



UNIVERSIDAD NACIONAL DE INGENIERÍA

FACULTAD DE INGENIERÍA INDUSTRIAL Y DE SISTEMAS



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SQL-SERVER ADMINISTRACION



Ing. Wilman Vásquez Gutiérrez



4 sesiones

M & J 19:00 a 22:00



SQL-SERVER ADMINISTRACION



Introducción

Administración de base
de datos en SQL Server

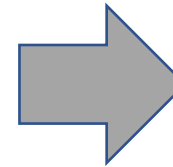
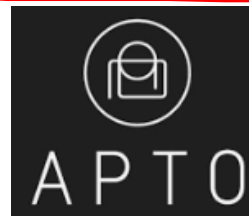


Fórmula de Evaluación

$$PF = 30\% \text{ PROM}(EC, 3) + 10\% \text{ PROM}(AT) + 60\% (PF) + (EF)$$

Donde:

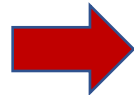
- **EC** = Evaluación Continua (3) ("Cuestionarios en Línea") ✓
- **AT** = Avance Técnico
- **PCI** = Proyecto Final I → 3
- **EFI** = Examen Final



Objetivo

El Participante al finalizar el curso será capaz de:

- Aplicar las herramientas esenciales para administrar las bases de datos y los servidores que trabajan bajo SQL Server.



Requisitos:

- Conocimientos de Modelamiento de Datos
- Implementación de SqlServer.



Consideraciones

- ✦ **Asistencia y puntualidad**
- ✦ **Participación en clases (Videoconferencia)**
- ✦ **Comportamiento**
- ✦ **Tareas**



Saberes Previos



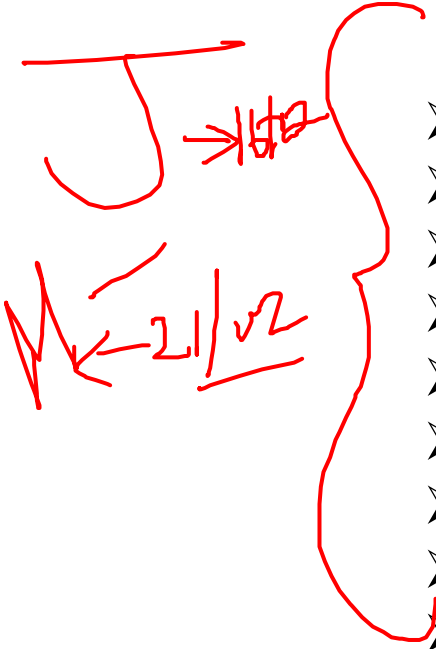
LOGRO DE APRENDIZAJE

- Reconoce e instala y configura el SQL Server mediante sus ediciones , requerimientos de HW y SW aplicando en una BDR a través de la creación ,administración haciendo uso de Schemas y FileGroups para un proceso de negocio real.



Sesión 1

SQL Server 2016

- 
- Instalación y Configuración de SQL-Server
 - Ediciones del SQL Server 2016.
 - Requerimientos de Hardware y Software.
 - Manejo de instancias.
 - Consideraciones sobre la Seguridad.
 - Administración de la Base de Datos y Archivos.
 - Planificación de la Base de Datos.
 - Creación de Bases de Datos.
 - Administración de las Bases de Datos. Uso de Schemas y FileGroups.



Instalación de SqlServer

Instalación SQL Server 2017

Descarga el Link :

2017

https://utpedupe-my.sharepoint.com/:u:/g/personal/d16011_idat_edu_pe/EadXT_4MuntEjRMTyiVPK3gBweVJ_hnzZf8GcdYV2tr0ag?e=w97ldL

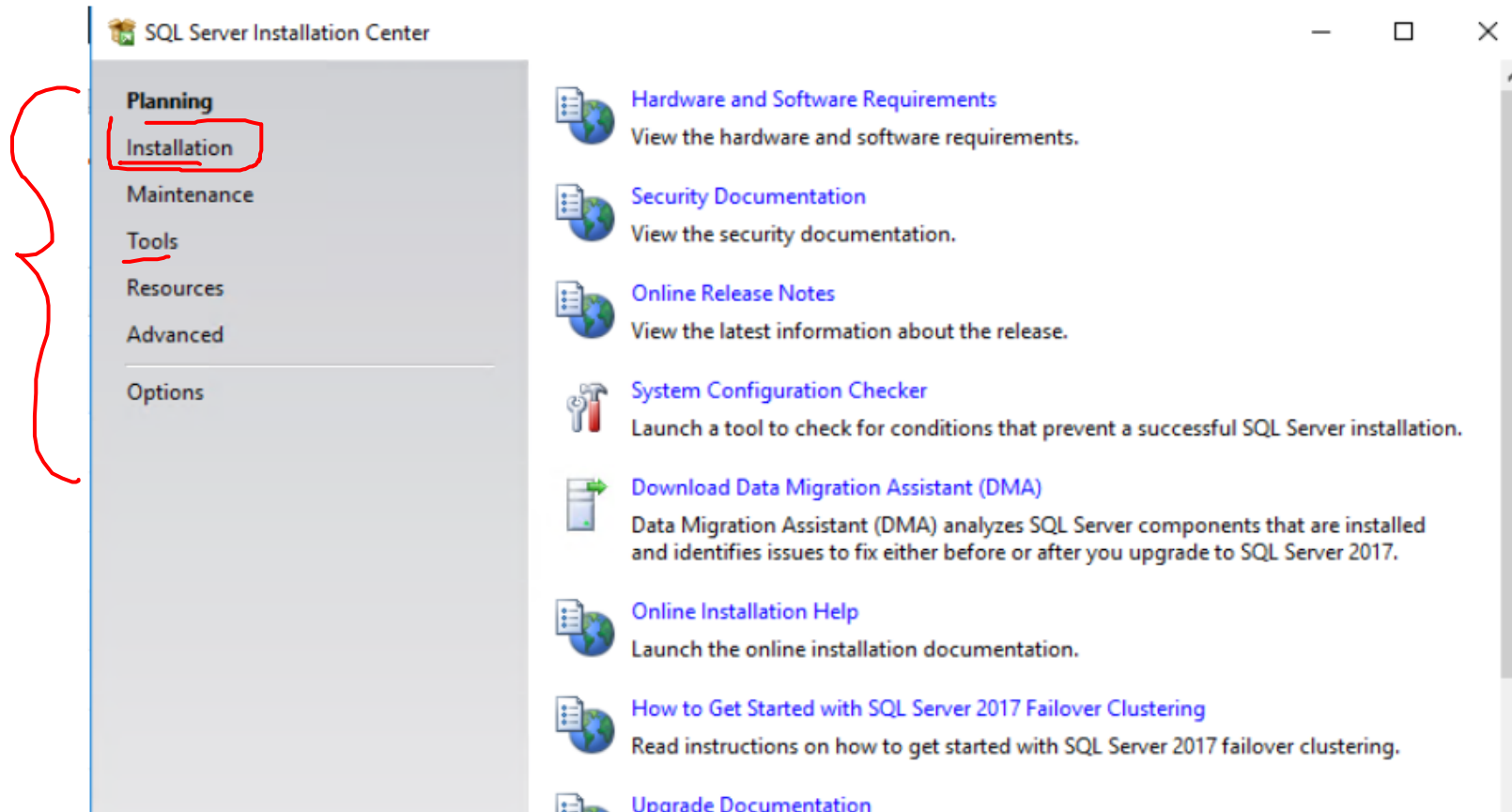
SSMS

https://utpedupe-my.sharepoint.com/:u:/g/personal/d16011_idat_edu_pe/Eb62uSj8kwFPuKMpPdEdI4cBKkAy76oeYlcK7tzTiacW7A?e=Lz37Fc



