Instalacja środowiska MS SQL Server w maszynie wirtualnej w systemie Windows 10 PRO (22H2)

Oprogramowanie wykorzystywane na laboratorium:

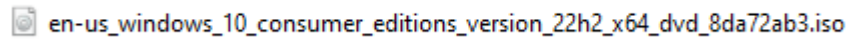
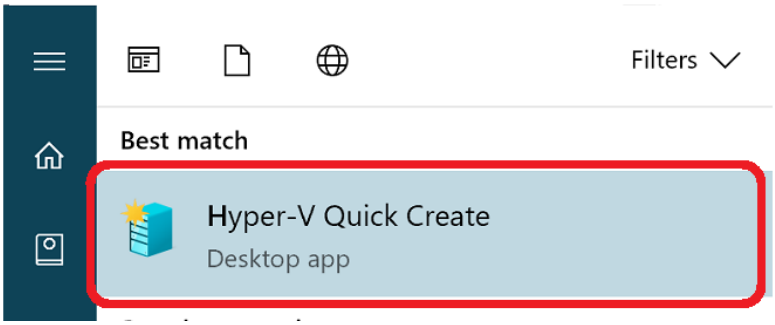
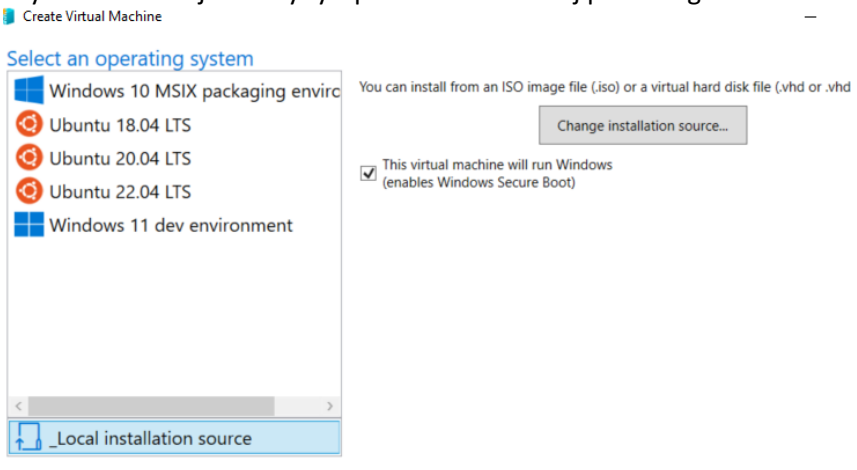
- MS SQL Server (np. 2019 DEV)
  - Analysis Services
  - Integration Services
  - Reporting Services
- SQL Server Management Tools
- SQL Server Data Tools + Visual Studio
- Instalacja bazy danych AdventureWorks
- Instalacja Power BI
- Instalacja MS Office (Excel)

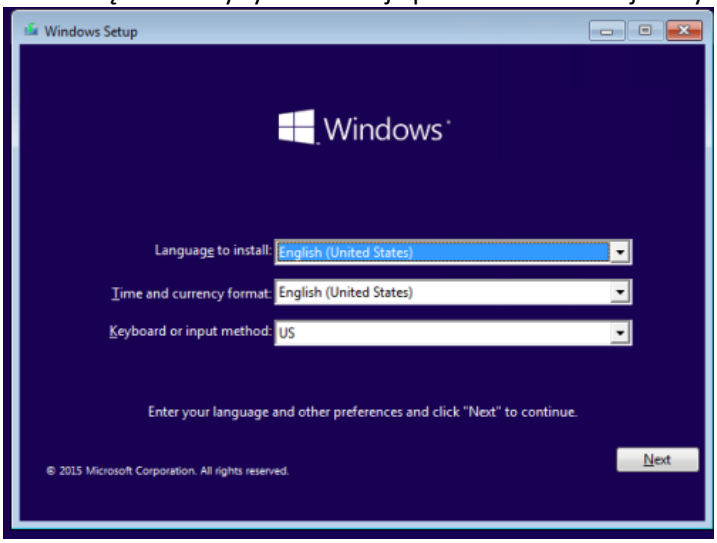
Oprogramowanie jest dostępne na stronie:
https://azureforeducation.microsoft.com/devtools

Należy się zarejestrować przy wykorzystaniu adresu poczty z domeny „pwr.edu.pl”.

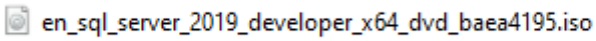
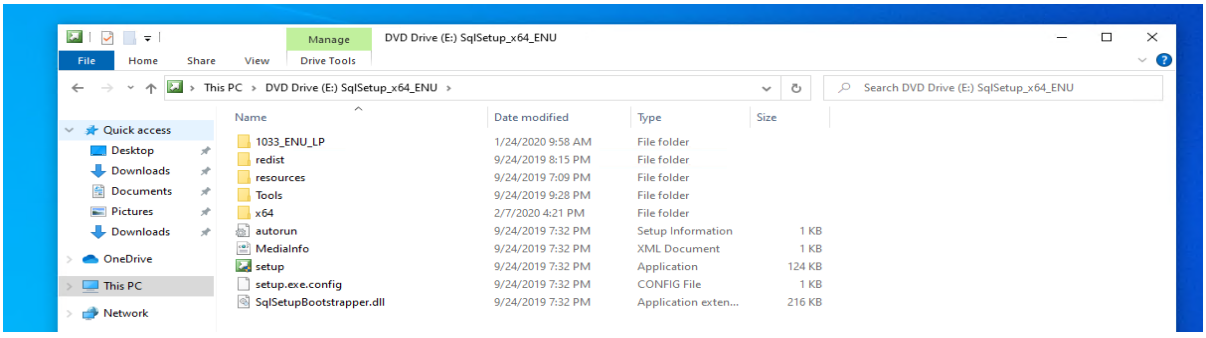
Instalacja oprogramowania w środowisku maszyny wirtualnej Hyper-V w systemie Windows 10 Pro:

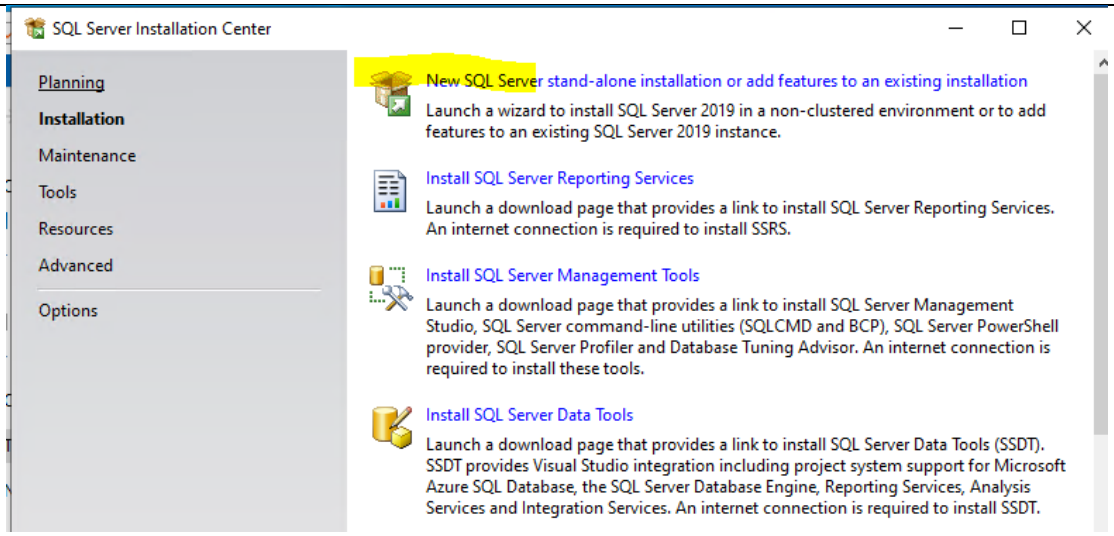
1. Uruchomienie maszyny wirtualnej systemu Windows 10 Edu (Opcjonalne)

1.1	Pobierz obraz systemu operacyjnego Windows 10 Edu. Pobierz i zapisz klucz produktu: 
1.2	Uruchom Open Hyper-V Quick Create from the start menu: 
1.3	Wybierz instalacje maszyny z pliku ISO wcześniej pobranego: 

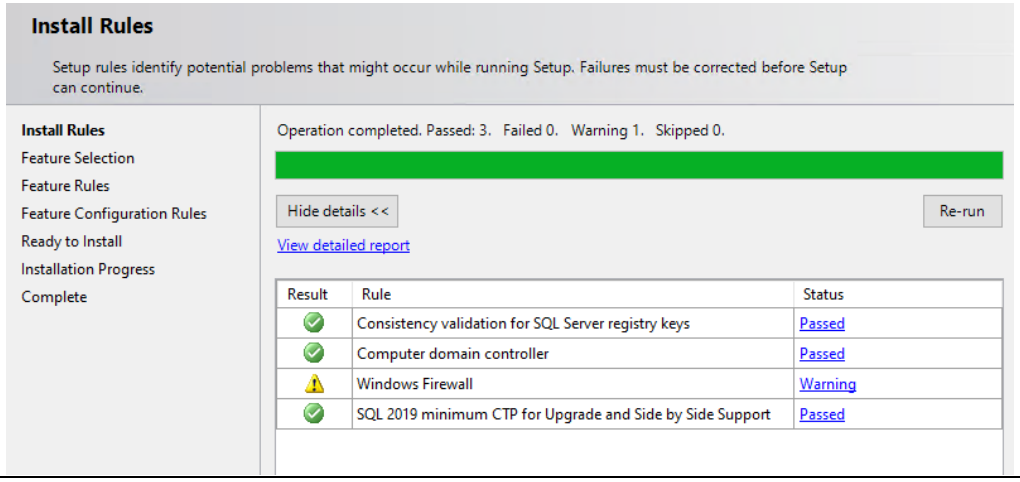
1.4	Polacz się do maszyny wirtualnej i potwierdź instalacje z dysku CD. Pozostaw standardowe ustawienia języka: 
1.5	Wprowadź klucz produktu pobrany wcześniej.
1.6	Przeprowadź dalsze kroki standardowej instalacji systemu operacyjnego.

2. Instalacja MS SQL Server 2019 Dev

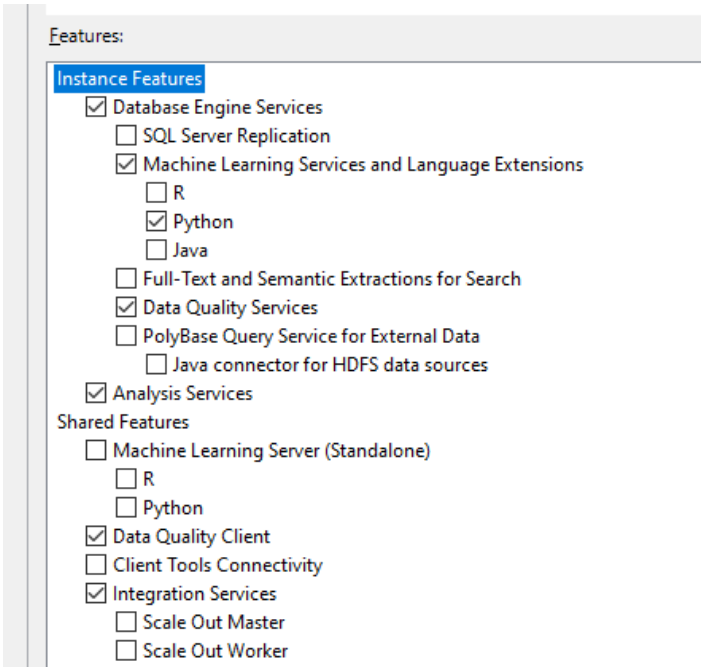
2.1	Pobierz obraz nośnika instalacji systemu MS SQL Server 2019 Dev 
2.2	Skopiuj plik ISO do dysku lokalnego maszyny wirtualnej (o ile jest stosowana).
2.3	Podłącz plik ISO jako dysk i uruchom instalacje: 
2.4	Wybierz instalacje SQL Server:

