

# INSTALACJA MSSQL 2022 DEVELOPER W SYSTEMIE WINDOWS

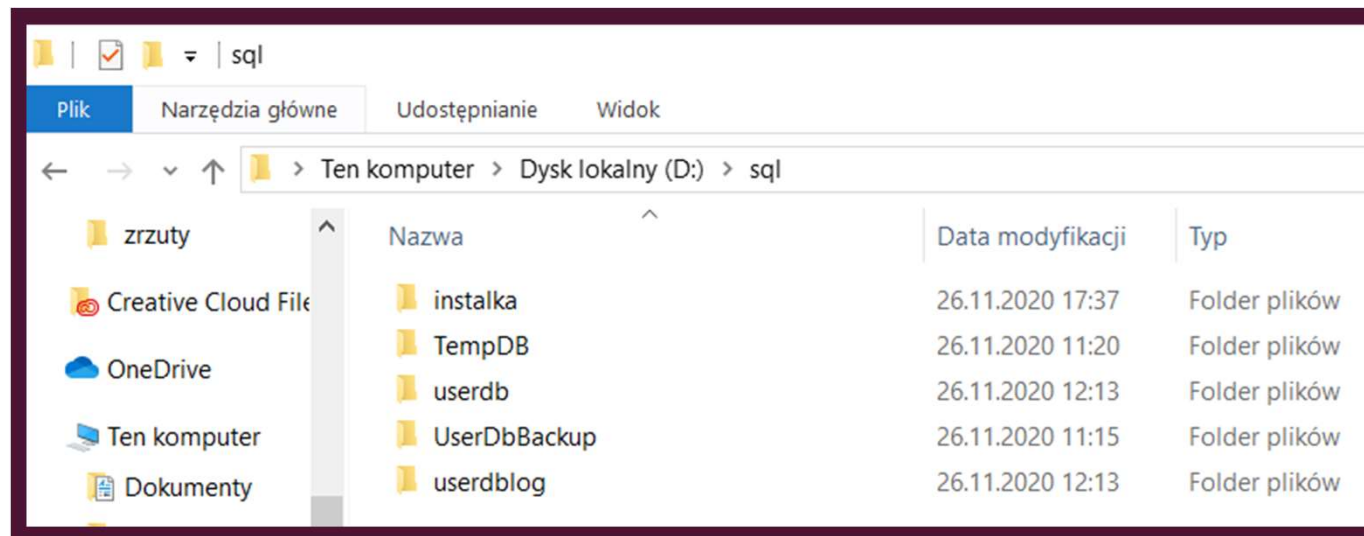
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## PORÓWNANIE WERSJI

Developer	Express
<p>SQL Server 2022 Developer to oferująca komplet funkcji bezpłatna edycja z licencją do użytku jako baza danych do developmentu i testowania w środowisku nieprodukcyjnym.</p> <p>→ pełna wersja</p>	<p>SQL Server 2022 Express to bezpłatna edycja programu SQL Server, idealna do developmentu aplikacji desktopowych, aplikacji internetowych oraz małych aplikacji serwerowych.</p> <p>→ okrojona wersja</p>

# STRUKTURA SERWERA BAZ DANYCH

W szkole instalujemy wszystko domyślnie na dysku C. Poprawnie powinniśmy instalować serwer baz danych na różnych dyskach w odpowiednich katalogach. Przykładowa struktura na obrazku.



# POBIERANIE SERWERA

The screenshot shows a Google search interface with the query "mssql 2022 download" in the search bar. Below the search bar, there are filters for "64 bit", "For windows 10", "Free", "Videos", "Images", "News", "Books", "Maps", and "Flights". The search results show "About 12,600,000 results (0.32 seconds)".

**Sponsored**

[azure.microsoft.com](https://azure.microsoft.com)  
<https://azure.microsoft.com> > cloud > services

**SQL Database - Microsoft Azure Official Site**  
Focus On Building New Applications Without Worrying About Storage Size With SQL Database. 750 Hours With Flexible Server Offering 32GB Of Storage and 32GB Of Backup...

**Try Free Account**  
Free Credit for 30 Days. Try Any Azure Products

**Azure Data**  
Build Apps for Scenarios with Data Portfolio

**Or, download a free specialized edition**

**Developer**  
SQL Server 2022 Developer is a full-featured free edition, licensed for use as a development and test database in a non-production environment.  
[Download now](#)

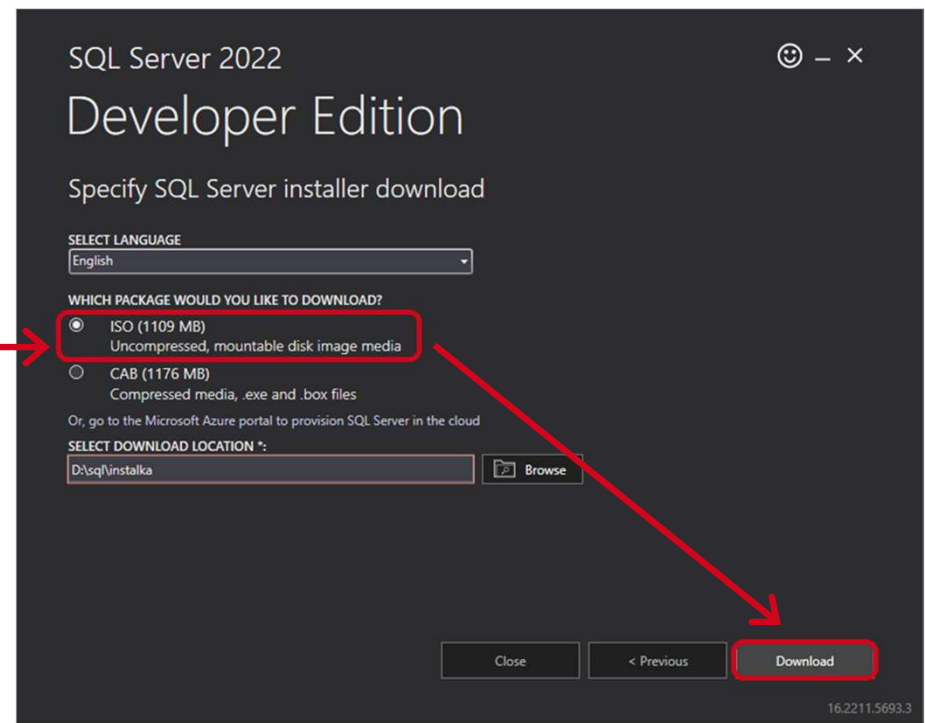
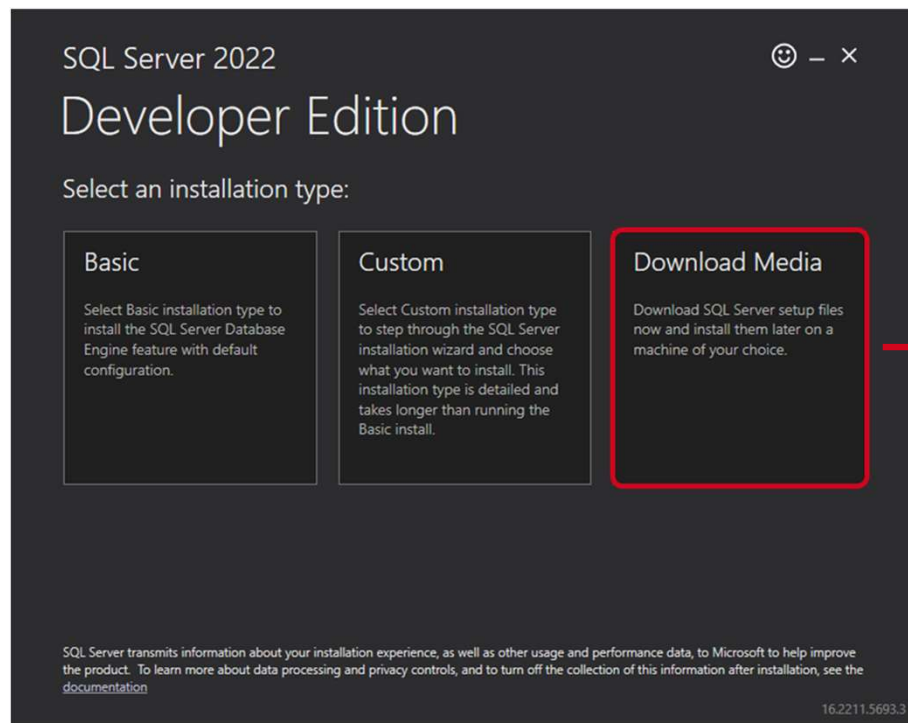
**Express**  
SQL Server 2022 Express is a free edition of SQL Server, ideal for development and production for desktop, web, and small server applications.  
[Download now](#)

