

Installing SQL Express 2019

Last Modified on 10/12/2022 8:20 am CDT

Note: SQL 2019 is not compatible with Windows 7, Windows Server 2008R2 or Windows Server 2012. It is only compatible with Windows 10, Windows Server 2016, and later operating systems.

The installation and setup process is lengthy and quite detailed. If assistance is needed at any time during the process, please contact a member of the I.S. Support team.

1. Download SQL Server 2019 by going to <https://www.microsoft.com/en-us/Download/details.aspx?id=101064>. Select **Download**.

Note: To download the Standard edition, the product must be licensed from Microsoft.

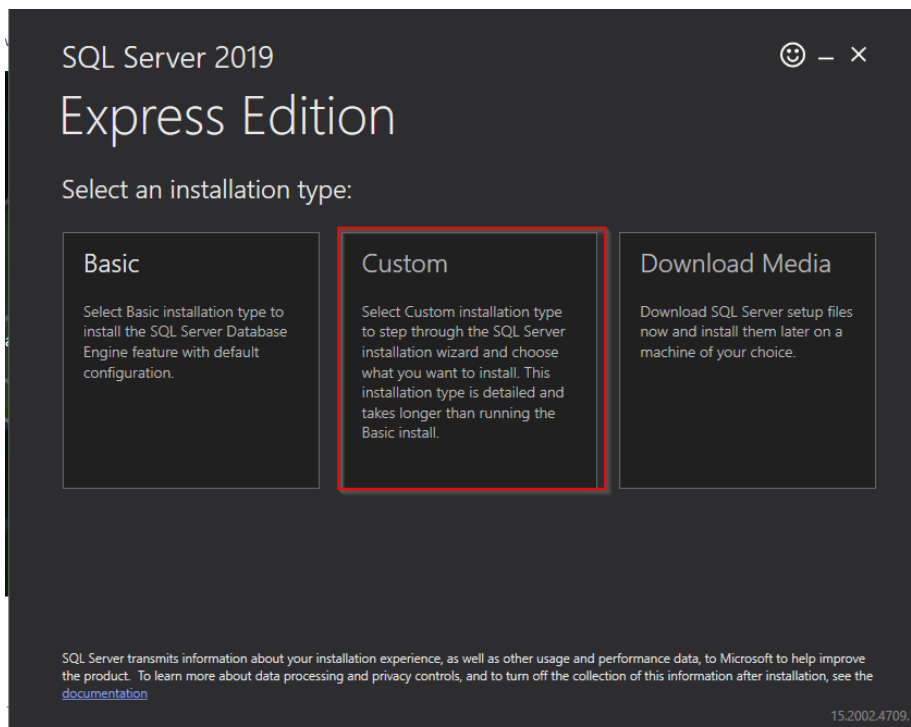
Microsoft® SQL Server® 2019 Express

Important! Selecting a language below will dynamically change the complete page content to that language.

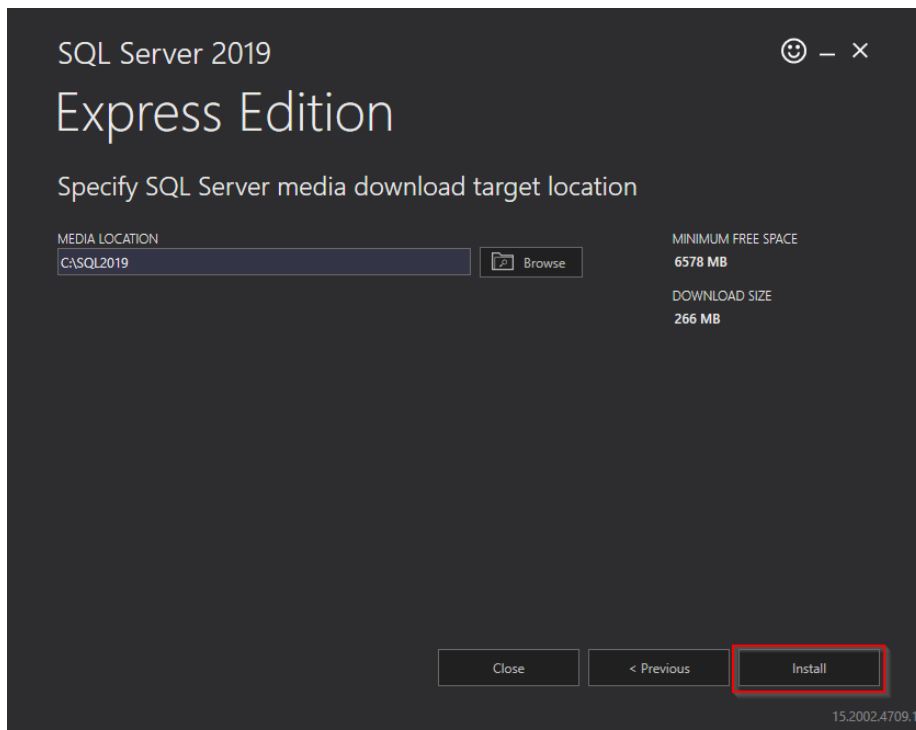
Select Language:

Microsoft® SQL Server® 2019 Express is a powerful and reliable free data management system that delivers a rich and reliable data store for lightweight Web Sites and desktop applications.

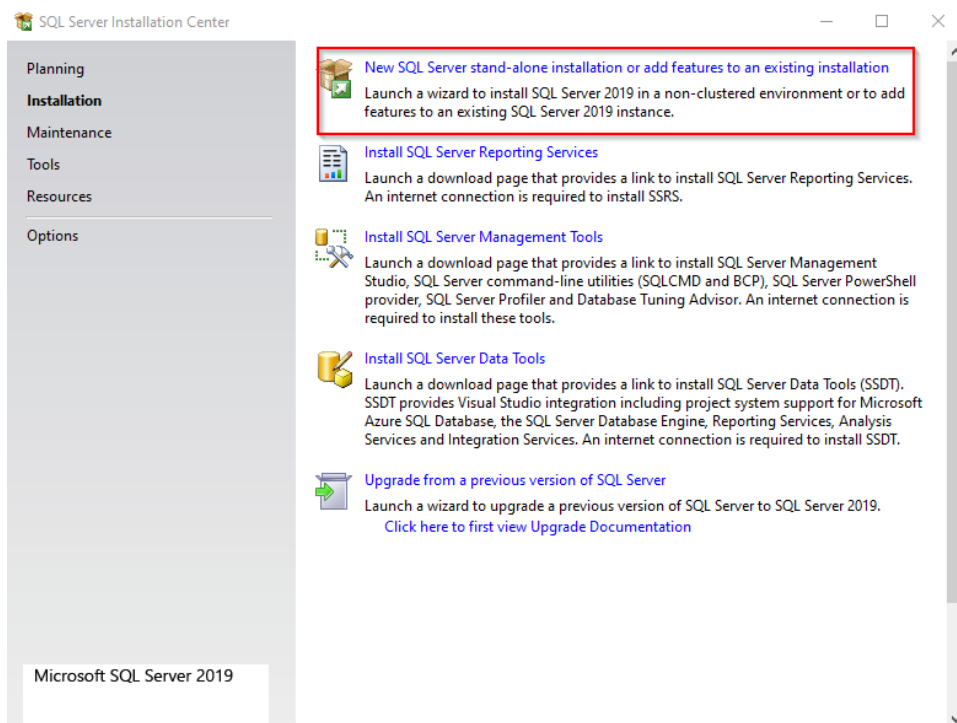
2. Select **Custom**.



