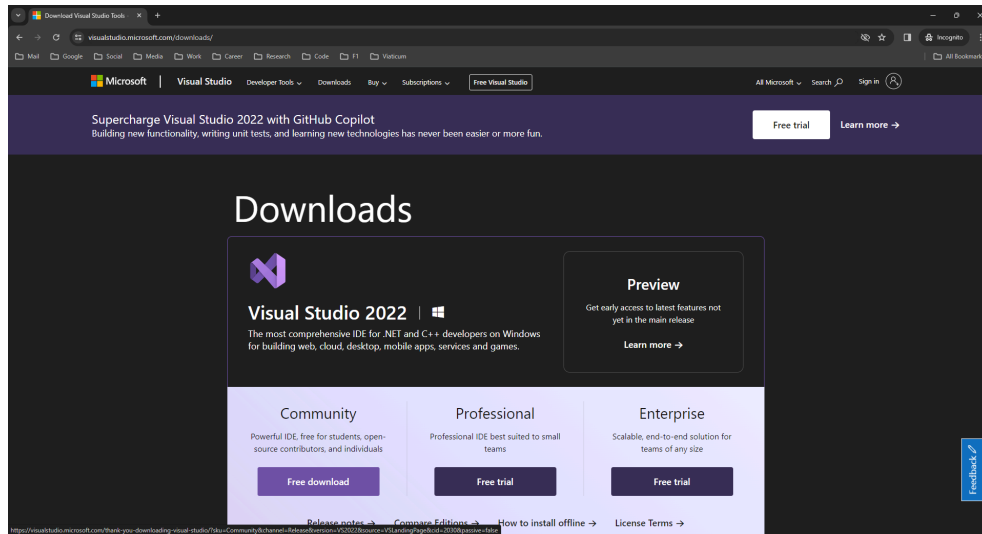


ASP.NET Installation Guide

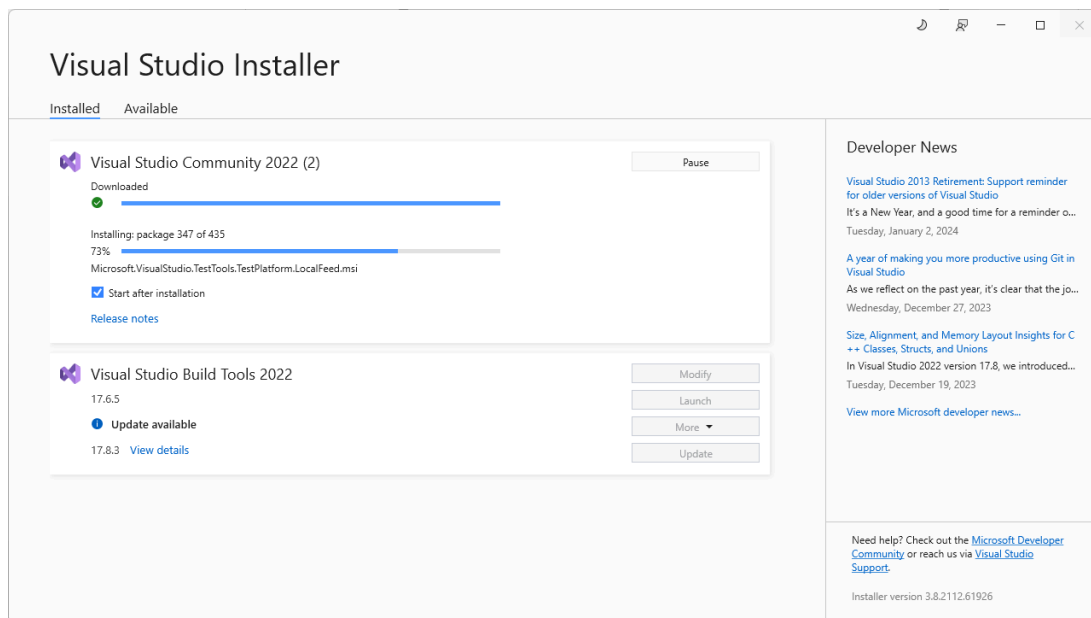
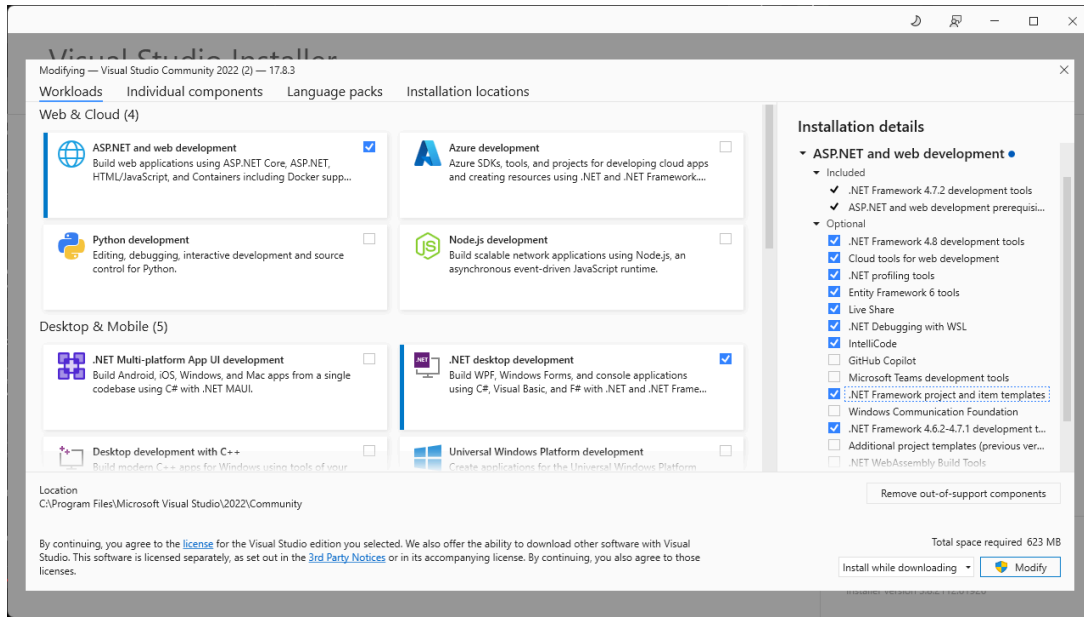
Step 1: Download Visual Studio

1. Go to the official website: <https://visualstudio.microsoft.com/downloads/>
2. Download the community edition.



Step 2: Install Visual Studio

1. Run the installer that you downloaded.
2. Select “**ASP.NET and web development**” (Make sure to select **.NET Framework project and item templates**) and “**.NET desktop development**” and install. Installation might take a while.



3. Update Visual Studio Build Tools if necessary.

Step 3: Run a Test Project

1. Open Visual Studio. Sign into your Microsoft account if you want to.

Visual Studio 2022

Open recent

As you use Visual Studio, any projects, folders, or files that you open will show up here for quick access.
You can pin anything that you open frequently so that it's always at the top of the list.

