# SQL Server and SQL Server Management Studio Install (Windows)

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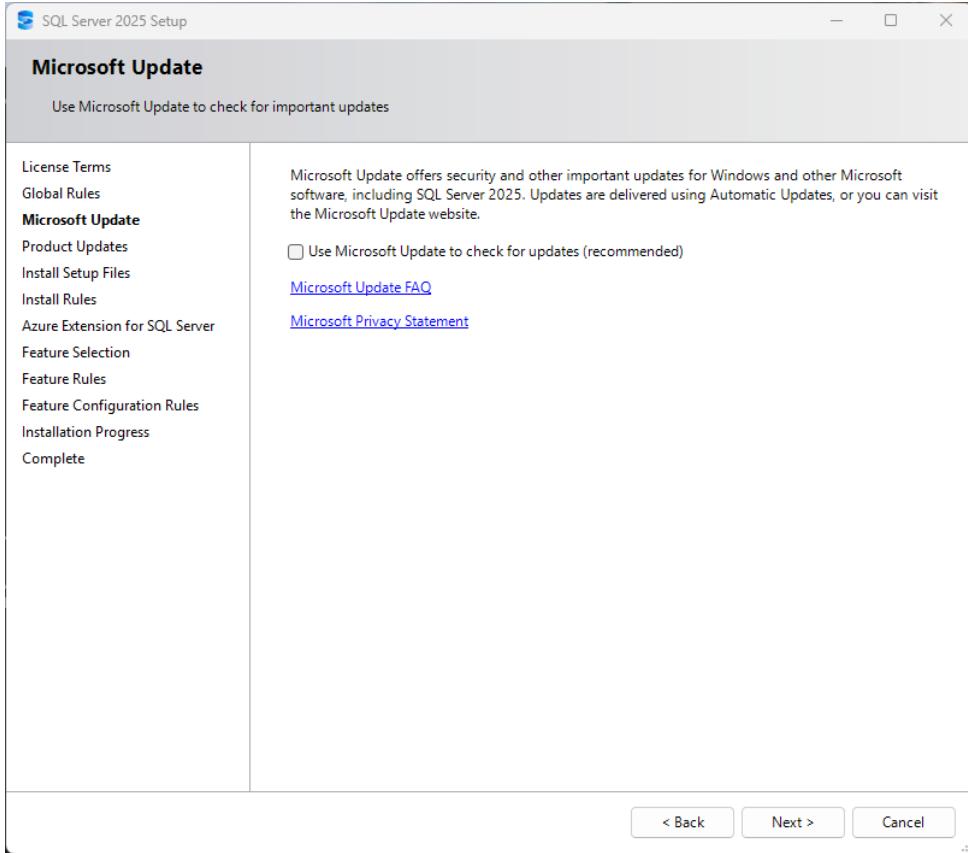
2. Select New SQL Server standalone installation
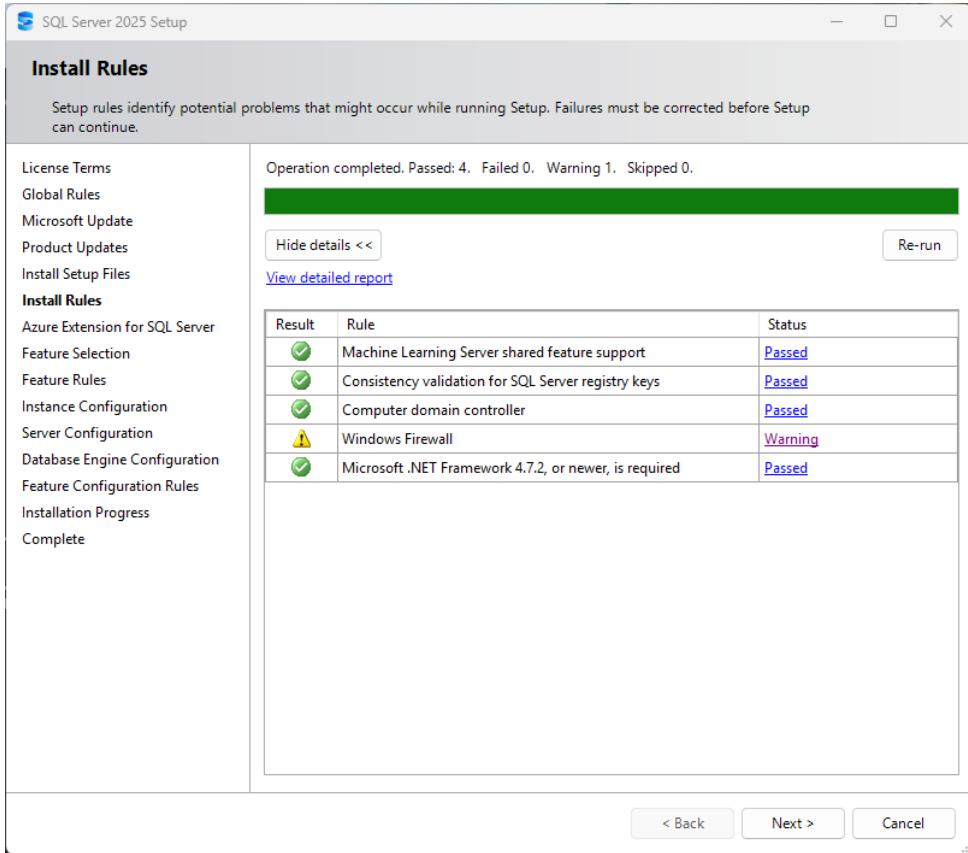