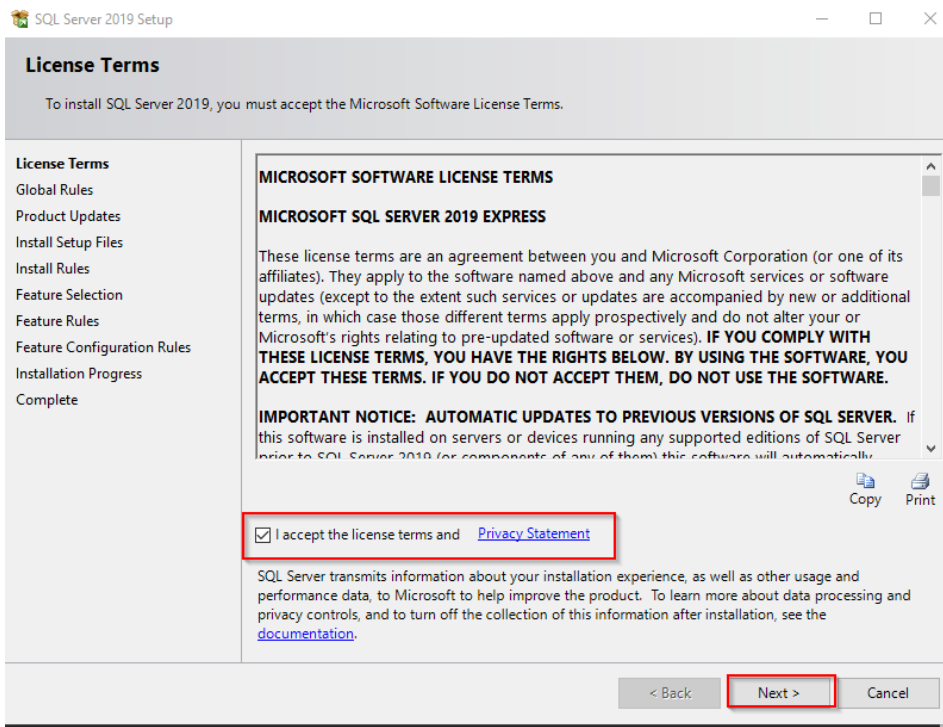
3. After initial setup, the following screen displays. Select **Install**.



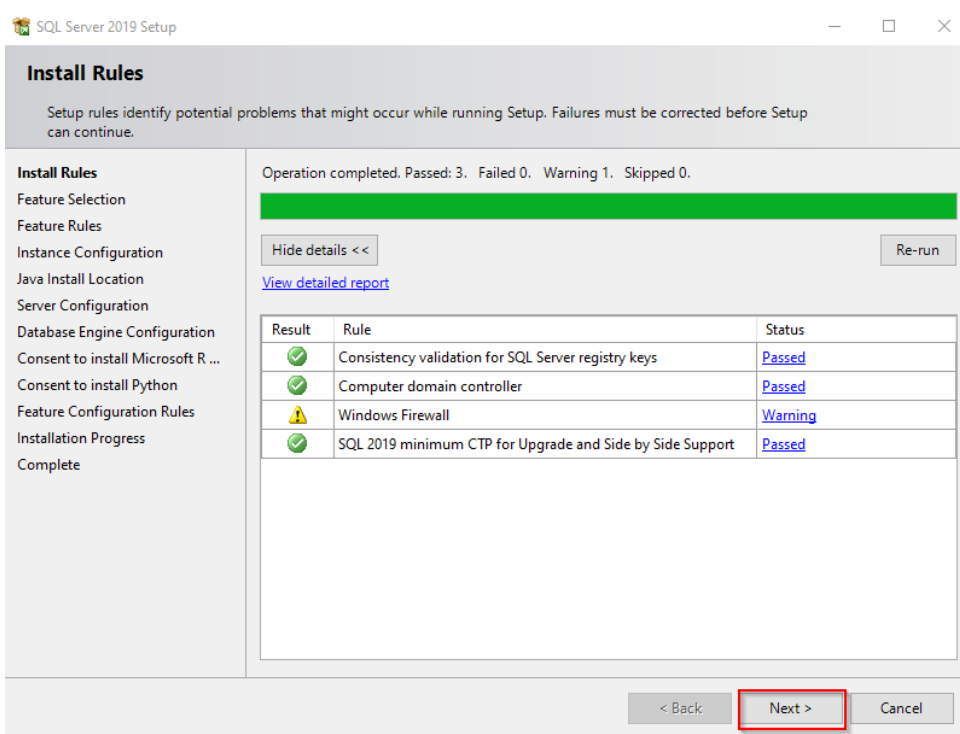
4. Select the **New SQL Server Stand-alone Installation** option.



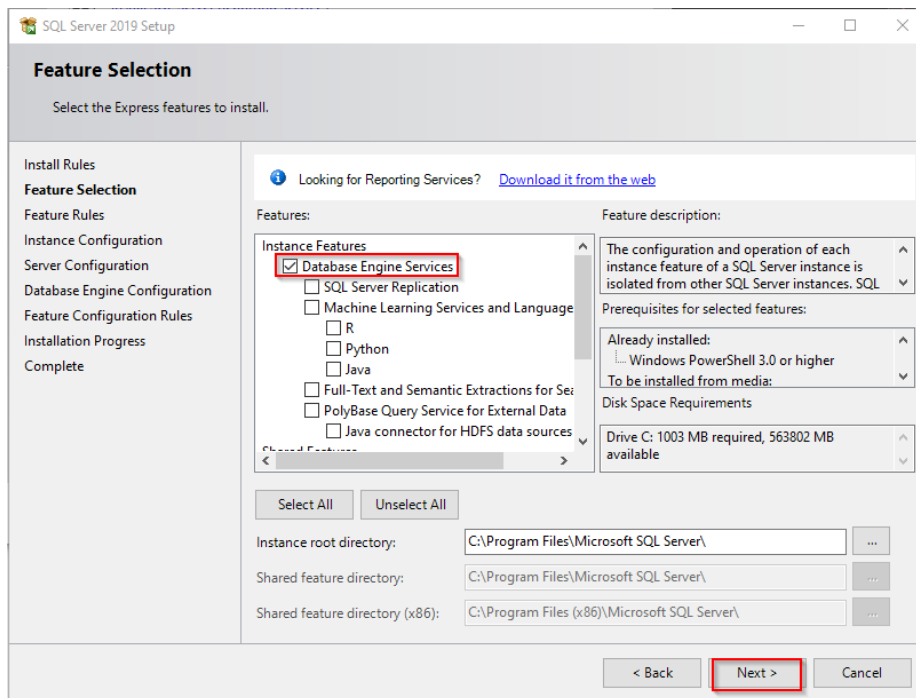
5. Check the box to accept the license terms and select **Next**.



