

Fast Track

Estimating System

Structured Query Language (SQL)

Postgres

Overview

Fast Track Estimating system is now available in Structured Query Language(SQL) using Postgres database and also Omnis native database. Fast Track has been rewritten to have both systems incorporated in the same library file called **SQLFastTrackWeb60.lbs**

If you have chosen Omnis native database, please see standard Fast Track Manual.

If you have chosen Postgres, please proceed to section 1.0. below. PostgreSQL is available to download from the website.



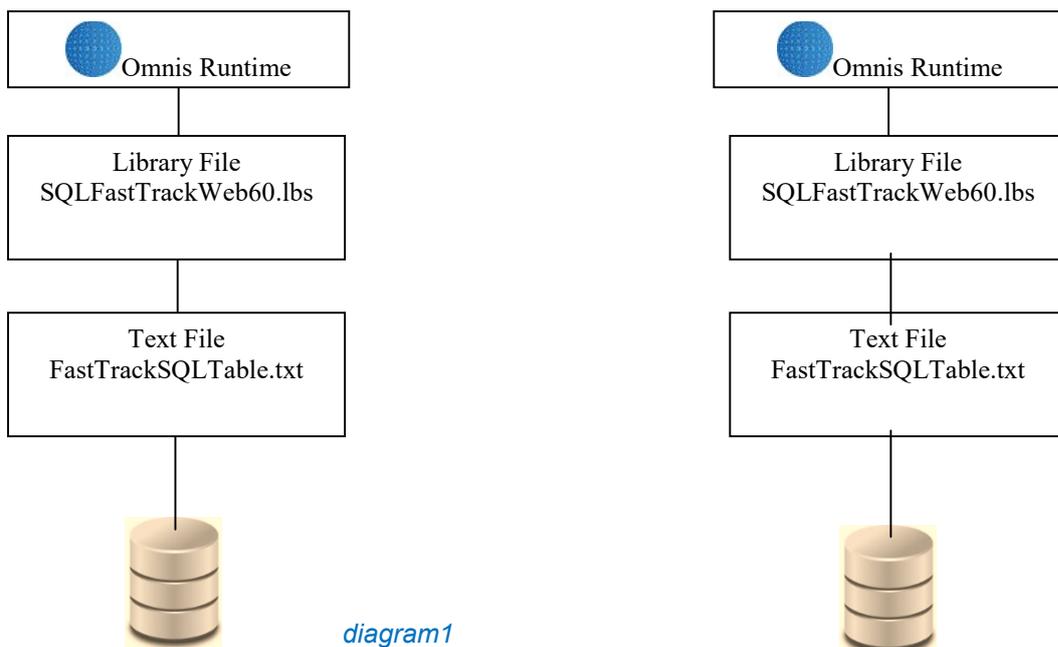
1.0 PostgreSQL Setup

To set Fast Track using PostgreSQL database, you will need to follow the PostgreSQL Basic Installation Manual.(See doc. **PG.01**)

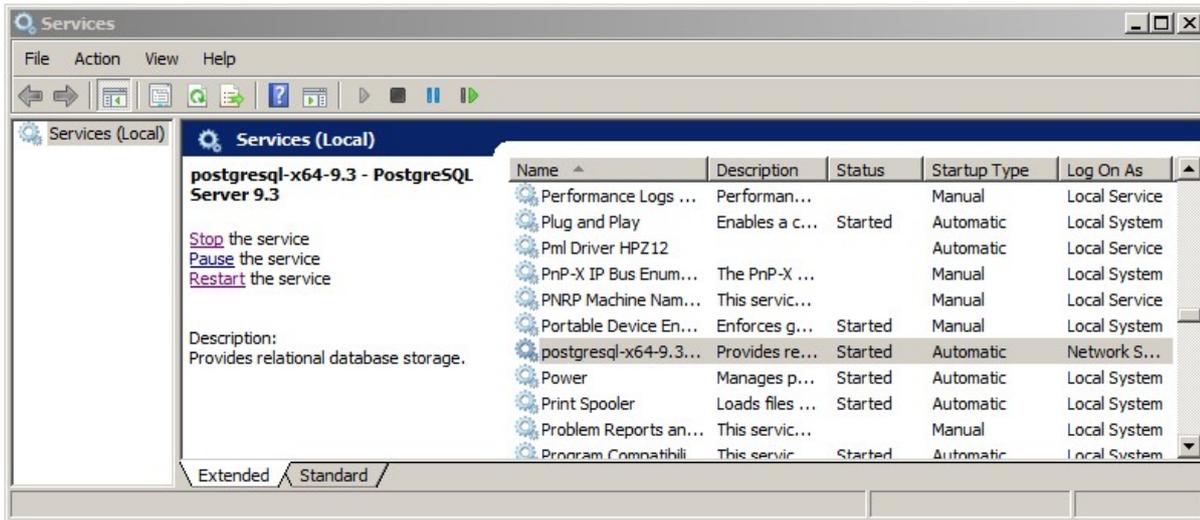
Technical Information

Please note that Postgres database is a stand-alone application and Omnis is another stand-alone application which communicates, stores and retrieves information from Postgres.

Please see this diagram below to explain how both systems work.



The following procedures must be done to keep your database secure and working efficiently. Please check your Control Panel –Administrative Tool-Services to make sure that the postgres service has been installed.



2.0 Setting up the Server Firewall

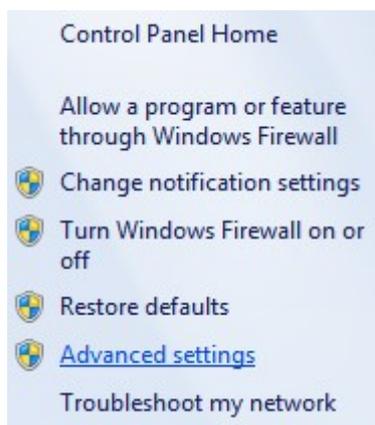
The next step is to set up the Firewall.

Some servers will require modifications to the firewall, in order for Postgres to go through the Firewall. This has to be done so that Postgres can communicate and not be treated as an unfriendly programme.

