If not already done, make sure that the installation of SQL Server accepts remote connections.
 - a. Start SQL Server Management Studio, e.g., go to Start/Programs/Microsoft SQL Server Tools X/Microsoft SQL Server Management Studio <Express>. Select or enter the connection information (Express users can generally accept the default values). Click **Connect** on the Connect to Server screen.



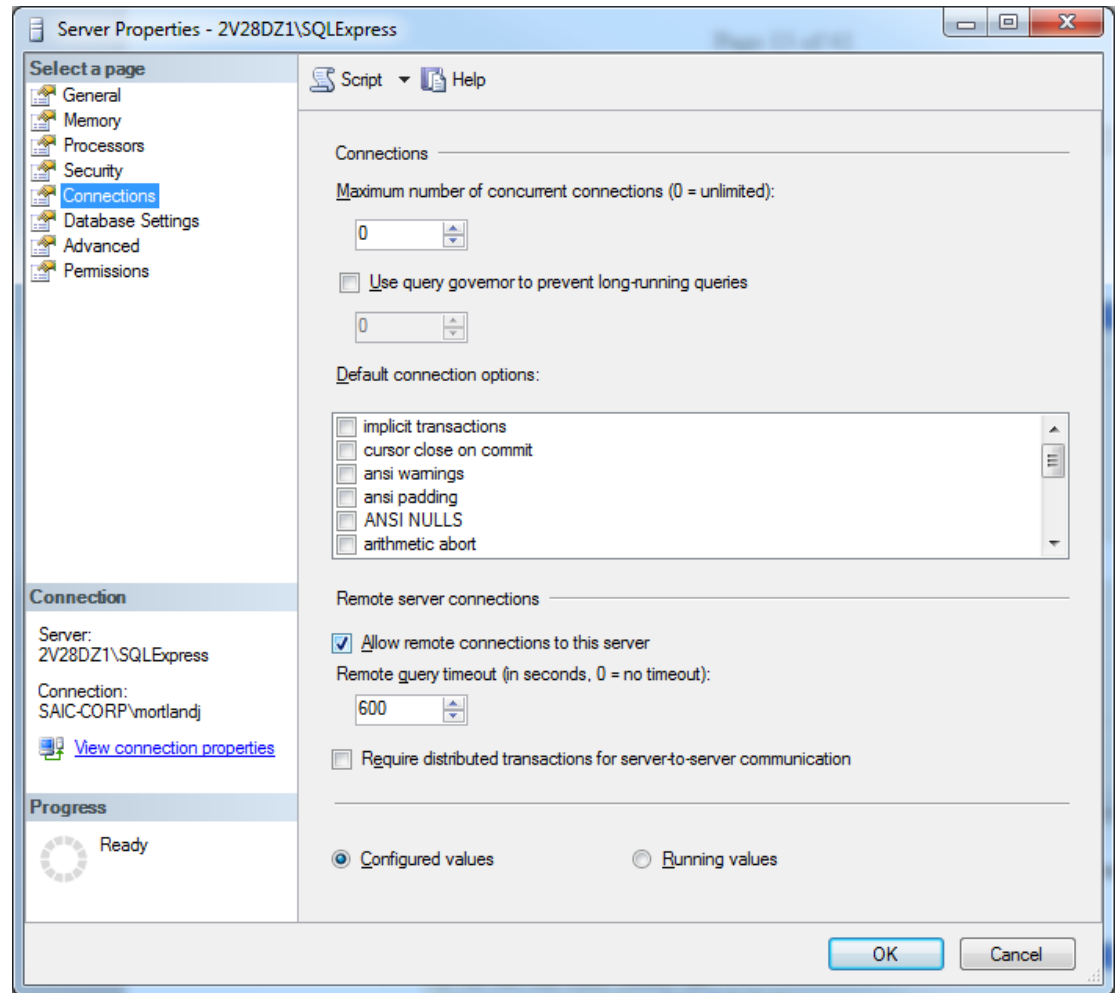
- b. In the Object Explorer (left panel), right-click on the database server and select **Properties**.



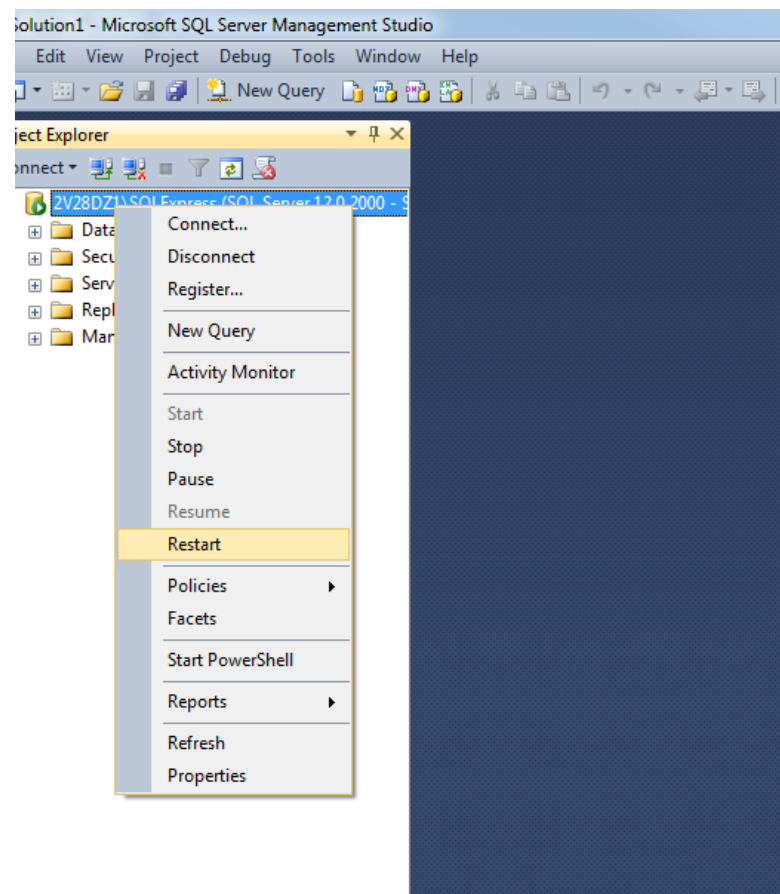
- c. In the Server Properties window, select the Security page (left panel). Make sure that **SQL Server and Windows Authentication mode** under Server Authentication is selected.



- d. In the Server Properties window, select the Connections page (left panel). Make sure the checkbox for “**Allow Remote Connections to this server**” is checked. Click **OK**.

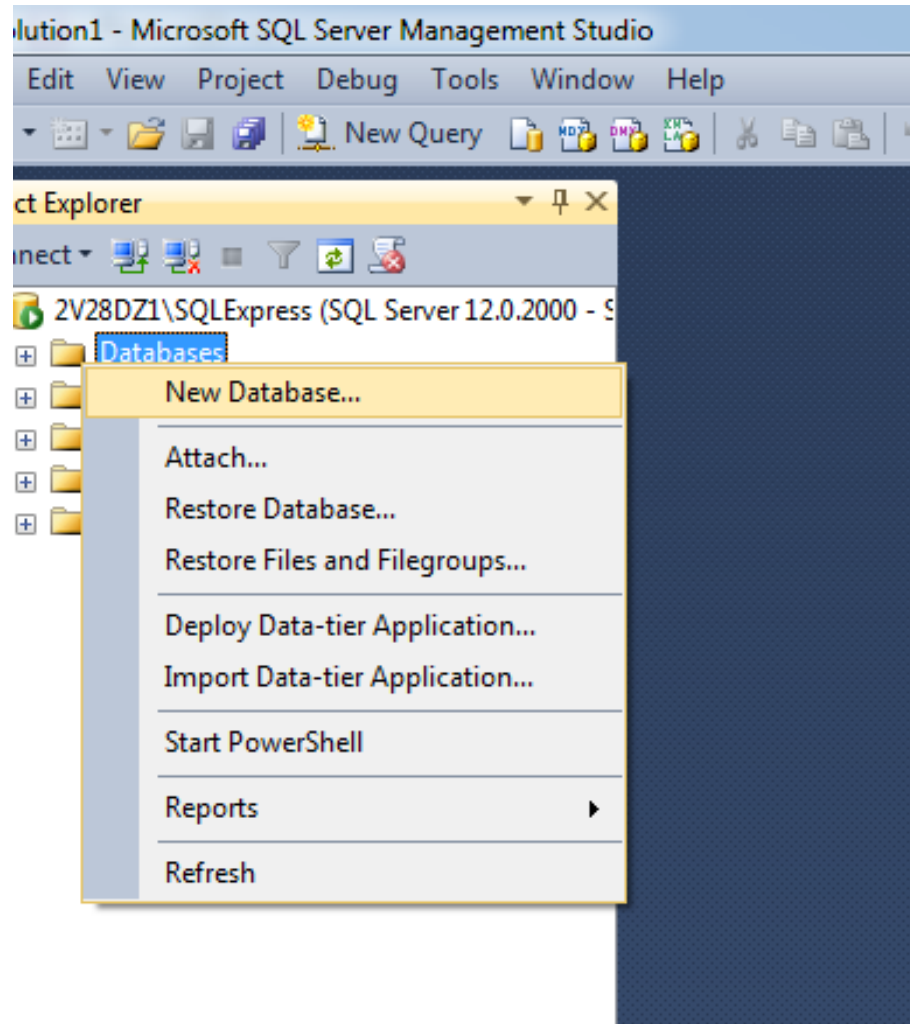


- e. In the Object Explorer (left-panel), right-click on the Database Server, and then click on **Restart**.



