Install a SQL Server Instance on Windows

(Copied from https://www.red-gate.com/simple-talk/sql/bi/reporting-services-basics-overview-and-installation/)

To install the SQL Server instance, you will need to first download the media. I will not provide a link here, because invariably it will change, so just search for "SQL Server 2019 downloads." The page that was current as of this writing had links for a free trial and for a Developer Edition shown in Figure 1. Choose the Developer edition and save the downloaded file.

Developer

SQL Server 2017 Developer is a full-featured free edition, licensed for use as a development and test database in a non-production environment.

Download now ⬇

Figure 1: The SQL Server media download page

I'm not going to show you every step of installing SQL Server because that information can be found elsewhere. Here are the important things to note:

1. The page mentioned above allows you to download the actual media. Do that first.
2. Once you have downloaded the media, run setup.exe to launch the *SQL Server Installation Center*. You'll need to click *New SQL Server stand-alone installation* on the *Installation* page shown on Figure 2.
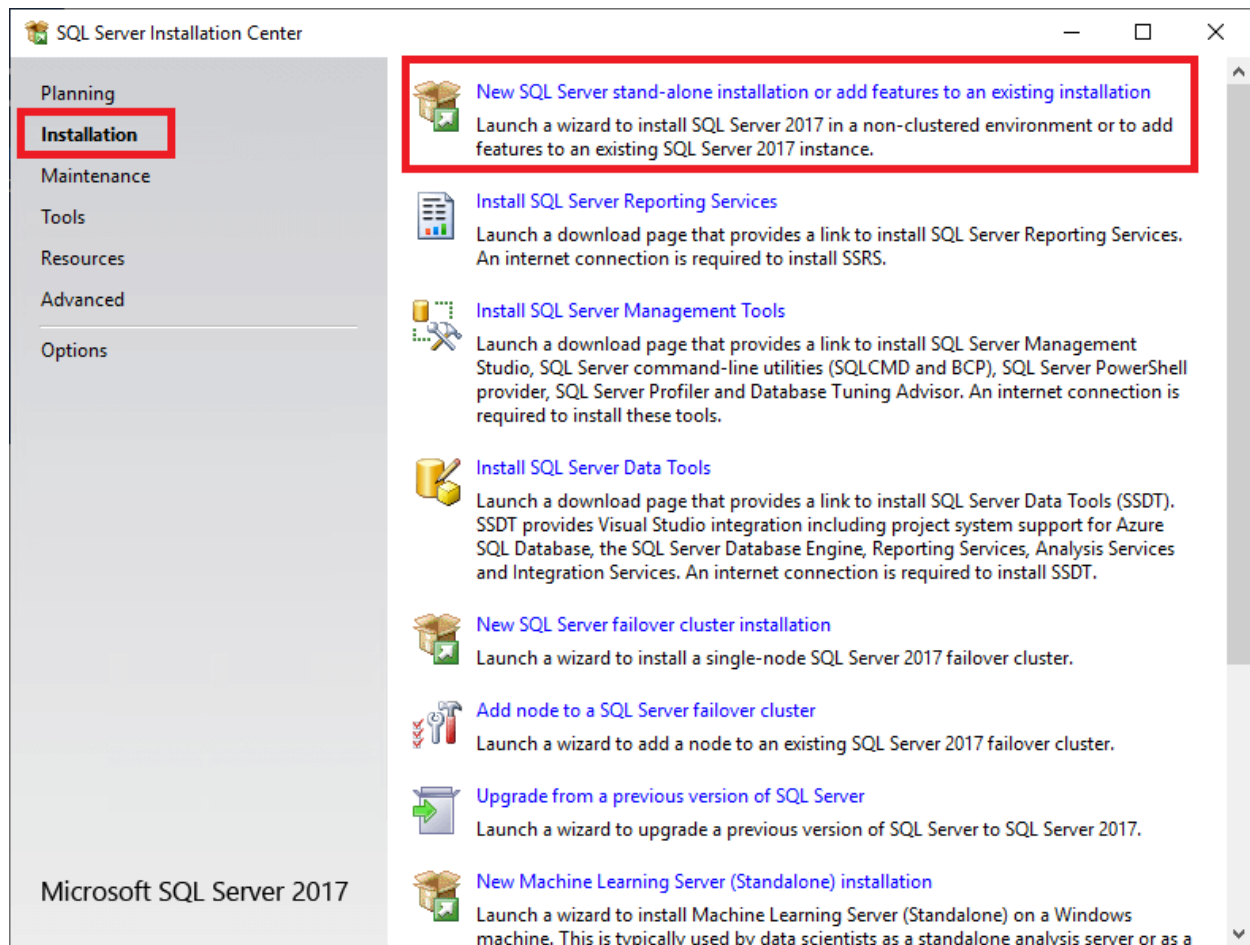
Figure 2: Launch the installation

