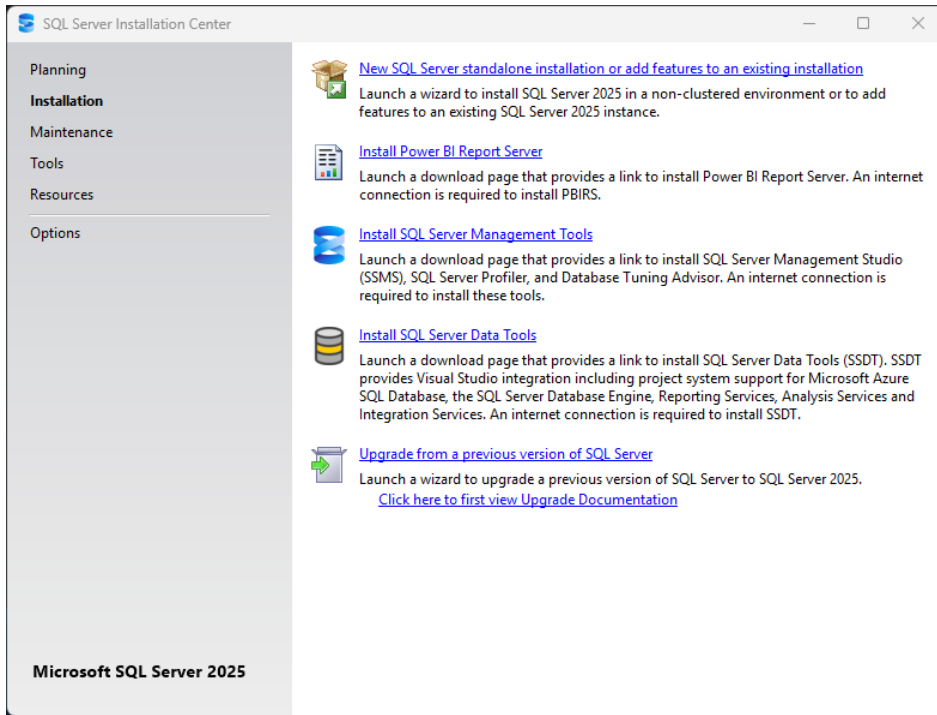
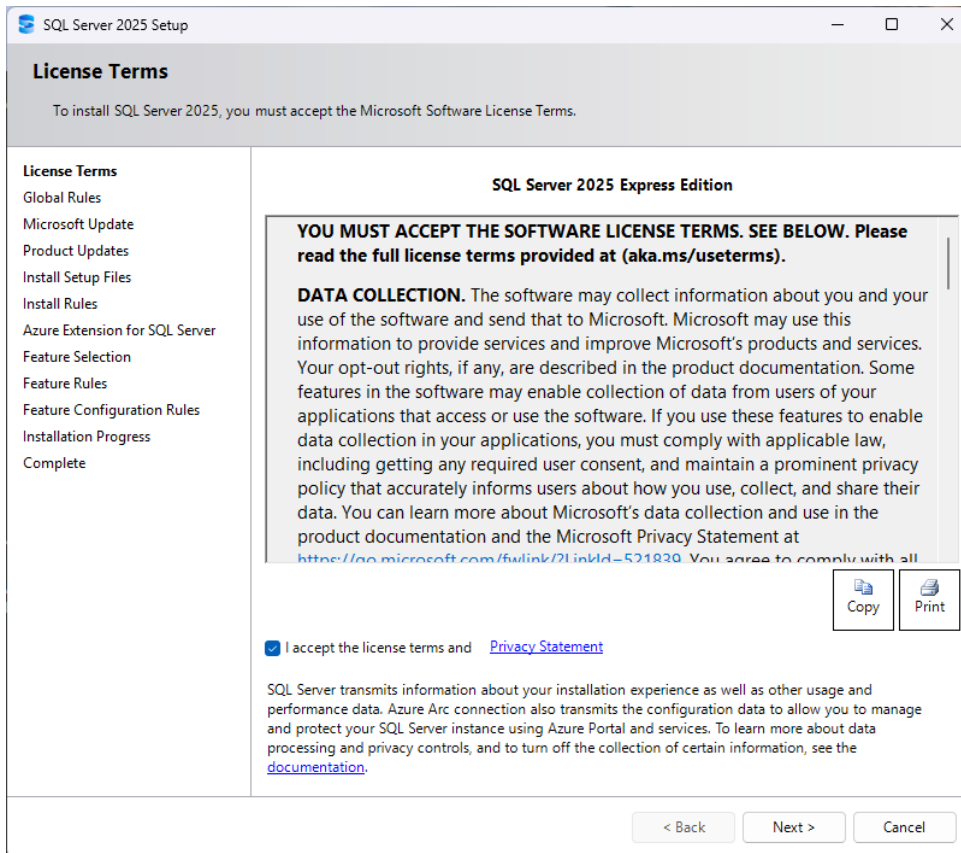