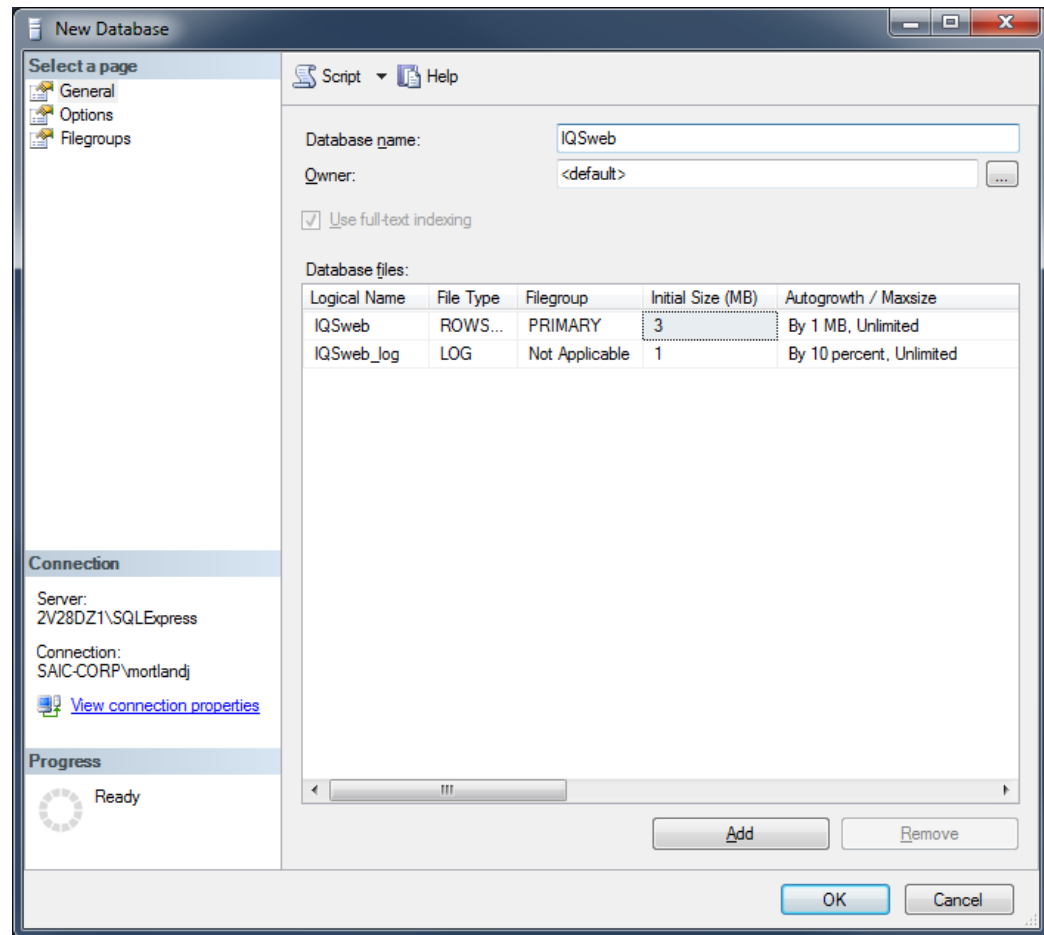
Step 3: Create an Empty IQS Database and User Account in SQL Server

1. Create an empty IQS database and IQS user account in SQL Server.
NOTE: Please do not use the character sequence \$*#~ for the database server, database name, database username, or database password.
 - a. In the Object Explorer (left panel), right-click on the Databases object and select **“New Database”**.

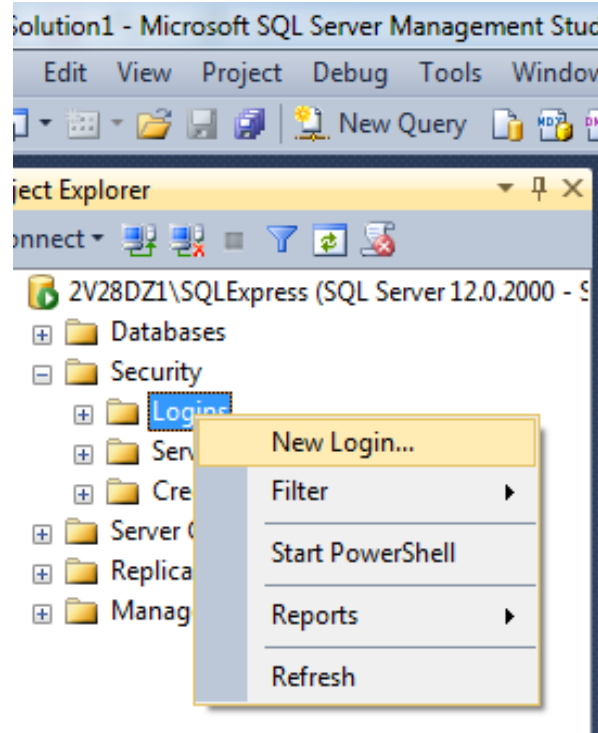


- b. In the New Database window, enter the name you want for the IQSweb database into the **Database Name** field, e.g., IQSweb. No spaces or underscores are allowed in the database name.

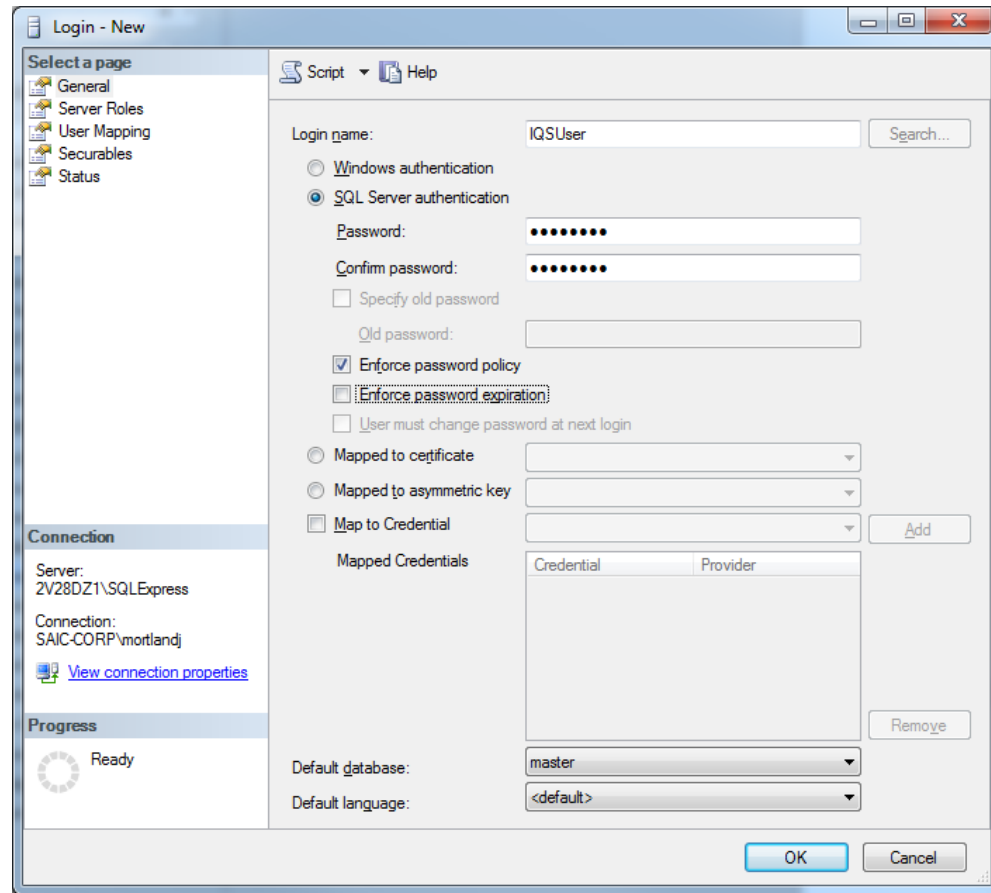
*Document the **DATABASE NAME** in line 3 on the Check List for use later.*



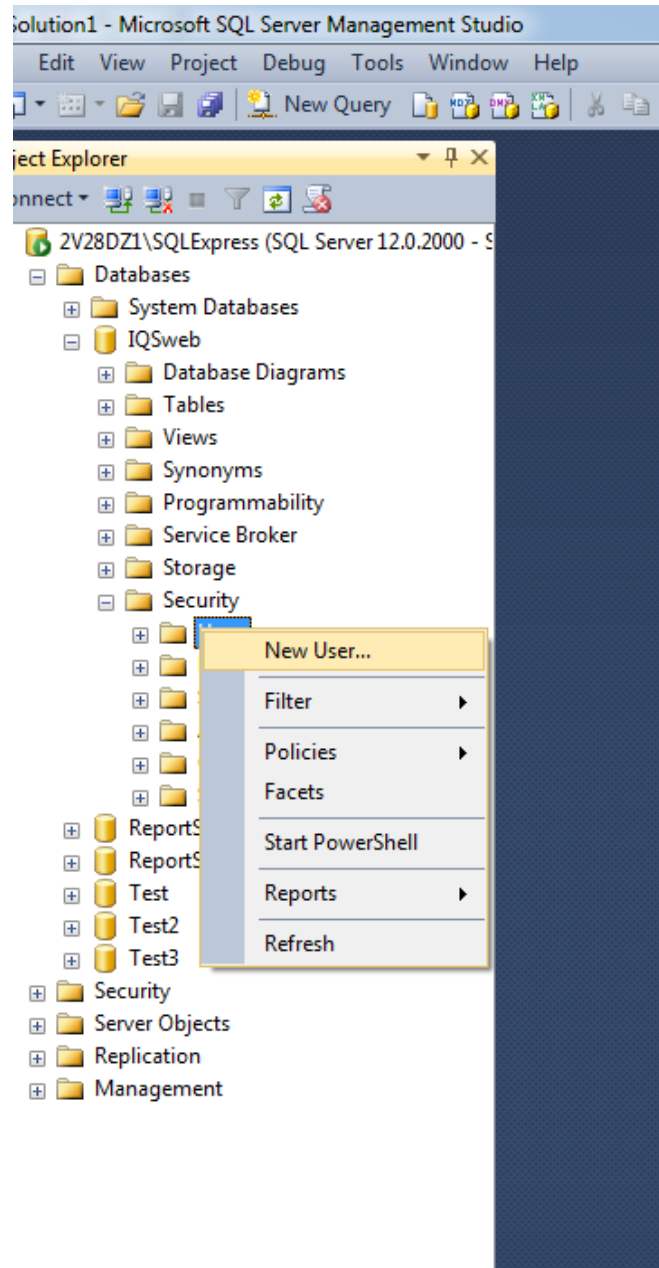
- c. Click **OK**.
NOTE: If you happened to click Add before clicking OK you might get an error. Remove any blank lines showing in the Database Files section before clicking OK. Do this by highlighting the line and clicking **Remove**.
- d. In the Object Explorer (left panel), expand the Security object and right-click on Logins. Select **"New Login"**.