**Microsoft**  
<https://www.microsoft.com/en-us/sql-server-downloads>

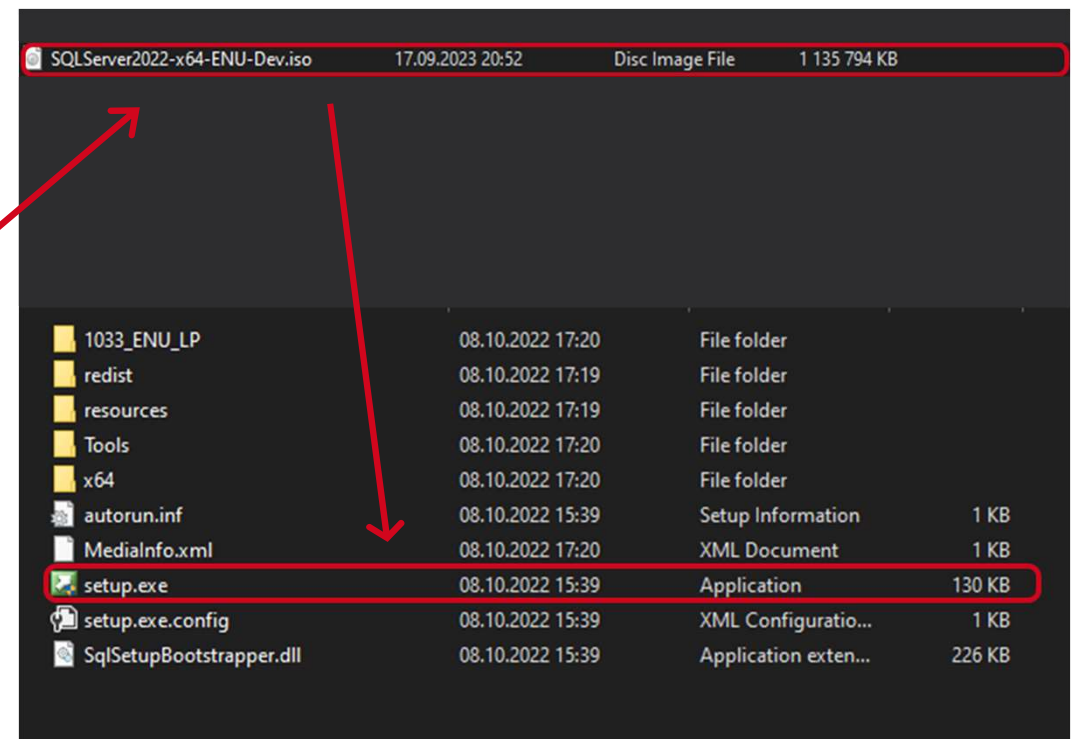
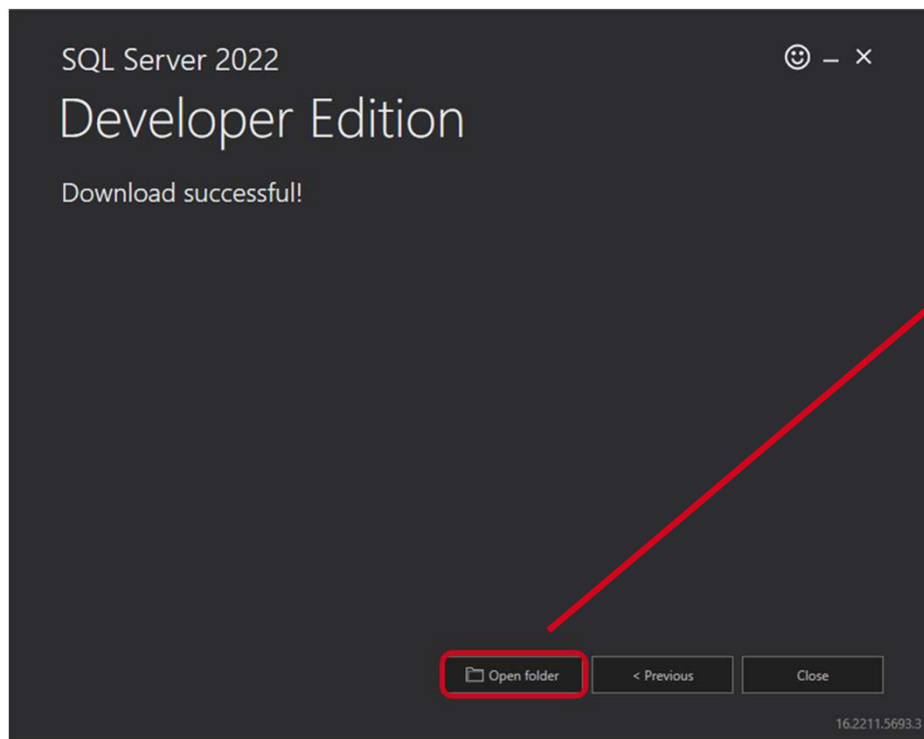
**SQL Server Downloads**  
SQL Server 2022 Developer is a full-featured free edition, licensed for use as a development and test database in a non-production environment. [Download now](#) ...  
2019 · Azure Data Community · SQL Server 2017 · SQL Server 2016

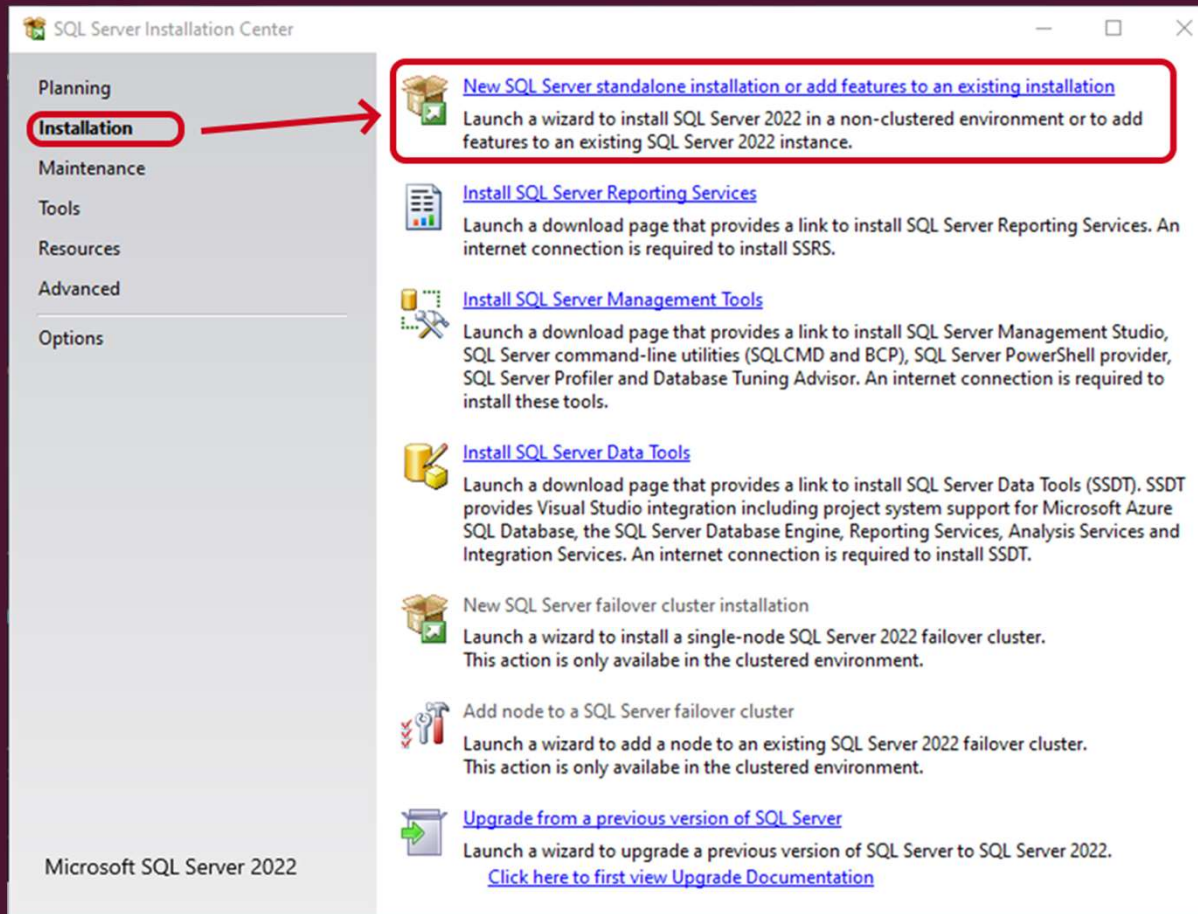
Red arrows indicate the flow from the search bar to the search results, and from the search results to the download page.

# PO ŚCIAĞNIĘCIU PLIKU I URUCHOMIENIU



# URUCHOMIENIE PLIKU INSTALACYJNEGO







SQL Server 2022 Setup

### Edition

Select the edition of SQL Server 2022 you want to install.

**Edition**

- License Terms
- Global Rules
- Microsoft Update
- Product Updates
- Install Setup Files
- Install Rules
- Azure Extension for SQL Server
- Feature Selection
- Feature Rules
- Feature Configuration Rules
- Ready to Install
- Installation Progress
- Complete

Select an edition of SQL Server to install. You can choose to either use a SQL Server license that you have already purchased by entering the product key or choose pay-as-you-go billing through Microsoft Azure. You can also specify a free edition of SQL Server: Developer, Evaluation, or Express. Evaluation has the largest set of SQL Server features, as documented in SQL Server Books Online, and is activated with a 180-day expiration. Developer edition does not have an expiration, has the same set of features found in Evaluation, but is licensed for non-production database application development only. To upgrade from one installed edition to another, run the Edition Upgrade Wizard.

☒ Specify a free edition:

Developer

☐ Use pay-as-you-go billing through Microsoft Azure:

Warning: To enable this option, you must have an active Azure subscription that you will be required to provide along with a resource group, Azure region, and tenant ID later in setup. For more information, see <https://aka.ms/ArcEnabledSqlPAYG>.

Standard

☐ Enter the product key:

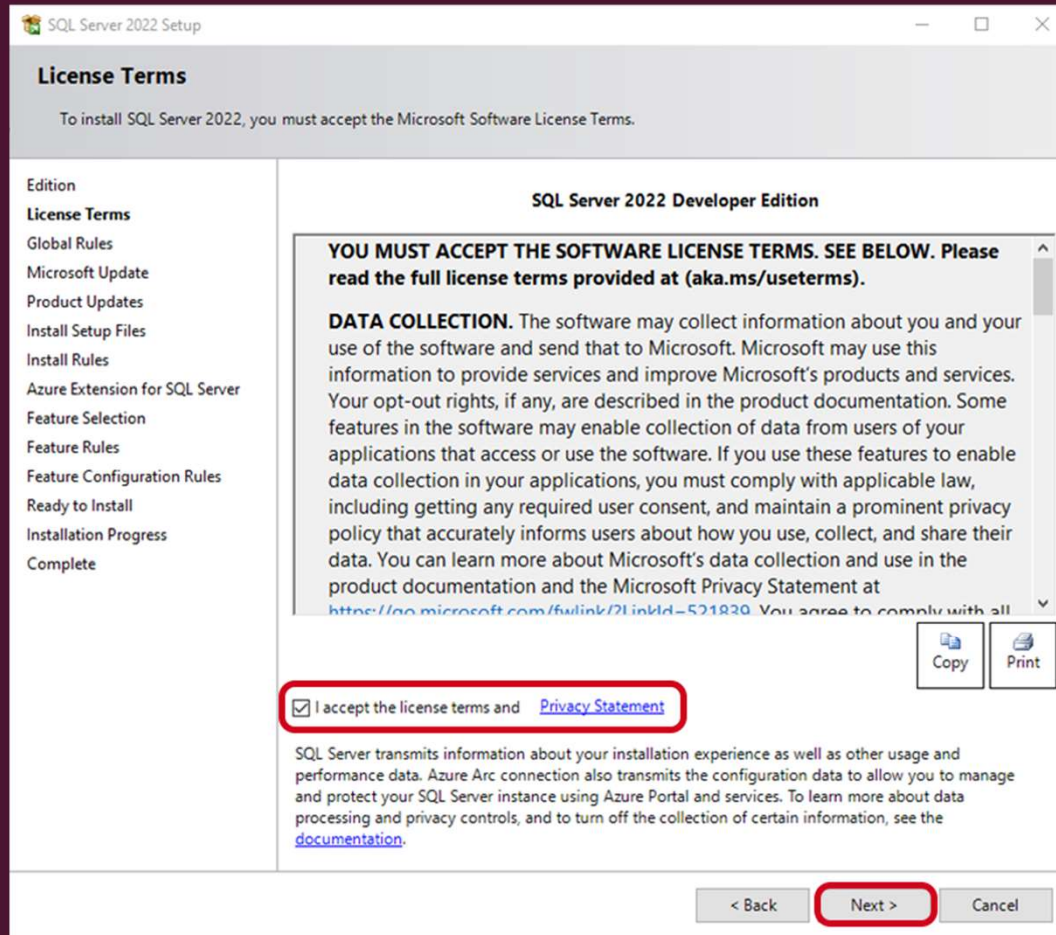
- - - -

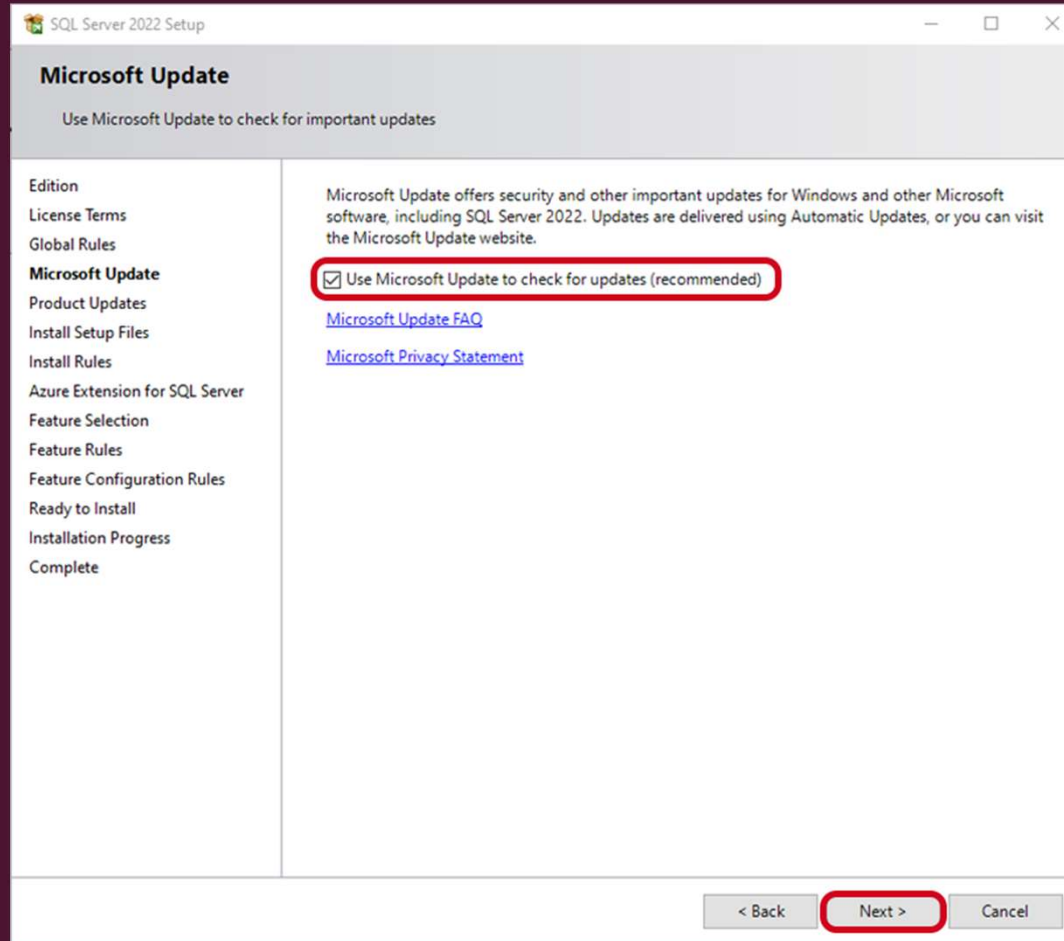
☐ I have a SQL Server license with Software Assurance or SQL Software Subscription

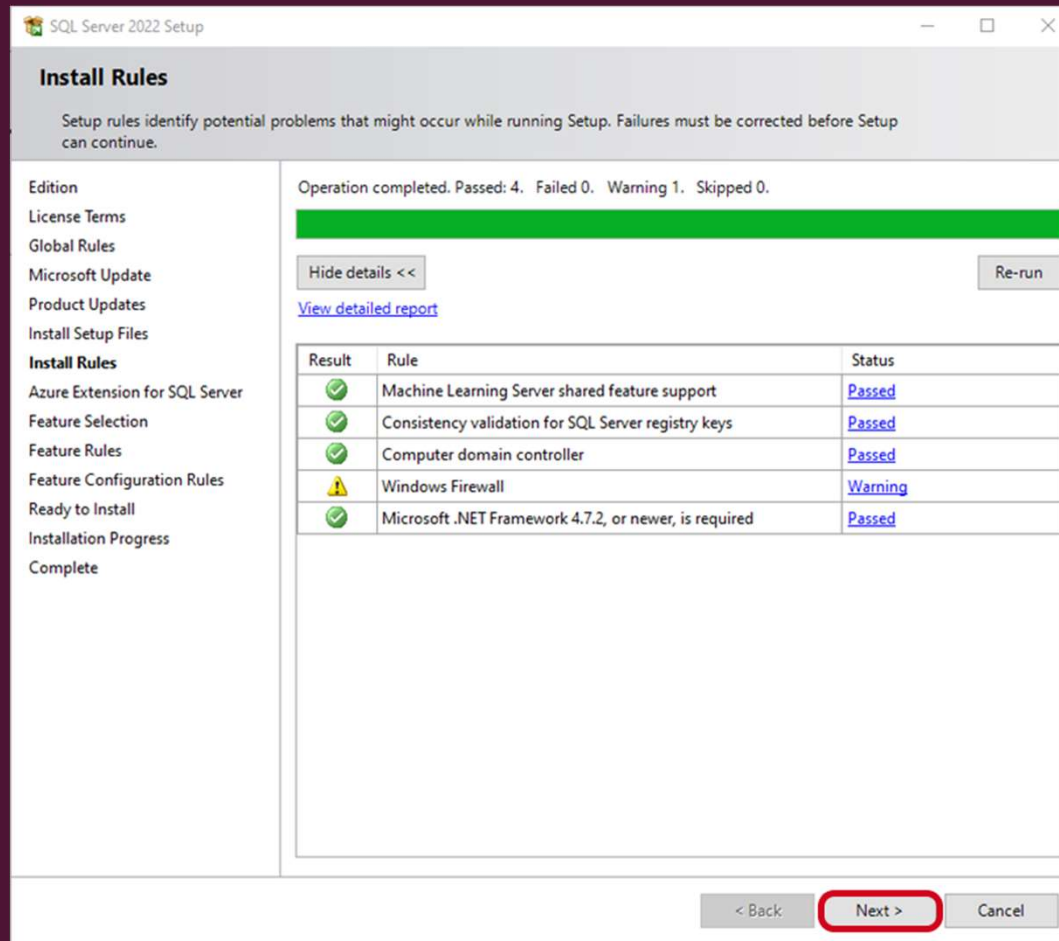
☐ I have a SQL Server license only

< Back Next > Cancel









Nie dodajemy rozszerzenia  
Azure, gdyż nie będzie nam  
ono potrzebne.

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.

☐ 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\*

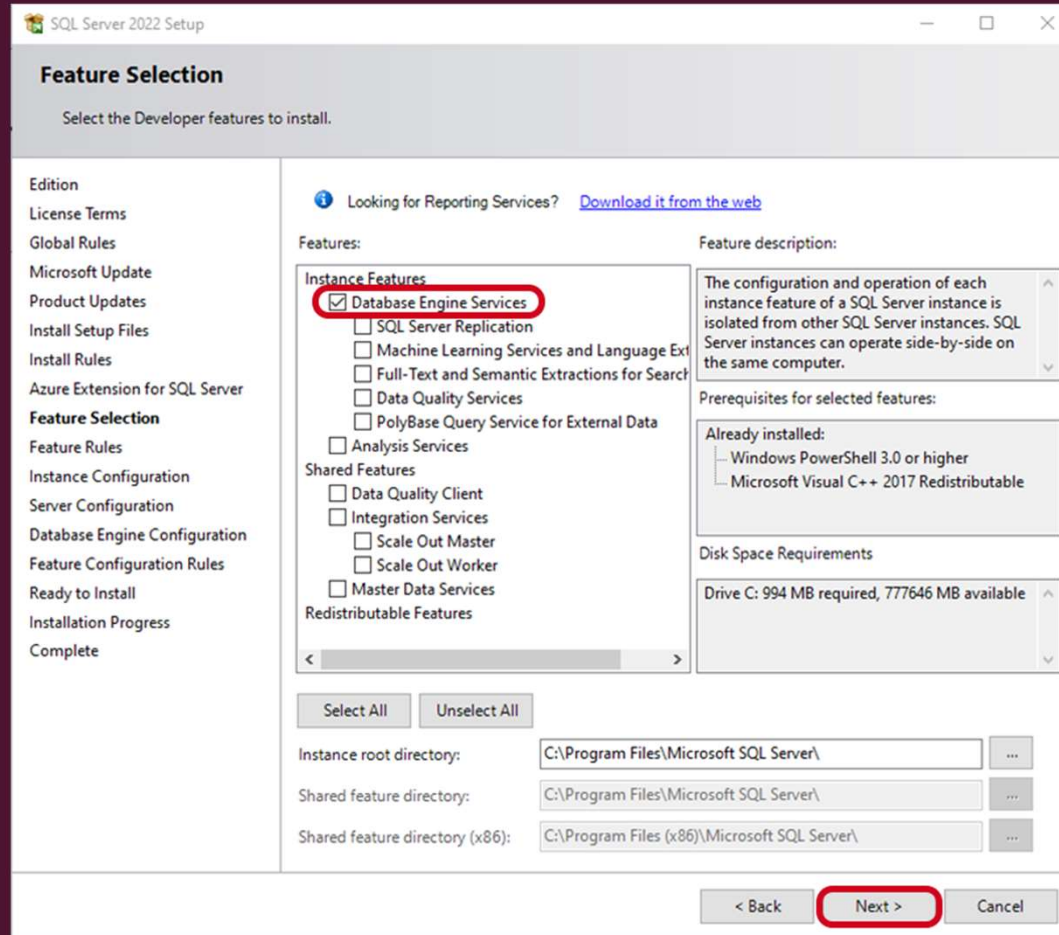
Proxy Server URL (optional)

☒ Arc feature requires AZURESUBSCRIPTIONID input.

☒ Arc feature requires AZURETENANTID input.

☒ Arc feature requires AZUREREGION input.

< Back **Next >** Cancel



Kolejny etap pozwala wybrać czy jest to instalacja tzw. instancji domyślnej (w tym trybie nazwa serwera bazy danych to nazwa systemu, w której ten serwer został zainstalowany np. SRV1 - instancja domyślna może być tylko jedna), lub instancji nazwanej wtedy nazwa serwera to np. SRV1\WAPRO gdzie SRV1 to nazwa komputera w systemie a WAPRO to nazwa instancji, w ten sposób można zainstalować wiele wystąpień serwera baz danych w jednym systemie.