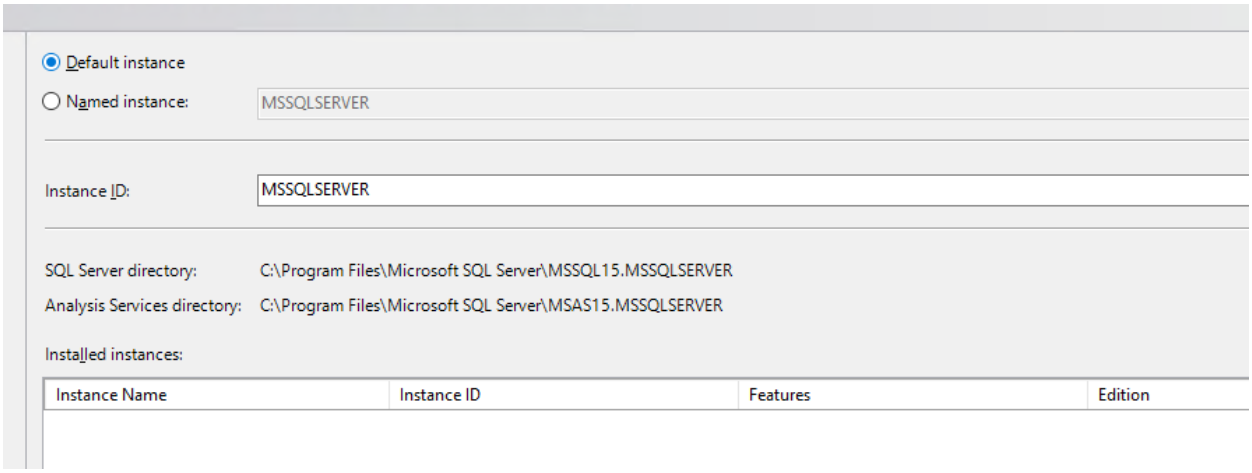
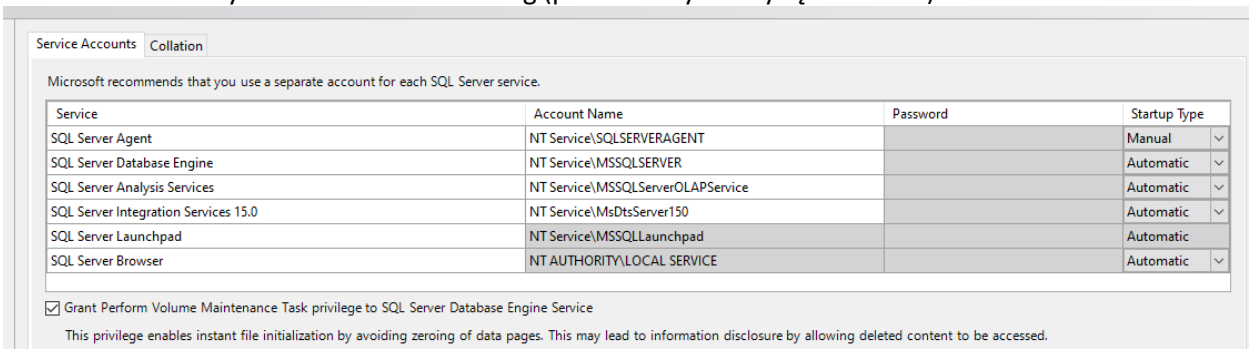
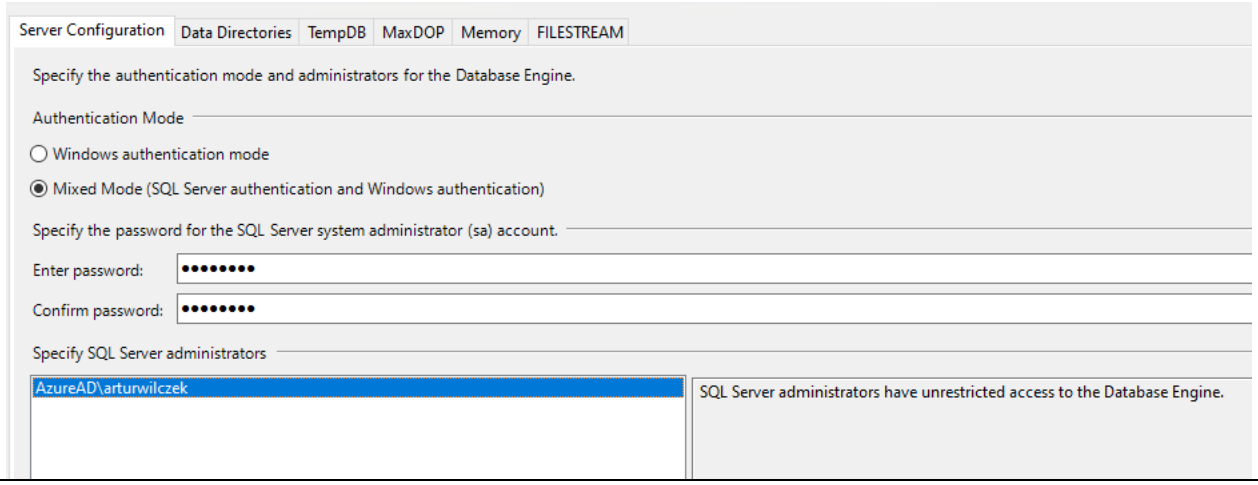
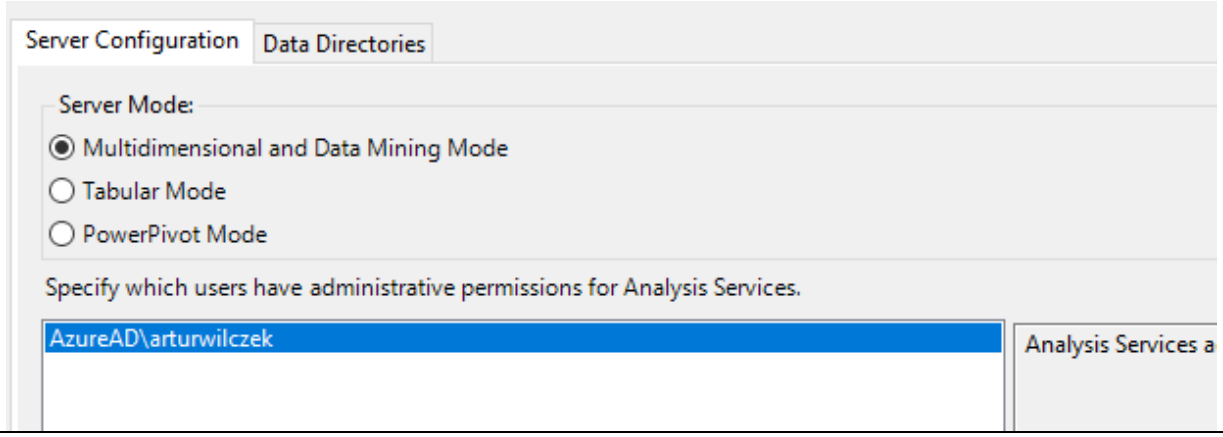


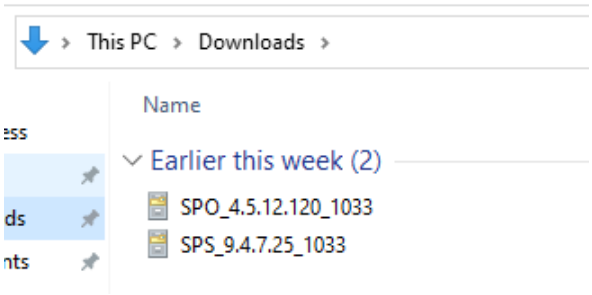
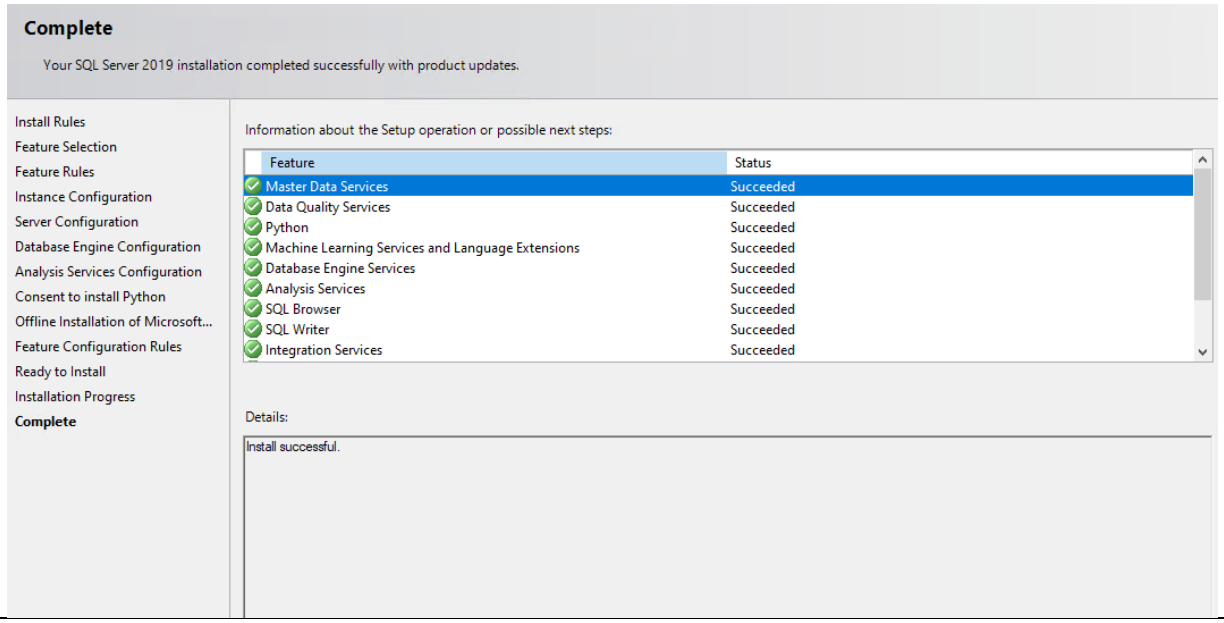
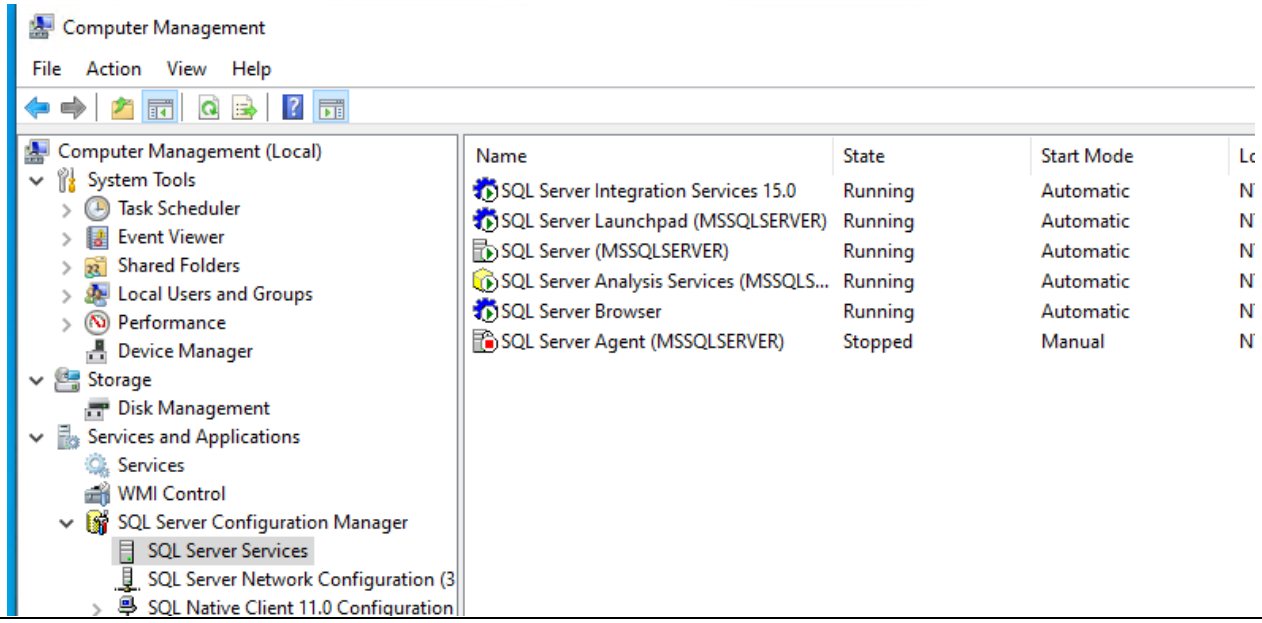
2.5 Wybierz wersję Developerską i standardowe ustawienia:

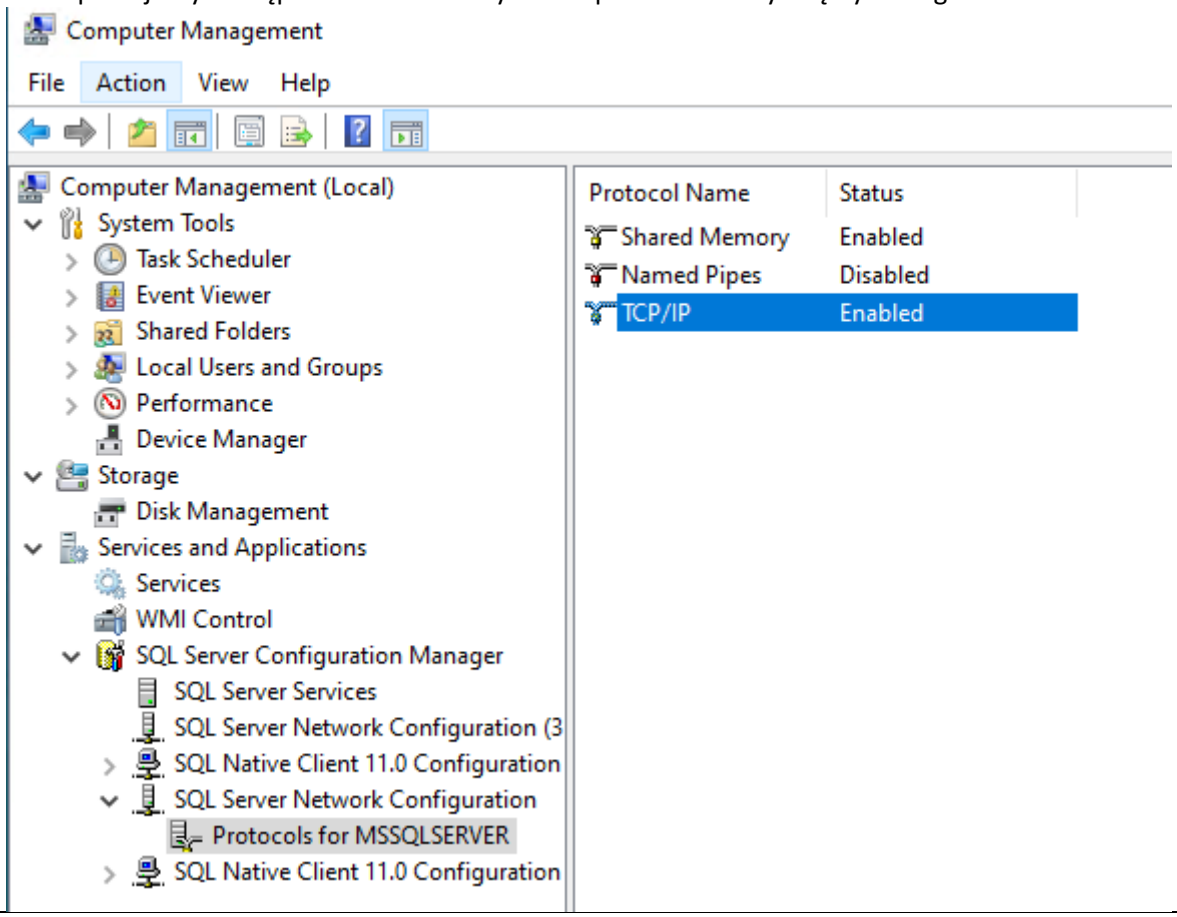


2.6 Wybierz następujące opcje:

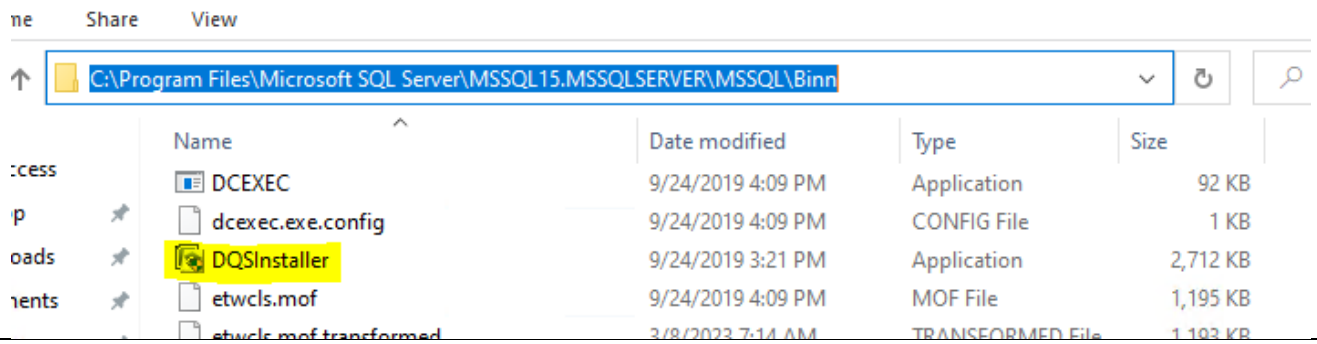


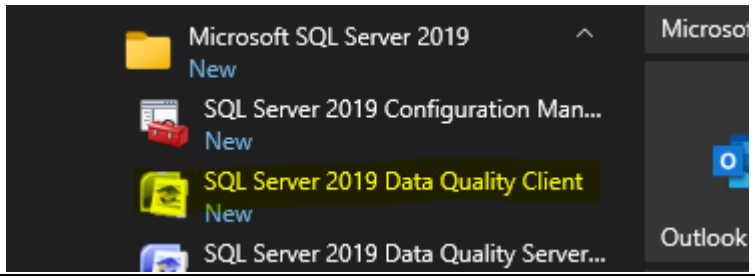
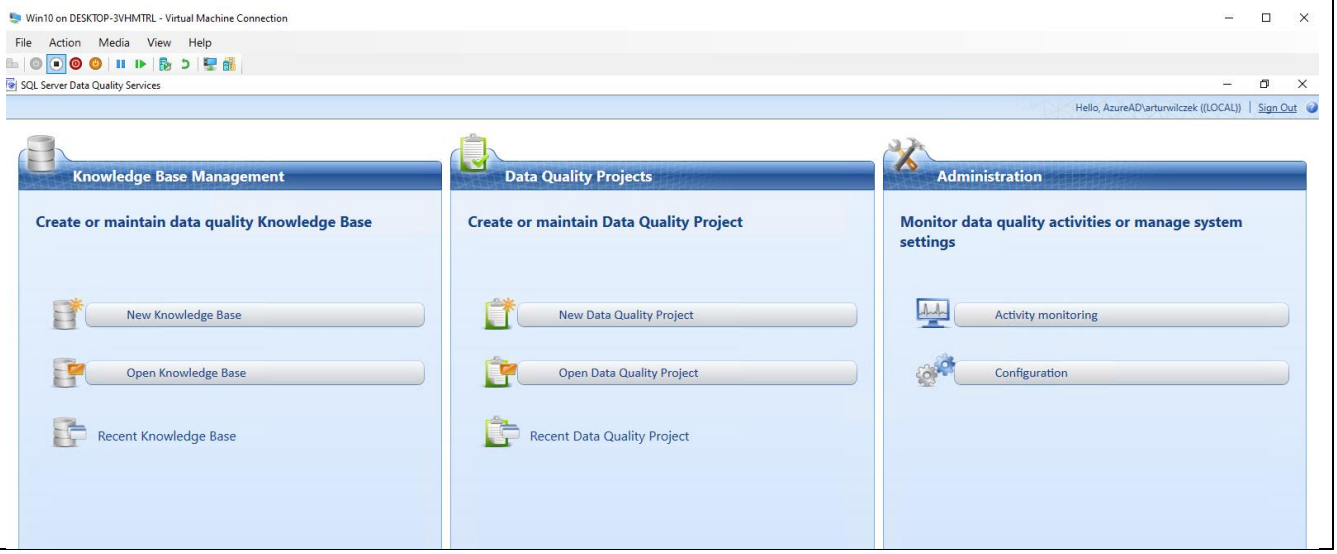
2.7	Oraz: 
2.8	Pozostaw automatyczne uruchomienie usług (po to mamy maszynę wirtualna): 
2.9	Ustaw autoryzację mixed mode i hasło administratora: 
2.10	Wybierz Server Mode: 

2.11	W przypadku braku wymaganych pakietów instalacji pobierz je w wskaż folder gdzie zostały zapisane: 
2.12	Instalacja zakończy się komunikatem: 
2.13	Weryfikacja uruchomienia usług SQL Serwera: 

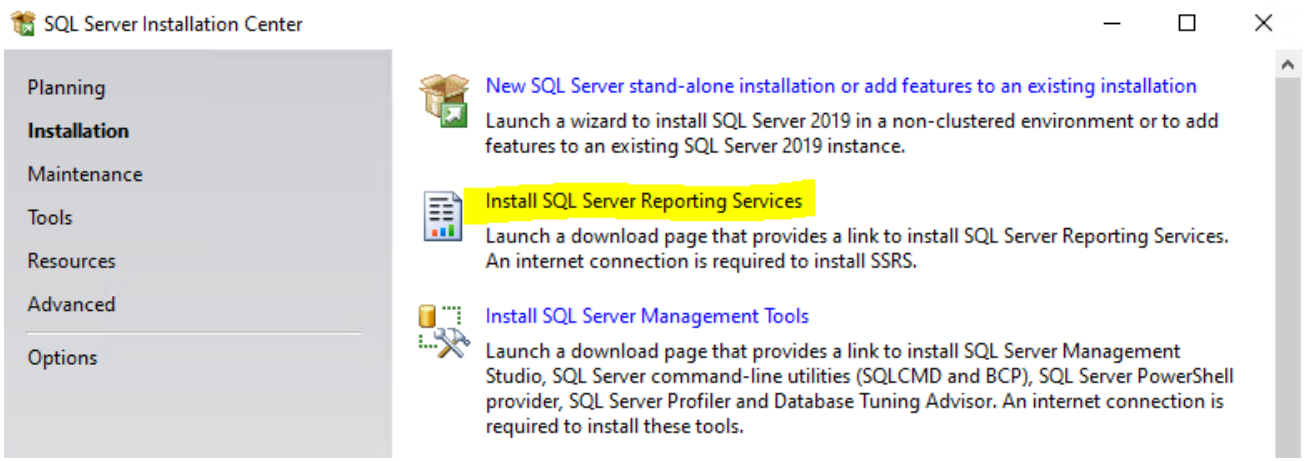
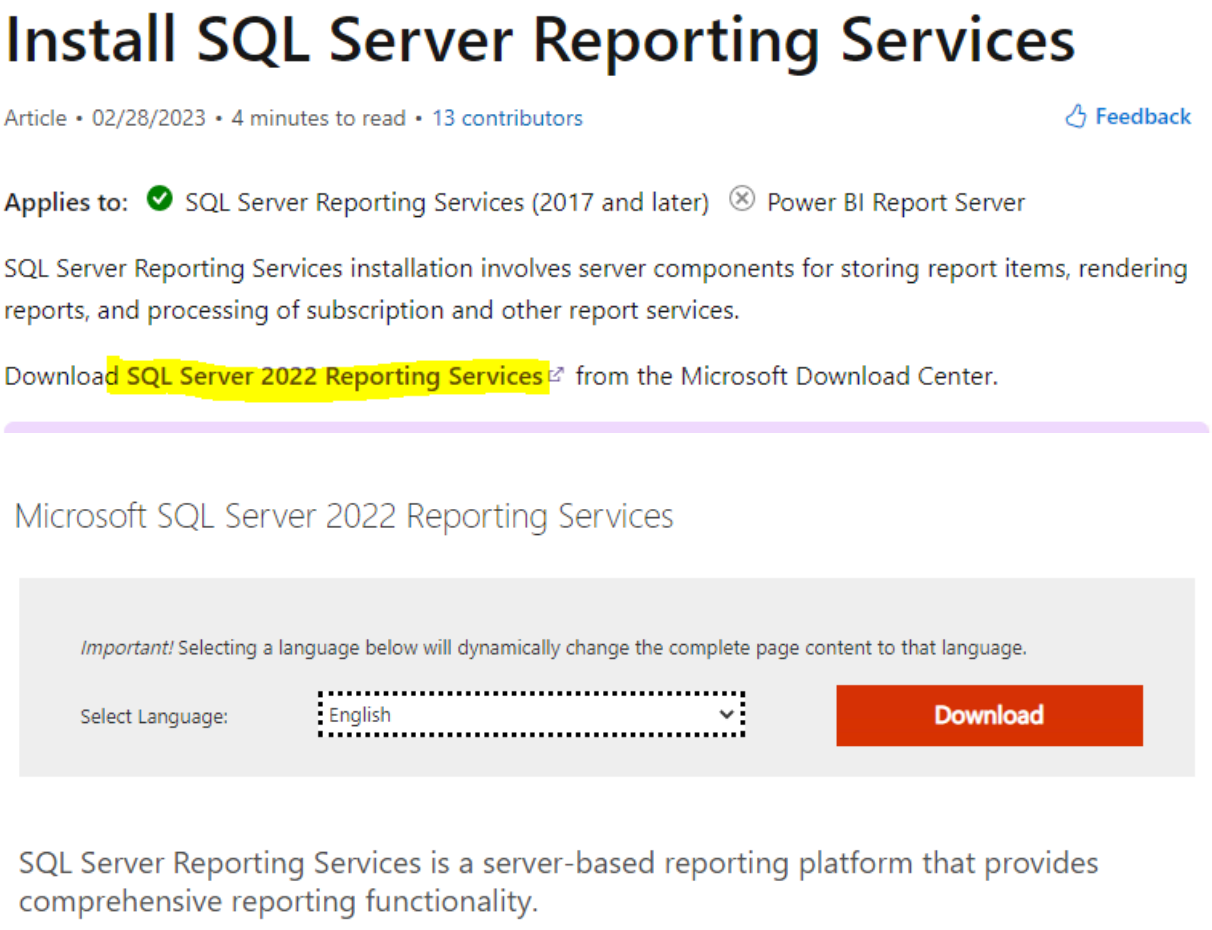
2.14	Jeżeli planujemy dostęp do serwera z innych komputerów należy włączyć usługi sieciowe: 