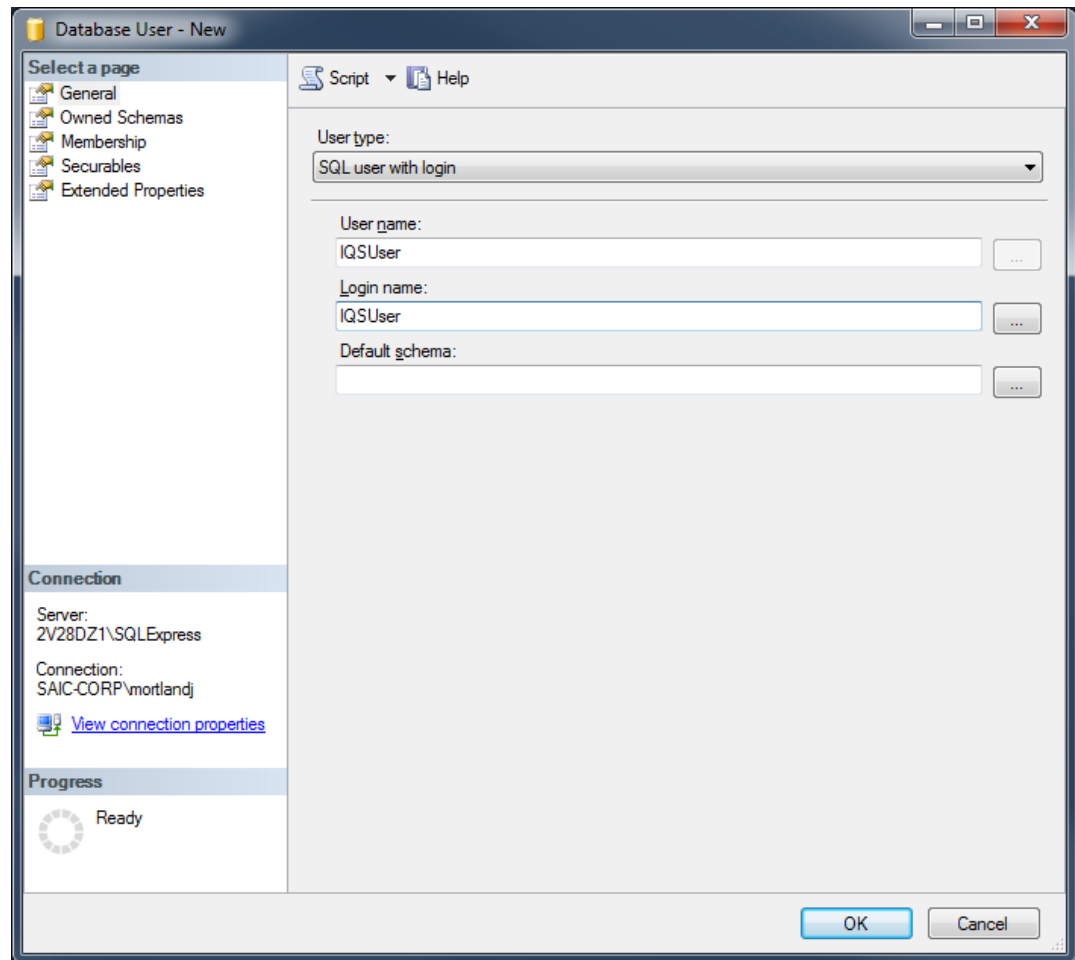
- e. On the Login - New screen, enter the **Login Name**, e.g., **IQSuser**. **Select the SQL Server Authentication** radio button. Enter a **Password** and confirm the password. Continue to the next steps **BEFORE** clicking OK.



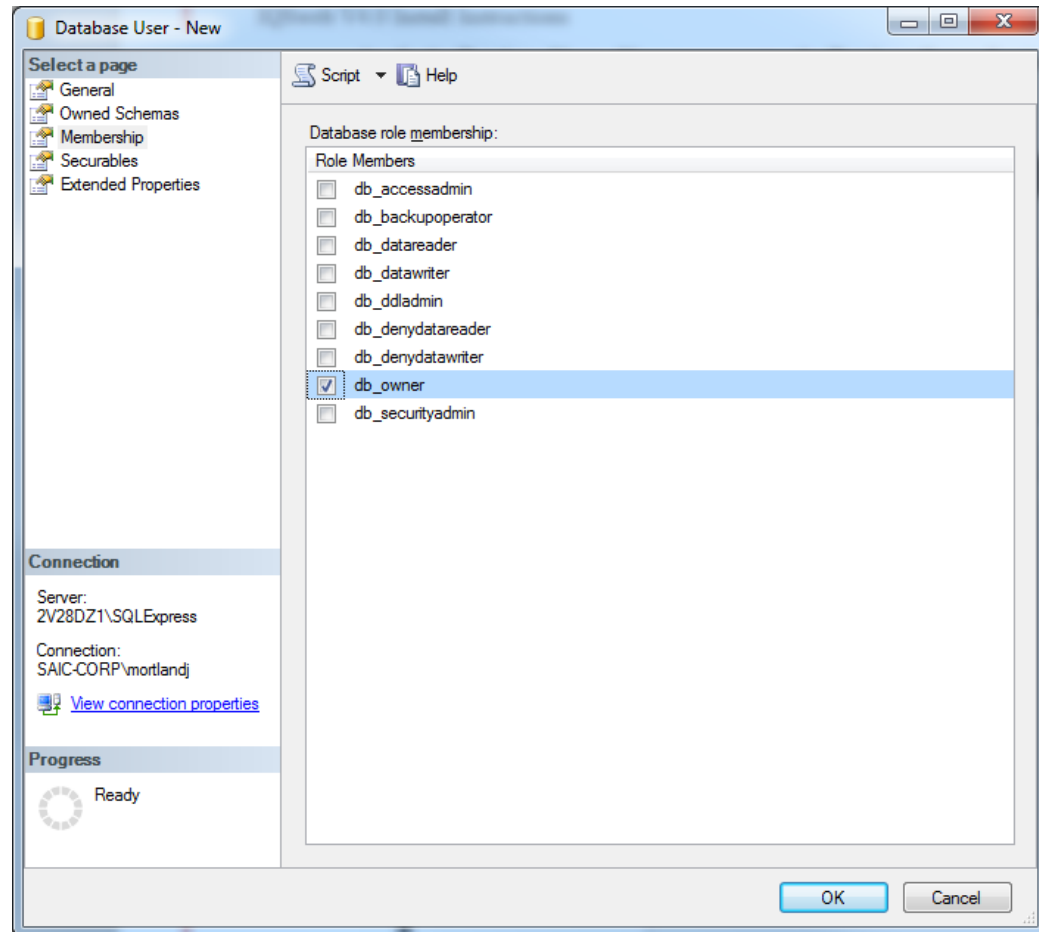
- f. Document the value you enter for Login Name in Line 4 of the Check list, **DATABASE SERVER LOGIN NAME**
- g. Document the value you entered for password in Line 5 of the Check list, **DATABASE SERVER LOGIN PASSWORD**
- h. Uncheck the **User must change password at next login** and **Enforce password expiration** checkboxes. You can optionally uncheck the **Enable password policy** checkbox, depending on your organization's security policies.
- i. Click **OK**.
- j. Go into the Object Explorer, expand the Databases object and find the new database you created. Expand the new database object and then expand the database's Security object. Under the Security object, right-click on **Users** and select "**New User**".



- k. In the Database User – New screen, enter the Database Server Login Name from line 4 of the Check List in the **User Name** and **Login name** fields.



- l. Click on the “**Membership**” page on the left. **NOTE:** Certain versions of SQL Server Management Studio will show the **Membership** section in the **General** page.
- m. In the “Database role membership” section at the bottom, check the “**db_owner**” checkbox. You may need to scroll down to see this role.



- n. Click **OK**.
- o. Exit SQL Server Management Studio by selecting File and then Exit from the top menu.

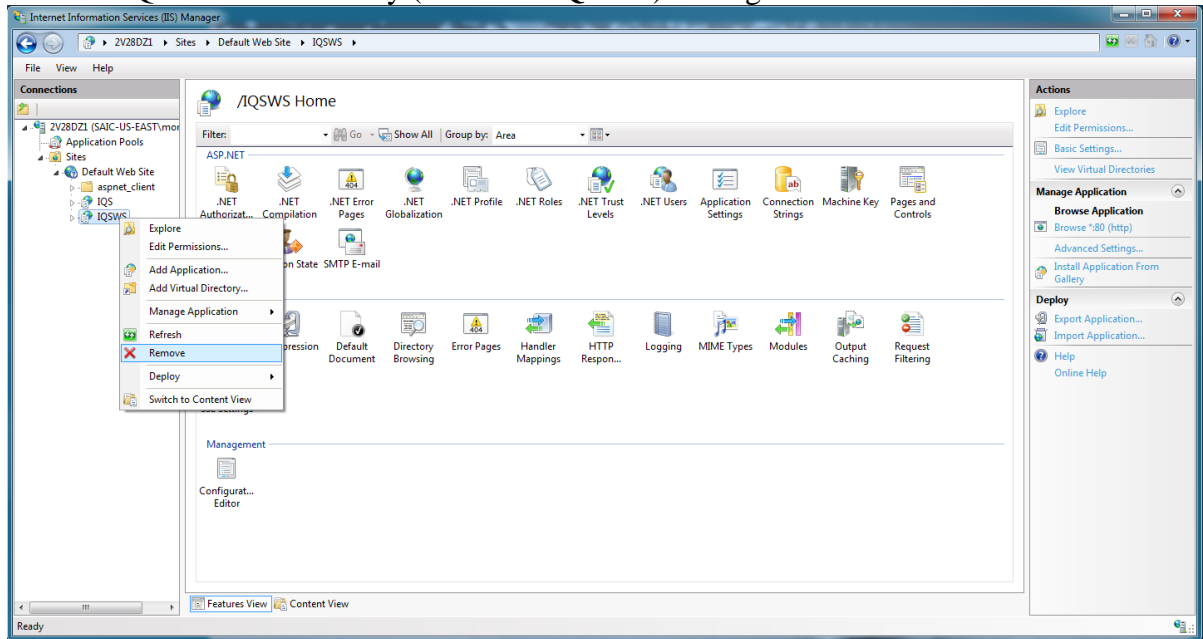
Step 4: Uninstall the IQSweb Web Service and Application (if upgrading from IQSweb v3.1.2 or earlier)

1. Go to Control Panel and select **Programs and Features**.
2. If you are upgrading from a version of IQSweb, uninstall the applications titled IQSweb Vx and IQSweb Service Vx.
3. Go to Control Panel and select **Administrative Tools**, then open **Internet Information Services (IIS) Manager**

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4. In the **Connections** pane on the left, expand the computer, **Sites**, and **Default Web Site**.
5. Find the IQSweb Service entry (default is **IQSWS**) and right-click on it. Select **Remove**.



6. Find the IQSweb Application entry (default is **IQS**) and right-click on it. Select **Remove**.
7. If uninstalling IQSweb V3.1.x or earlier: Open **Windows Explorer** and navigate to the IIS **wwwroot** directory (default is C:\inetpub\wwwroot.).
8. Delete the **IQS** and **IQSWS** folders.