SQL Server 2022 Setup

### Instance Configuration

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

Navigation pane:

- Edition
- 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
- Ready to Install
- Installation Progress
- Complete

Configuration options:

☒ Default instance

☐ Named instance: \* MSSQLSERVER

Instance ID: MSSQLSERVER

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
---------------	-------------	----------	---------	---------

Buttons: < Back, Next >, Cancel

SQL Server 2022 Setup

## Server Configuration

Specify the service accounts and collation configuration.

Edition

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

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\SQLSERVERA...		Manual
SQL Server Database Engine	NT Service\MSSQLSERVER		Manual
SQL Server Browser	NT AUTHORITY\LOCAL ...		Disabled

☒ Grant Perform Volume Maintenance Tasks 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.

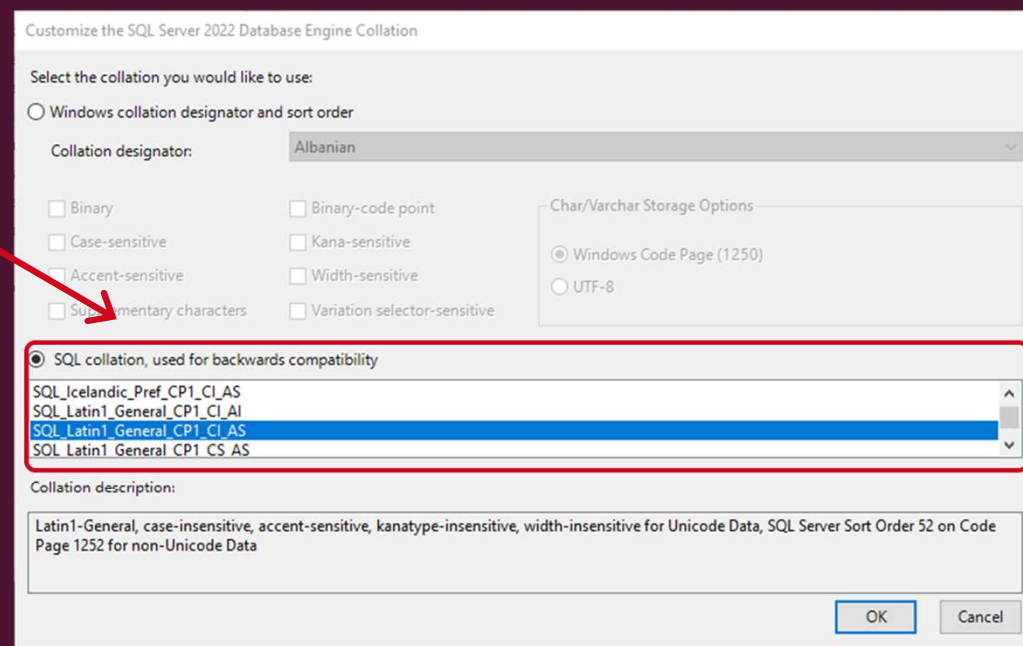
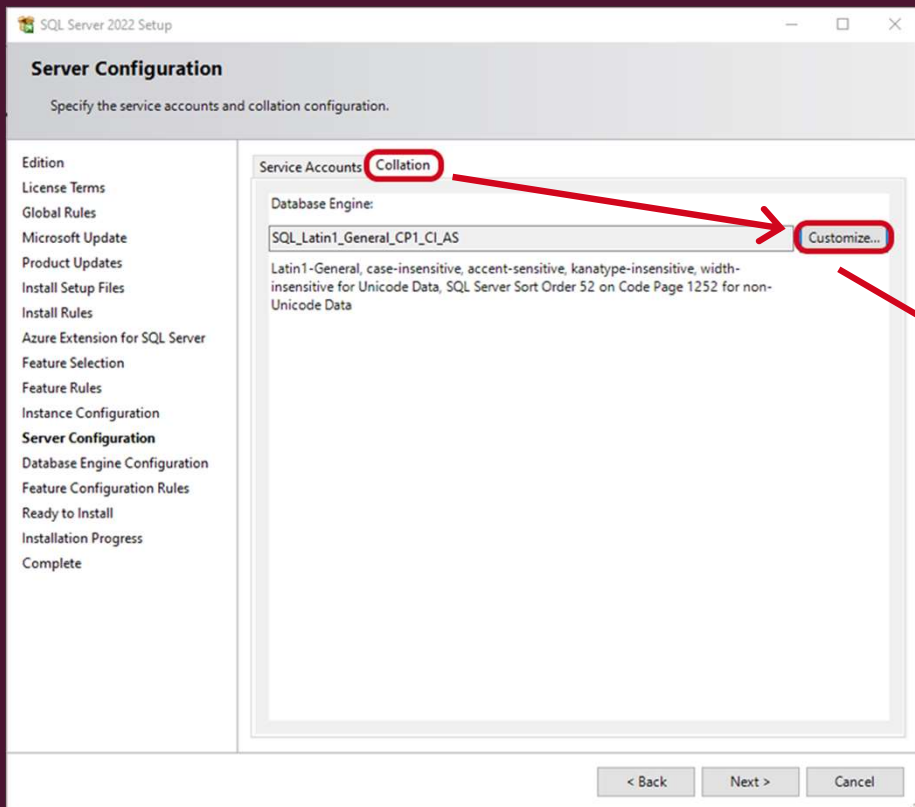
[Click here for details](#)