3. Instalacja SQL Server Quality Services

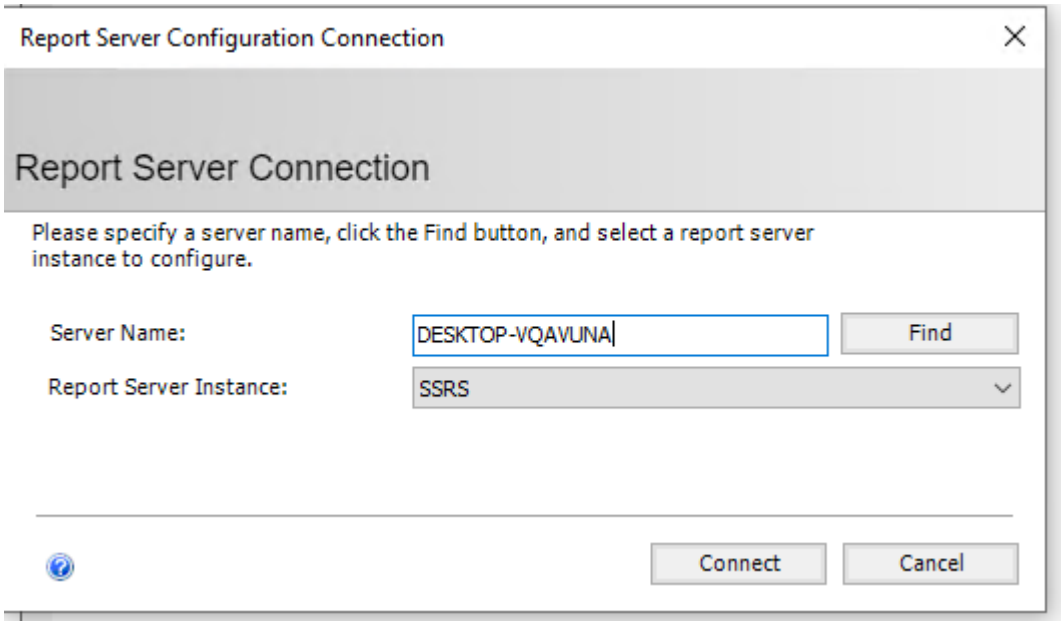
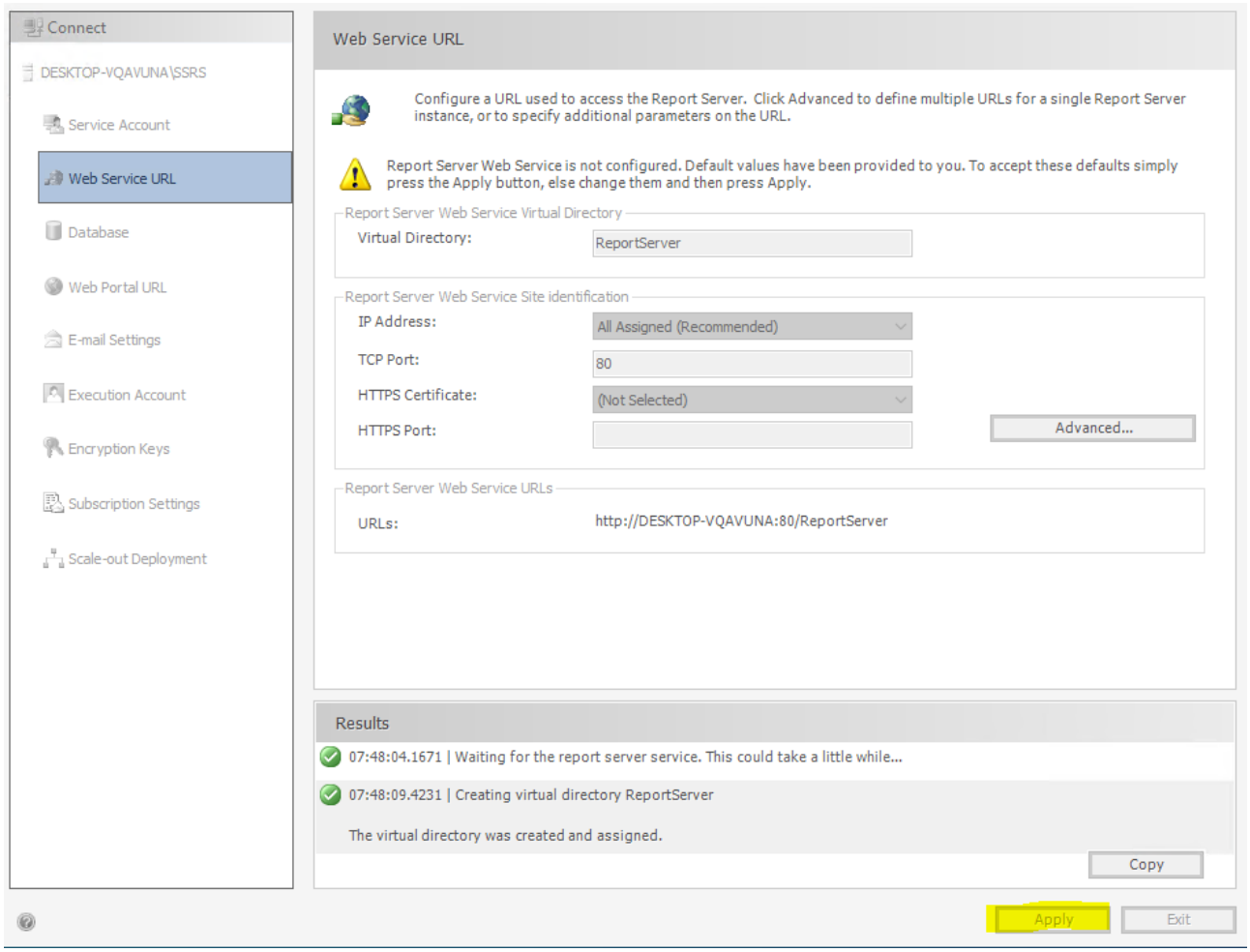
3.1	Uruchom DQSInstaller z folderu: C:\Program Files\Microsoft SQL Server\MSSQL15.MSSQLSERVER\MSSQL\Binn 

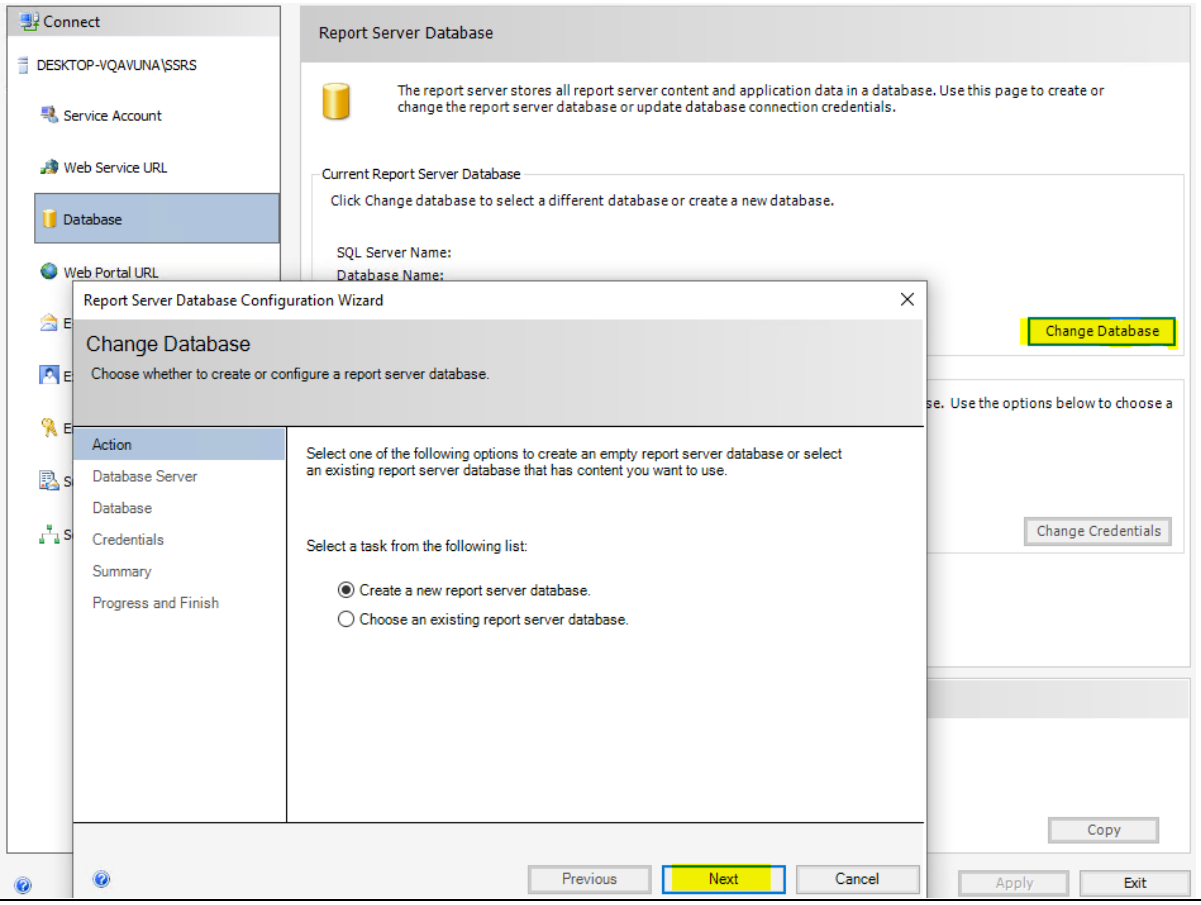
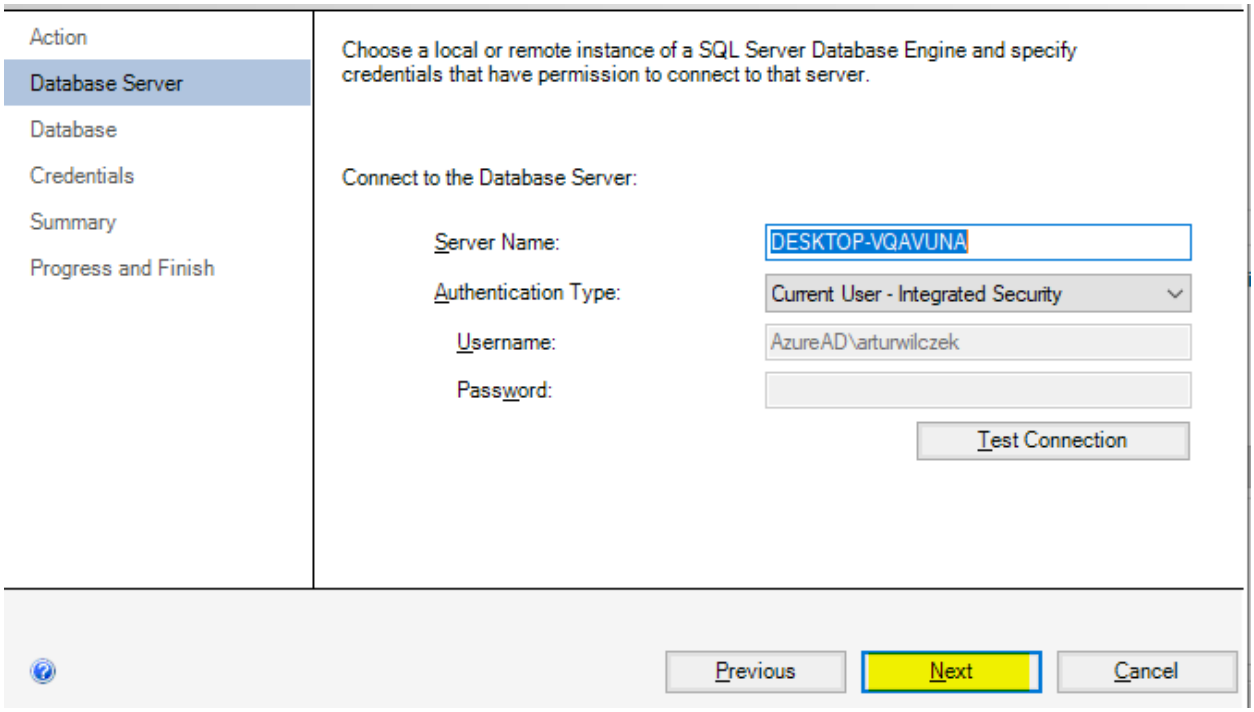
3.2	Wprowadź hasło spełniające wskazane warunki i instalacja powinna się zakończyć komunikatem: C:\Program Files\Microsoft SQL Server\MSSQL15.MSSQLSERVER\MSSQL\Binn\DQSInstaller.exe [3/11/2023 7:22:31 AM] - Creating refresh assemblies stored procedure. [3/11/2023 7:22:31 AM] Changed database context to 'master'. [3/11/2023 7:22:31 AM] - Creating refresh assemblies helper linked server. [3/11/2023 7:22:31 AM] - Creating and registering [dbo].[DQInitDQS_MAIN] (calls internal_core rtup stored procedure. [3/11/2023 7:22:31 AM] [3/11/2023 7:22:31 AM] --> Running File: create_service_broker_objects.sql [3/11/2023 7:22:31 AM] ---[Registering Service Broker Objects]--- [3/11/2023 7:22:31 AM] Changed database context to 'DQS_MAIN'. [3/11/2023 7:22:31 AM] - Creating SB dispatcher stored procedure, messages and contract [3/11/2023 7:22:31 AM] - Creating parallel execution SB queues and services [3/11/2023 7:22:31 AM] - Creating calibration SB queues and services [3/11/2023 7:22:31 AM] - Creating parallel calibration SB queues and services [3/11/2023 7:22:31 AM] [3/11/2023 7:22:31 AM] [3/11/2023 7:22:31 AM] Successfully registered all assemblies. [3/11/2023 7:22:31 AM] [3/11/2023 7:22:31 AM] [3/11/2023 7:22:31 AM] Action 'Register data quality assemblies and stored procedures' finished succe [3/11/2023 7:22:31 AM] Executing action: Set product version property. [3/11/2023 7:22:31 AM] Action 'Set product version property' finished successfully. [3/11/2023 7:22:31 AM] Executing action: Create MDS user (if MDS login exists). [3/11/2023 7:22:31 AM] Action 'Create MDS user (if MDS login exists)' finished successfully. [3/11/2023 7:22:31 AM] Executing action: Load out of the box data. [3/11/2023 7:22:32 AM] Started loading knowledgebase 'DQS Data' [3/11/2023 7:23:16 AM] Finished loading knowledgebase 'DQS Data' [3/11/2023 7:23:16 AM] Action 'Load out of the box data' finished successfully. [3/11/2023 7:23:16 AM] DQS Installer finished successfully. Press any key to continue...
3.3	Uruchom SQL Server Data Quality Client: 
3.4	SQL Server Data Quality Client: 