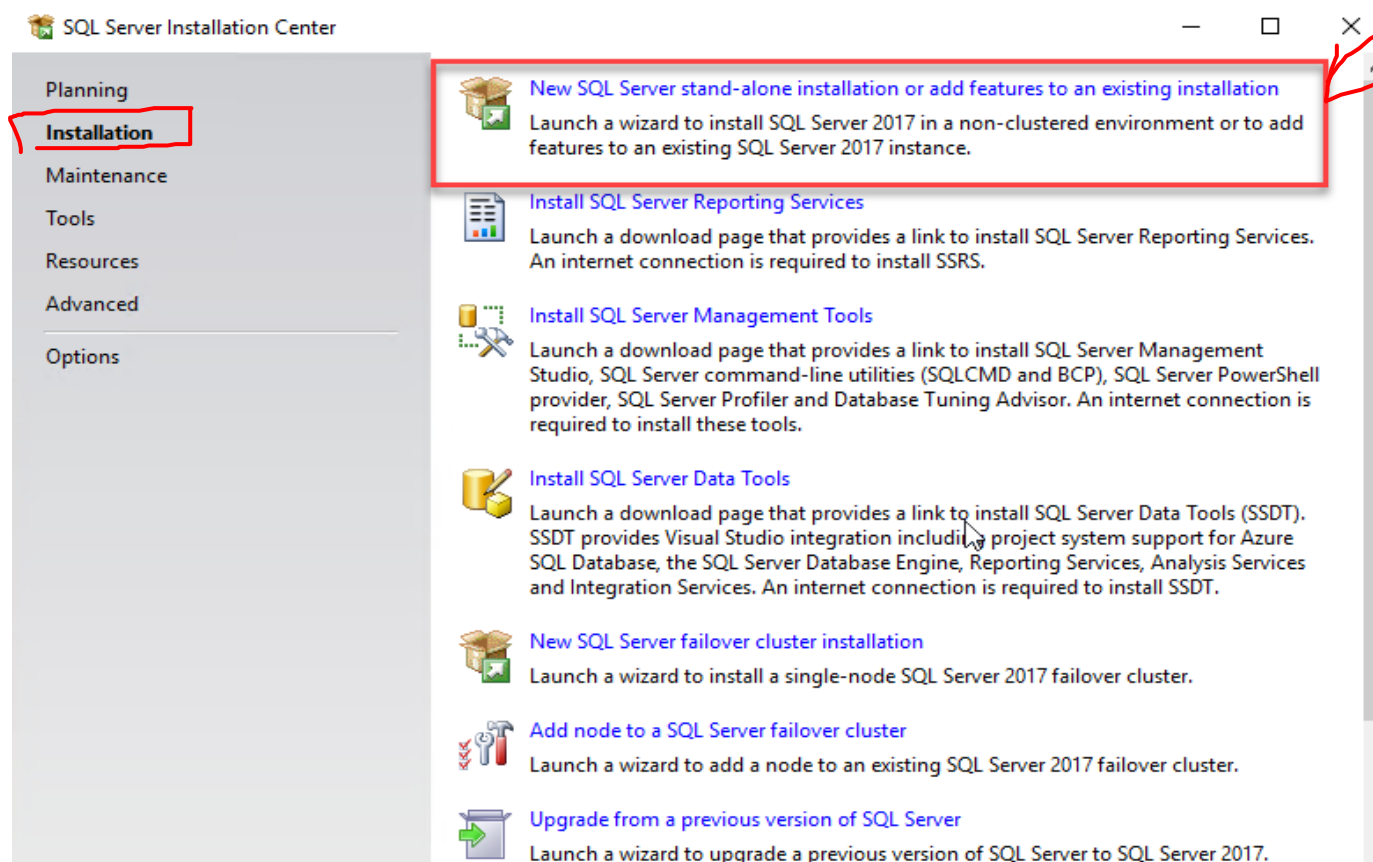
Instalación y Configuración de SqlServer

Instalación SQL Server 2016 - Personalización



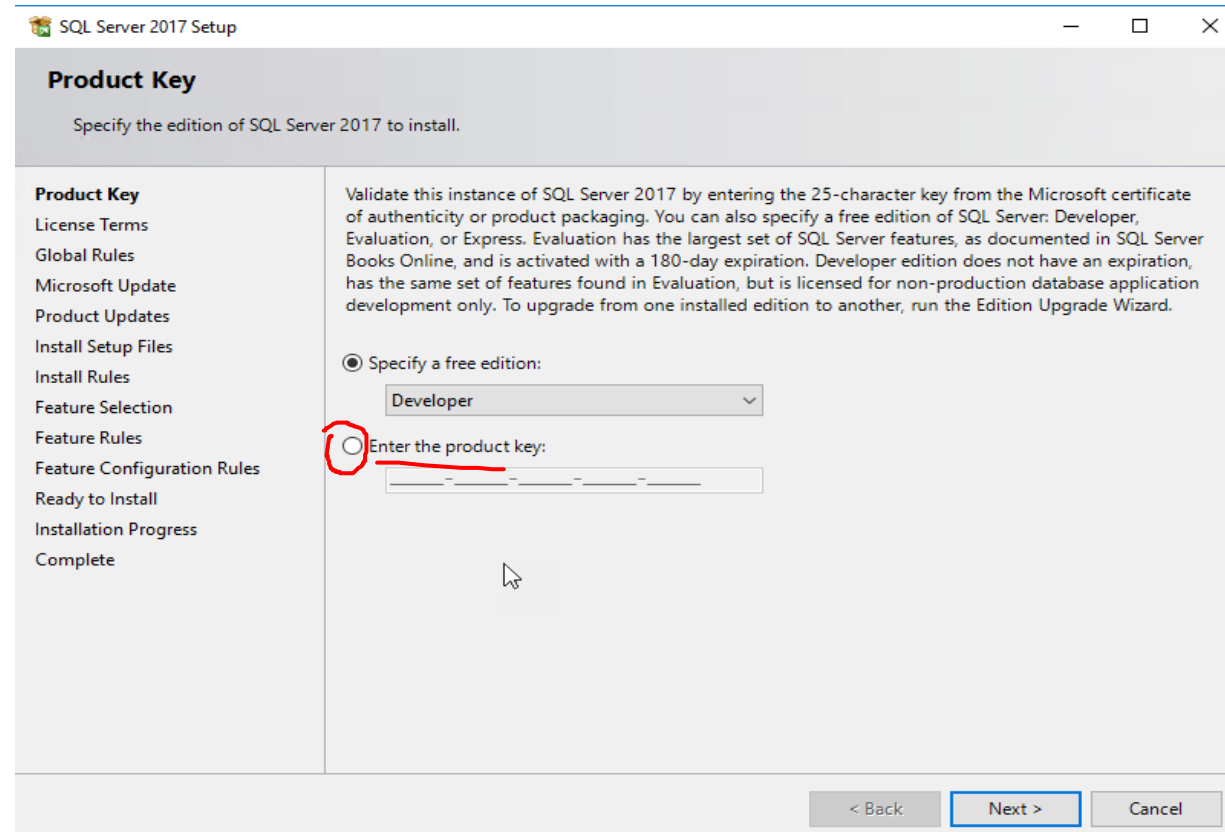
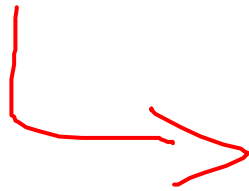
Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores

