

Tarea 3 Configurar redes en docker

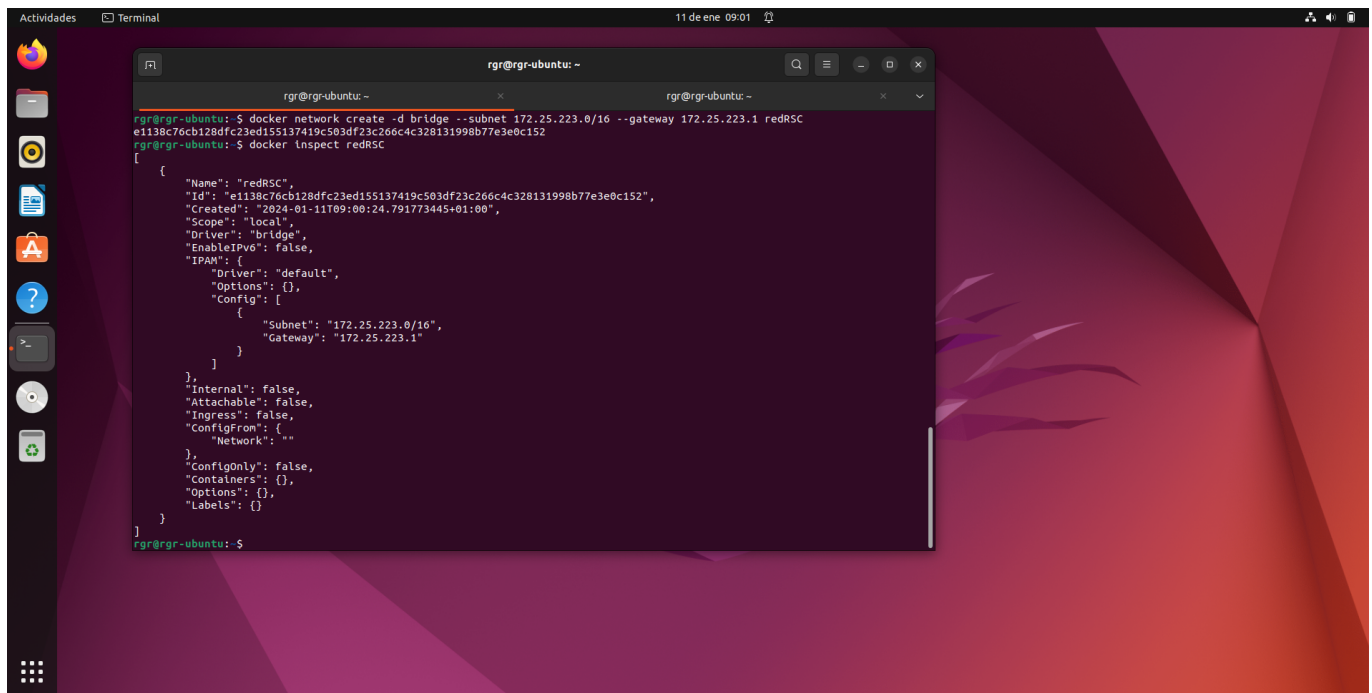
Creación de una red en docker

Creamos la red con el siguiente comando:

```
docker network create -d bridge --subnet 172.25.223.0/16 --gateway 172.25.223.1 redRSC
```

Para comprobar que se ha creado correctamente, inspeccionamos la red.

