

# **JOBSHEET**

## **PRAKTIKUM BASIS DATA LANJUT**

**Jurusan Teknologi Informasi**  
**POLITEKNIK NEGERI MALANG**  
**TAHUN AJARAN 2024/2025**



**Week 1**

**SQL SERVER – INSTALASI SQL SERVER**

### **Team Teaching Basis Data Lanjut:**

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Information Technology Department, Malang State Polytechnic

## **Jobsheet- 1 : SQL Server Installation**

### **Advanced Database Course**

**Supervisor:** Advanced Database Teaching Team

*August 2024*

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#### **Topics**

1. SQL Server Installation

#### **Objective**

Students are expected to be able to:

1. Understand the basic concepts in database management, including what SQL Server is , its function in database management, and its role in software applications.
2. Understanding how to create *a database* from an existing SQL file
3. Understand how to execute part or all of a SQL *script* from an existing file.

#### **General Instructions**

1. Follow the steps in the practical sections in the order given.
2. Answer all questions marked **[Question-X]** that are found in certain steps in each part of the practicum.
3. In each step of the practicum, there is an explanation that will help you answer the questions in instruction number 3, so read and do all the practicum parts in this jobsheet.
4. Write the answers to the questions in the instructions number 3 in a report that is done using a word processing application (Word, OpenOffice, or other similar). Export as a **PDF file** with the following name format:
  - **BDL\_Class\_03\_YourFullName .pdf**
  - Collect the PDF files as a practical report to the supervising lecturer.
  - In addition to the file name, also include your identity on the first page of the report.