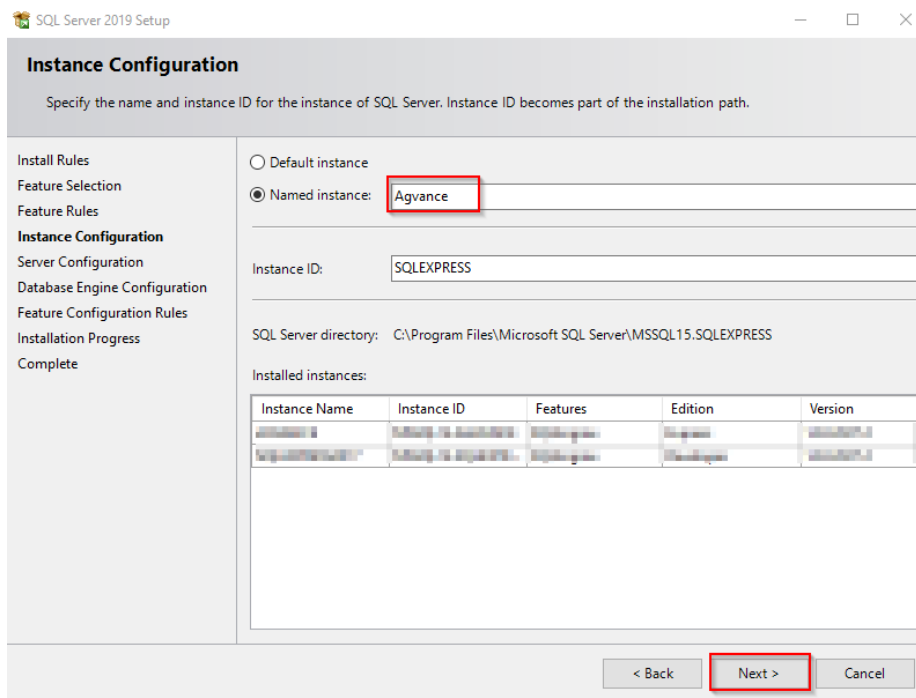
6. Ignore the Windows Firewall Warning as those rules will be entered in later. Select **Next**.



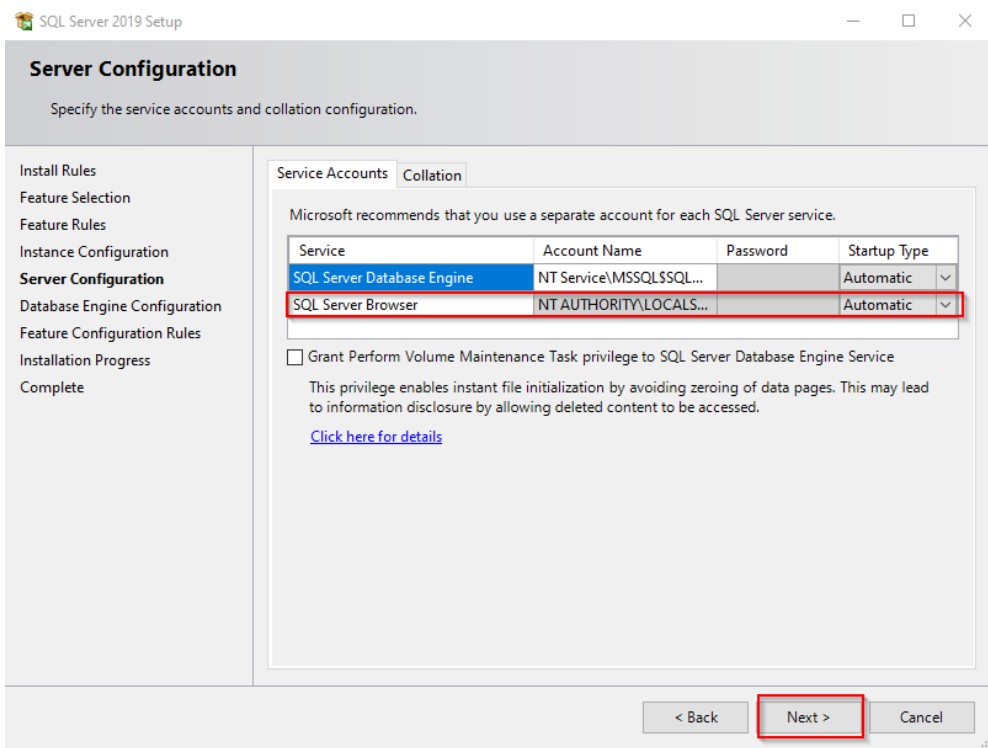
7. Select the *Database Engine Services* option and then select **Next**.



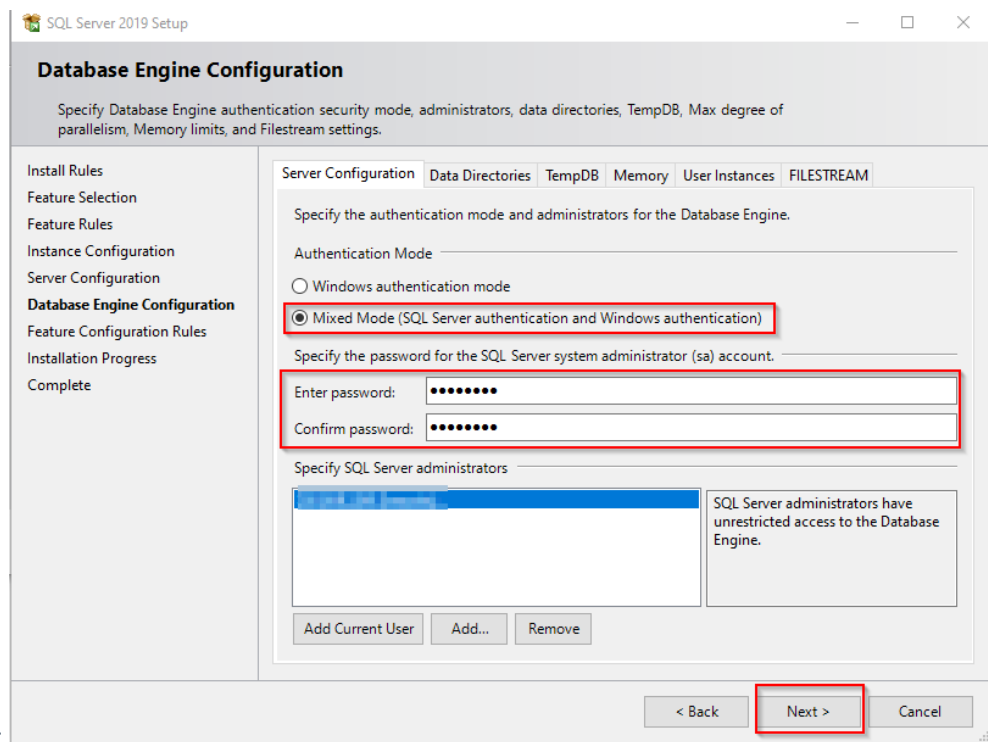
8. On the *Instance Configuration* window, choose the *Named instance* option and enter a name for the SQL instance. In this example, it is 'Agvance'. Select **Next**.