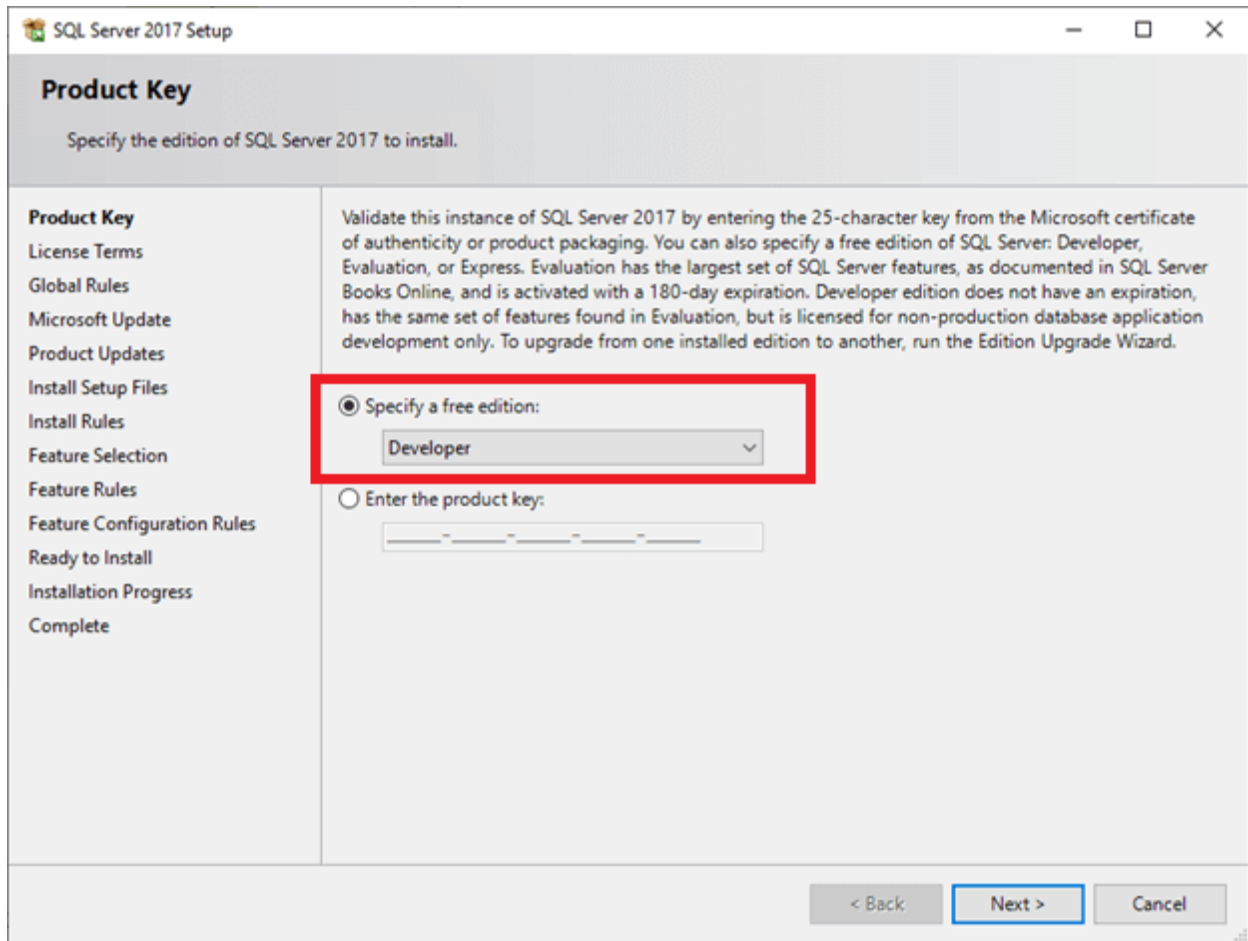Make sure to choose the *Developer Edition* shown in Figure 3.

