**Lab Exercise 7- Configuring pg\_ident.conf in PostgreSQL**

**Objective**

Understand how to configure user name mapping in PostgreSQL using the pg\_ident.conf file. This is useful when your operating system (OS) user name is different from your PostgreSQL database user name, and you're using ident-based authentication.

**Step 1. Locate the pg\_ident.conf File**

1. Open SQL Shell (psql).
2. Run this command to find the path of the ident file:

SHOW ident\_file;

1. Note the full path, for example:

C:\Program Files\PostgreSQL\15\data\pg\_ident.conf

**Step 2. Open the File in Notepad**

1. Open File Explorer and go to the path found in step 1.
2. Right-click on pg\_ident.conf and choose Open with.
3. Select Notepad.

**Step 3. Understand the Format**

The file contains **mapping rules** with the following format:

* map name
* operating system user name
* PostgreSQL user name

Each line links an OS user to a PostgreSQL role using a map name.

**Step 4. Add a Mapping Rule**

At the bottom of the file, add this example line:

mymap alice dbuser1

This means that the OS user alice is allowed to connect as the PostgreSQL user dbuser1 using the ident method and the map called mymap.

**Step 5. Update pg\_hba.conf to Use the Map**

1. Open the pg\_hba.conf file.
2. Add this line to allow ident authentication using the map:

host all dbuser1 127.0.0.1 255.255.255.255 ident map=mymap

This line says:  
Allow the OS user alice to connect to any database as PostgreSQL user dbuser1 from localhost using ident and the mapping named mymap.

**Step 6. Save and Restart PostgreSQL**

1. Save both pg\_ident.conf and pg\_hba.conf.
2. Press the Windows key and type Services.
3. Open the Services app.
4. Find the PostgreSQL service such as postgresql-x64-15.
5. Right-click it and select Restart.

**Step 7. Test the Mapping**

Try to connect to the database using a command-line terminal or psql as OS user alice, and connect as dbuser1.

**Notes**

* The ident method is often used on Unix systems, but can be tested on Windows with local tools or configured environments.
* The mapping only applies when ident authentication is used in pg\_hba.conf.
* If the map name is incorrect or missing, connection will fail with a permission error.