

Installation Guide for Doctor On-Line Server Software

The Doctor Online Server requires a computer running a 64-bit version of Windows 7, or Windows 10 operating system.

The installation process will install the following items onto your computer:

- .NET Framework 4.6
- SQL Server 2012 Express
- Doctor On-Line Server
- Doctor On-Line Manager
- Doctor On-Line Viewer

The installation folder consists of the following files:

SQLEXPADV_x64_ENU.exe	Application to install SQL Server 2012 Express
Doctor6OnlineServerSetup.exe	Application to install the Doctor Online Server and Manager
Doctor6OnlineViewerSetup.exe	Application to install the Doctor Online Viewer
ISSetupPrerequisite	Folder containing .NET Framework 4.6

The computer that is to be used to perform the data acquisition should have all the above software installed upon it. Additional computers can have the Doctor Online Viewer installed to allow the system to be viewed from other locations.

If you do not have the folder *ISSetupPrerequisites* the .NET Framework can still be installed correctly if you are currently connected to the internet.

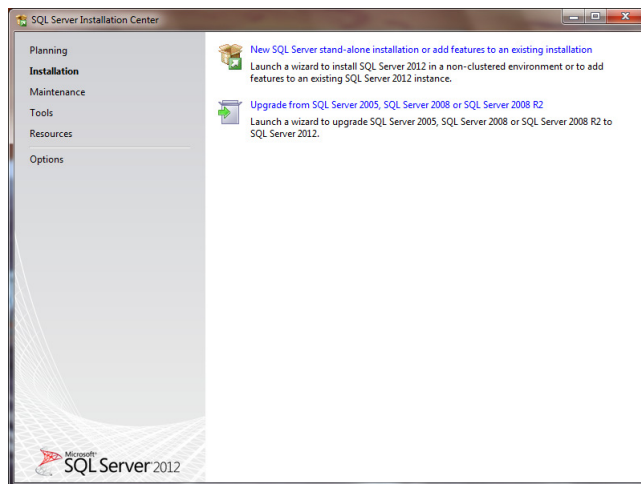
SQL Server Install

To install SQL server run the app *SQLEXPRADV_x64_ENU.exe*, this will initially extract files before starting the actual install. Once extracted you will be prompted by the Windows User Account Control to confirm that you wish to perform this action, click the **Yes** button to proceed. A brief pause will occur before the next window is presented.

SQL Server Installation Center

Once the files have been extracted you will be presented with the SQL Server Installation Center. This provides checks to ensure that the install is possible and to configuration settings for the type of install required.

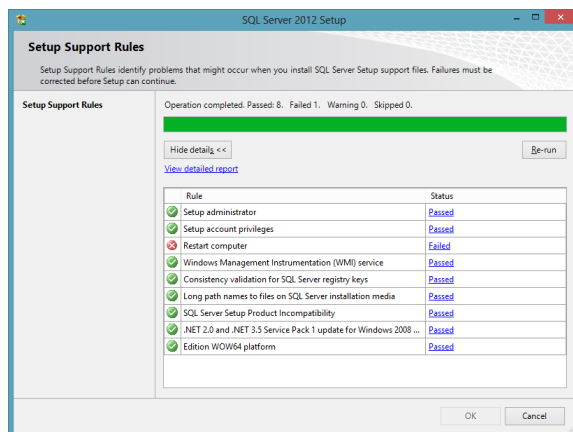
You will start at the *Installation* stage of the install.



Click on the option for **New SQL server stand-alone installation or add features to an existing installation**, this will start the SQL Server 2012 Setup process which goes through several stages:

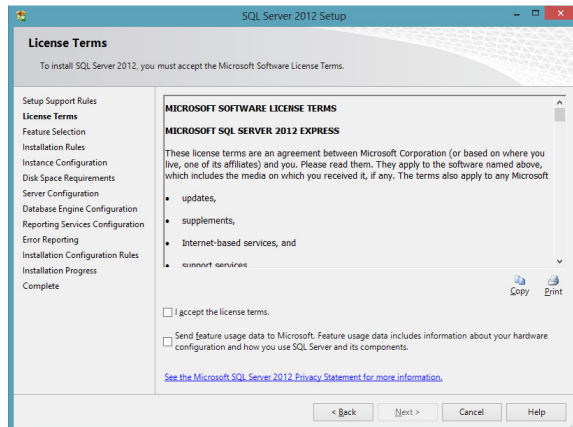
Stage 1 Setup Support Rules

Ideally your computer will be already compatible for a correct installation. However, if there are any issues that need addressing you will be presented with the *Setup Support Rules* dialog. Typically this just requires a reboot of the computer before continuing. If there are any other issues listed contact Icon research for assistance.