Figure 3: The Developer edition

The only instance feature you will need for learning T-SQL is the *Database Engine Services* shown in Figure 4.
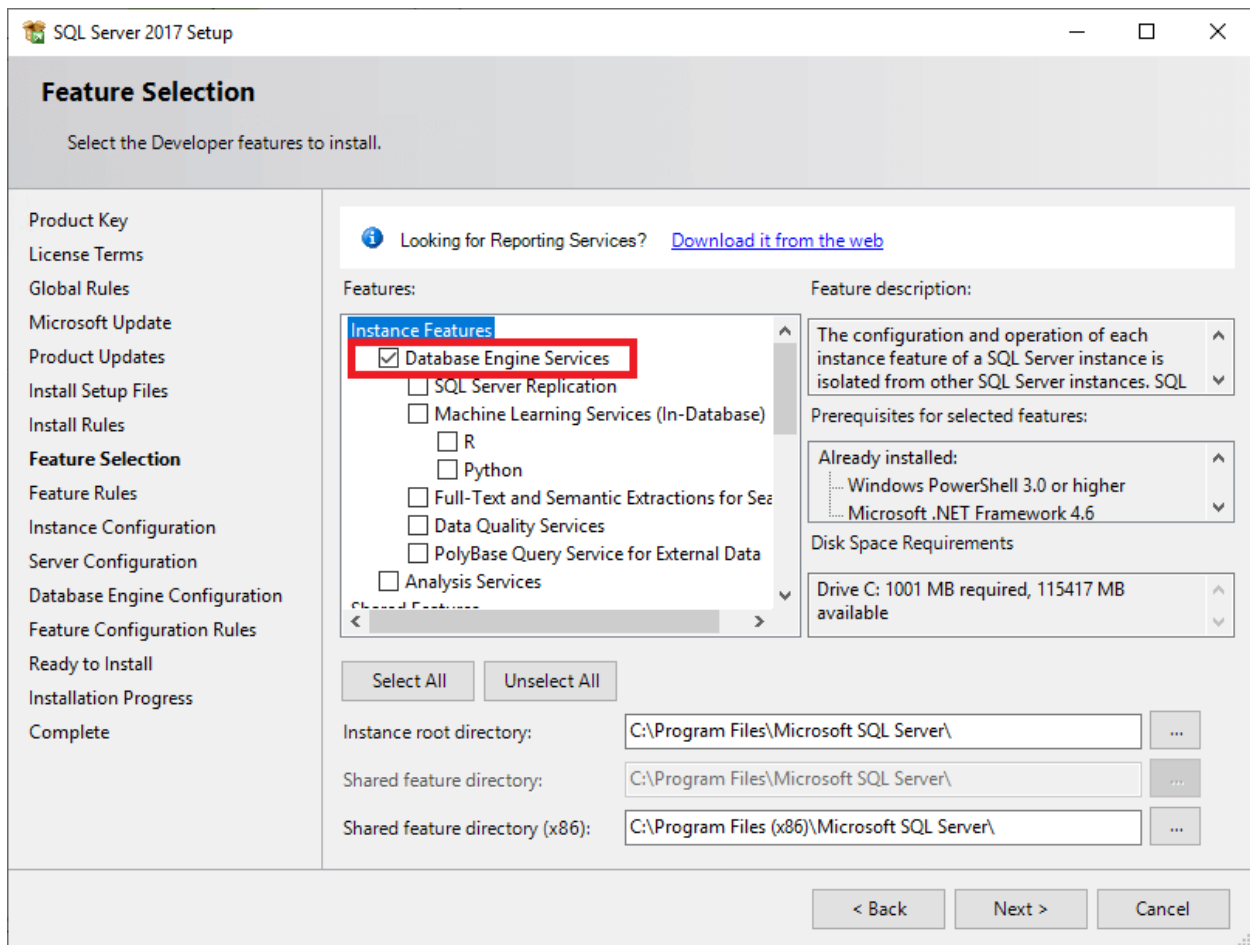
Figure 4: Features