SQL Server and SQL Server Management Studio Install (Windows)

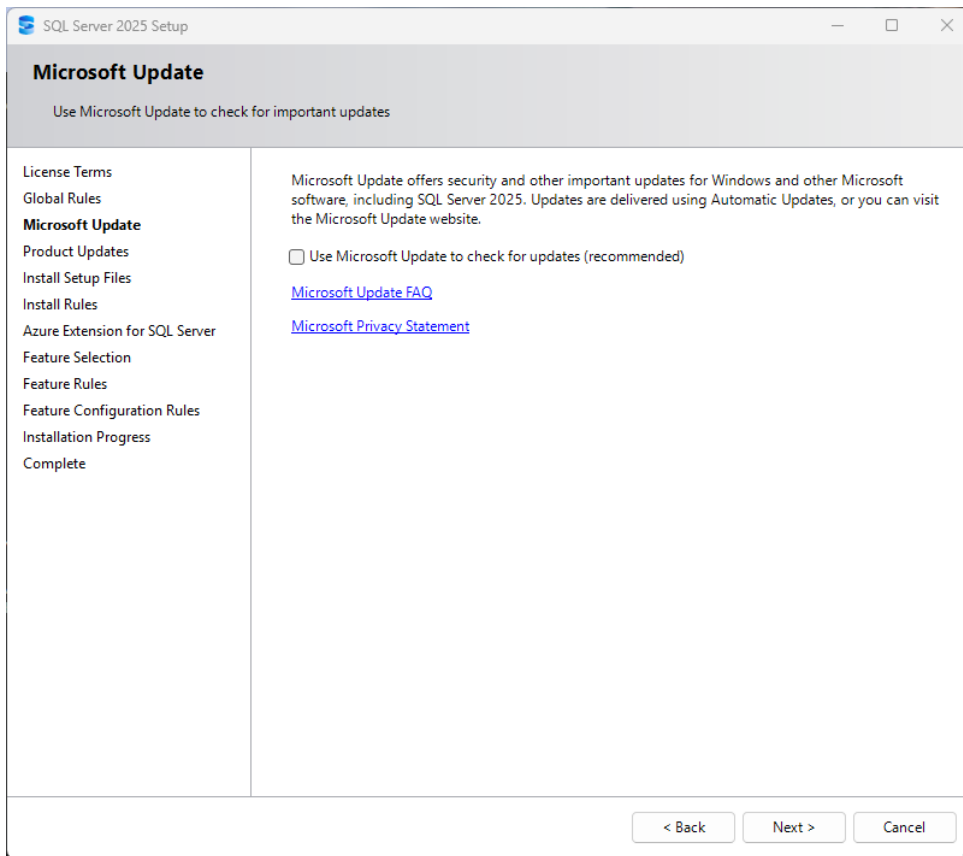
1. Start the installation and select custom installation
2. Select New SQL Server standalone installation