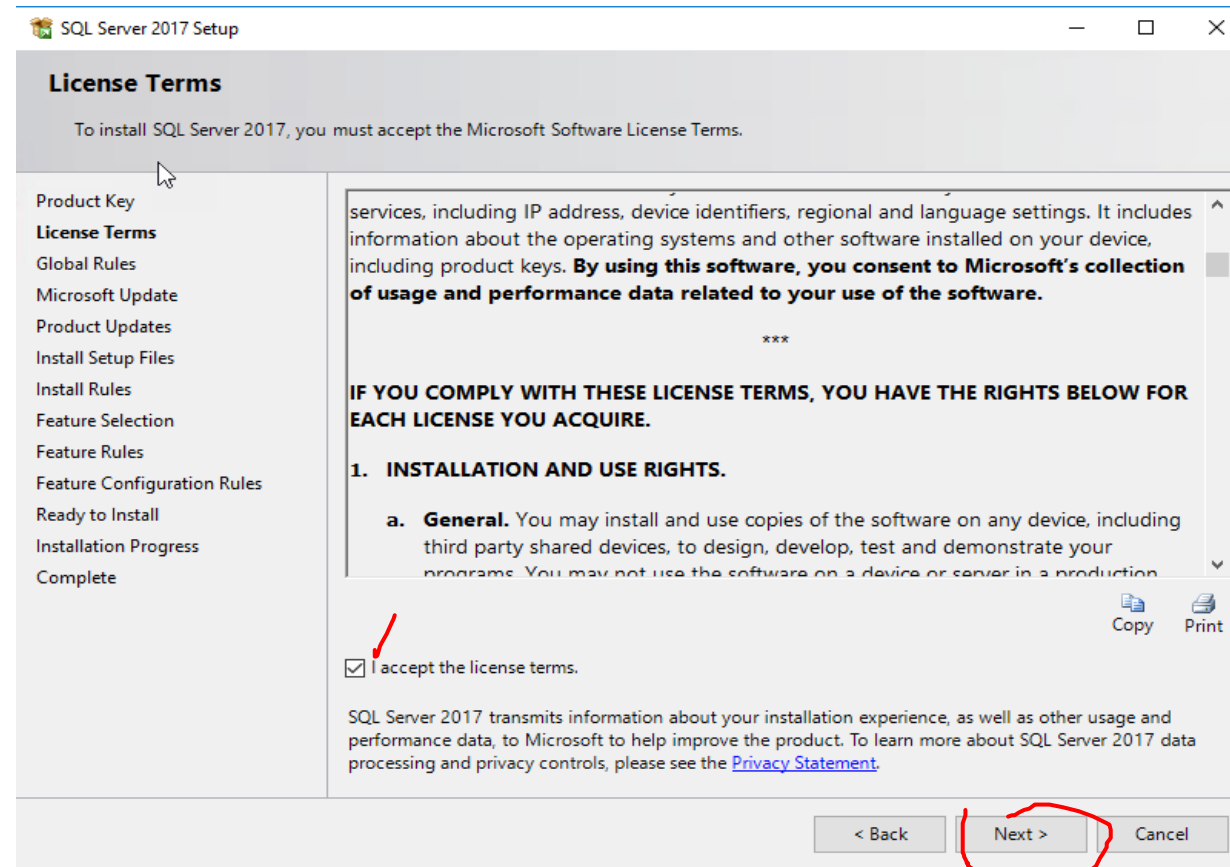


The screenshot shows the 'SQL Server 2017 Setup' window. The 'Product Key' section is active, with the instruction 'Specify the edition of SQL Server 2017 to install.' The left sidebar lists various setup steps, with 'Product Key' at the top. The main area contains a text box explaining the validation process and two radio button options: 'Specify a free edition:' (selected) and 'Enter the product key:'. The 'Specify a free edition:' option has a dropdown menu showing 'Developer'. The 'Enter the product key:' option is circled in red, and its text is underlined. Below it is a text input field with a placeholder for a 25-character key. At the bottom right are buttons for '< Back', 'Next >', and 'Cancel'.



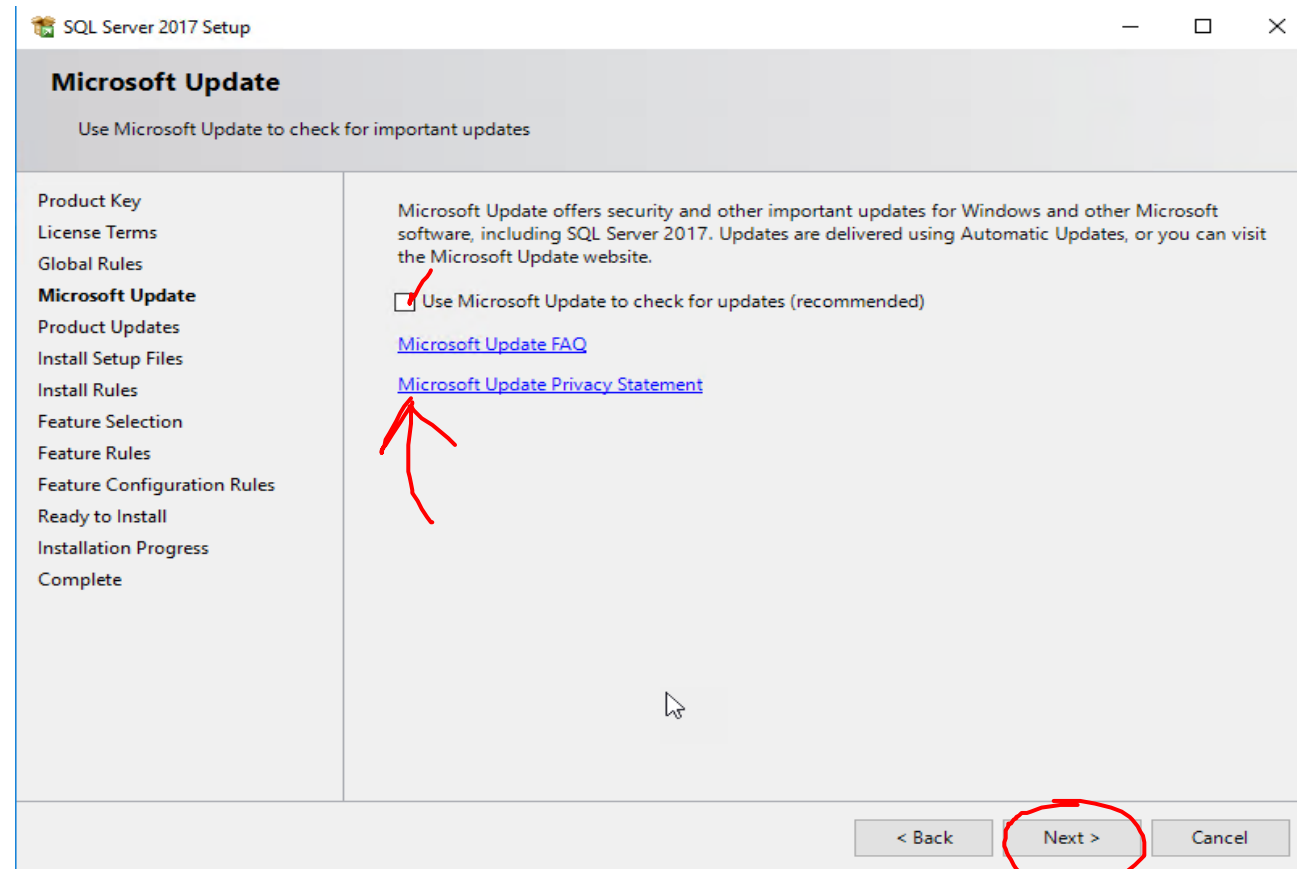
Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores



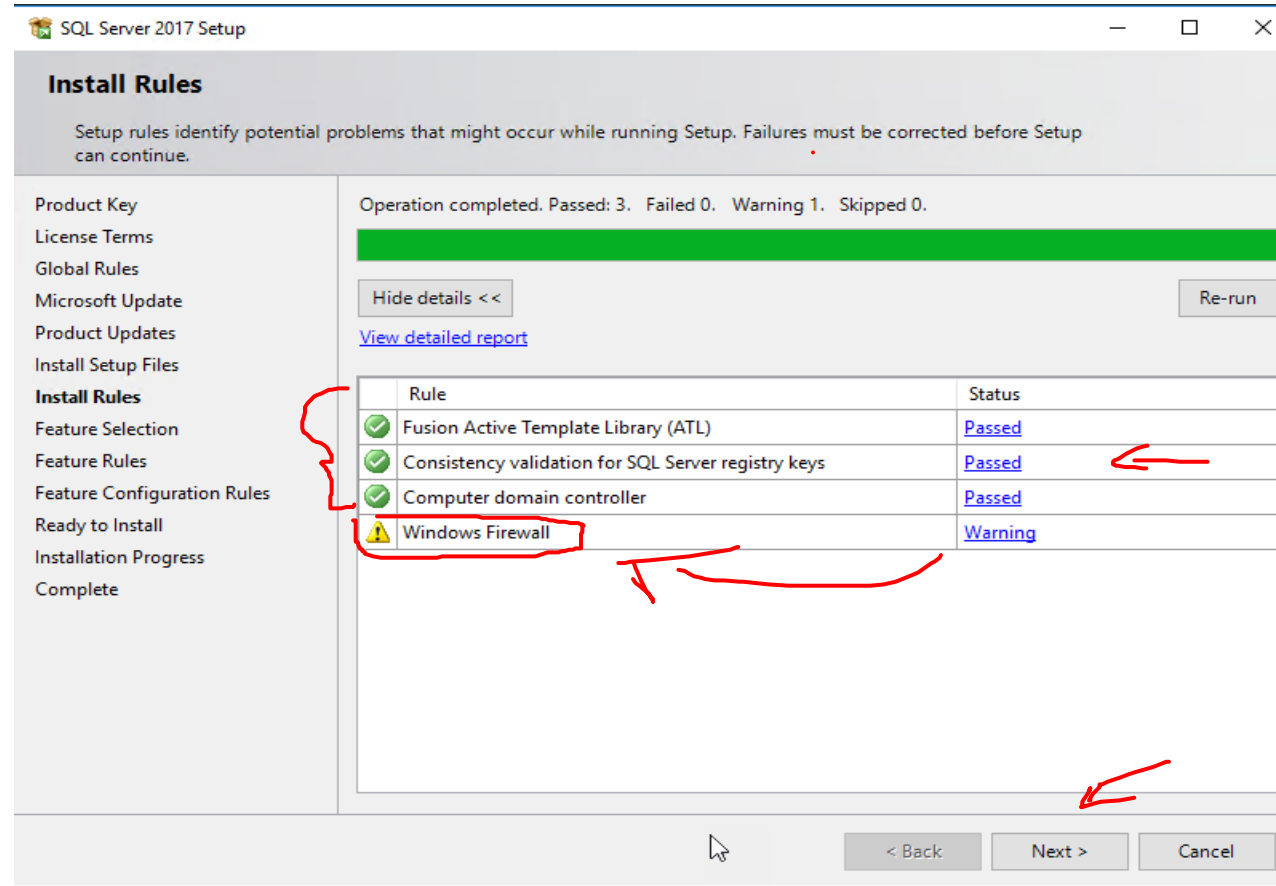
Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores



Instalación y Configuración de SqlServer






Instalación SQL Server 2016 Versiones Anteriores



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores

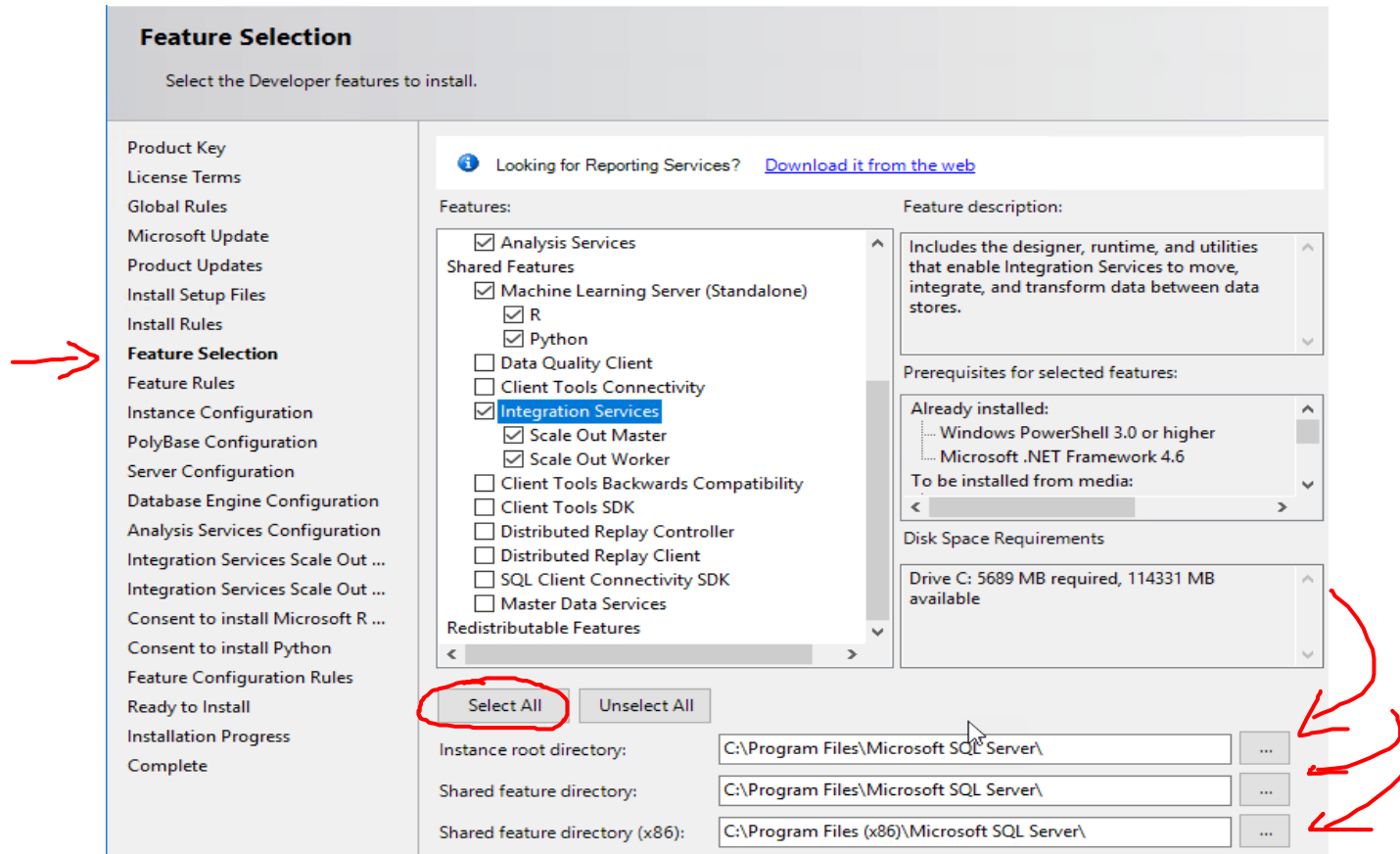


Windows x86 Online	1.98 MB	 jre-8u281-windows-i586-iftw.exe
Windows x86 Offline	69.74 MB	 jre-8u281-windows-i586.exe
Windows x86	68.55 MB	 jre-8u281-windows-i586.tar.gz
Windows x64	79.68 MB	 jre-8u281-windows-x64.exe
Windows x64	73.92 MB	 jre-8u281-windows-x64.tar.gz



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores



Feature Selection

Select the Developer features to install.

Product Key
License Terms
Global Rules
Microsoft Update
Product Updates
Install Setup Files
Install Rules
Feature Selection
Feature Rules
Instance Configuration
PolyBase Configuration
Server Configuration
Database Engine Configuration
Analysis Services Configuration
Integration Services Scale Out ...
Integration Services Scale Out ...
Consent to install Microsoft R ...
Consent to install Python
Feature Configuration Rules
Ready to Install
Installation Progress
Complete

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

Features:

- ☒ Analysis Services
- ☒ 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

Feature description:

Includes the designer, runtime, and utilities that enable Integration Services to move, integrate, and transform data between data stores.

Prerequisites for selected features:

Already installed:
... Windows PowerShell 3.0 or higher
... Microsoft .NET Framework 4.6

To be installed from media:

Disk Space Requirements

Drive C: 5689 MB required, 114331 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\ ...



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores

SQL Server 2017 Setup

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
PolyBase Configuration
Server Configuration
Database Engine Configuration
Analysis Services Configuration
Integration Services Scale Out ...
Integration Services Scale Out ...
Consent to install Microsoft R ...
Consent to install Python
Feature Configuration Rules

☒ Default instance
☐ Named instance: MSSQLSERVER

Instance ID: MSSQLSERVER

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL14.MSSQLSERVER
Analysis Services directory: C:\Program Files\Microsoft SQL Server\MSAS14.MSSQLSERVER

Installed instances:

Instance Name	Instance ID	Features	Edition	Version

< Back **Next >** Cancel



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores

PolyBase Configuration
Specify PolyBase scale-out option and port range.

Product Key
License Terms
Global Rules
Microsoft Update
Product Updates
Install Setup Files
Install Rules
Feature Selection
Feature Rules
Instance Configuration
PolyBase Configuration
Server Configuration
Database Engine Configuration
Analysis Services Configuration
Integration Services Scale Out ...
Integration Services Scale Out ...
Consent to install Microsoft R ...
Consent to install Python
Feature Configuration Rules

☒ Use this SQL Server as standalone PolyBase-enabled instance.
Choose this option to use this SQL Server instance as a standalone Head node.

☐ Use this SQL Server as a part of PolyBase scale-out group.
Choose this option to use this SQL Server instance as a Compute node in a PolyBase Scale-out group. To ensure that your PolyBase scale-out group can be configured after installation, make sure that the head node is on enterprise license of SQL Server 2016. Selecting this option will open Firewall on this machine to allow incoming connections to SQL Server Database Engine, SQL Server PolyBase services and SQL Browser. Selecting this option will also enable MSDTC firewall connections and modify MSDTC registry settings.

Specify a port range for PolyBase services (6 or more ports):

< Back **Next >** Cancel



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores

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
PolyBase Configuration
Server Configuration
Database Engine Configuration
Analysis Services Configuration
Integration Services Scale Out ...
Integration Services Scale Out ...
Consent to install Microsoft R ...
Consent to install Python
Feature Configuration Rules

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\SQLSERVERA...		Manual
SQL Server Database Engine	NT Service\MSSQLSERVER		Automatic
SQL Server Analysis Services	NT Service\MSSQLServe...		Automatic
SQL Server Integration Services 14.0	NT Service\MsDtsServer...		Automatic
SQL Server Integration Services Sc...	NT Service\SSISScaleOut...		Automatic
SQL Server Integration Services Sc...	NT Service\SSISScaleOut...		Automatic
SQL Server PolyBase Engine	NT AUTHORITY\NETW...		Automatic
SQL Server PolyBase Data Movem...	NT AUTHORITY\NETW...		Automatic
SQL Server Launchpad	NT Service\MSSQLLaun...		Automatic
SQL Full-text Filter Daemon Launc...	NT Service\MSSQLFD...		Manual
SQL Server Browser	NT AUTHORITY\LOCAL ...		Disabled

☒ Grant Perform Volume Maintenance Task privilege to SQL Server Database Engine Service

This privilege enables instant file initialization, by avoiding copying of data pages. This may lead to data corruption if the service is not properly configured.

< Back Next > Cancel



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores

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
PolyBase Configuration
Server Configuration
Database Engine Configuration
Analysis Services Configuration
Integration Services Scale Out ...
Integration Services Scale Out ...
Consent to install Microsoft R ...
Consent to install Python
Feature Configuration Rules

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)

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

Enter password:
Confirm password:

Specify SQL Server administrators

myvirtualpc\daniel (daniel)

SQL Server administrators have unrestricted access to the Database Engine.