To make things simpler, just install the *Default* instance shown in Figure 5. If you have already installed an instance, you'll see it listed. If that's the case, you may want to just cancel out of the wizard at this point and use the previously installed instance.
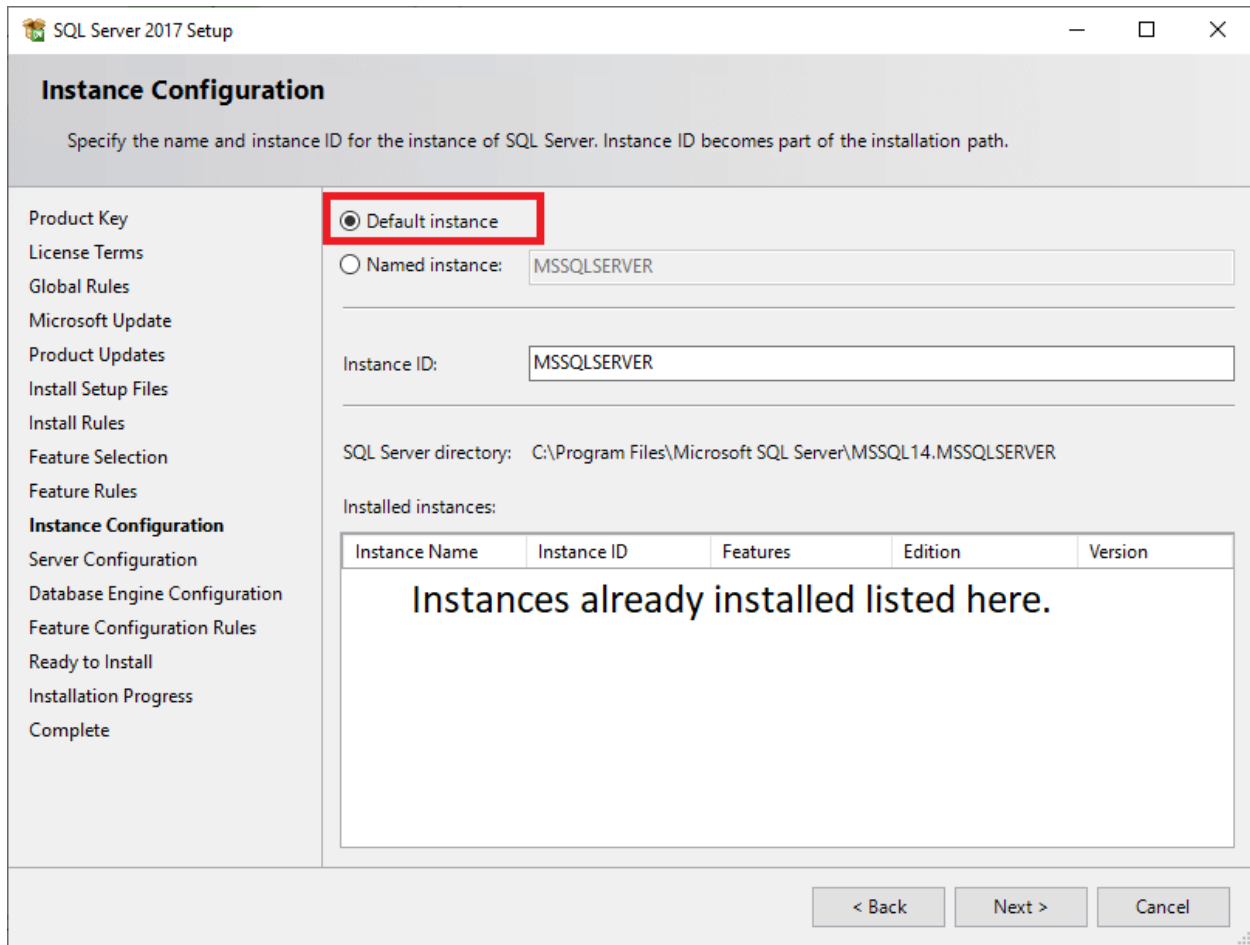
Figure 5: Install the Default instance