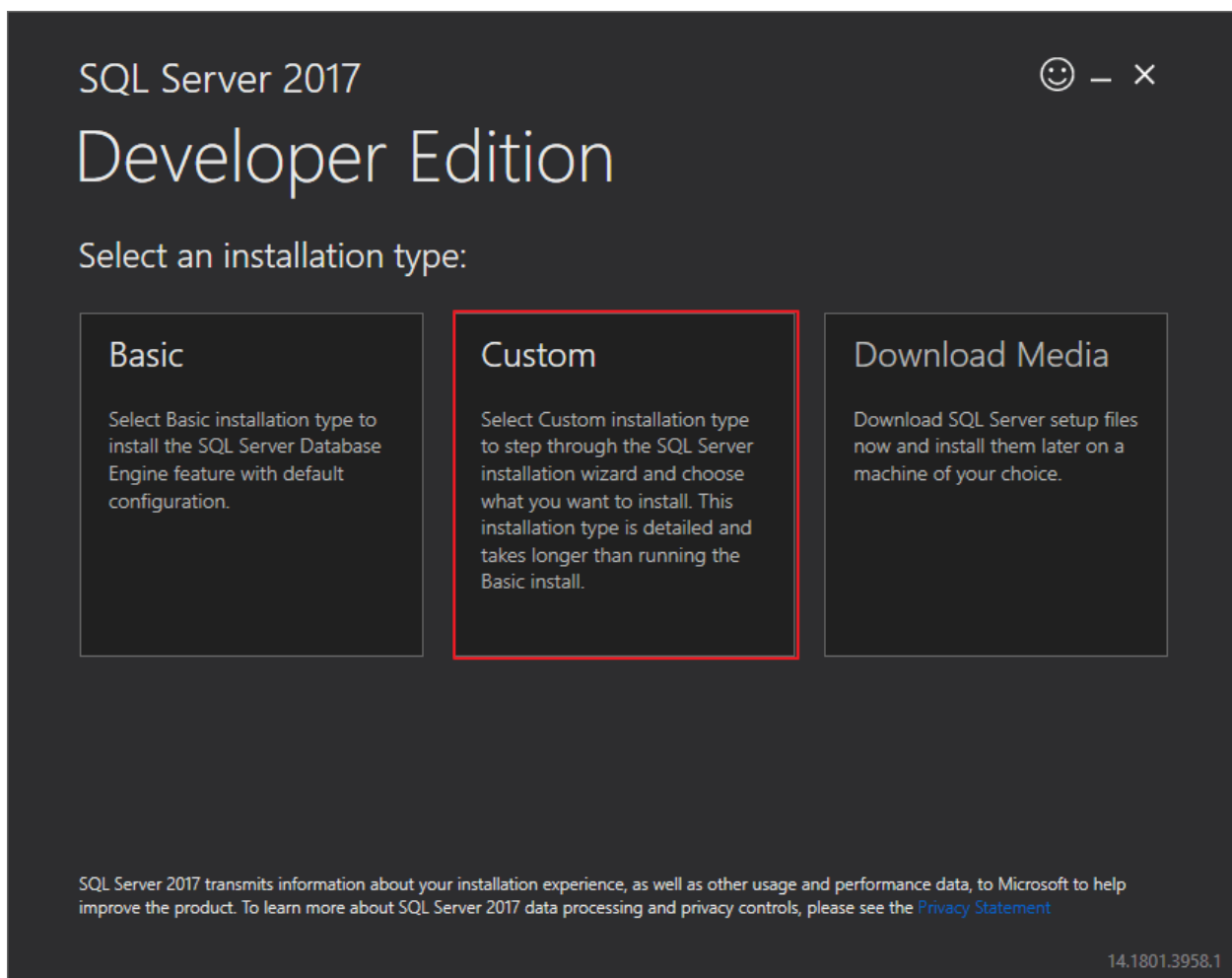
## Practical: SQL Server Installation

### SQL Server Functions

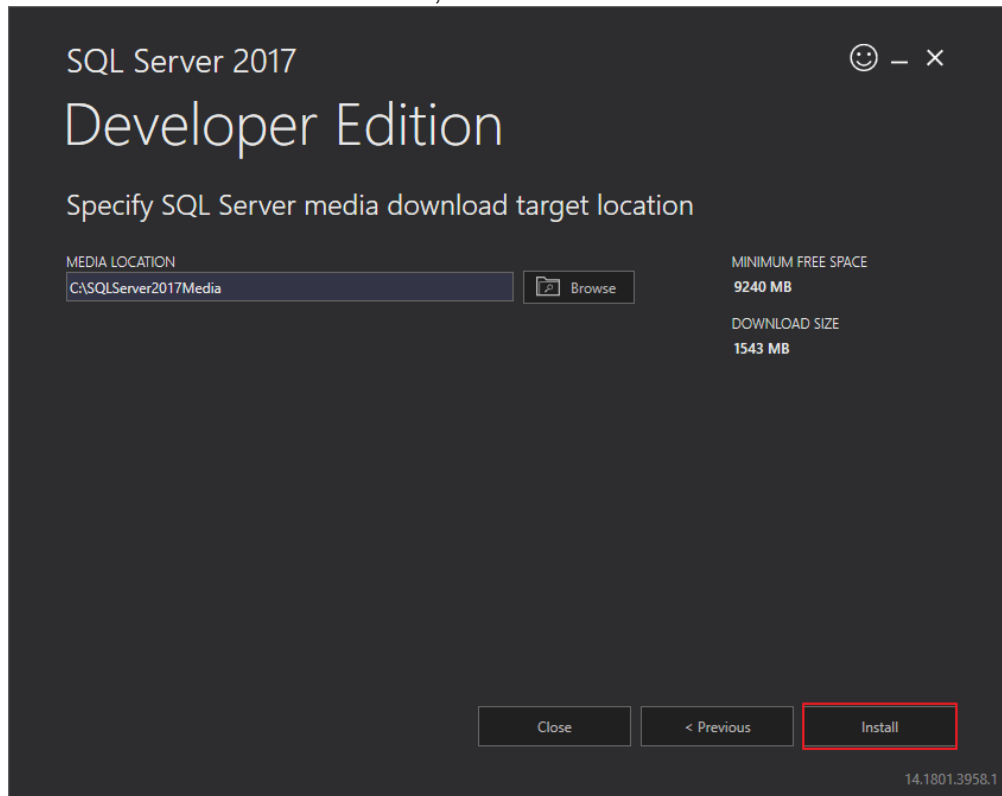
SQL Server is a standard database programming language that has rational data management, so don't be surprised if almost all host servers use SQL more than other programs.

### How to Completely Install SQL Server

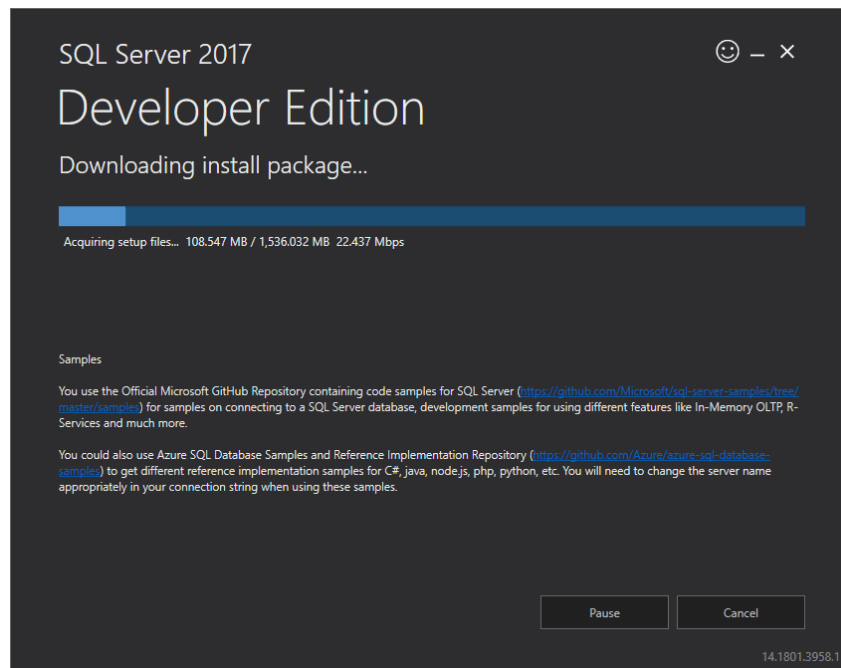
1. First of all, you have to download the SQL Server installer first. Here I am still using SQL Server 2017 Developer version. In addition to being free, its features are also quite complete. Download SQL Server 2017 Developer Edition [via this link](#) .
2. In the initial installation window, select **Custom** .



3. Leave the installation location as default, then select **Install** .



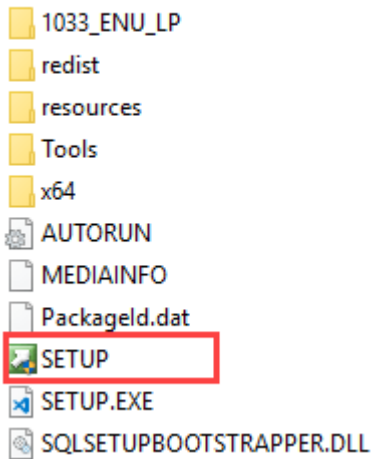
4. SQL Server will download some packages and files needed. This process requires an internet connection and is quite long because the downloaded files are more than 1GB. Therefore, it is recommended to connect to a WiFi network.



