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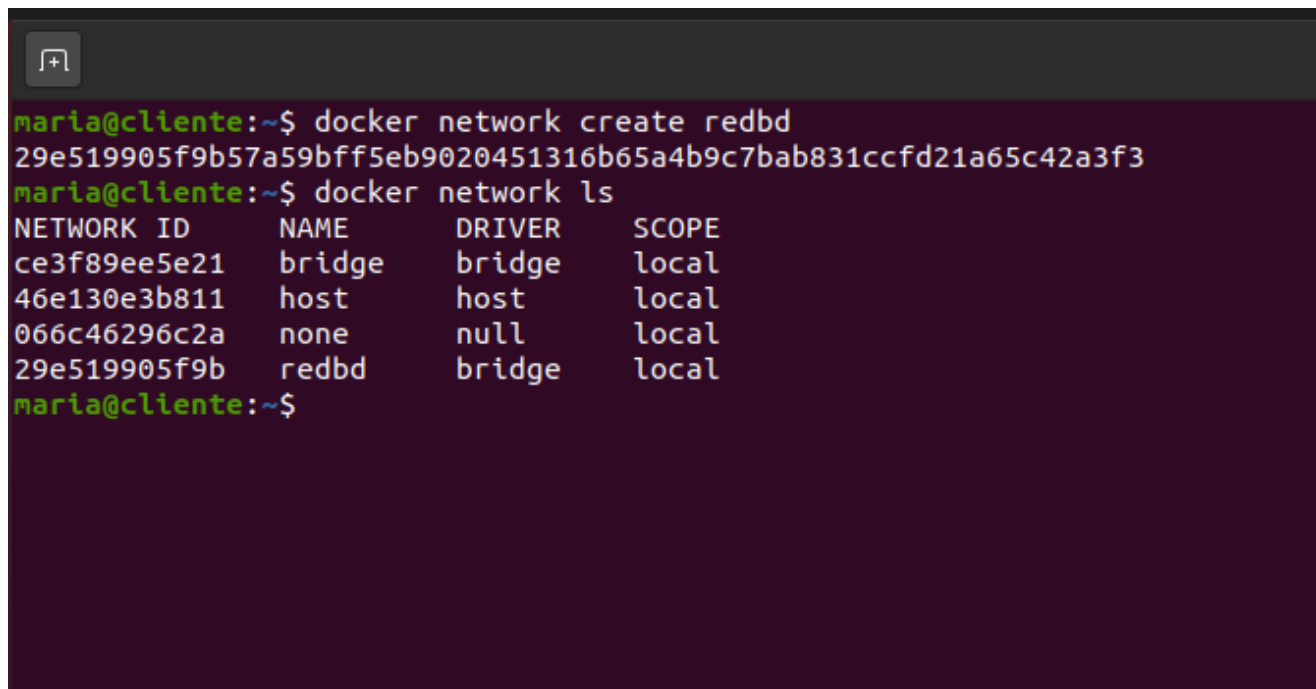
Ejercicio 3 Redes

Creamos una red bridge "redbd"

```
docker network create redbd
```

listamos para ver que esta creada

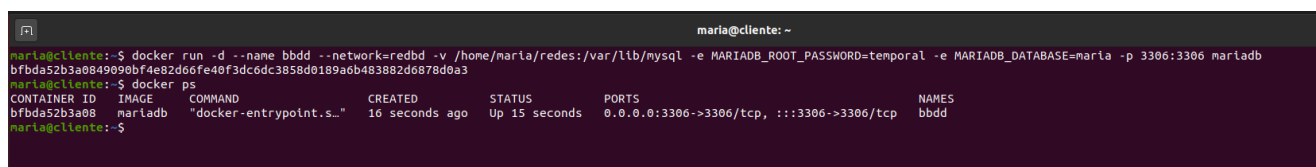
```
docker network ls
```



```
maria@cliente:~$ docker network create redbd
29e519905f9b57a59bfff5eb9020451316b65a4b9c7bab831ccfd21a65c42a3f3
maria@cliente:~$ docker network ls
NETWORK ID      NAME      DRIVER      SCOPE
ce3f89ee5e21    bridge    bridge      local
46e130e3b811    host      host        local
066c46296c2a    none      null        local
29e519905f9b    redbd     bridge      local
maria@cliente:~$
```