3. Accept the license and click Next
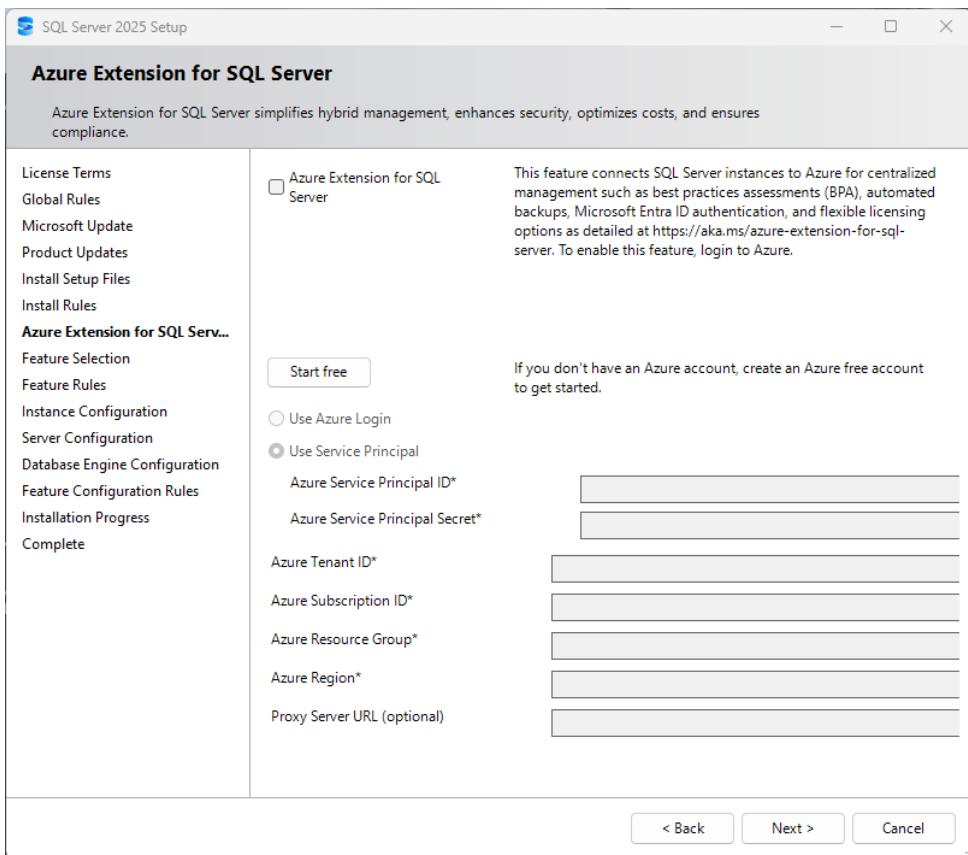
4. Check Use Microsoft Update to check for updates and click Next
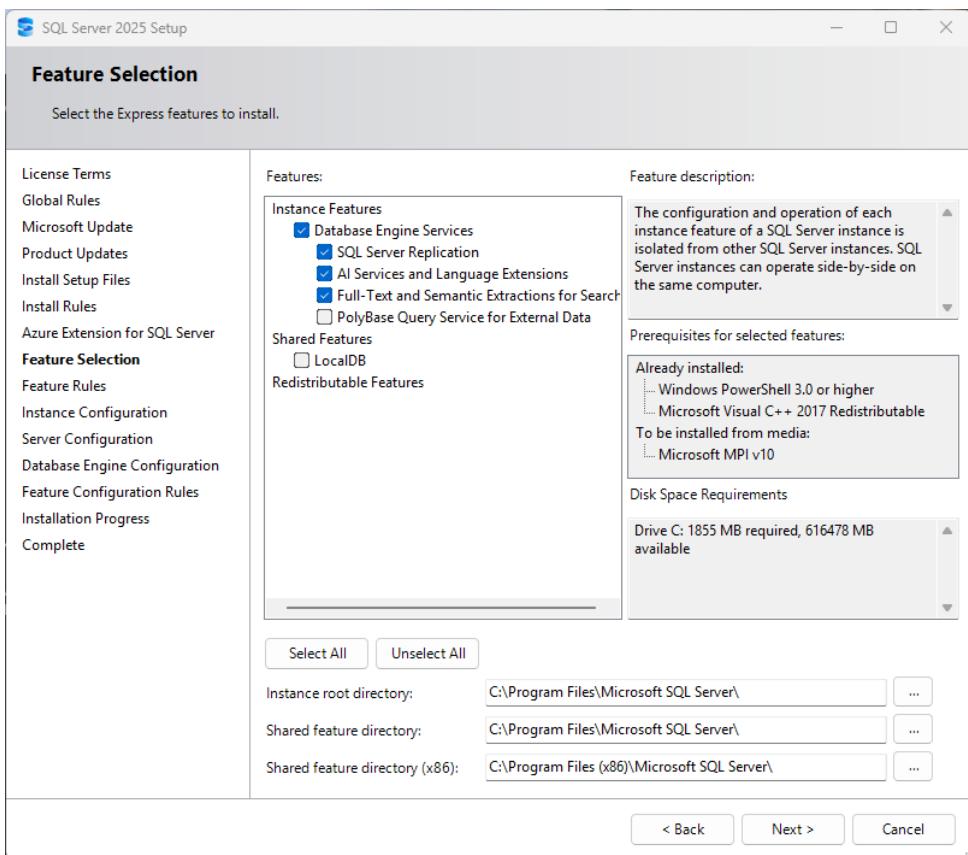
