

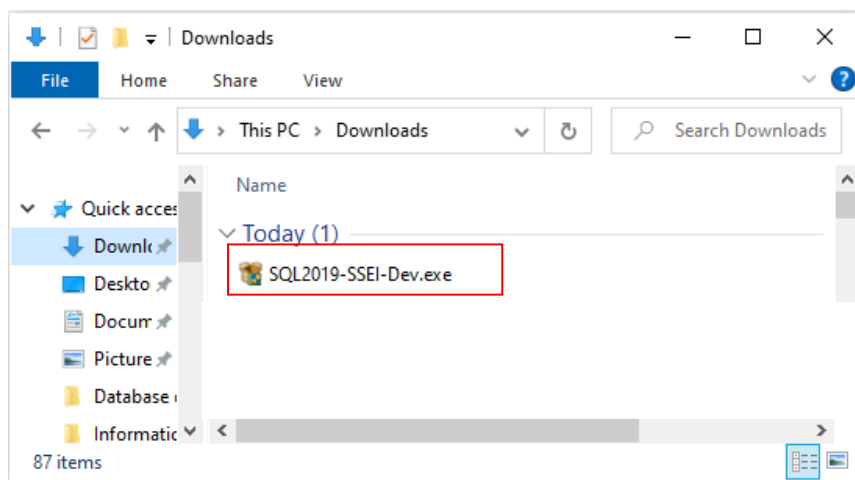
## SQL Server 2019 and SSMS Installation Instructions

Microsoft SQL Server Developer edition is a full-featured free edition, licensed for use as a development and test database engine in a non-production environment. We are going to install SQL Server 2019 Developer Edition and Management Studio on Windows 10.

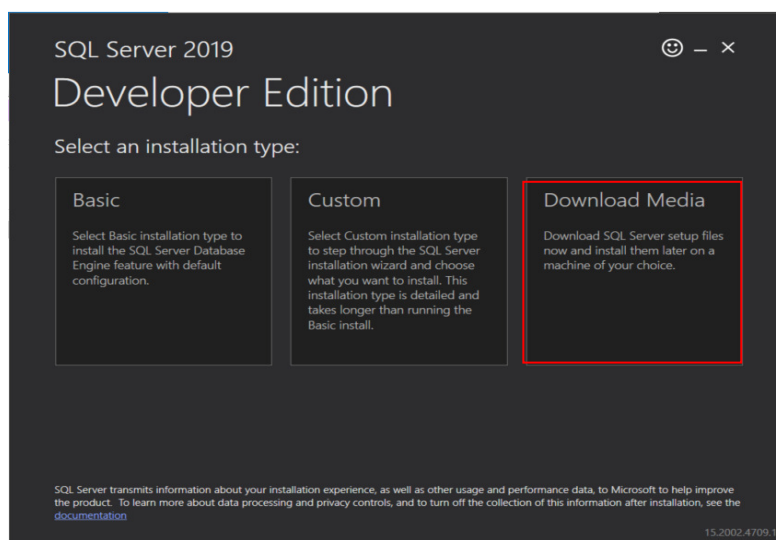
Click the link below to download the SQL Server setup application

<https://go.microsoft.com/fwlink/?linkid=866662>

If prompted, just save it anywhere you can locate. It may download into the Downloads folder.

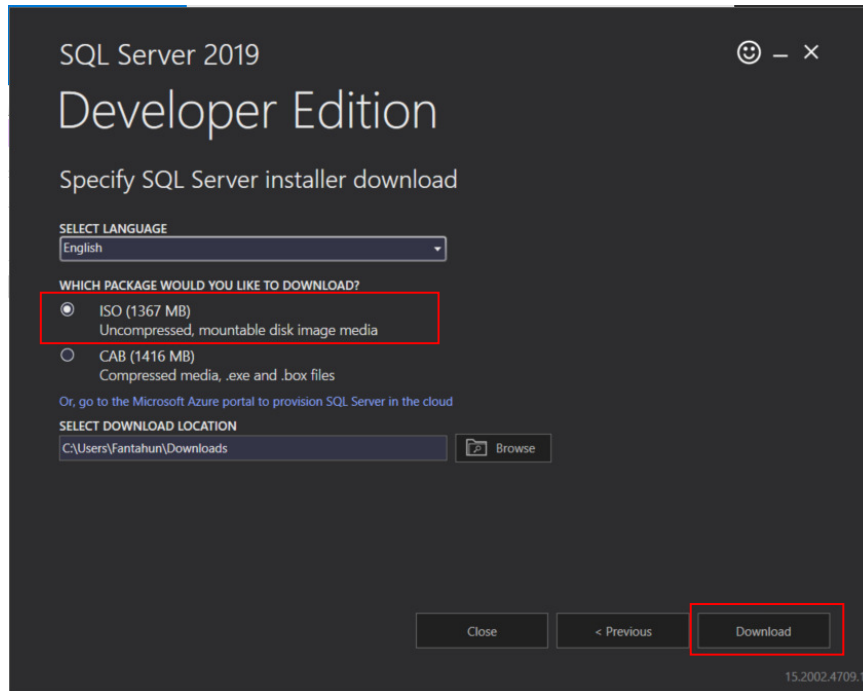


Double click to start the SQL2019-SSEI-Dev.exe.