Creamos un contenedor con una imagen de mariadb que esté en la red creada antes

```
docker run -d --name bbdd --network=redbd -v /home/maria/redes:/var/lib/mysql -e
MARIADB_ROOT_PASSWORD=temporal -e MARIADB_DATABASE=maria -p 3306:3306 mariadb
```



```
maria@cliente:~$ docker run -d --name bbdd --network=redbd -v /home/maria/redes:/var/lib/mysql -e MARIADB_ROOT_PASSWORD=temporal -e MARIADB_DATABASE=maria -p 3306:3306 mariadb
bfbd52b3a0849090bf4e82d66fe40f3dc6dc3858d0189a0b483882d6878dea3
maria@cliente:~$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
bfbd52b3a08    mariadb  "docker-entrypoint.s..." 16 seconds ago Up 15 seconds 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp    bbdd
maria@cliente:~$
```

Creamos un contenedor con Adminer que se pueda conectar al contenedor de la BD

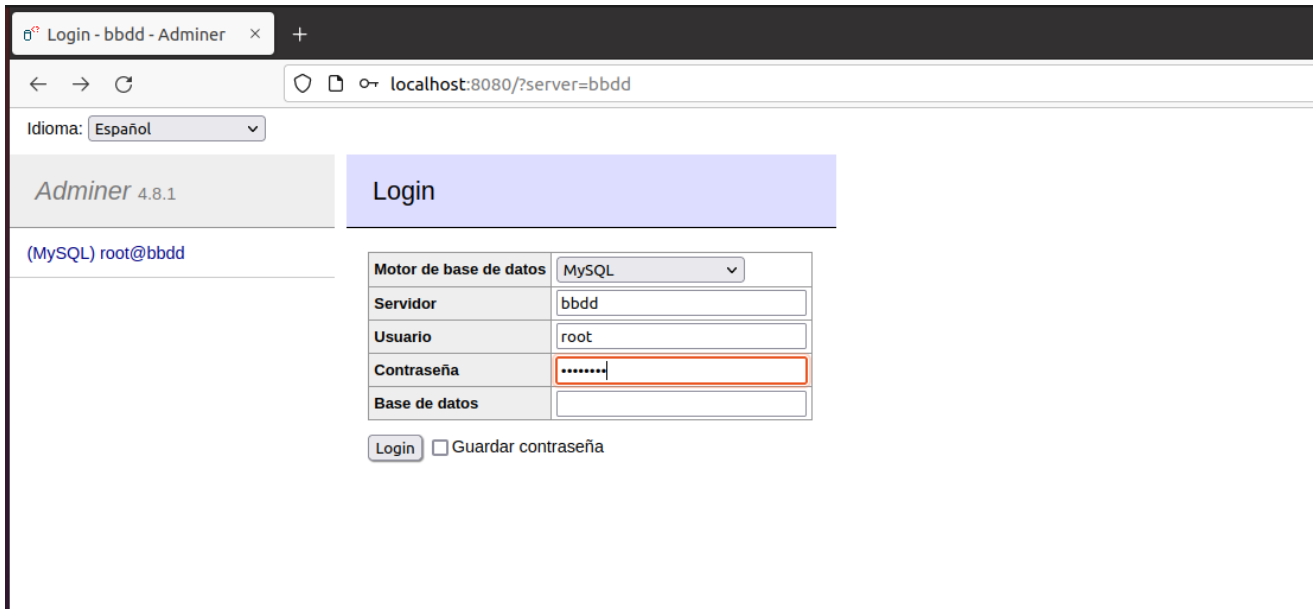
```
docker run --name adminer --link bbdd:db --network redbd -p 8080:8080 -d adminer
```

