PostgreSQL

Introduction

- ❏ PostgreSQL (postgres) is an open source object-relational database system
- ❏ It is one of leading database server used for production servers.
- ❏ It allows us to execute stored procedures
- ❏ which is similar to Oracle's PL/SQL

Setup

1. Install PostgreSQL

```
$ sudo apt-get update
$ sudo apt-get install postgresql postgresql-contrib
$ psql --version (Check Version)
```

2. Configure PostgreSQL to start up upon server boot. (optional)

```
$ sudo update-rc.d postgresql enable
```

3. Start / Stop / Restart PostgreSQL

```
$ sudo service postgresql start/stop/restart
```

Connecting to PostgreSQL

1. Login to system as user postgres / postgres

```
$ sudo sudo su - postgres
postgres@tn293:/root$ psql
postgres-# \h (help)
```

2. Checking login info

```
postgres-# \conninfo (Port: 5432)
```

3. Disconnecting from PostgreSQL database

```
postgres-# \q
```

phpPgAdmin

phpPgAdmin is an web interface for accessing and managing PostgreSQL databases in a very easy way.

1. Install PgAdmin

```
$ sudo apt-get update
$ sudo apt-get install phppgadmin
```

2. Access phpPgAdmin from localhost

```
http://localhost/phppgadmin
```

3. If you want to access phpPgAdmin web interface from remote system like your local LAN or remote public network server. We need to make little changes in PostgreSQL Apache configuration file.

```
$ sudo nano /etc/apache2/conf.d/phppgadmin
order deny,allow
deny from all
allow from 127.0.0.0/255.0.0.0 ::1/128
allow from all (uncommented this line)
$ sudo service apache2 reload
```

Error 1: Unable to access
Solution:
ln -s /etc/apache2/conf.d/phppgadmin /etc/apache2/conf-available/phppgadmin.conf
a2enconf phppgadmin
service apache2 reload
Error2: Login disallowed for security reasons
Solution:
- Open -> /etc/phppgadmin -> config.inc.php
- Change $conf['extra_login_security'] = true;   to $conf['extra_login_security'] = false;
-
Error3:password authentication failed for user "postgres"
sudo vi /etc/postgresql/9.4/main/pg_hba.conf
Change permission
(or) ALTER USER postgres PASSWORD 'newPassword';
sudo -u postgres psql
\password postgres
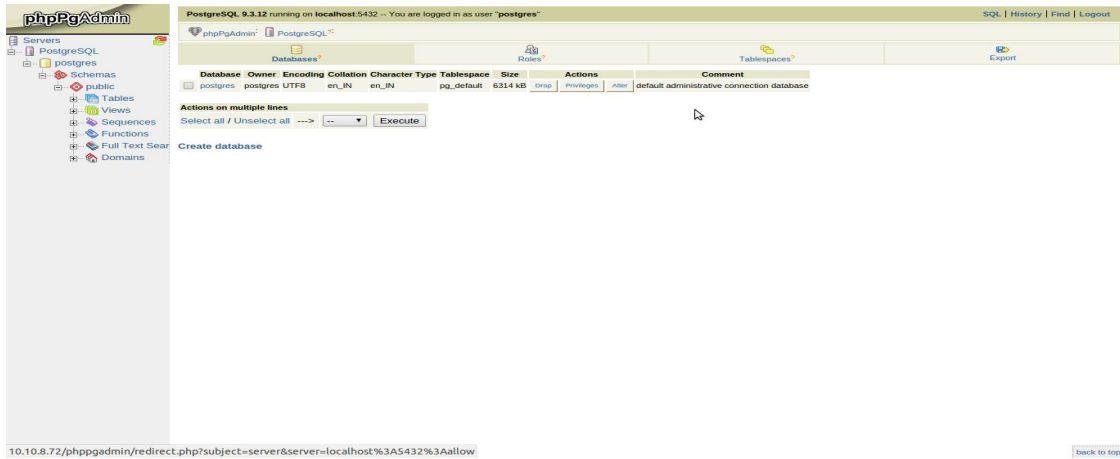\q
sudo service postgresql restart
Error4:connections on Unix domain socket "/var/run/postgresql/.s.PGSQL.5432"?
netstat -nlp | grep 5432

```
ps aux
```


PostgreSQL 9.3.12 running on localhost:5432 -- You are logged in as user "postgres"   SQL | History | Find | Logout

Useful Commands

Command	Description
\h	Help
CREATE USER <uname> WITH PASSWORD <password>';	Creating User
GRANT ALL PRIVILEGES ON DATABASE <dbname> to <uname>;	Granting privileges to User on DB
\list or \l	List all Databases
CREATE DATABASE <dbname>	Creating Database
\connect <db> (or) \c	Connecting/Switching to db
\dt	list all tables in the current database

CREATE TABLE table_name(
  column1 datatype,
  column2 datatype,
  column3 datatype,
  .....
  columnN datatype,
  PRIMARY KEY(one or more columns)
);
	Creating Table

pg_lsclusters	
dpkg -l | grep postgres	List All Postgres related packages
sudo apt-get --purge remove sudo apt-get --purge remove postgresql*	Remove all postgresql components
sudo usermod -a -G sudo postgres	
export POSTGRES_DB="postgres://$PG_USER:$PG_PASSWORD@localhost:5434/	Connect to db

References

http://www.postgresql.org/
http://www.tutorialspoint.com/postgresql/postgresql_environment.htm
http://mherman.org/blog/2015/02/12/postgresql-and-nodejs/#.VxSNFt_Os8o
http://phppgadmin.sourceforge.net/doku.php
https://gist.github.com/dideler/60c9ce184198666e5ab4
https://gist.github.com/tamoyal/2ea1fcdf99c819b4e07d (upgrade)
https://www.howtoinstall.co/en/ubuntu/trusty/phppgadmin?action=remove

http://wiki.postgresql.org/wiki/Community_Guide_to_PostgreSQL_GUI_Tools

******* Thank You *******