Be sure to click *Add current user* to make your account an administrator. You may also want to set the security to *Mixed mode*. Figure 6 shows these options.
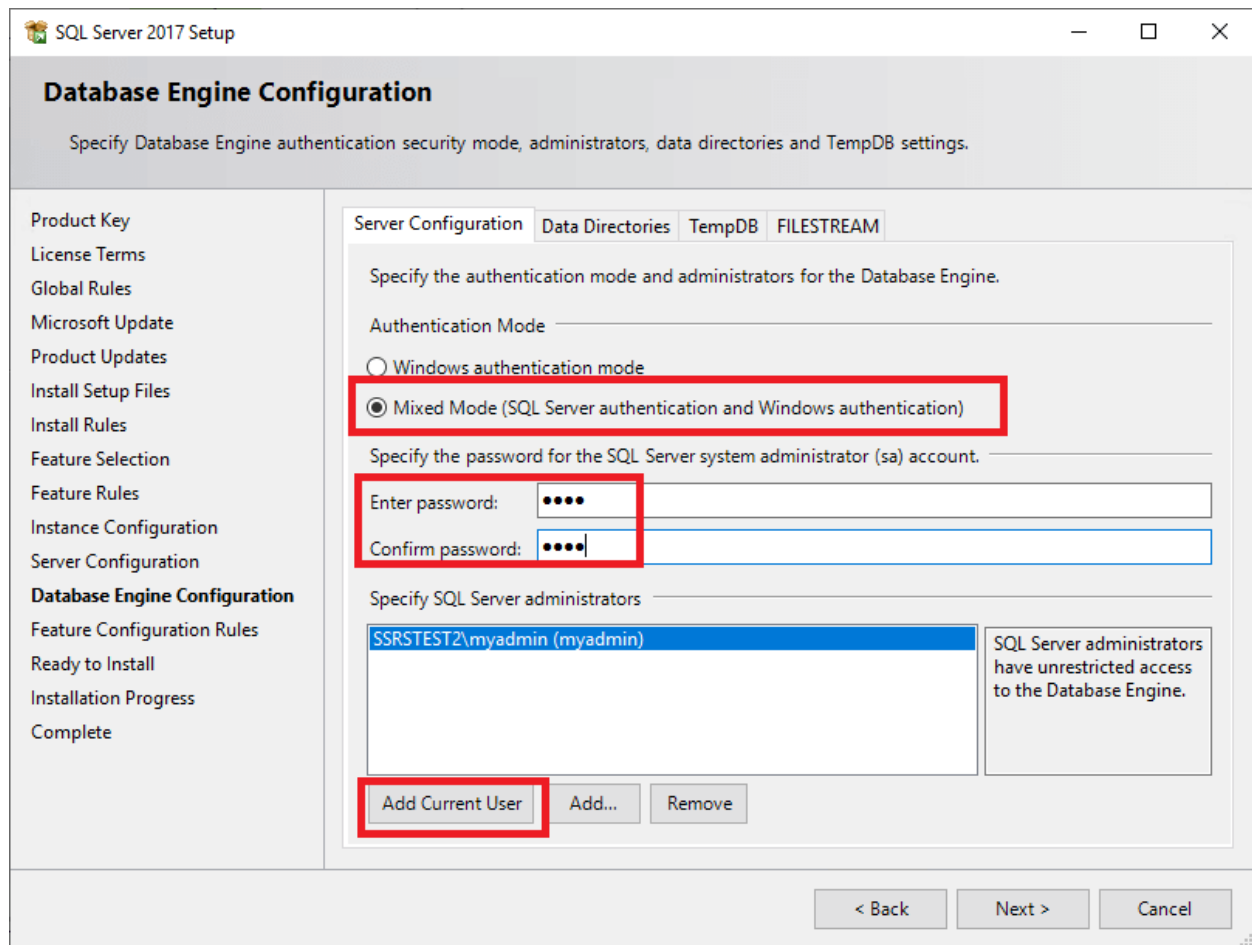
Figure 6: Security settings