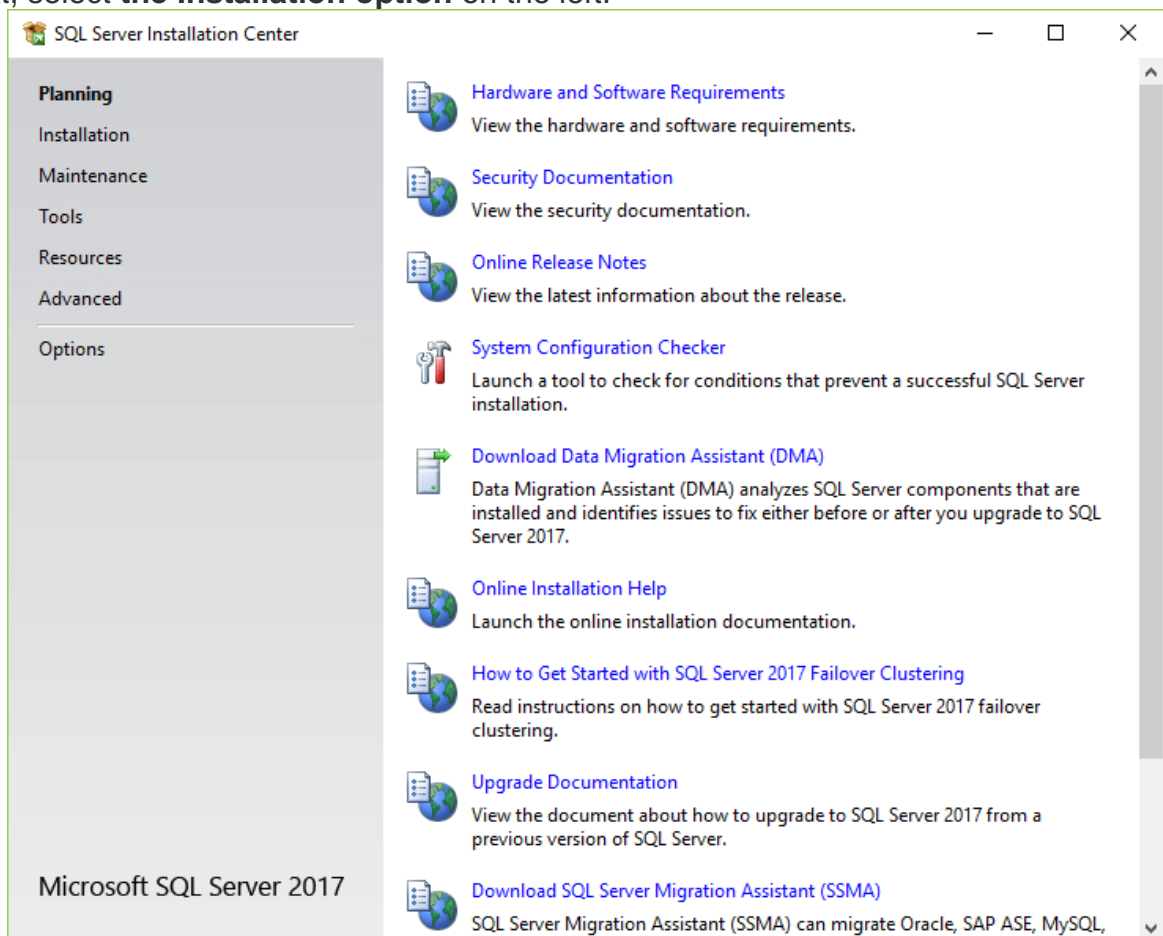
5. If the downloading process is complete. Enter to

folder **C:\SQL2017\Developer\_ENU** then **click 2X SETUP** .

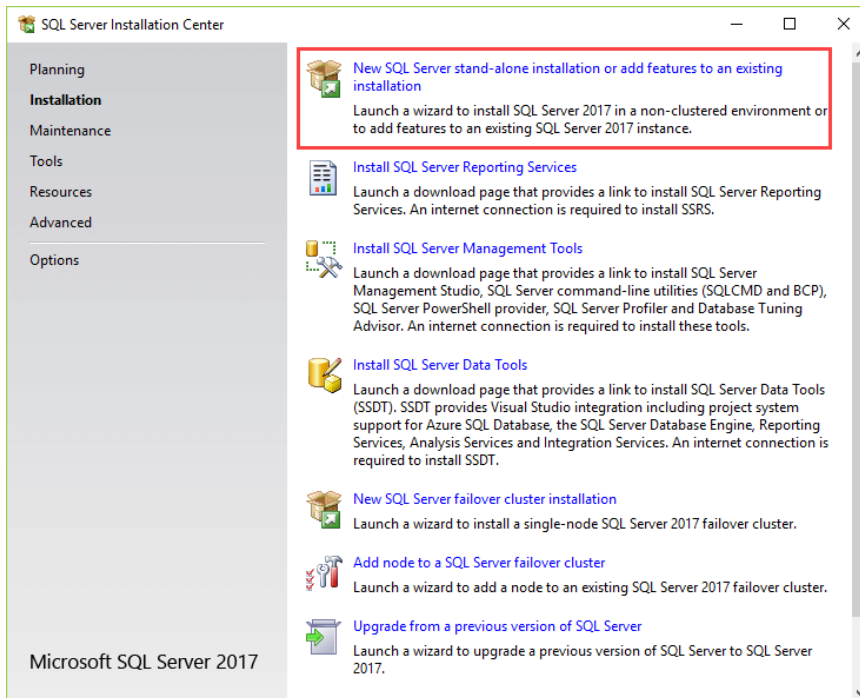
C > Local Disk (C:) > SQLServer2017Media > Developer\_ENU >



