## **Installing postgreSQL on Ubuntu VM on Cloud Stack**

**Step1:** To install PostgreSQL, run the commands below in Terminal:

```
ubuntu@ubuntu-CloudStack-KVM-Hypervisor: -$ sudo apt update
[sudo] password for ubuntu:
Hit:1 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:2 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:4 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease
Reading package lists... Done
Building dependency tree
Reading state information... Done
15 packages can be upgraded. Run 'apt list --upgradable' to see them.
server1@server1-CloudStack-KVM-Hypervisor:~$ sudo apt-get install postgresql pos
tgresql-contrib
[sudo] password for server1:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  efibootmgr gir1.2-geocodeglib-1.0 libfwup1 libllvm8 libwayland-egl1-mesa
  ubuntu-web-launchers
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libpq5 postgresql-10 postgresql-client-10 postgresql-client-common
  postgresql-common sysstat
Suggested packages:
  postgresql-doc locales-all postgresql-doc-10 libjson-perl isag
The following NEW packages will be installed:
```

After seeing the message above when installing postgresql-10, run below command, then it will automatically change to postgres=#

postgresql-client-common postgresql-common postgresql-contrib sysstat

```
server1@server1-CloudStack-KVM-Hypervisor:~$ sudo su - postgres

postgres@server1-CloudStack-KVM-Hypervisor:~$ psqi

psql (10.12 (Ubuntu 10.12-0ubuntu0.18.04.1))

Type "help" for help.

postgres=#
```

To create a database in postgresql, run next commands:

createdb <name of database> or CREATE DATABASE <name of database>; from postgres=#

To connect to yelpdb from postgres use command \c as shown below.

libpq5 postgresql postgresql-10 postgresql-client-10

```
postgres=# \q
postgres@ubuntu-CloudStack-KVM-Hypervisor:~$ createdb yelpdb
postgres@ubuntu-CloudStack-KVM-Hypervisor:~$ psql
psql (10.12 (Ubuntu 10.12-OubuntuO.18.04.1))
Type "help" for help.

postgres=# CREATE DATABASE yelpdb;
ERROR: database "yelpdb" already exists
postgres=# \c yelpdb
You are now connected to database "yelpdb" as user "postgres".
yelpdb=# \q
```

Next, proceed with some queries.

## References

 $262588213843476.~(n.d.).~Install~PostgreSQL~10~on~Ubuntu.~Retrieved~from~\underline{https://gist.github.com/alistairewj/8aaea0261fe4015333ddf8bed5fe91f8}$ 

ByStudent. (2018, October 31). Installing PostgreSQL 10 on Ubuntu 16.04: 17.10: 18.04. Retrieved from <a href="https://websiteforstudents.com/installing-postgresql-10-on-ubuntu-16-04-17-10-18-04/">https://websiteforstudents.com/installing-postgresql-10-on-ubuntu-16-04-17-10-18-04/</a>

Rahul. (2020, January 28). How To Install PostgreSQL on Ubuntu 18.04 & 16.04 LTS. Retrieved from <a href="https://tecadmin.net/install-postgresql-server-on-ubuntu/">https://tecadmin.net/install-postgresql-server-on-ubuntu/</a>