5. You may get a warning from the Windows firewall about port opening. It should be okay for our use. Click Next.
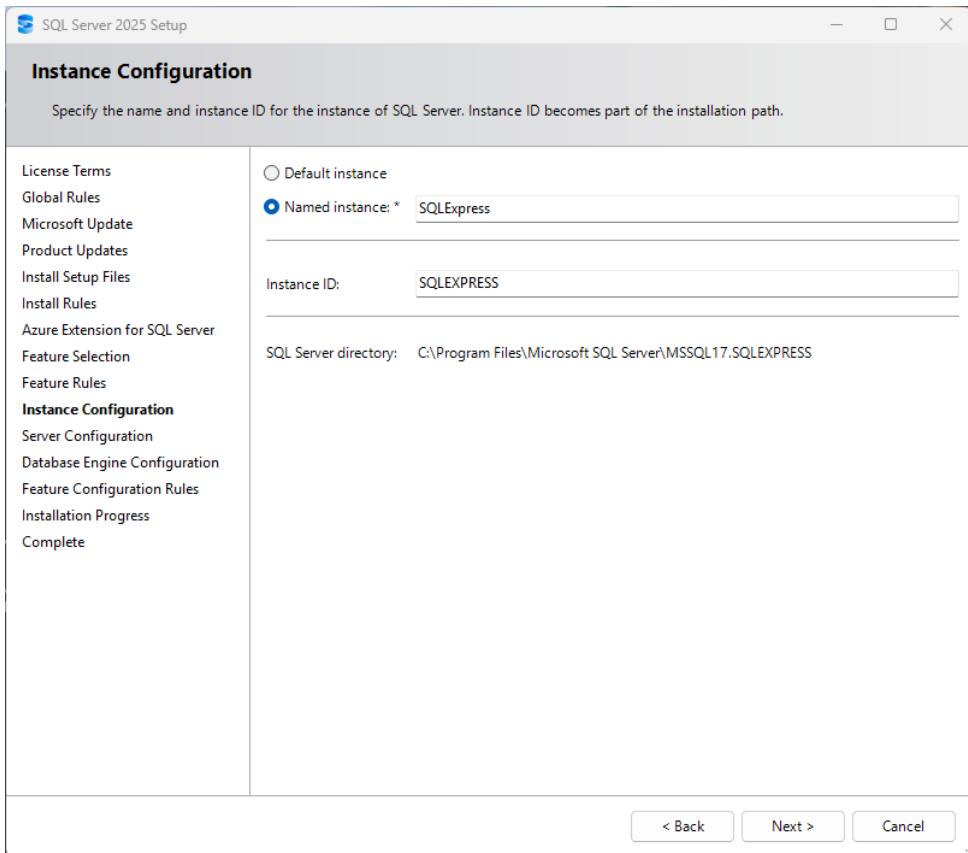
6. Uncheck the Azure Extension for SQL Server. We do not need it for our purposes. Click Next.