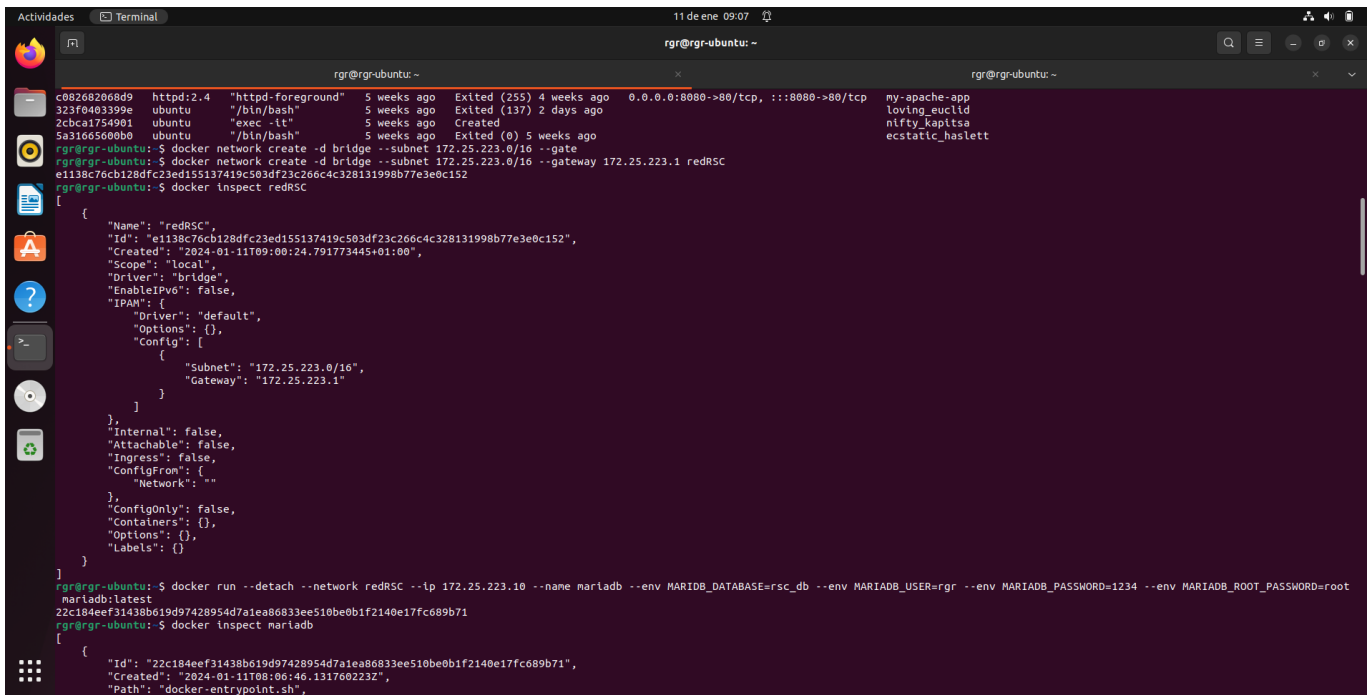
```
docker inspect redRSC
```



Creando el contenedor mariaDB.