4. Instalacja SQL Server Reporting Services

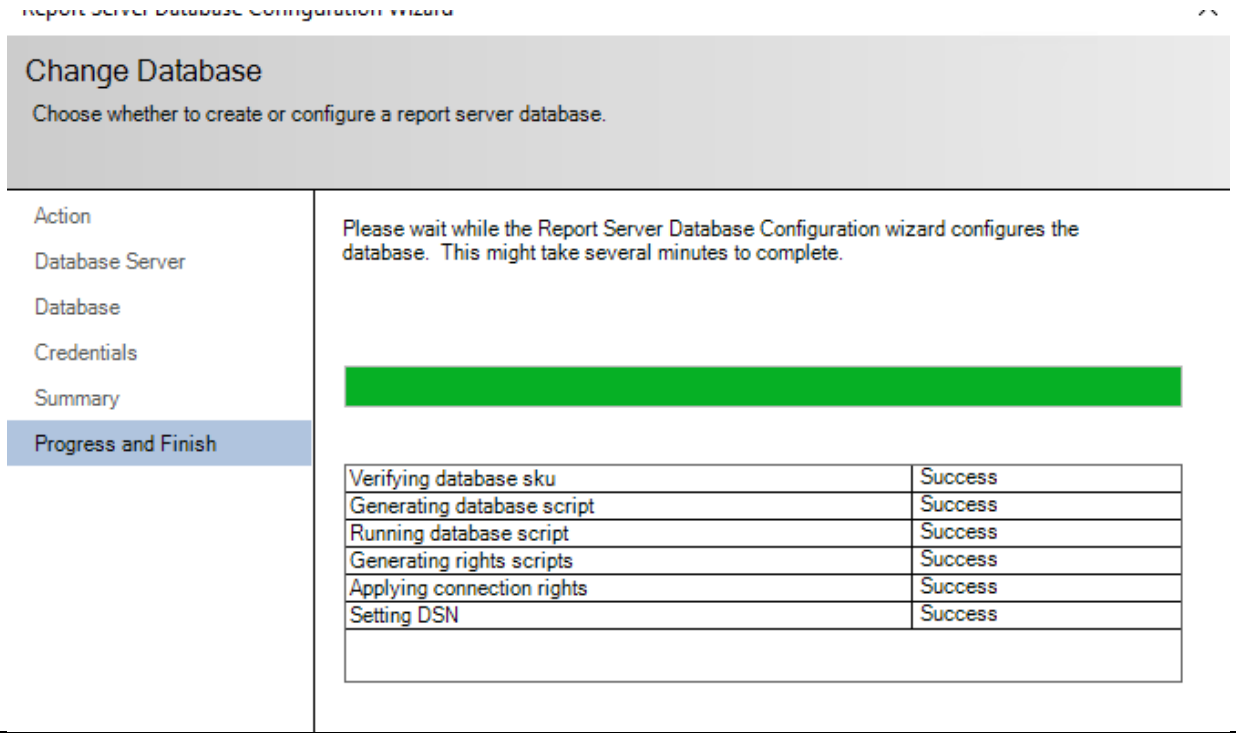
4.1	Uruchom instalacje SQL Server i wybierz instalacje Reporting Services: 
4.2	Pobierz pakiet instalacyjny 

4.3	Uruchom instalację
4.4	Wybierz edycję developerską i w standardowe ustawienia w kolejnych krokach instalacji
4.5	Instalacja zakończy się. Przejdź do konfiguracji report serwera:

4.6	Połącz się: 
4.7	Uruchom usługi sieciowe: 

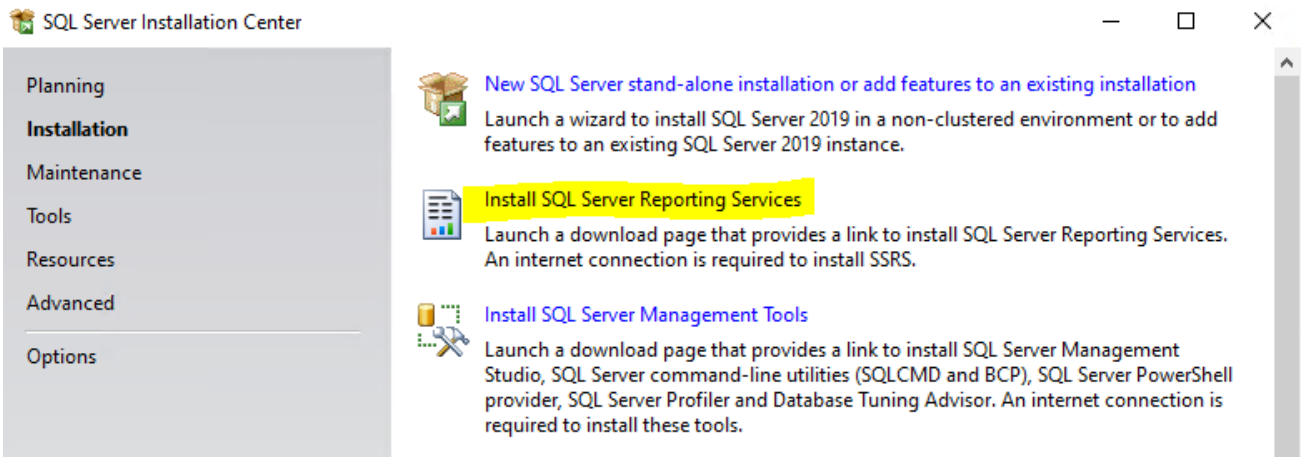
4.8	Utwórz bazę danych dla Reporting Services: 
4.9	Pozostaw standardowe ustawienia: 

4.10	Instalacja bazy danych zakończy się:



5. Instalacja SQL Server Management Tools

5.1	Uruchom instalacje SQL Server i wybierz instalacje Management Tools:



5.2 Pobierz pakiet instalacyjny

Download SQL Server Management Studio (SSMS)

Article • 03/03/2023 • 6 minutes to read • 47 contributors

Feedback

Applies to: SQL Server | Azure SQL Database | Azure SQL Managed Instance | Azure Synapse Analytics

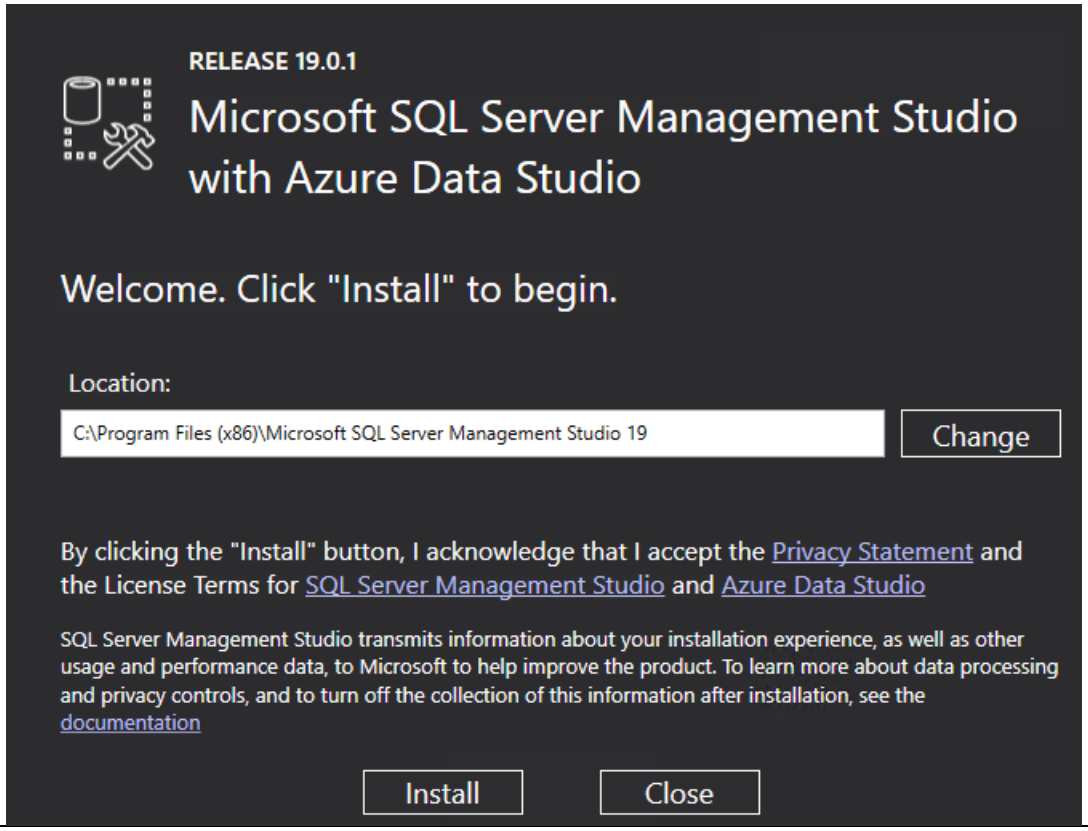
SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure, from SQL Server to Azure SQL Database. SSMS provides tools to configure, monitor, and administer instances of SQL Server and databases. Use SSMS to deploy, monitor, and upgrade the data-tier components used by your applications and build queries and scripts.

Use SSMS to query, design, and manage your databases and data warehouses, wherever they are - on your local computer or in the cloud.