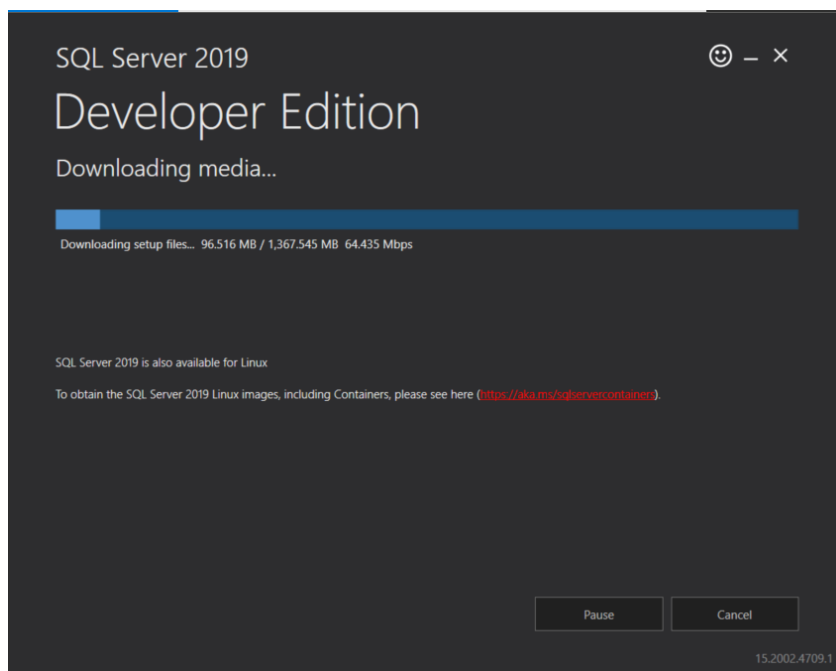


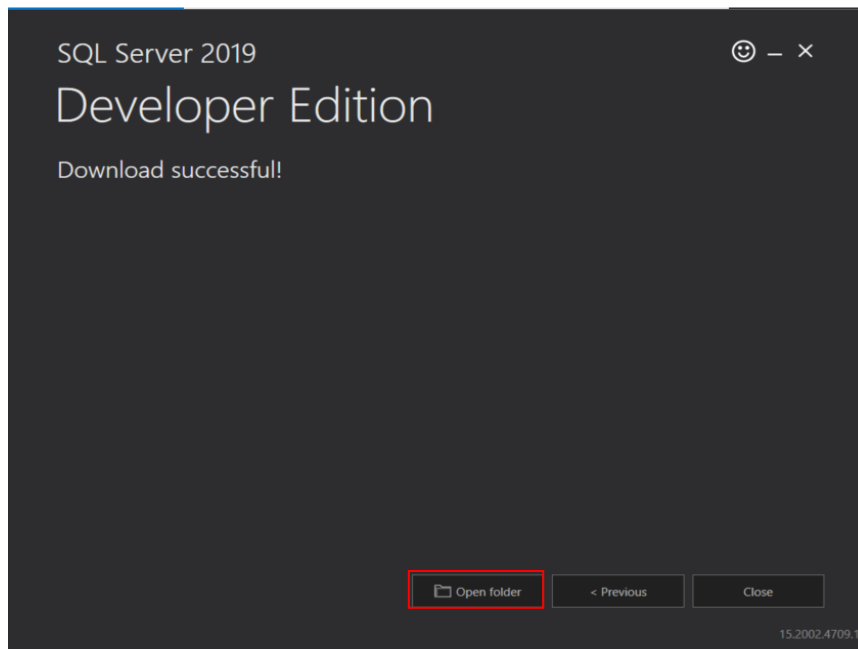
We've three options to choose from; **Basic**: Installs the database engine only by directly downloading from the web. **Custom**: Allows you to choose any features provided with SQL Server 2019 package. **Download Media**: is the third option that lets you to download the entire SQL Server 2019 media to your computer to install it later. We choose the latest option and will download the media to our computer.

Choose the ISO package as in the below and click download.