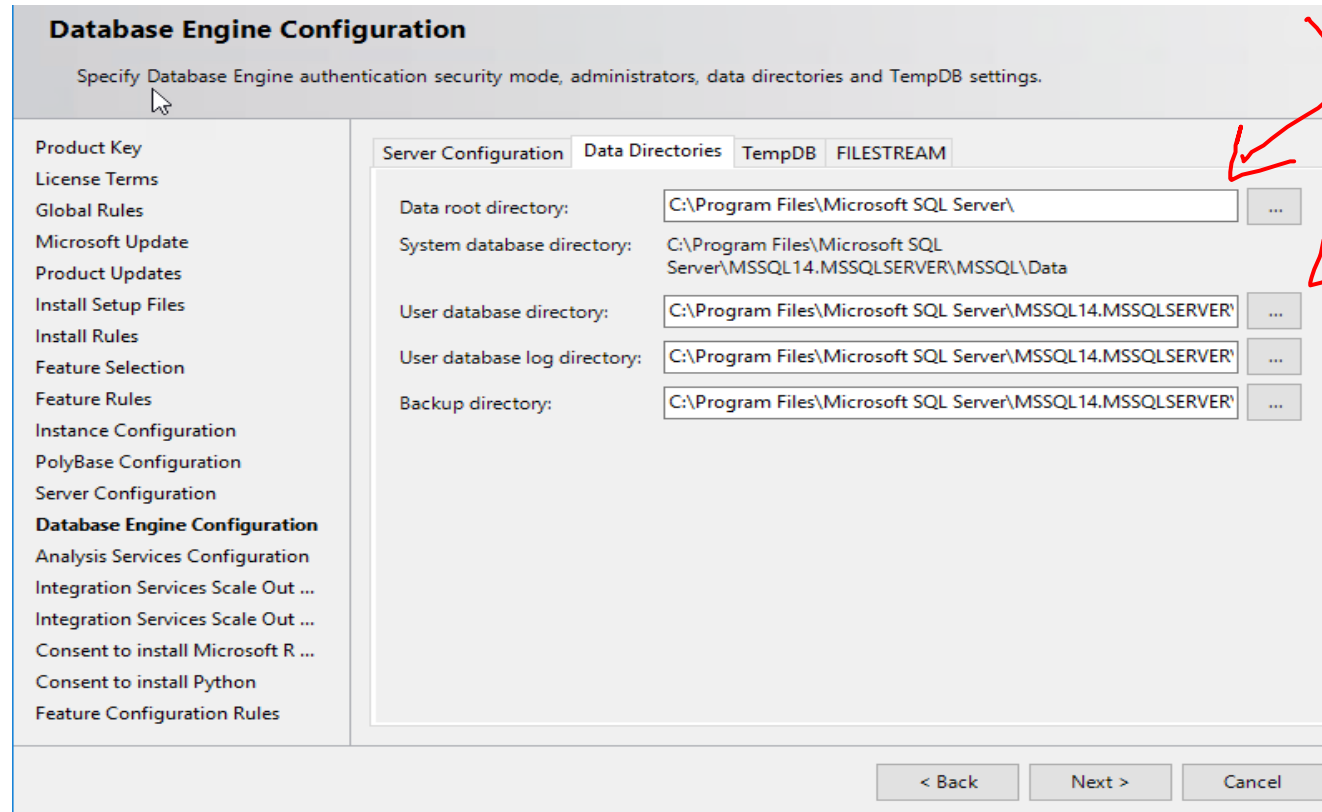
Add Current User Add... Remove

< Back Next > Cancel



Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores



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
PolyBase Configuration
Server Configuration
Database Engine Configuration
Analysis Services Configuration
Integration Services Scale Out ...
Integration Services Scale Out ...
Consent to install Microsoft R ...
Consent to install Python
Feature Configuration Rules

Server Configuration | **Data Directories** | TempDB | FILESTREAM

Data root directory: C:\Program Files\Microsoft SQL Server\ ...

System database directory: C:\Program Files\Microsoft SQL Server\MSSQL14.MSSQLSERVER\MSSQL\Data

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

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

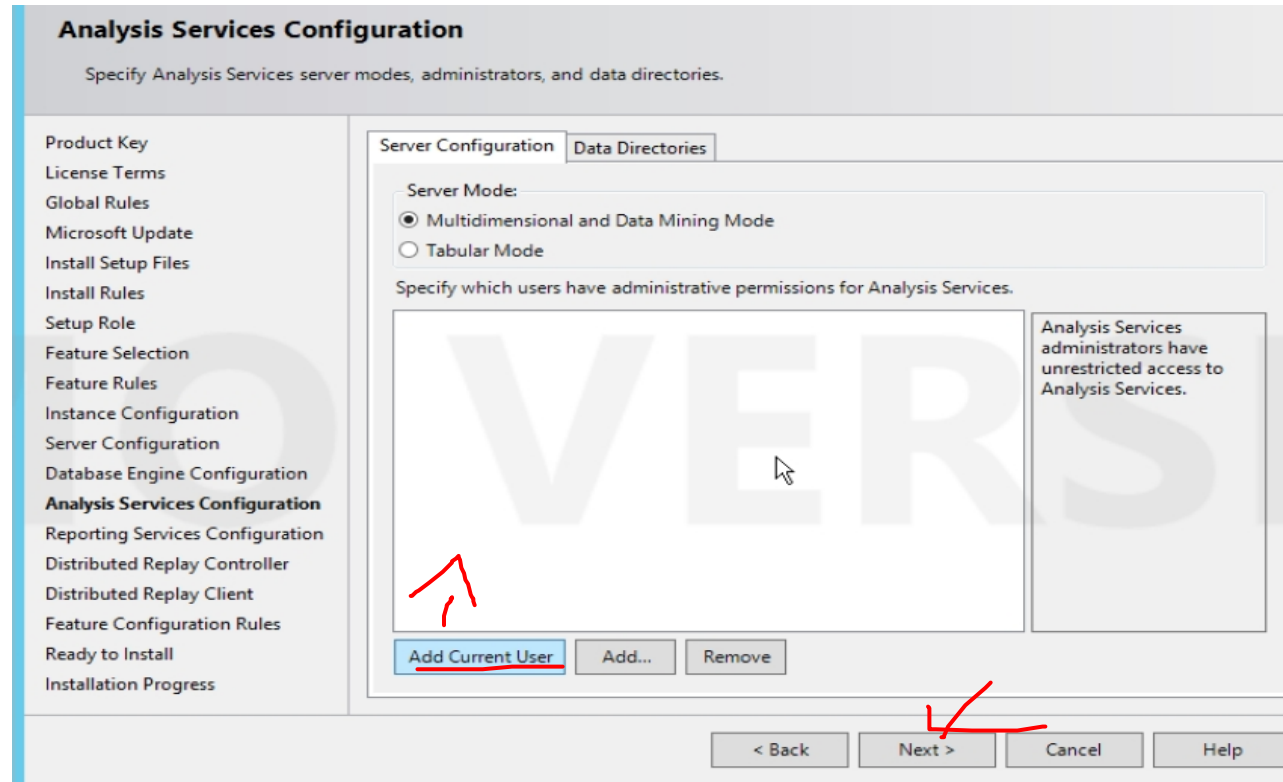
Backup directory: C:\Program Files\Microsoft SQL Server\MSSQL14.MSSQLSERVER\ ...