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder

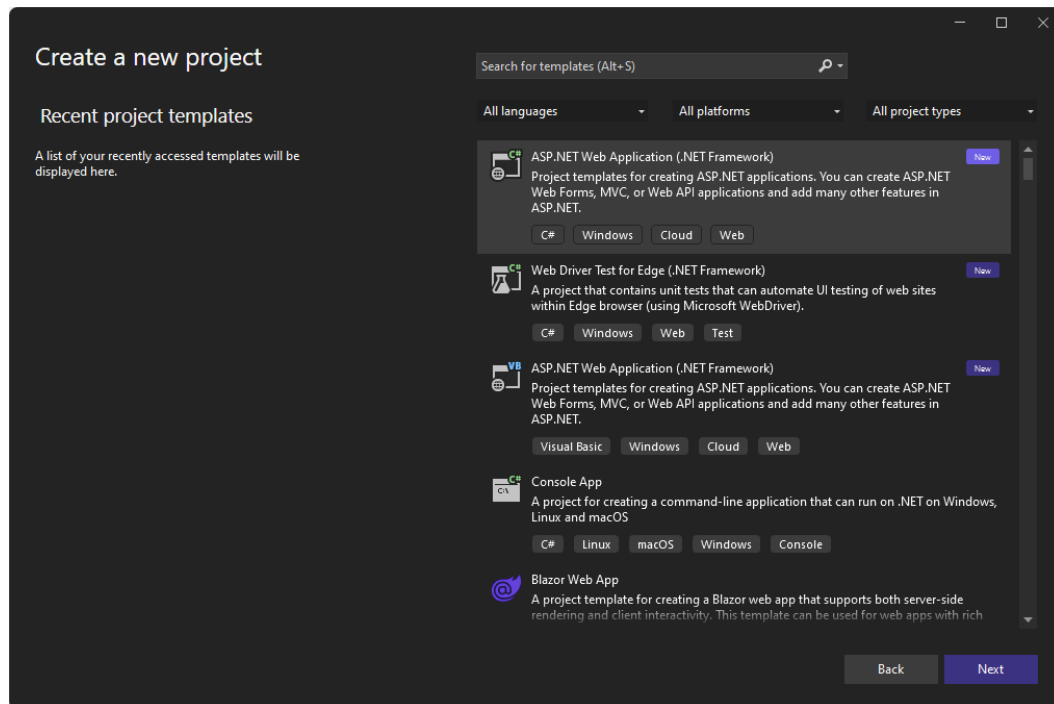


Create a new project

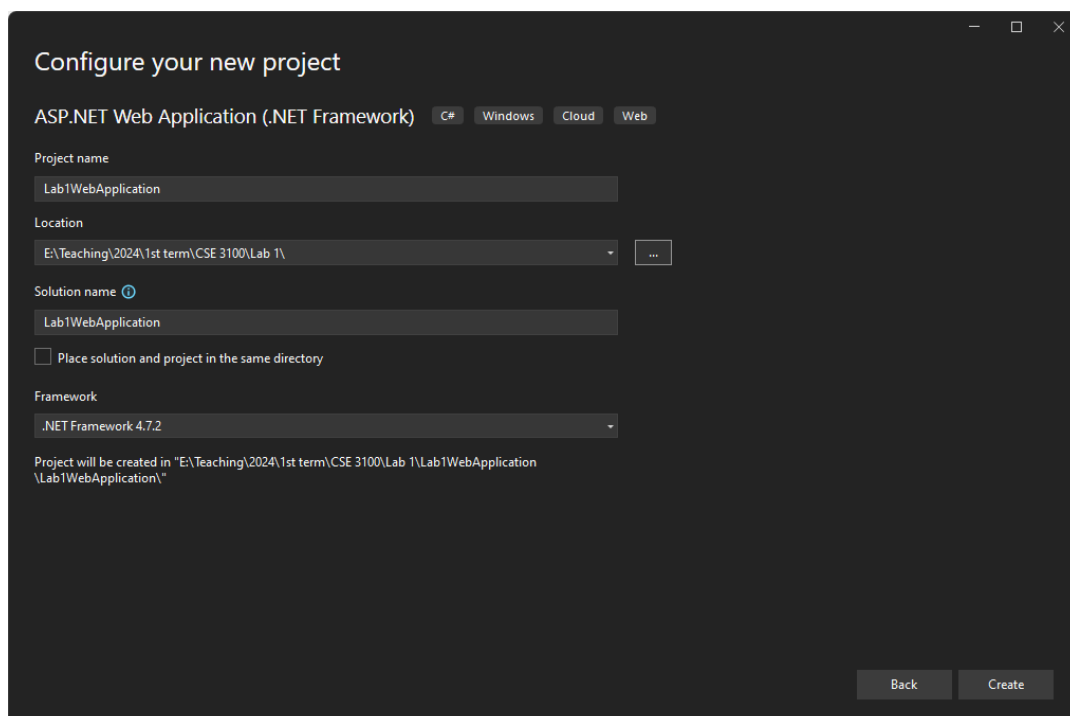
Choose a project template with code scaffolding to get started

[Continue without code →](#)

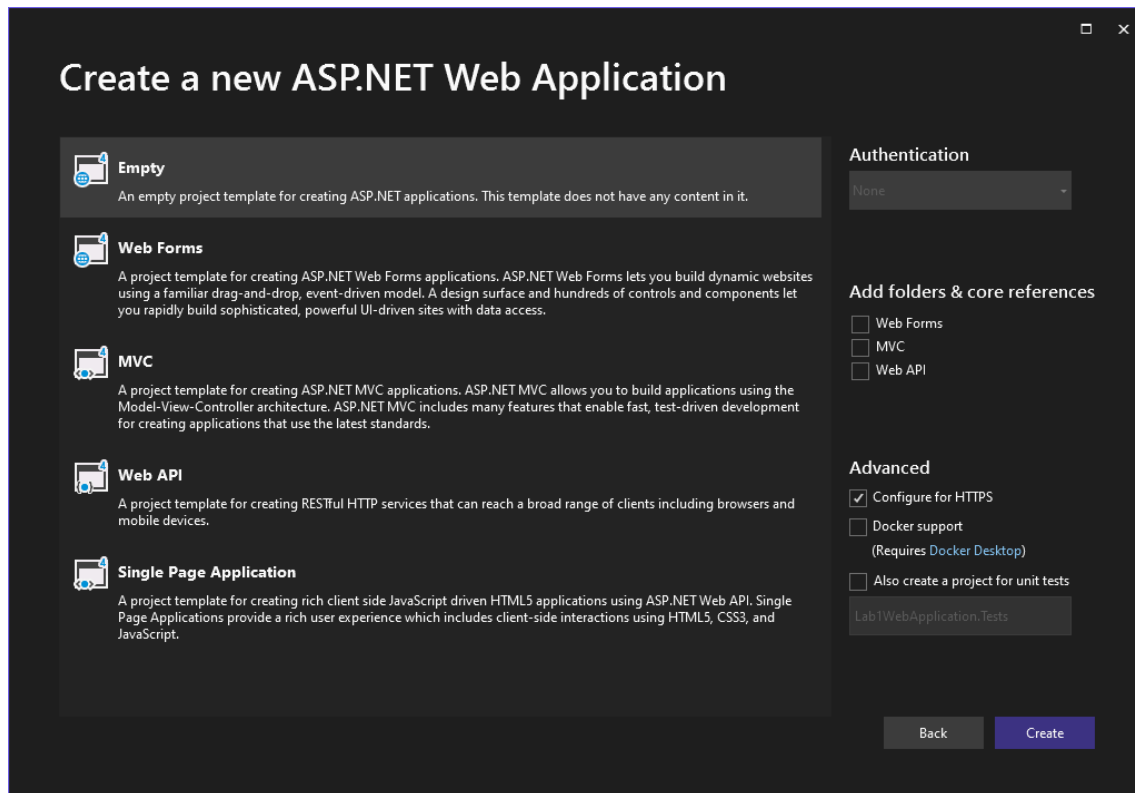
- Click ‘Create a new project’. Search for “ASP.NET Web Application”.
[N.B. If you can’t find the template then scroll down and click “Not finding what you are looking for” which will redirect you to “Visual Studio Installer”. Here select “ASP.NET and web development” again and under the optional you will find “.NET Framework project and item templates” (Step 2.2). Make sure to install this.]



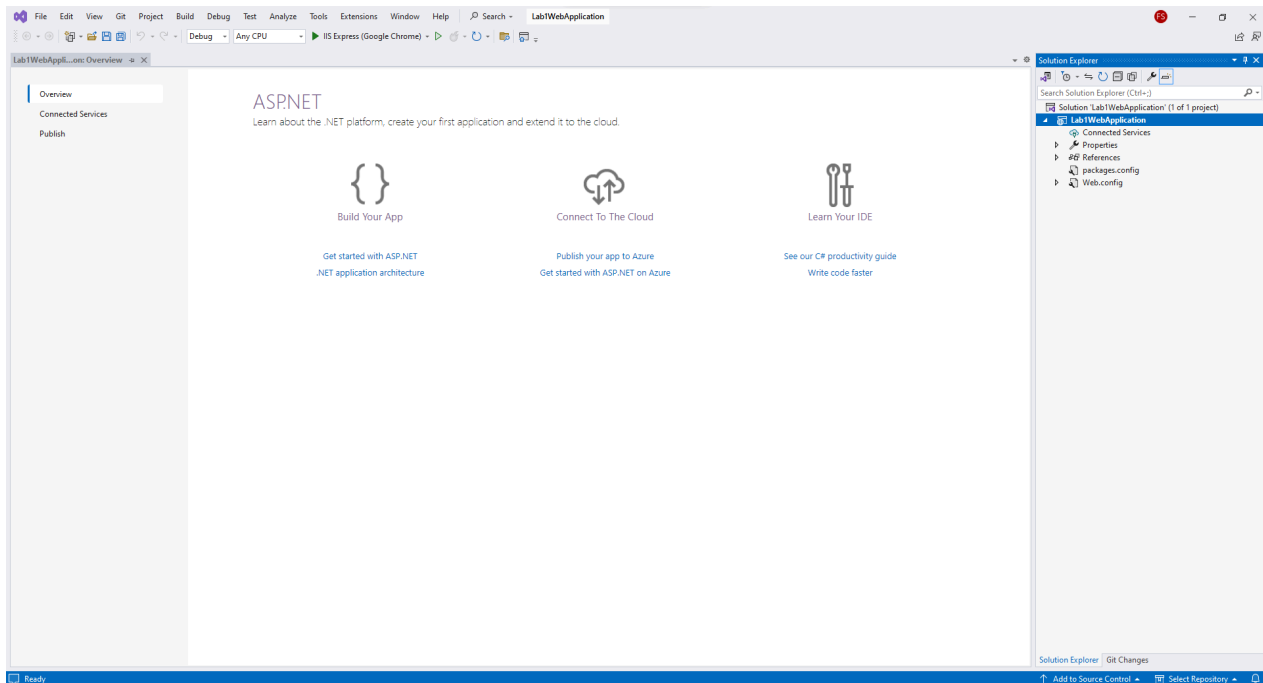
- Give project a name and select the directory. And click “Create”.



