**Purpose:**

To perform the initial administrative steps to access the PostgreSQL/PostGIS database. Simply trying

“psql postgres my-ubuntu-username"

results in an error message:

psql: FATAL: Ident authentication failed for user "my-ubuntu-username"

The following steps involve creating a user and creating a database.

The steps are taken from <https://stackoverflow.com/questions/2172569/how-do-i-login-and-authenticate-to-postgresql-after-a-fresh-install> .

The recommended approach suggests *NOT* modifying the postgres user password.

1. It's normally locked from the OS. No one is supposed to "log in" to the operating system as postgres. You're supposed to have root authority to get to authenticate as postgres.
2. It's normally not password protected and delegates to the host operating system. This is a **good thing**. This normally means in order to log in as postgres which is the PostgreSQL equivalent of SQL Server's SA, you have to have write-access to the underlying data files. And, that means that you could normally wreak havoc anyway.
3. By keeping this disabled, you remove the risk of a brute force attack through a named super-user. Concealing and obscuring the name of the superuser has advantages.
4. TAC adds: allow local access by users. Sudo su postgres; cd /var/lib/pgsql/12/data; nano pg\_hba.conf; peer->password; save; /usr/pgsql-12/binpg\_ctl reload

| **Step** | **Major Activity** | **References, Forms and Details** |
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| **1** | Enter psql as a superuser:  $ sudo -u postgres psql | **sudo -u postgres psql**  is the standard logon |
| **2** | Create a new user:  CREATE ROLE myuser LOGIN PASSWORD 'mypass'; | * User has login privileges and a password |
| **3** | Create a database  CREATE DATABASE mydatabase WITH OWNER = myuser; | * Different to the default postgres database |
| **4** | Exit psql  \q |  |
| **5** | Set PGHOST=”localhost” for Linux   * vi ~/.bashrc * move to end of file * insert the (i)   EXPORT PGHOST=localhost   * save and exit editor ( :wq ) * reload the startup file   source ~/.bashrc | * so that one does need to specify “-h localhost” during logon * use any text editor (vi commands described) * you can add a comment header if desired – prefix the header with the symbol “#” (no quotes) * need to reload the .bashrc file so the export localhost command is used |
| **6** | Try to login  $ psql -h localhost -d mydatabase -U myuser -p <port> | * Server (-h) is optional if the database is local * Port is optional if the default 5432 was chosen |
| **7** | If you don't know the port, there are two methods:   * In psql,   “SHOW port;”   * In Linux,   “grep "port =" /etc/postgresql/\*/main/postgresql.conf |  |