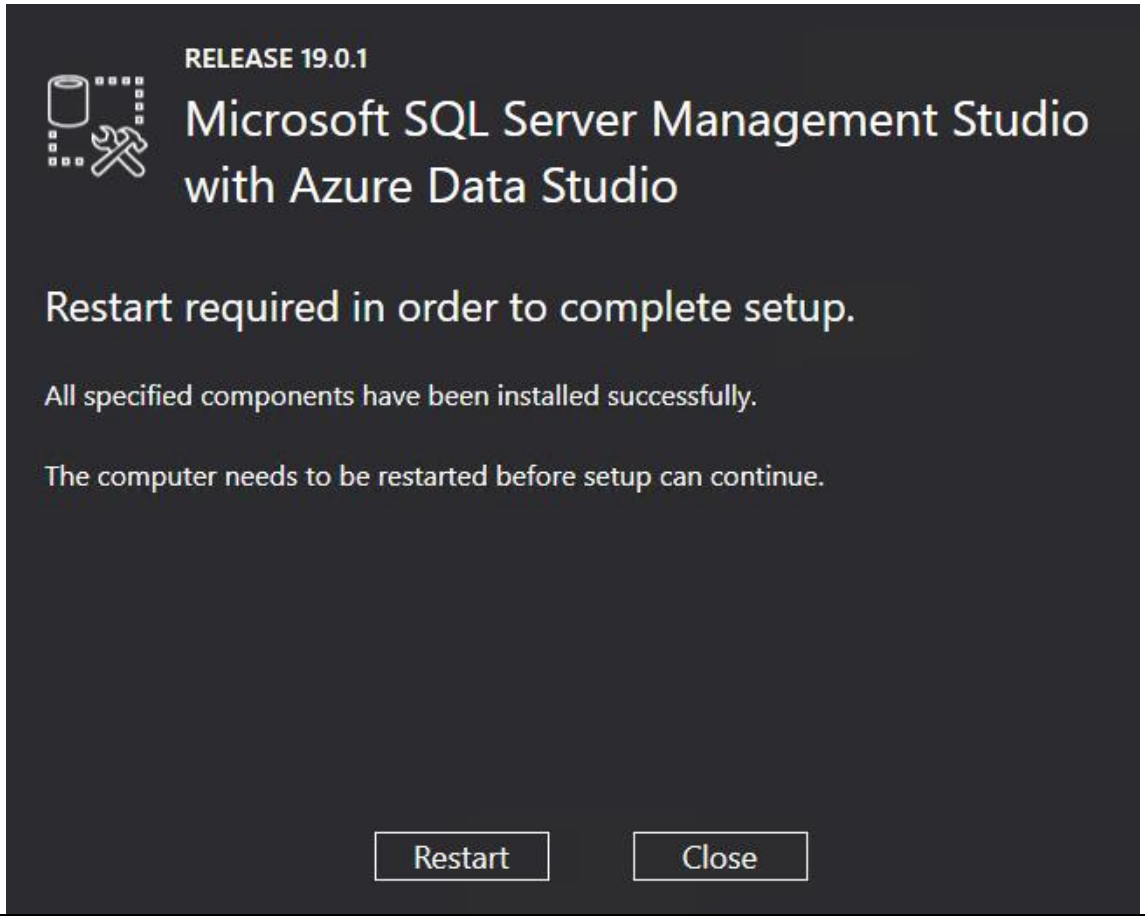
Download SSMS

Free Download for SQL Server Management Studio (SSMS) 19.0.1

5.3 Uruchom instalację:



5.4	Wykonaj restart komputera/maszyny wirtualnej:



6. Instalacja SQL Server Data Tools + Visual Studio

6.1	SQL Server Data Tools są dostępne pod adresem: https:// docs.microsoft.com/en-us/sql/ssdt/download-sql-server-data-tools-ssdt

Download SQL Server Data Tools (SSDT) for Visual Studio

Article • 03/03/2023 • 3 minutes to read • 47 contributors

Feedback

Applies to: SQL Server Azure SQL Database Azure Synapse Analytics

SQL Server Data Tools (SSDT) is a modern development tool for building SQL Server relational databases, databases in Azure SQL, Analysis Services (AS) data models, Integration Services (IS) packages, and Reporting Services (RS) reports. With SSDT, you can design and deploy any SQL Server content type with the same ease as you would develop an application in Visual Studio.

SSDT for Visual Studio 2022

Changes in SSDT for Visual Studio 2022

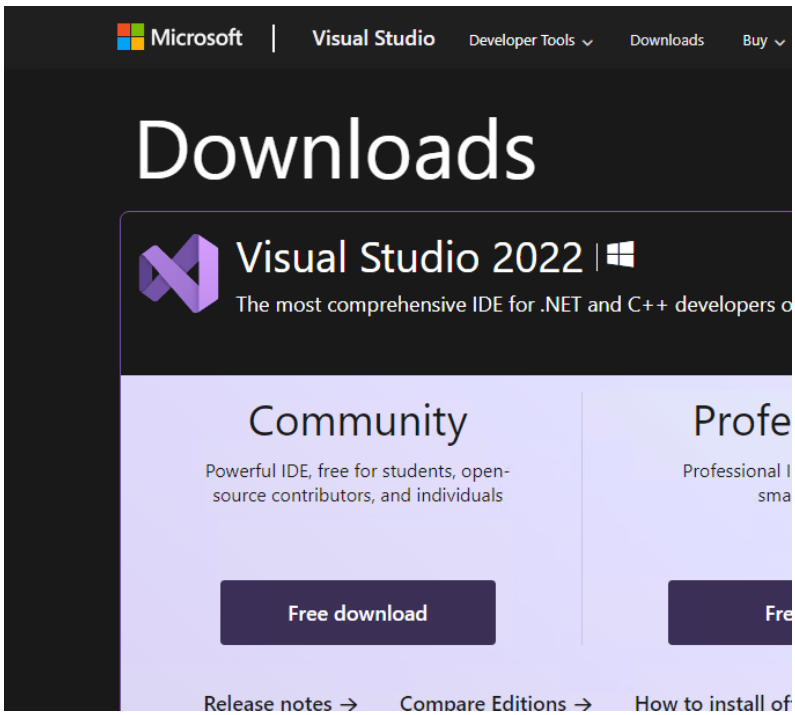
The core SSDT functionality to create database projects has remained integral to Visual Studio.

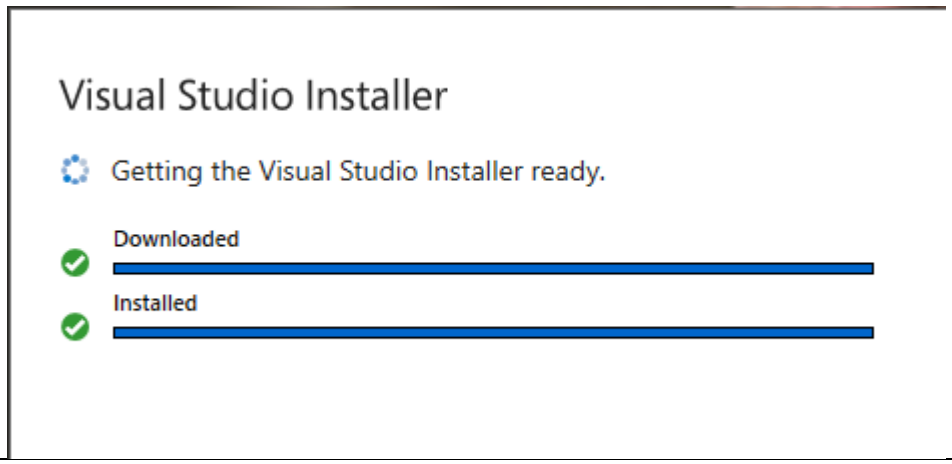
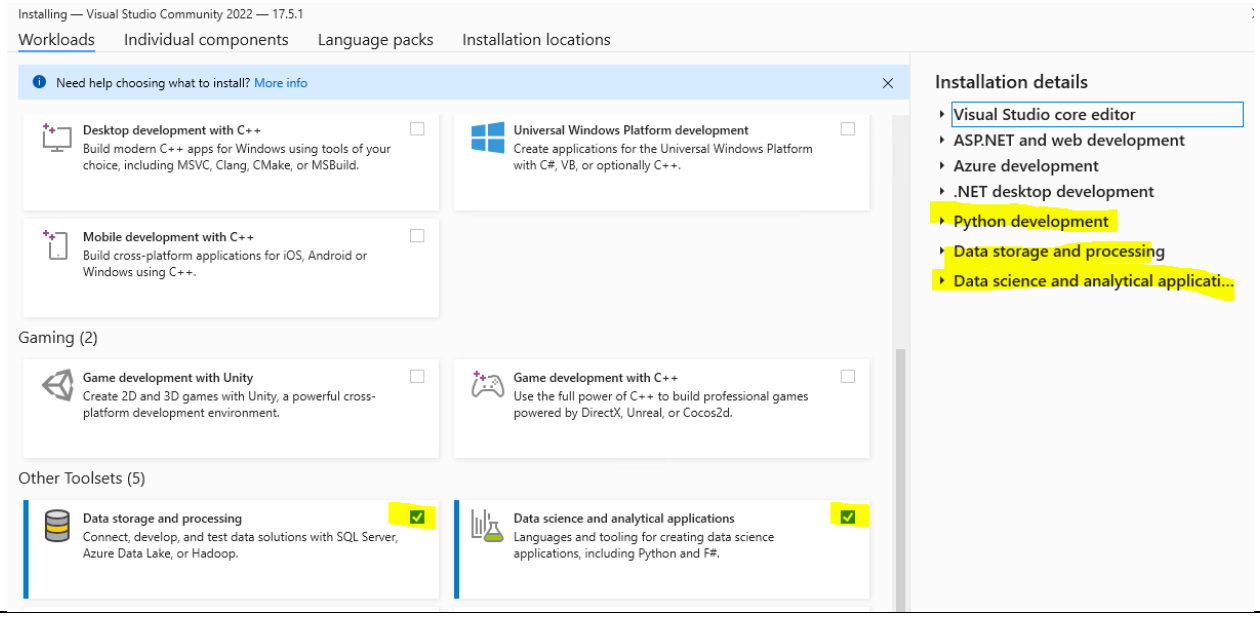
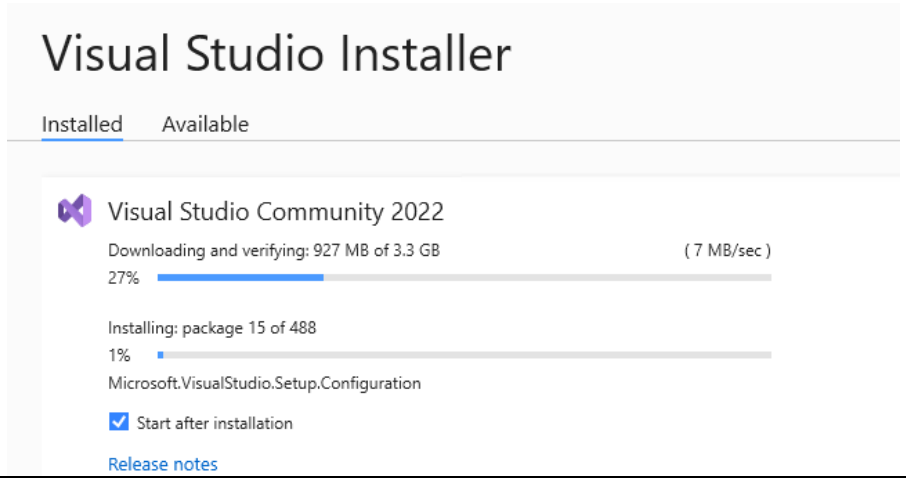
> **Note**
>
> There's no SSDT standalone installer for Visual Studio 2022.

