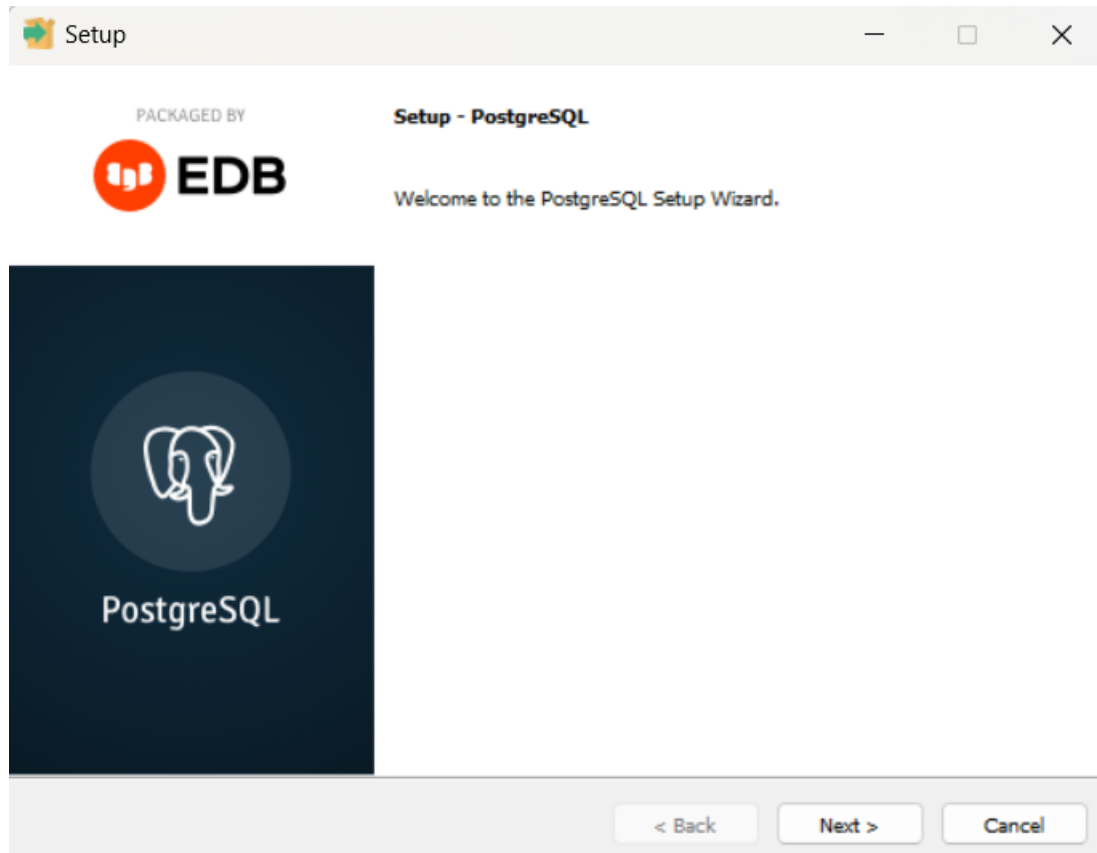
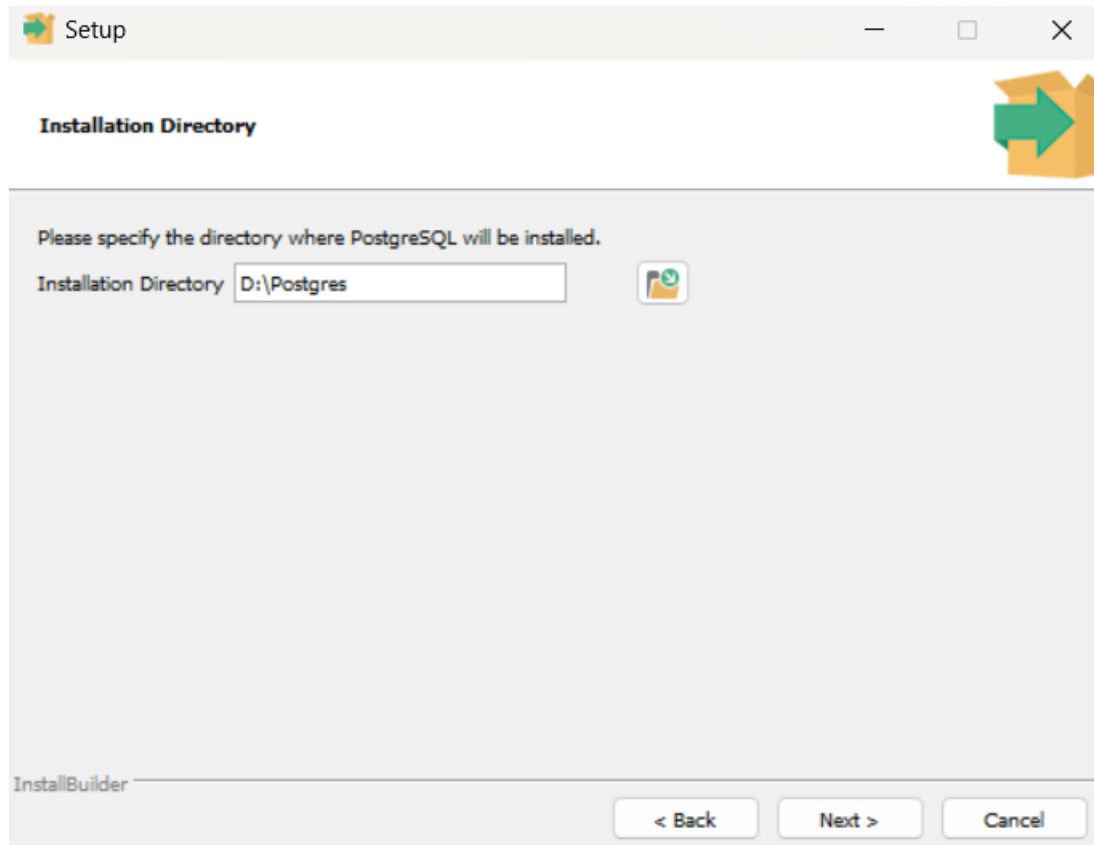