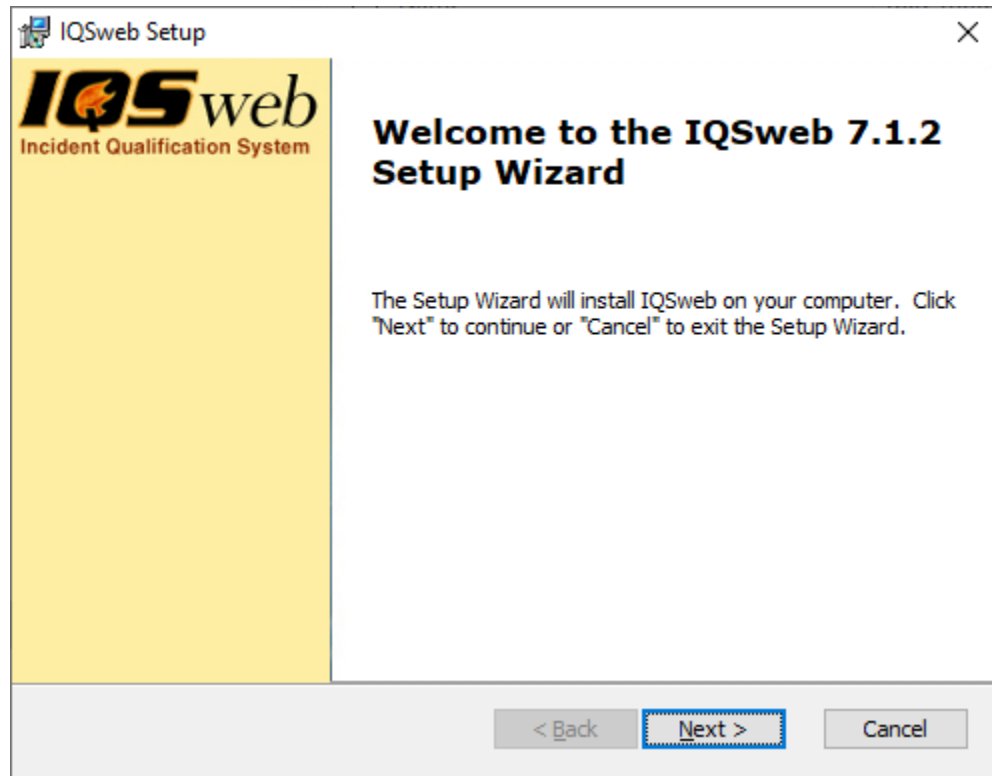
Step 5: Install the IQSweb Application

1. Depending on your configuration (see Configuration Options) start the file **IQSweb64.exe** on the appropriate computer.
 - a. Double-click the IQSweb64.exe file to begin the installation.

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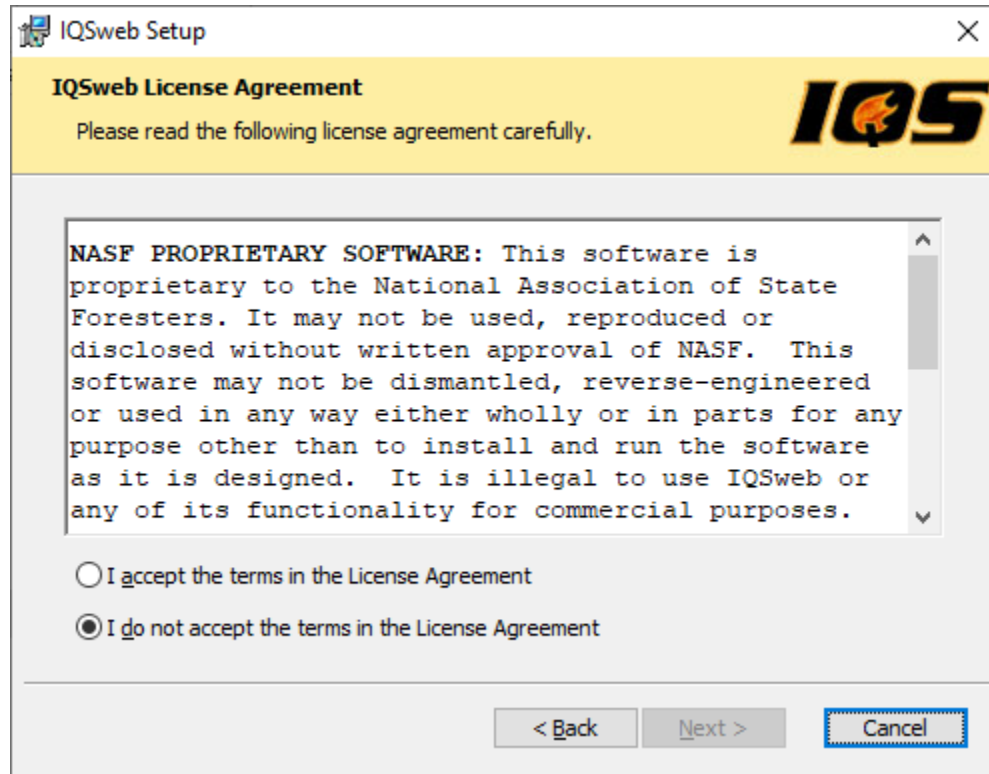
- b. On the IQSweb Welcome screen, click **Next**.



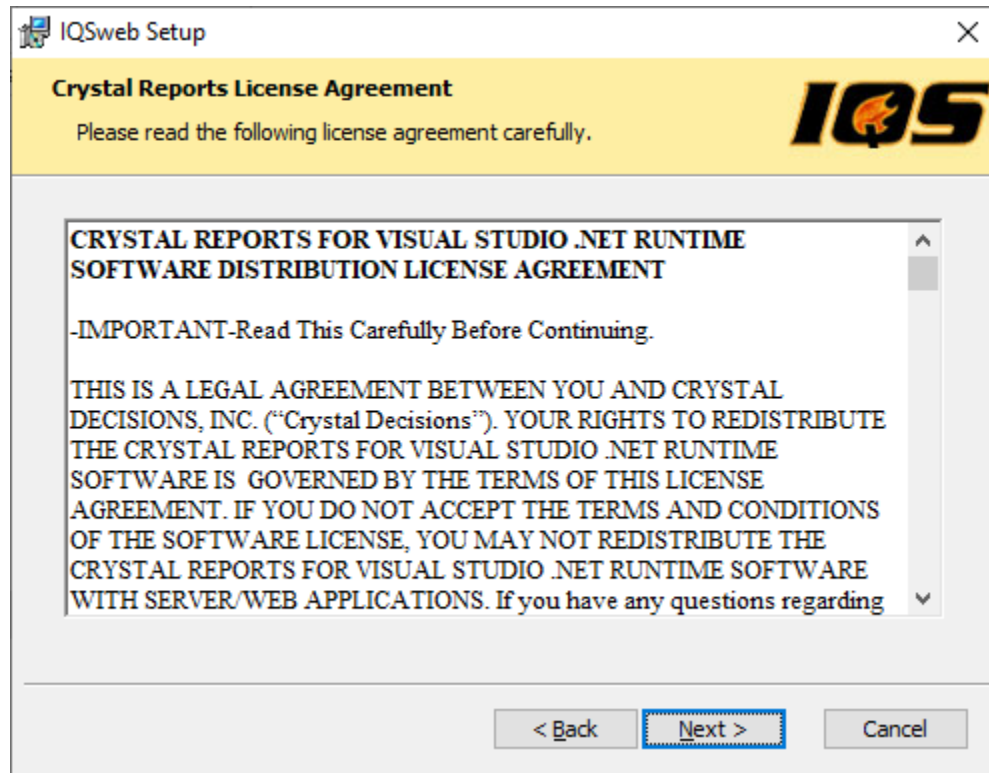
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- c. Read the IQSweb License Agreement and select '**I accept the terms in the License Agreement**' to continue the installation. Click **Next**.



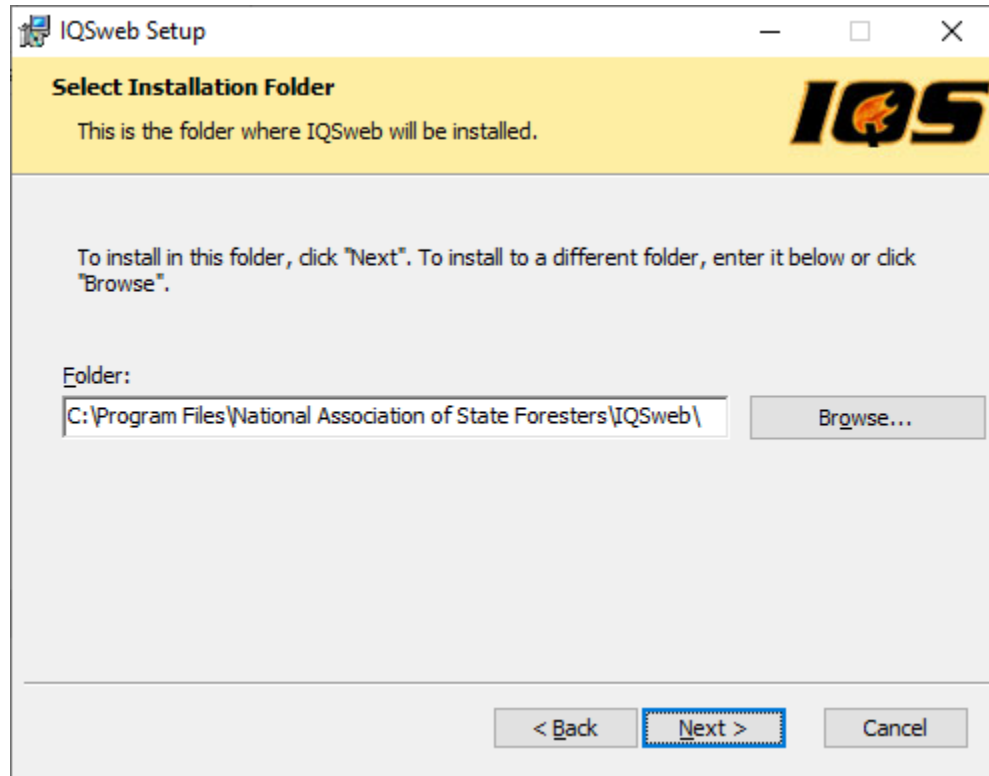
- d. Read through the Crystal Reports License Agreement and click **Next**.