< Back Next > Cancel



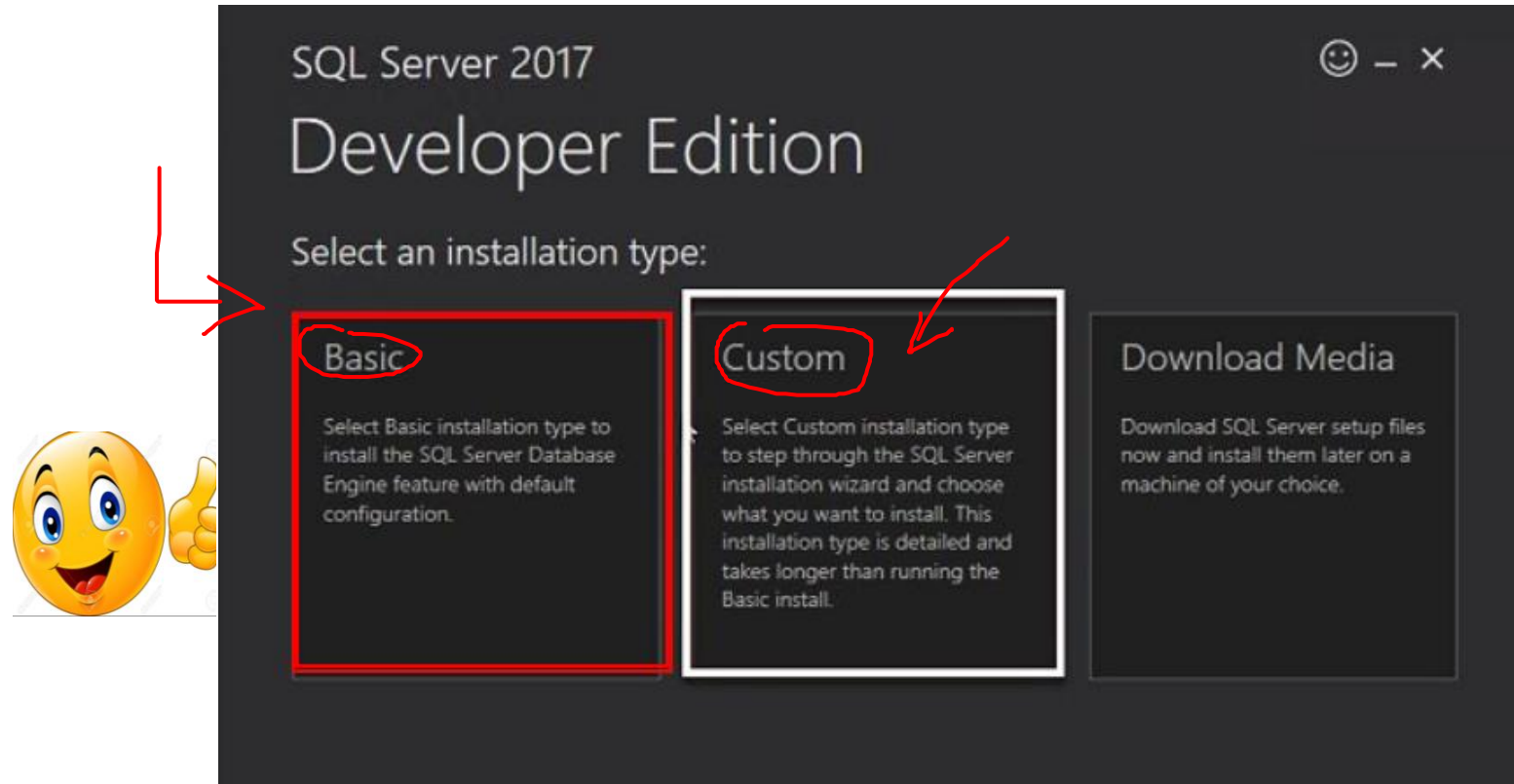
Instalación y Configuración de SqlServer

Instalación SQL Server 2016 Versiones Anteriores



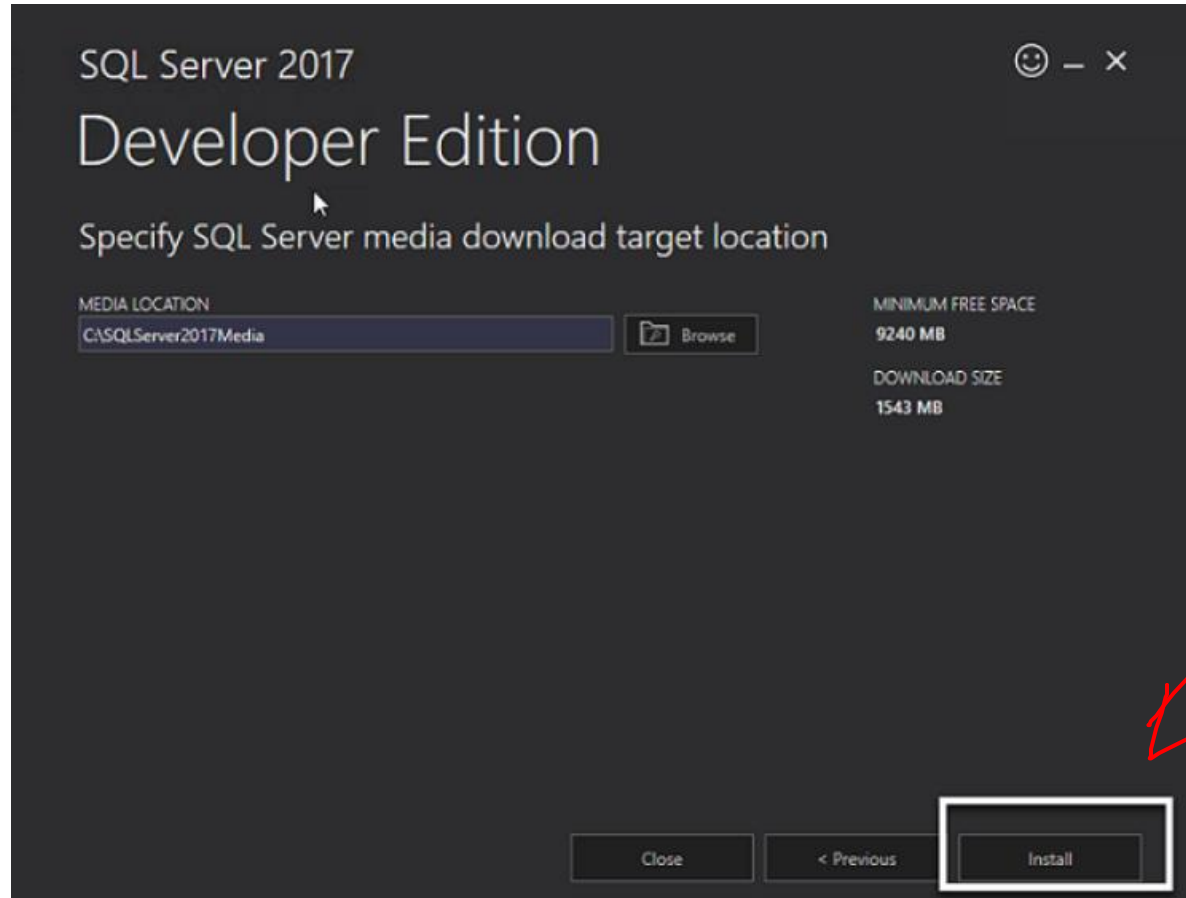
Instalación y Configuración de SqlServer

Instalación SQL Server 2017 Versiones nuevas



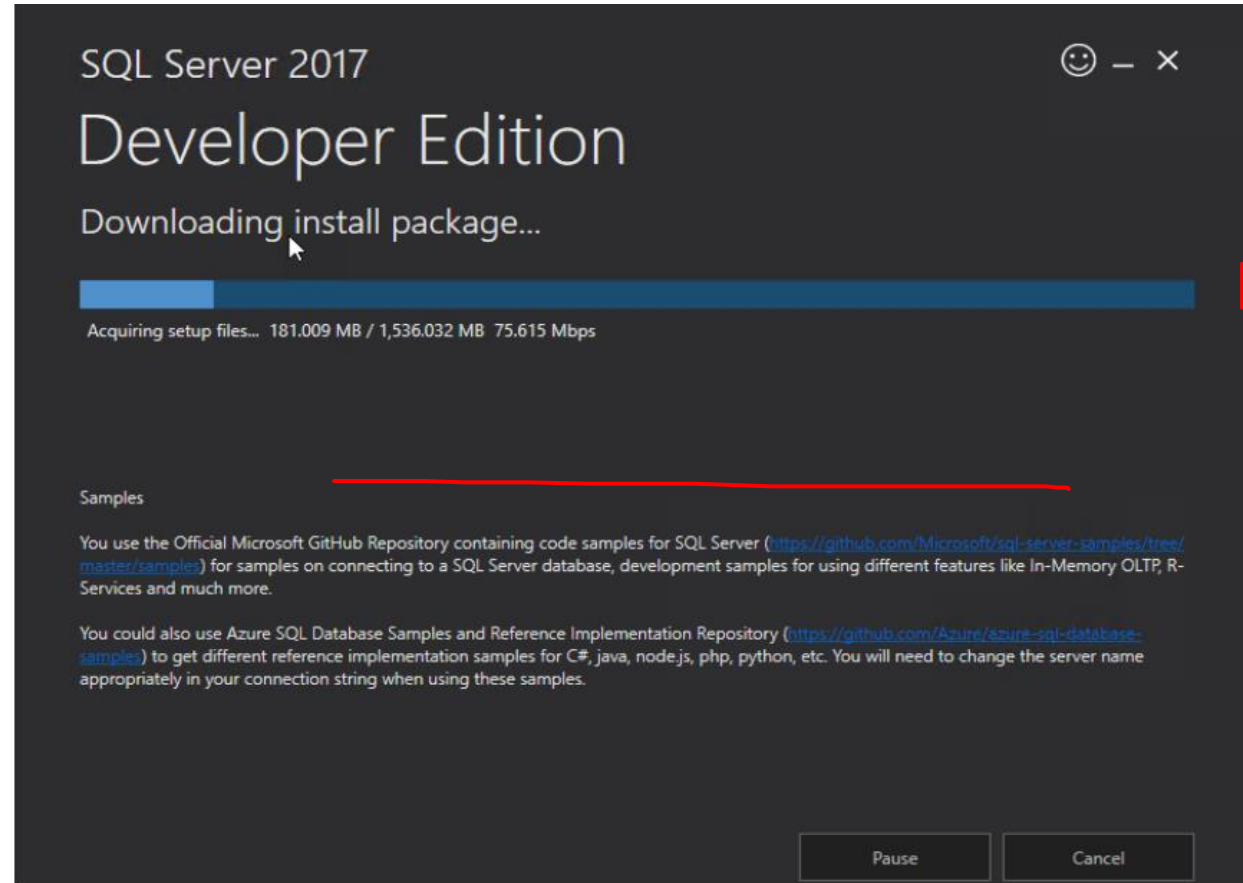
Instalación y Configuración de SqlServer