Stage 2 Licence Terms

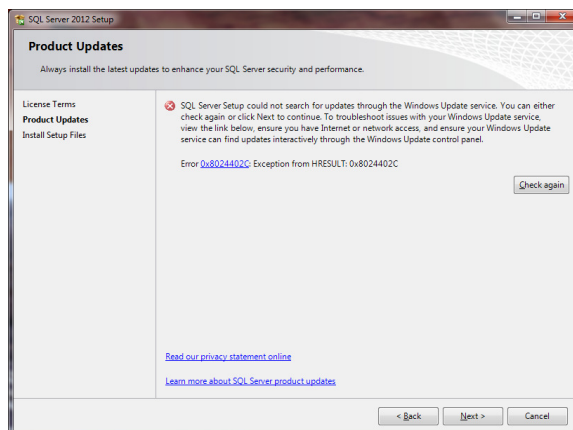
You will be presented with the terms and conditions for SQL Server. Click the **I accept the licence terms** option and then click **Next** to continue.



Stage 3 Product Updates

The setup will now attempt to find product updates across the internet. If you have internet access you should allow it to perform this as it ensures you have the latest updates for SQL server. After an update it may require the computer to reboot before continuing.

If you do not have internet access then you will see the following error message in which case you should click **Next** to continue.

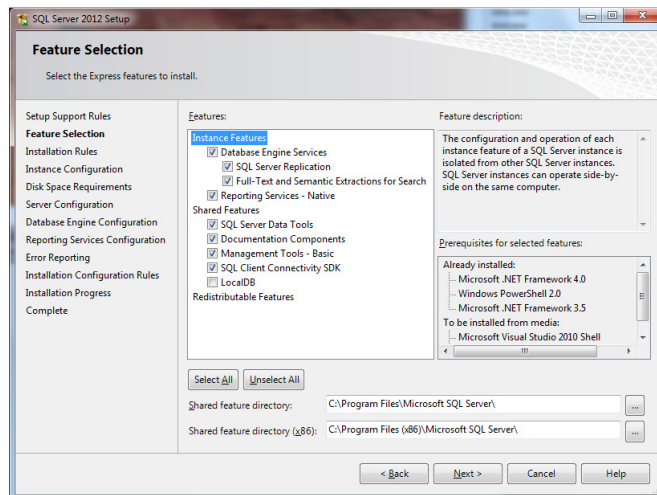


Stage 4 Install Setup Files

The installer will now copy the required files for SQL Server. This will take a significant amount of time to complete and the windows may disappear for a minute or so between actions.

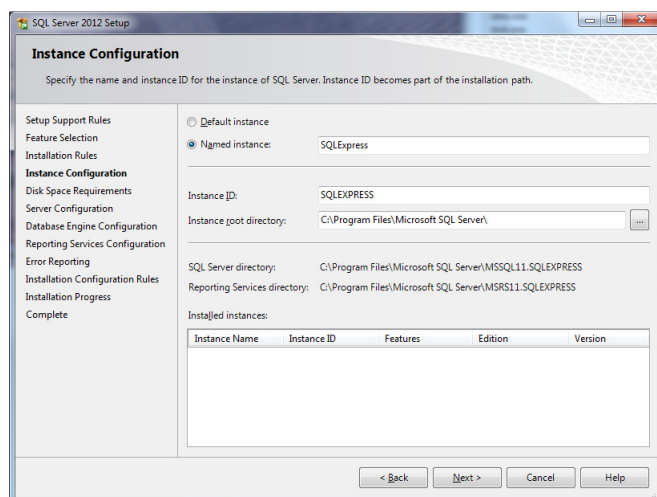
Stage 5 Feature Selection:

The default features as shown below should not be changed unless you have a specific reason to do so. Click **Next** to continue.



