

UNIVERSIDAD AUTÓNOMA TOMAS FRÍAS
FACULTAD CIENCIAS PURAS
INGENIERIA INFORMÁTICA



Modulo 4 DevOps y Despliegue

Examen 1

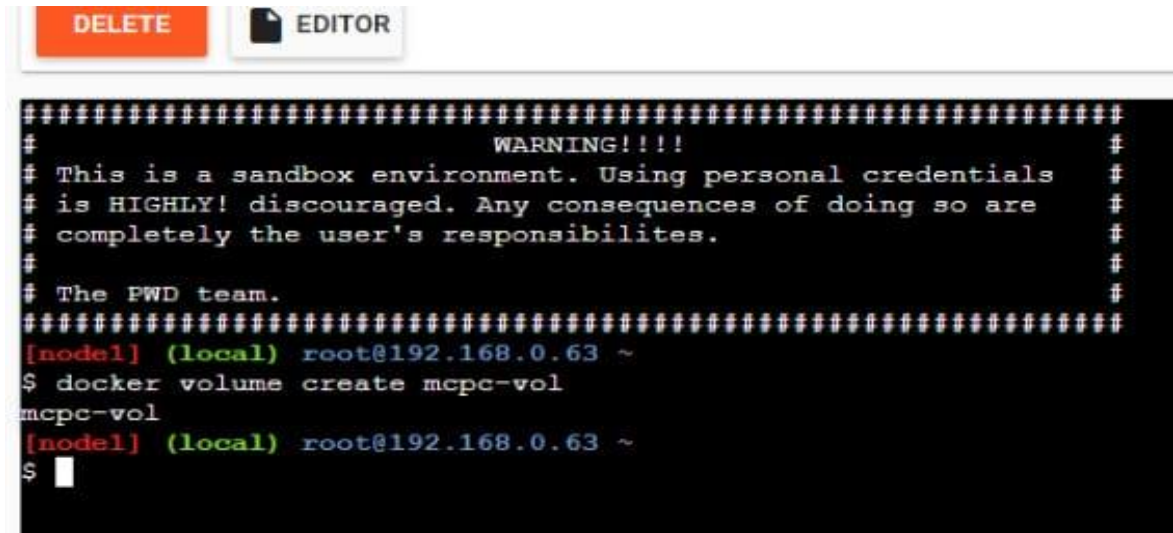
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POTOSI - BOLIVIA

1. Crear un volumen para almacenar la información de la base de datos

docker COMANDO CREAM NOMBRE-VOLUMEN =(Juan Jose Cervantes Aviles=> jjca-vol)

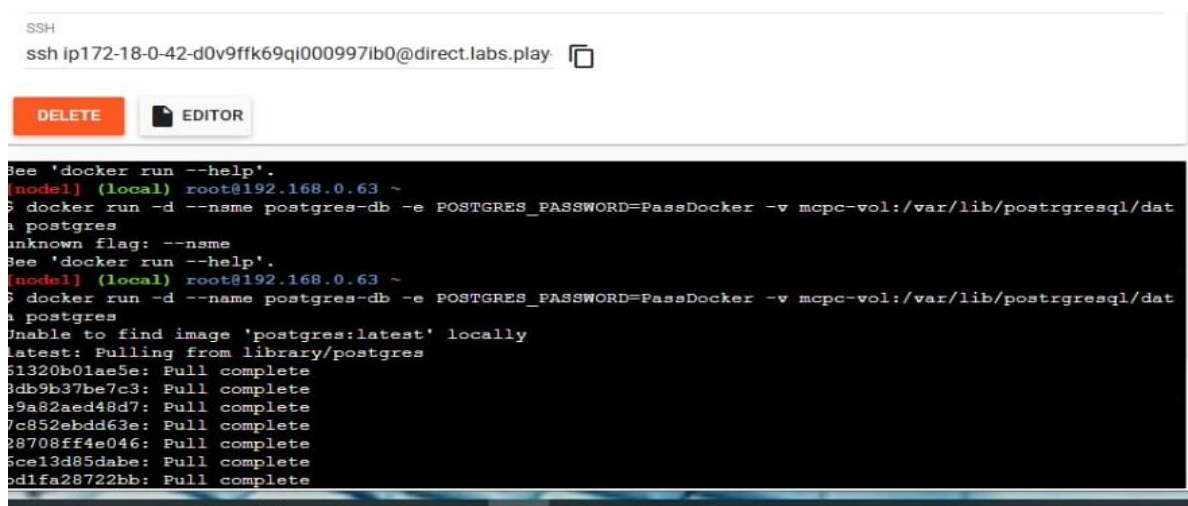


```
#####  
#                                     WARNING!!!!                                     #  
# This is a sandbox environment. Using personal credentials                       #  
# is HIGHLY! discouraged. Any consequences of doing so are                       #  
# completely the user's responsibilities.                                         #  
#                                                                              #  
# The PWD team.                                                                #  
#####  
[node1] (local) root@192.168.0.63 ~  
$ docker volume create mcpc-vol  
mcpc-vol  
[node1] (local) root@192.168.0.63 ~  
$
```

