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## **Install postgres and table creation in centos 6**

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### **Step 1: Switch as root user**

# sudo su

# password:hduser

### **Step 2: Update centos linux package list**

# yum -y update

### **Step 3: Install postgresql using the below command - client packages**

# yum -y install postgresql postgresql-contrib

### **Step 4: Install postgresql server packages**

# yum install postgresql-server

### **Step 5: Initialize the postgresql DB**

# service postgresql initdb

### **Step 6: Configure postgres to start when server reboots**

# chkconfig postgresql on

### **Step 7: Edit the configuration file to update the server access**

```
# cd /var/lib/pgsql/data/
```

```
# vi pg_hba.conf
```

```
host all all 0.0.0.0/0 md5
```

### **Step 8: Start postgres service**

```
# service postgresql start
```

### **Step 9: Switch as postgres, creat retail db, create hduser and grant all access to retail db**

```
# su postgres
```

```
create database retail;
```

```
create user hduser with encrypted password 'hduser';
```

```
grant all privileges on database retail to hduser;
```

### **Step 10: Quit from postgres command line**

```
/q
```

### **Step 11: switch as hduser**

```
$ su hduser
```

### **Step 12: Get into postgresql retail db and create tables**

```
$ psql retail
```

```
create table customer(custid int,firstname varchar(100),lastname  
varchar(100),age int,profession varchar(200));
```

```
insert into customer values(400001,'Kristina','Chung',55,'Pilot');
```

```
insert into customer values(400002,'Paige','Chen',74,'Teacher');
```

```
insert into customer values(400003,'Sherri','Melton',34,'Lawyer');
```

```
insert into customer values(400004,'Gretchen','Hill',66,'Carpenter');
```

```
insert into customer values(400005,'Karen','Puckett',74,'Doctor');
```

```
create table tutorials (id int, tutorial_name varchar(100));
```

```
insert into tutorials values(101,'Hadoop Learning');
```

```
insert into tutorials values(102,'Sqoop Tutorials');
```

```
insert into tutorials values(103,'Hive Workouts');
```

```
insert into tutorials values(104,'Spark Internals');
```

```
insert into tutorials values(105,'Python Tutorials');
```

```
CREATE TABLE weather (city varchar(80),temp_lo int,temp_hi int,prcp  
real,date date);
```

```
CREATE TABLE cities (name varchar(80),location point);

INSERT INTO weather VALUES ('San Francisco', 46, 50, 0.25, '1994-11-27');

INSERT INTO cities VALUES ('San Francisco', '(-194.0, 53.0)');

INSERT INTO weather (city, temp_lo, temp_hi, prcp, date)
VALUES ('San Francisco', 43, 57, 0.0, '1994-11-29');

INSERT INTO weather (date, city, temp_hi, temp_lo)
VALUES ('1994-11-29', 'Hayward', 54, 37);
```

### **To list databases**

`\l`

**or**

```
SELECT datname FROM pg_database;
```

### **To list tables**

`\dt`

**or**

```
SELECT * FROM pg_catalog.pg_tables WHERE schemaname !=
'pg_catalog' AND schemaname != 'information_schema';
```

### **To see the details of the table**

```
\d customer
```

**or**

```
SELECT COLUMN_NAME,data_type FROM  
information_schema.COLUMNS WHERE TABLE_NAME = 'customer';
```

### **To quit**

```
\q
```

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### **Import data from postgres to hdfs using sqoop**

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#### **Step 1: Check the hadoop services are running, if not start the services**

```
$ jps
```

#### **Step 2: Download postgres jdbc jar from the below given commands**

```
$ cd ~/Downloads/
```

```
$ wget
```

```
http://www.java2s.com/Code/JarDownload/postgresql/postgresql-8.4-  
702.jdbc4.jar.zip
```

#### **Step 3: Extract and copy the jar into the sqoop folder**

```
$ unzip ~/Downloads/postgresql-8.4-702.jdbc4.jar.zip
```

```
$ cp ~/Downloads/postgresql-8.4-702.jdbc4.jar /usr/local/sqoop/
```

#### **Step 4: sqoop command to import**

```
sqoop list-tables --connect jdbc:postgresql://localhost:5432/retail --  
username hduser --password hduser
```

```
sqoop import --connect jdbc:postgresql://localhost:5432/retail --  
username hduser --password hduser --table customer --target-dir  
postgrescustomer -m 1
```