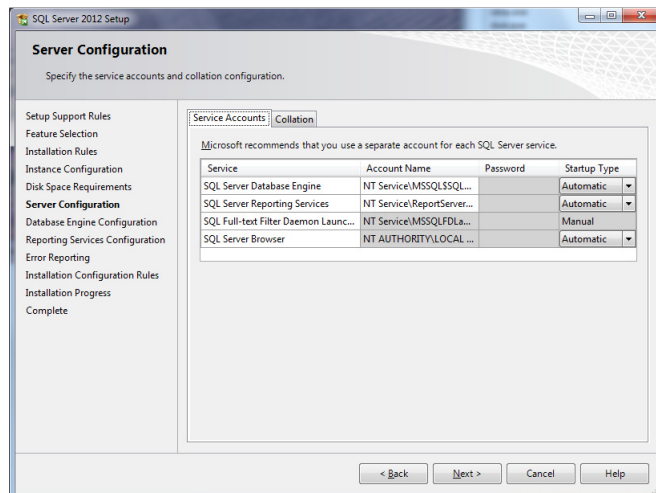
Stage 6 Instance Configuration:

The default features as shown below should not be changed unless you have a specific reason to do so. Click **Next** to continue.



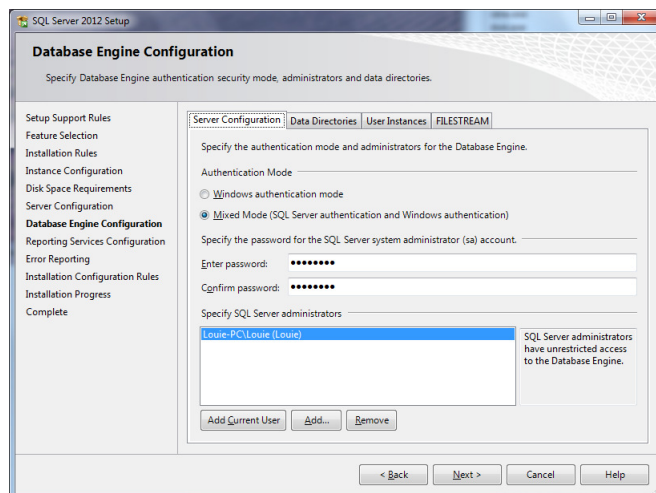
Stage 7 Server Configuration:

Change the *Startup type* for the SQL Server browser service to *Automatic*. Once you have made these changes click **Next** to continue.



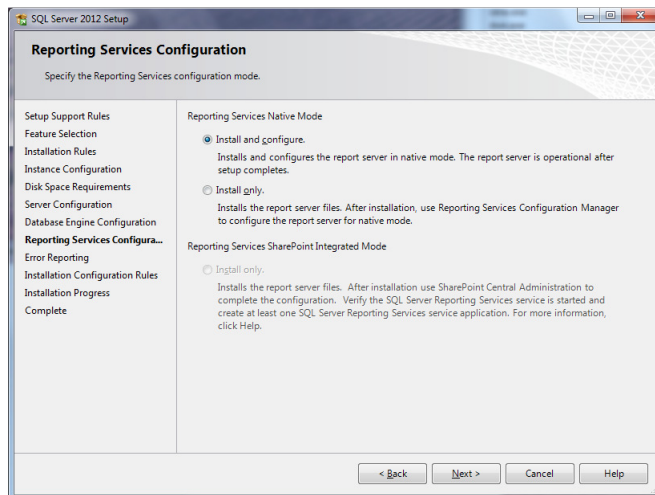
Stage 8 Database Engine Configuration:

Click the option for **Mixed Mode**, you will then be required to enter a password for the SQL Server system administrator (sa) account. This is a useful method for later testing and diagnostics so enter a password that you will remember. Once you have made these changes click **Next** to continue.



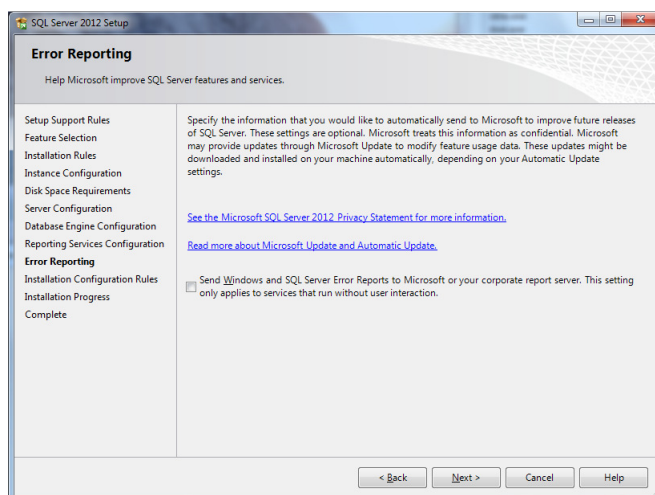
Stage 9 Reporting Service Configuration:

The default features as shown below should not be changed unless you have a specific reason to do so. Click **Next** to continue.