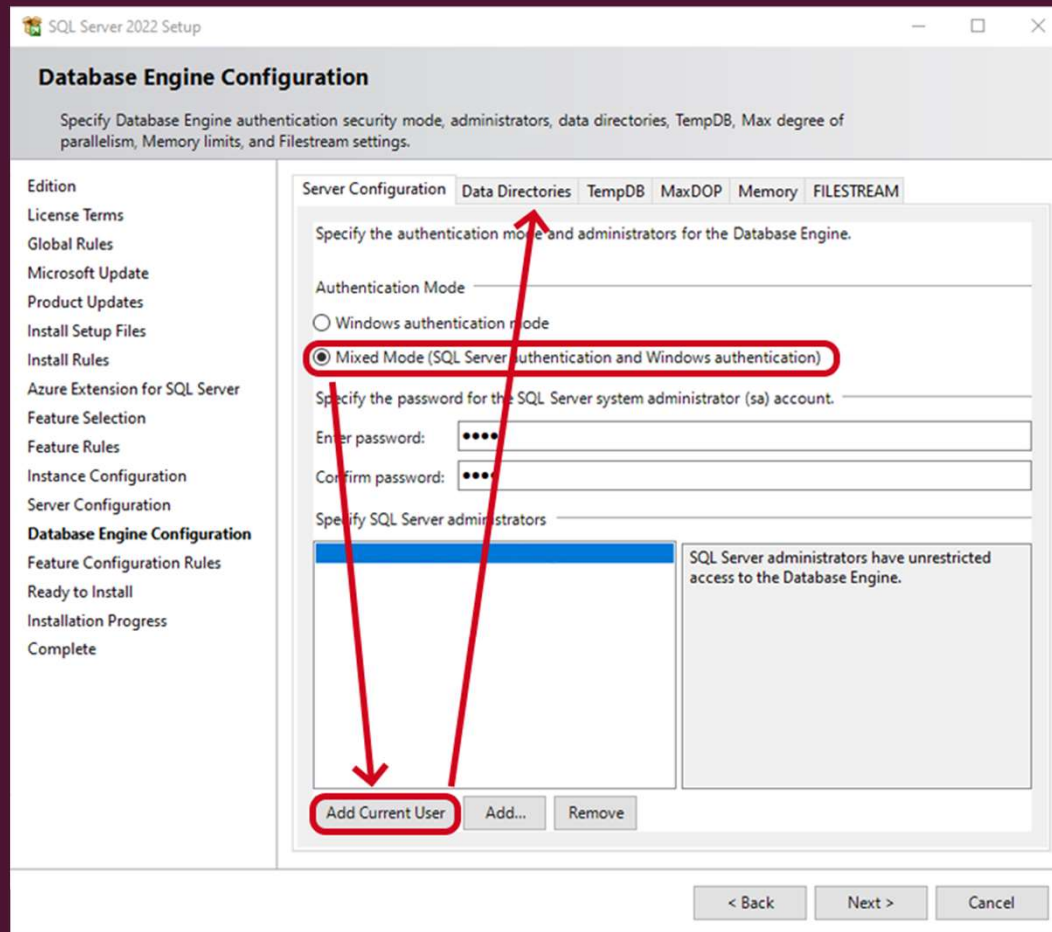
< Back

Next >

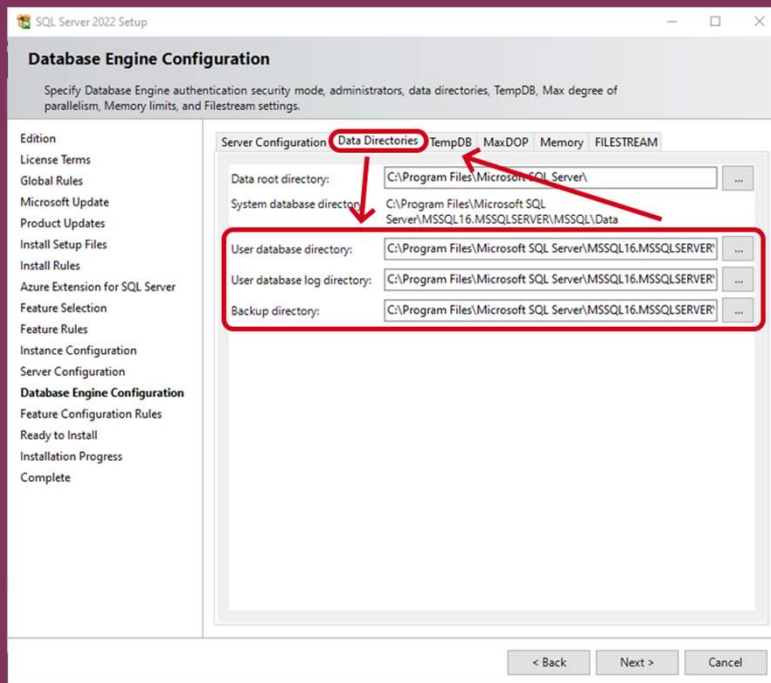
Cancel



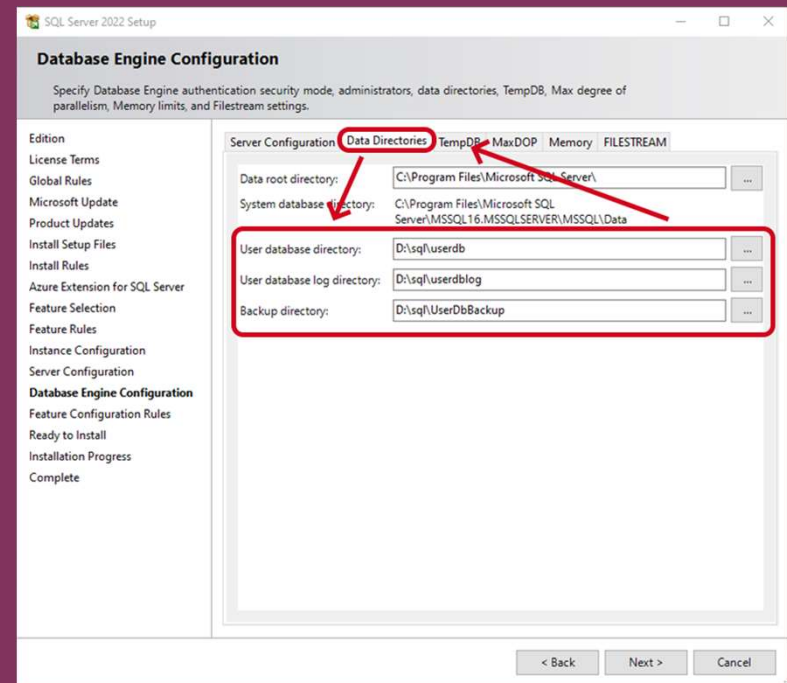




# USTAWIANIE KATALOGÓW INSTALACYJNYCH



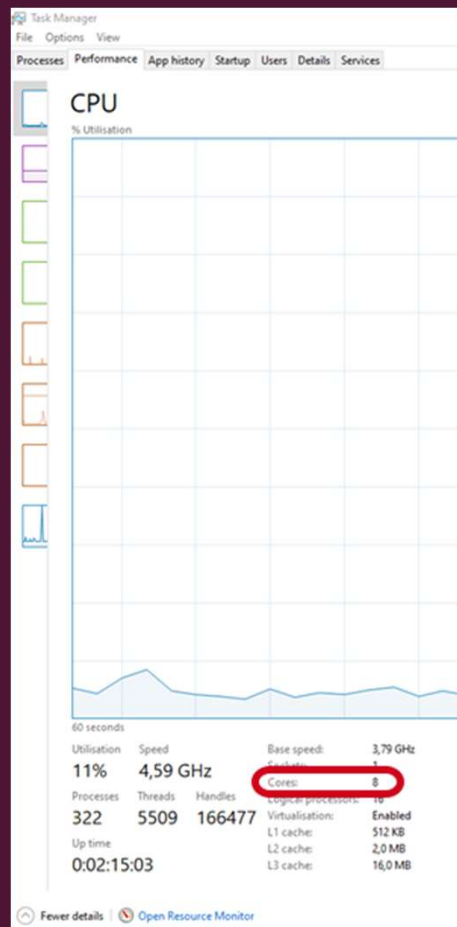
W przypadku użycia dysku systemowego (zostawiamy domyślne).



W przypadku użycia drugiego dysku.

Ilość plików zależna od ilości rdzeni, np.  
1 rdzeń- 1 plik,  
2 rdzenie – 2 pliki,  
4 rdzenie – 4 pliki,  
8 lub więcej rdzeni – 8 plików

Data Directories, jeżeli instalujemy z jednym dyskiem - zostawiamy, jeżeli na dwóch, zmieniamy nazwę wg naszej struktury.



The screenshot shows the SQL Server 2022 Setup Database Engine Configuration window. The TempDB tab is selected, and several fields are highlighted with red boxes and arrows. The 'Number of files' is set to 8. The 'Initial size (MB)' is 8, and the 'Autogrowth (MB)' is 64. The 'Data directories' field is set to 'D:\sql\TempDB'. The 'TempDB log file' is 'templog.ldf', with an 'Initial size (MB)' of 8 and 'Autogrowth (MB)' of 64. The 'Log directory' is 'D:\sql\TempDB'. The 'TempDB data files' section shows 'tempdb.mdf' and 'tempdb\_mssql\_#.ndf'. The 'TempDB' tab is also highlighted with a red box.

Database Engine Configuration

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

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

TempDB data files: tempdb.mdf, tempdb\_mssql\_#.ndf

Number of files: 8

Initial size (MB): 8 Total initial size (MB): 64

Autogrowth (MB): 64 Total autogrowth (MB): 512

Data directories: D:\sql\TempDB

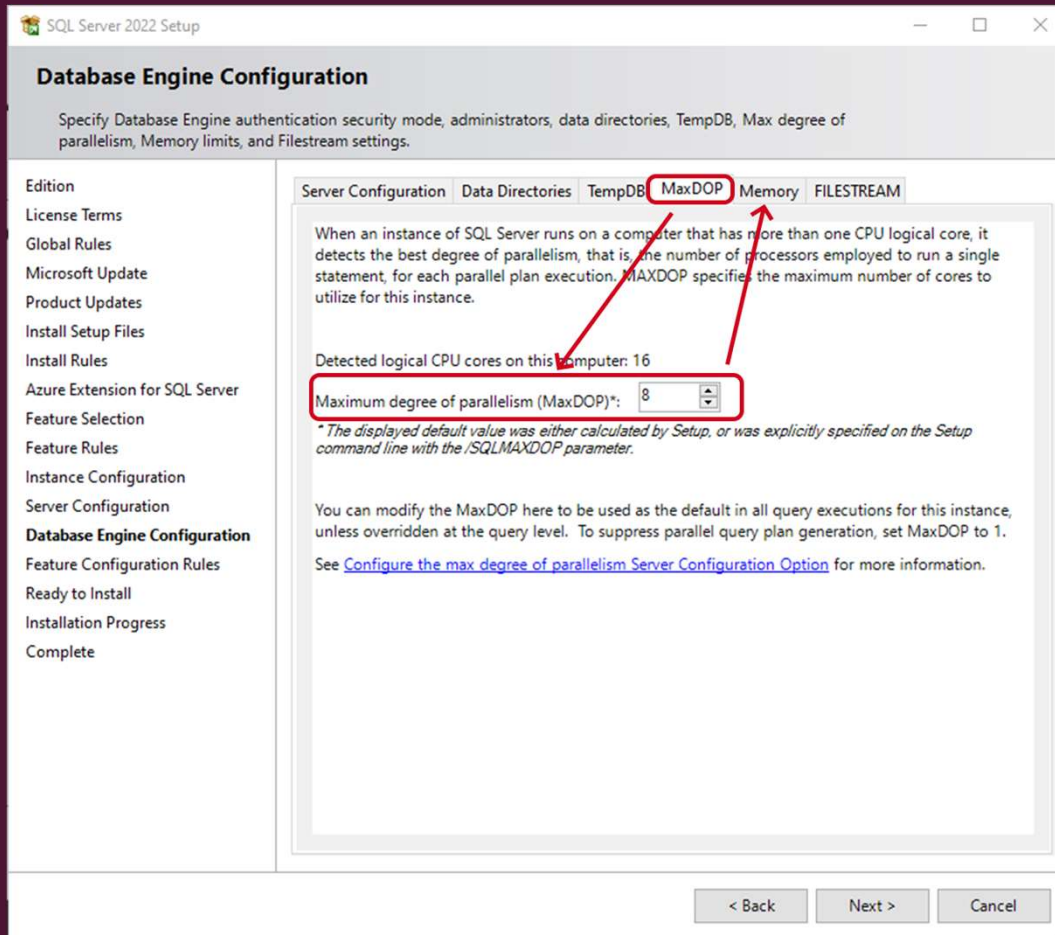
TempDB log file: templog.ldf

Initial size (MB): 8 Setup could take longer with large initial size.

Autogrowth (MB): 64

Log directory: D:\sql\TempDB

< Back Next > Cancel



Zostawiamy wartość domyślną.

W szkole możemy zostawić domyślnie, ponieważ co zajęcia komputery są wyłączane, i serwer z automatu nie startuje. 5 GB musimy zostawić na system Windows, dlatego przykładowo, gdy mamy 12 GB RAM-u, ustawiamy max 5 GB na zapytania.

SQL Server 2022 Setup

### Database Engine Configuration

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

- Edition
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Server Configuration | Data Directories | TempDB | MaxDOP | **Memory** | FILESTREAM

SQL Server can change its memory requirements dynamically based on available system resources. However, in some scenarios you can configure the range of memory (in MB) that is managed by the SQL Server Memory Manager for this instance, by specifying min server memory and/or max server memory.

☒ Recommended ☐ Default

Min Server Memory (MB): 100 0

Max Server Memory (MB): 23168 2147483647

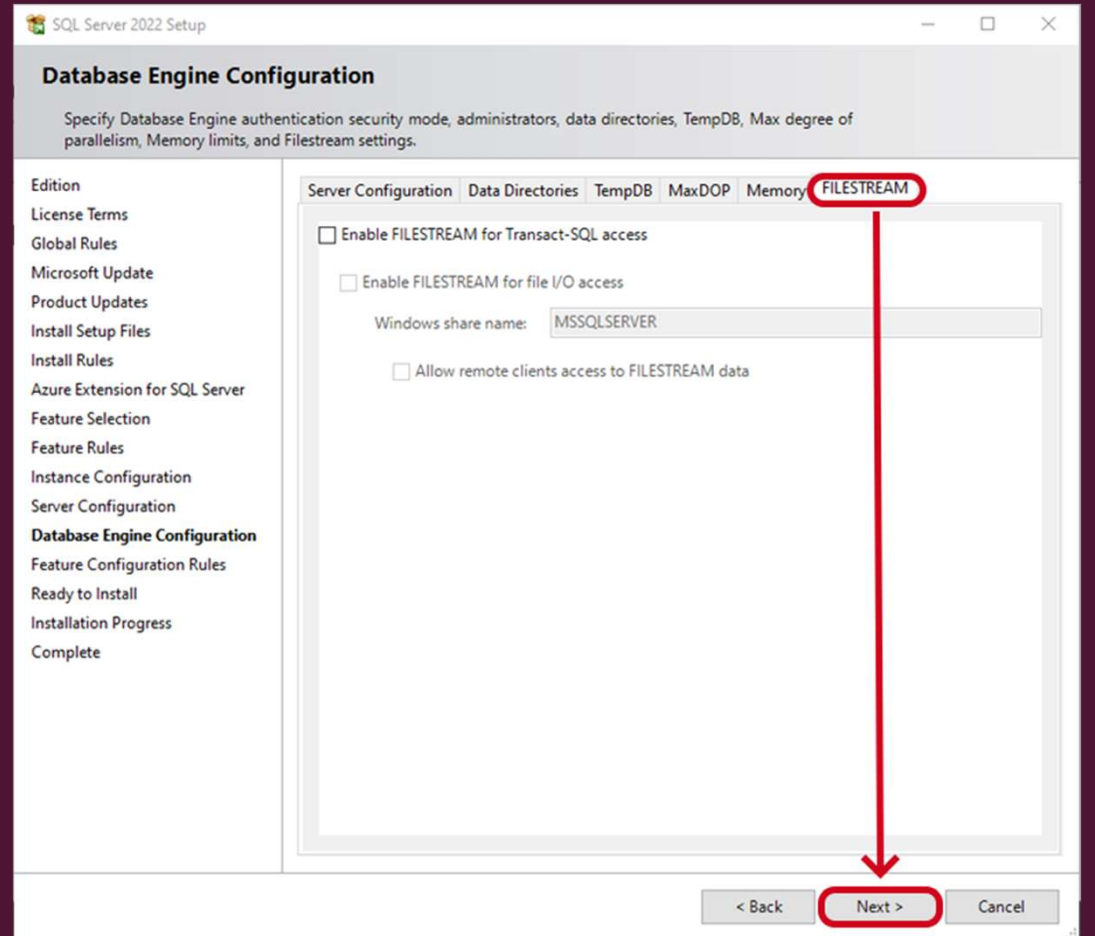
*The displayed recommended values were calculated by Setup based on your system configuration and edition, unless these were explicitly specified in the Setup command line using the /SQLMINMEMORY and /SQLMAXMEMORY parameters.*

For more information see: [Server Memory Server Configuration Options](#).