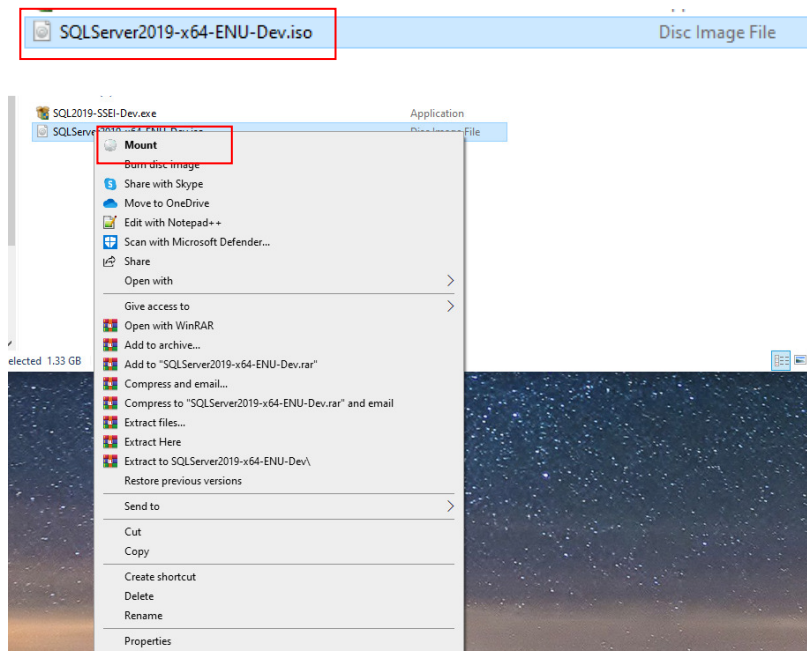


After clicking download, it may ask you where to save or may directly start downloading to the default folder (most of the time in the Downloads folder.)

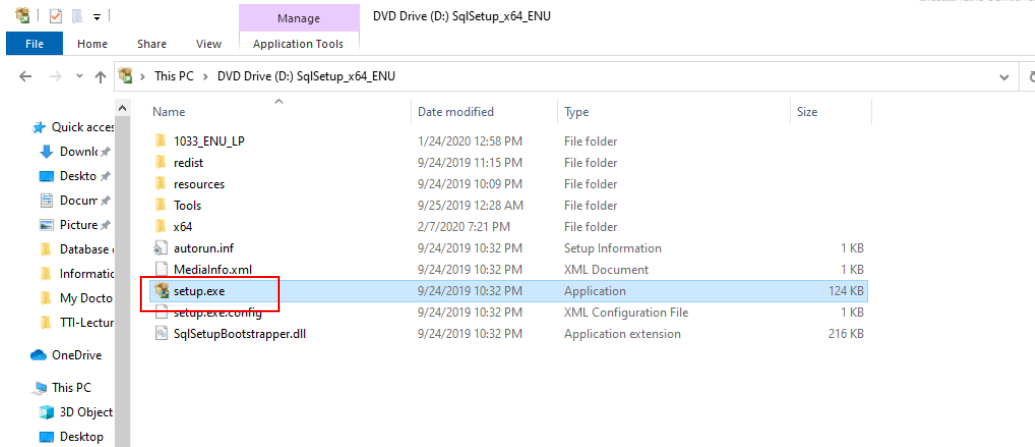




When the download is complete, click on open the folder that contains the downloaded file and mount it as follows. To mount, right click on the **SQLServer2019-x64-ENU-Dev.iso** and click **mount**

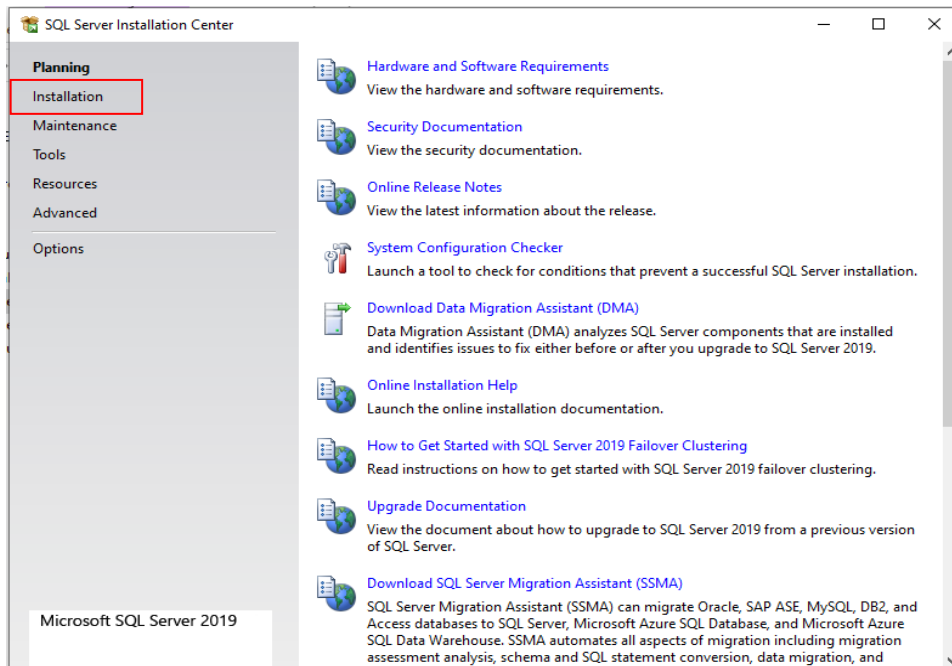


Next, double click on Setup to start the installation.