1. Instalacja postgresa

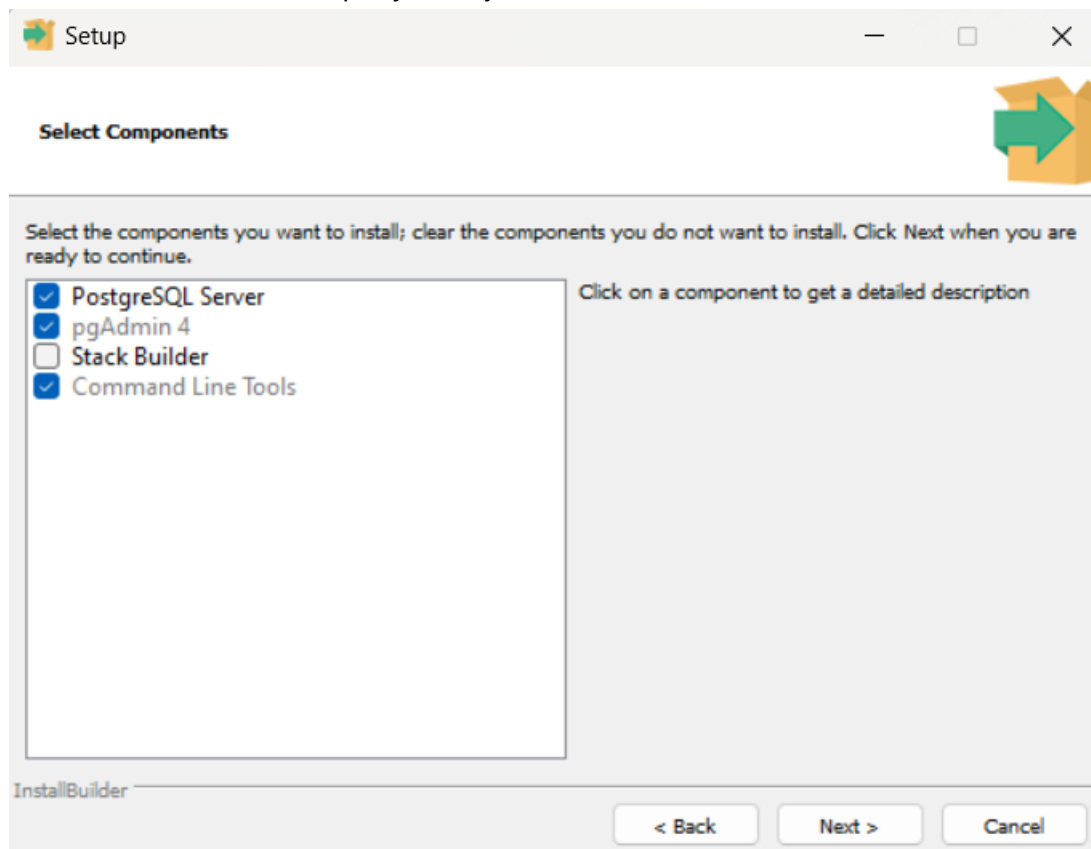
1.1. Kliknij 'Next >' aby przejść dalej



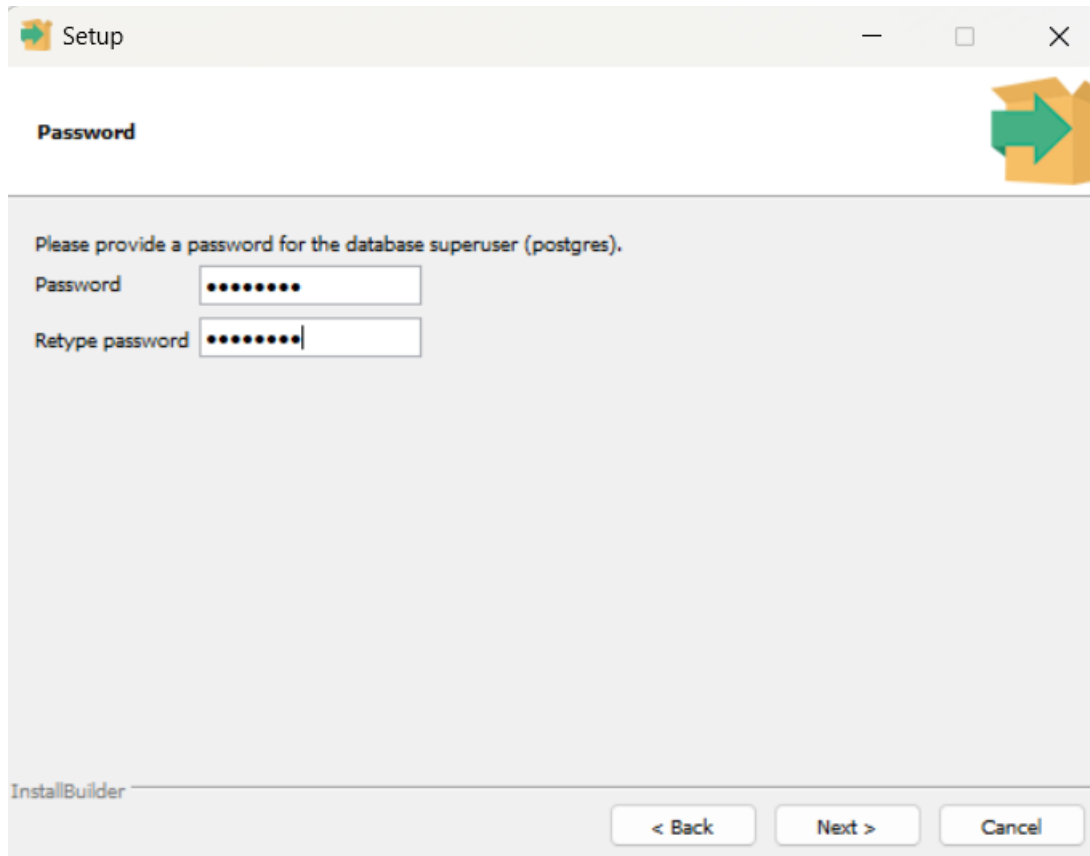
1.2. Wybierz folder do instalacji a następnie przejdź dalej



1.3. Odnazcz Stack Builder i przejdź dalej.



1.4. Ustal hasło dla admina i przejdź dalej.



Setup

Password

Please provide a password for the database superuser (postgres).