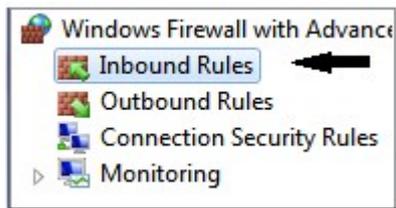
1. Go to Control Panel and choose



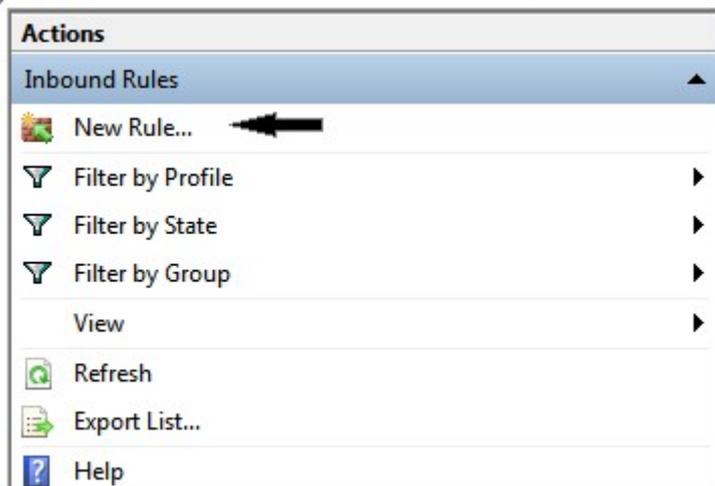
2. Choose "Advanced settings"



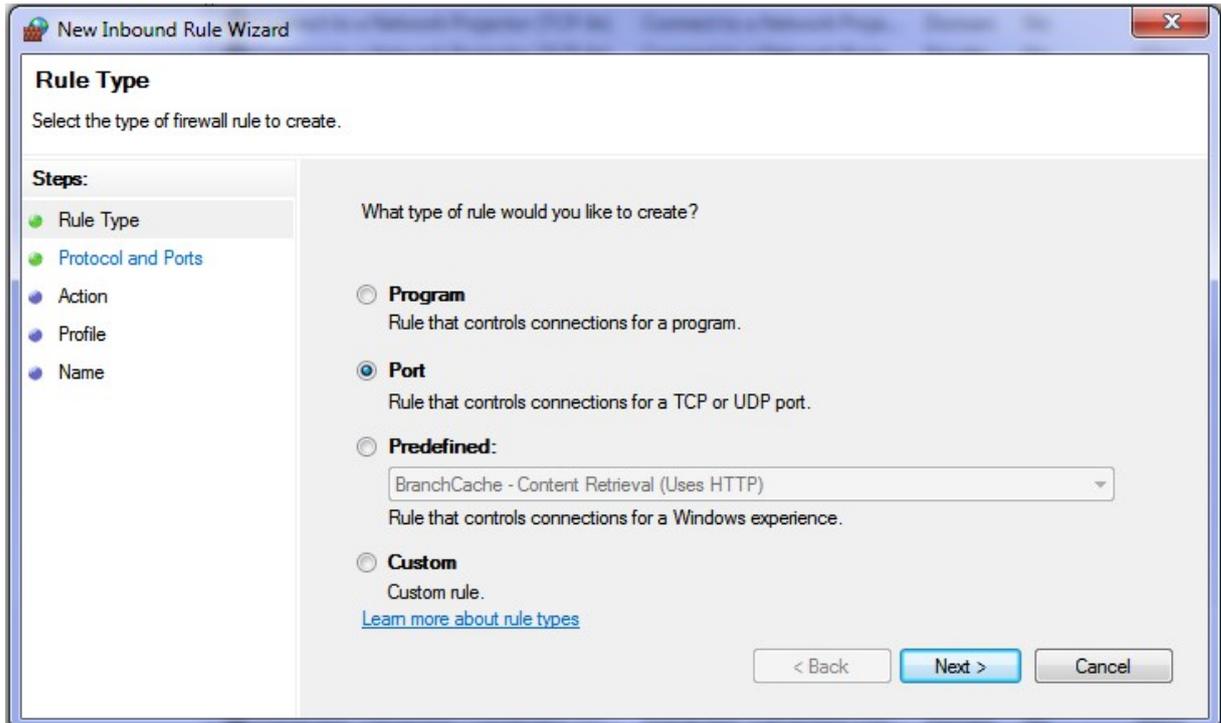
3. Choose "Inbound Rules"



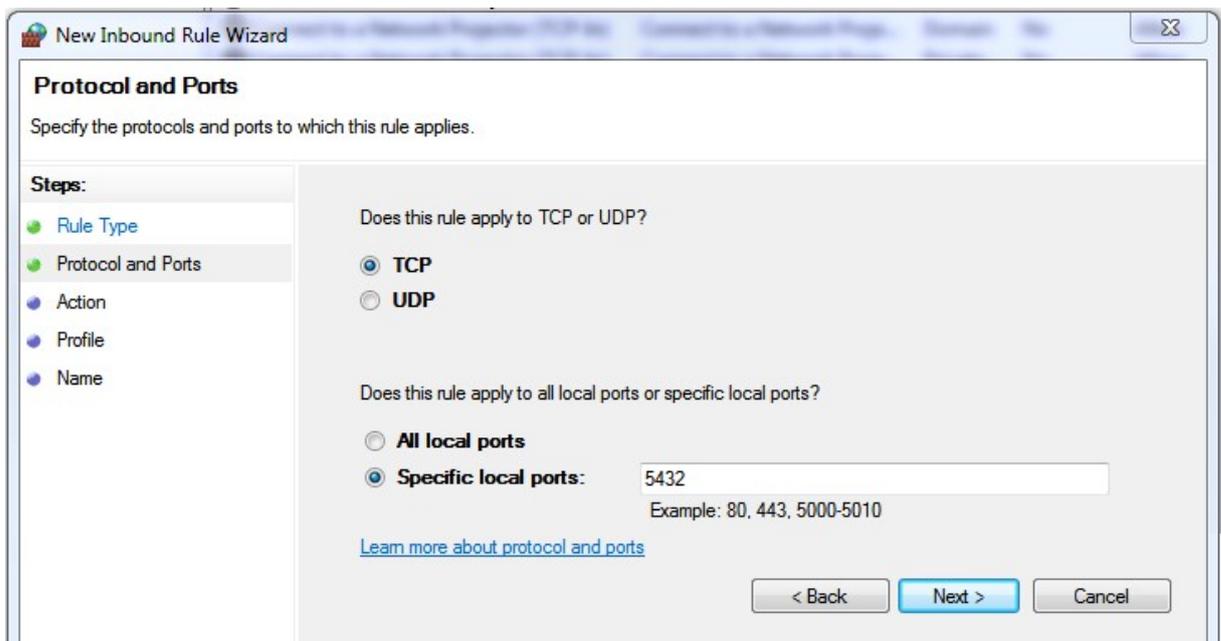
4. Find "New Rule.." from the box on the very right