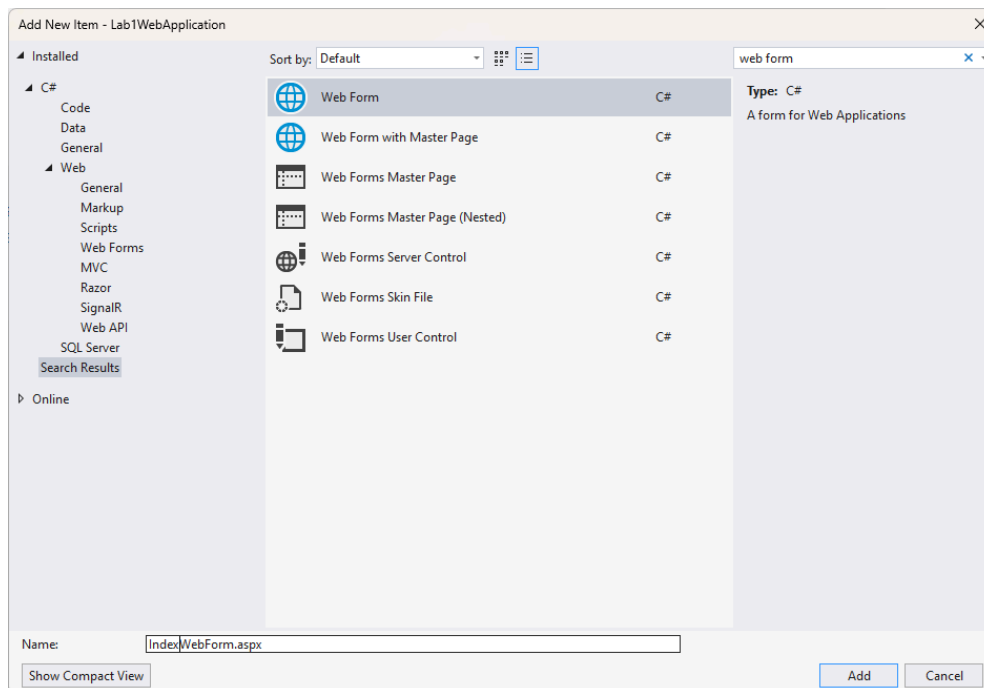
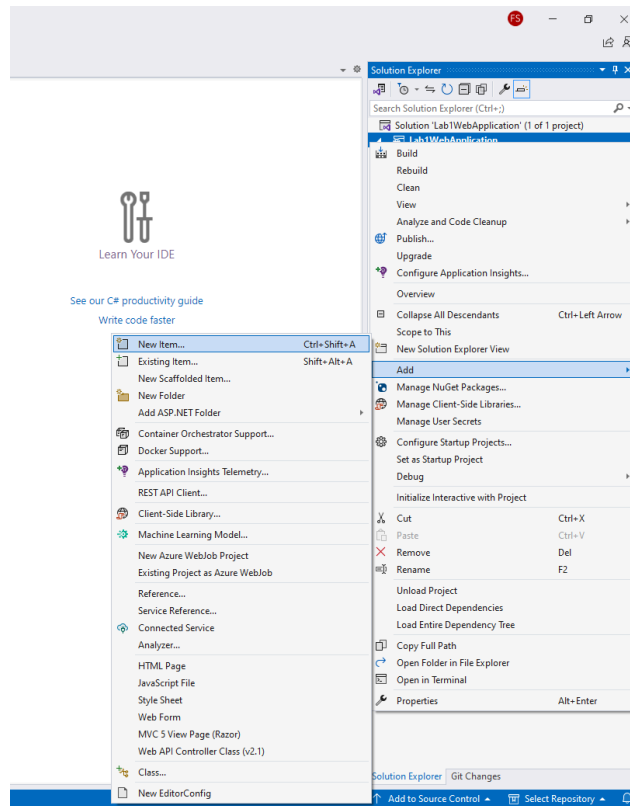
4. Select an Empty template for now.



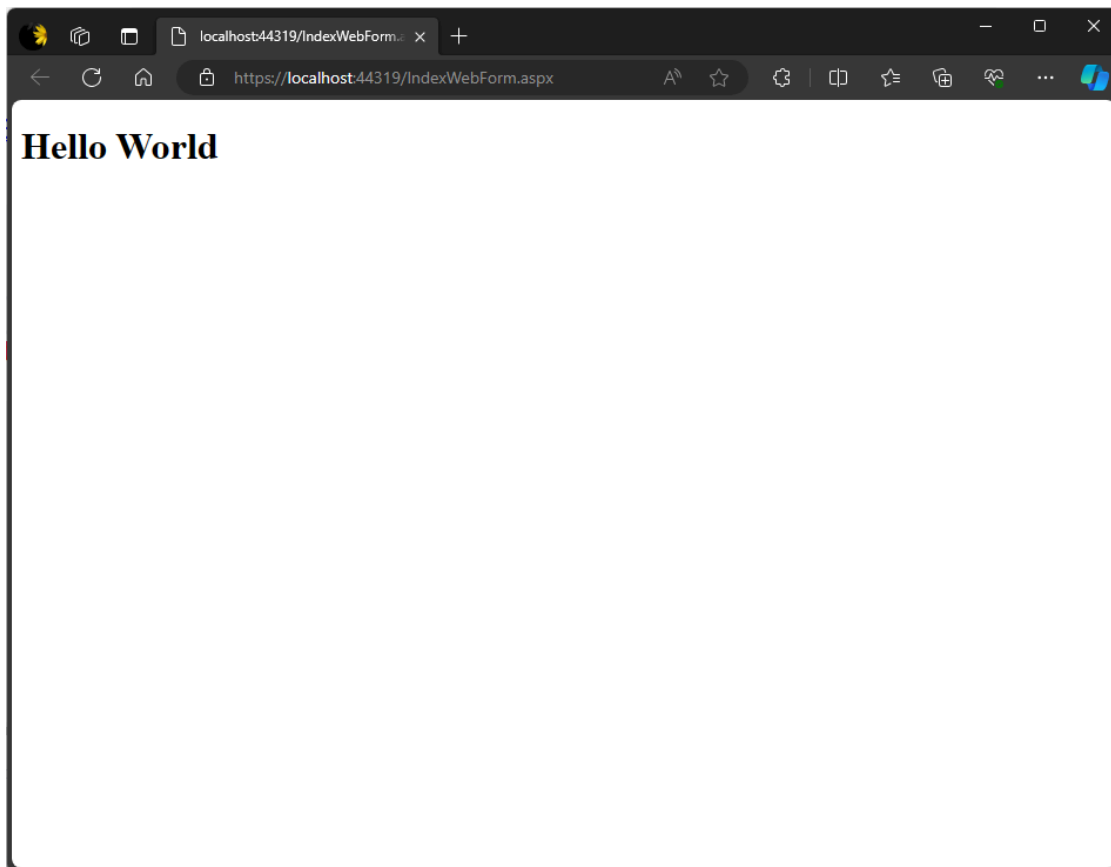
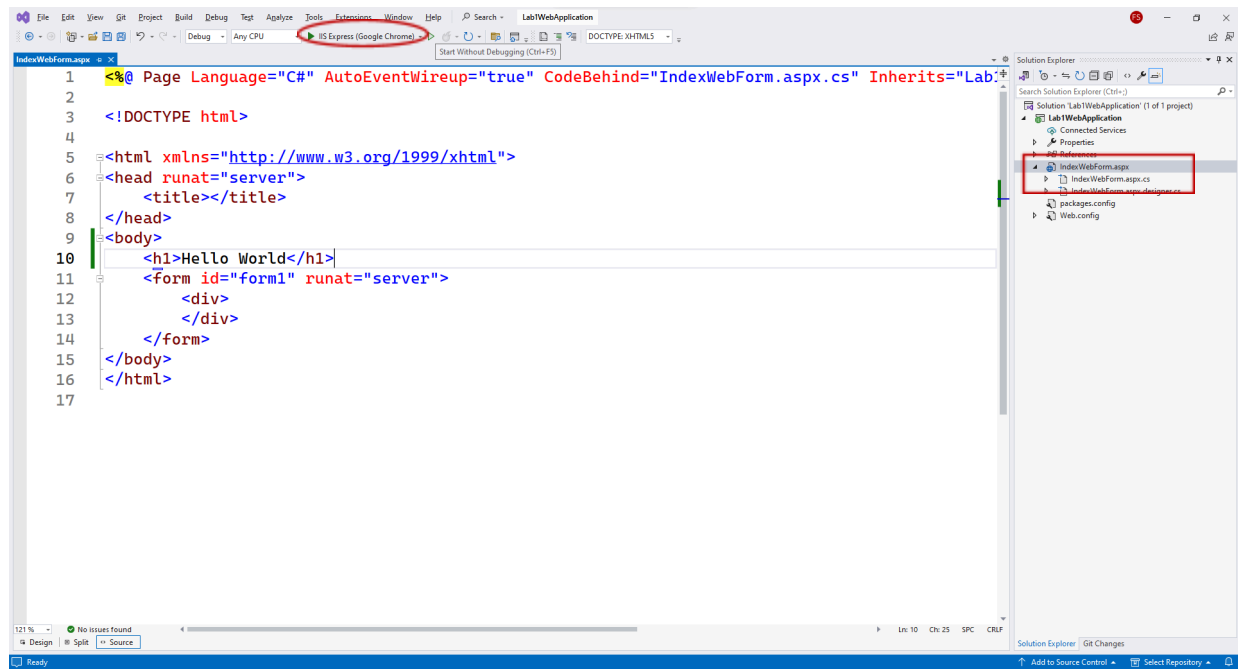
5. This Visual Studio window will pop up.