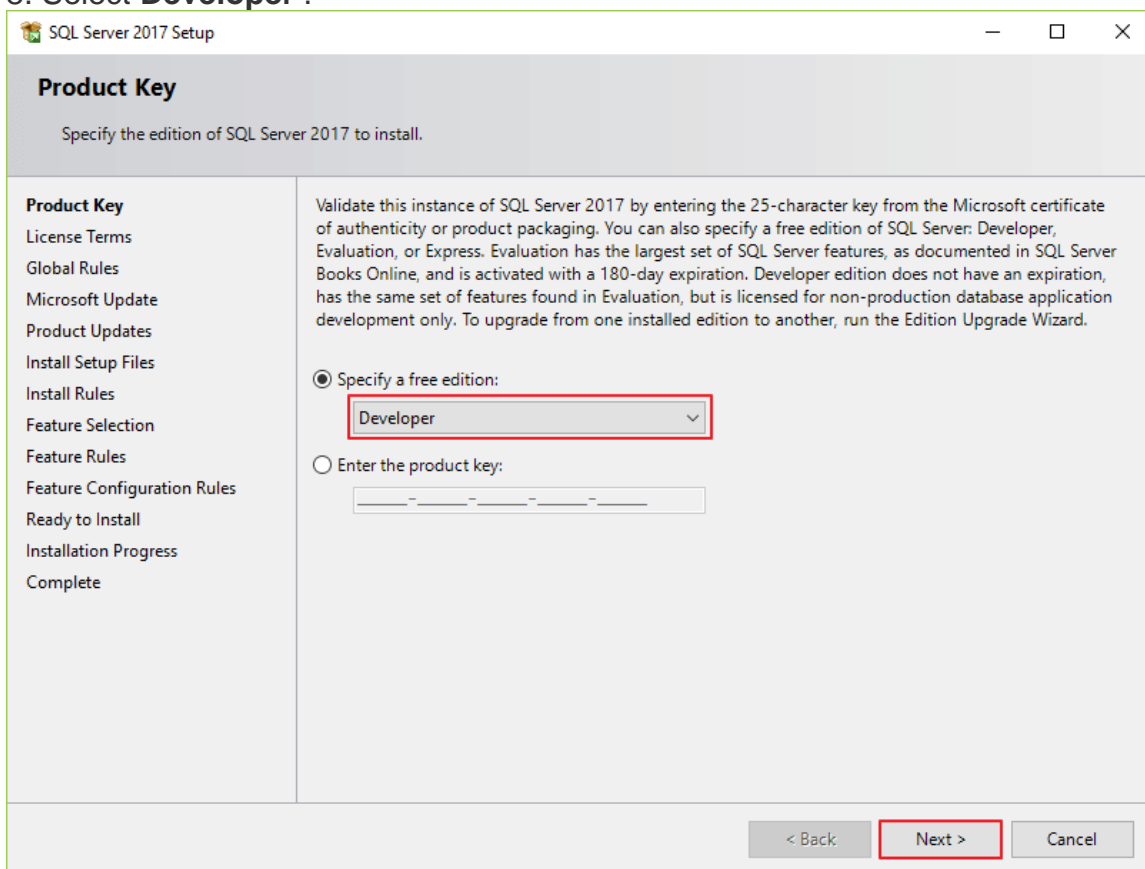
6. Next, select the **Installation option** on the left.



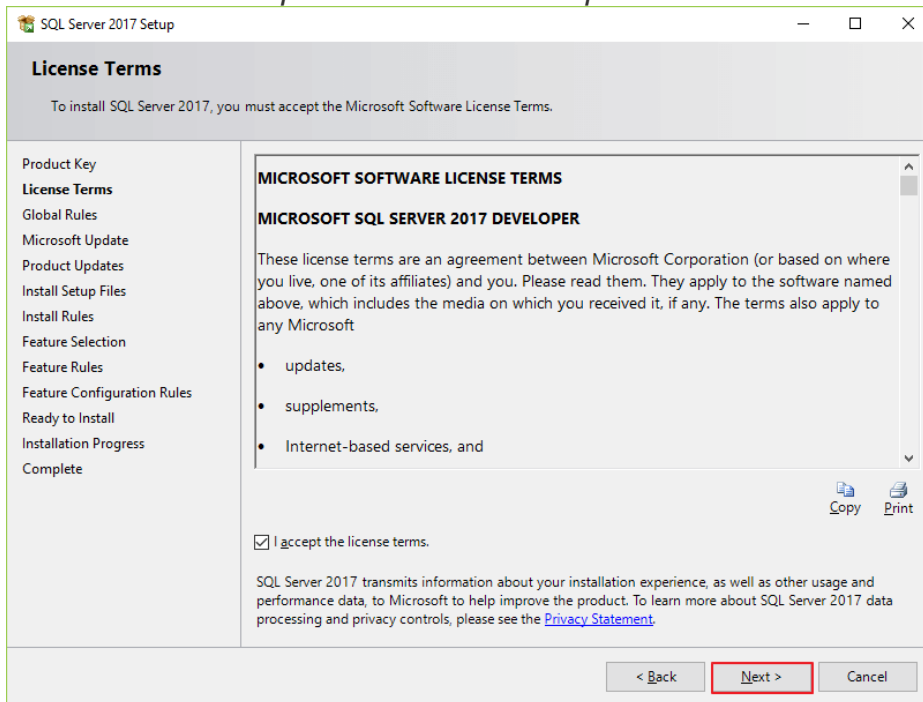
7. Next, select the option marked with a red box.



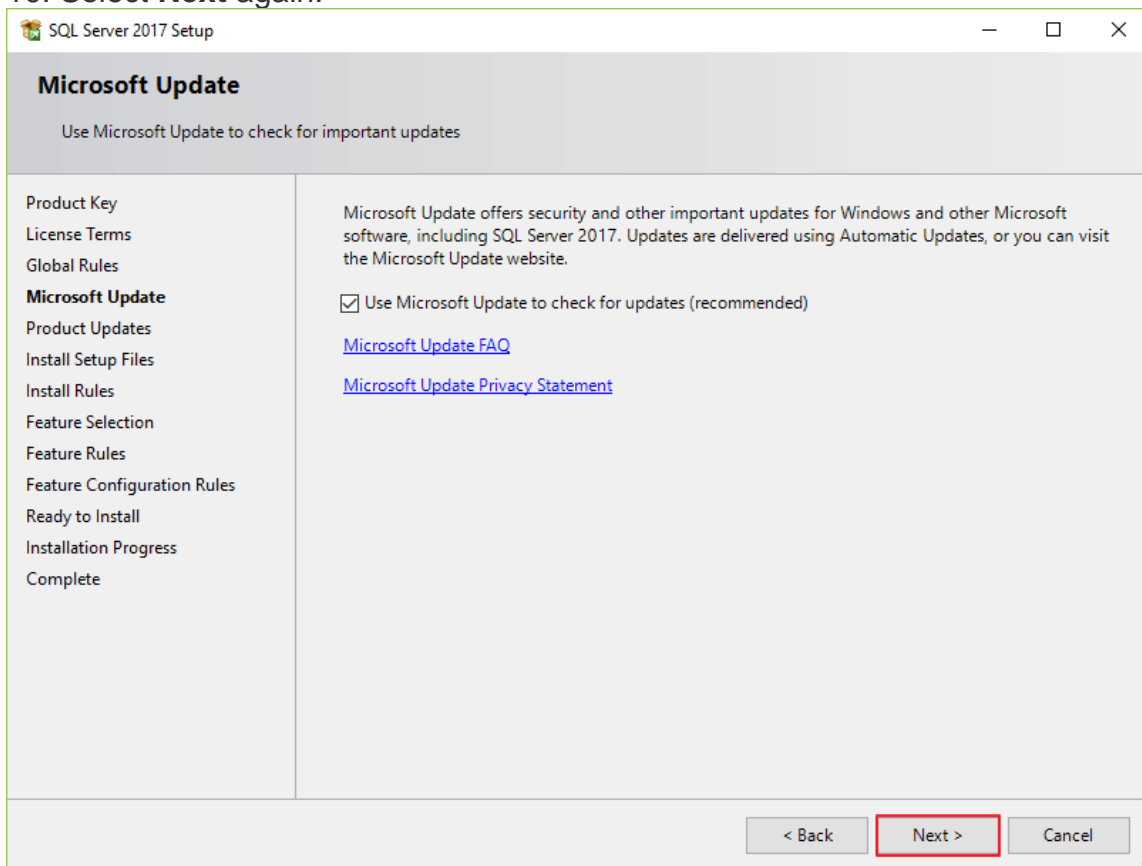
8. Select **Developer** .