Instalación SQL Server 2017



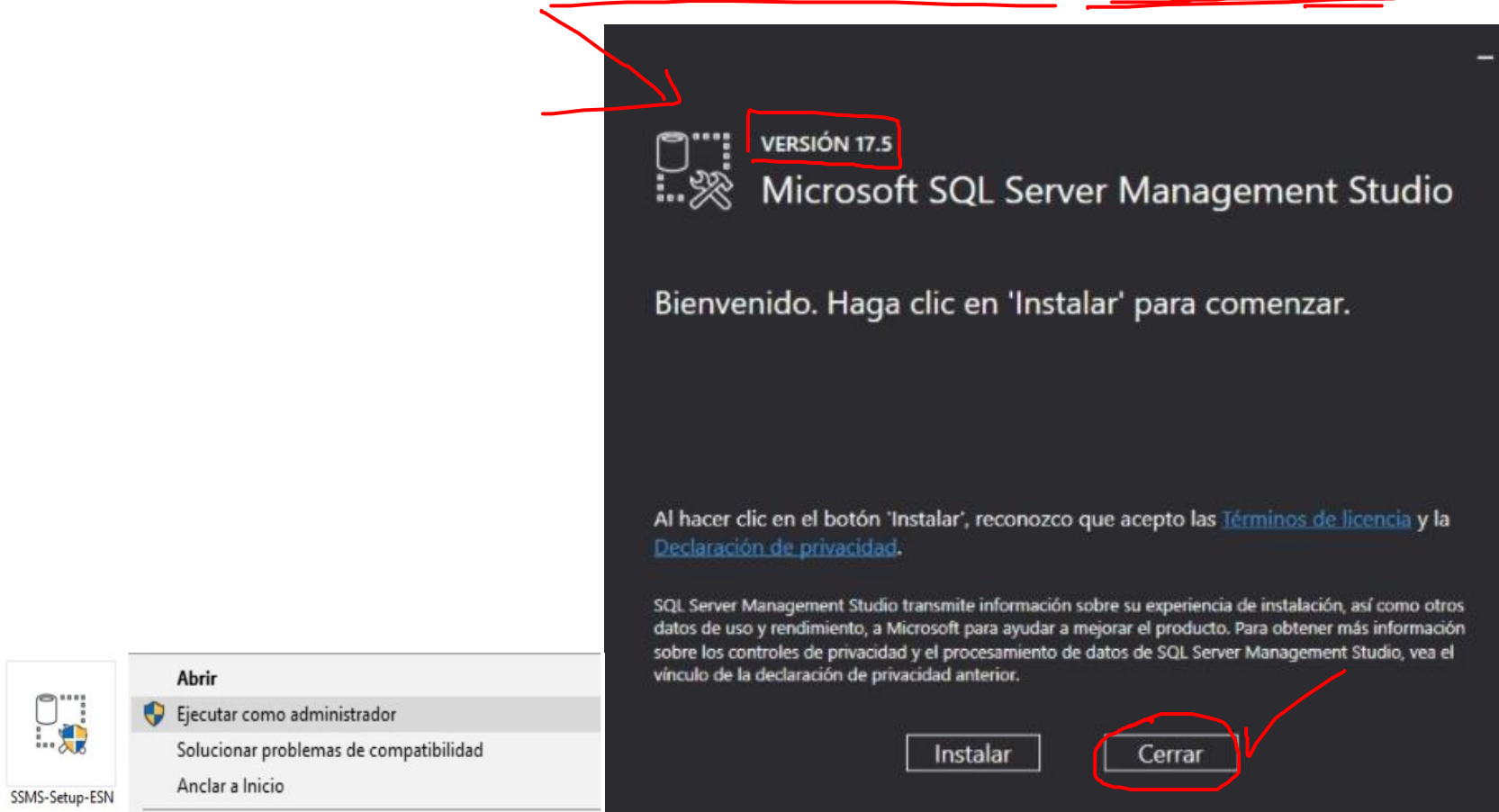
Instalación y Configuración de SqlServer

Instalación SQL Server 2017



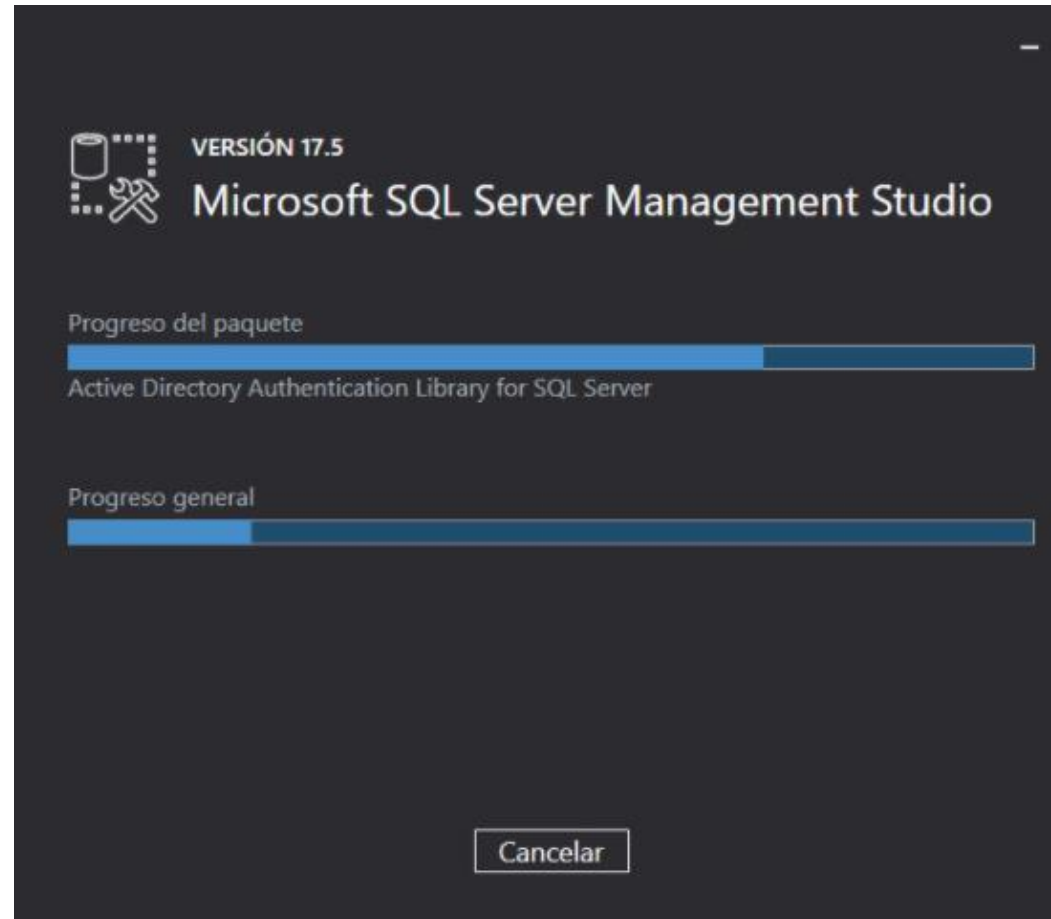
Instalación y Configuración de SqlServer

