Remote Database Connections

Step 1: Find the IP Address of Your First Laptop (Server)

You need to know the **IP address** of your first laptop, which will act as the PostgreSQL server.

1) On Windows:

   Open Command Prompt (cmd), type:

   ipconfig

   Look for the **IPv4 Address** under your active network connection. It will look something like **192.168.1.100**.

```
C:\Users\Administrator>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 11:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::befe:c036:6204:3b72%6
   IPv4 Address. . . . . . . . . . . : 192.168.0.142
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.0.1
```

2) On Mac/Linux:

   Open **Terminal**, type:

   ifconfig

   Look for the **inet** address under your active network interface (like en0 or wlan0).

Step 2: Edit PostgreSQL Configuration Files on the First Laptop

2.1 Modify `postgresql.conf`

`postgresql.conf` in path: C:\Program Files\PostgreSQL\15\data\postgresql.conf (windows)

Find the line:

#listen_addresses = 'localhost'

Change it to:

listen_addresses = '*'

2.2 Modify `pg_hba.conf`

Open the **pg_hba.conf file**:

Located at: C:\Program Files\PostgreSQL\15\data\pg_hba.conf
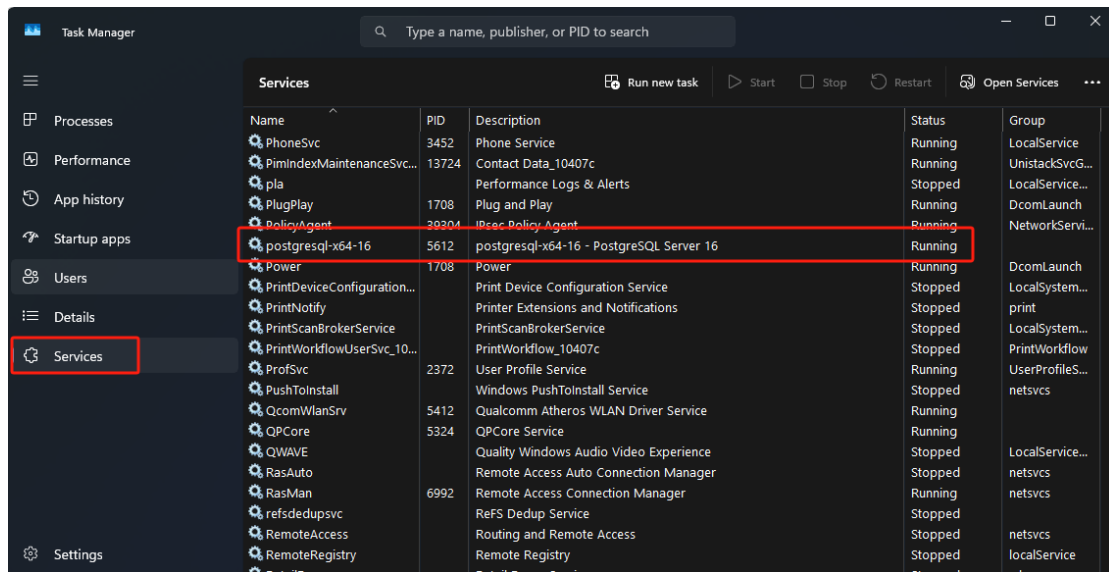
Add this line to the end of the file:

host all all 0.0.0.0/0 md5

Step 3: change firewall on first laptop

Follow the steps under **3. Configure the Windows Firewall to allow incoming connections to PostgreSQL** in this link to allow income connections to PostgreSQL

Step 4: Ensure the postgresql service is running on your first laptop

Step 5: Remote connect to server on your second laptop

1. Open **pgAdmin** on your second laptop.
2. Go to **Servers** > **Create** > **Server**.
3. In the **General** tab, give your server a name.
4. In the **Connection** tab:
   - **Host name/address**: Enter the IP address of your first laptop.
   - **Port**: 5432 (default PostgreSQL port).
   - **Username** and **Password**: Enter your PostgreSQL credentials.
5. Click **Save**.