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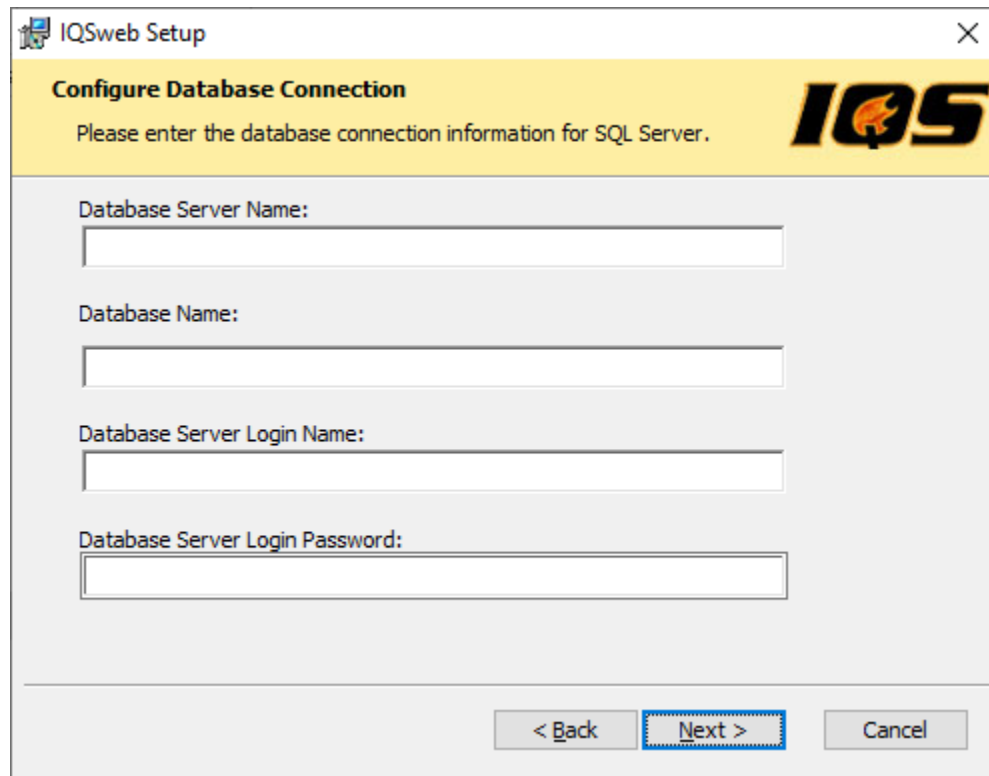
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- e. Select the **folder** where the IQSweb Service will be installed. The default location is in the “C:\Program Files\National Association of State Foresters” directory.



- f. Click **Next** to continue.

- g. Configure the database connection. Refer to the Check List as described in the next steps for each value to be entered.

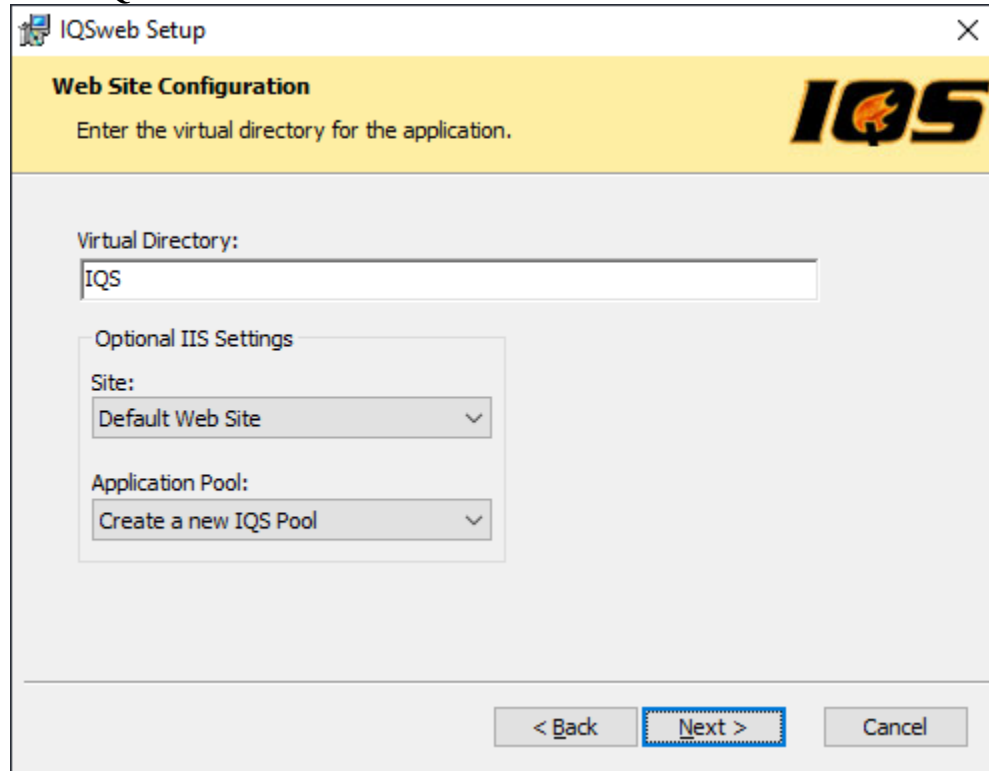


The screenshot shows a Windows-style dialog box titled "IQSweb Setup". The main heading is "Configure Database Connection" in bold. Below the heading, a yellow banner contains the text "Please enter the database connection information for SQL Server." and the "IQS" logo. The dialog box has four text input fields, each preceded by a label: "Database Server Name:", "Database Name:", "Database Server Login Name:", and "Database Server Login Password:". At the bottom right, there are three buttons: "< Back", "Next >" (which is highlighted with a blue dashed border), and "Cancel".

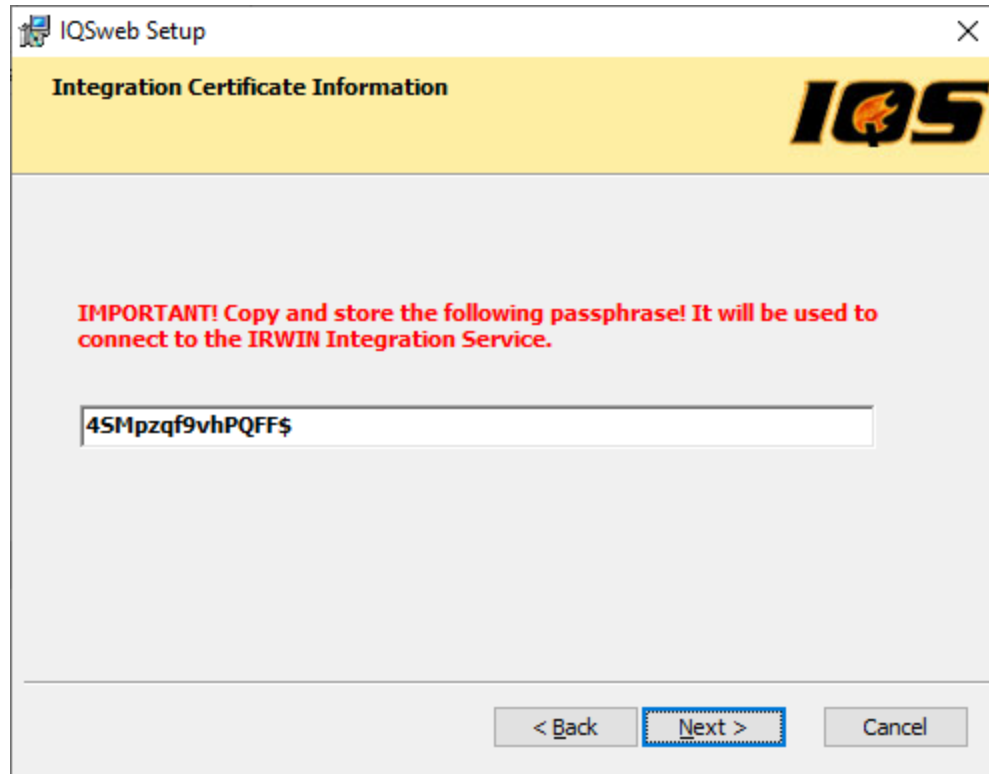
- h. Enter the **Database Server Name** from line 2 of the Check List.
NOTE: if your SQL Server installation accepts remote connections from a non-standard port (not 1433), enter the Server in the following format: <server>,<port#>.
- i. Enter the **Database Name** from line 3 of the Check List.
- j. Enter the **Database Server Login Name** from line 4 of the Check List.
- k. Enter the **Database Server Login Password** from line 5 of the Check list (case sensitive).
- l. Click **Next** to continue. The installer will check that the database connection is working before proceeding to the next screen.

- m. Enter the virtual directory you want to use for IQS. **This will be part of the URL that your end users will use when they access IQSweb.** Generally you can select the default Virtual Directory of IQS.

The **Optional IIS Settings** group holds advanced settings for IIS. The **Site** and **Application Pool** have the default values automatically selected. IQSweb requires its own application pool, so there will only be an option of ‘**Create a new IQS Pool**’ in the Application Pool drop-down. The installer will create a new application pool called **IQSWebPool**.

The screenshot shows the 'Web Site Configuration' window of the 'IQSweb Setup' application. The window has a yellow header bar with the title 'Web Site Configuration' and the IQS logo on the right. Below the header, it says 'Enter the virtual directory for the application.' There is a text box labeled 'Virtual Directory:' containing the text 'IQS'. Below this is a group box titled 'Optional IIS Settings'. Inside this group box, there are two dropdown menus: 'Site:' with 'Default Web Site' selected, and 'Application Pool:' with 'Create a new IQS Pool' selected. At the bottom of the window are three buttons: '< Back', 'Next >' (which is highlighted with a blue border), and 'Cancel'.