Instalación SSMS 2017



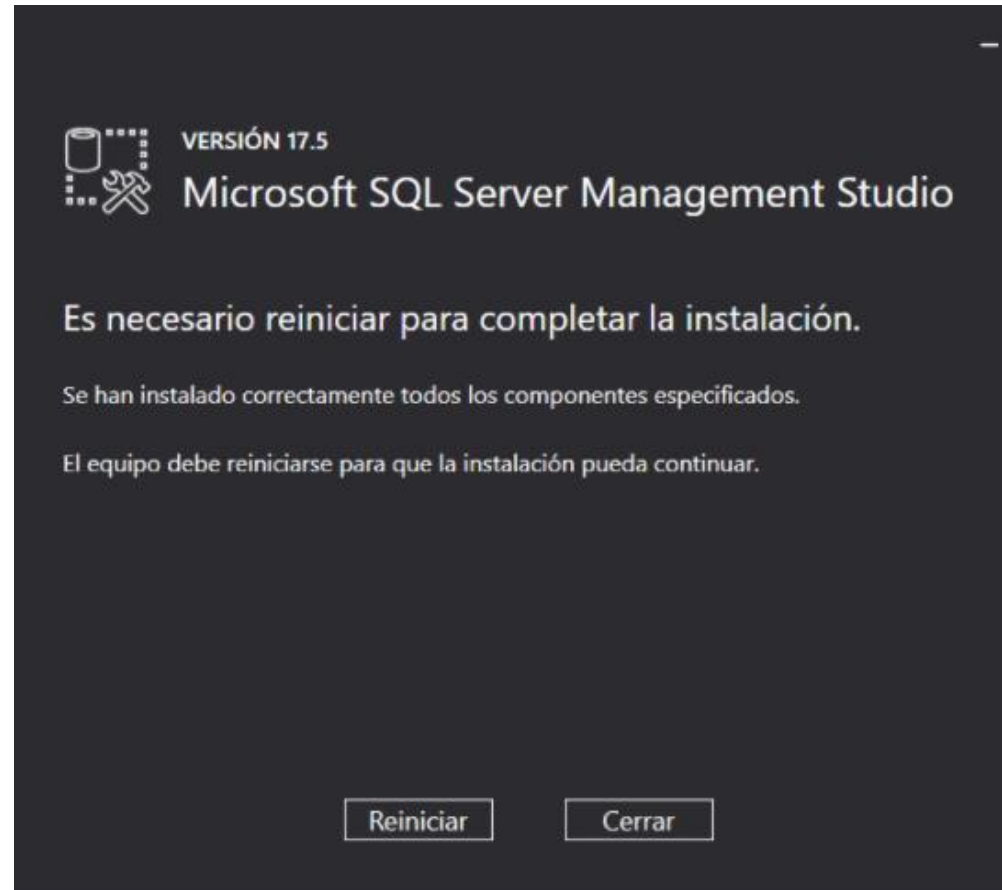
Instalación y Configuración de SqlServer

Instalación SSMS 2017



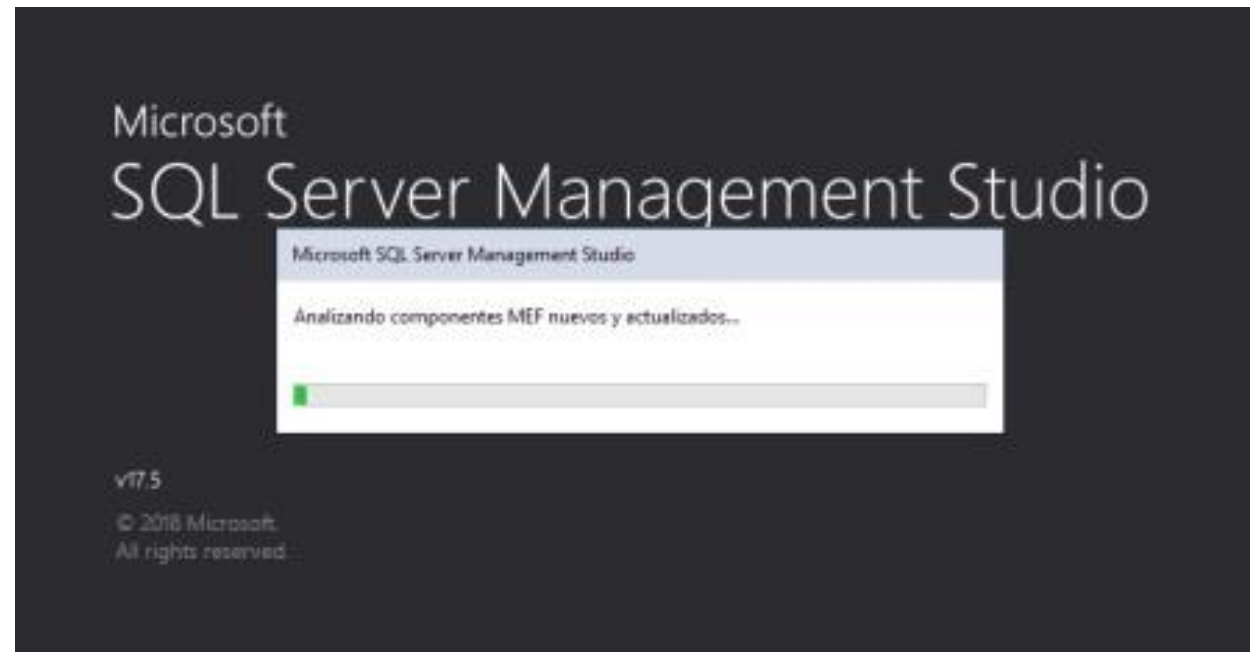
Instalación y Configuración de SqlServer

Instalación SSMS 2017



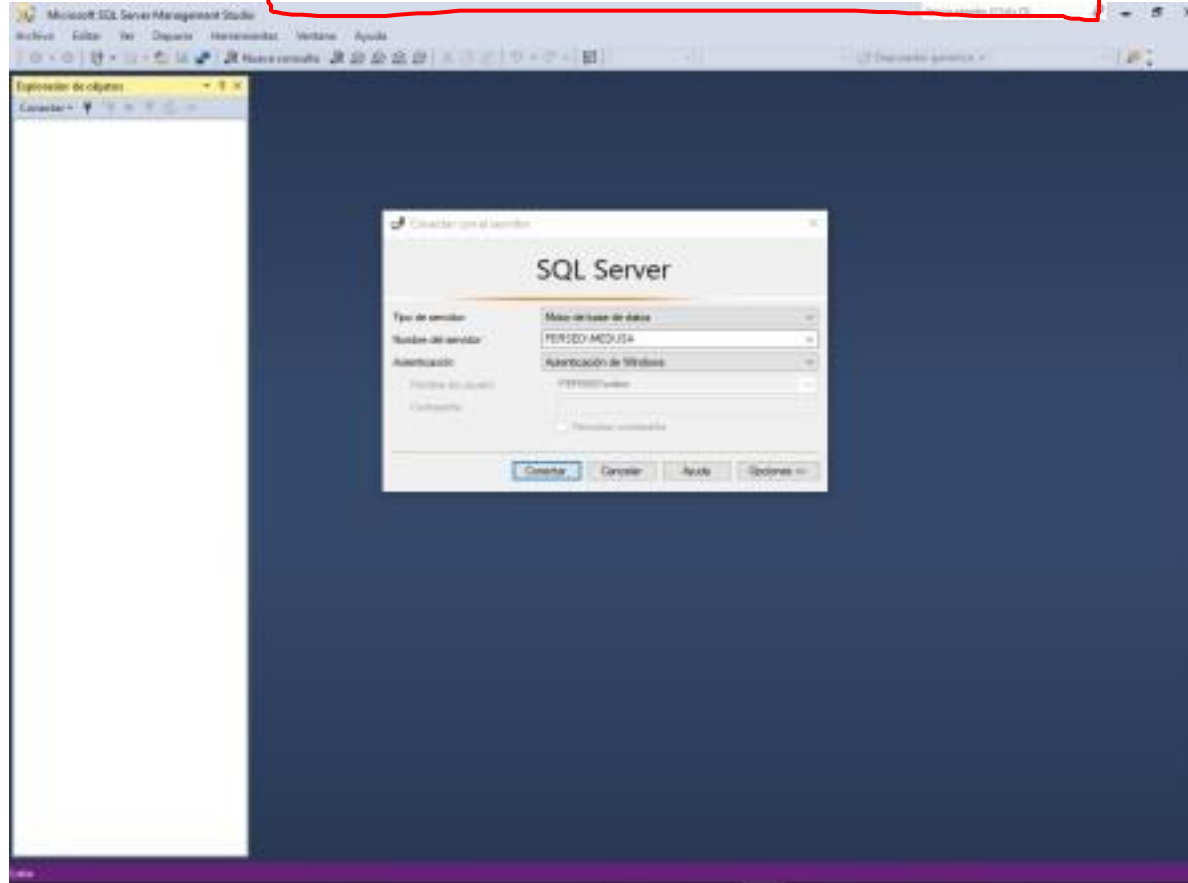
Instalación y Configuración de SqlServer

Instalación SSMS 2017



Instalación y Configuración de SqlServer

Instalación SSMS 2017



Edición de SQLServer

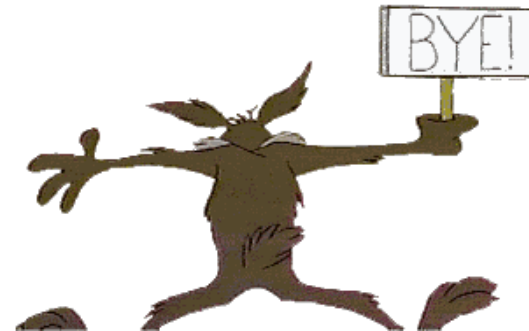
Descripción de la Edición de SQL Server 2017



2019



*Muchas
Gracias!*



Fin de Sesión