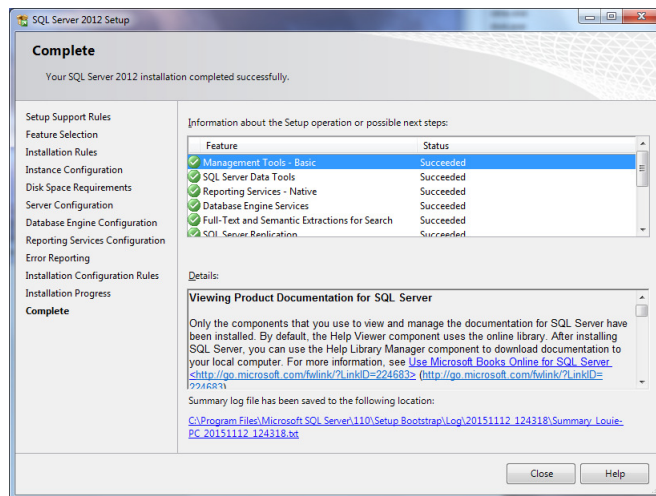
Stage 10 Error Reporting:

The default features as shown below should not be changed unless you have a specific reason to do so. Click **Next** to continue.



Stage 11 Installation:

The installation process will now commence. This can take a significant amount of time to complete. Once finished you will get a summary report as below. If any of the features did not succeed contact Icon research for assistance.



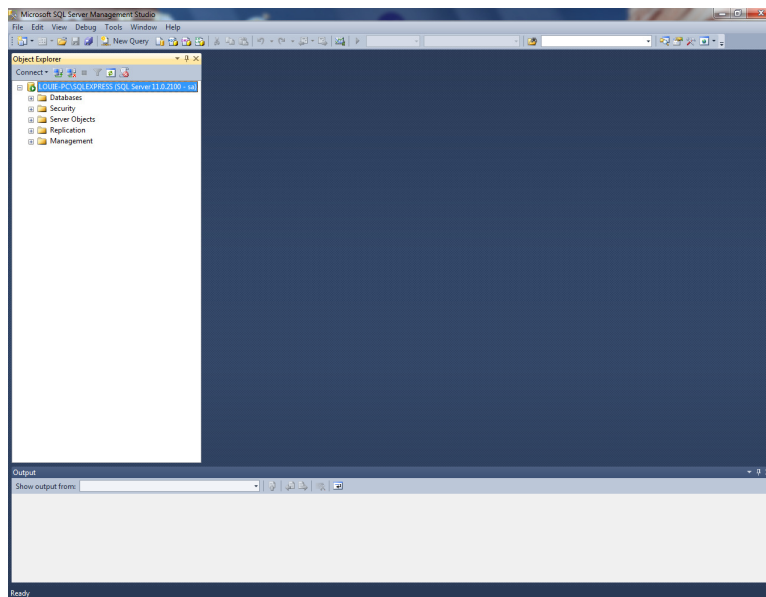
Testing SQL Server:

From the toolbar start button, open the folder for *Microsoft SQL Server 2012* and then select the application *SQL Server Management Studio*.

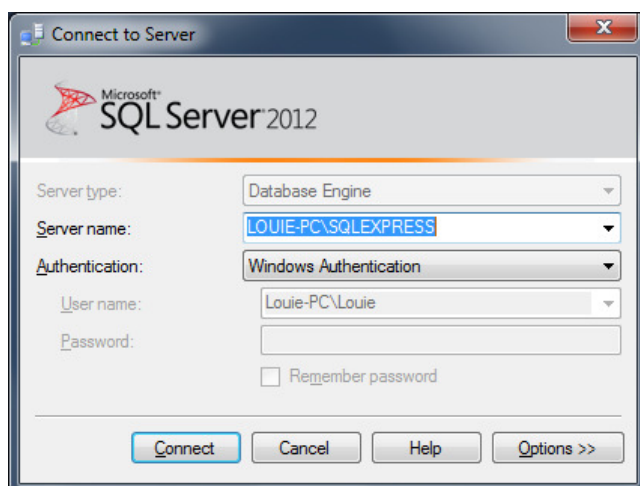
When prompted to Connect to Server, select the *SQL Server Authentication* method of Authentication, enter *sa* as the Login name, and for the password enter the phrase you supplied as part of the installation process. Once these details have been entered click **Connect** to test.



If all has gone well you will be presented with a window similar to this.



If the login fails, try again in case you mistyped the password. if this also fails try one further time but in this case select the *Windows Authentication* method of Authentication. This does not need a Login or password to connect.



If the Windows authentication works then SQL server has been installed, but either the System Administrator account has not been configured correctly or SQL server is not configured for Mixed mode authentication. Contact Icon Research for assistance.

Configure SQL Server for Remote Access

By default SQL server only allows connections from the computer it is installed upon. To allow Doctor Online Viewer to be used on other computers on the network SQL server needs to be configured for remote access.

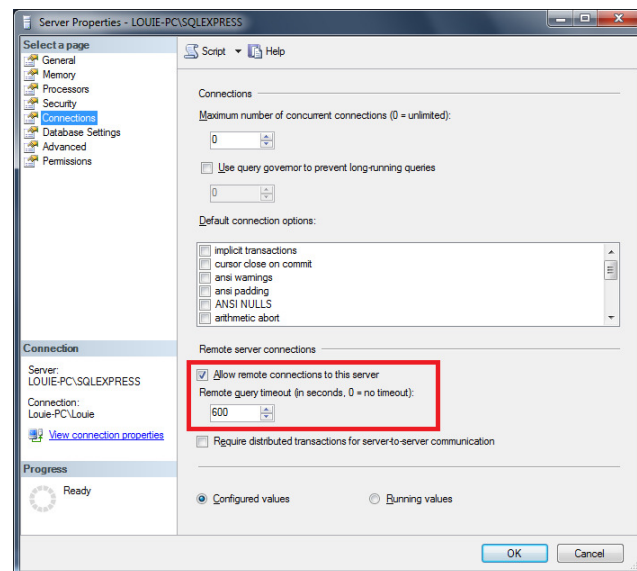
There are four items that need to be checked, two of which should be correct if the installation steps were followed correctly.

Check 1: SQL Server Connection Properties

From the toolbar start button, open the folder for *Microsoft SQL Server 2012* and then select the application *SQL Server Management Studio*. Logon using the Windows Authentication method (no password required).

Once connected right click on the first item in the left pane (SQLEXPRESS entry) and select its *Properties* option.

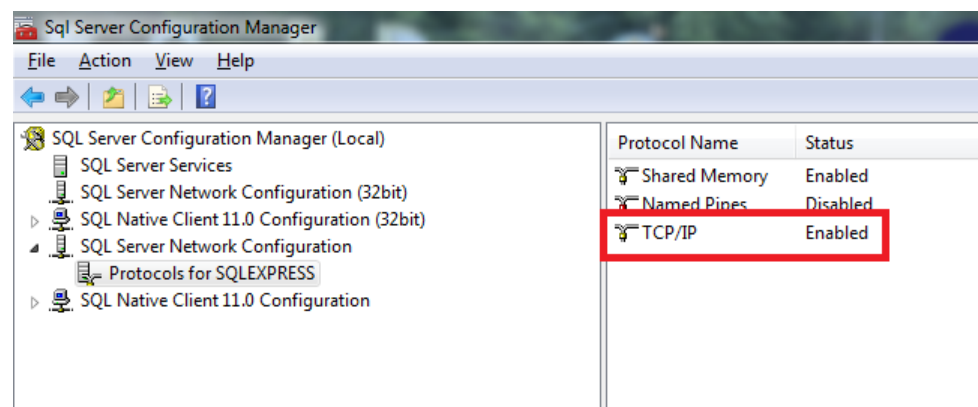
Make sure that the settings for the *Remote server connections* are as below. Once checked you can close the application.



Check 2: SQL Server TCP/IP Properties

From the toolbar start button, open the folder for *Microsoft SQL Server 2012*, then the folder *Configuration Tools*, and then select the application *SQL Server Configuration Manager*.

Open the item *SQL Server network Configuration* on the left pane and select the entry for *Protocols for SQLEXPRESS*. Change the Status for the *TCP/IP* protocol to *Enabled*.

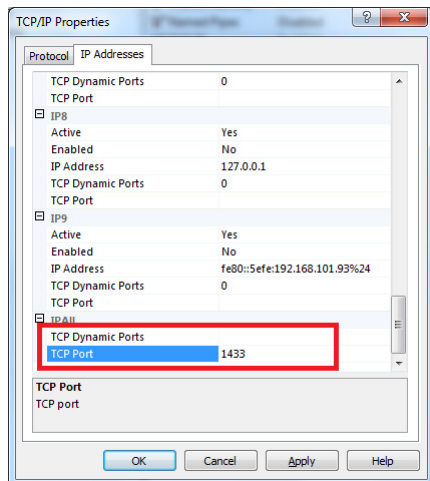


Once it has been changed, right click and select its *Properties*.

Select the **IPAddresses** tab and scroll down to the bottom option for *IPAll*.

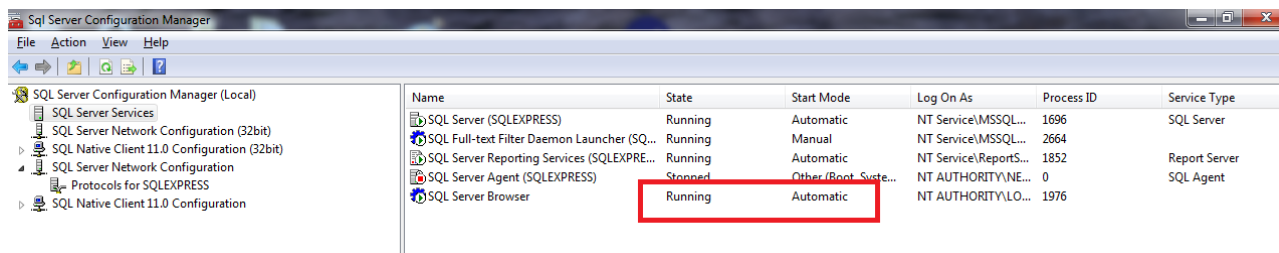
Remove any entry for *TCP Dynamic Ports*, do not even leave a value zero. Set the entry for *TCP port* to 1433.

Once changed click **OK** to return to the top level of the application.



Check 3: SQL Server Browser Service

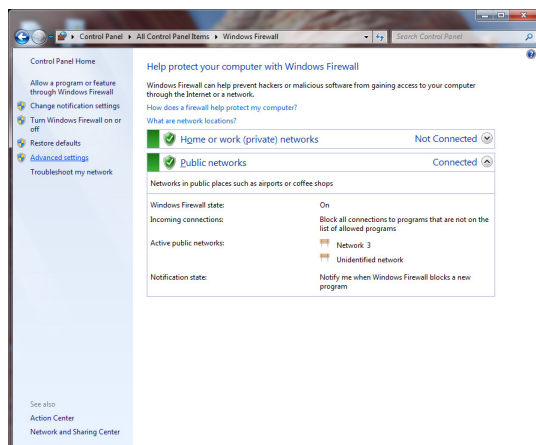
Click on the option *SQL Server Services* in the left pane and check that the entry for *SQL Server Browser* is in a *Running* state and set for *Automatic* Start Mode. Once checked you can close the application.



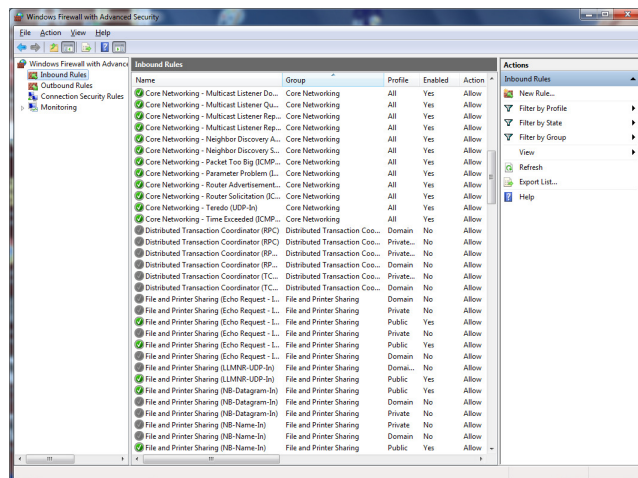
Check 4: Firewall Settings

The computer firewall must be configured to allow SQL server messages to pass through it unhindered. The example below is for the standard Windows Firewall found in Windows 7. As there are many other different firewall suppliers you may have to consult your local IT department for assistance.

From the control panel open the Windows firewall.



Click the option *Advanced Settings* on the left hand pane.



Select the option *Inbound Rules* on the left hand pane, then add the following four rules one at a time by clicking the **New Rule...** button on the right hand pane.

Click **New Rule...**

Select **Port** option and click **Next** to continue

Select **TCP** option and enter port number **1433** then click **Next** to continue

Select *Allow the Connection* option and click **Next** to continue

Tick all options of **Domain**, **Private**, **Public** and click **Next** to continue

Enter name: **SQL - TCP 1433** and click **Finish** to add the rule.

Click **New Rule...**

Select **Port** option and click **Next** to continue

Select **UDP** option and enter port number **1434** then click **Next** to continue

Select *Allow the Connection* option and click **Next** to continue

Tick all options of **Domain**, **Private**, **Public** and click **Next** to continue

Enter name: **SQL - UDP 1434** and click **Finish** to add the rule.

Click **New Rule...**

Select **Program** option and click **Next** to continue

Click the **Browse** button and select the file **C:\Program Files\Microsoft SQL**

Server\MSSQL11.SQLEXPRESS\MSSQL\Binn\sqlserver.exe and click **Next** to continue

Select *Allow the Connection* option and click **Next** to continue

Tick all options of **Domain**, **Private**, **Public** and click **Next** to continue

Enter name: **SQL Server** and click **Finish** to add the rule.

Click **New Rule...**

Select **Program** option and click **Next** to continue

Click the **Browse** button and select the file **C:\Program Files (x86)\Microsoft SQL**

Server\90\Shared\sqlbrowser.exe and click **Next** to continue

Select *Allow the Connection* option and click **Next** to continue

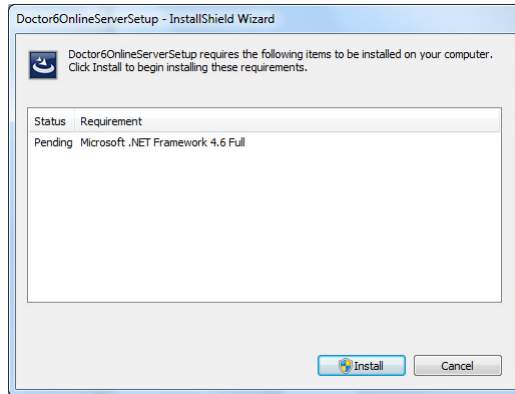
Tick all options of **Domain**, **Private**, **Public** and click **Next** to continue

Enter name: **SQL Browser** and click **Finish** to add the rule.

Installation of Doctor On-Line Server (DOS) and Doctor On-Line Manager (DOM)

To perform the install run the application *Doctor6OnlineServerSetup.exe*.

This install also checks that the .NET Framework 4.6 is installed on your computer, and if not will install it. if this process is required will see is this window.



Click the **Install** button and the .NET Framework will be installed onto your computer. Note that if you do not have the folder *ISSetupPrerequisites* this will require access to the internet.

You may be prompted by the Windows User Account Control to confirm that you wish to perform this action, click the **Yes** button to proceed, this will take several minutes to complete.

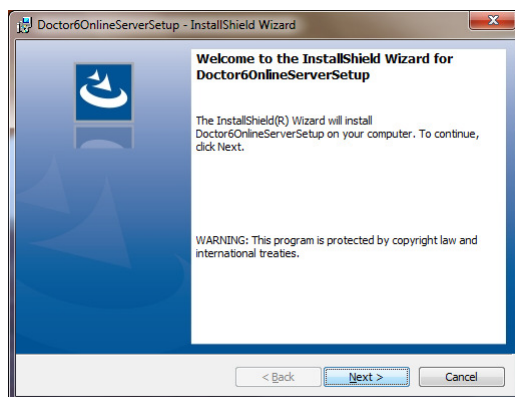
After the install the computer may request a reboot before proceeding, if this is the case click **Yes** to do so and the installation will continue automatically after the reboot.

InstallShield wizard

The Installshield Wizard will now present a series of stages to allow the setup process to be customised.

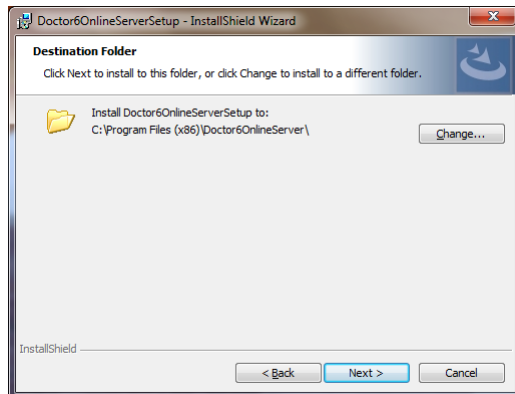
Stage 1: Welcome:

Click **Next** to continue.



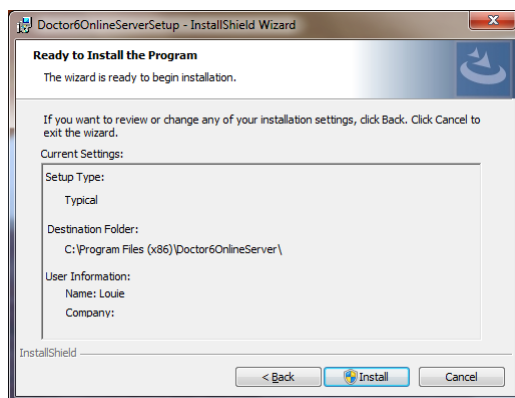
Stage 2 Destination Folder:

It is advised not to change the name of the folder used unless you have a definite reason for doing so. Click **Next** to continue.



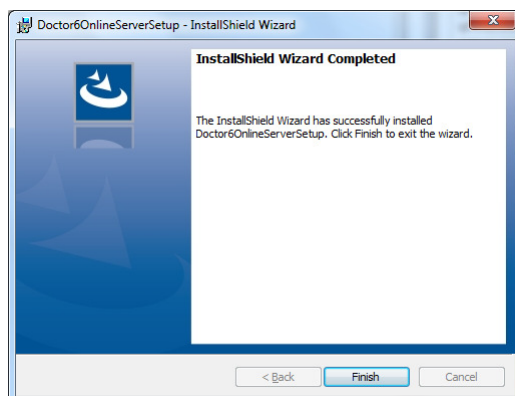
Stage 3 Ready to Install:

Click **Install** to start the installation process. You may be prompted by the Windows User Account Control to confirm that you wish to perform this action, click the **Yes** button to proceed, this will take several minutes to complete.



Stage 4 InstallShield Wizard Completed:

The install has completed successfully, click **Finish** to close the application.

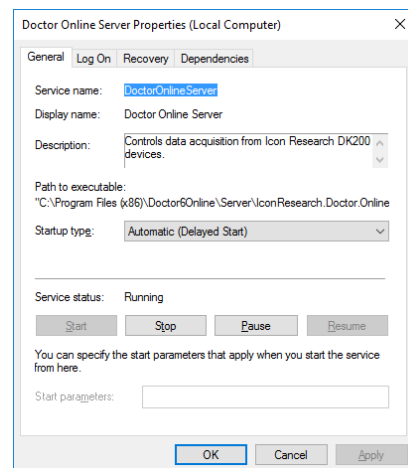


Stage 5 Optional Service Configuration:

The DoctorOnlineServer is installed to start Automatically when the computer starts, however due to different startup configurations some computers need this to be altered to allow some extra time for their other systems to settle before the DoctorServer is started.

To do this:

1. Open the windows Control Panel and then within the Administrative Tools section open the Services tool.
2. Scroll down to the entry for DoctorOnlineServer and right click to open its properties.
3. Change the dropdown list entry for *StartupType* from *Automatic* to *Automatic (delayed start)*.
4. Click **OK** and close the Services tool.



Stage 6 Firewall Settings

The DOS and DOM need to be given access through the firewall.

Open the firewall in the same manner as for the SQL Server installation.

Select the option Inbound Rules on the left hand pane, then add the following two rules one at a time by clicking the **New Rule...** button on the right hand pane.

Click **New Rule...**

Select **Program** option and click **Next** to continue

Click the **Browse** button and select the file *C:\Program Files (x86)\Doctor6Online\Server\IconResearch.Director.Online.Server.exe* and click **Next** to continue

Select *Allow the Connection* option and click **Next** to continue

Tick all options of **Domain**, **Private**, **Public** and click **Next** to continue

Enter name: *Doctor6 On-Line Server* and click **Finish** to add the rule.

Click **New Rule...**

Select **Program** option and click **Next** to continue

Click the **Browse** button and select the file *C:\Program Files (x86)\Doctor6Online\Server\IconResearch.Director.Online.DOM.exe* and click **Next** to continue

Select *Allow the Connection* option and click **Next** to continue

Tick all options of **Domain**, **Private**, **Public** and click **Next** to continue

Enter name: *Doctor6 On-Line Server Manager* and click **Finish** to add the rule.