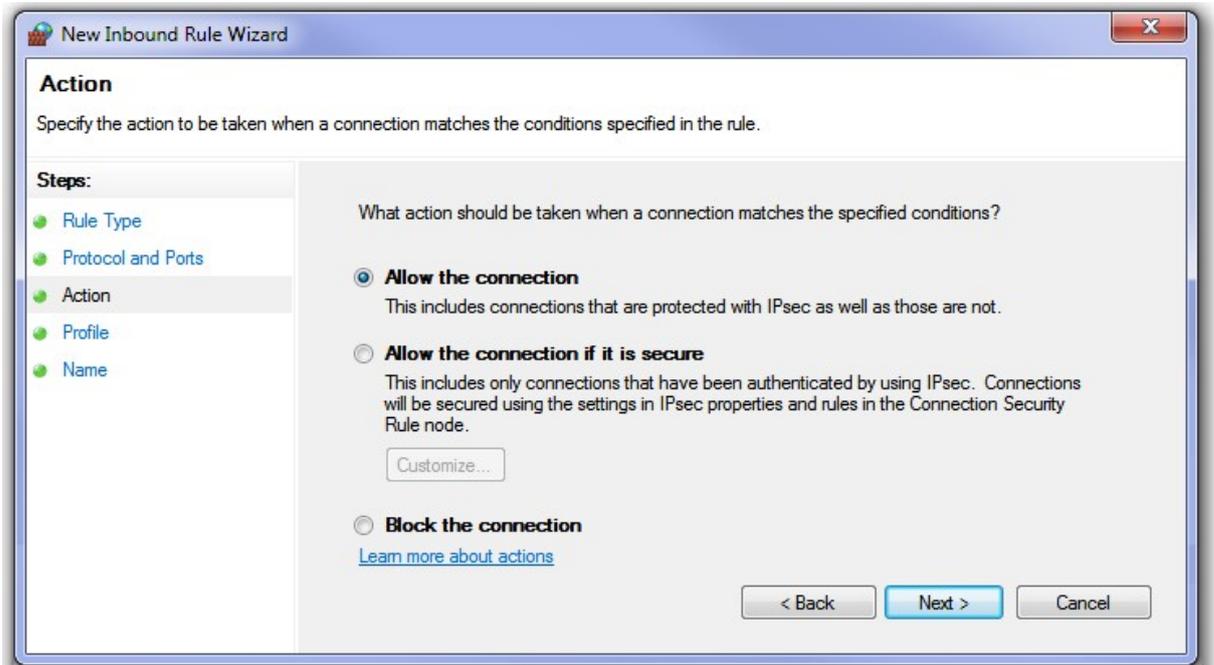
5. This window shall appear in your screen, choose "Port" and then "Next>"



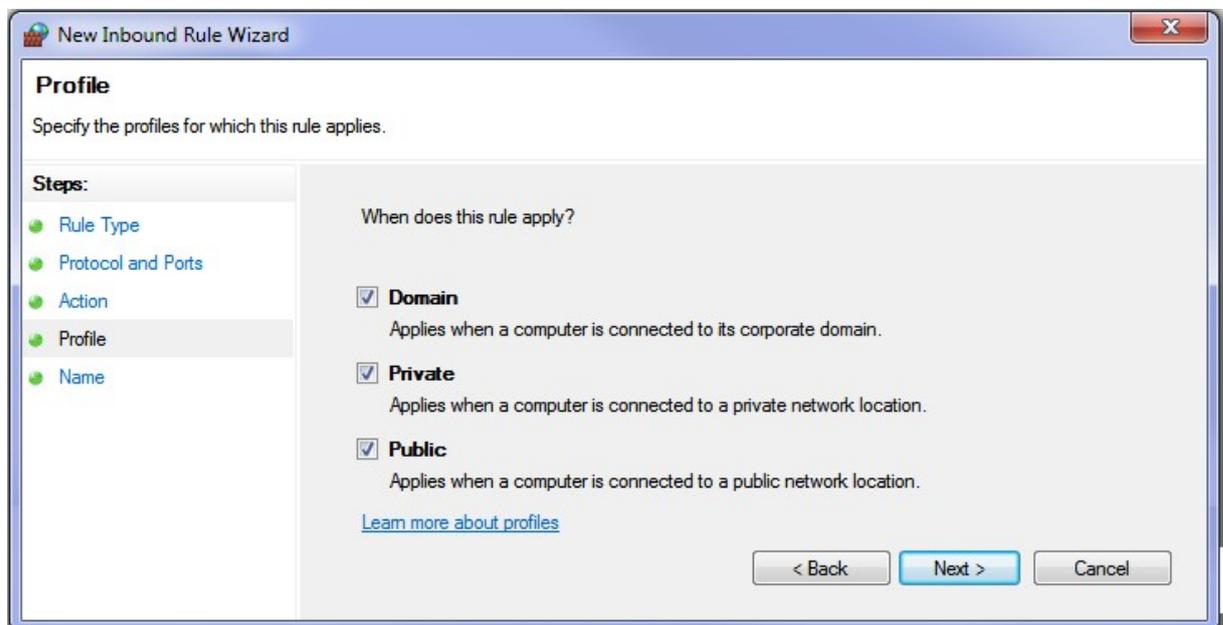
6. Choose "Specific local ports:" and put in the "SQL Port Number" that you put in your text file box (*refer to diagram2 on page 8*), in our case it is 5342 and then Next>



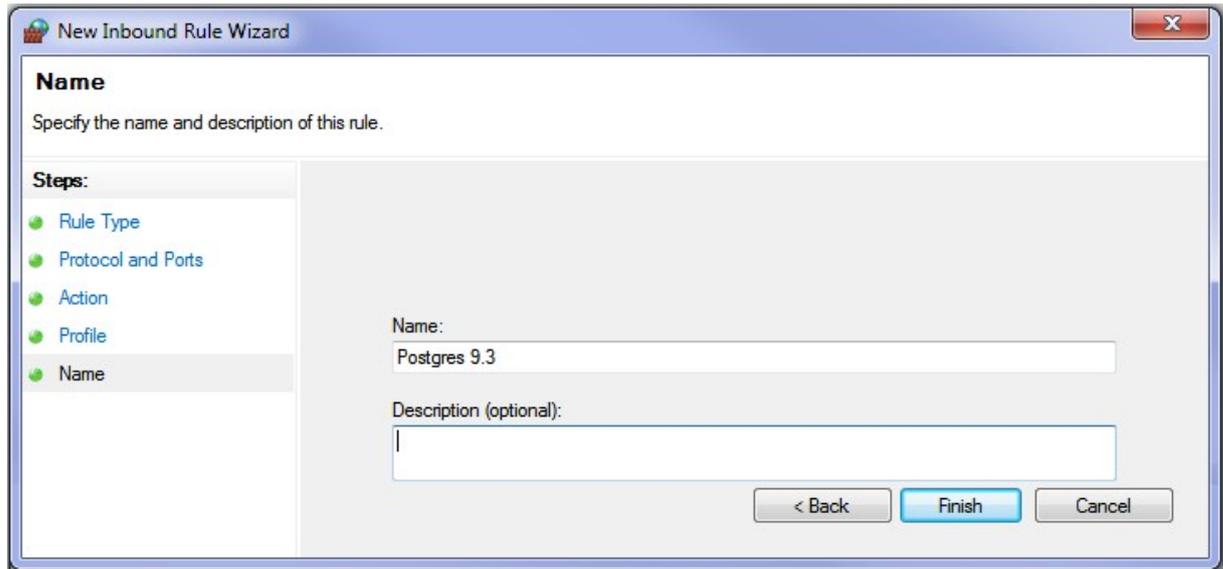
7. Allow the connection and “Next>”



8. All 3 boxes can be ticked. Please consult your IT professionals then “Next>”

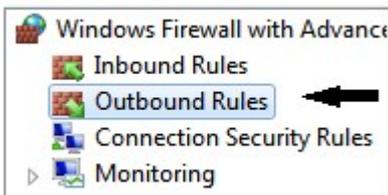


9. Place a Name for example “Postgres 9.#” so it can be altered or deleted at a later stage, then “Finish”.



Important Notes

The next action that need to be done is repeating **step 4 to 9** for the “Outbound Rules”



3.0 Text File

So that your Omnis library file can communicate with Postgres data file, some parameters have to be passed to the Postgres server. Information on how to find database and password will save time on not being prompted for a second time for password.