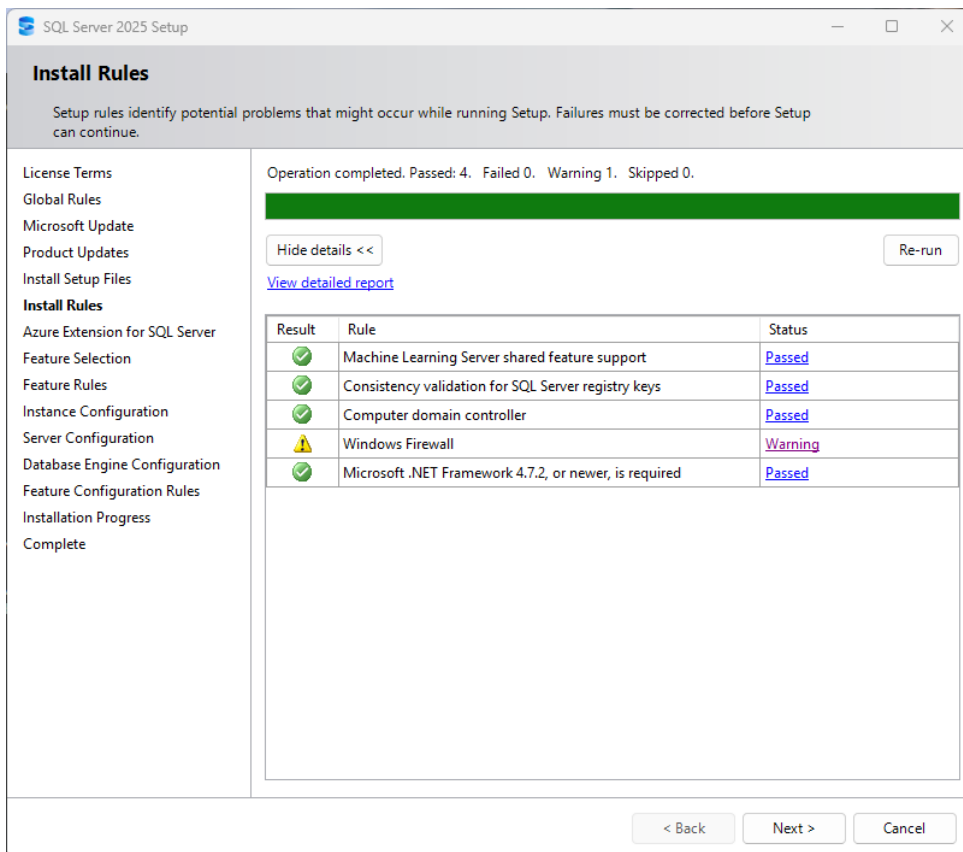
3. Accept the license and click Next



4. Check Use Microsoft Update to check for updates and click Next



5. You may get a warning from the Windows firewall about port opening. It should be okay for our use. Click Next.



6. Uncheck the Azure Extension for SQL Server. We do not need it for our purposes. Click Next.

SQL Server 2025 Setup

Azure Extension for SQL Server

Azure Extension for SQL Server simplifies hybrid management, enhances security, optimizes costs, and ensures compliance.

☐ Azure Extension for SQL Server

This feature connects SQL Server instances to Azure for centralized management such as best practices assessments (BPA), automated backups, Microsoft Entra ID authentication, and flexible licensing options as detailed at <https://aka.ms/azure-extension-for-sql-server>. To enable this feature, login to Azure.

Start free If you don't have an Azure account, create an Azure free account to get started.

☐ Use Azure Login

☒ Use Service Principal

Azure Service Principal ID*

Azure Service Principal Secret*

Azure Tenant ID*

Azure Subscription ID*

Azure Resource Group*

Azure Region*

Proxy Server URL (optional)

< Back Next > Cancel

7. The default feature selection should be good enough for us. Click Next.

SQL Server 2025 Setup

Feature Selection

Select the Express features to install.

