

## Table of Contents

|   |   |
|---|---|
| Table of Contents                                       | 1 |
| PGSQL-RUNNER DEVOPS GUIDE                               | 2 |
| 1. INTRODUCTION   | 2 |
| 2. SEARCHING FOR ANSWERS                                | 2 |
| 3. INSTALLATIONS AND CONFIGURATIONS                     | 2 |
| 3.1. Configure the Ubuntu repositories                  | 2 |
| 3.2. Add the media keys                                 | 2 |
| 3.3. Install the postgre package with apt               | 2 |
| 3.4. Change the postgre user password                   | 2 |
| 3.4.1. Start the psql client as the postgres shell user | 3 |
| 3.4.2. Create the pgsq user                             | 3 |
| 3.5. Install the perl modules ( optional)               | 3 |
| 4. MAINTENANCE AND OPERATIONS                           | 4 |
| 4.1. RUNSTATE MANAGEMENT                                | 4 |
| 4.1.1. To check the status of the postgresql            | 4 |
| 4.1.2. To stop the postgresql                           | 4 |
| 4.1.3. To start the postgresql                          | 4 |
| 4.1.4. to check the port on which it is listening       | 4 |
| 5. NAMING CONVENTIONS                                   | 4 |
| 5.1. Dirs naming conventions                            | 4 |
| 5.1.1. Root Dirs naming conventions                     | 4 |

# PGSQL-RUNNER DEVOPS GUIDE

## 1. INTRODUCTION

The purpose of this document is to provide you with quick devops info related to the usage of the tool. The more you feel proficient in postgres administration and management the more you should skip reading it ...

## 2. SEARCHING FOR ANSWERS

PostgreSQL has one of the best documentation online for a RDBMS:

<https://www.postgresql.org/docs/9.6/static/index.html>

+ stackoverflow is full with good q&a info to search for:

[https://www.google.fi/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=site:stackoverflow.com+postgresql+bash&\\*>](https://www.google.fi/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=site:stackoverflow.com+postgresql+bash&*>)

## 3. INSTALLATIONS AND CONFIGURATIONS

### 3.1. Configure the Ubuntu repositories

Configure the Ubuntu repositories

```
# create the following repo list file
sudo vim /etc/apt/sources.list.d/pgdg.list

# add the following line in it:
deb http://apt.postgresql.org/pub/repos/apt/ trusty-pgdg main
```

### 3.2. Add the media keys

Add the media keys as follows:

```
wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -
```

### 3.3. Install the postgres package with apt

Install the postgres package with apt

```
# update the apt repositories
sudo apt-get update

# install
sudo apt-get install postgresql-9.4
```

### 3.4. Change the postgres user password

Configure the Ubuntu repositories

```
sudo passwd postgres
# Type a pw - add to your password manager !!!

# and verify
su - postgres
```

### 3.4.1. Start the psql client as the postgres shell user

Start the psql client as the postgres shell user

source:

<http://dba.stackexchange.com/a/54253/1245>

```
sudo su - postgres
# start the psql client
psql

# the psql prompt should appear as
# postgres=#

# list the databases
\l
#and quit
\q
```

### 3.4.2. Create the pgsq user

Create the pgsq user and grant him the privileges to create dbs and to connect to the postgres db.

```
# create the pgsq user to be the same as the shell
# user you are going to execute the scripts with ( in my case it is ysg )
# postgres=#
create user ysg ;

# grant him the priviledges
grant all privileges on database postgres to ysg ;

# grant him the privilege to create db's
ALTER USER ysg CREATEDB;

# and exit
\q
```

### 3.5. Install the perl modules ( optional)

Install the perl module by first installing the server development package

```
# check which server development packages are available
sudo apt-cache search postgres | grep -i server-dev | sort

# install it
sudo apt-get install -y postgresql-server-dev-9.6

# install the DBD::Pg module
sudo perl -MCPAN -e 'install DBD::Pg'

sudo perl -MCPAN -e 'Tie::Hash::DBD'
```

## 4. MAINTENANCE AND OPERATIONS

### 4.1. RUNSTATE MANAGEMENT

#### 4.1.1. To check the status of the postgresql

To check the status of the postgresql issue:

```
sudo /etc/init.d/postgresql status
```

#### 4.1.2. To stop the postgresql

To stop the postgresql issues:

```
sudo /etc/init.d/postgresql stop
```

#### 4.1.3. To start the postgresql

To start the postgresql issues:

```
sudo /etc/init.d/postgresql start
```

#### 4.1.4. to check the port on which it is listening

To check the port on which it is listening issue:

```
sudo netstat -tulnt | grep -i postgres
# tcp      0      0 127.0.0.1:5432      0.0.0.0:*        LISTEN      8095/postgres
```

## 5. NAMING CONVENTIONS

### 5.1. Dirs naming conventions

The dir structure should be logical and a person navigating to a dir should almost understand what is to be found in there by its name ..

#### 5.1.1. Root Dirs naming conventions

The root dirs are named as follows:

bin - contains the produced binaries for the project

cnf - for the configuration

dat - for the data of the app

lib - for any external libraries used

src - for the source code of the actual projects and subprojects