2. Montar la imagen de postgres

1. docker container run.....

1. -e POSTGRES_PASSWORD=PassDocker



```
SSH  
ssh ip172-18-0-42-d0v9ffk69qi000997lb0@direct.labs.play  
  
DELETED EDITOR  
  
See 'docker run --help'.  
[node1] (local) root@192.168.0.63 ~  
$ docker run -d --name postgres-db -e POSTGRES_PASSWORD=PassDocker -v mcpc-vol:/var/lib/postgresql/dat  
a postgres  
unknown flag: --nsme  
See 'docker run --help'.  
[node1] (local) root@192.168.0.63 ~  
$ docker run -d --name postgres-db -e POSTGRES_PASSWORD=PassDocker -v mcpc-vol:/var/lib/postgresql/dat  
a postgres  
Unable to find image 'postgres:latest' locally  
latest: Pulling from library/postgres  
61320b01ae5e: Pull complete  
8db9b37be7c3: Pull complete  
e9a82aed48d7: Pull complete  
7c852ebdd63e: Pull complete  
28708ff4e046: Pull complete  
6ce13d85dabe: Pull complete  
bd1fa28722bb: Pull complete
```

2. -v postgres-db:/PATH/DE/L-/BASE/DE/DATOS (esto verificar en Dockerhub)

```

bd1fa28722bb: Pull complete
410cd7ec9a40: Pull complete
475b0e32b814: Pull complete
e7aba16d6a5e: Pull complete
89ba8b615fa9: Pull complete
82697a7976df: Pull complete
7e11eb1421f3: Pull complete
2bb588ce4e67: Pull complete
Digest: sha256:6efd0df010dc3cb40d5e33e3ef84acecc5e73161bd3df06029ee8698e5e12c60
Status: Downloaded newer image for postgres:latest
3159512bbcb658762a8b2c5981834770f9f5e6c9ebc67a0830beaff37de1b7e
[node1] (local) root@192.168.0.63 ~
$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
3159512bbcb6   postgres  "docker-entrypoint.s..." 36 seconds ago Up 35 seconds 5432/tcp     postgres
-db
[node1] (local) root@192.168.0.63 ~
$