License Terms

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Azure Extension for SQL Server

Feature Selection

Feature Rules

Instance Configuration

Server Configuration

Database Engine Configuration

Feature Configuration Rules

Installation Progress

Complete

Features:

Instance Features

- ☒ Database Engine Services
- ☒ SQL Server Replication
- ☒ AI Services and Language Extensions
- ☒ Full-Text and Semantic Extractions for Search
- ☐ PolyBase Query Service for External Data

Shared Features

- ☐ LocalDB

Redistributable Features

Select All Unselect All

Feature description:

The configuration and operation of each instance feature of a SQL Server instance is isolated from other SQL Server instances. SQL Server instances can operate side-by-side on the same computer.

Prerequisites for selected features:

Already installed:

- Windows PowerShell 3.0 or higher
- Microsoft Visual C++ 2017 Redistributable

To be installed from media:

- Microsoft MPI v10

Disk Space Requirements

Drive C: 1855 MB required, 616478 MB available

Instance root directory: C:\Program Files\Microsoft SQL Server\ ...

Shared feature directory: C:\Program Files\Microsoft SQL Server\ ...

Shared feature directory (x86): C:\Program Files (x86)\Microsoft SQL Server\ ...

< Back Next > Cancel

8. The default Named instance should work for us. Click Next.

The screenshot shows the 'Instance Configuration' window of the SQL Server 2025 Setup. The window title is 'SQL Server 2025 Setup'. The main heading is 'Instance Configuration' with a subtitle 'Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the installation path.' On the left is a navigation pane with the following items: License Terms, Global Rules, Microsoft Update, Product Updates, Install Setup Files, Install Rules, Azure Extension for SQL Server, Feature Selection, Feature Rules, Instance Configuration (highlighted), Server Configuration, Database Engine Configuration, Feature Configuration Rules, Installation Progress, and Complete. The main area has two radio buttons: 'Default instance' (unselected) and 'Named instance: *' (selected). Next to 'Named instance: *' is a text box containing 'SQLExpress'. Below this is an 'Instance ID:' label followed by a text box containing 'SQLEXPRESS'. At the bottom of the main area, it says 'SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL17.SQLEXPRESS'. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