If it asked you [Do you want to allow this app make changes to your device?] Click **yes**.

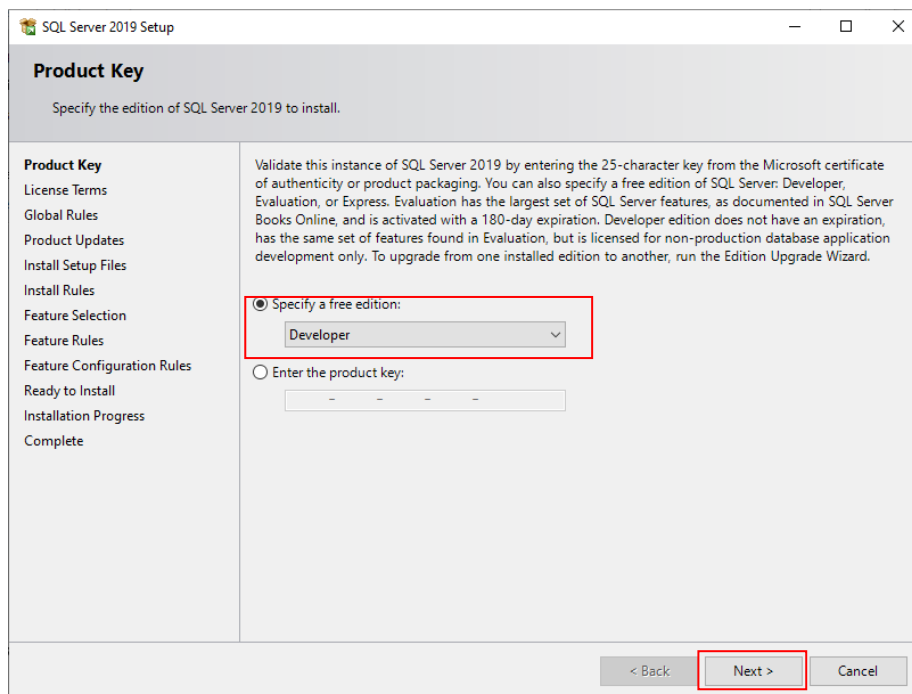
In the screen that appears, click on installation



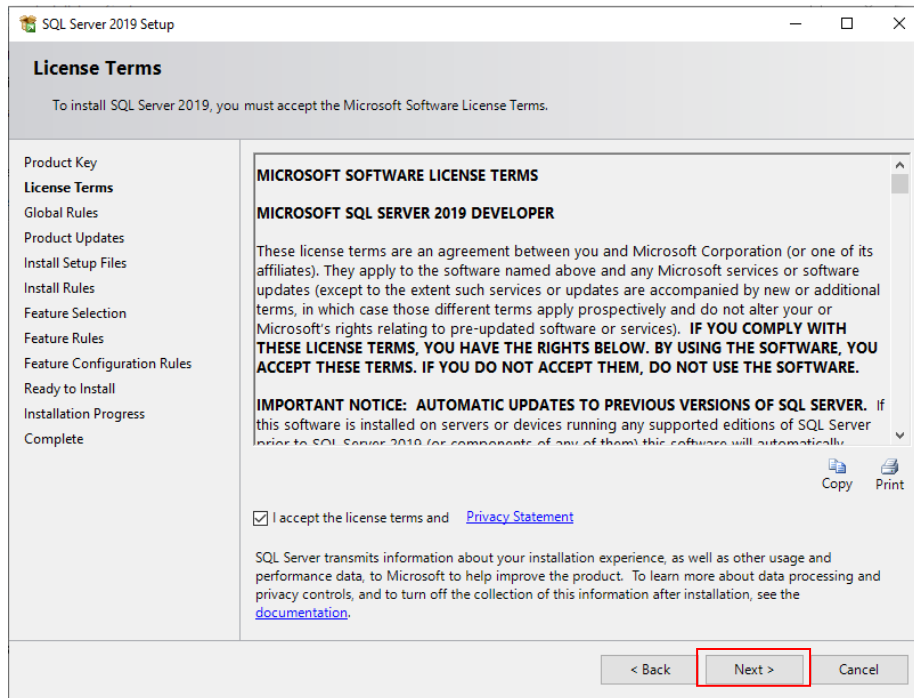
Next, click on New SQL Server stand-alone installation or add features to an existing installation.