6. Right click on project name (e.g. Lab1WebApplication). Select “Add” > “New item”. Then search for “Web Form” and rename it. (e.g. IndexWebForm.aspx). Click on “Add”.

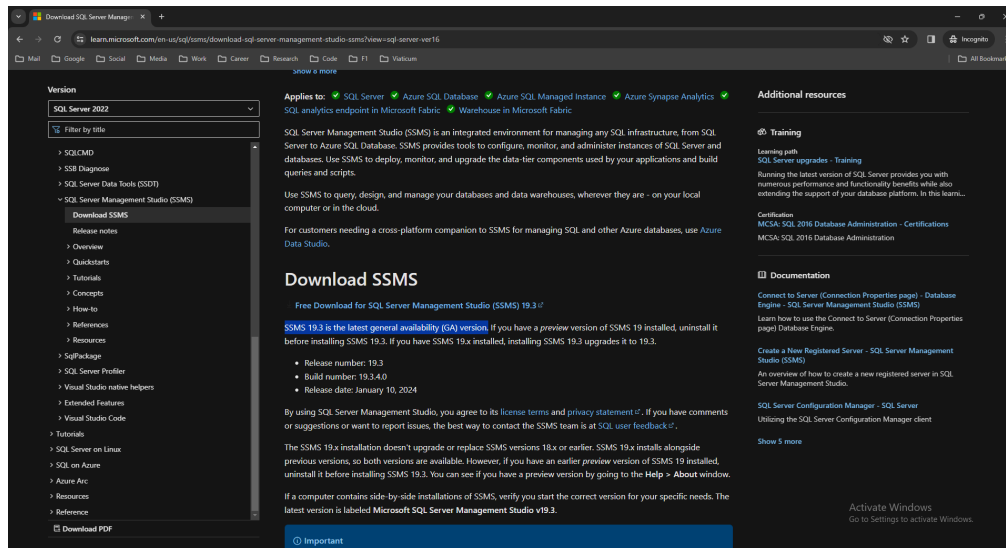


7. Modify the code and run.

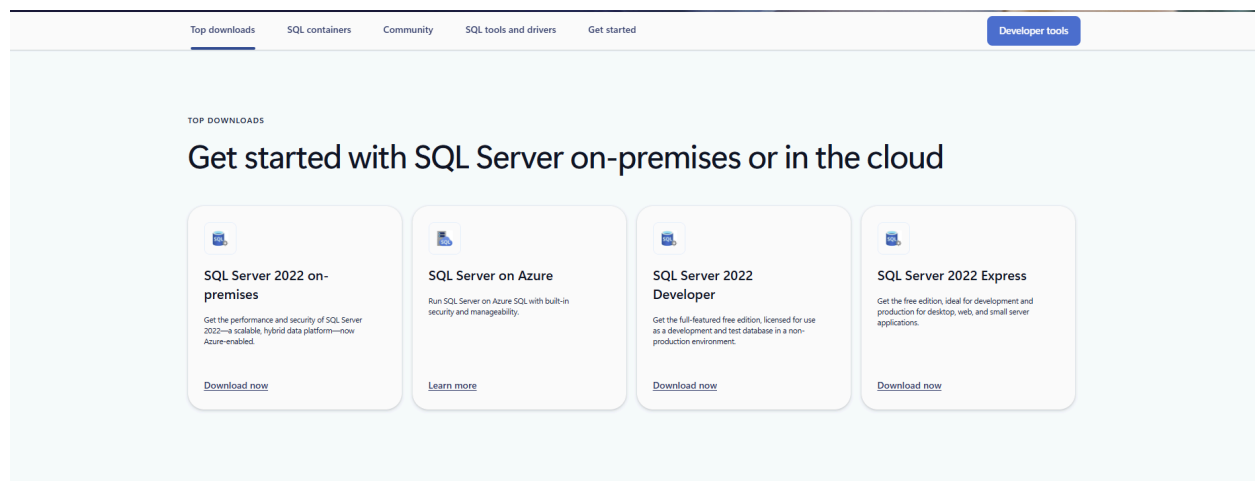


Step 4: Download Microsoft SQL Server Management Studio

1. Go to the official Microsoft SSMS website:
<https://learn.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver16>
2. Download SSMS 19.3 or the latest general availability version.



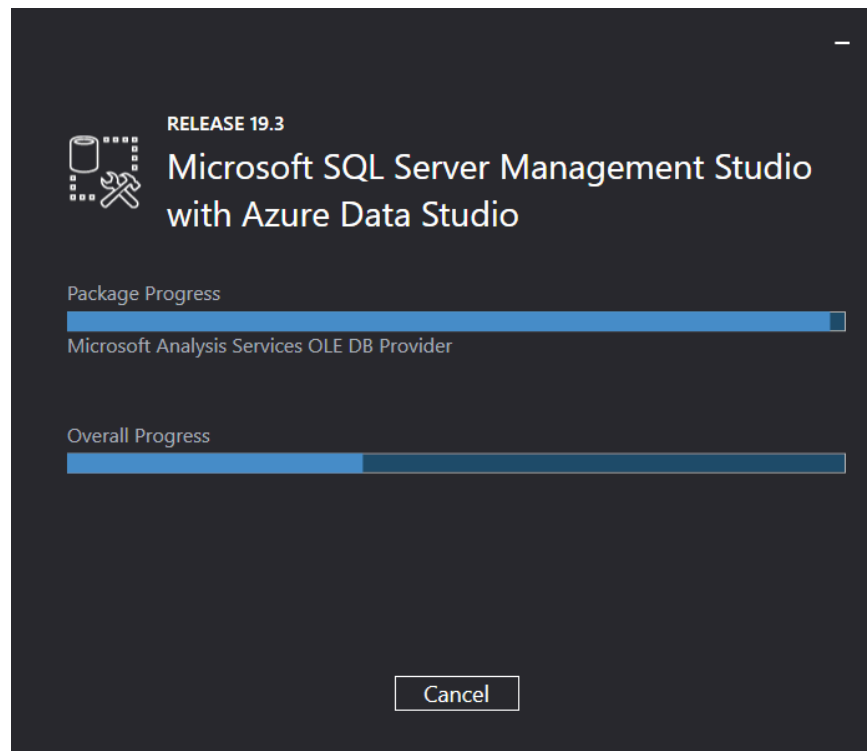
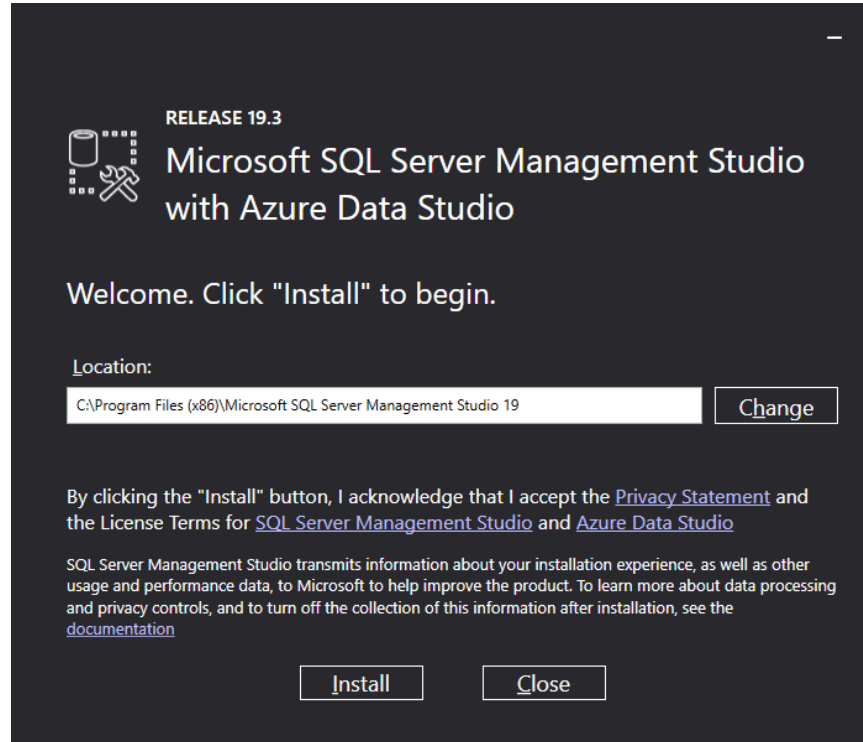
3. Go to Microsoft SQL Server official website:
<https://www.microsoft.com/en-us/sql-server/sql-server-downloads>
4. Download the **SQL Server 2022 Express** edition.



