

PostgreSQL 9.5 in docker

how to setup postgresql 9.5 in docker with user name and password with port to access postgresql with command and example on ubuntu 22.04 ?

Setting up PostgreSQL 9.5 in Docker on Ubuntu 22.04 involves several steps. Below is a comprehensive guide to get you started, including creating a Docker container with PostgreSQL 9.5, configuring a username and password, and exposing the port to access PostgreSQL.

Step 1: Install Docker

First, ensure that Docker is installed on your Ubuntu 22.04 system.

Update the package list:

```
sudo apt update
```

Install Docker:

```
sudo apt install -y docker.io
```

Start Docker and enable it to run at startup:

```
sudo systemctl start docker
```

```
sudo systemctl enable docker
```

Verify Docker installation:

```
docker --version
```

Step 2: Pull the PostgreSQL 9.5 Docker Image

Download the PostgreSQL 9.5 Docker image from Docker Hub.

```
docker pull postgres:9.5
```

Step 3: Run the PostgreSQL Container

Run the PostgreSQL container with a specified username, password, and port.

```
docker run --name my_postgres \  
-e POSTGRES_USER=myuser \  
-e POSTGRES_PASSWORD=mypassword \  
-p 5432:5432 \  
-d postgres:9.5
```

Here's a breakdown of the command:

--name my_postgres: Names the container my_postgres.

-e POSTGRES_USER=myuser: Sets the PostgreSQL username to myuser.

-e POSTGRES_PASSWORD=mypassword: Sets the PostgreSQL password to mypassword.

-p 5432:5432: Maps the container's port 5432 to the host's port 5432.

-d: Runs the container in detached mode.

postgres:9.5: Specifies the PostgreSQL 9.5 image.

Step 4: Verify the Container is Running

Ensure the PostgreSQL container is running.

```
docker ps
```

You should see my_postgres listed in the running containers.

Step 5: Access PostgreSQL

You can now access PostgreSQL using the psql command-line tool or any PostgreSQL client with the following details:

Host: localhost

Port: 5432

Username: myuser

Password: mypassword

For example, using the psql command-line tool:

Install PostgreSQL client tools (if not already installed):

```
sudo apt install -y postgresql-client
```

Connect to PostgreSQL:

```
psql -h localhost -U myuser -d postgres
```

You will be prompted to enter the password (mypassword).

Full Example Script

Here's a script that combines all the steps above:

```
#!/bin/bash
```

```
# Update package list and install Docker
```

```
sudo apt update
```

```
sudo apt install -y docker.io
```

```
# Start Docker and enable it to run at startup
```

```
sudo systemctl start docker
```

```
sudo systemctl enable docker
```

```
# Pull PostgreSQL 9.5 image
```

```
docker pull postgres:9.5
```

Run PostgreSQL container with specified user, password, and port

```
docker run --name my_postgres \  
-e POSTGRES_USER=myuser \  
-e POSTGRES_PASSWORD=mypassword \  
-p 5432:5432 \  
-d postgres:9.5
```

Install PostgreSQL client tools

```
sudo apt install -y postgresql-client
```

Output message indicating setup completion

```
echo "PostgreSQL 9.5 is running and accessible on  
localhost:5432 with username 'myuser' and specified  
password."
```

Run this script on your Ubuntu 22.04 machine, and you will have PostgreSQL 9.5 set up in a Docker container, ready for use.

Example:

```
112 sudo adduser hpcsa007
113 sudo usermod -aG sudo hpcsa007
114 su - hpcsa007
115 sudo service docker stop
116 sudo apt-get purge -y docker-ce docker-ce-cli
containerd.io
117 sudo apt-get autoremove -y --purge docker-ce docker-
ce-cli containerd.io
118 sudo rm -rf /var/lib/docker
119 sudo rm -rf /etc/docker
120 sudo rm /etc/apparmor.d/docker
121 sudo groupdel docker
122 sudo rm -rf /var/run/docker.sock
123 docker --version
124 username -r
125 uname -r
126 su -
127 su - hpcsa007
128 docker pull postgres
129 docker pull dpage/pgadmin4
130 docker pull postgres:9.5
```

```
131 docker run --name my_postgres -e  
POSTGRES_USER=kali016 -e  
POSTGRES_PASSWORD=Hellomykali -p 5432:5432 -d  
postgres:9.5
```

```
132 sudo apt install -y postgresql-client
```

```
133 echo "PostgreSQL 9.5 is running and accessible on  
localhost:5432 with username 'myuser' and specified  
password."
```

```
134 docker ps
```

```
135 sudo apt install -y postgresql-client
```

```
136 psql -h localhost -U kali016 -d postgres
```

```
137 history
```

```
root@kali:/home/hpcsa007#
```