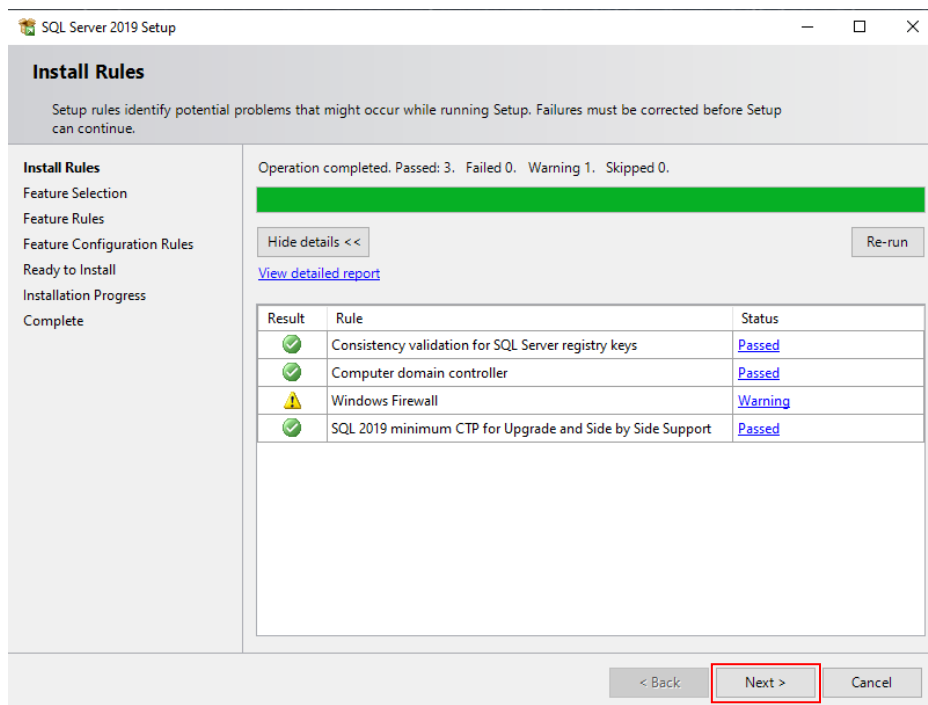
The window below appears where **Developer** is selected for the Specify a free edition. Leave everything as is and click next.



Next, Accept the license terms and click next as follows



After clicking next if you see the following screen – (only the Windows Firewall is Warning) you're good to go. Click next to get the feature selection.



We want to install features like Analysis Service, Integration Service and others as follows to use in our classes in the future. Remember that features can be installed and uninstalled at anytime. Make sure you selected the features as follows.

SQL Server 2019 Setup

### Feature Selection

Select the Developer features to install.

Install Rules

**Feature Selection**

Feature Rules

Instance Configuration

Server Configuration

Database Engine Configuration

Analysis Services Configuration

Integration Services Scale Out ...

Integration Services Scale Out ...

Feature Configuration Rules

Ready to Install

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 Extensions
  - ☐ R
  - ☐ Python
  - ☐ Java
- ☒ Full-Text and Semantic Extractions for Search
- ☒ Data Quality Services
- ☐ PolyBase Query Service for External Data
- ☐ Java connector for HDFS data sources
- ☒ Analysis Services

Shared Features

- ☐ Machine Learning Server (Standalone)
  - ☐ R
  - ☐ Python
- ☒ Data Quality Client
- ☒ Client Tools Connectivity
- ☒ Integration Services
- ☒ Scale Out Master
- ☒ Scale Out Worker
- ☒ Client Tools Backwards Compatibility
- ☒ Client Tools SDK
- ☐ Distributed Replay Controller
- ☐ Distributed Replay Client
- ☒ SQL Client Connectivity SDK
- ☒ Master Data Services

Redistributable Features

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

To be installed from media:

- Microsoft Visual C++ 2017 Redistributable
- Microsoft Visual Studio Tools for Applications 2017

Disk Space Requirements

Drive C: 3079 MB required, 156198 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

Click next to set up feature rules. The Instance Configuration window shows the default instance (MSSQLSERVER) (assuming you don't have another instance of SQL Server running on your computer)

SQL Server 2019 Setup

### Instance Configuration

Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the installation path.

Install Rules

Feature Selection

Feature Rules

**Instance Configuration**

Server Configuration

Database Engine Configuration

Analysis Services Configuration

Integration Services Scale Out ...

Integration Services Scale Out ...

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

☒ Default instance

☐ Named instance: MSSQLSERVER

Instance ID: MSSQLSERVER

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL15.MSSQLSERVER

Analysis Services directory: C:\Program Files\Microsoft SQL Server\MSAS15.MSSQLSERVER

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
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< Back   **Next >**   Cancel

Don't make changes to the Server Configuration for now. (If needed it can be configured from SQL Server Management Tools later). Thus accept defaults and click next.