The location of the text file must be adjacent to the Omnis library file.

If you want Omnis Data file to start you are to place a path name similar to this diagram displayed below.

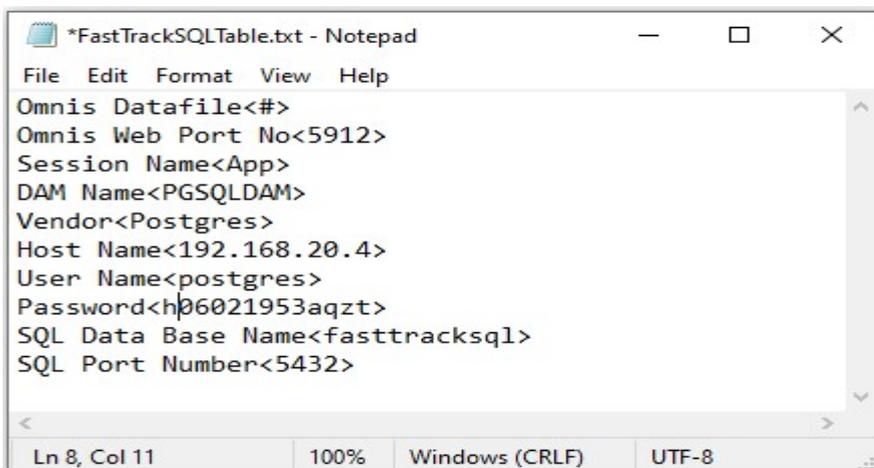


diagram2

This is where you change details. Please remember to save

If you do not want Omnis to access PostgreSQL, you are to place “#” instead of the datafile pathname for Omnis Native data file.

The first line would be : Omnis Datafile =#.

The text structure must be maintained using ten (10) lines. They are read into Omnis application using the parameter stored after “=” . Do not change text before the “=” .

Similar line feeds must be maintained in other words you must have 10 lines as per the above diagram.

Please find example of IP Address below (re : Host name)

127.0.0.1 = on the local computer

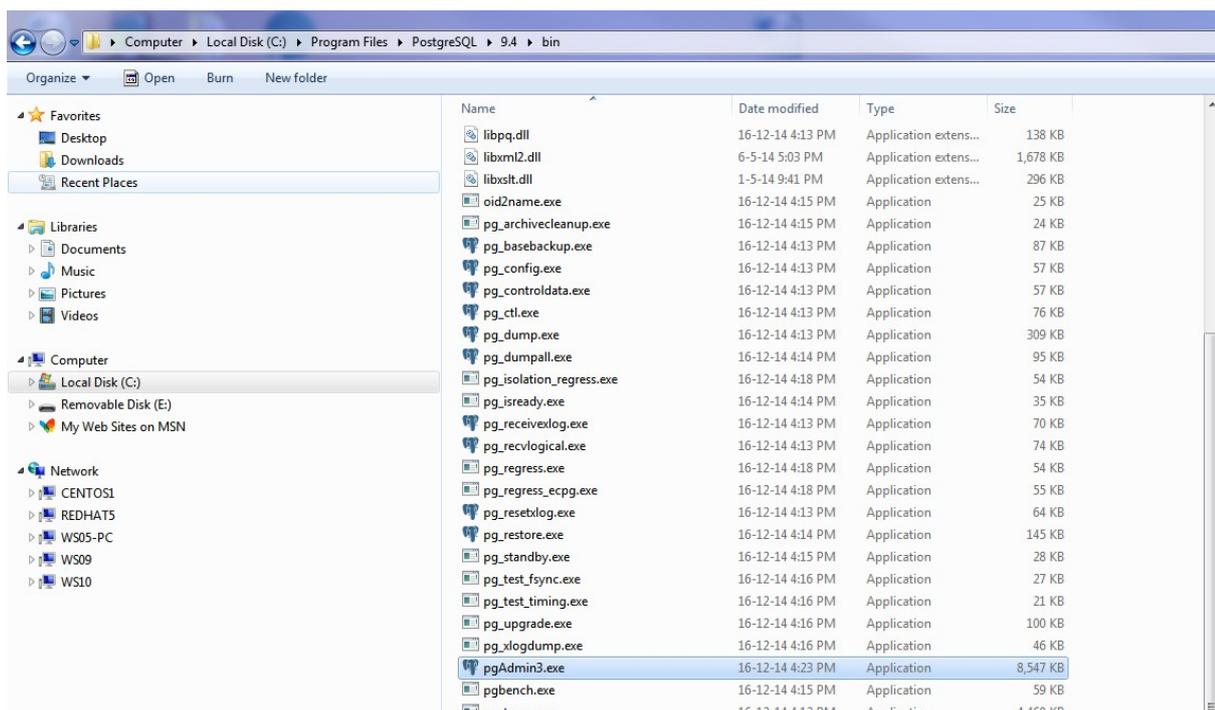
192.168.1.4 = Location on the Local Area Network (LAN)

110.143.43.164 = Location over the Web.

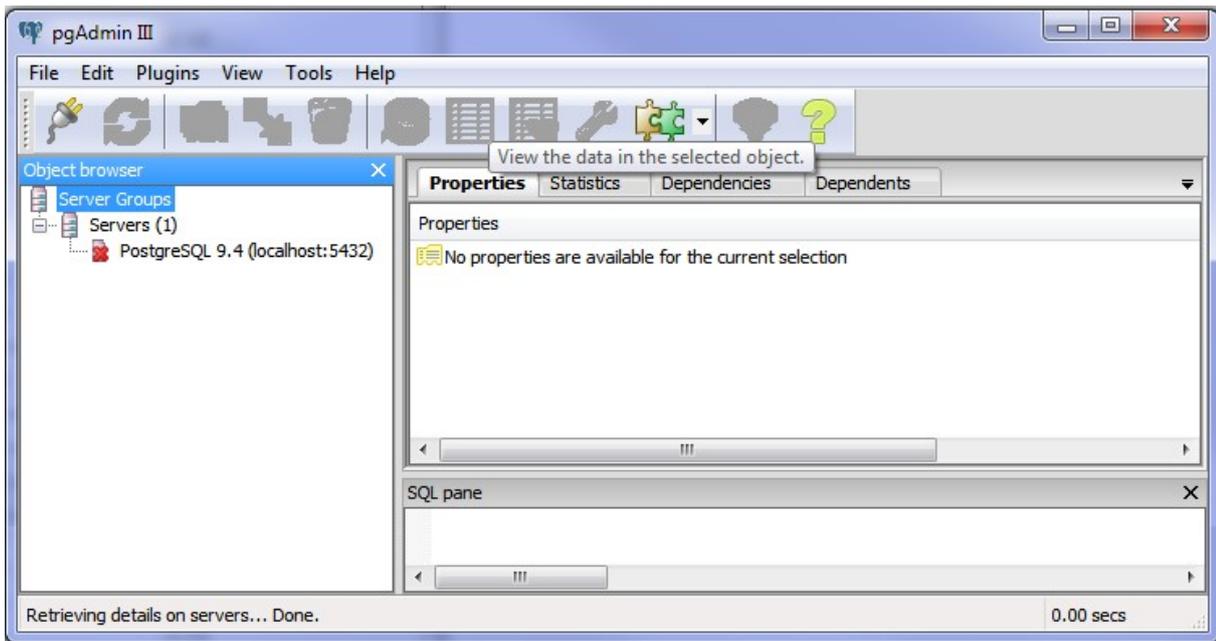
Please note that the following Pgadmin3 is no longer available all modifications must be done via text files.