9. On the *Server Configuration* window, make sure the *Startup Type* for the *SQL Server Browser* service is set to *Automatic* and select **Next**.

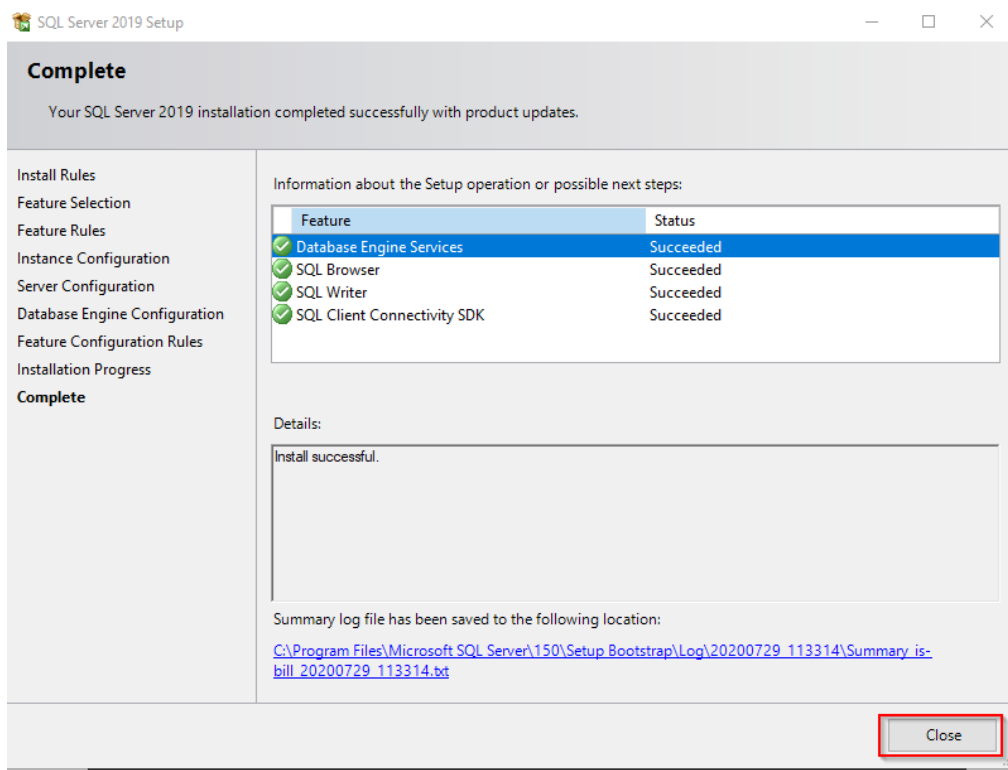


10. Choose the *Mixed Mode (SQL Server authentication and Windows authentication)* option and create a password.



Select **Next**.

11. Select the **Install** button and allow the install to finish. Select **Close**.



Installing Management Studio

1. Go to <https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms>, and download SQL Server Management Studio.

Download SQL Server Management Studio (SSMS)

07/22/2020 • 5 minutes to read • 28

Applies to: ✓ SQL Server (all supported versions) ✓ Azure SQL Database ✓ Azure SQL Managed Instance ✓ Azure Synapse Analytics

SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure, from SQL Server to Azure SQL Database. SSMS provides tools to configure, monitor, and administer instances of SQL Server and databases. Use SSMS to deploy, monitor, and upgrade the data-tier components used by your applications, and build queries and scripts.

Use SSMS to query, design, and manage your databases and data warehouses, wherever they are - on your local computer, or in the cloud.

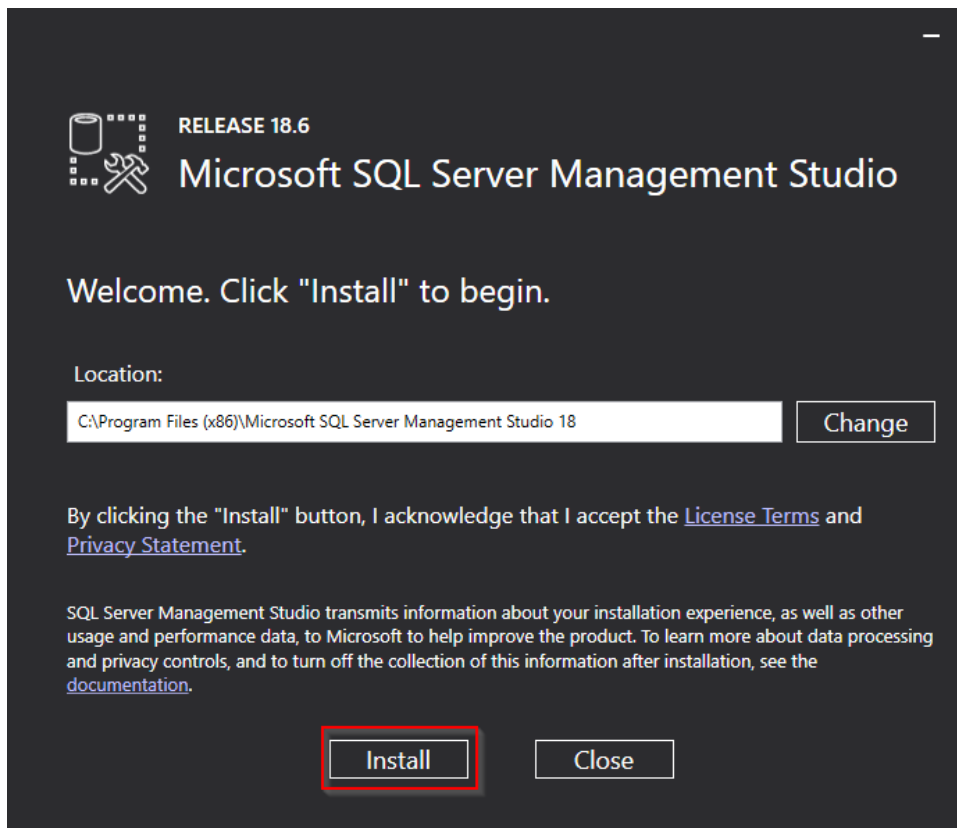
SSMS is free!