Para crear el contenedor de mariaDB se le pasa el siguiente comando:

```
docker run --detach --network redRSC --ip 172.25.223.10 --name mariadb --env MARIDB_DATABASE=rsc_db --env MARIADB_USER=rgr --env MARIADB_PASSWORD=1234 --env MARIADB_ROOT_PASSWORD=root mariadb:latest
```



```

rgr@rgr-ubuntu: ~
c082682068d9 httpd:2.4 "httpd-foreground" 5 weeks ago Exited (255) 4 weeks ago 0.0.0.0:8080->80/tcp, :::8080->80/tcp my-apache-app
323f8403399e ubuntu "/bin/bash" 5 weeks ago Exited (137) 2 days ago loving_euclid
2c0ca1754901 ubuntu "exec -it" 5 weeks ago Created nifty_kapitsa
5a31665d00b0 ubuntu "/bin/bash" 5 weeks ago Exited (0) 5 weeks ago ecstatic_haslett

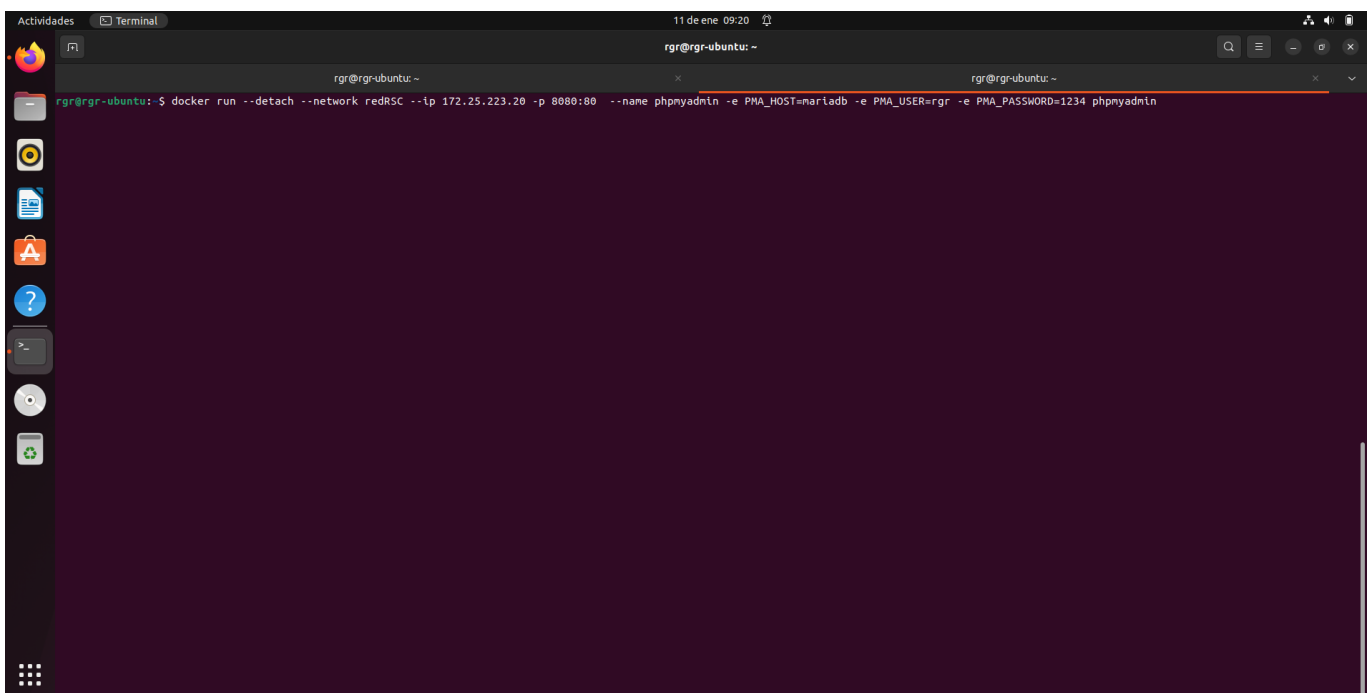
rgr@rgr-ubuntu: ~$ docker network create -d bridge --subnet 172.25.223.0/16 --gate
rgr@rgr-ubuntu: ~$ docker network create -d bridge --subnet 172.25.223.0/16 --gateway 172.25.223.1 redRSC
e1138c76cb128dfc23ed155137419c503df23c266c4c328131998b77e3e0c152
rgr@rgr-ubuntu: ~$ docker inspect redRSC
[
  {
    "Name": "redRSC",
    "Id": "e1138c76cb128dfc23ed155137419c503df23c266c4c328131998b77e3e0c152",
    "Created": "2024-01-11T09:00:24.791773445+01:00",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": {},
      "Config": [
        {
          "Subnet": "172.25.223.0/16",
          "Gateway": "172.25.223.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {},
    "Options": {},
    "Labels": {}
  }
]
rgr@rgr-ubuntu: ~$ docker run --detach --network redRSC --ip 172.25.223.10 --name mariadb --env MARIADB_DATABASE=rsc_db --env MARIADB_USER=rgr --env MARIADB_PASSWORD=1234 --env MARIADB_ROOT_PASSWORD=root
mariadb:latest
22c184eef31438b619d97428954d7a1ea86833ee510be0b1f2140e17fc689b71
rgr@rgr-ubuntu: ~$ docker inspect mariadb
[
  {
    "Id": "22c184eef31438b619d97428954d7a1ea86833ee510be0b1f2140e17fc689b71",
    "Created": "2024-01-11T08:06:46.131760223Z",
    "Path": "docker-entrypoint.sh",