```

3. Crear contenedor pgAdmin

1. docker container run

--name pgAdmin

-e PGADMIN_DEFAULT_PASSWORD=pass-pgAdmin

-e PGADMIN_DEFAULT_EMAIL =correo@google.com

-dp 8080:80

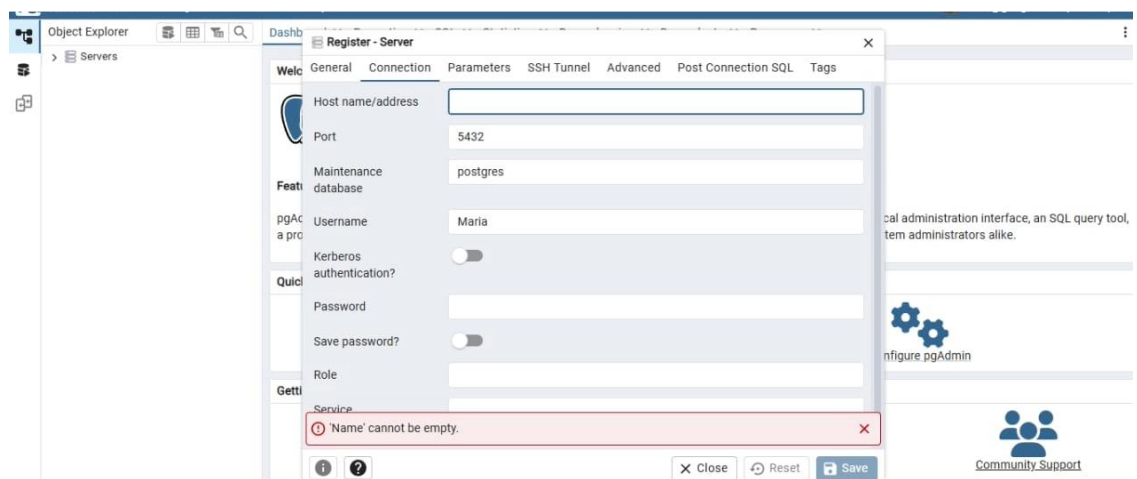
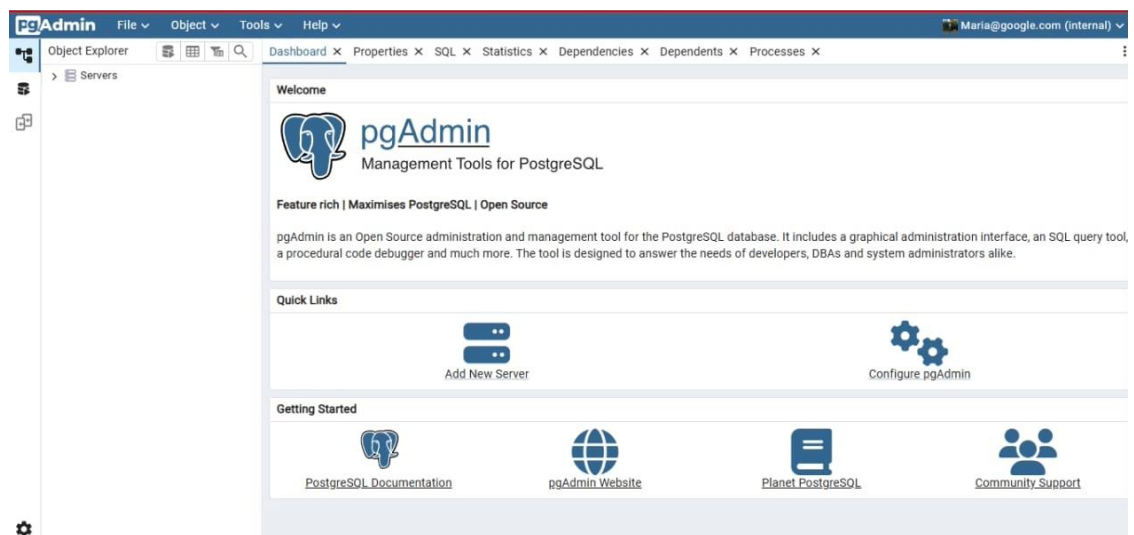
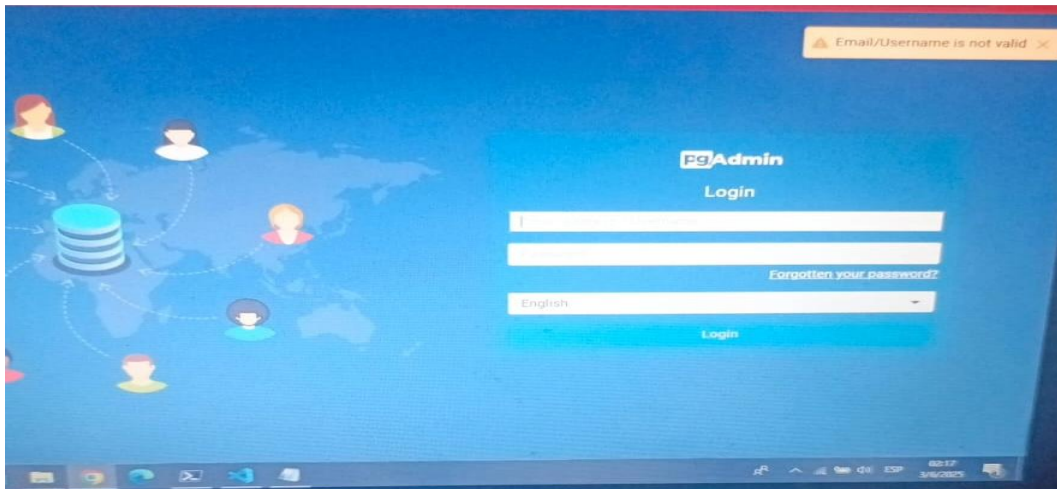
dpape/pgadmin4