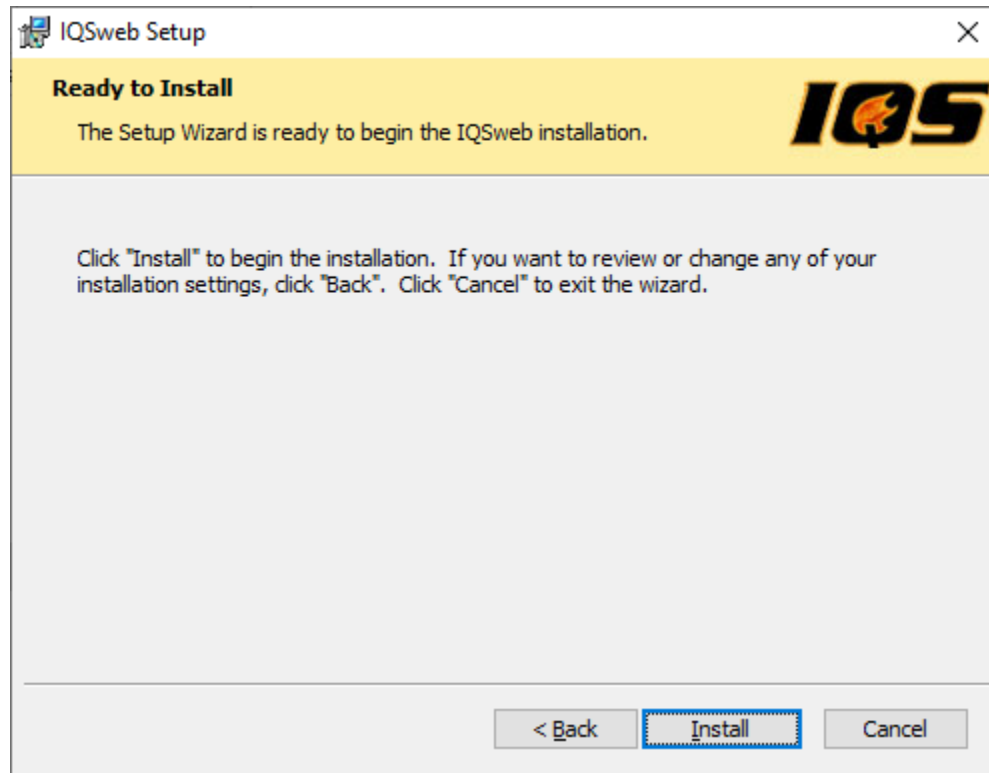
- n. Document the value you entered for Virtual Directory in Line 6 of the Check list, ***IQS APPLICATION VIRTUAL DIRECTORY***.
- o. Document the ***IQSweb ADDRESS*** in line 7 on the Check List for use later. The format for this URL will be http://<IQS Web Application Server Computer Name (line 1)>/<IQS Application Virtual Directory (line 6)>.
- p. Click **Next**.
- q. Copy and enter the **Integration Certificate Passphrase** onto line 8 of the Check list (case sensitive). This passphrase will be used by the IQS Manager when configuring IQS to connect to the IRWIN Integration service. **THIS IS YOUR ONLY OPPORTUNITY TO COPY THIS PASSPHRASE!**



If you have previously installed IQSweb V7.0.x on this computer, you will instead see a message that the certificate already exists. You will be able to use the existing passphrase.

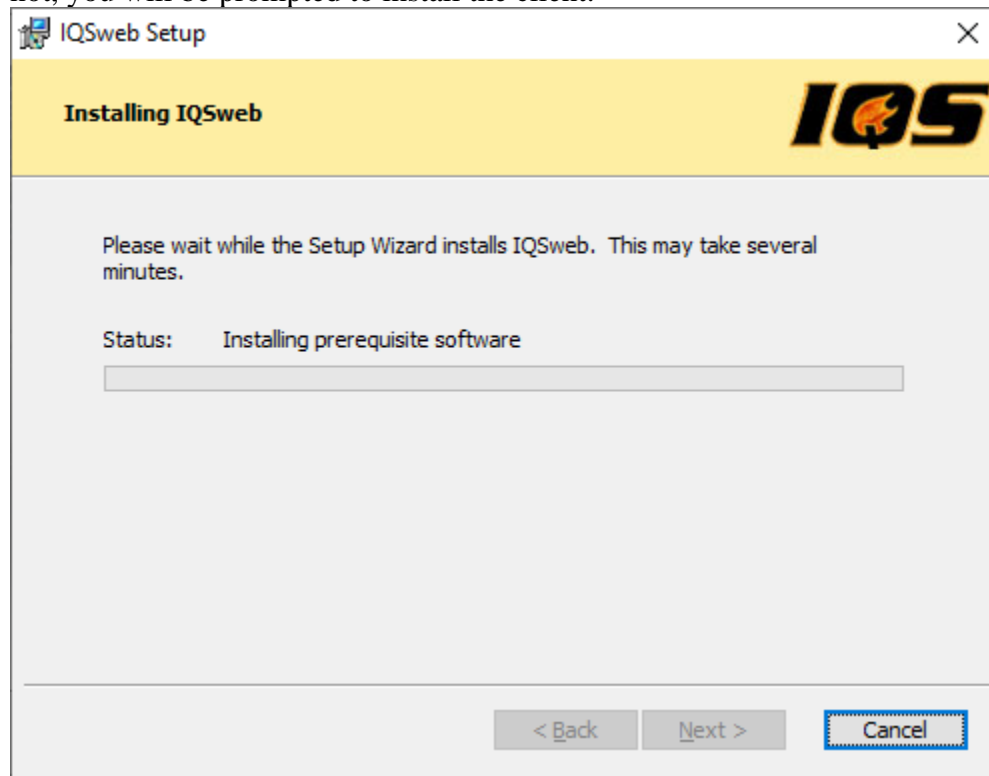
- r. Click **Next**.

Click **Next** to confirm that you want to start the installation.



- s. The IQSweb installer uses **SQL Server 2012 Native Client** to update the IQSweb database. The installer will check to see if the client is installed on the system. If it is

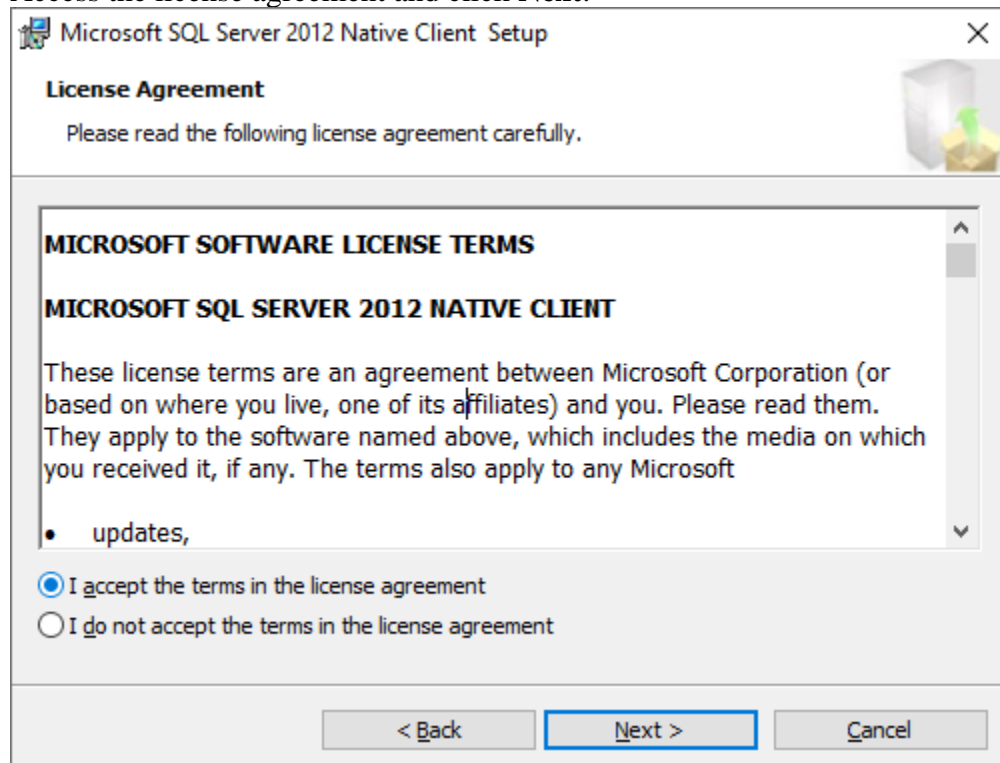
not, you will be prompted to install the client.



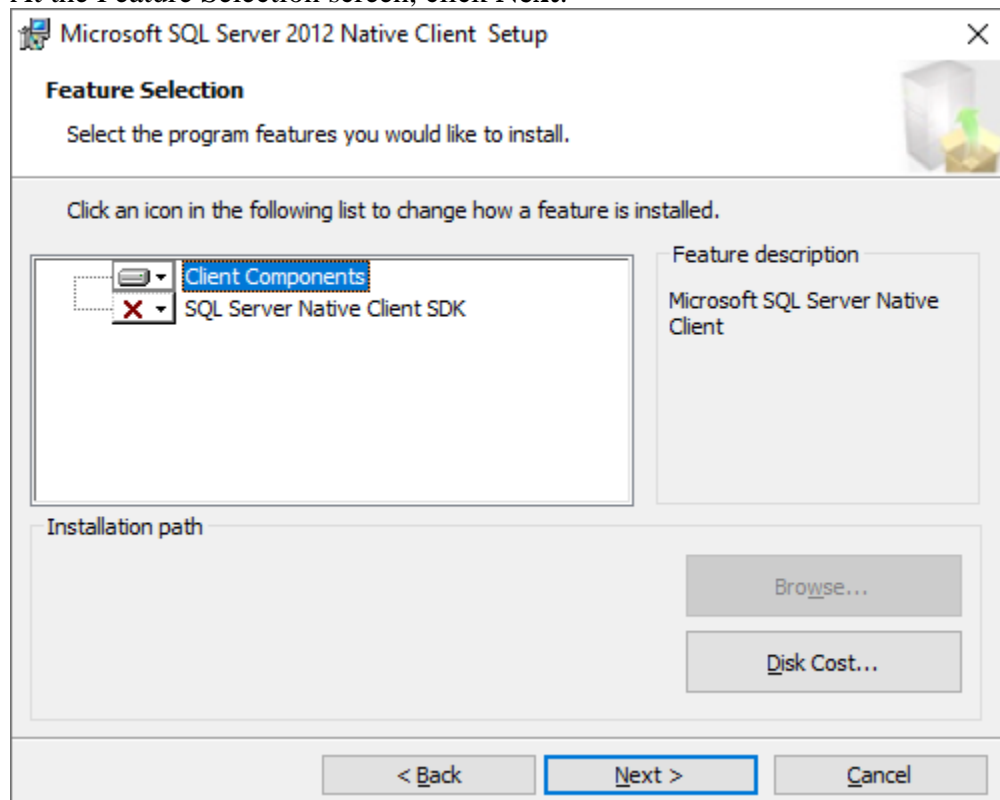
- t. The **Microsoft SQL Server 2012 Native Client Setup** window will appear (it may be hidden behind the IQSweb installer, please check the task bar for a flashing icon to click). Click **Next**