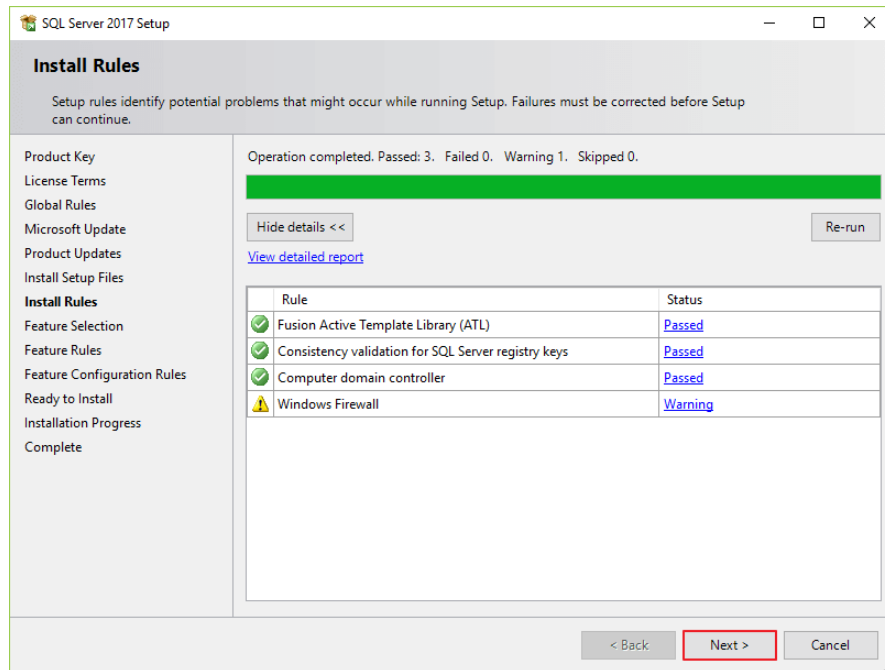
9. Check the *I accept the license terms* option then select **Next** .



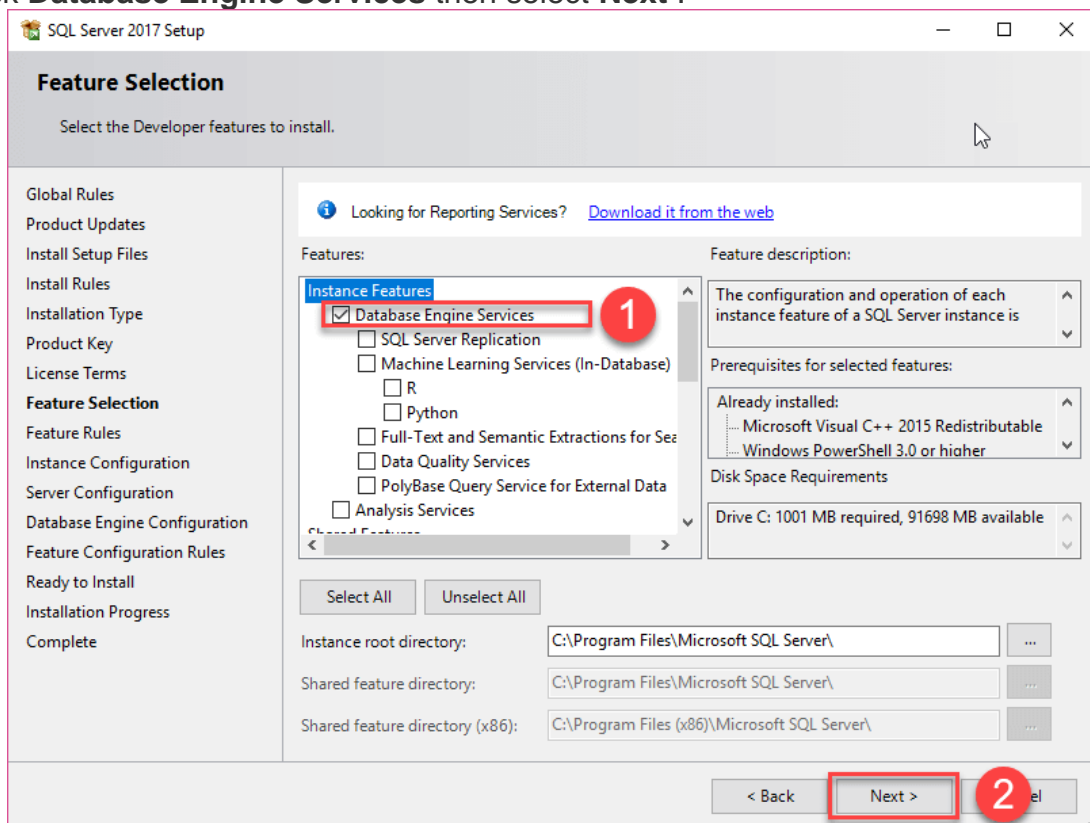
10. Select **Next** again.