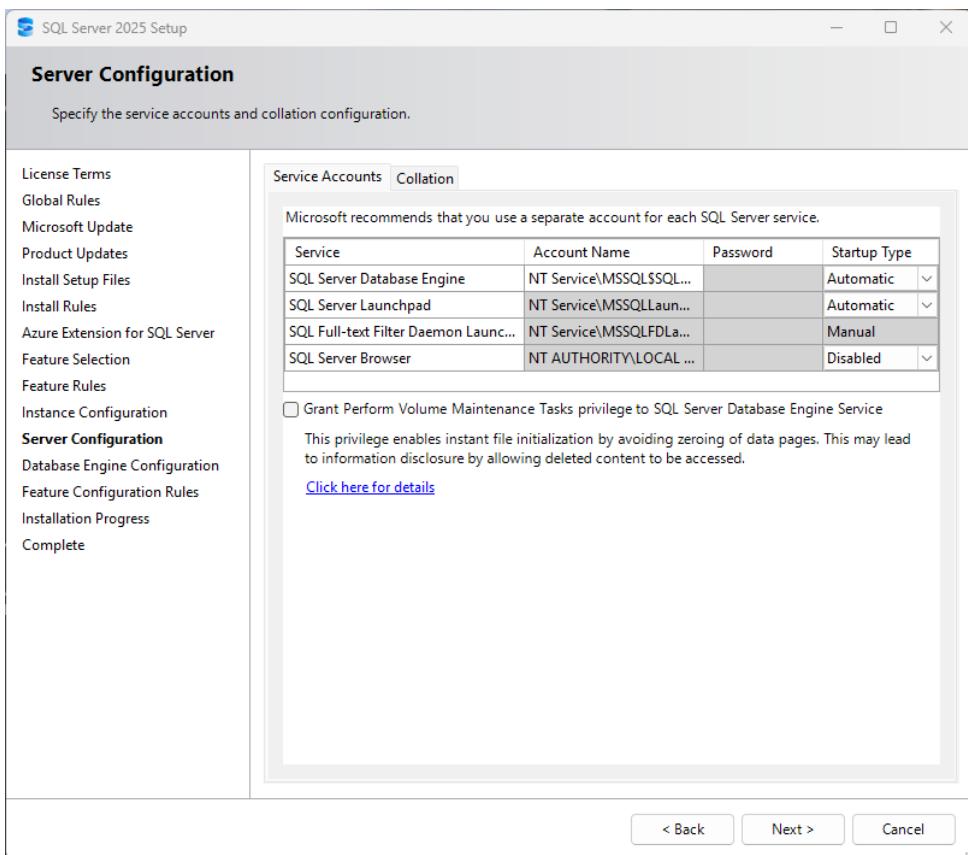
7. The default feature selection should be good enough for us. Click Next.

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