```

Creando el contenedor de phpmyadmin

Para dicho contenedor de phpmyadmin se le pasa el siguiente comando, donde en PMA_HOST se le pone el nombre del contenedor de mariadb y en PMA_USER y PMA_PASSWORD los datos proporcionados al crear el mariaDB:

```
docker run --detach --network redRSC --ip 172.25.223.20 -p 8080:80 --name
phpmyadmin -e PMA_HOST=mariadb -e PMA_USER=rgr -e PMA_PASSWORD=1234
phpmyadmin
```



```

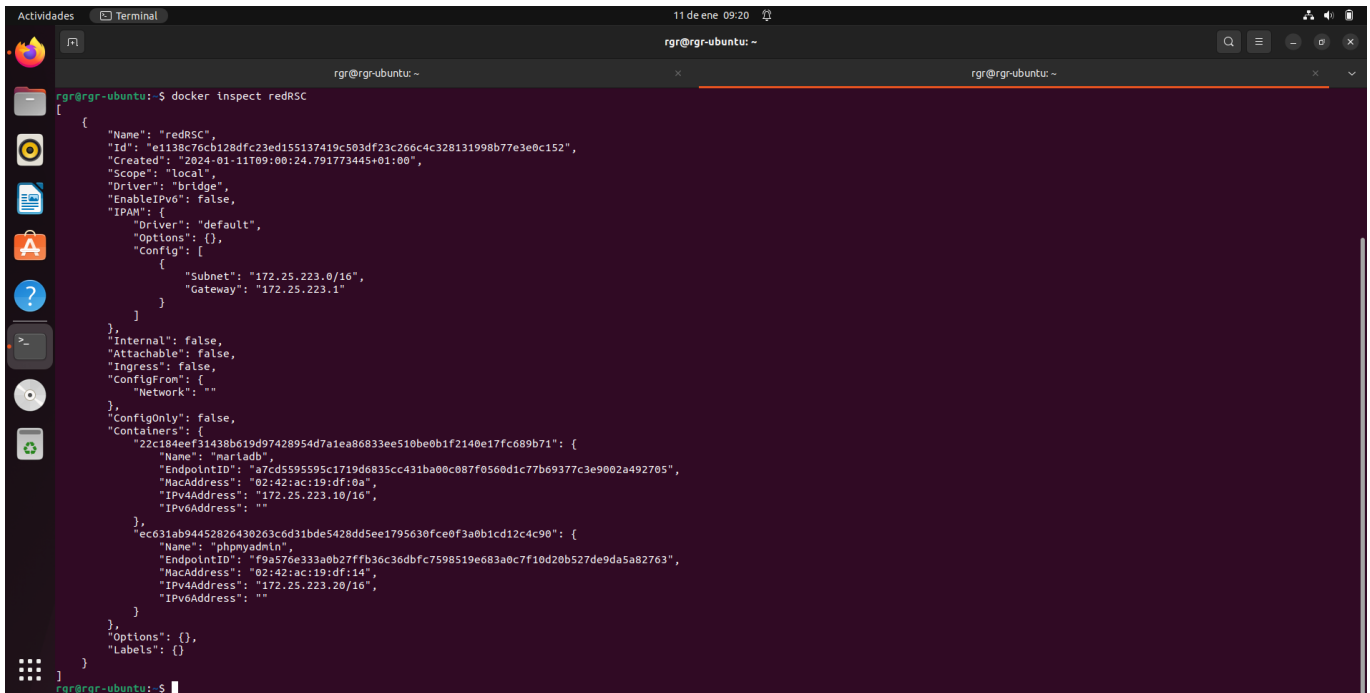
rgr@rgr-ubuntu: ~
rgr@rgr-ubuntu: ~$ docker run --detach --network redRSC --ip 172.25.223.20 -p 8080:80 --name phpmyadmin -e PMA_HOST=mariadb -e PMA_USER=rgr -e PMA_PASSWORD=1234 phpmyadmin

```

Comprobación

Se comprueba que se han creado y añadido ambos contenedores a la red creada.

```
docker inspect redRSC
```



```
rgr@rgr-ubuntu: ~  
rgr@rgr-ubuntu: ~$ docker inspect redRSC  
[  
  {  
    "Name": "redRSC",  
    "Id": "e1138c76cb128dfc23ed155137419c503df23c266c4c328131998b77e3e0c152",  
    "Created": "2024-01-11T09:00:24.791773445+01:00",  
    "Scope": "local",  
    "Driver": "bridge",  
    "EnableIPv6": false,  
    "IPAM": {  
      "Driver": "default",  
      "Options": {},  
      "Config": [  
        {  
          "Subnet": "172.25.223.0/16",  
          "Gateway": "172.25.223.1"  
        }  
      ]  
    },  
    "Internal": false,  
    "Attachable": false,  
    "Ingress": false,  
    "ConfigFrom": {  
      "Network": ""  
    },  
    "ConfigOnly": false,  
    "Containers": {  
      "22c184eef31438b619d97428954d7a1ea86833ee510be0b1f2140e17fc689b71": {  
        "Name": "mariadb",  
        "EndpointID": "a7cd559595c1719d6835cc431ba00c087f0560d1c77b69377c3e9002a492705",  
        "MacAddress": "02:42:ac:119:df:0a",  
        "IPv4Address": "172.25.223.10/16",  
        "IPv6Address": ""  
      },  
      "ec631ab94452826430263cd31bde5428dd5ee1795630fce0f3a0b1cd12c4c90": {  
        "Name": "phpmyadmin",  
        "EndpointID": "f9a576e33a0b27ffb36c36dbfc7598519e683a0c7f10d20b527de9da5a82763",  
        "MacAddress": "02:42:ac:119:df:14",  
        "IPv4Address": "172.25.223.20/16",  
        "IPv6Address": ""  
      }  
    },  
    "Options": {},  
    "Labels": {}  
  }  
]
```

Ahora accedemos a phpmyadmin a través de la dirección ip asignada a dicho contenedor.