**SQL Server 2019 Setup**

**Server Configuration**  
Specify the service accounts and collation configuration.

Install Rules  
Feature Selection  
Feature Rules  
Instance Configuration  
**Server Configuration**  
Database Engine Configuration  
Analysis Services Configuration  
Integration Services Scale Out ...  
Integration Services Scale Out ...  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

Service Accounts Collation

Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Agent	NT Service\SQLSERVERAGENT		Manual
SQL Server Database Engine	NT Service\MSSQLSERVER		Automatic
SQL Server Analysis Services	NT Service\MSSQLServerOLAPSe...		Automatic
SQL Server Integration Services 15.0	NT Service\MSDTS150		Automatic
SQL Server Integration Services Scale Out Ma...	NT Service\SSISScaleOutMaster1...		Automatic
SQL Server Integration Services Scale Out Wo...	NT Service\SSISScaleOutWorker1...		Automatic
SQL Full-text Filter Daemon Launcher	NT Service\MSSQLFDLauncher		Manual
SQL Server Browser	NT AUTHORITY\LOCAL SERVICE		Disabled

☐ Grant Perform Volume Maintenance Task privilege to SQL Server Database Engine Service  
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.  
[Click here for details](#)

< Back **Next >** Cancel

In the Database Engine Configuration click Add Current User, to add yourself as an admin to your SQL Server Engine. Note that your windows admin account name appears inside the box.

**SQL Server 2019 Setup**

**Database Engine Configuration**  
Specify Database Engine authentication security mode, administrators, data directories, TempDB, Max degree of parallelism, Memory limits, and Filestream settings.

Install Rules  
Feature Selection  
Feature Rules  
Instance Configuration  
Server Configuration  
**Database Engine Configuration**  
Analysis Services Configuration  
Integration Services Scale Out ...  
Integration Services Scale Out ...  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

Server Configuration Data Directories TempDB MaxDOP Memory FILESTREAM

Specify the authentication mode and administrators for the Database Engine.

Authentication Mode

☒ Windows authentication mode  
☐ Mixed Mode (SQL Server authentication and Windows authentication)

Specify the password for the SQL Server system administrator (sa) account.

Enter password:   
Confirm password:

Specify SQL Server administrators

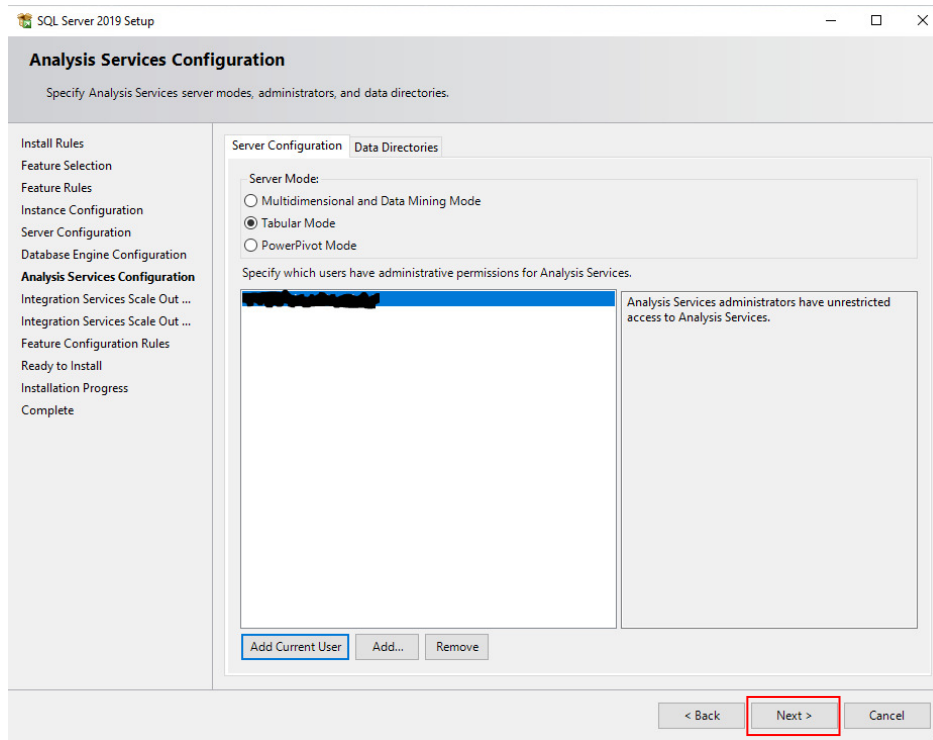
**Add Current User** Add... Remove

SQL Server administrators have unrestricted access to the Database Engine.