11. Make sure there are no failed rules. If there is still a warning, it doesn't matter. Continue by selecting **Next** .

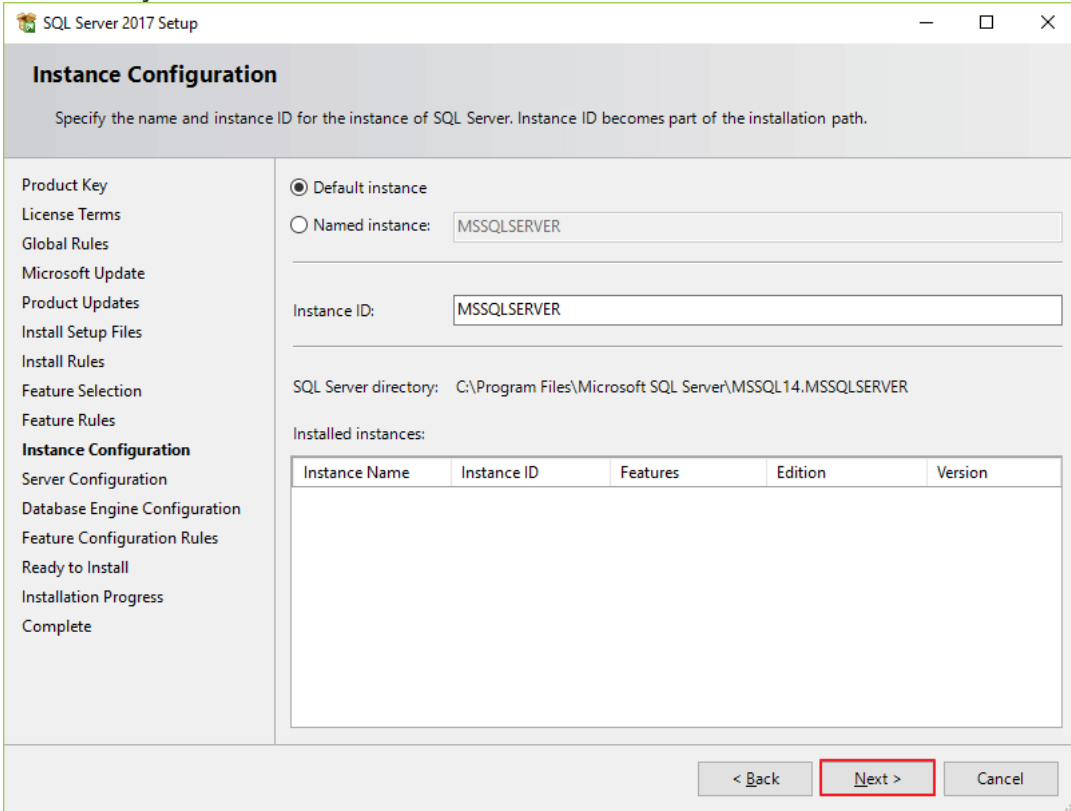


12. Check **Database Engine Services** then select **Next** .





12. Give a name to your SQL Server. Then select **Next** .



**Instance Configuration**

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

Product Key  
License Terms  
Global Rules  
Microsoft Update  
Product Updates  
Install Setup Files  
Install Rules  
Feature Selection  
Feature Rules  
**Instance Configuration**  
Server Configuration  
Database Engine Configuration  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

☒ Default instance  
☐ Named instance: MSSQLSERVER

Instance ID: MSSQLSERVER

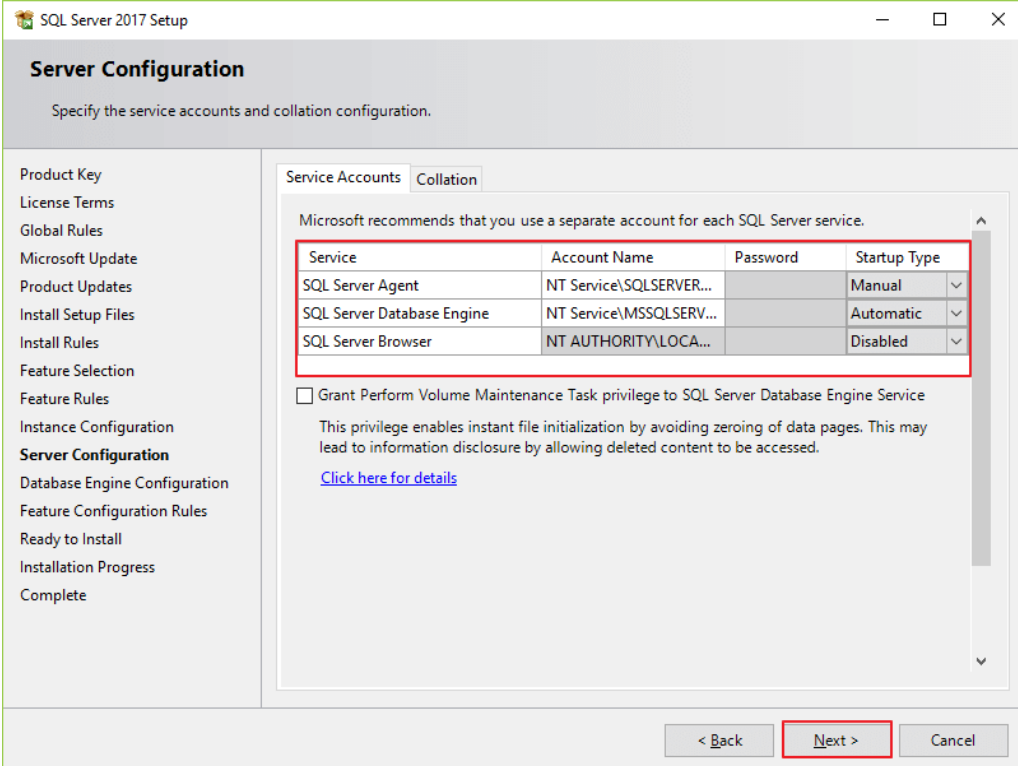
SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL14.MSSQLSERVER

Installed instances:

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

13. Select **Next** again.



**Server Configuration**

Specify the service accounts and collation configuration.