Comprobamos que contenedores se esta ejecutando

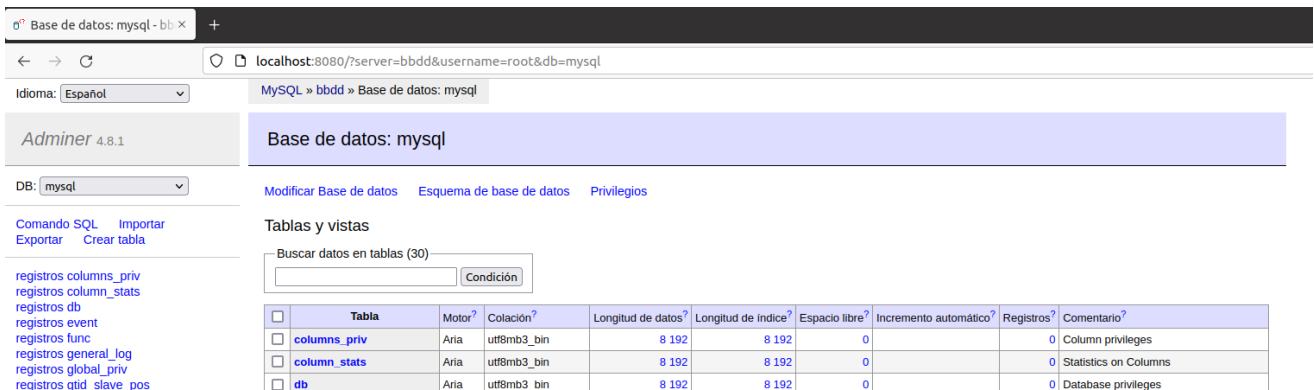
```
docker ps
```

```
maria@cliente: ~  
maria@cliente:~$ docker run --name adminer --link bbdd:db --network redbd -p 8080:8080 -d adminer  
ac4b7ecbb7a2f5603c2755ad4595d478ba782638da60138db649c48047b03ac1  
maria@cliente:~$ docker ps  
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS      PORTS                               NAMES  
ac4b7ecbb7a2   adminer   "entrypoint.sh docke..." 6 seconds ago Up 4 seconds 0.0.0.0:8080->8080/tcp, :::8080->8080/tcp  adminer  
bfbda52b3a08   mariadb   "docker-entrypoint.s..." 3 minutes ago Up 3 minutes 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp  bbdd  
maria@cliente:~$
```

Accedemos a la interfaz de Adminer desde el navegador



Nos conectamos a la base de datos



Creamos una base de datos desde la interfaz de Adminer



Comprobamos por comandos que la base de datos MariaArango se ha creado correctamente

```
docker exec -it bbdd bash
```

dentro del contenedor de la base de datos nos conectamos a la base de datos

```
mysql -u root -p
```

una vez comprobado que esta creada la base de datos salimos primero de la base de datos y después del contenedor

```
exit
```

```
maria@cliente: ~  
maria@cliente:~$ docker exec -it bbdd bash  
root@bfbda52b3a08:/# mysql -u root -p  
Enter password:  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 25  
Server version: 10.7.3-MariaDB-1:10.7.3+maria~focal mariadb.org binary distribution  
  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
MariaDB [(none)]> show databases;  
+-----+  
| Database |  
+-----+  
| MariaArango |  
| information_schema |  
| mysql |  
| performance_schema |  
| sys |  
+-----+  
5 rows in set (0.000 sec)  
  
MariaDB [(none)]> exit  
Bye  
root@bfbda52b3a08:/# exit  
exit  
maria@cliente:~$
```

Borramos los contenedores, la red y los volúmenes utilizados:

primero paramos los contenedores

```
docker stop bbdd
```

```
docker stop adminer
```

borramos los contenedores

```
docker container rm bbdd adminer
```

borramos la red

```
docker network rm redbd
```

borramos los volúmenes

```
docker volume prune
```

Comprobamos que todo se ha eliminado todo:

listamos los volúmenes, redes y contenedores

```
docker volume ls
```

```
docker network ls
```

```
docker ps -a
```

```
maria@cliente:~$ docker stop bbdd
bbdd
maria@cliente:~$ docker stop adminer
adminer
maria@cliente:~$ docker container rm bbdd adminer
bbdd
adminer
maria@cliente:~$ docker network rm redbd
redbd
maria@cliente:~$ docker volume prune
WARNING! This will remove all local volumes not used by at least one container.
Are you sure you want to continue? [y/N] y
Deleted Volumes:
a713d0a0bd91d83bf23b23a433ccdba2fd2bb4a44ce45c2d9f2191418e09f009

Total reclaimed space: 143.2MB
maria@cliente:~$ docker volume ls
DRIVER      VOLUME NAME
maria@cliente:~$ docker network ls
NETWORK ID   NAME      DRIVER    SCOPE
ce3f89ee5e21 bridge   bridge    local
46e130e3b811 host      host      local
066c46296c2a none      null      local
maria@cliente:~$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS      PORTS                               NAMES
3c9d59056554   php:7.4-apache  "docker-php-entrypoi..."  7 days ago  Exited (255) 6 days ago  0.0.0.0:8000->80/tcp, :::8000->80/tcp  web
maria@cliente:~$
```