4.0 HBA (Host-Based Authentication)

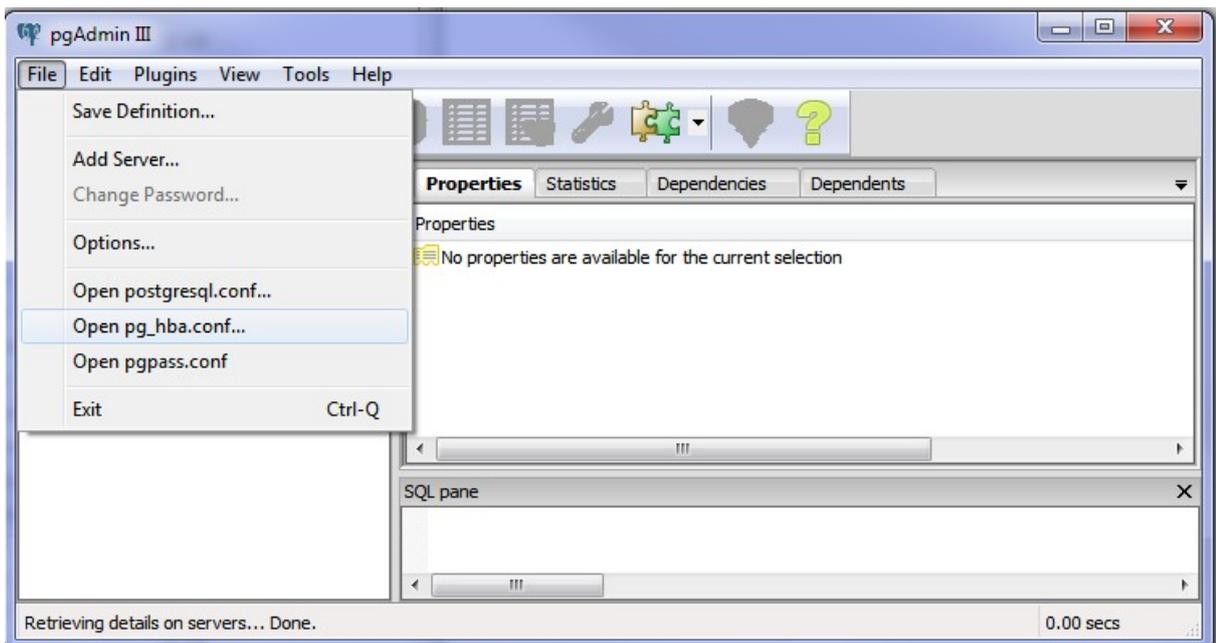
The following window is launched from the Postgres folder using **pgAdmin3.exe**. It is located in C:\ProgramFile\PostgreSQL\12\bin.



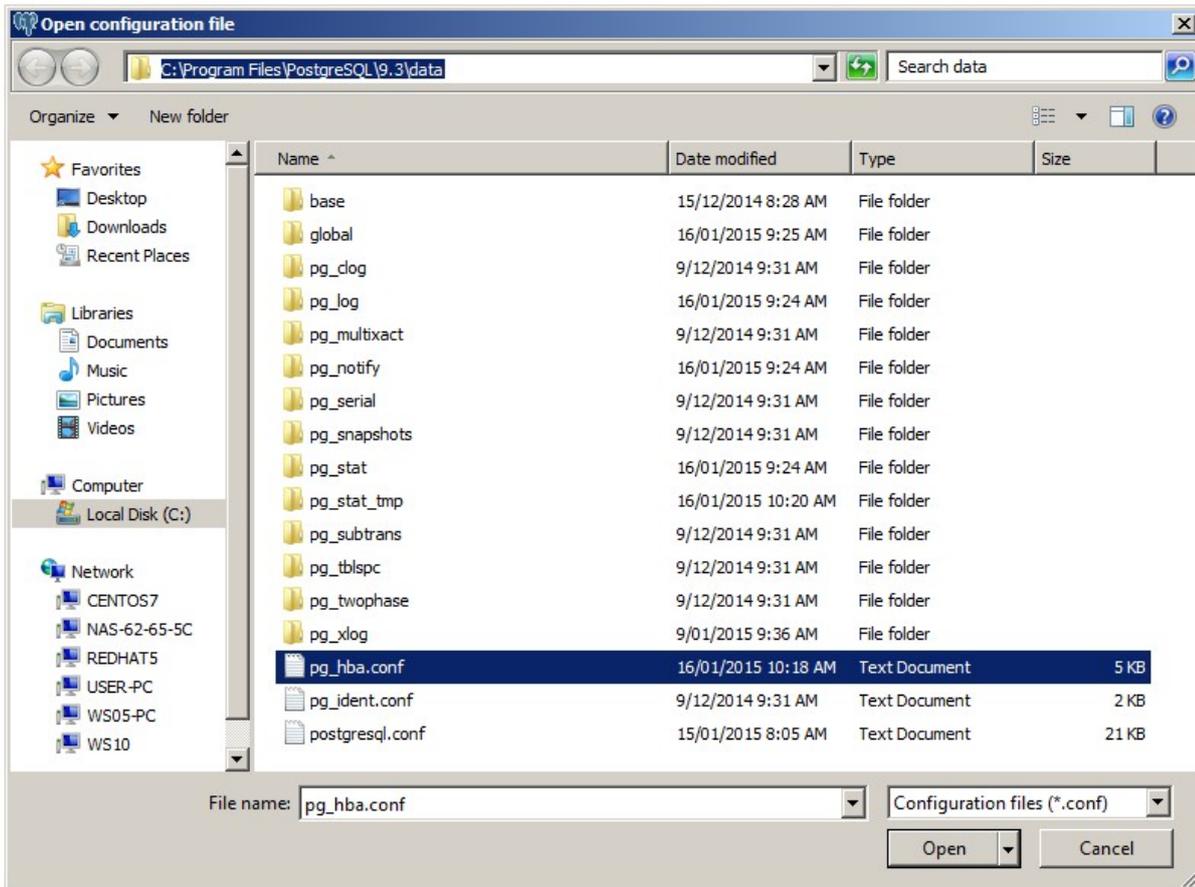
Open this one and this window below should appear