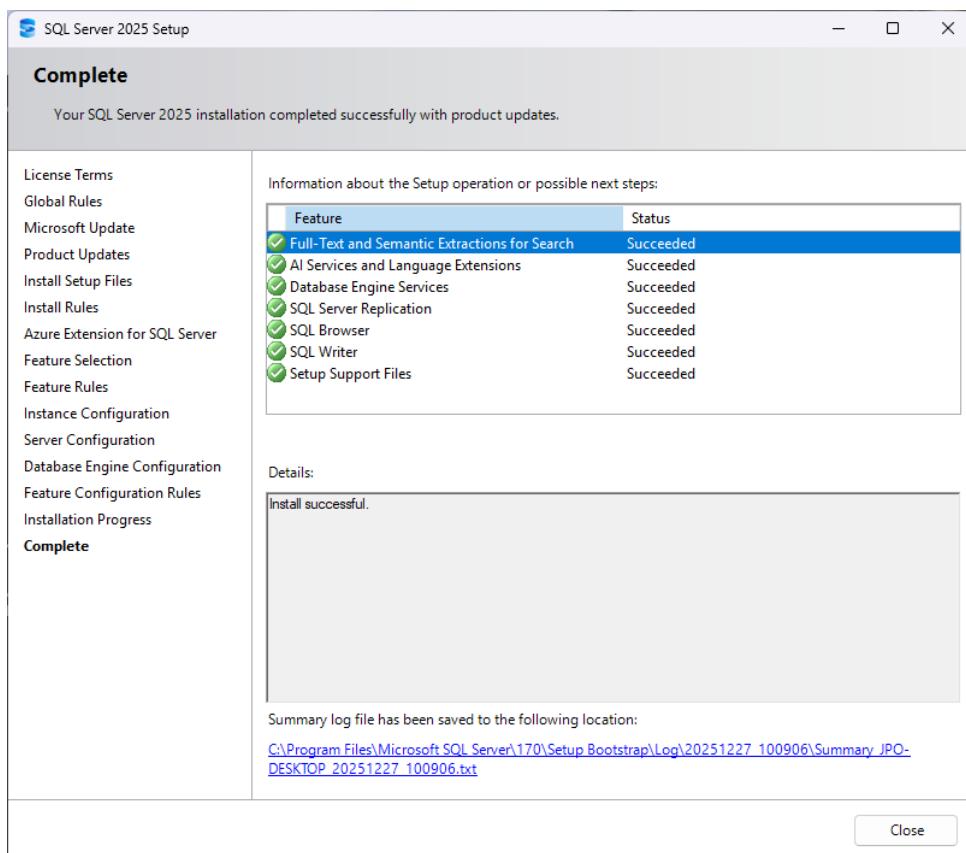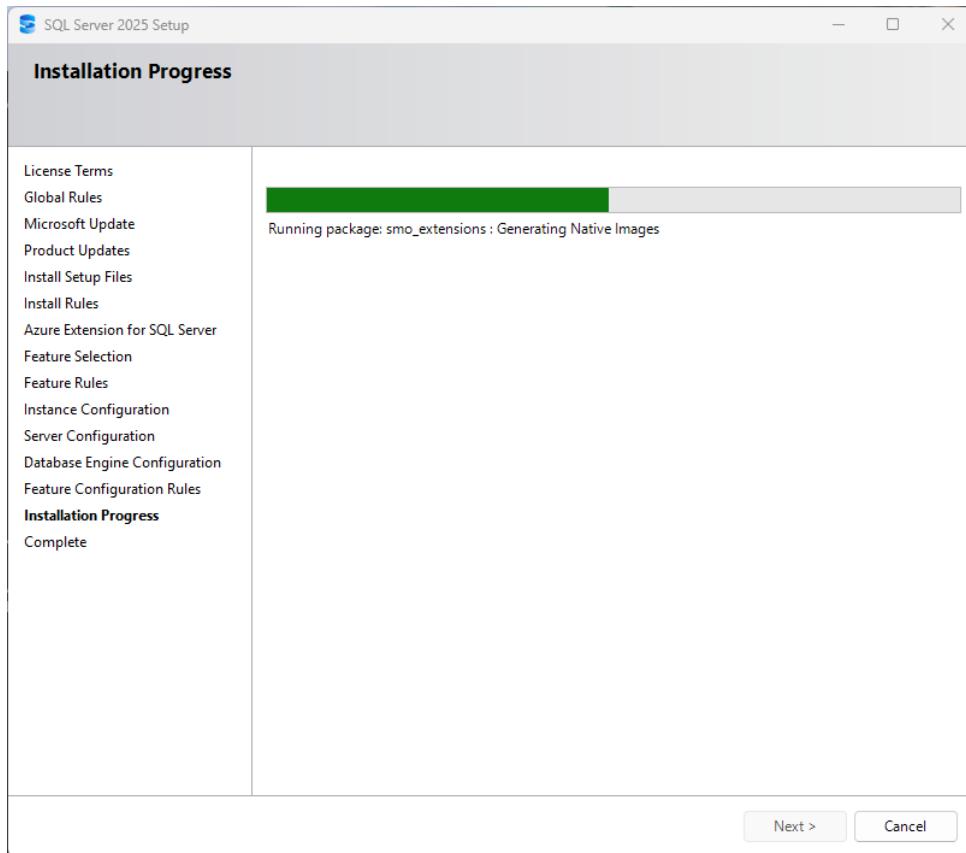
9. The default server configuration should work for us. Click Next.

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."