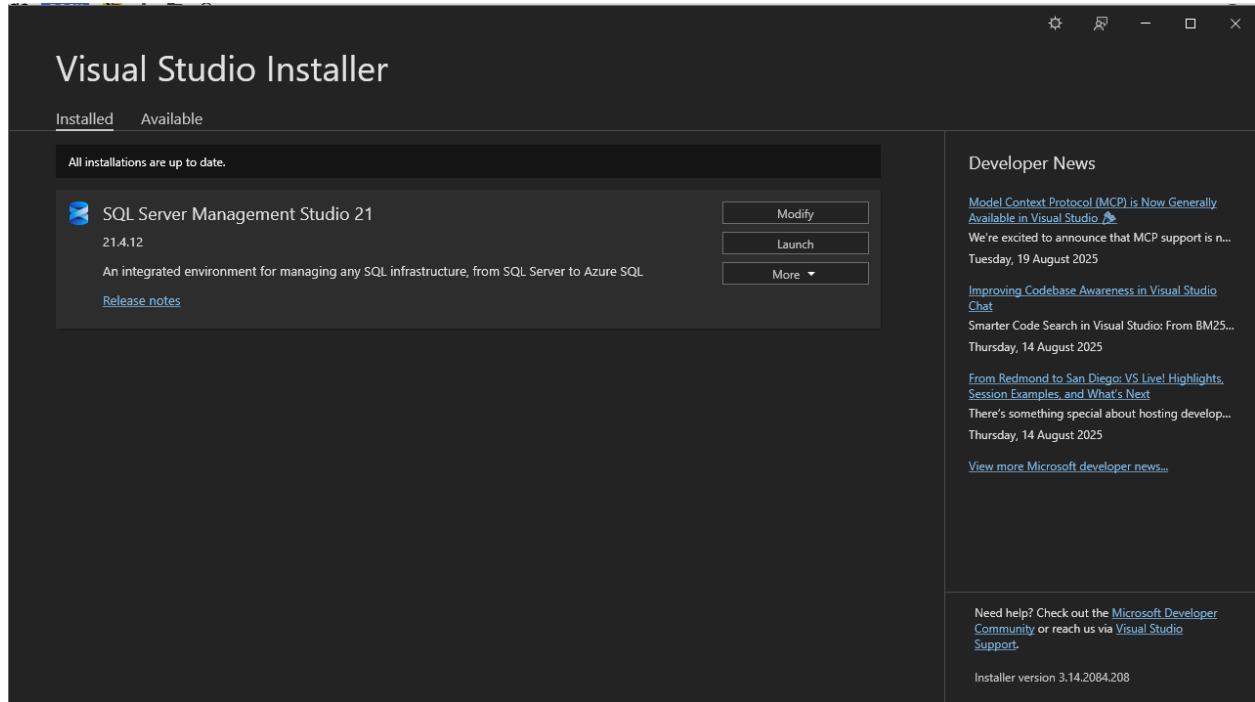
Step 5: Install SSMS

Open the SSMS downloaded file and follow the installation process.

Older Version:

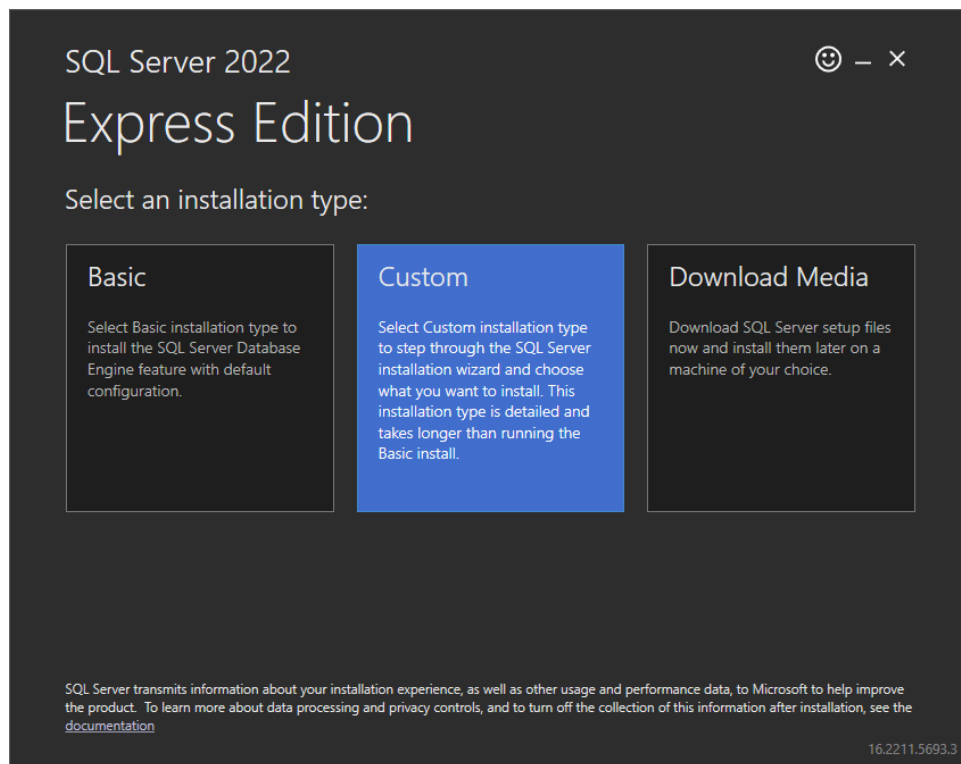


Recent Version:

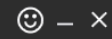


Step 6: SQL Server

- Open the SQL Server downloaded file. Select the **Custom** installation.



SQL Server 2022



Express Edition

Specify SQL Server media download target location

MEDIA LOCATION *:

C:\SQL2022

 Browse

MINIMUM FREE SPACE

6604 MB

DOWNLOAD SIZE

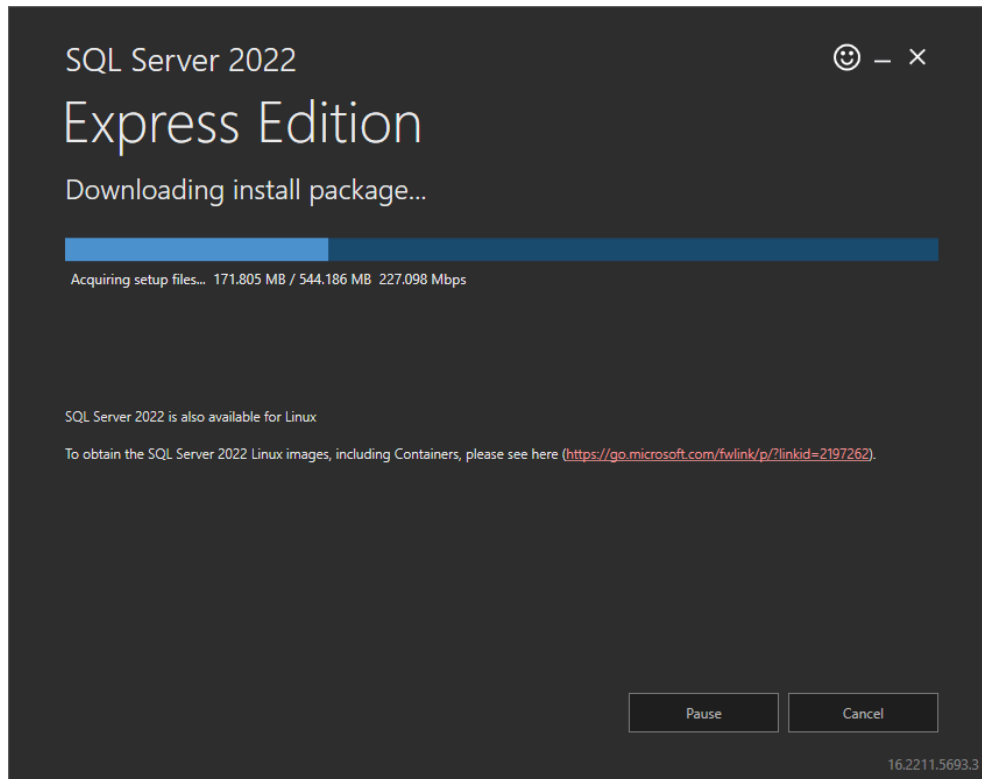
278 MB

Close

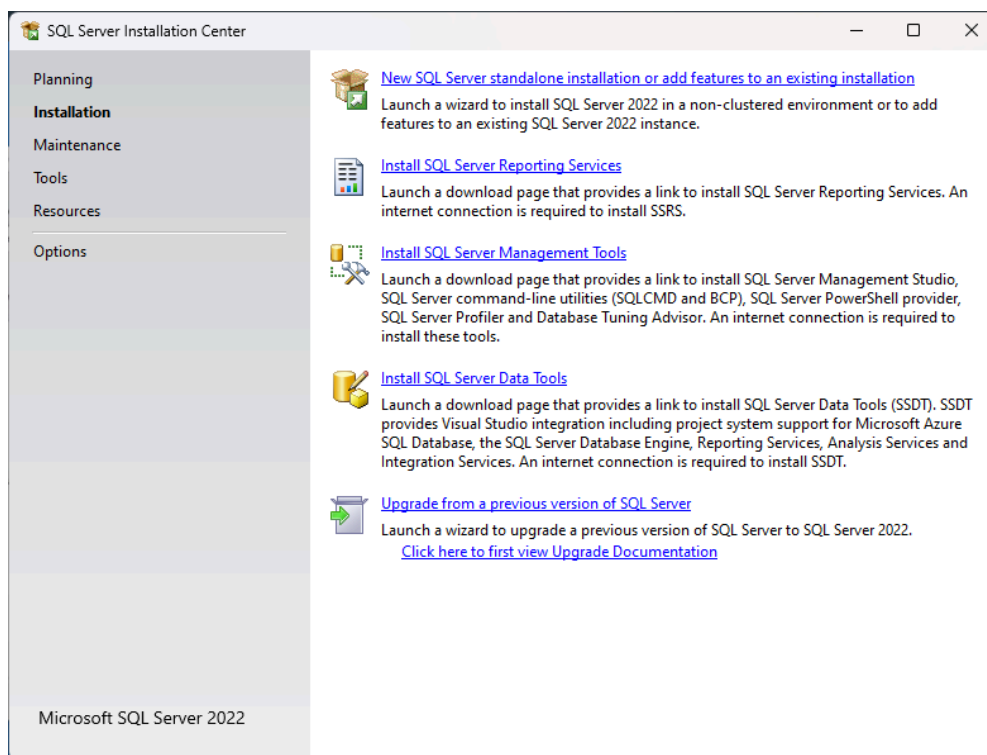
< Previous

Install

16.2211.5693.3



- b. **Select New SQL Server standalone installation or add features to an existing installation.** And follow the following process.



SQL Server 2022 Setup

Azure Extension for SQL Server

Azure Extension for SQL Server is required to enable Microsoft Defender for Cloud, Purview, and Azure Active Directory.

License Terms

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Azure Extension for SQL Serv...

Feature Selection

Feature Rules

Instance Configuration

Server Configuration

Database Engine Configuration

Feature Configuration Rules

Installation Progress

Complete

☐ Azure Extension for SQL Server

To install Azure extension for SQL Server, provide your Azure account or a service principal to authenticate the SQL Server instance to Azure. You also need to provide the Subscription ID, Resource Group, Region, and Tenant ID where this instance will be registered. For more information for each parameter, visit <https://aka.ms/arc-sql-server>.

☐ Use Azure Login

☒ Use Service Principal

Azure Service Principal ID*

Azure Service Principal Secret*

Azure Subscription ID*

Azure Resource Group*

Azure Region*

Azure Tenant ID*

Proxy Server URL (optional)

☒ Arc feature requires AZURESUBSCRIPTIONID input.

☒ Arc feature requires AZURETENANTID input.

☒ Arc feature requires AZUREREGION input.

< Back

Next >

Cancel

SQL Server 2022 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

Looking for Reporting Services? [Download it from the web](#)

Features:

Instance Features

☒ Database Engine Services

☒ SQL Server Replication

☒ Machine Learning Services and Language Ext

☒ Full-Text and Semantic Extractions for Search

☐ PolyBase Query Service for External Data

Shared Features

☒ LocalDB

Redistributable Features

Feature description:

LocalDB is a lightweight version of the SQL Server Express Database Engine that has the same programmability features, yet starts on demand and runs in user mode.

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: 2022 MB required, 76183 MB available

Select All

Unselect All

Instance root directory:

C:\Program Files\Microsoft SQL Server\

...

Shared feature directory:

C:\Program Files\Microsoft SQL Server\

...

Shared feature directory (x86):

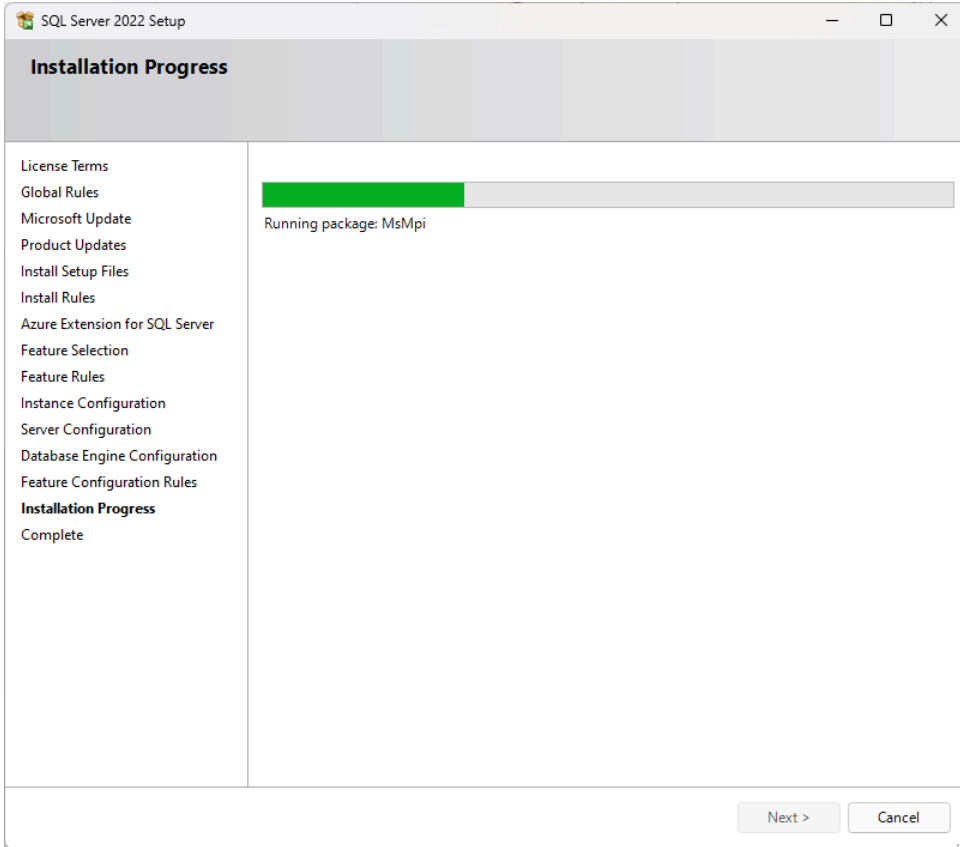
C:\Program Files (x86)\Microsoft SQL Server\

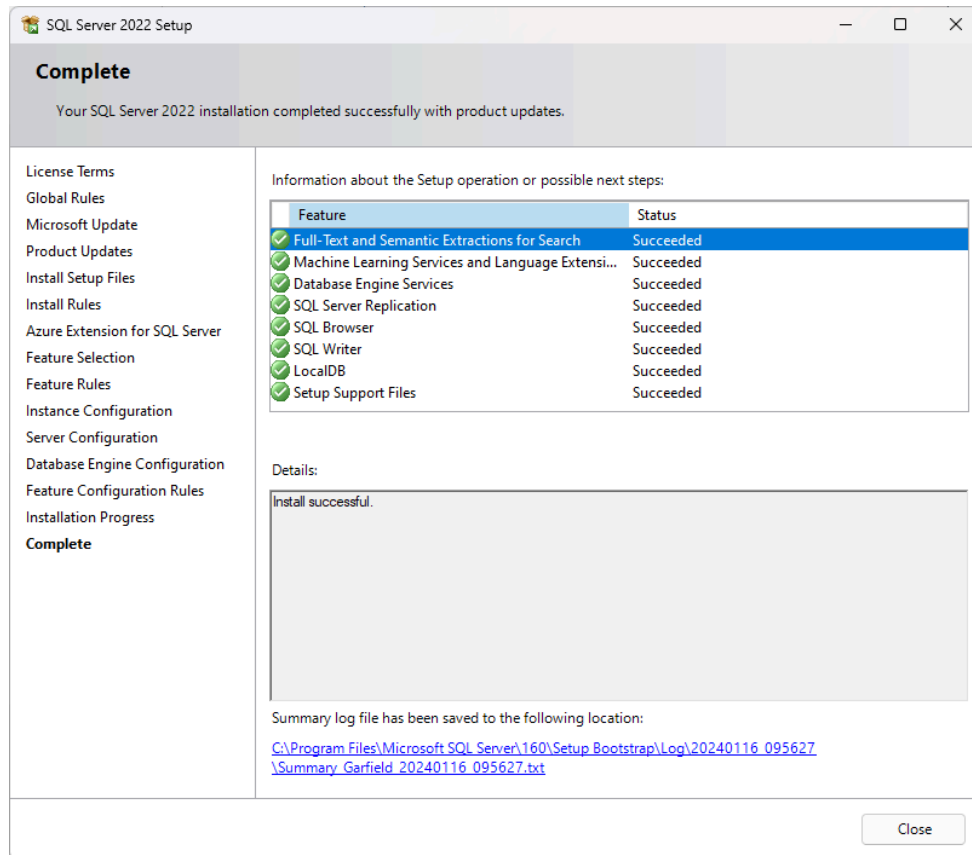
...