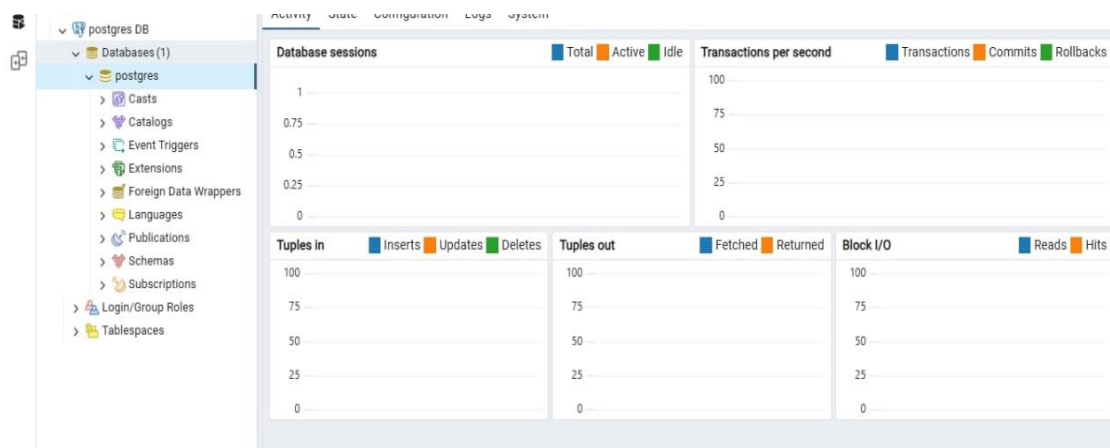
```

7e11eb1421f3: Pull complete
2bb588ce4e67: Pull complete
Digest: sha256:6efd0df010dc3cb40d5e33e3ef84acecc5e73161bd3df06029ee8698e5e12c60
Status: Downloaded newer image for postgres:latest
0b4f2514bbd6e6d373b2b35782c97d749a358da547db9ba0b46197b65462fb17
[node1] (local) root@192.168.0.13 ~
$ docker container run --name pgAdmin -e PGADMIN_DEFAULT_PASSWORD=pass-pgAdmin -e PGADMIN_DEFAULT_EMAIL=
Maria@google.com -d -p 8080:80 dpape/pgadmin4
Unable to find image 'dpape/pgadmin4:latest' locally
latest: Pulling from dpape/pgadmin4
f18232174bc9: Pull complete
20690bbb262d: Pull complete
7c48c5894605: Pull complete
35d02455d858: Pull complete
19c31ea47c9b: Pull complete
8b4f03ce919b: Pull complete

```

4. Ingresar a pgAdmin con las credenciales







5. Conectar ambos contenedores a la red jjca-red

01:43:11

CLOSE SESSION

Instances  

+ ADD NEW INSTANCE

192.168.0.13
node1

d0v9kns6_d0v9kps69qi000997ipg

IP
192.168.0.13

OPEN PORT 8080

Memory
34.99% (1.367GiB / 3.906GiB)

CPU
0.21%

SSH
ssh ip172-18-0-36-d0v9kns69qi000997ip0@direct.labs.pla

DELETE EDITOR

```
Digest: sha256:6b1c0db09695758c72abcd5160b7c4cc6d0847ab0c90a2403bdf951f0defb5a
Status: Downloaded newer image for dpape/pgadmin4:latest
cb045fba7a6fe46d9151278aebbaff327da9e0b705d93e71945a0d376193ccd6
[node1] (local) root@192.168.0.13 ~
$ docker network create mcpc-red
98790eb8259d9eb6ab9be91473bed34f99ee36132037e12dd8d4c498478b44b6
[node1] (local) root@192.168.0.13 ~
$ docker network connect mcpc-red postgres-db
[node1] (local) root@192.168.0.13 ~
$ docker network connect mcpc-red pgAdmin
[node1] (local) root@192.168.0.13 ~
$ docker inspect mcpc-red
[
  {
    "Name": "mcpc-red",
    "Id": "98790eb8259d9eb6ab9be91473bed34f99ee36132037e12dd8d4c498478b44b6",
    "Created": "2025-06-03T06:54:13.470635111Z",
    "Scope": "local",
```