☒ Click here to accept the recommended memory configurations for the SQL Server Database Engine

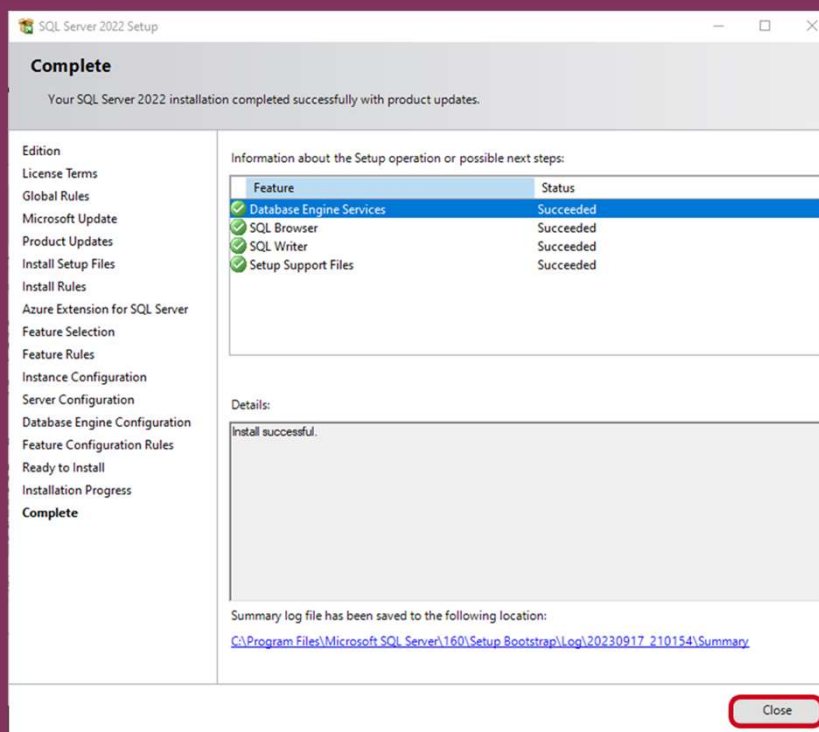
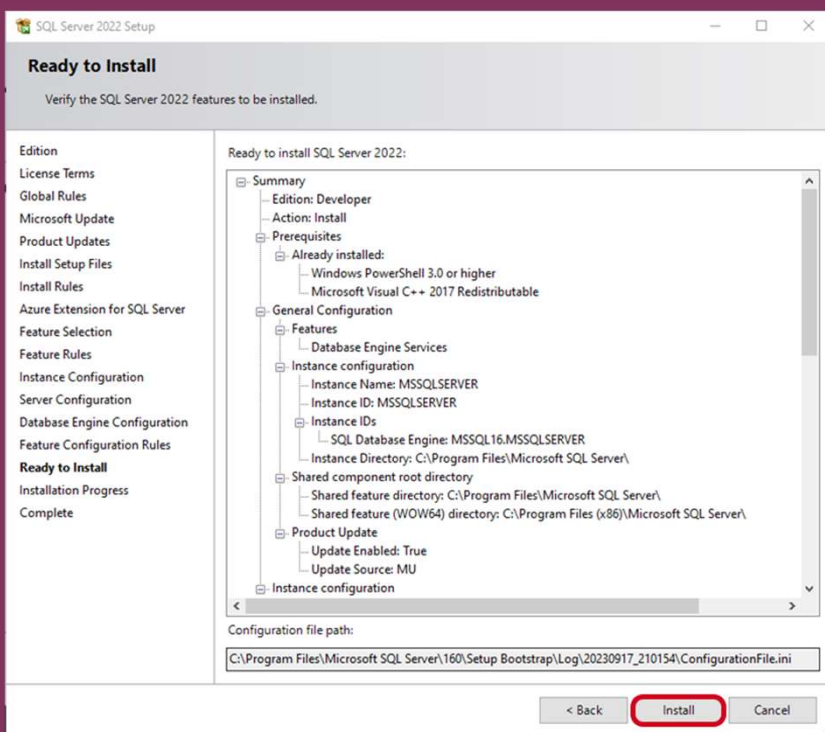
< Back Next > Cancel

Obsługa dużych plików, np. zdjęć,  
muzyki zostawiamy domyślnie.



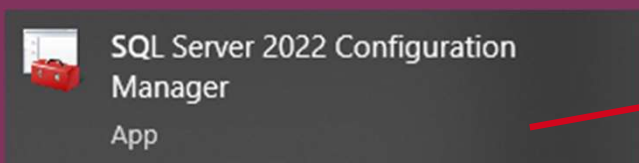


# PODSUMOWANIE INSTALACJI

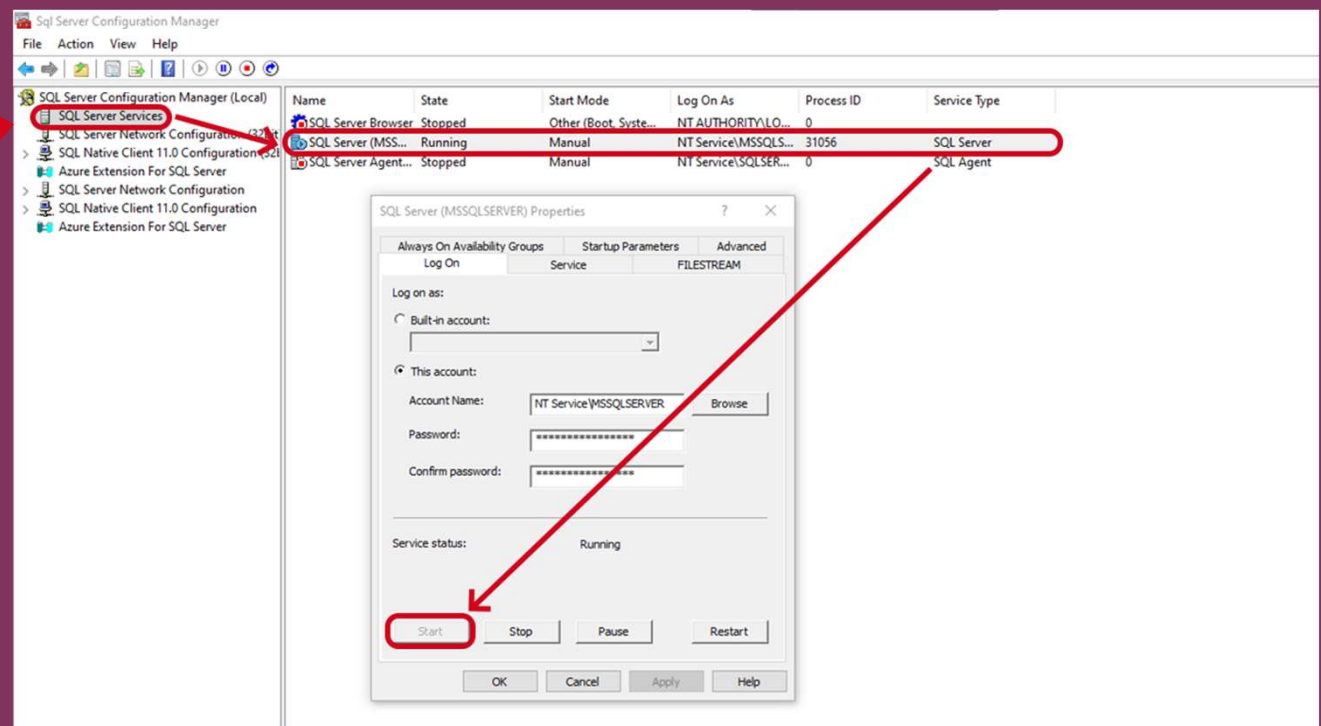


Po instalacji  
warto jest  
zrestartować  
komputer.