Go to tab File, choose "pg.hba.conf"

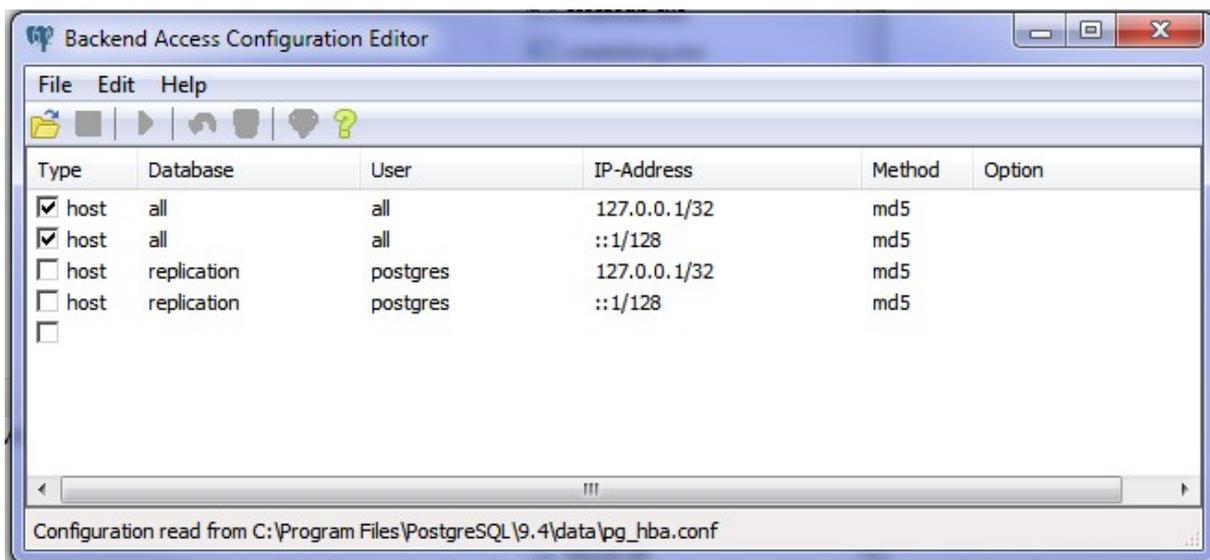


It is usually located in the C:\ProgramFile\PostgreSQL\12\data.



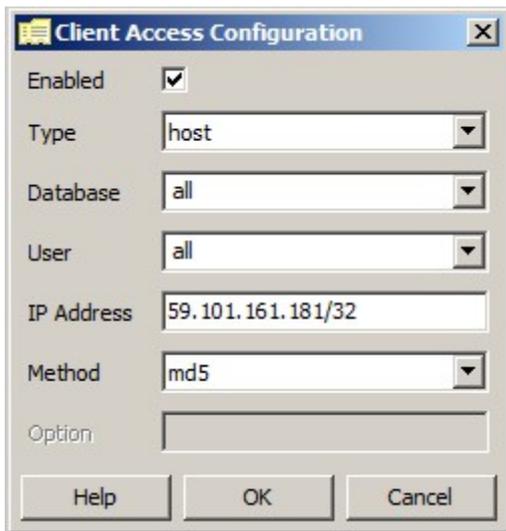
The pg_hba.conf can be accessed via a text setup or through a graphic interface. The following graphical interface can be accessed via the Postgres interface mentioned above.

Go to tree list to locate the FastTrackSQL data base and highlight then used the pull down menu "Tool". Drop down to "Server Configuration" releasing on the "pg_hba.conf" line. This following graphic should appear.



Double Click on the bottom line to add more IP Address and fill in all the boxes.

Tick box to activate window like this example below.



Please now fill in details for each user of the Postgres system ,

The “Type” is usually “host” and can be selected.

The “Database” is usually called “fasttracksq1” this can vary from system to system.

The “User” is the name placed in the direct text box mention before and must be the same and is case sensitive.

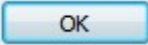
The “IP Address” is the computer that is accessing the data base, this can be found via various ways for people on a LAN by going to the command prompt and typing “ipconfig” and hitting enter this will tell you the “IPv4 address”.

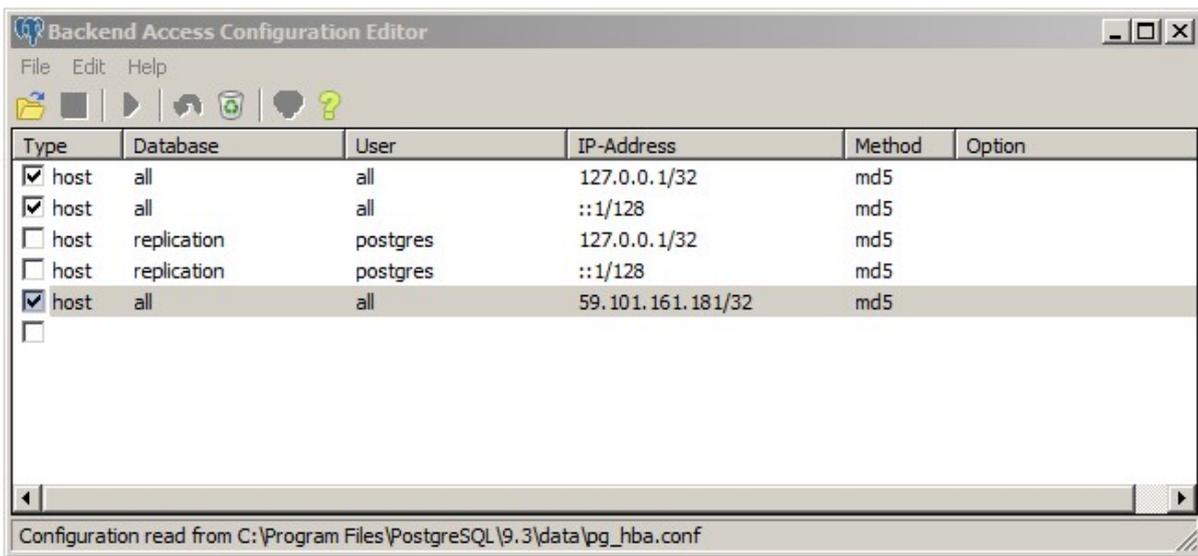
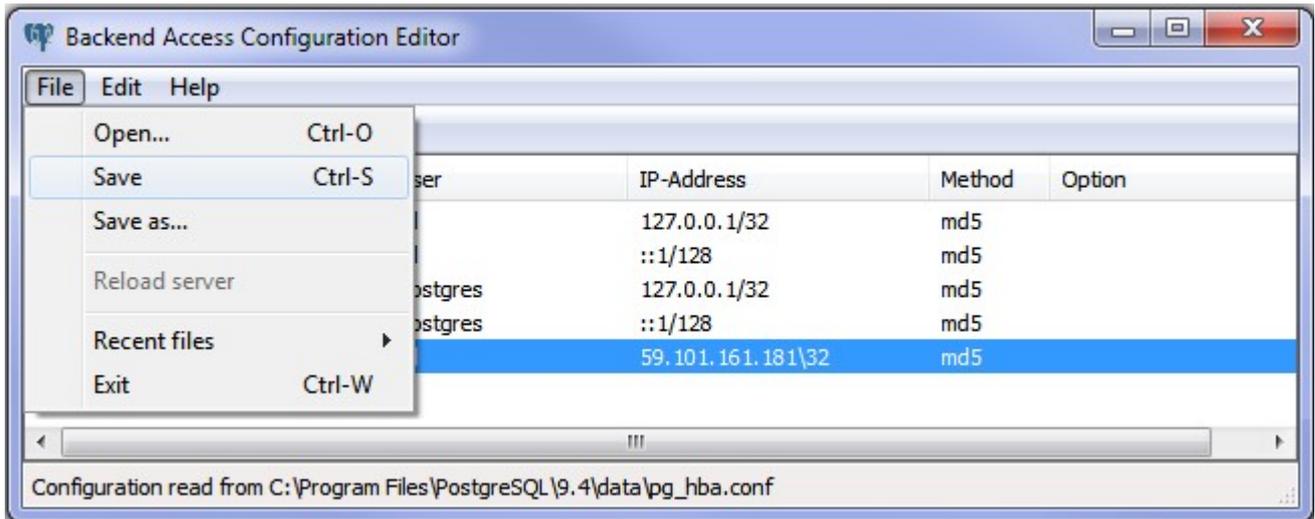
If you are viewing from a remote computer system use the internet to and type in “What’s my ip address” you should get a quick response.