< Back

Next >

Cancel





Your SQL Server 2022 installation completed successfully with product updates.

- 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**

Information about the Setup operation or possible next steps:

Feature	Status
Full-Text and Semantic Extractions for Search	Succeeded
Machine Learning Services and Language Extensi...	Succeeded
Database Engine Services	Succeeded
SQL Server Replication	Succeeded
SQL Browser	Succeeded
SQL Writer	Succeeded
LocalDB	Succeeded
Setup Support Files	Succeeded

Details:

Install successful.

Summary log file has been saved to the following location:

C:\Program Files\Microsoft SQL Server\160\Setup Bootstrap\Log\20240116_095627\SuSummary_Garfield_20240116_095627.txt

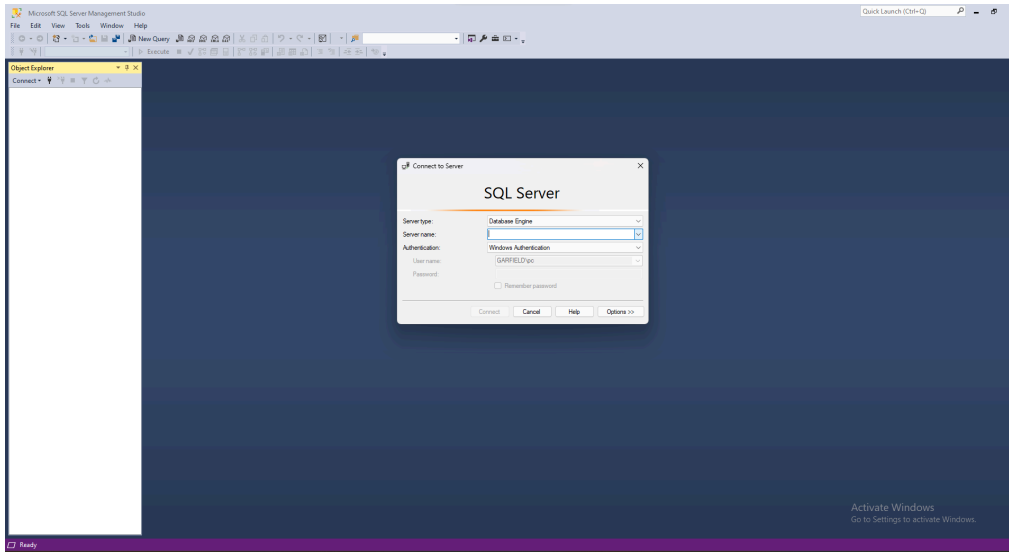
Close

Search for **SQL Server Management Studio** and open the installed app.

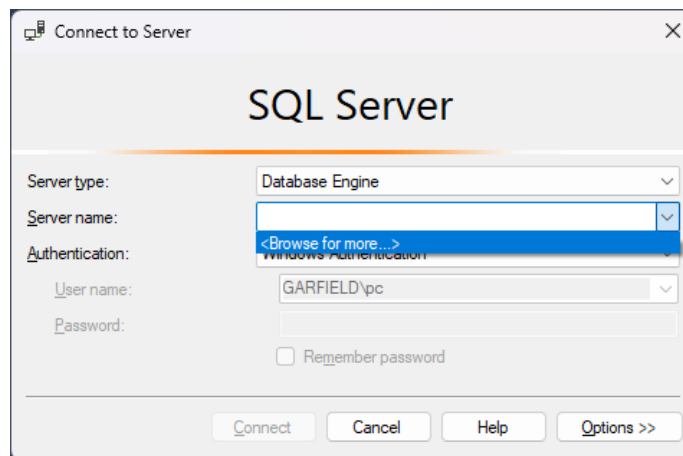
v19.3

Step 7: Connect To MSSQL Server

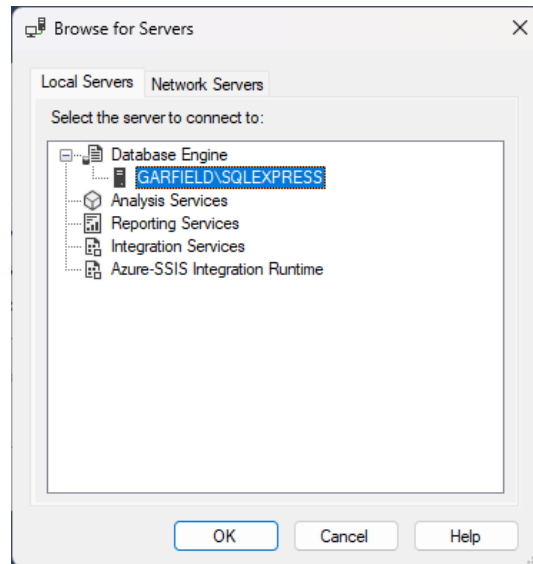
Older versions:



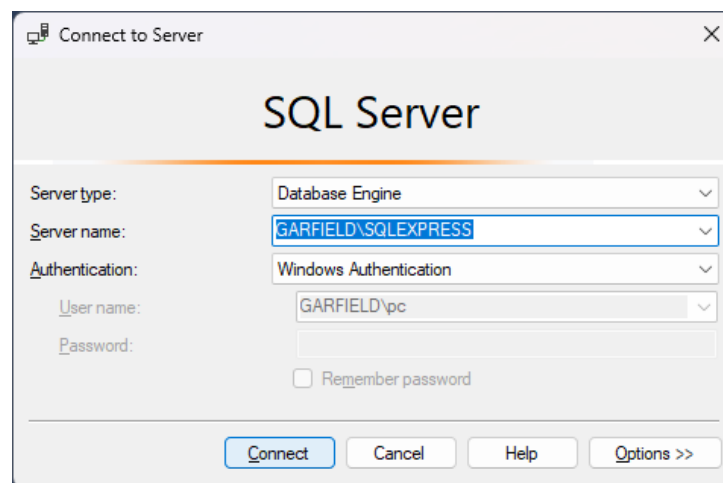
Select **<Browse for more...>**



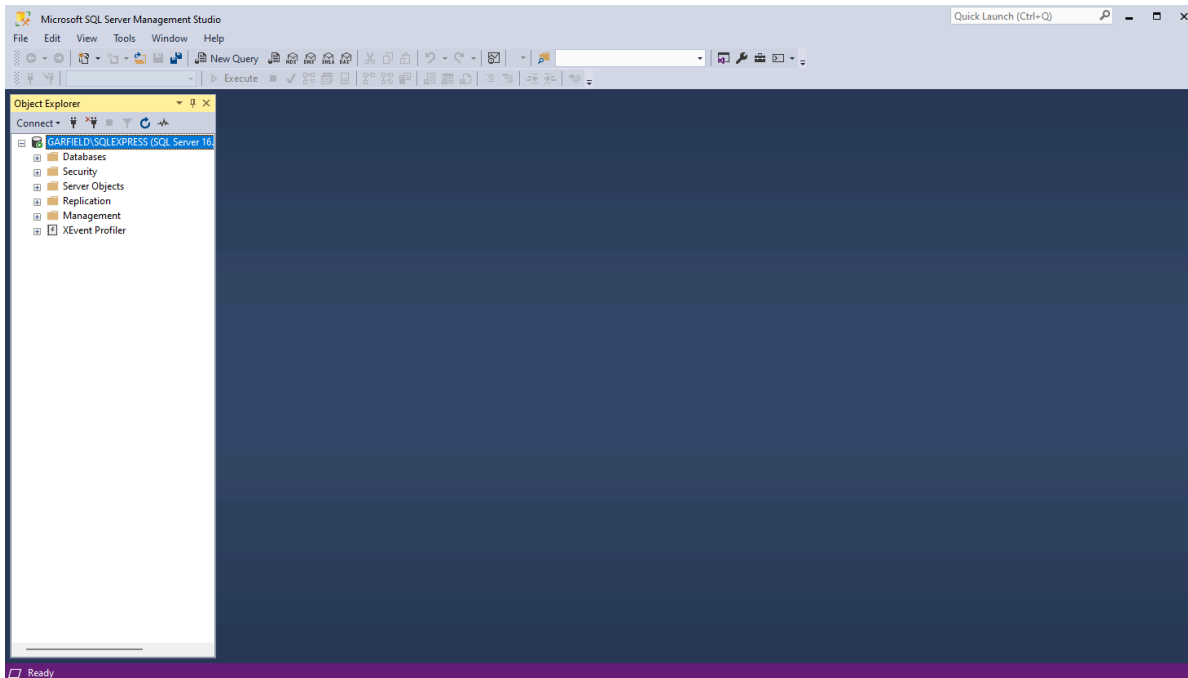
From the **Database Engine**, select your database and press ok.



Now you will be seeing your Server name. Press “Connect”.