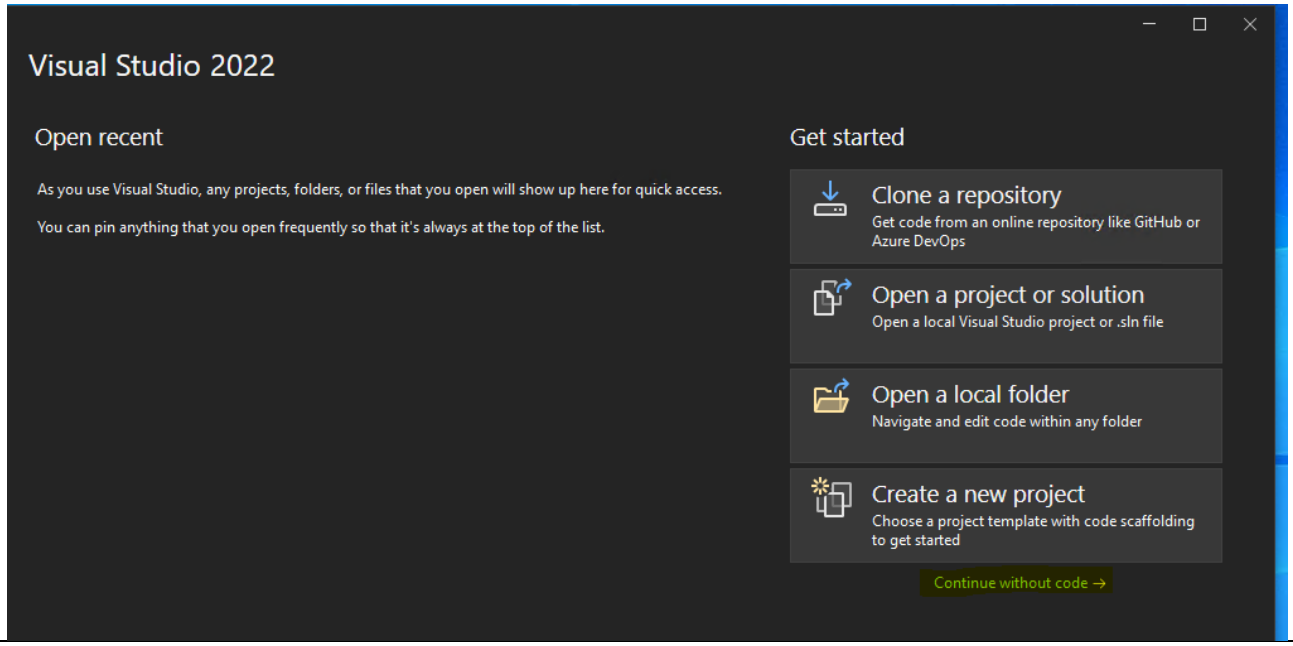
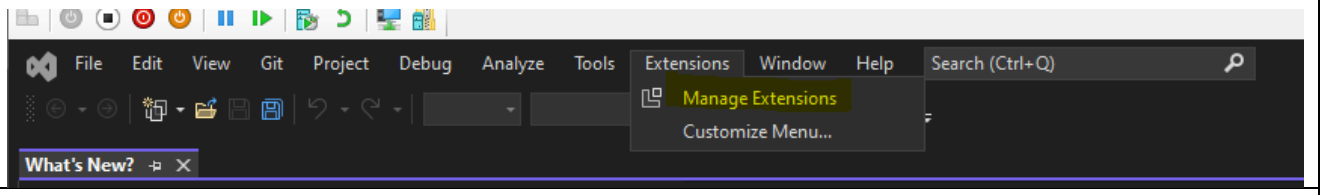
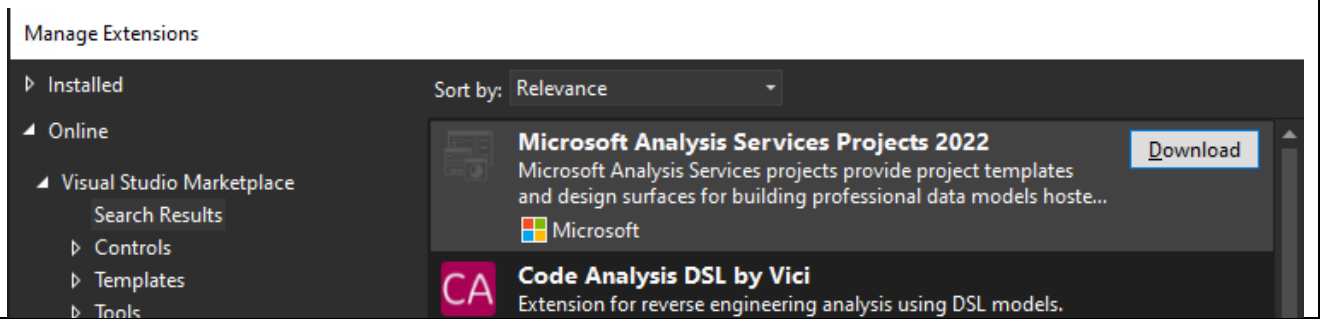
Install SSDT with Visual Studio 2022

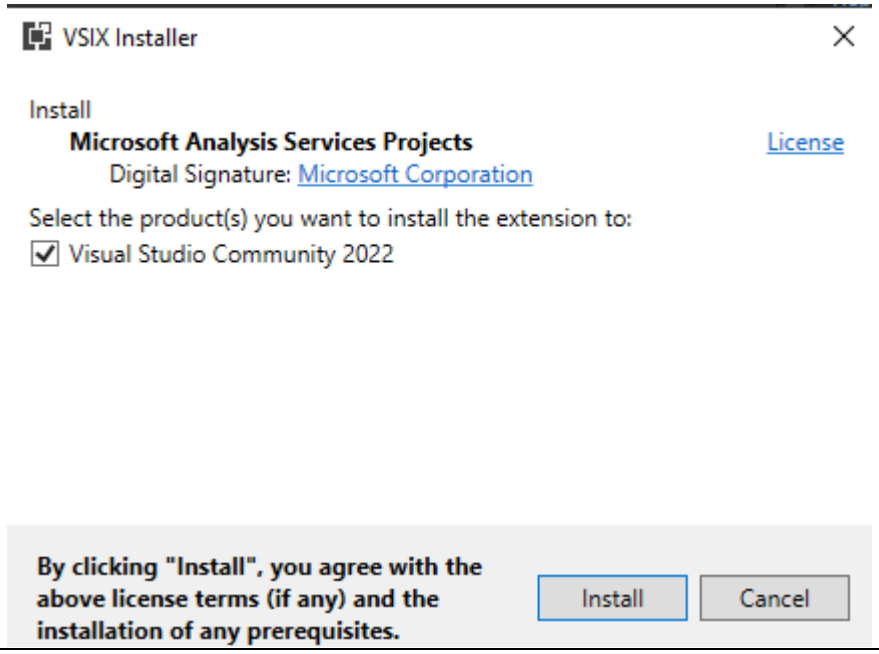
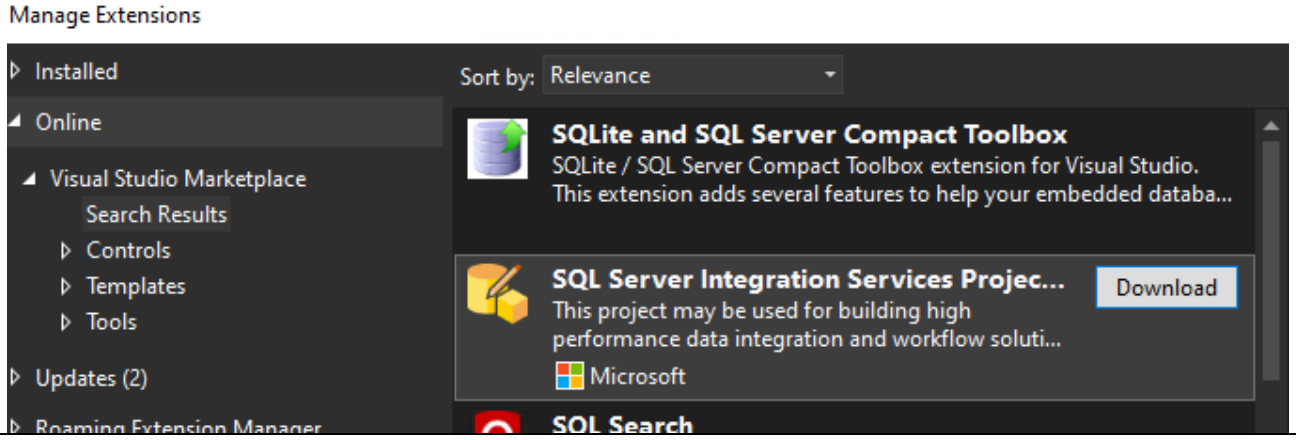
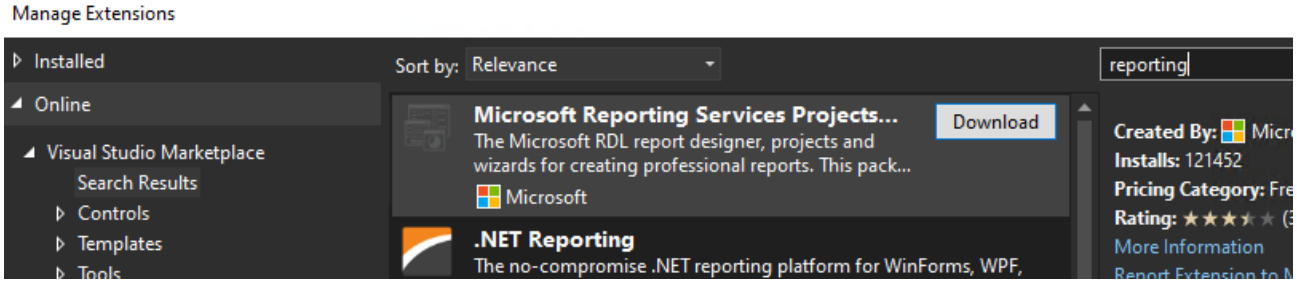
If Visual Studio 2022 is already installed, you can edit the list of workloads to include SSDT. If you don't have Visual Studio 2022 installed, then you can download and install Visual Studio 2022.

6.2	Pobierz Visual Studio

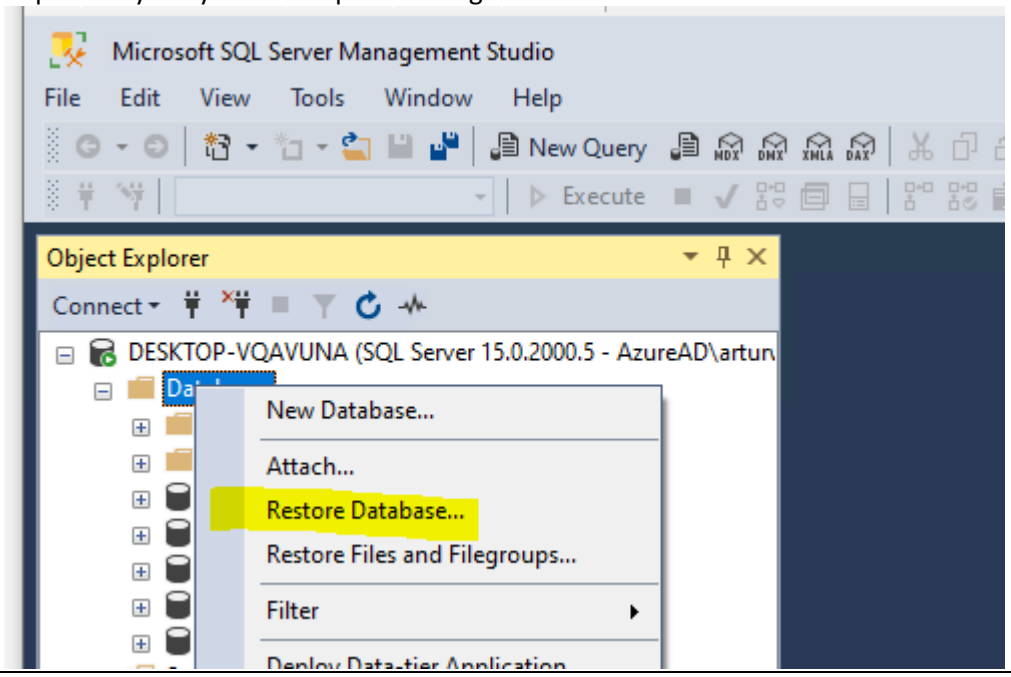


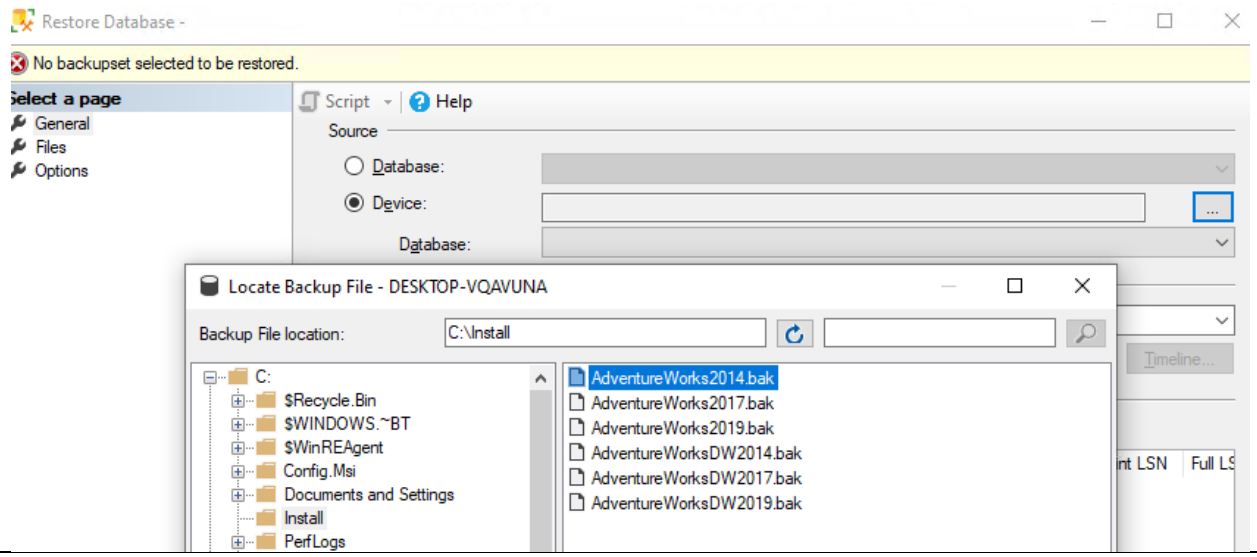
6.3	Uruchom instalację: 
6.4	Wybierz komponenty: 
6.5	Instalacja pobierze wymagane pakiety: 

6.6	Po uruchomieniu Visual Studio. Wybieramy uruchomienie bez kodu: 
6.7	Przechodzimy do zarządzania rozszerzeniami: 
6.8	Wybieramy dodatek: 