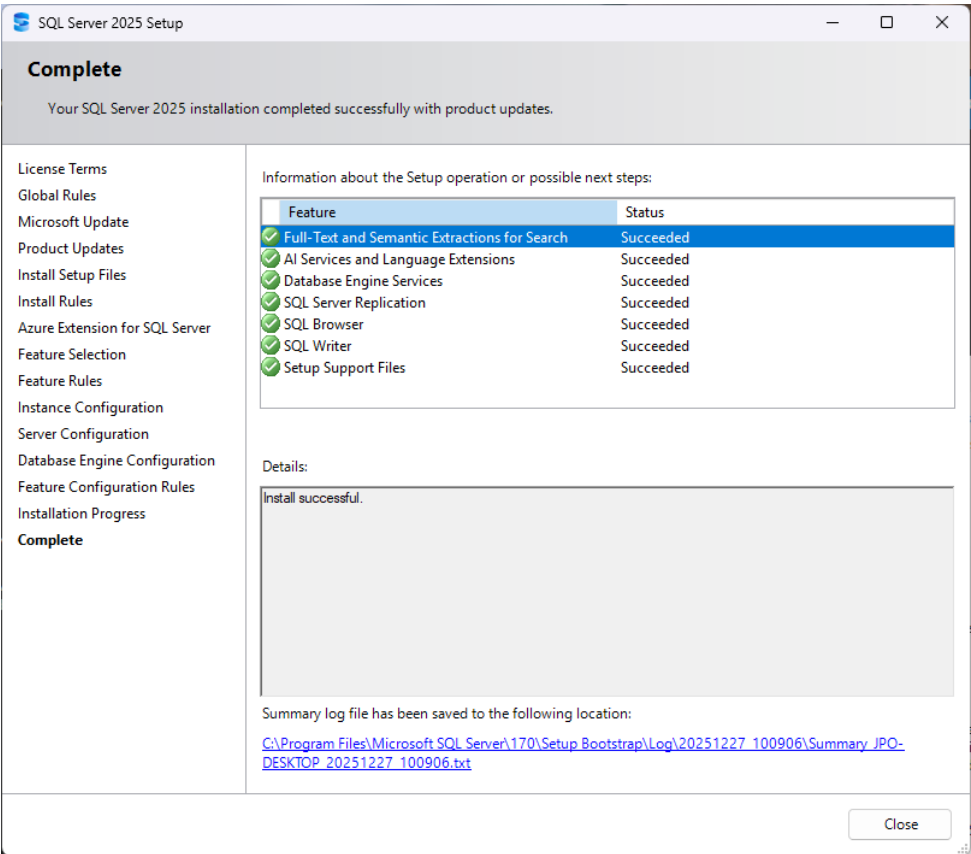
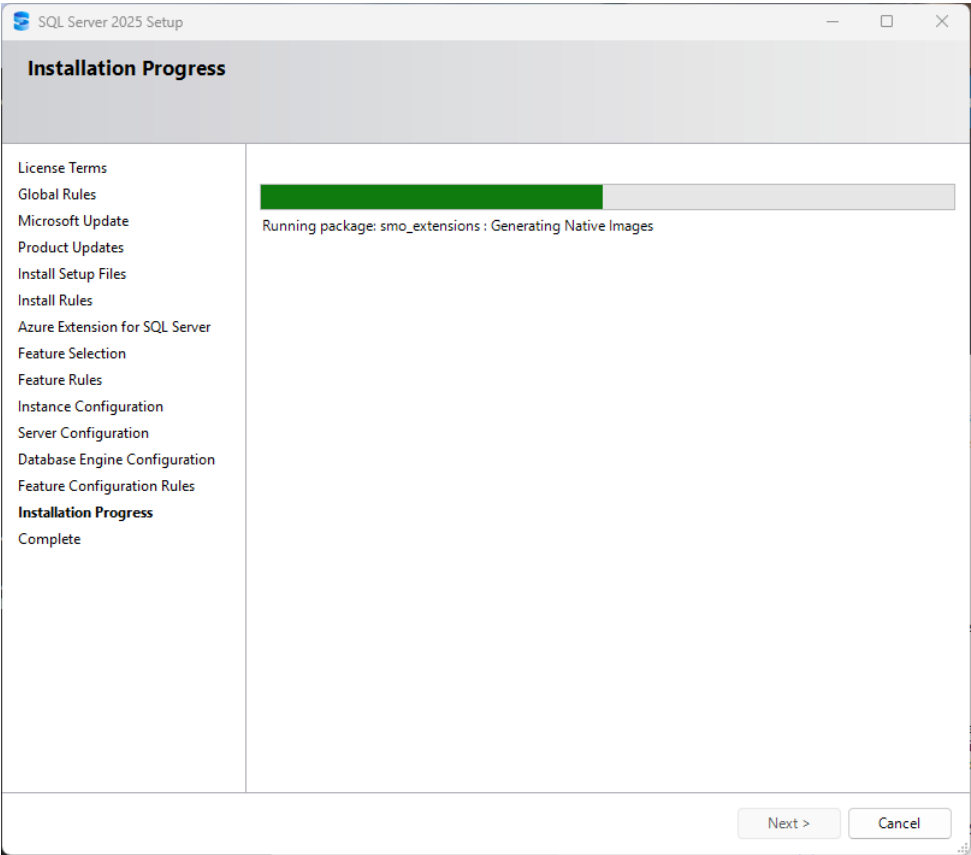
9. The default server configuration should work for us. Click Next.