Review the summary shown in Figure 7 and go make yourself a cup of coffee or tea after clicking *Install* because it could take 10 or 20 minutes for the installation to run.
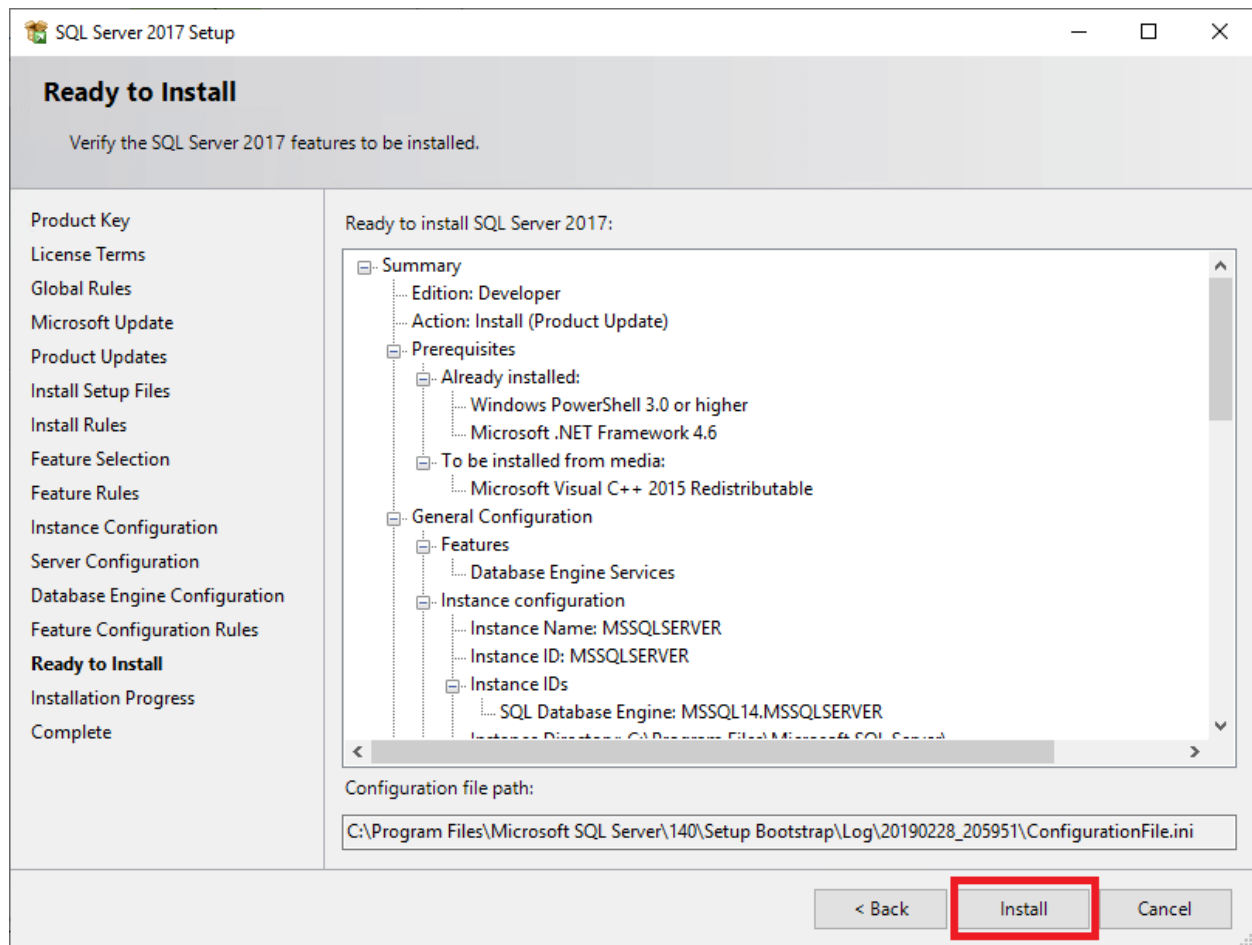
Figure 7: The Summary