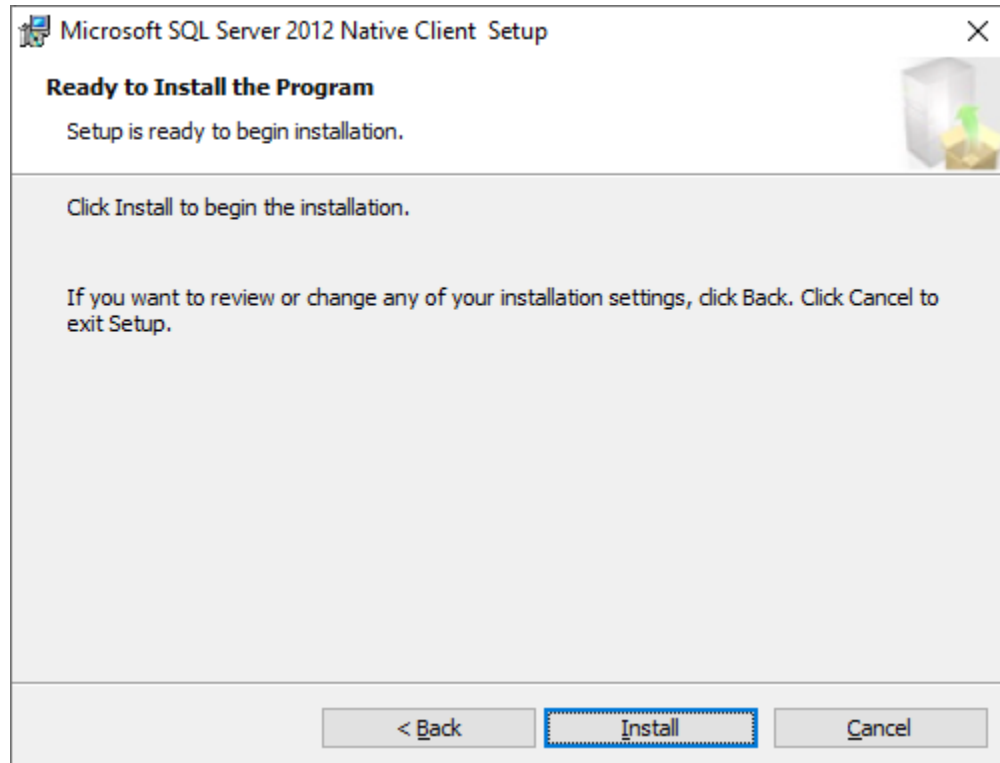
- u. Access the license agreement and click **Next**.



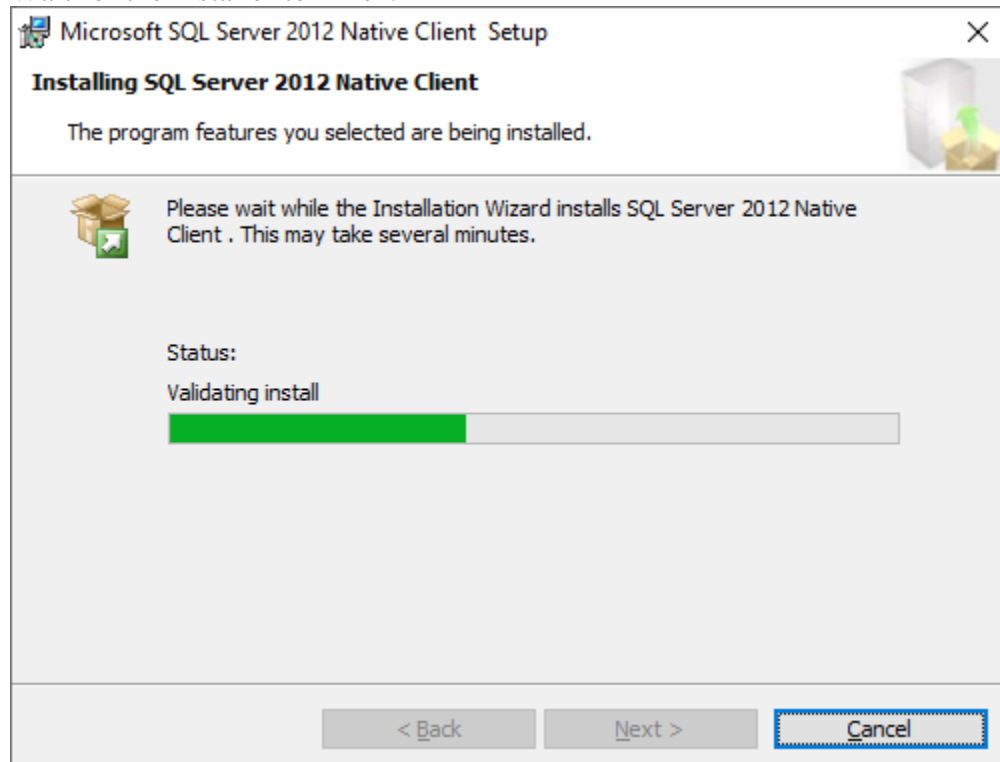
- v. At the Feature Selection screen, click **Next**.



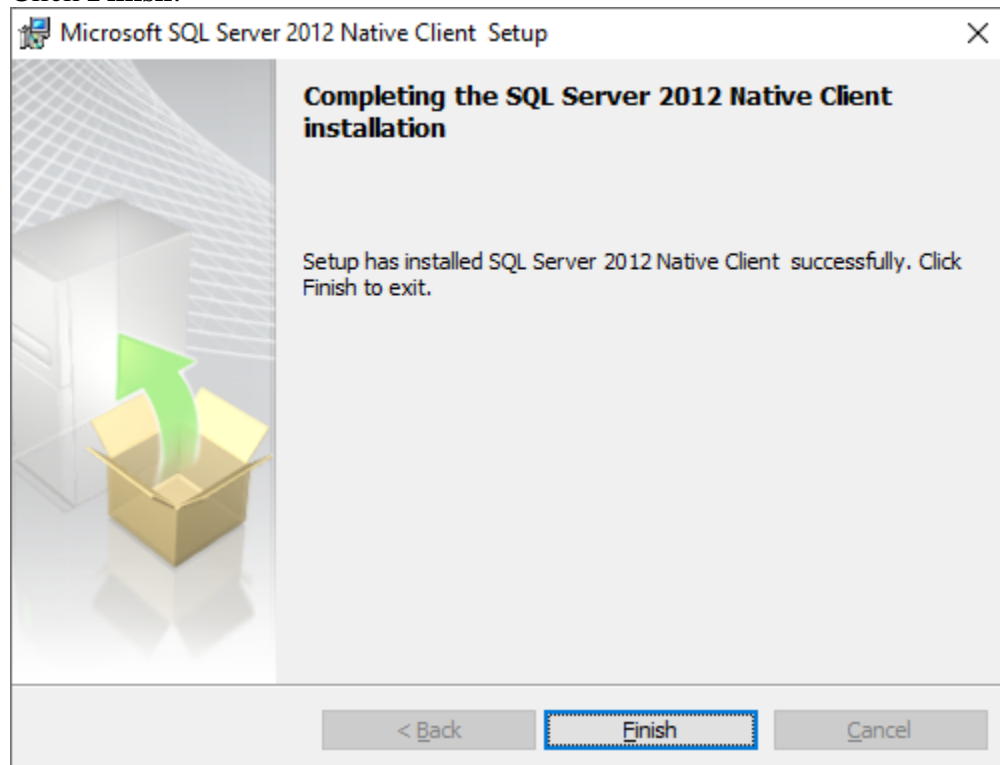
- w. Click **Install**.



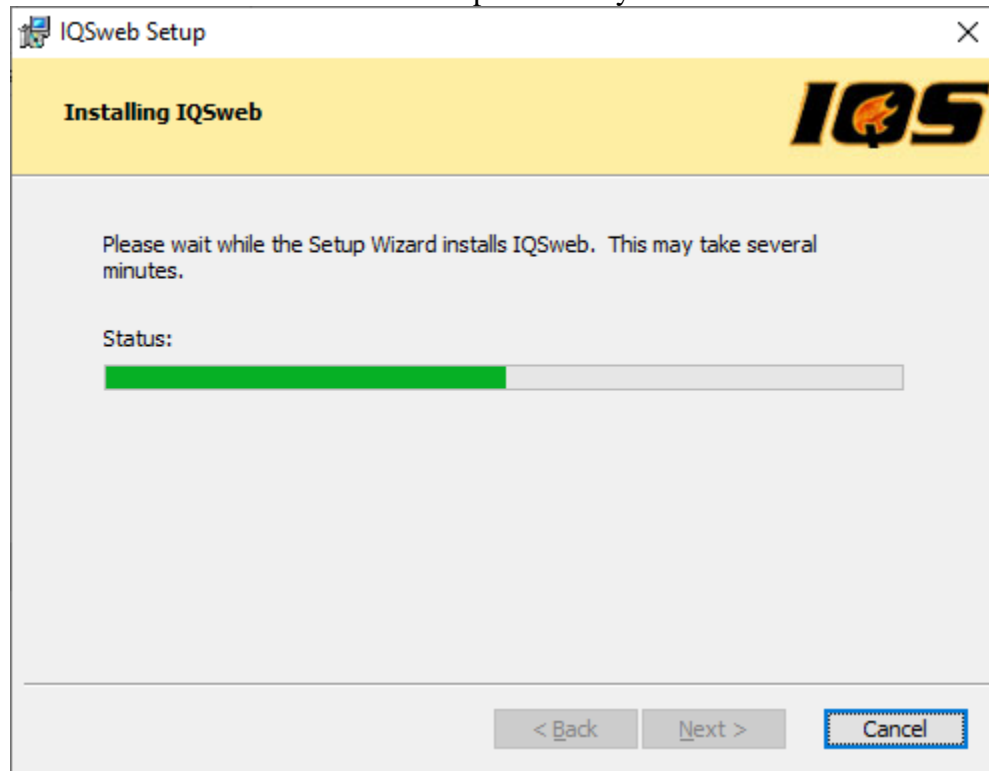
- x. Wait for the installer to finish.



y. Click **Finish**.



z. The installer will then resume. This process may take a few minutes.