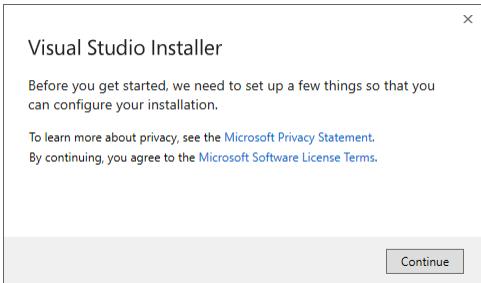
In the IP Address tab, you should decide which addresses to enable or disable based on your system and access needs, and add port 1433 (the default for SQL Server, though you may choose a different one). There is an option at the bottom called IPAll, where you can set port 1433. I cannot recommend a 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
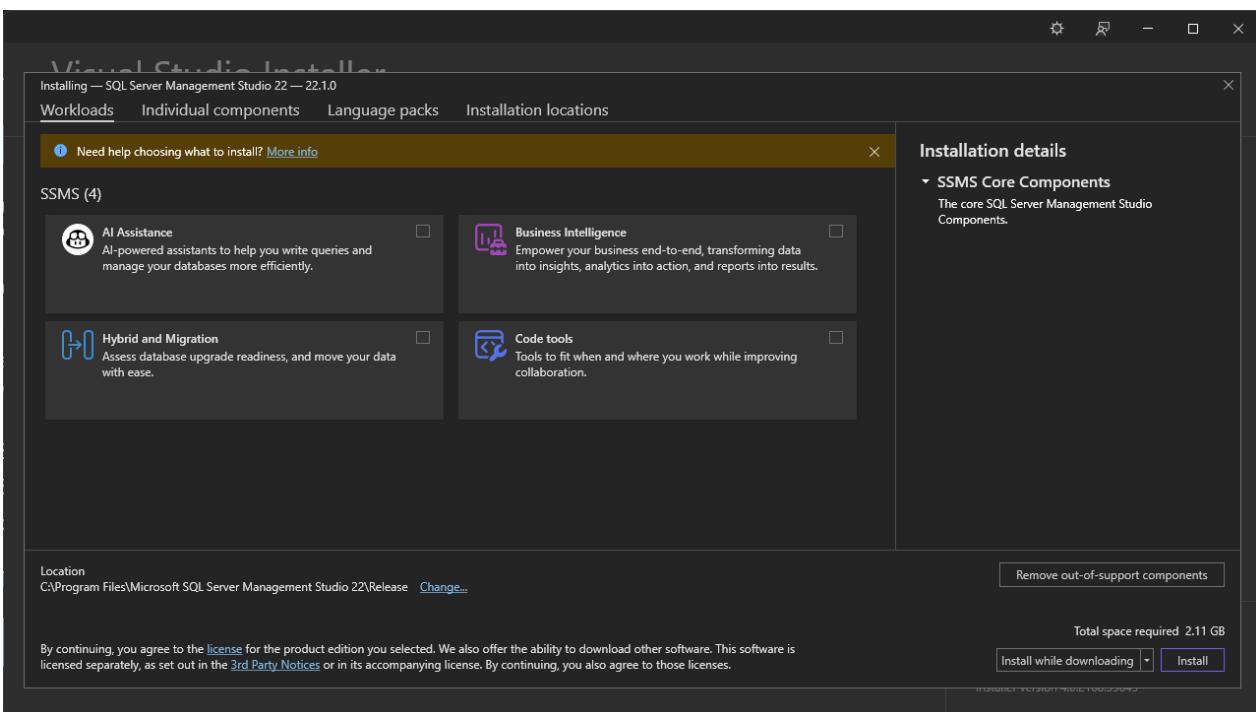
You will have to restart the SQL Server service after setting it up. Note: I recommend setting up SQL Server Express with a manual start to prevent it from starting automatically at Windows startup; however, remember to start it when you need it. https://learn.microsoft.com/en-us/sql/database-engine/configure-windows/scm-services-prevent-automatic-startup-of-an-instance?view=sql-server-ver17
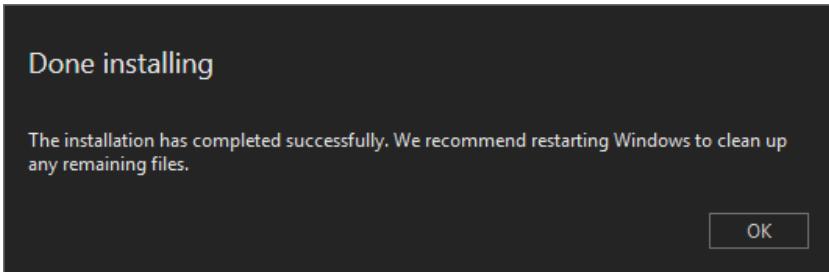
13. Now, download and run the SQL Server Management Studio installation file. It will likely have to set up a few things first. Click Continue

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.