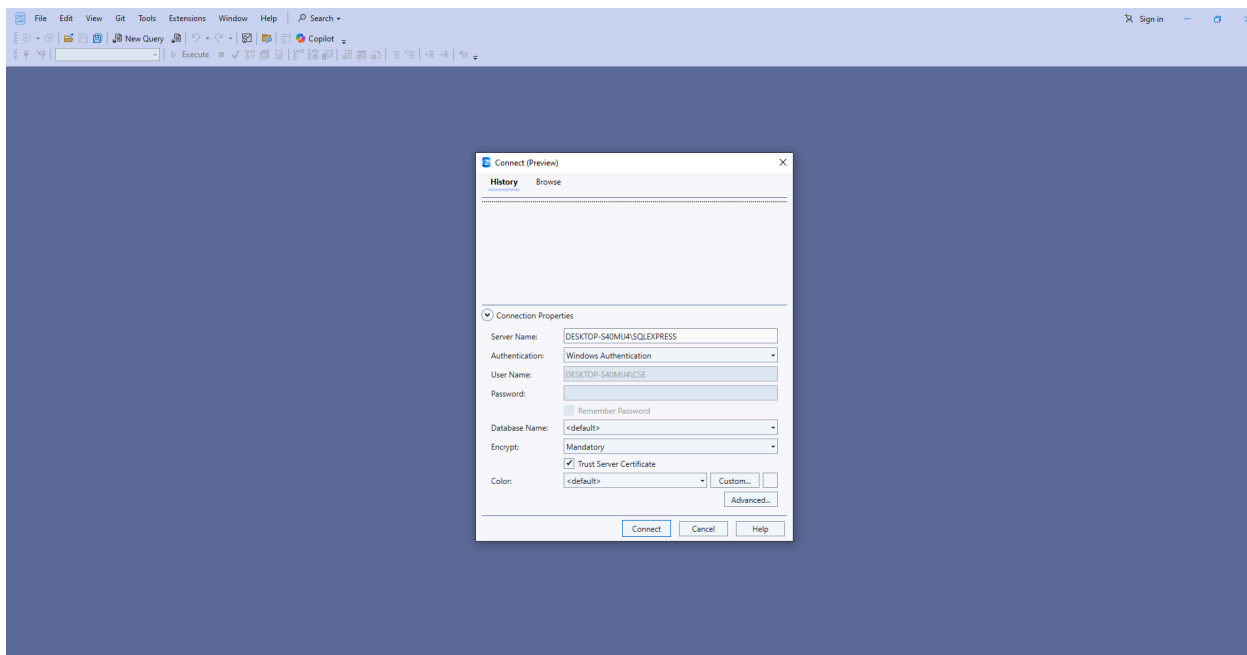
And you will be connected to your MSSQL server.



Recent Version:

Search for **SQL Server Management Studio** and open the installed app.

Now, we need to enter server name. Here we will follow the naming pattern **“Machine-Name\SQLEXPRESS”**, tick the box for **“Trust Server Certificate”** and press **“Connect”**.



Connect (Preview)

History Browse

Recent Connections

- DESKTOP-S40MIJ4\SQLEXPRESS, <default> (DESKTOP-S40MIJ4\CSE)

Connection Properties

Server Name:

Authentication:

User Name:

Password:

☐ Remember Password

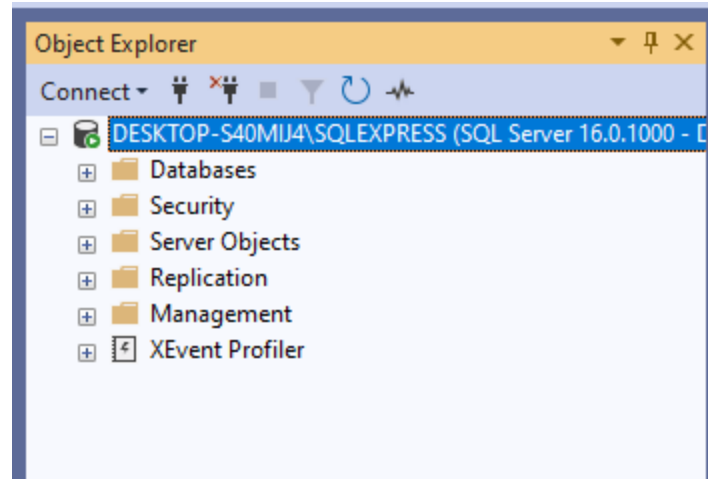
Database Name:

Encrypt:

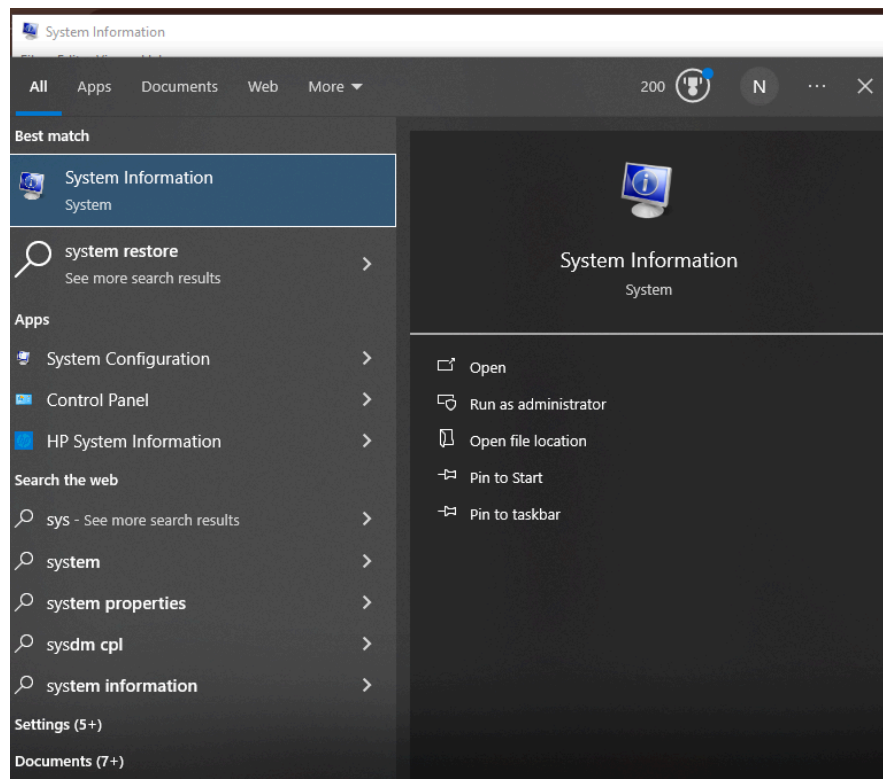
☒ Trust Server Certificate

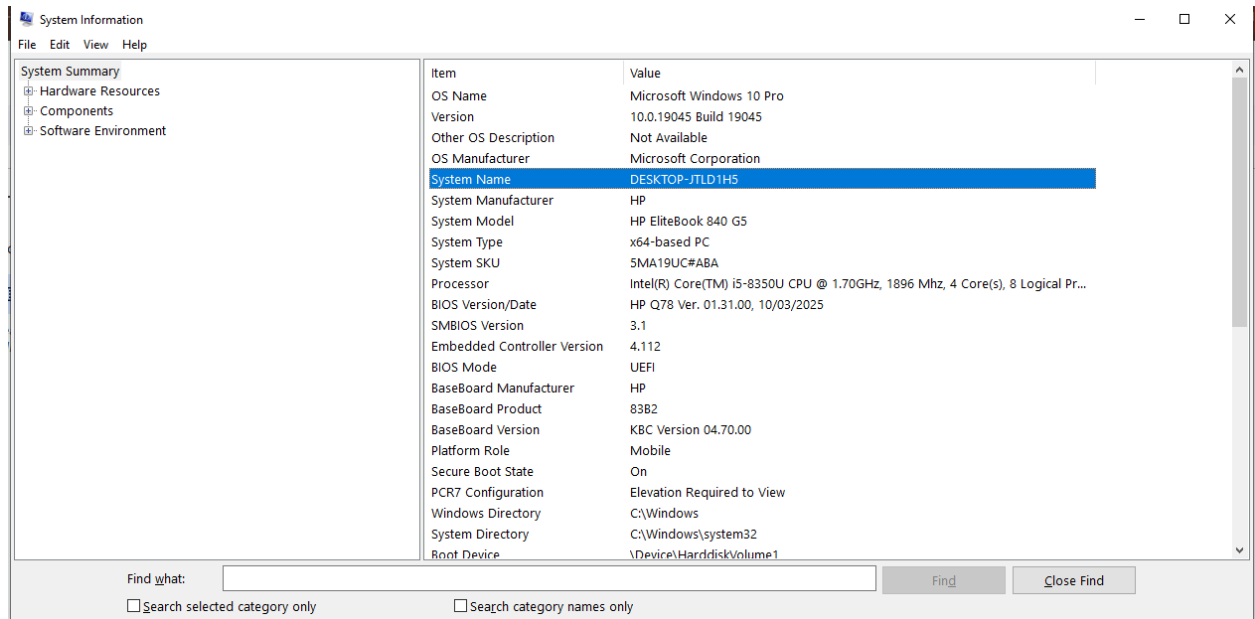
Color:

And you will be connected to your MSSQL server.



To know your system/machine name you can search System Information and look for the system name.





We will be using Microsoft SSMS for future backend related database implementations in the upcoming laboratories.