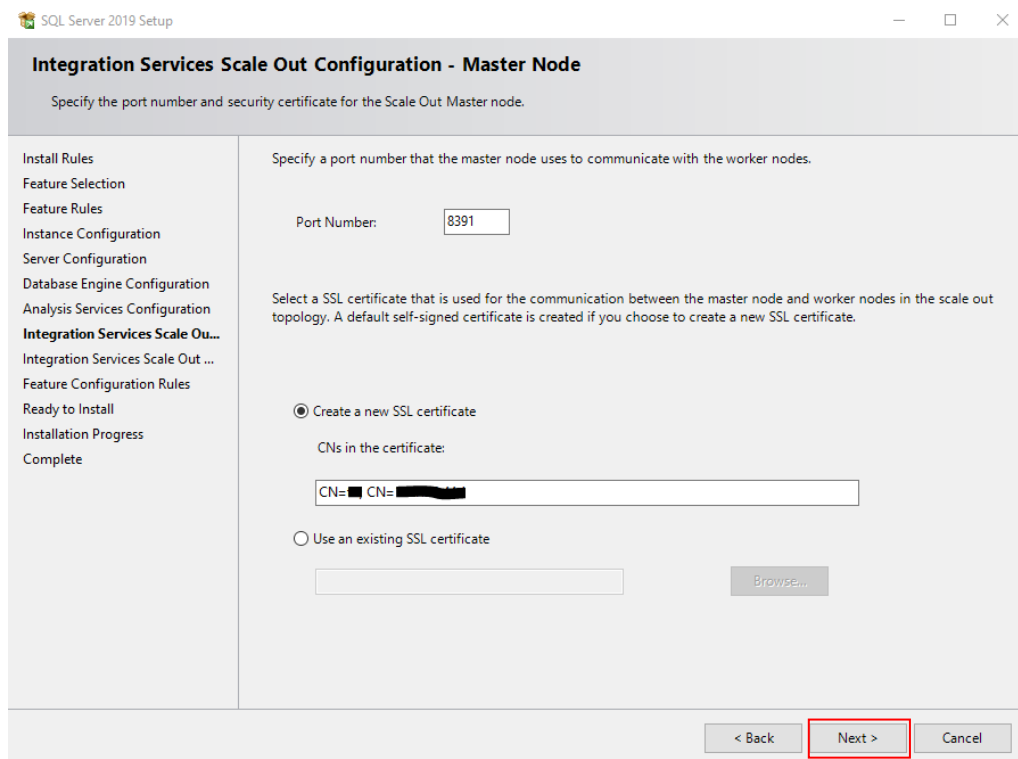
< Back **Next >** Cancel

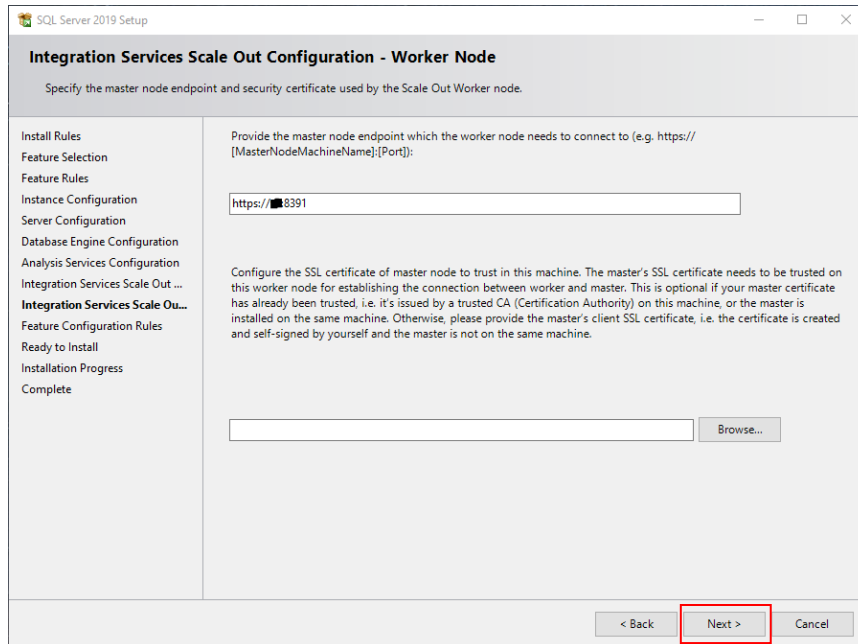


Same way, please click the Add Current User for the Analysis Services Configuration. Also, based on your future use requirement you can choose to install Multidimensional, Tabular or PowerPivot modes. We use the Tabular mode here.