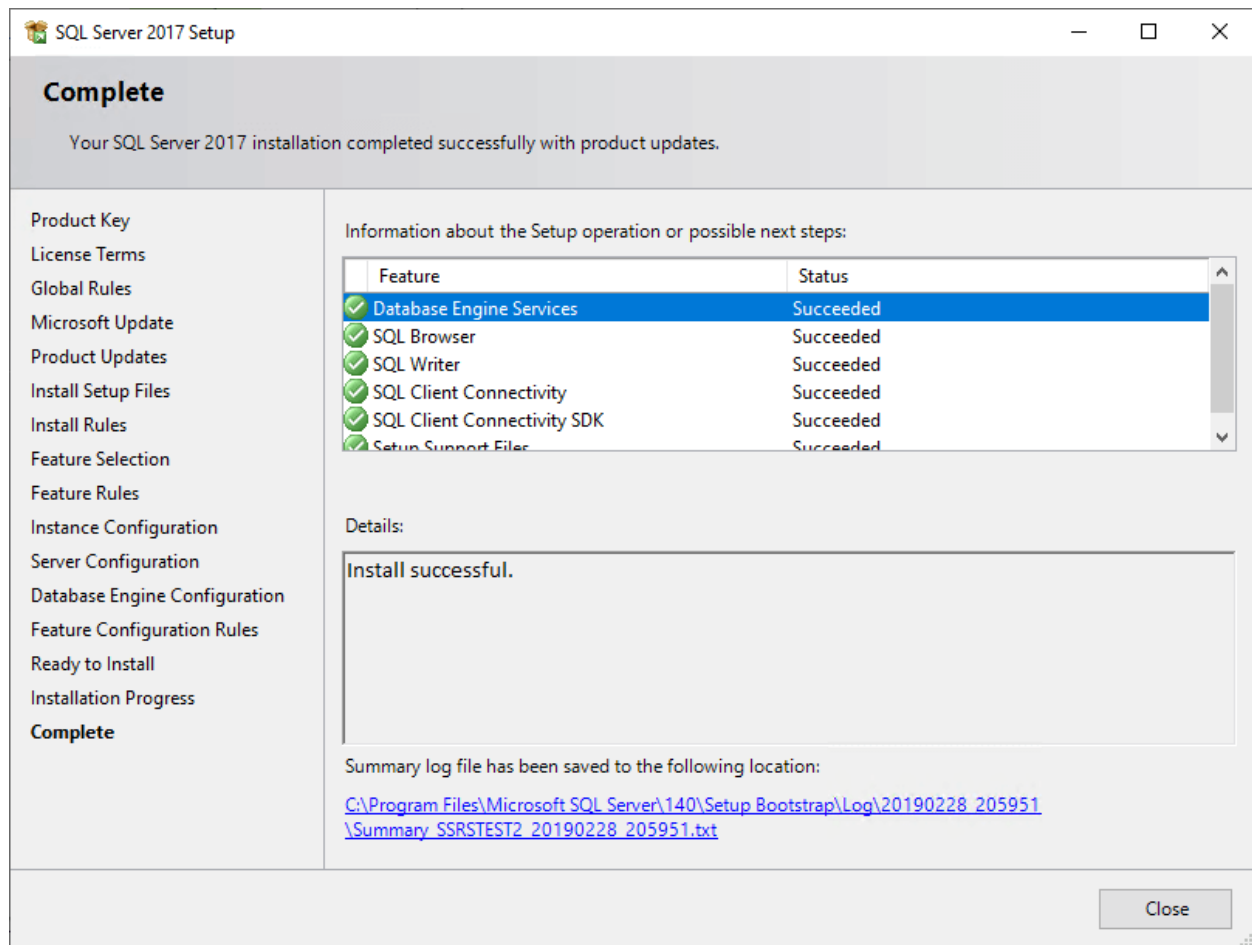Figure 8 shows that the installation was a success!

Figure 8: Success!

Tools for SQL Server

You can use SQL Server Management Studio or Azure Data Studio among other tools for connecting to SQL Server. Just search for one of these two tools, download and install.

Database Download and Restore

The current test database for SQL Server is AdventureWorks2019 https://github.com/Microsoft/sql-server-samples/releases/download/adventureworks/AdventureWorks2019.bak

Download it and move it to a folder such as C:\Temp. The SQL Server cannot see the file in your Downloads or Desktop folders.

This article shows how to create a database, back it up and restore it using SQL Server Management Studio. Use this to learn how to restore your AdvnetureWorks2019 database: https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/quickstart-backup-restore-database?view=sql-server-ver15

This is a similar article for Azure Data Studio https://docs.microsoft.com/en-us/sql/azure-data-studio/tutorial-backup-restore-sql-server?view=sql-server-ver15