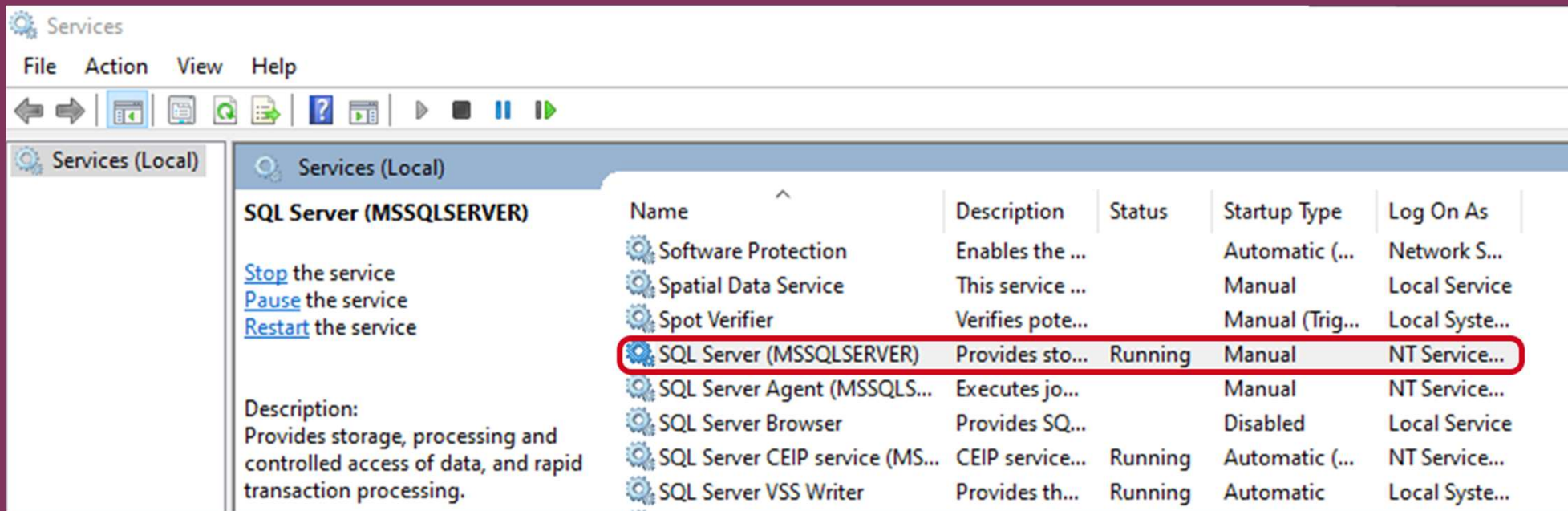
# URUCHAMIANIE SERWERA – I SPOSÓB



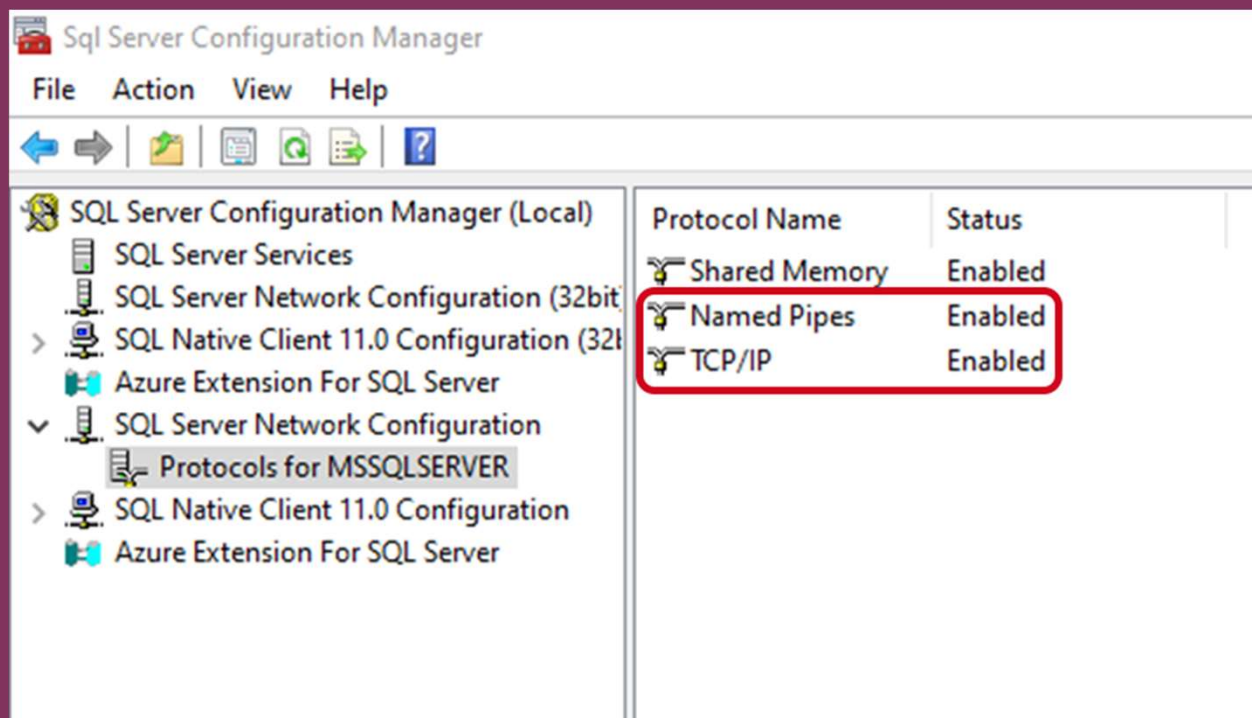
Klikamy 2 razy na serwer, po czym klikamy przycisk Start.



# URUCHAMIANIE SERWERA - II SPOSÓB (USŁUGI)



# USTAWIENIA SERWERA - JEŚLI CHCEMY UDOSTĘPNIĄĆ USŁUGI SERWERA NA ZEWNĄTRZ



# POBIERANIE I INSTALACJA MANAGEMENT STUDIO

Management Studio to narzędzie do zarządzania bazą danych. Można je zainstalować korzystając z wcześniej otwartej strony z instalacją serwera (zjeżdżając na dół strony).

## SQL Server tools and connectors

### Tools

[Download Azure Data Studio](#)

[Download SQL Server Management Studio \(SSMS\)](#)

[Download SQL Server Data Tools \(SSDT\)](#)

[Download Data Migration Assistant](#)

[Download SQL Server Migration Assistant for Oracle](#)

### Connectors

[Microsoft ADO.NET for SQL Server](#)

[Microsoft JDBC Driver for SQL Server](#)

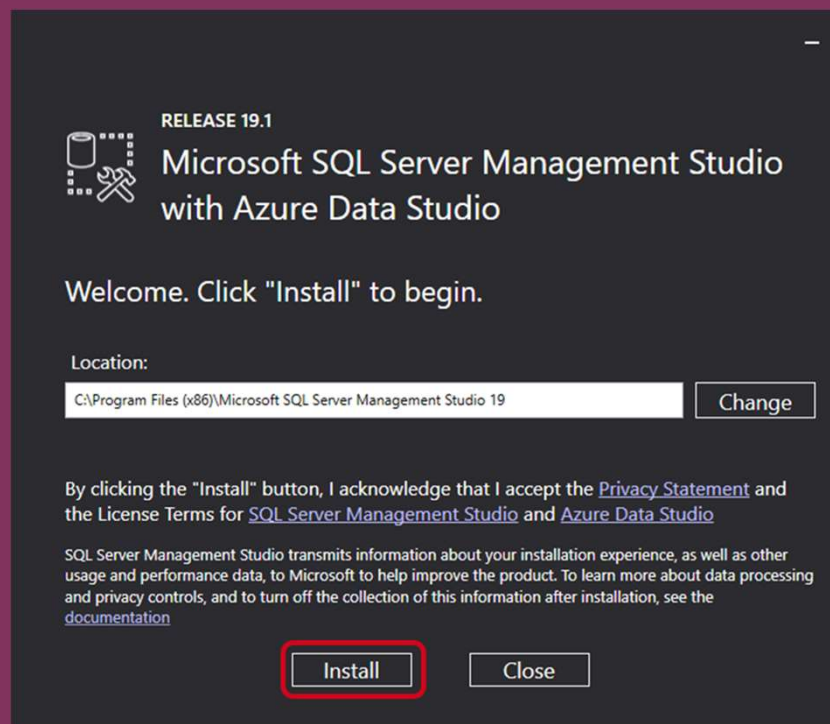
[Microsoft ODBC Driver for SQL Server](#)

[Node.js Driver for SQL Server](#)

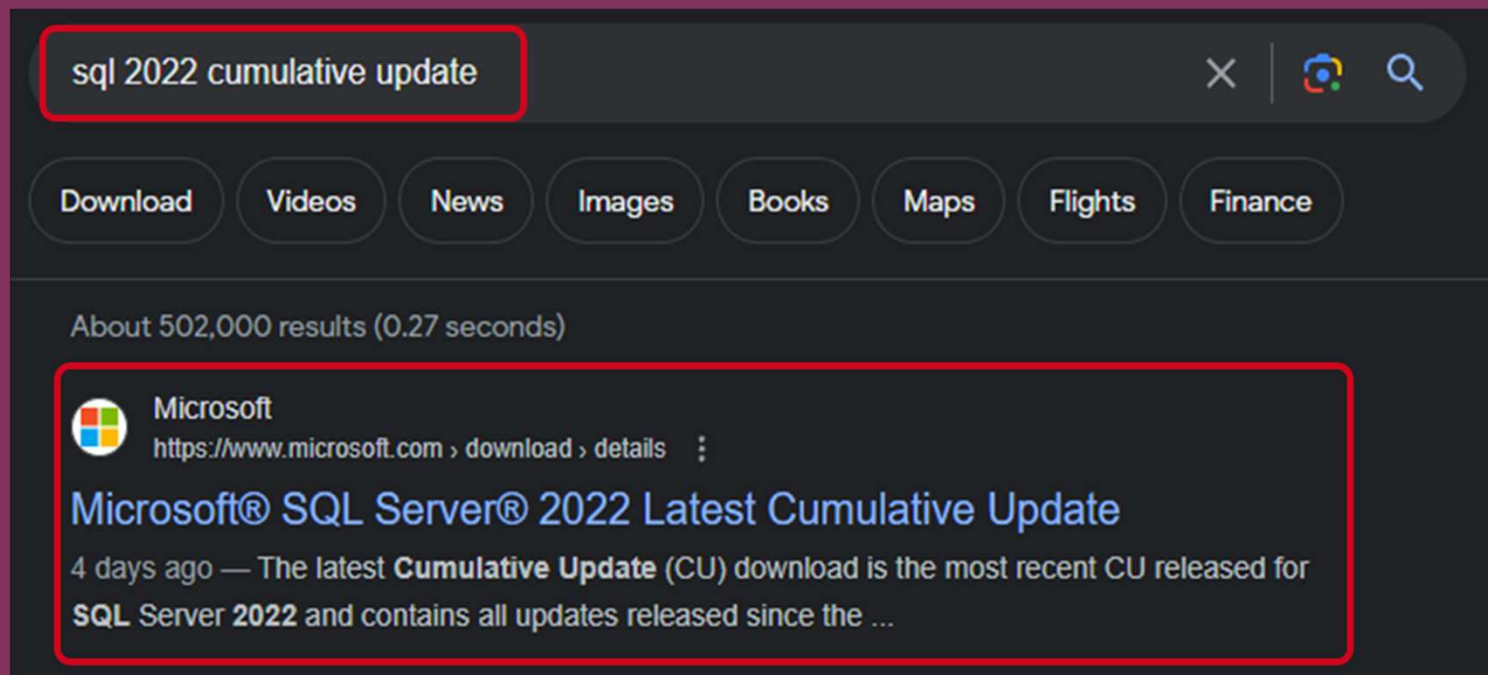
[Python Driver for SQL Server](#)

[Ruby Driver for SQL Server](#)

# POBIERANIE I INSTALACJA MANAGEMENT STUDIO



# INSTALACJA CUMULATIVE UPDATE



Zawsze instalujemy najnowszy cumulative update. W przypadku, gdy jest nowy service pack, to najpierw instalujemy nowy service pack, a następnie najnowszy cumulative update.



# INSTALACJA CUMULATIVE UPDATE

## Microsoft® SQL Server® 2022 Latest Cumulative Update

Cumulative Update Package 8 for SQL Server 2022 - KB5029666

Important! Selecting a language below will dynamically change the complete page content to that language.