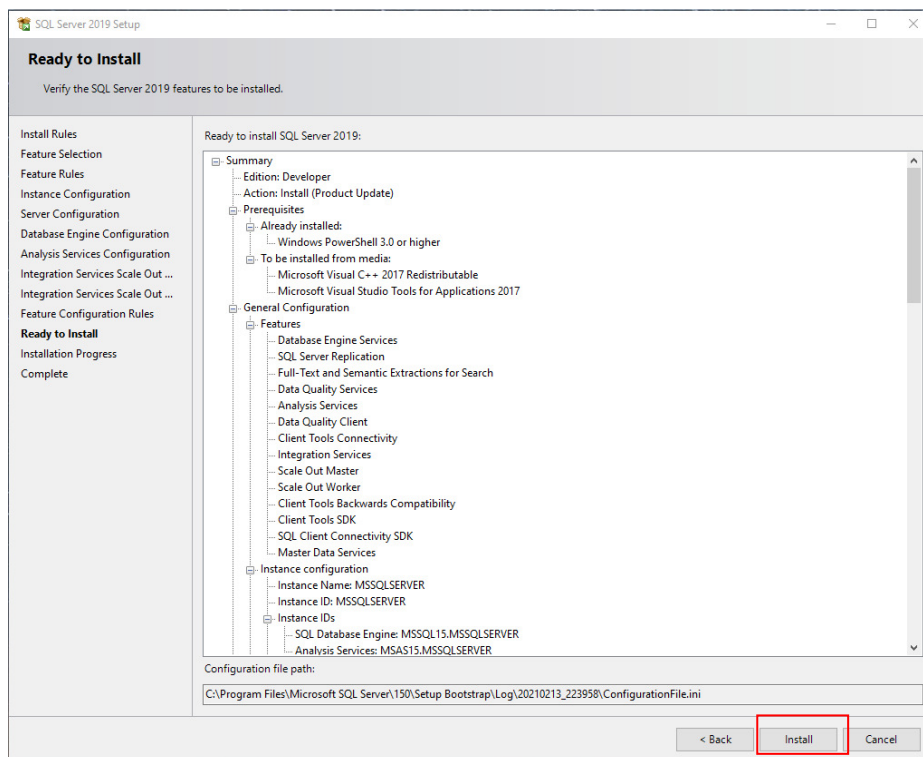


Take the default configuration for Integration Services – Master and Worker Nodes and click next





By clicking next, you're now ready to install. On the **Ready to Install** page, click install to start the installation




With this the installation will begin and after about 10 to 20 min (depending on your computer) the installation will complete with all the features in **Green**.

## Installing SQL Server Management Studio

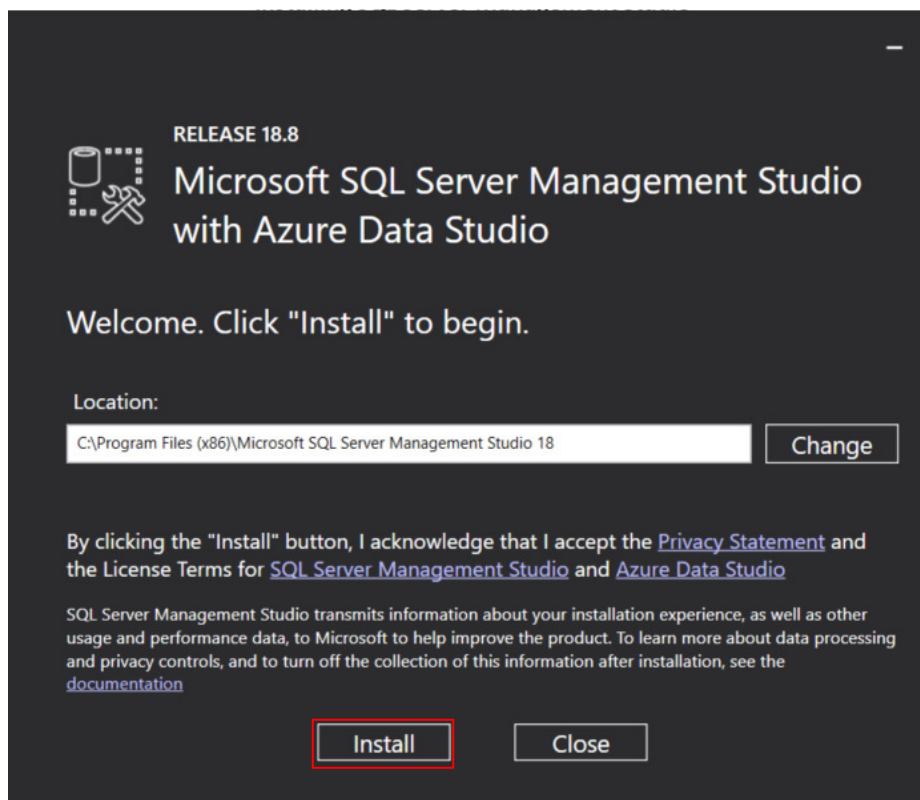
Search for SQL Server Management Studio and open a link from Microsoft Website or click the link below to download the SQL Server Management Studio (SSMS)

<https://aka.ms/ssmsfullsetup>

By clicking on the above link, a download will automatically begin or prompts to save. Save it in a folder that's convenient for you. The file is about 640MB. When the download is completed, go the folder containing it and double click on **SSMS-Setup-ENU.exe** to start the installation.

Name	Date modified	Type	Size
 SSMS-Setup-ENU.exe	2/19/2021 5:15 PM	Application	655,512 KB

After double clicking the setup file, when prompted [Do you want to allow this app make changes to your device?] Click **yes**. In the screen that appears (as in below), click install to start the installation.



When the installation is completed, it may prompt you to restart your computer. Please do so!