Download SSMS

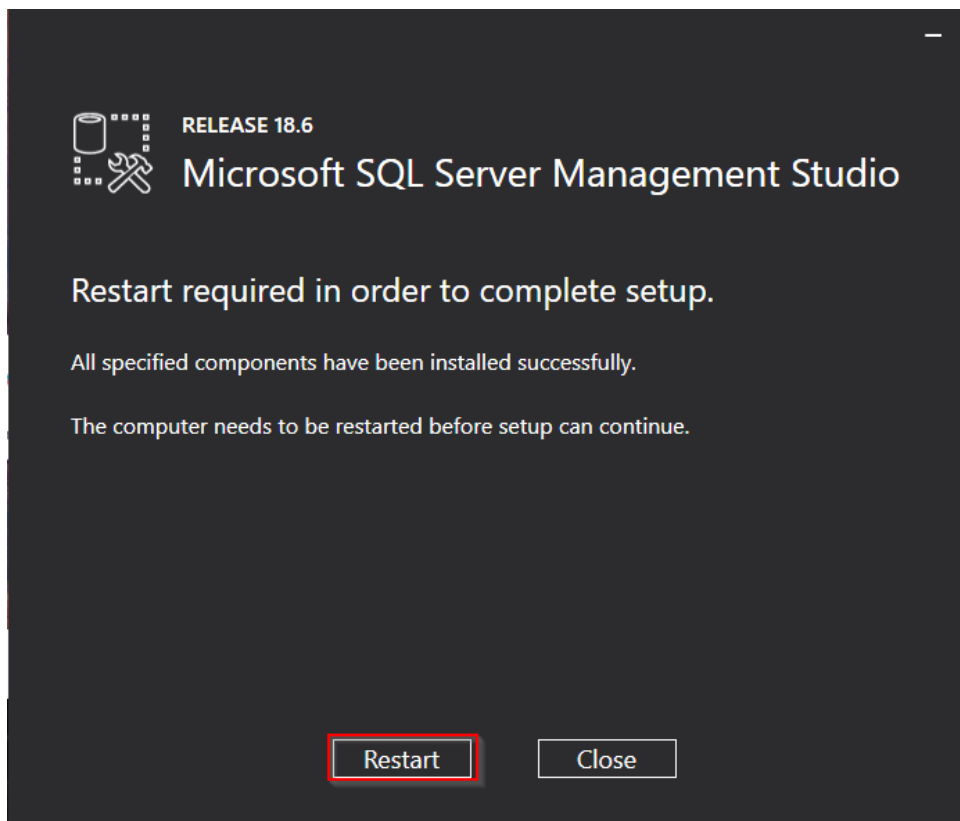
 [Download SQL Server Management Studio \(SSMS\)](#)

SSMS 18.6 is the latest general availability (GA) version of SSMS. If you have a previous GA version of SSMS 18 installed, installing SSMS 18.6 upgrades it to 18.6.

2. After the download completes, run the file and then choose the **Install** button.

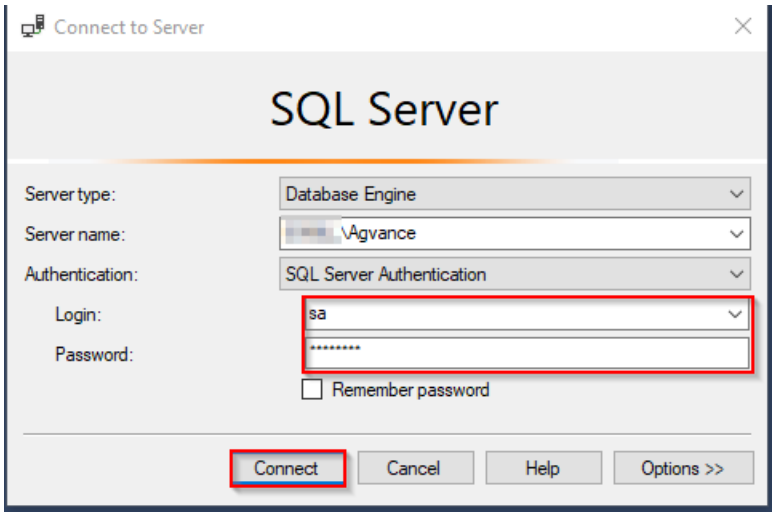


3. As the installation progresses, there may be a prompt to reboot the machine to complete the installation.

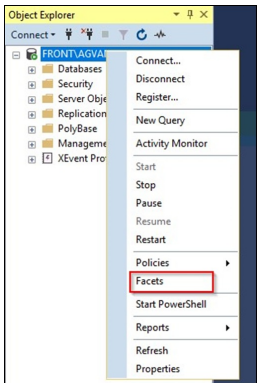


Configuring SQL Express 2019

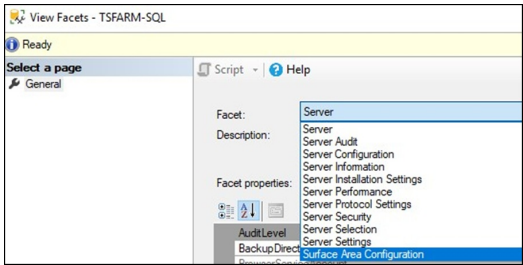
1. Open SQL Server Management Studio and log in via *SQL Server Authentication* using the *sa* login. Enter the password created on Step 10 of the *Installing SQL Express 2019* section of this guide.



2. After logging in, right-click on the SQL Server instance name, and select *Facets*.



3. From the Server drop-down list, choose *Surface Area Configuration*.



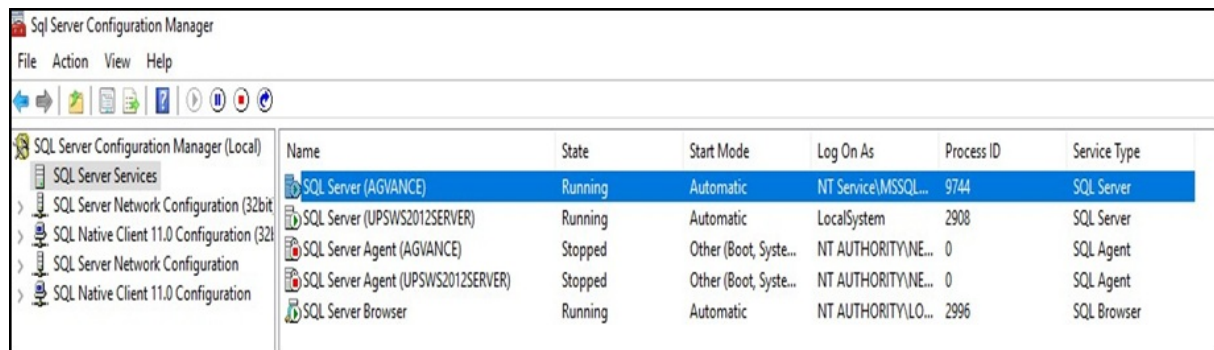
4. Set the *XPCmdShellEnabled* option to *True* and exit SQL Server Management Studio.

AdHocRemoteQueriesEnabled	False
ClrIntegrationEnabled	False
DatabaseMailEnabled	True
OleAutomationEnabled	False
RemoteDacEnabled	False
ServiceBrokerEndpointActive	False
SoapEndpointsEnabled	False
SqlMailEnabled	False
WebAssistantEnabled	Property value 'WebAssistantEnabled' is not available.
XPCmdShellEnabled	True
	True
	False

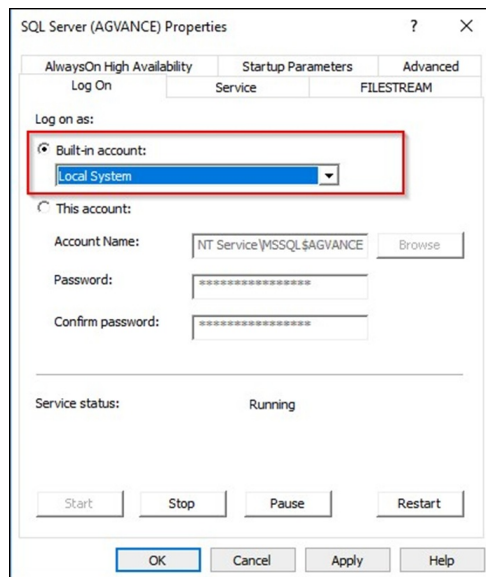
5. Open the SQL Server Configuration Manager by navigating to

C:\Windows\SysWOW64\SQLServerManager15.msc.