The screenshot shows the 'Server Configuration' window of the SQL Server 2025 Setup. The window title is 'SQL Server 2025 Setup'. The main heading is 'Server Configuration' with a subtitle 'Specify the service accounts and collation configuration.' On the left is a navigation pane with the following items: License Terms, Global Rules, Microsoft Update, Product Updates, Install Setup Files, Install Rules, Azure Extension for SQL Server, Feature Selection, Feature Rules, Instance Configuration, Server Configuration (highlighted), Database Engine Configuration, Feature Configuration Rules, Installation Progress, and Complete. The main area has two tabs: 'Service Accounts' (selected) and 'Collation'. Below the tabs is a text box stating 'Microsoft recommends that you use a separate account for each SQL Server service.' Below this is a table with the following data:

Service	Account Name	Password	Startup Type
SQL Server Database Engine	NT Service\MSSQL\$SQL...		Automatic
SQL Server Launchpad	NT Service\MSSQLLaun...		Automatic
SQL Full-text Filter Daemon Launc...	NT Service\MSSQLFDLa...		Manual
SQL Server Browser	NT AUTHORITY\LOCAL ...		Disabled

Below the table is a checkbox labeled 'Grant Perform Volume Maintenance Tasks privilege to SQL Server Database Engine Service'. Below the checkbox is a text box stating 'This privilege enables instant file initialization by avoiding zeroing of data pages. This may lead to information disclosure by allowing deleted content to be accessed.' Below the text box is a link labeled 'Click here for details'. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

10. For the Server Configuration, I suggest using Mixed Mode and enabling the SA account and adding your Windows account as a Server Administrator. The remaining default settings are suitable. Click Next.
11. It will go through the installation. Click Close when it completes.



12. Now you need to ensure that TCP/IP is enabled. Run the SQL Server Configuration Manager.

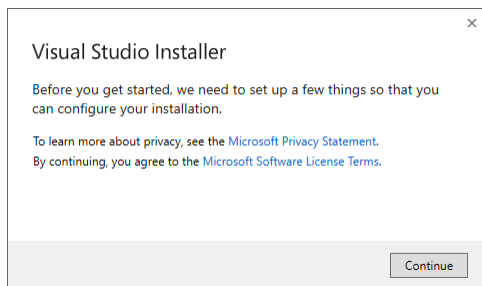
Follow the steps at <https://dbasco.com/enabling-tcp-connections-in-sql-server/> under the section “Enabling TCP/IP in SQL Server Configuration Manager.”

In the IP Address tab, you should decide which addresses to enable or disable based on your system and access needs, and add port 1433 (the default for SQL Server, though you may choose a different one). There is an option at the bottom called IPAll, where you can set port 1433. I cannot recommend a specific IP address, as your system setup will probably differ from mine. For more information:

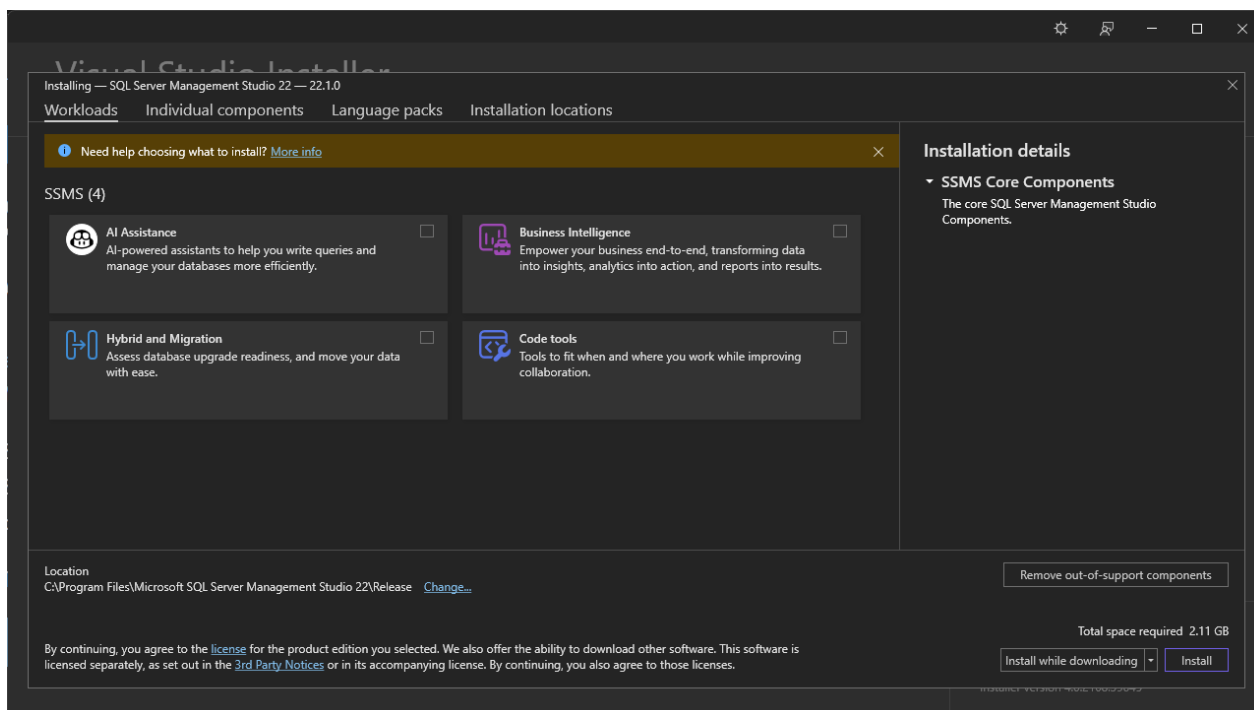
<https://learn.microsoft.com/en-us/sql/tools/configuration-manager/tcp-ip-properties-ip-addresses-tab?view=sql-server-ver17>

You will have to restart the SQL Server service after setting it up. Note: I recommend setting up SQL Server Express with a manual start to prevent it from starting automatically at Windows startup; however, remember to start it when you need it. <https://learn.microsoft.com/en-us/sql/database-engine/configure-windows/scm-services-prevent-automatic-startup-of-an-instance?view=sql-server-ver17>

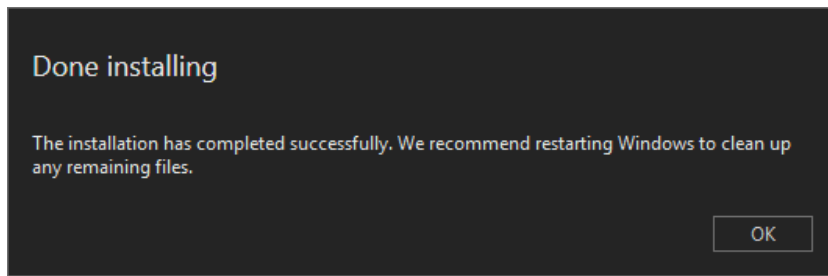
13. Now, download and run the SQL Server Management Studio installation file. It will likely have to set up a few things first. Click Continue



14. Click Install to start the installation.



15. The download and installation may take a couple of minutes. Click OK and exit the installer.



16. Test it by starting the application. You can select “Skip and add accounts later.” As with most Microsoft products, it will probably keep bothering you to use your account.

17. In the Connect dialog box, click Browse to find your SQL Express instance under the Local options. In this example, I am going to use Windows Authentication, but I also recommend using SQL Server Authentication with the SA account you set up during the installation. You will also need to select “Trust Server Certificate” before clicking Connect.