Product Key  
License Terms  
Global Rules  
Microsoft Update  
Product Updates  
Install Setup Files  
Install Rules  
Feature Selection  
Feature Rules  
Instance Configuration  
**Server Configuration**  
Database Engine Configuration  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

Service Accounts Collation

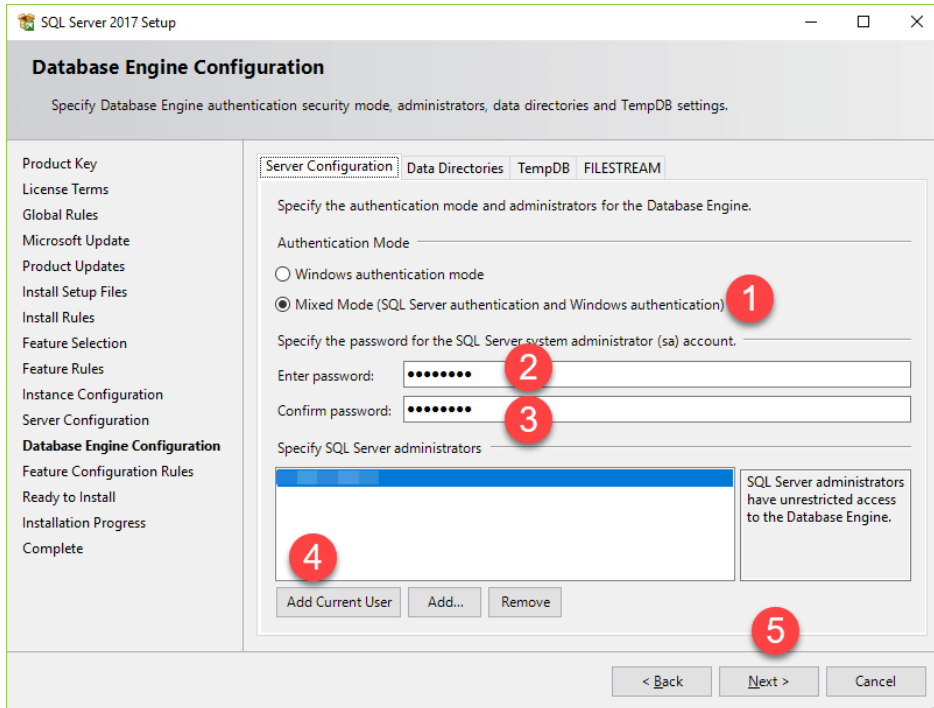
Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Agent	NT Service\SQLSERVER...		Manual
SQL Server Database Engine	NT Service\MSSQLSERV...		Automatic
SQL Server Browser	NT AUTHORITY\LOCA...		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

14. Select Mixed mode then give a strong but memorable password. Select **Add Current User** then select **Next** .



**SQL Server 2017 Setup**

**Database Engine Configuration**

Specify Database Engine authentication security mode, administrators, data directories and TempDB settings.

Product Key  
License Terms  
Global Rules  
Microsoft Update  
Product Updates  
Install Setup Files  
Install Rules  
Feature Selection  
Feature Rules  
Instance Configuration  
Server Configuration  
**Database Engine Configuration**  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

Server Configuration | Data Directories | TempDB | FILESTREAM

Specify the authentication mode and administrators for the Database Engine.

Authentication Mode

☐ Windows authentication mode

☒ Mixed Mode (SQL Server authentication and Windows authentication) (1)

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

Enter password: ..... (2)

Confirm password: ..... (3)

Specify SQL Server administrators

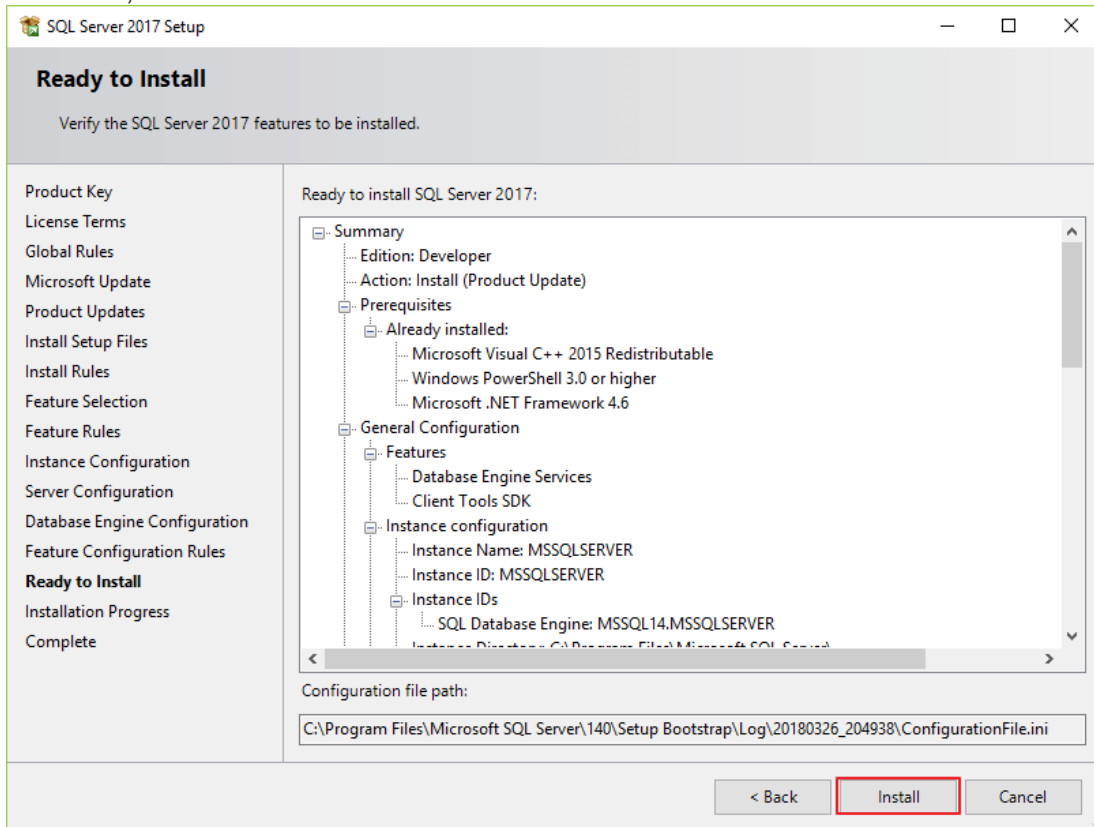
(4)

Add Current User | Add... | Remove

SQL Server administrators have unrestricted access to the Database Engine.