All IP address must be followed with forward slash and 32.

Note If you have IPv6 system please contact this office.

The “Method” is generally “md5”

When finish fill in everything hit  then **Save** it as shown in the table below.



Now you should all be ready to start Fast Track Estimating System.

To make it easier you are to set the Library File to be the Shortcut on your desktop to start Fast Track Estimating System.

FAST TRACK TYPICAL INSTALLATION WITH POSTGRESQL DATABASE

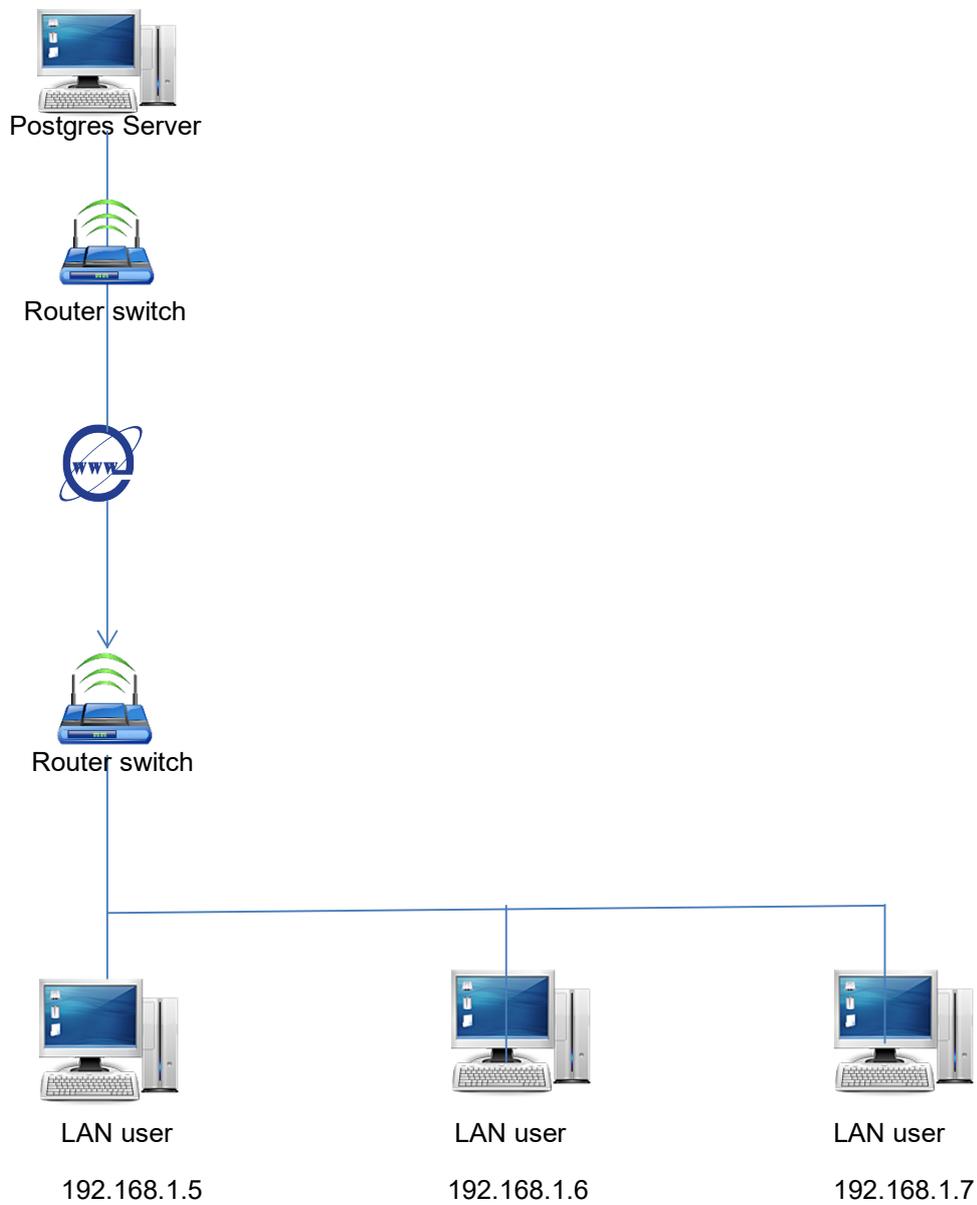


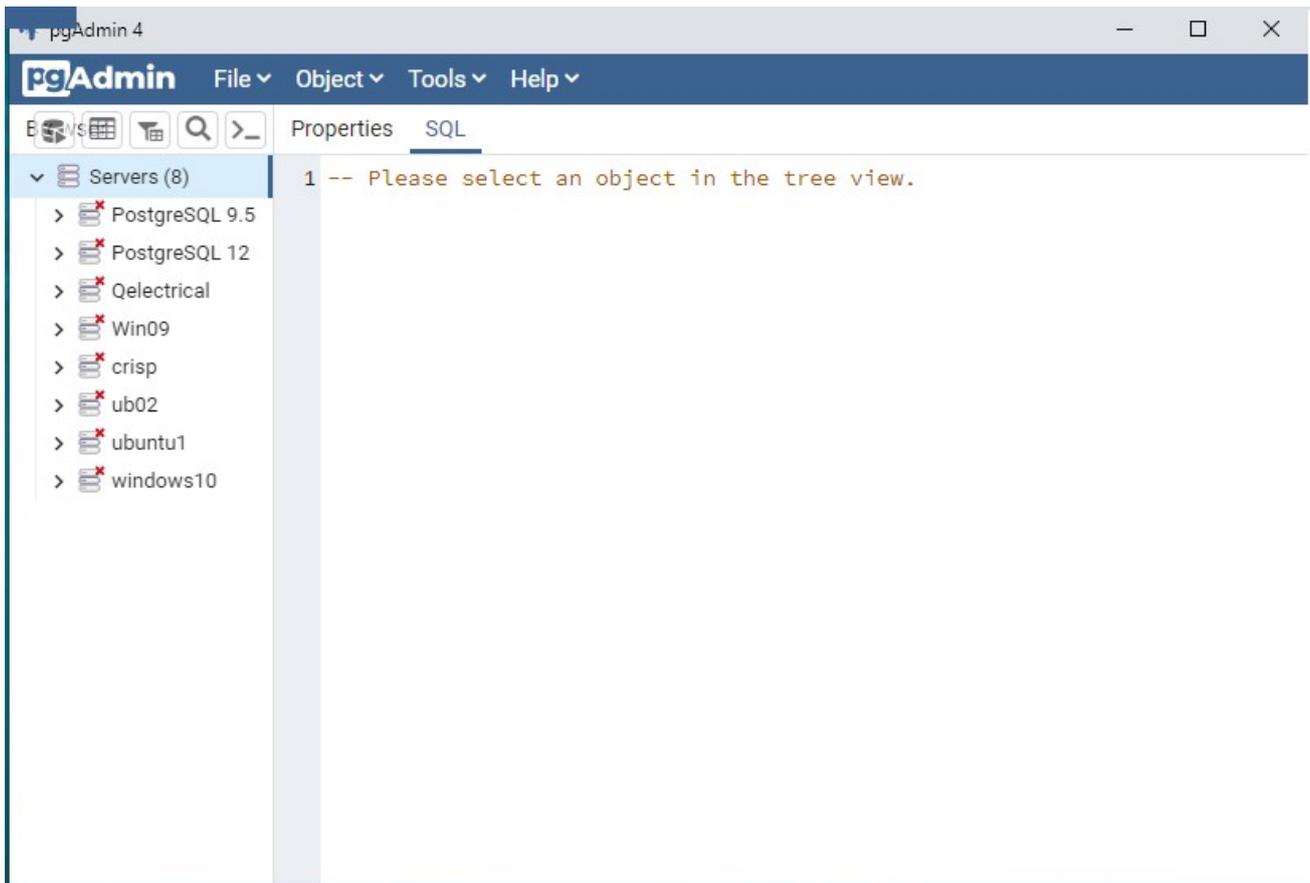
diagram3

Creating New User and New Database in Postgres

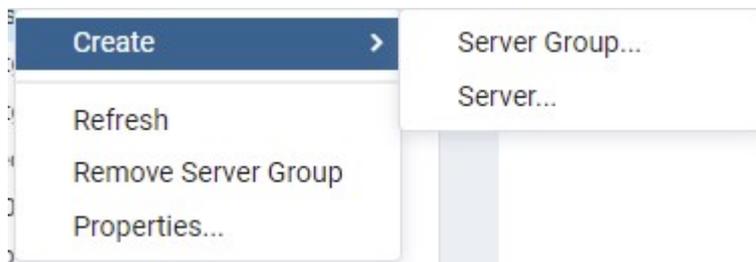
Appendix 1. Creating New User in Postgres

Go to pgAdmin4.exe (C:\Program Files\PostgreSQL\12\bin)

Double click on PostgreSQL 12 (localhost:5432)



Right Click on Server.



A new screen will appear.

The image shows a 'Create - Server' dialog box with the following elements:

- Window title: Create - Server
- Tabs: General (selected), Connection, SSL, SSH Tunnel, Advanced
- Name: An empty text input field with a red border and a red error icon to its left.
- Server group: A dropdown menu showing 'Servers'.
- Background: A button with an 'X' icon.
- Foreground: A button with an 'X' icon.
- Connect now?: A toggle switch that is currently turned on.
- Comments: A large empty text area.