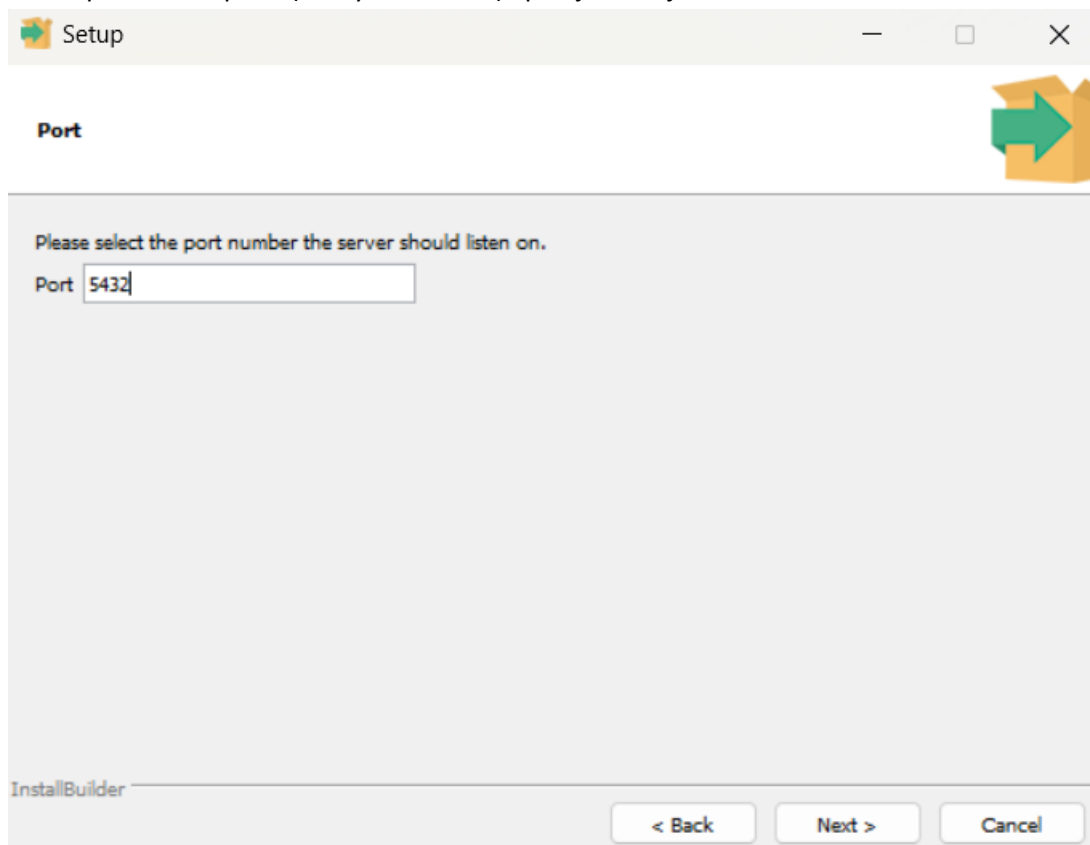
Password

Retype password

InstallBuilder

< Back Next > Cancel

1.5. Wpisz numer portu(domyślnie: 5432) i przejdź dalej.



Setup

Port

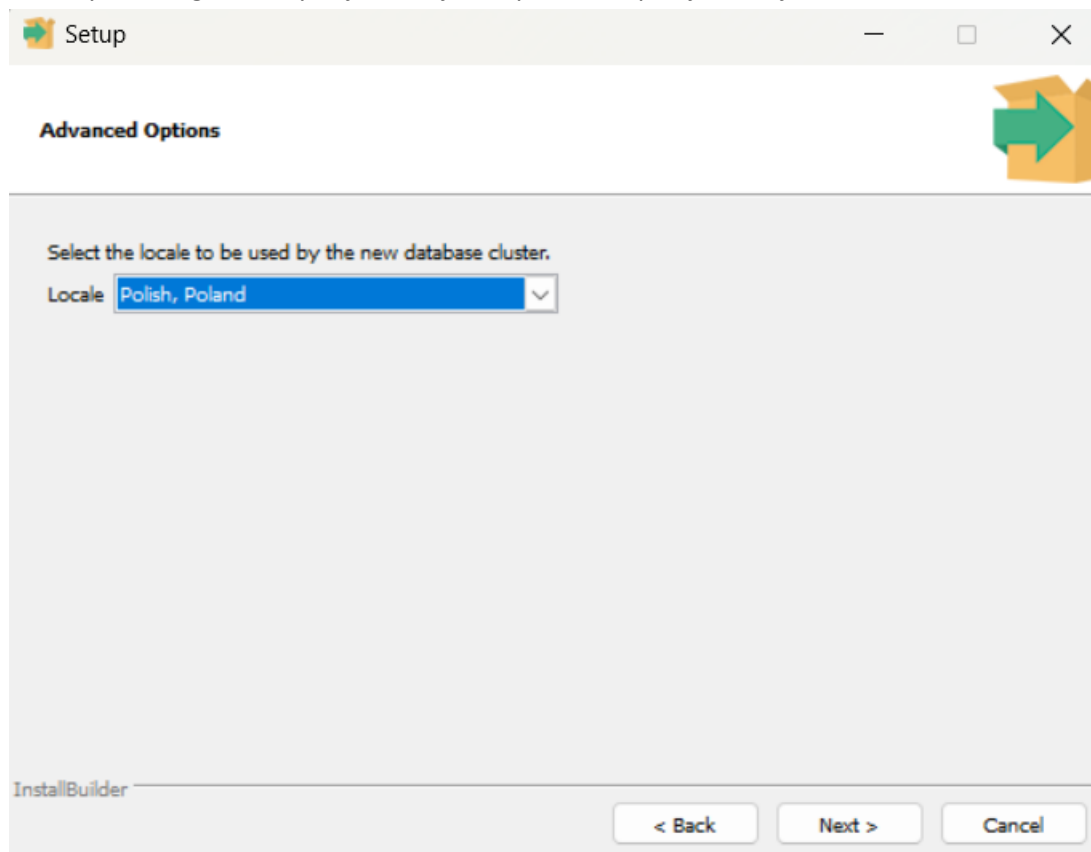
Please select the port number the server should listen on.

Port

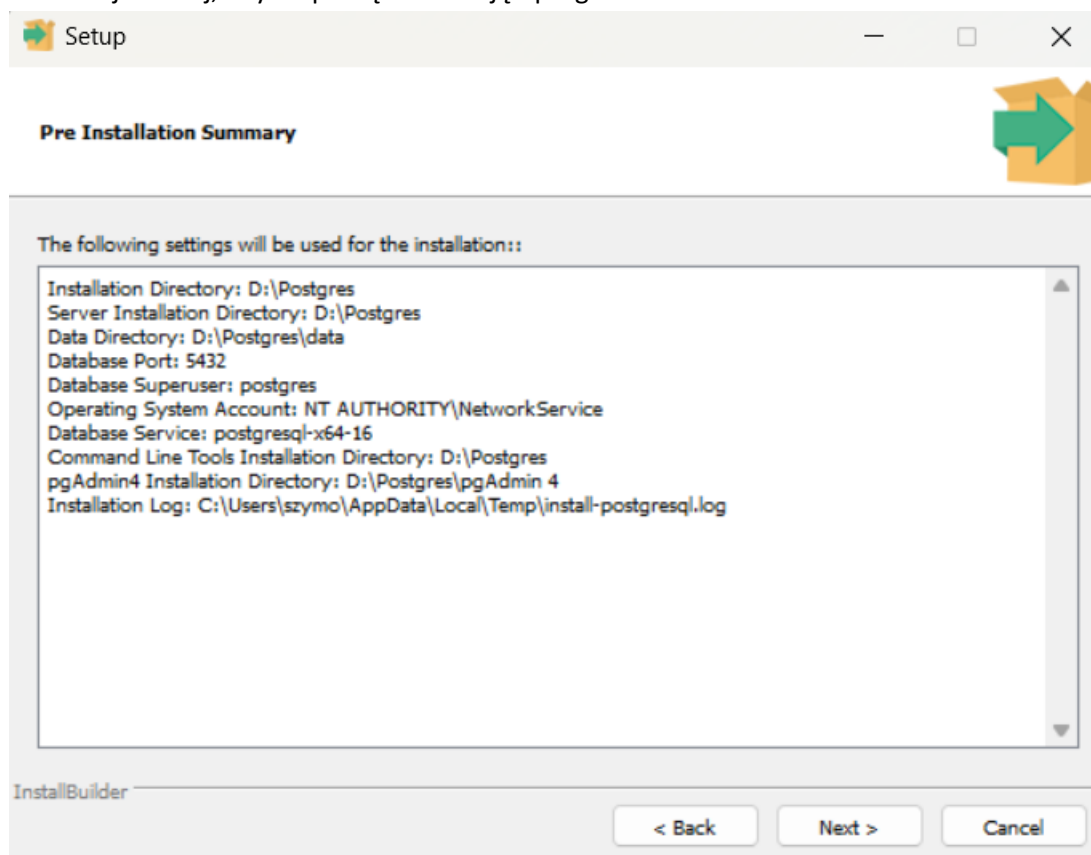
InstallBuilder

< Back Next > Cancel

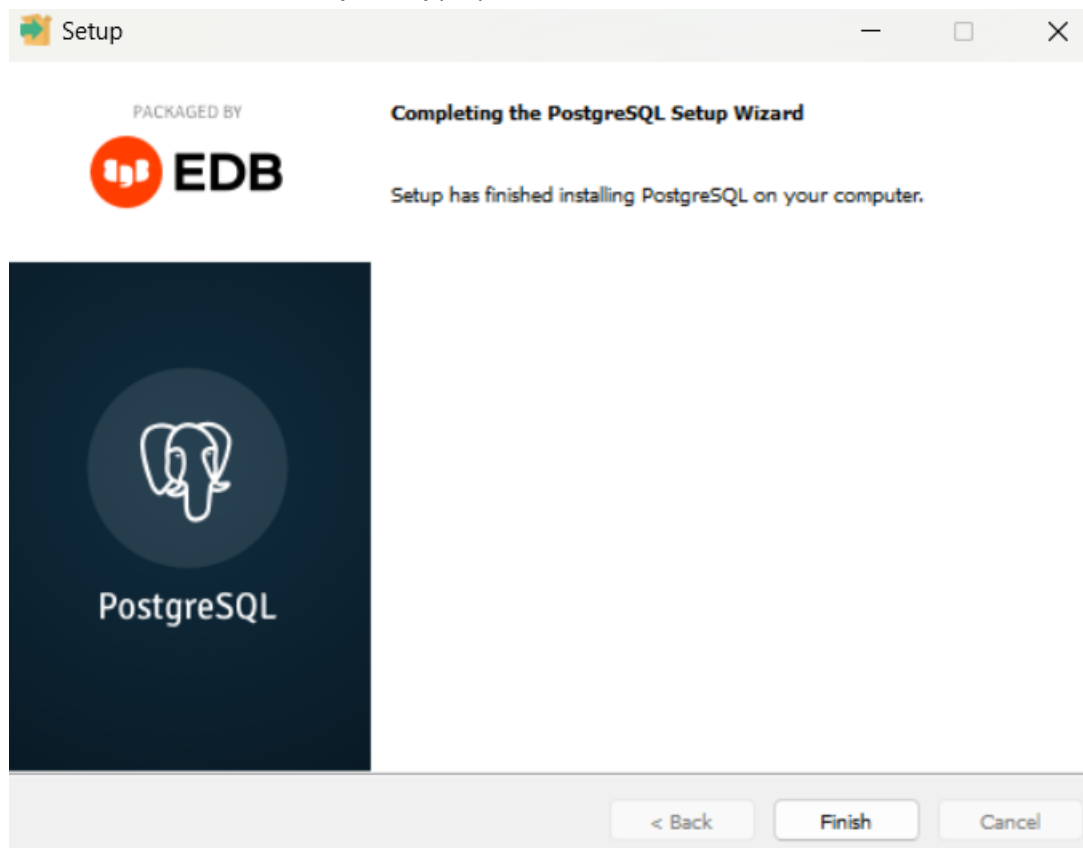
1.6. Wybierz region który najbardziej Ci odpowiada i przejdź dalej.



1.7. Przejdź dalej, aby rozpocząć instalację oprogramowania.

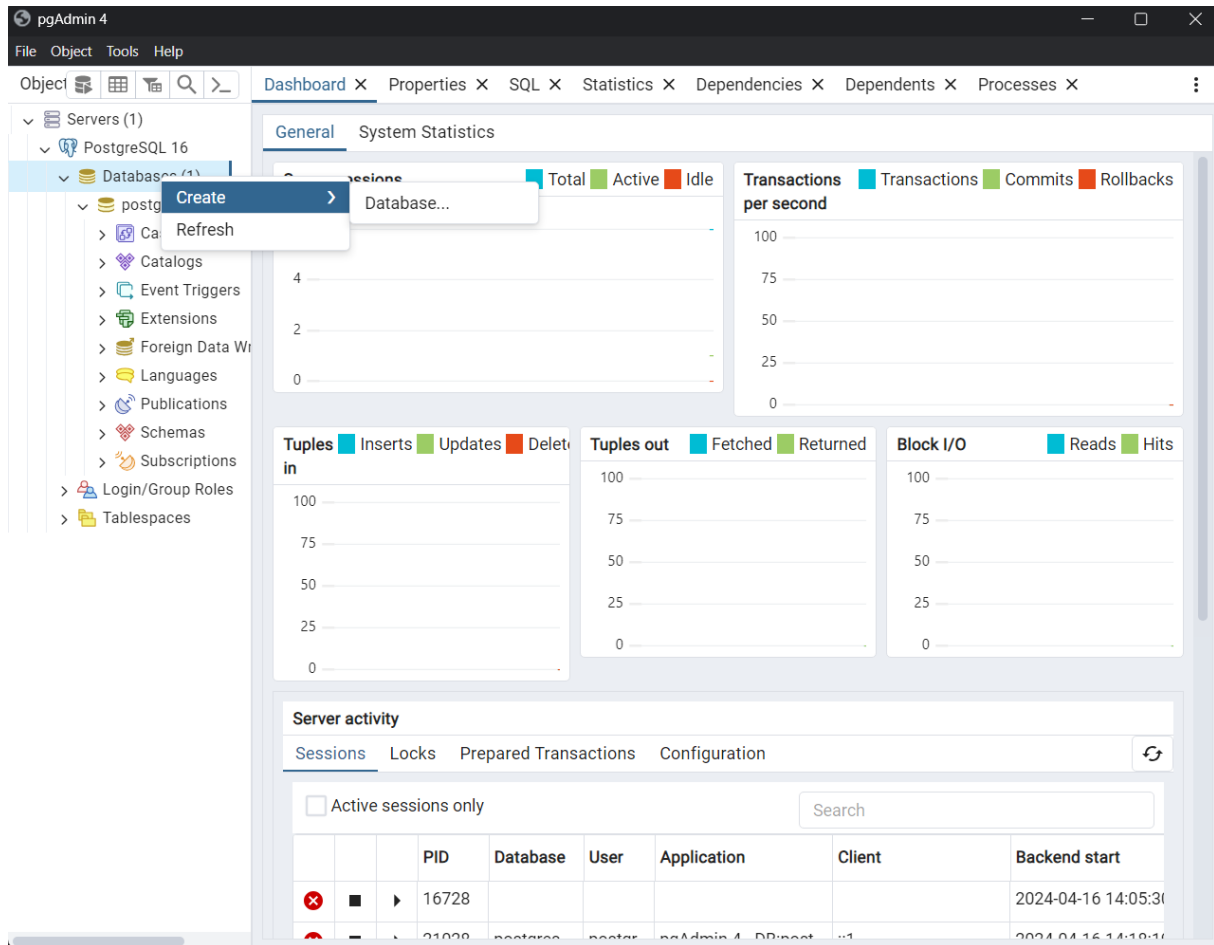


1.8. Po zakończeniu instalacji kliknij przycisk 'Finish'.




2.Stworzenie pustej bazy danych i dodanie tabeli 'users'

2.1. Przejdź do okna tworzenia bazy danych.



2.2. Ustal nazwe bazy danych na 'users' i zapisz.

 **Create - Database** ×

General

Definition

Security

Parameters

Advanced


SQL

Database



users

OID


Owner


 postgres ▾

Comment

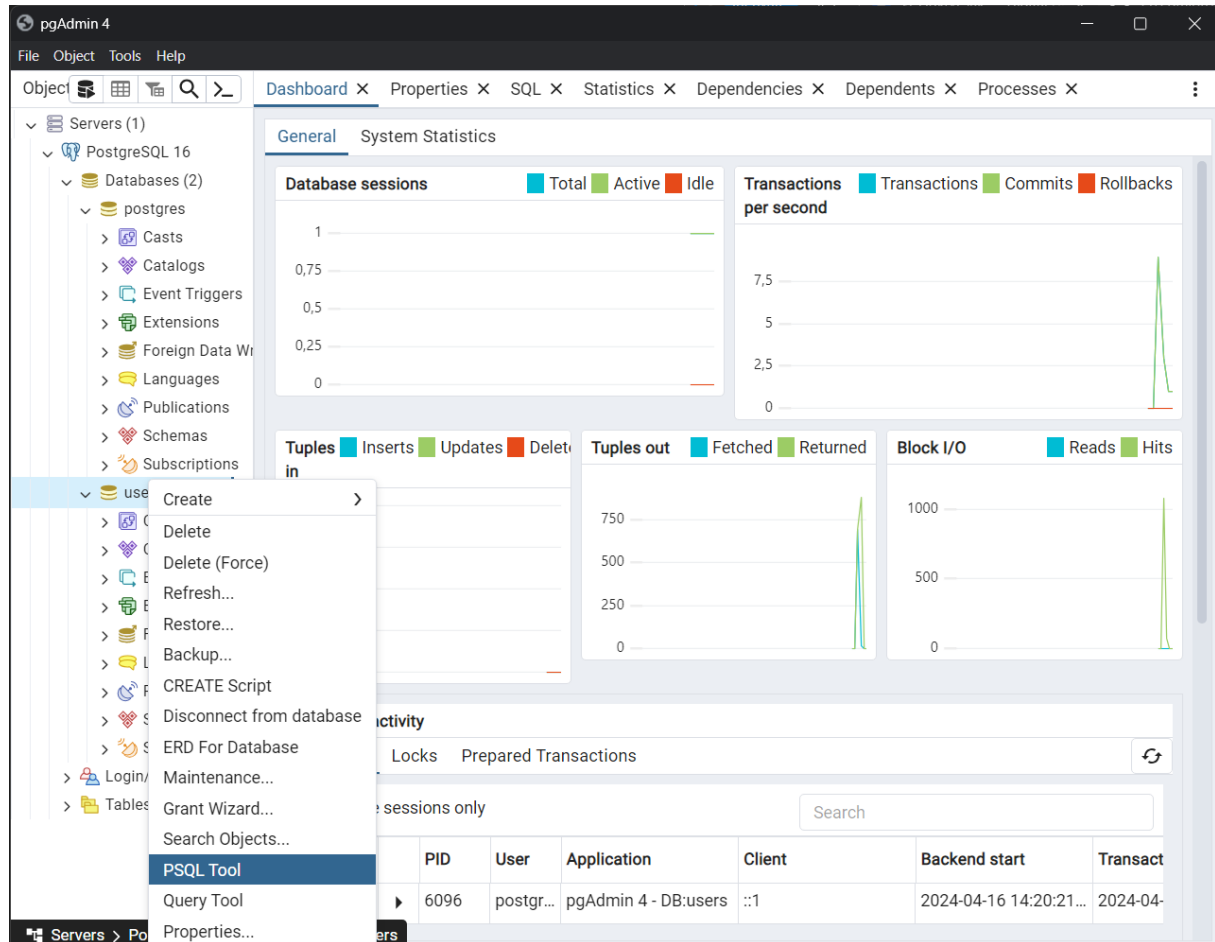
 

× Close

 Reset

 Save

2.3. Następnie otwórz 'PSQL Tool'



2.4. Utwórz tabelę 'users' z atrybutami: id INT, login VARCHAR(255), password VARCHAR(255)

```
Microsoft Windows [Version 10.0.22631.3296]
(c) Microsoft Corporation. Wszelkie prawa zastrzeżone.

D:\Postgres\pgAdmin 4\runtime>"D:\Postgres\pgAdmin 4\runtime\psql.exe" "host=localhost port=5432 dbname=users user=postgres sslmode=prefer connect_timeout=10" 2>>&1
psql (16.2)
WARNING: Console code page (852) differs from Windows code page (1250)
         8-bit characters might not work correctly. See psql reference
         page "Notes for Windows users" for details.
Type "help" for help.

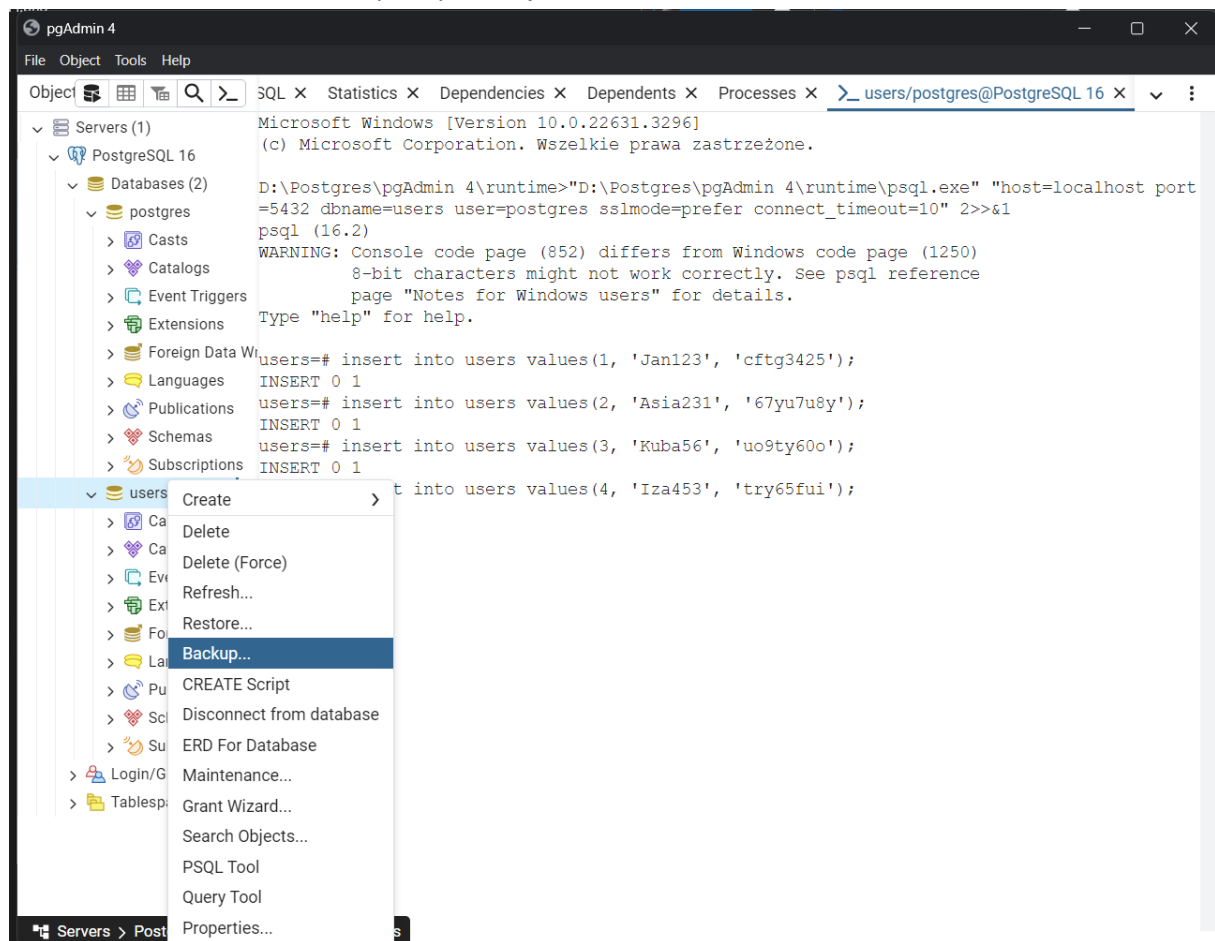
users=# create table users(id int, login varchar(255), password varchar(255));
CREATE TABLE
```


2.5. Dodaj kilka wartości do tabeli users

```
users=# insert into users values(1, 'Jan123', 'cftg3425');
INSERT 0 1
users=# insert into users values(2, 'Asia231', '67yu7u8y');
INSERT 0 1
users=# insert into users values(3, 'Kuba56', 'uo9ty60o');
INSERT 0 1
users=# insert into users values(4, 'Iza453', 'try65fui');
INSERT 0 1
```

3. Przywrócenie danych

3.1. Otwórz okno tworzenia kopii zapasowej



3.2. Ustal nazwę(ew. ścieżkę do) kopii zapasowej i kliknij przycisk 'Backup'

Backup (Database: users)

General

Data Options

Query Options

Table Options

Options

Objects

Filename

D:\PostgresBackups\users_backup.sql

Format

Custom

Compression ratio

Encoding

Select an item...

Number of jobs

Role name

Select an item...

i

?

Close

Reset

Backup

3.3. Otwórz okno odzyskiwania bazy danych

The screenshot shows the pgAdmin 4 interface with the 'System Statistics' dashboard. The left sidebar shows the tree structure with 'users' selected. A context menu is open over 'users', and the 'Restore...' option is highlighted. The dashboard includes several charts: 'Database sessions' (Total, Active, Idle), 'Transactions per second' (Transactions, Commits, Rollbacks), 'Tuples in' (Inserts, Updates, Deletes), 'Tuples out' (Fetched, Returned), and 'Block I/O' (Reads, Hits). At the bottom, there is a table of active transactions.

PID	User	Application	Client	Backend start	Transact
6096	postgr...	pgAdmin 4 - DB:users	::1	2024-04-16 14:20:21...	2024-04-
10516	postgr...	pgAdmin 4 - DB:users	::1	2024-04-16 14:20:20...	

3.4. Wybierz plik kopii zapasowej i kliknij przycisk 'Restore'

The screenshot shows the 'Restore (Database: users)' dialog box. The 'General' tab is selected. The 'Format' is set to 'Custom or tar'. The 'Filename' is 'D:\PostgresBackups\users_backup.sql'. The 'Number of jobs' is empty. The 'Role name' is 'Select an item...'. At the bottom, there are buttons for 'Close', 'Reset', and 'Restore'.