6. In the left panel, select *SQL Server Services*. In the right panel, right-click the installed SQL Server instance, and choose *Properties*.



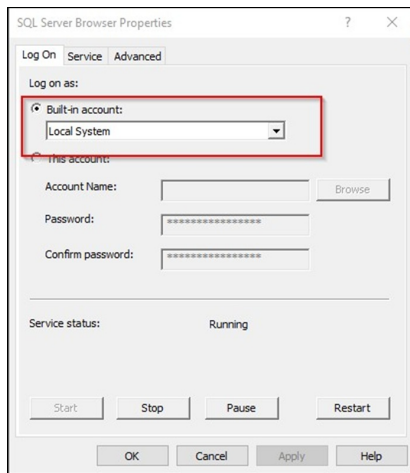
7. On the *Log On* tab, select the *Built-in account* option, and choose *Local System* from the drop-down list. Select **Apply**. When the prompt to restart the service appears, select **OK**.



8. In the right panel of the *SQL Configuration Manager* window, right-click *SQL Server Browser*, and choose *Properties*.

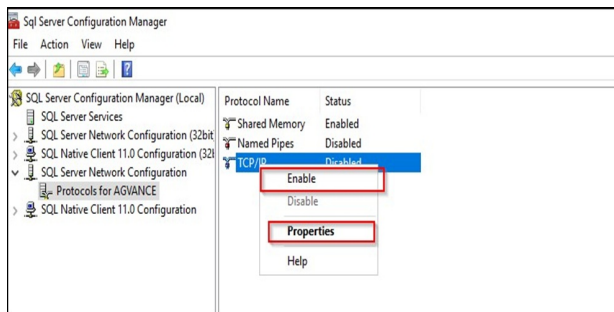
Name	State	Start Mode	Log On As	Process ID
SQL Server (AGV...	Running	Automatic	LocalSystem	4580
SQL Full-text Filte...	Running	Manual	NT Service\MSSQL...	6400
SQL Server Launc...	Running	Automatic	NT Service\MSSQL...	6908
SQL Server Agent...	Stopped	Other (Boot, Syste...	NT AUTHORITY\NE...	0
SQL Server Browser	Running	Automatic	LocalSystem	4452

9. Similar to how the SQL Service is set up, select the *Built-in account* option on the *Log On* tab, and choose *Local System* from the drop-down menu. Click **Apply** and select **OK** when prompted.

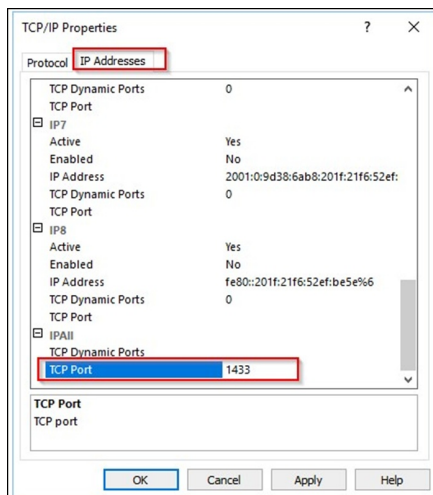


10. Select the *SQL Server Network Configuration* in the left panel of the *SQL Server Configuration Manager* window.
11. In the left panel, double-click the option for the installed SQL instance.
12. Right-click the *TCP/IP* option, and select *Enable*. When the prompt to restart the instance appears, select **OK**.

Right-click *TCP/IP* again, and select *Properties*.

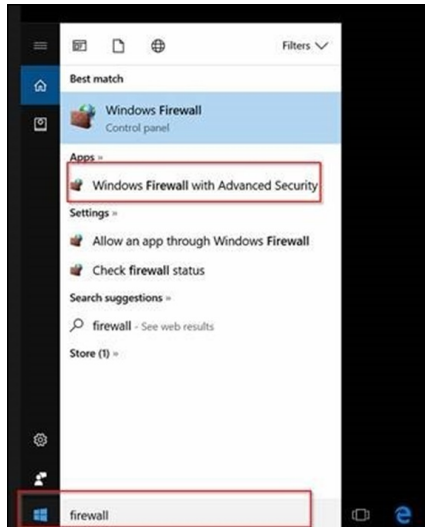


13. Go to the *IP Addresses* tab and scroll to the bottom of the window. Remove any TCP Dynamic Ports that may be listed (this value will most likely be 0), and then enter a port number for the TCP Port option (choose any port number desired). Write this port number down, as it is needed later when creating a firewall rule. Select **Apply** and then **OK** when the warning to restart the SQL Service appears.



14. Return to the *SQL Server Services* option in the left panel of the *SQL Server Configuration Manager* window.
Restart both the SQL Server Service (with the installed instance name) and the SQL Server Browser. This can

15. Close the *SQL Server Configuration Manager* and open the machine's Windows Firewall with Advanced Security.
16. On the desktop, in the search box of the Taskbar, type in "firewall". Select *Windows Firewall with Advanced Security*.



The screenshot shows the Windows Firewall with Advanced Security console. The left pane displays a tree view with 'Inbound Rules' selected and highlighted with a red rectangle. The main pane shows a list of inbound rules with columns for Name, Group, and Profile. Two rules are visible: 'CyberLink PowerDirector' and 'CyberLink PowerDVD 14 Media Server Ser...'. The right pane, titled 'Actions', contains a 'New Rule...' button, which is also highlighted with a red rectangle.

New Inbound Rule Wizard

Rule Type

Select the type of firewall rule to create.

Steps:

- Rule Type
- Program
- Protocol and Ports
- Scope
- Action
- Profile
- Name

What type of rule would you like to create?

☐ **Program**
Rule that controls connections for a program.

☐ **Port**
Rule that controls connections for a TCP or UDP port.

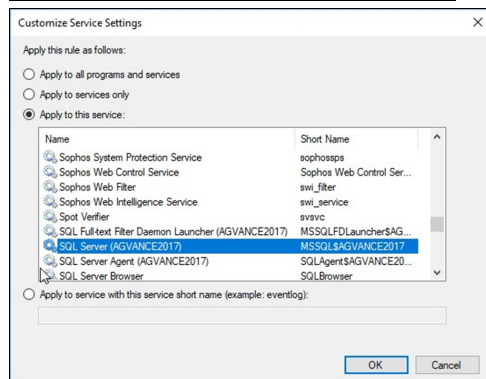
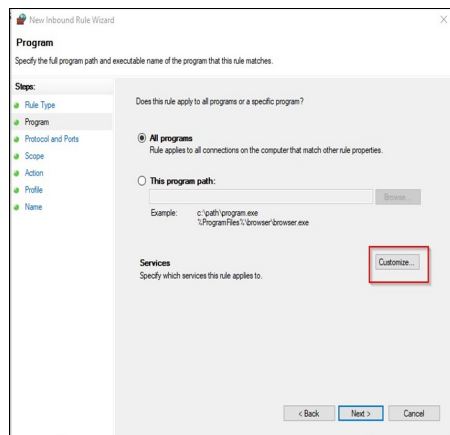
☐ **Predefined:**
Rule that controls connections for a Windows experience.

AllowInRouter

☒ **Custom**
Custom rule.

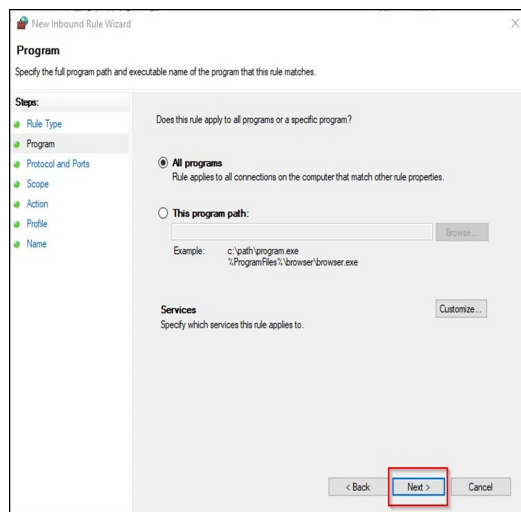
< Back Next > Cancel

19. Select **Customize**.

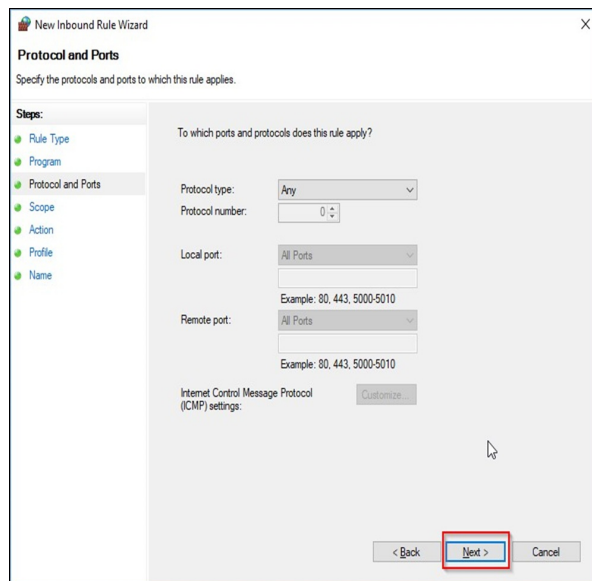


20. Select *Apply to this Service* and scroll down the list of services to select the SQL Server. Select **OK**.

21. Select **Next**.



22. Select **Next**.



New Inbound Rule Wizard

Protocol and Ports
Specify the protocols and ports to which this rule applies.

Steps:

- Rule Type
- Program
- Protocol and Ports
- Scope
- Action
- Profile
- Name

To which ports and protocols does this rule apply?

Protocol type:

Protocol number:

Local port:

Example: 80, 443, 5000-5010

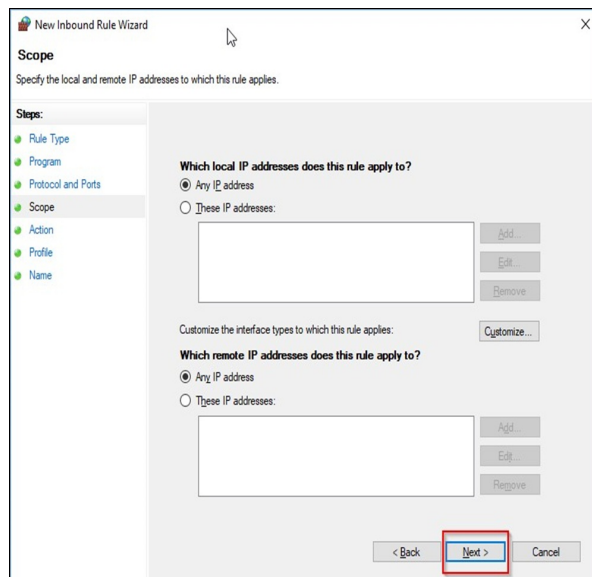
Remote port:

Example: 80, 443, 5000-5010

Internet Control Message Protocol (ICMP) settings:

< Back **Next >** Cancel

23. Select **Next** again.



New Inbound Rule Wizard

Scope
Specify the local and remote IP addresses to which this rule applies.

Steps:

- Rule Type
- Program
- Protocol and Ports
- Scope
- Action
- Profile
- Name

Which local IP addresses does this rule apply to?

☒ Any IP address

☐ These IP addresses:

Customize the interface types to which this rule applies:

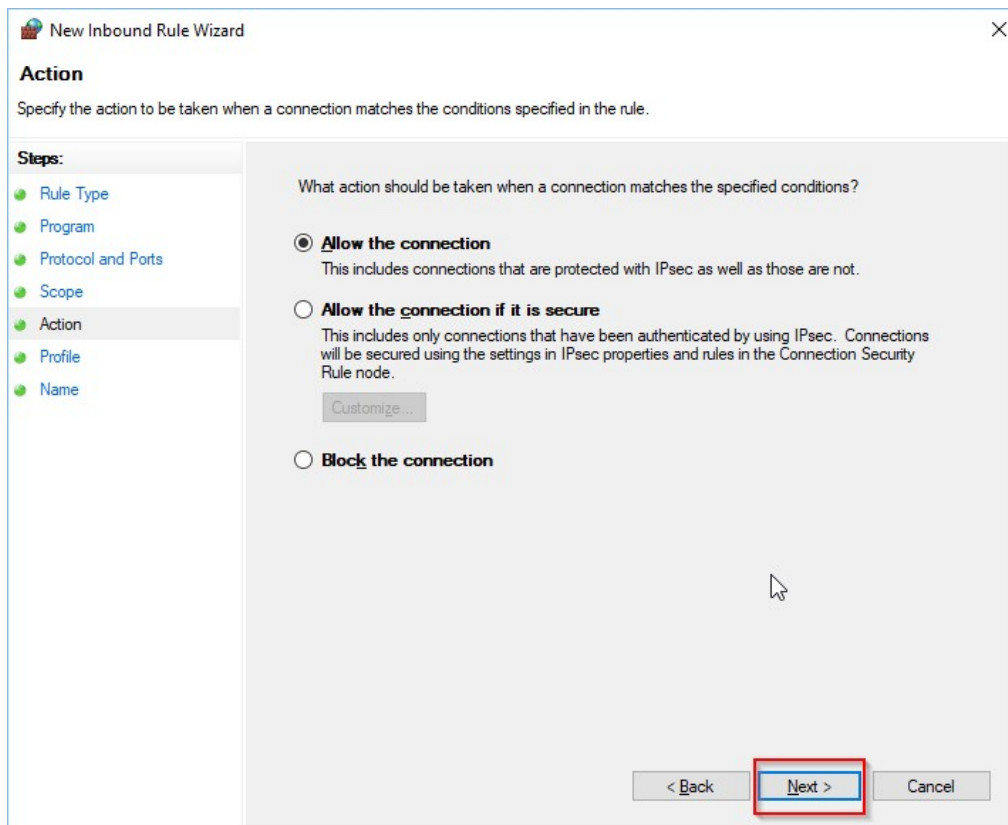
Which remote IP addresses does this rule apply to?

☒ Any IP address

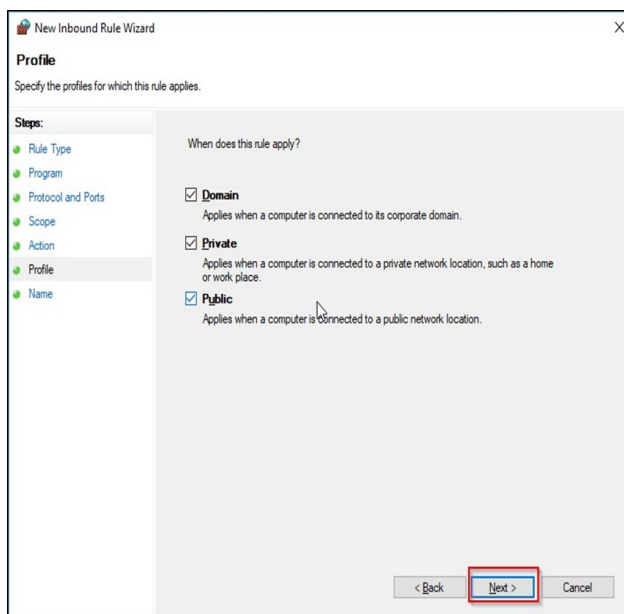
☐ These IP addresses:

< Back **Next >** Cancel

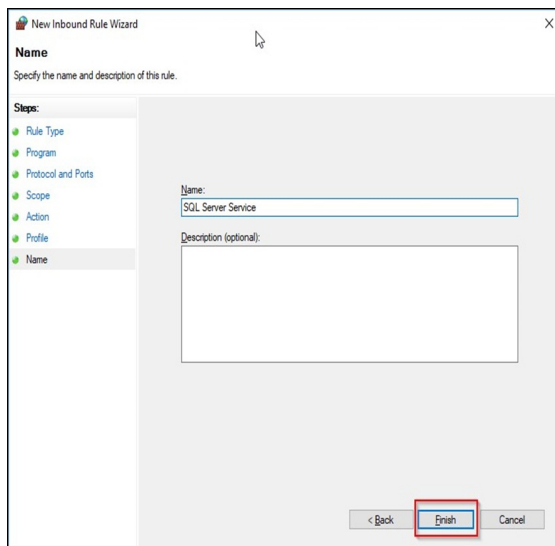
24. Select the option of *Allow the connection* and select **Next**.



25. Select Next.

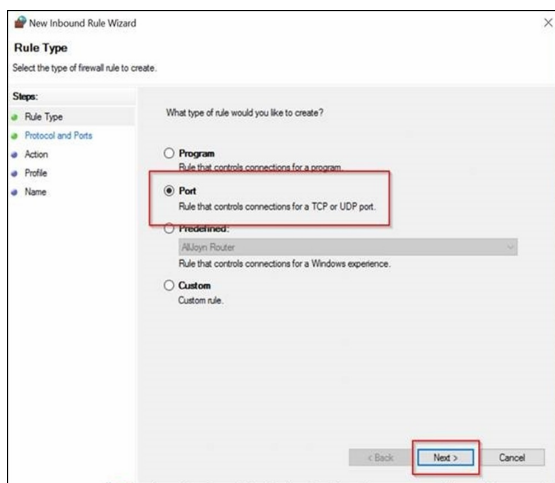


26. Name the rule. For example, the Name below is 'SQL Server Service'. Select **Finish**.

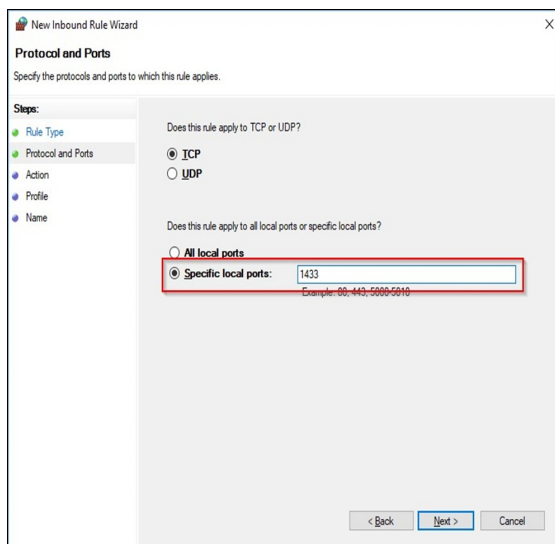


27. Repeat steps 17-26 of this section, but this time, create the rule for the SQL Server Browser Service. Choose the *SQL Server Browser* in Step 20.

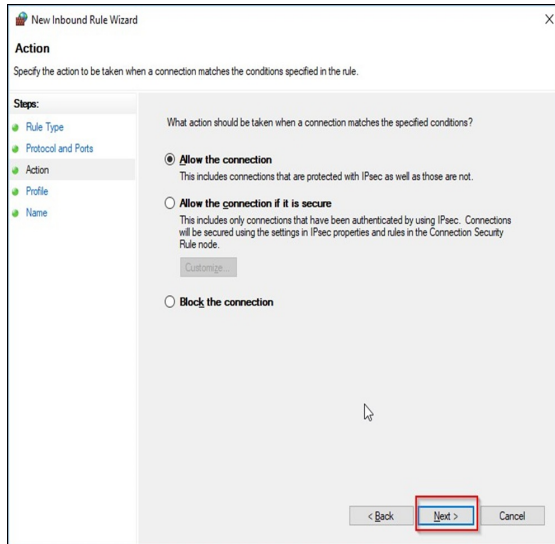
28. Choose to create another rule and select the *Port* option. Select **Next**.



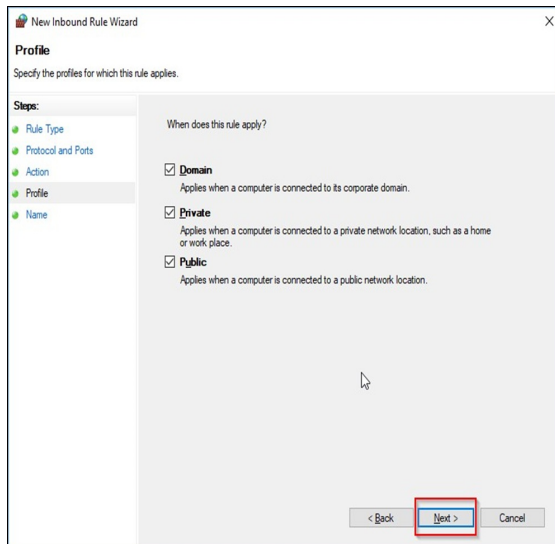
29. Enter the port number configured for the SQL instance ('1433' in this example). Select **Next**.



30. Select the *Allow the connection* option and select **Next**.



31. Select **Next**.



32. Enter a *Name* for the SQL port rule and select **Finish**.

New Inbound Rule Wizard

Name

Specify the name and description of this rule.

Steps:

- Rule Type
- Protocol and Ports
- Action
- Profile
- Name

Name:
SQL Port 1433

Description (optional):

< Back Finish Cancel

SQL Express 2019 should now be installed and configured.