- Error message: A red box at the bottom containing the text: 'Name' cannot be empty.
- Buttons: Information (i), Help (?), Close (X), Reset (circular arrow), and Save (floppy disk).

Enter the new server name.

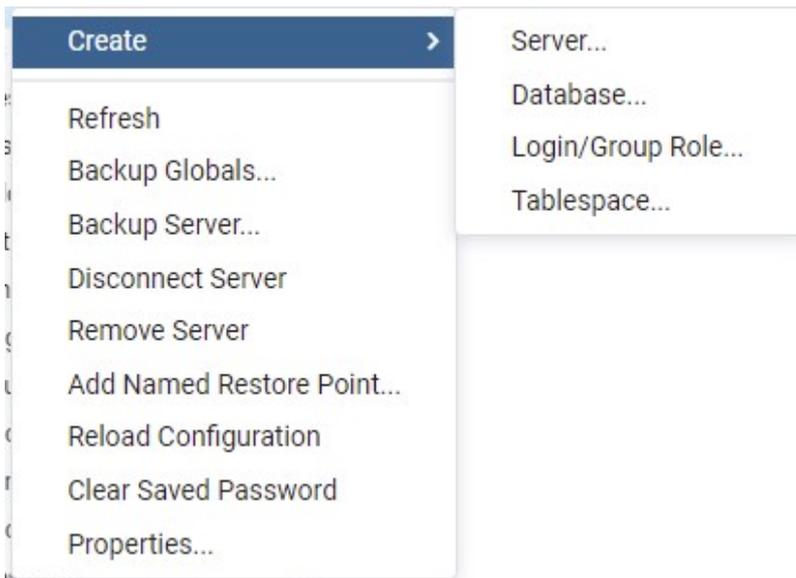
Then

Then go to Connection tab and enter the IP address.

Then the port.= 5432

Username = Postgres

Then save if everything is OK it should save.



Clicking on server you now create a new data base.

Enter name.

Then

Owner = Postgres

In PgAdmin4 there are also Tools, these allow to do some pretty heavy data base actions.

Please read manual before commencing any activities.

Backup

Backup (Database: deofficesql001) ↗ ✕

General Data/Objects Options

Filename ! 📁

Format | ▾

Compression ratio

Encoding | ▾

Number of jobs

Role name | ▾

! Please provide a filename. ✕

i ? ✕ Close ↺ Reset 📁 Backup

Select or create file name.

Encoding = UTF8

Role name = Postgres

Then Backup

Appendix3

Restore

Restore data for the new database

In the tab Tool choose "Restore"

Restore (Database: deofficesql001)

General Data/Objects Options

Format Custom or tar

Filename ! 📁

Number of jobs

Role name Select an item... | v

! Please provide a filename. X

i ? X Close ↺ Reset ↑ Restore

Select data file name

then

Select data file name source etc USB drive.

Role name = Postgres

Then

Restore

You should get a report of what went right or wrong.