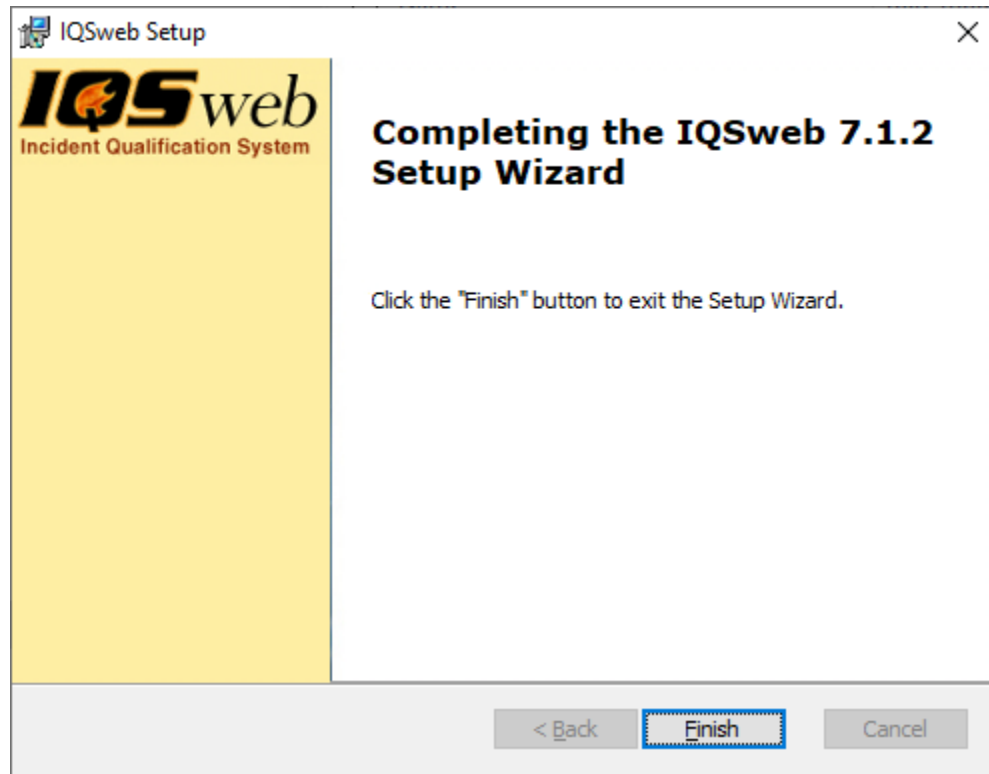


aa. If this is the first time you installed IQSweb V7 on the computer, you may see a prompt about installing a certificate from **IQSweb CA**. Click **Yes** to install the

certificate. This certificate is then used to install a certificate that will be used to encrypt and decrypt the IRWIN credentials.

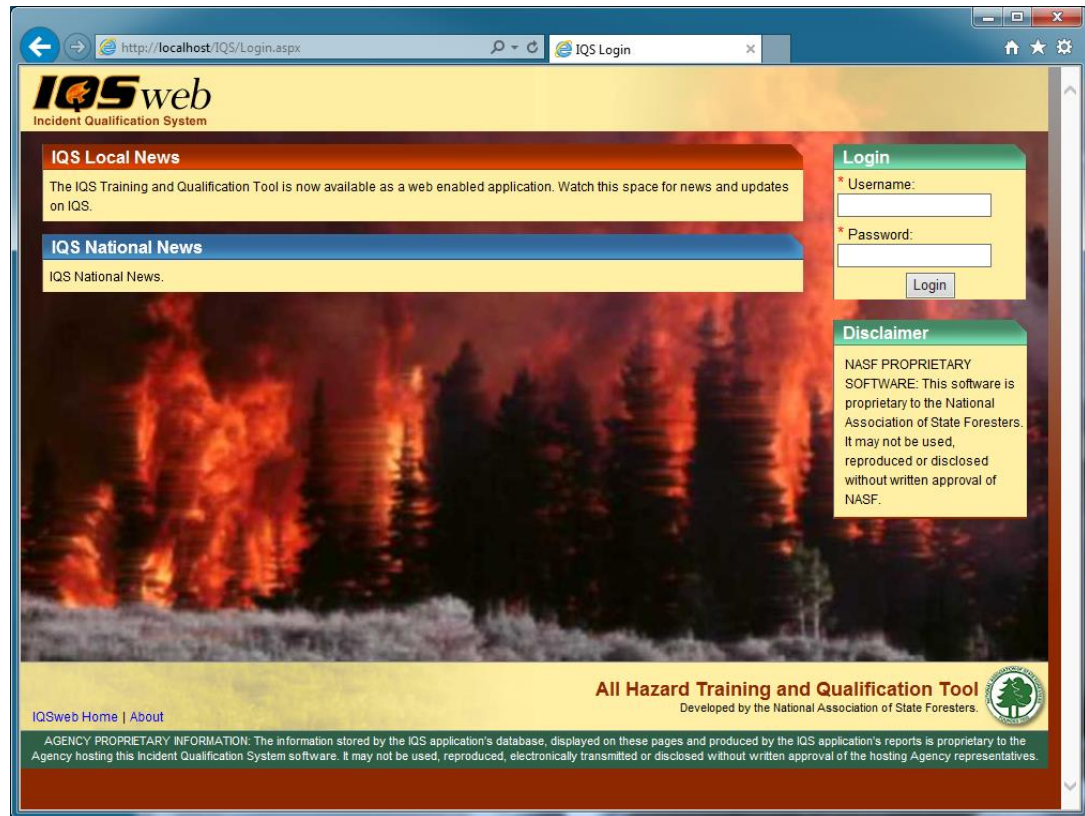


bb. The installer will finish. Click **Finish**.



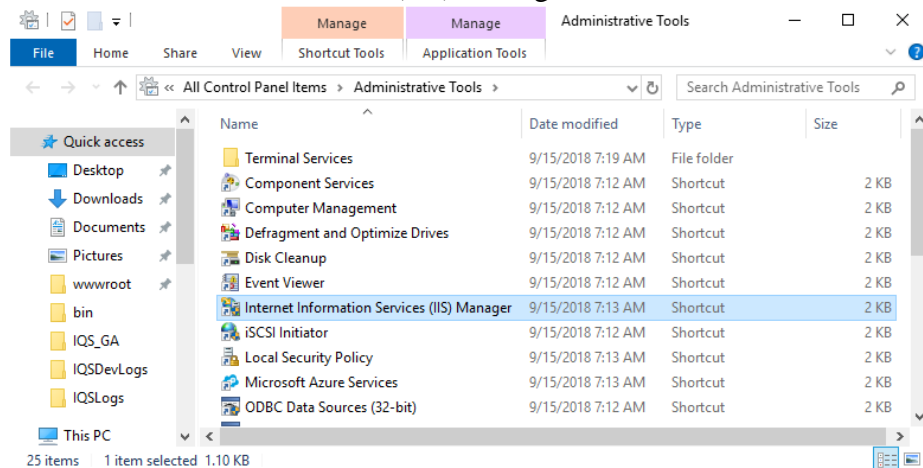
cc. You can test the installation by opening a web browser and going to the IQS web application. The address will be line 7 from the Check List. **The first time the application loads may take longer than normal.** REMEMBER to provide the IRWIN Integration Certificate passphrase.

dd. You should see a login page as follows:

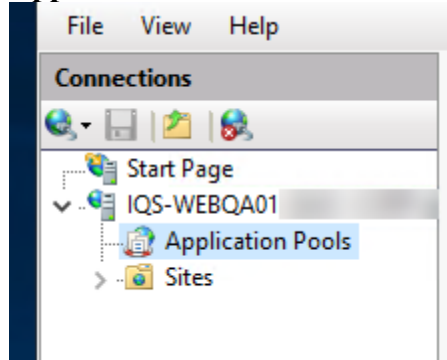


ee. If you do not see the login page and the IQS site is not coming up, restart the IQSWebPool application pool in Internet Information Services (IIS).

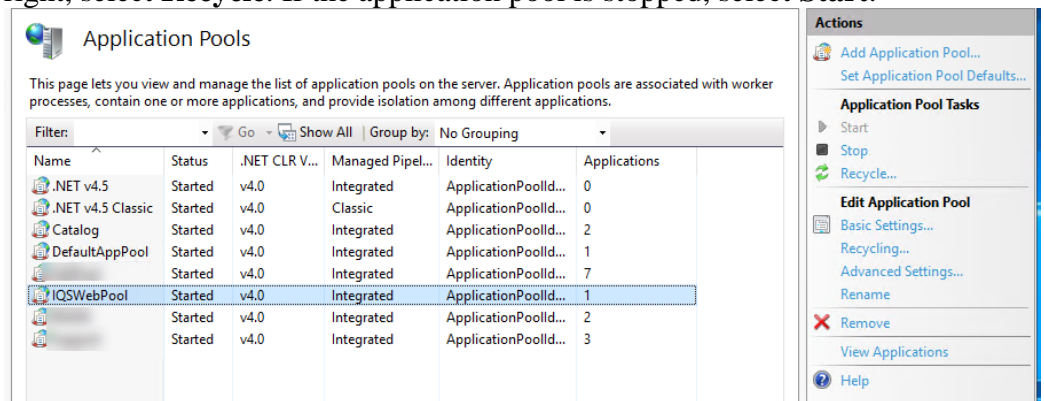
1. Go to the **Control Panel**, select **Administrative Tools** and double-click **Internet Information Services (IIS) Manager**:



2. Click the caret to expand the server in the **Connections Pane** and select **Application Pools**.



3. Select the **IQSWebPool** application pool. Then in the **Actions Pane** on the right, select **Recycle**. If the application pool is stopped, select **Start**.



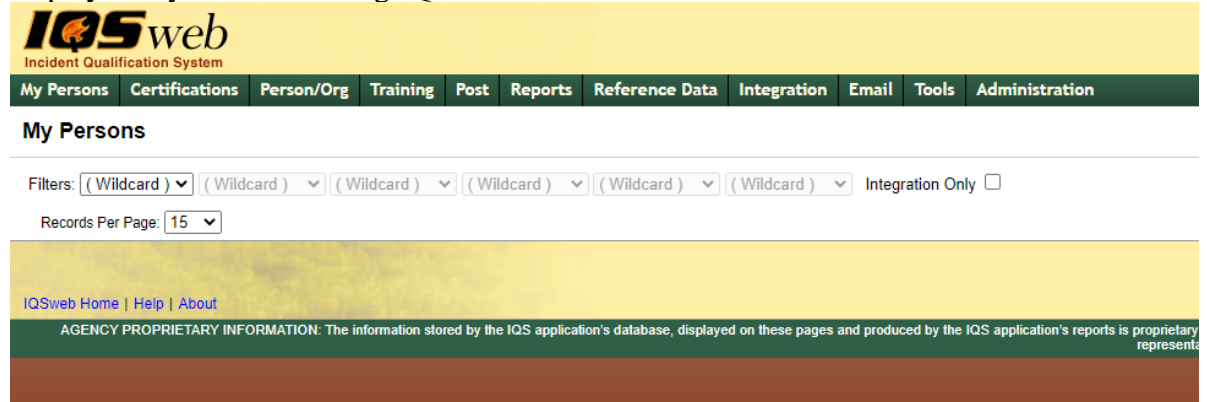
4. The application pool should now be restarted and the IQSweb application should be able to be loaded.
- ff. **FIRST TIME IQSweb USERS:** You can login with (case sensitive):
Username: IQSweb
Password: IQSweb\$2010

You will be prompted to change your password on the first login.

NOTE: Once logged in to IQSweb, will need to enter **NEW** user ids for all of your IQS users.

If you are upgrading from a previous version of IQSweb, your same login ids from the previous version are available.

gg. After logging in, you should see a page similar to the one below. No persons will be displayed if you are installing IQSweb for the first time.



Click on the **Help** link in the upper right for instructions on getting started using IQSweb.