< Back | Next > (5) | Cancel

15. Next, select **Install** .



**SQL Server 2017 Setup**

**Ready to Install**

Verify the SQL Server 2017 features to be installed.

Product Key  
License Terms  
Global Rules  
Microsoft Update  
Product Updates  
Install Setup Files  
Install Rules  
Feature Selection  
Feature Rules  
Instance Configuration  
Server Configuration  
Database Engine Configuration  
Feature Configuration Rules  
**Ready to Install**  
Installation Progress  
Complete

Ready to install SQL Server 2017:

Summary

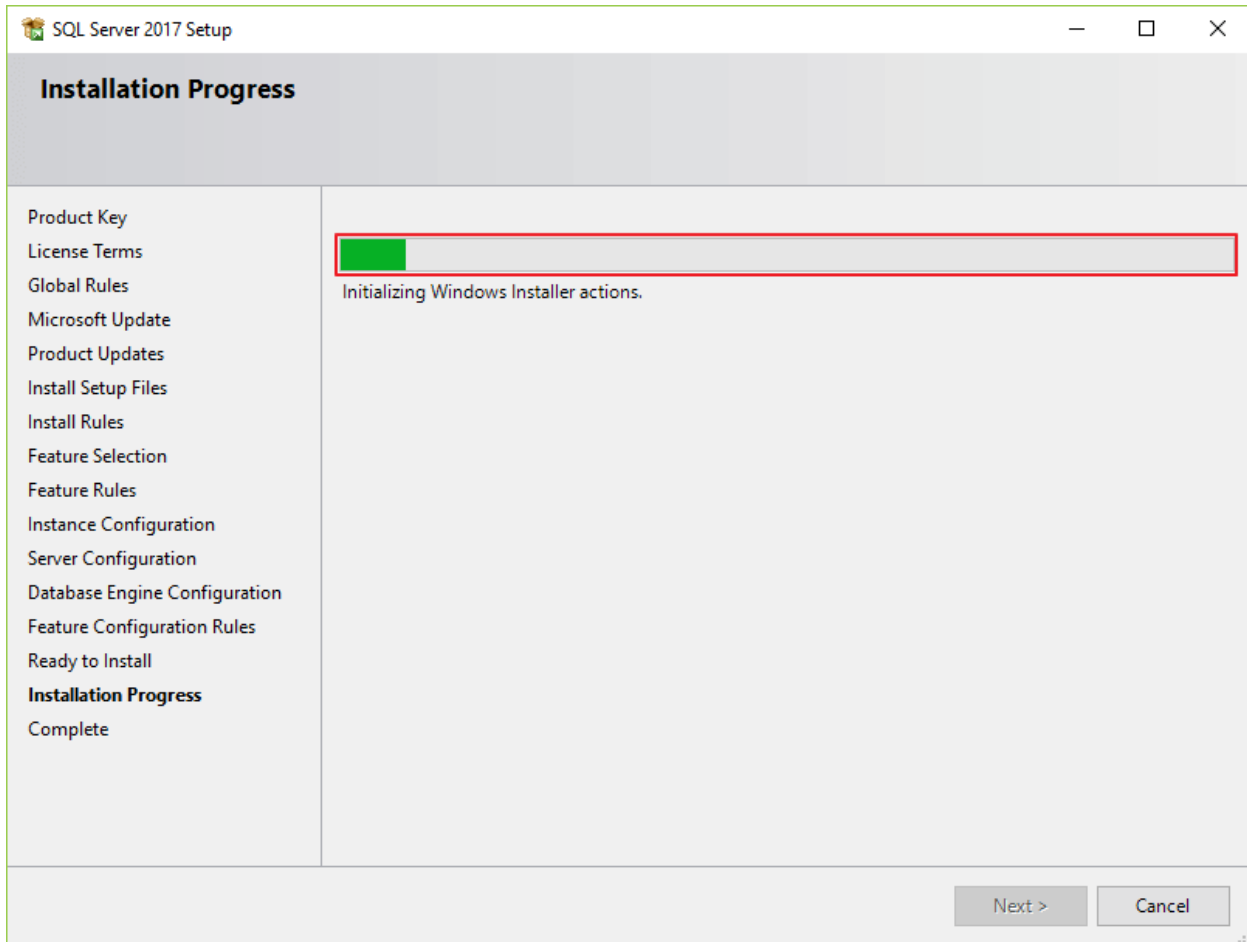
- Edition: Developer
- Action: Install (Product Update)
- Prerequisites
  - Already installed:
    - Microsoft Visual C++ 2015 Redistributable
    - Windows PowerShell 3.0 or higher
    - Microsoft .NET Framework 4.6
- General Configuration
  - Features
    - Database Engine Services
    - Client Tools SDK
  - Instance configuration
    - Instance Name: MSSQLSERVER
    - Instance ID: MSSQLSERVER
    - Instance IDs
      - SQL Database Engine: MSSQL14.MSSQLSERVER

Configuration file path:

C:\Program Files\Microsoft SQL Server\140\Setup Bootstrap\Log\20180326\_204938\ConfigurationFile.ini

< Back | **Install** | Cancel

16. Wait for the installation process to complete.



17. Make sure there are no error features in the status column. If you get a notification like this, select **OK**.