Select language

English



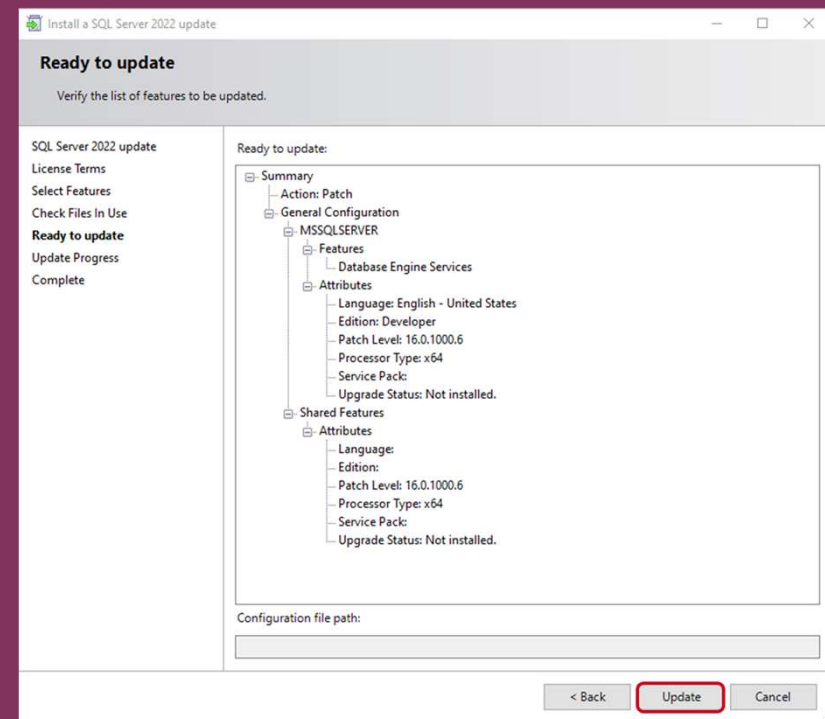
Download

Expand all | [Collapse all](#)

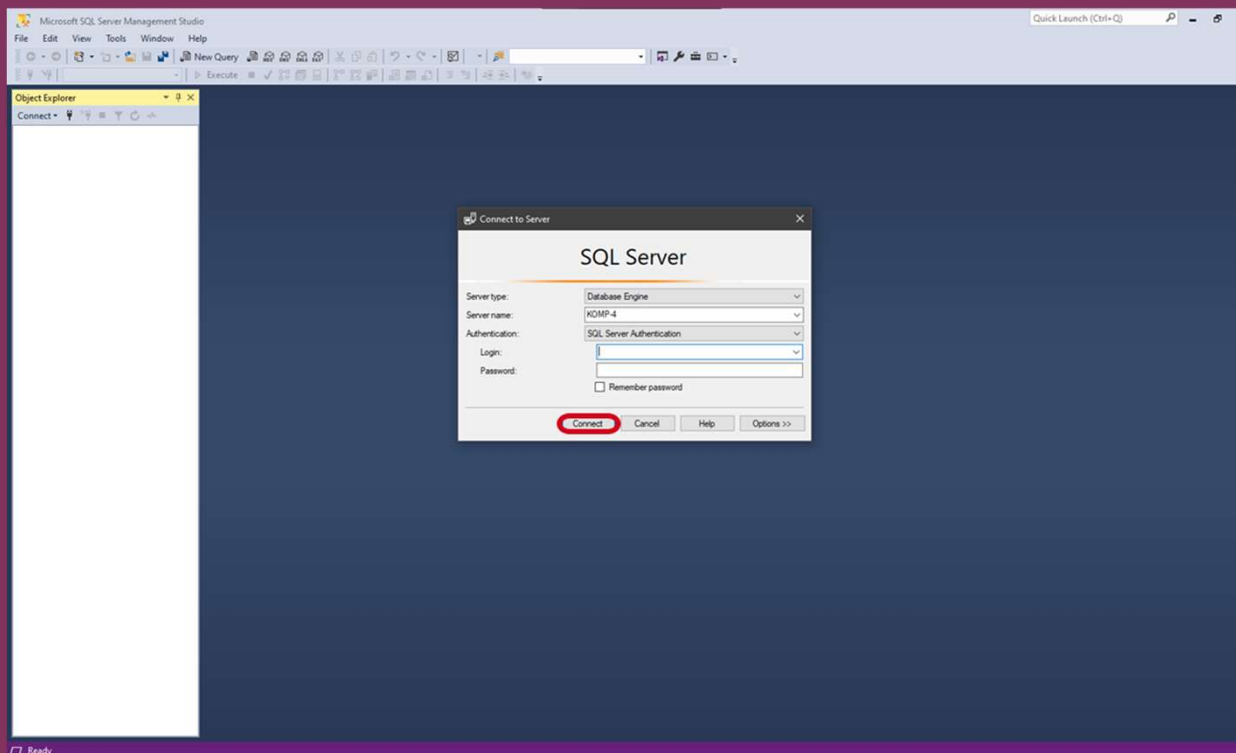
# INSTALACJA CUMULATIVE UPDATE

SQLServer2022-KB5029666-x64.exe	17.09.2023 23:14	Application	409 313 KB
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Akceptujemy umowę licencyjną i przeklikujemy kolejne okienka.



# URUCHAMIANIE MANAGEMENT STUDIO

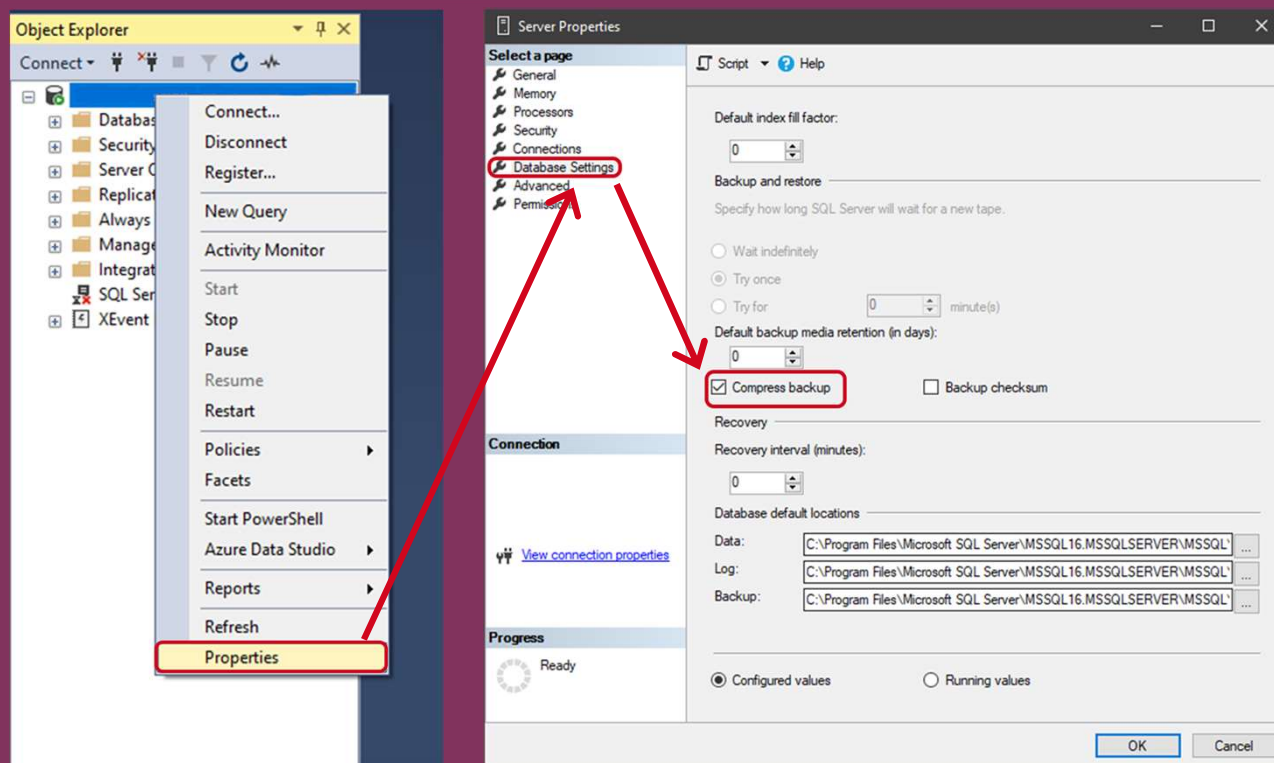


Przed łączeniem się do serwera należy go włączyć.

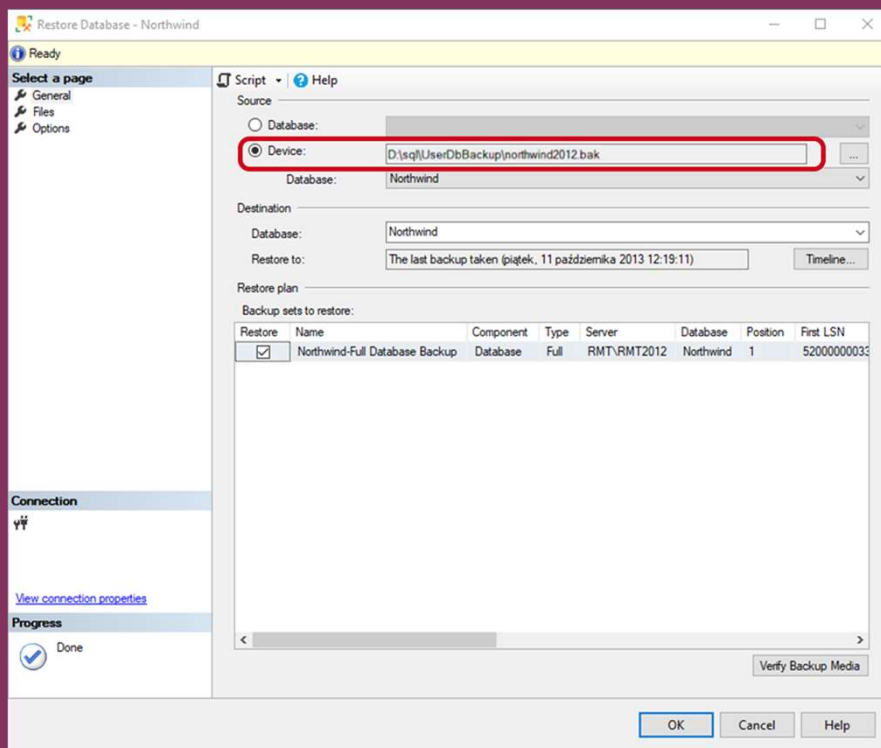
# USTAWIENIA MANAGEMENT STUDIO

Ustawienia serwera (prawy klawisz myszy) → właściwości → ustawiamy kompresowanie backupów

**UWAGA!** Jeśli dokonujemy jakichkolwiek zmian na serwerze w Management Studio to zmiany zostaną zapisane dopiero po restarcie serwera.



# RESTORE BAZY NORTHWIND



Ze strony przedmiotowej pobieramy bazę Northwind, a następnie klikamy na serwerze prawy klawisz myszy i wybieramy Restore. Starą wersję Northwind na nowym serwerze otworzymy - odwrotnie nie.

# TWORZENIE PIERWSZEGO ZAPYTANIA