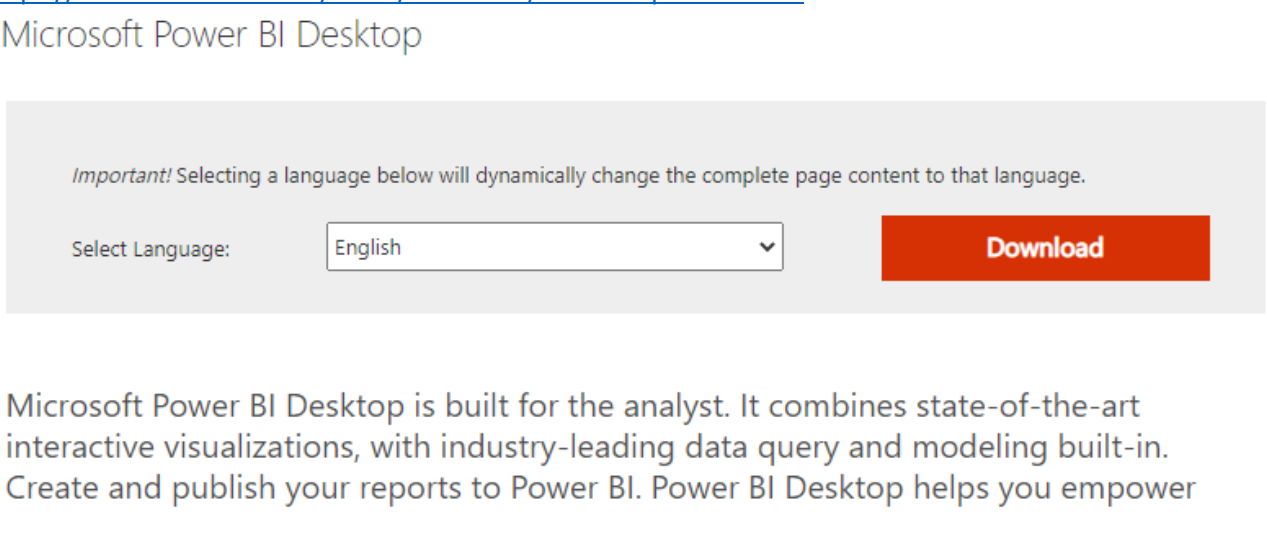
6.9	Uruchamiamy I instalujemy: 
6.10	Instalacja może wymagać zamknięcia Visual Studio (Polecenie End Tasks lub ręcznie).
6.11	Analogicznie instalujemy: 
6.12	Oraz: 

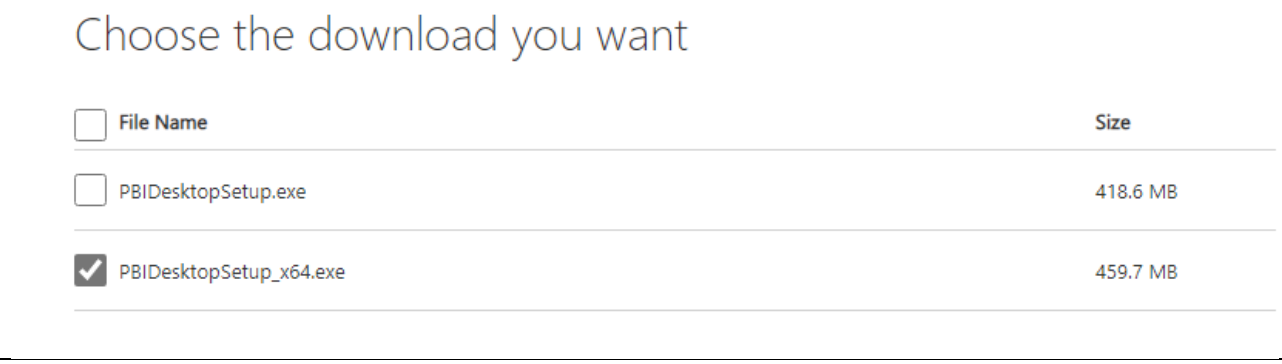
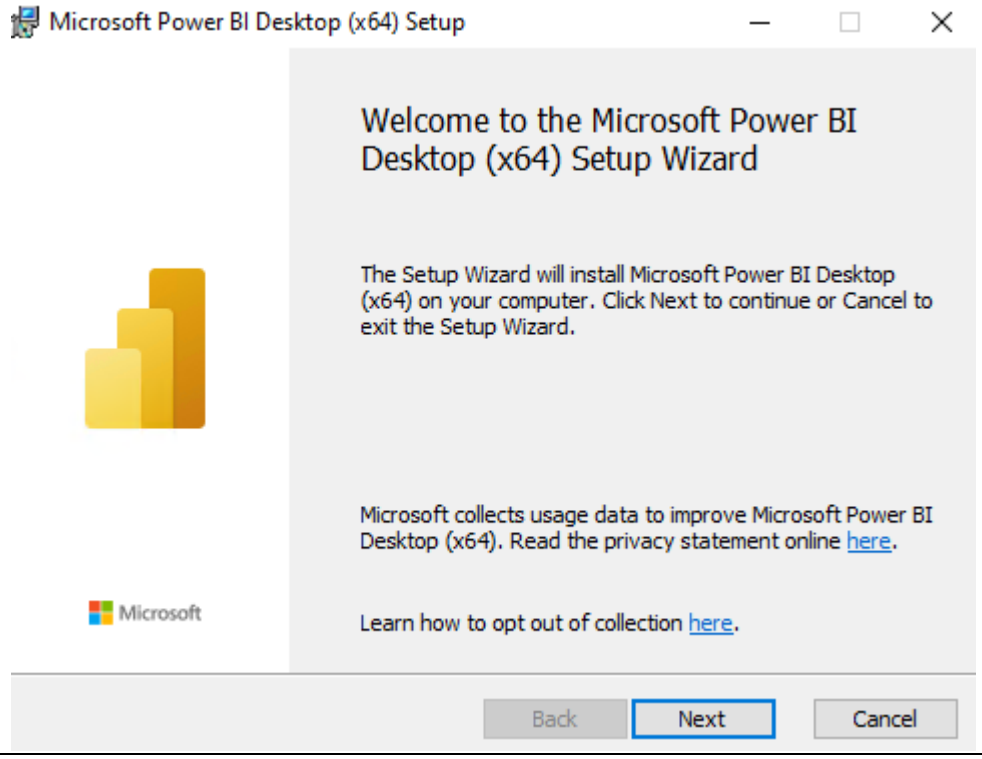
7. Instalacja bazy danych AdventureWorks

7.1	Informacje dotyczące bazy danych AdventureWorks: a) Przykładowe bazy danych https://learn.microsoft.com/pl-pl/previous-versions/sql/sql-server-2008/ms124501(v=sql.100) b) Scenariusze biznesowe: https://learn.microsoft.com/pl-pl/previous-versions/sql/sql-server-2008/ms124825(v=sql.100) c) Schemat: https://learn.microsoft.com/pl-pl/previous-versions/sql/sql-server-2008/ms124894(v=sql.100)?redirectedfrom=MSDN d) Słownik danych: https://learn.microsoft.com/en-us/previous-versions/sql/sql-server-2008/ms124438(v=sql.100)?redirectedfrom=MSDN
7.2	Pobierz backup bazy danych: https://learn.microsoft.com/en-us/sql/samples/adventureworks-install-configure?view=sql-server-ver16&tabs=ssms Sugerowana wersja to 2014, ale można pobrać także inne wersje dla celów porównawczych. OLTP / Data Warehouse / Lightweight AdventureWorks2019.bak / AdventureWorksDW2019.bak / AdventureWorksLT2019.bak AdventureWorks2017.bak / AdventureWorksDW2017.bak / AdventureWorksLT2017.bak AdventureWorks2016.bak / AdventureWorksDW2016.bak / AdventureWorksLT2016.bak AdventureWorks2016_EXT.bak / AdventureWorksDW2016_EXT.bak / N/A AdventureWorks2014.bak / AdventureWorksDW2014.bak / AdventureWorksLT2014.bak
7.3	Import bazy danych z backupu w Management Studio: 

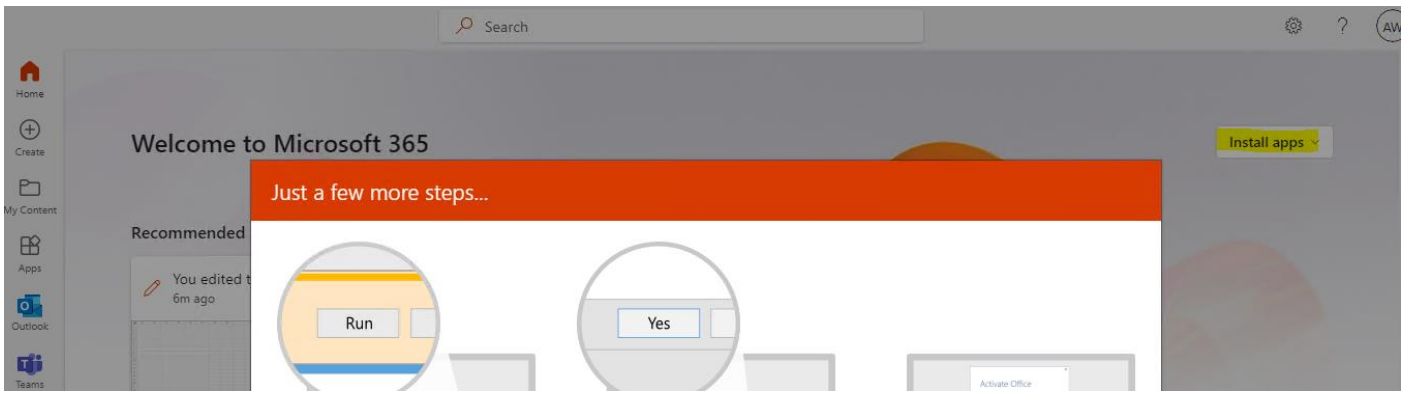
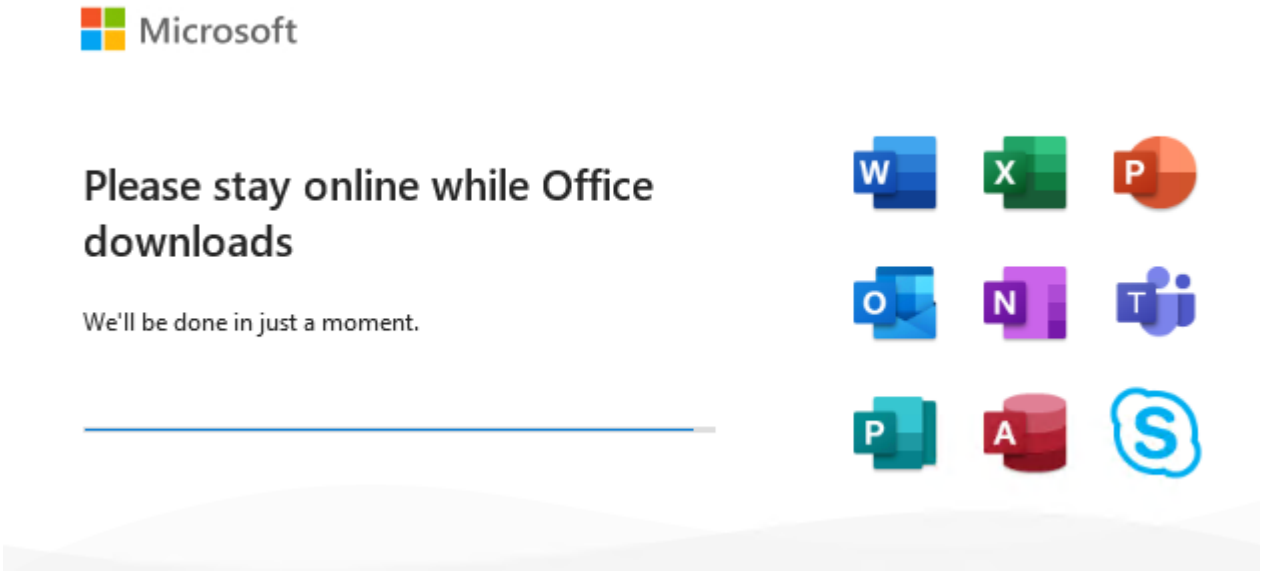
7.4	Wybierz plik zapisany w odpowiednim folderze (Device/Add) : 
7.5	Analogicznie postępujemy z innymi wersjami bazy danych.

8. Instalacja Power BI Desktop

8.1	Informacje dotyczące Power BI: a) What is Power BI Desktop https://learn.microsoft.com/en-us/power-bi/fundamentals/desktop-what-is-desktop b) Get started with Power BI Desktop: https://learn.microsoft.com/en-us/power-bi/fundamentals/desktop-getting-started
8.2	Pobierz Power BI Desktop: https://www.microsoft.com/en-us/download/details.aspx?id=58494 

8.3	Wybierz odpowiednią wersję: 
8.4	Uruchom instalację: 

9. Instalacja MS Office

9.1	W systemie Windows 10 Edu dostępny jest pakiet Microsoft Office 365, który umożliwia pobranie i zainstalowanie wersji desktopowych aplikacji pakietu (z konta w domenie pwr.edu.pl) . 

9.2	Instalacja przebiega automatycznie: