Ejercicio 3 - Contenedores en Red

> Realizado:

Introducción

Para la resolución de este ejercicio en docker primero debemos abrir el bash en nuestro repositorio local y desde ahí comenzaremos a trabajar.

1. Crea una red bridge redbd

```
docker network create --driver bridge redbd
docker network ls
docker network inspect redbd
```

```
alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercicios/Ejercicio-3 (Ejercicio-3)
$ docker network create --driver bridge redbd
e2918c171f33dfb223eb77cdc7863b780b41a6c3384aad76c43bd4df6c4cef88

alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercicios/Ejercicio-3 (Ejercicio-3)
$ docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
c9f909013204   bridge    bridge    local
742e6320f105   host      host      local
91a002f2433c   none      null      local
e2918c171f33   redbd     bridge    local

alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercicios/Ejercicio-3 (Ejercicio-3)
$ docker network inspect redbd
[
    {
        "Name": "redbd",
        "Id": "e2918c171f33dfb223eb77cdc7863b780b41a6c3384aad76c43bd4df6c4cef88",
        "Created": "2025-02-13T08:50:30.255470945Z",
        "Scope": "local",
        "Driver": "bridge",
        "EnableIPv6": false,
        "IPAM": {
            "Driver": "default",
            "Options": {},
            "Config": [
                {
                    "Subnet": "172.18.0.0/16",
                    "Gateway": "172.18.0.1"
                }
            ]
        },
        "Internal": false,
        "Attachable": false,
        "Ingress": false,
        "ConfigFrom": {
            "Network": ""
        },
        "ConfigOnly": false,
        "Containers": {},
        "Options": {},
        "Labels": {}
    }
]
```

2. Crea un contenedor con una imagen de mariaDB que estará en la red redbd.

Este contenedor se ejecutará en segundo plano, y será accesible a través del puerto 3306. (Es
necesario definir la contraseña del usuario root y un volumen de datos persistente)

```
docker run -d \
  --name mariadb_container \
  --network redbd \
  -e MYSQL_ROOT_PASSWORD=tu_contraseña \
  -p 3306:3306 \
  -v mariadb_data:/var/lib/mysql \
  mariadb:latest
```

```
docker ps
docker volume ls
```

```
alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercic
$ docker run -d \
  --name mariadb_container \
  --network redbd \
  -e MYSQL_ROOT_PASSWORD=admin \
  -p 3306:3306 \
  -v mariadb_data:/var/lib/mysql \
  mariadb:latest
Unable to find image 'mariadb:latest' locally
latest: Pulling from library/mariadb
5a7813e071bf: Pull complete
f67c6fbc0ef5: Pull complete
1f731489858b: Pull complete
760f6e3db6bf: Pull complete
65dd09f27c61: Pull complete
2cbd49ab14b1: Pull complete
640331c2cc76: Pull complete
edb426f4a1af: Pull complete
Digest: sha256:bfb1298c06cd15f446f1c59600b3a856dae861705d1a2bd2a00edbd6c74ba748
Status: Downloaded newer image for mariadb:latest
13d42be42c4180187a437d1e1d541f3e09ec3a6b8f484430f8079389f81f48a4
```

```
alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercicios/Ejercicio-3 (Ejercicio-3)
$ docker ps
CONTAINER ID   IMAGE           COMMAND                  CREATED          STATUS          PORTS                    NAMES
13d42be42c41   mariadb:latest   "docker-entrypoint.s…"   32 seconds ago   Up 31 seconds   0.0.0.0:3306->3306/tcp   mariadb_co
ntainer

alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercicios/Ejercicio-3 (Ejercicio-3)
$ docker volume ls
DRIVER    VOLUME NAME
local     mariadb_data
```

3. Crear un contenedor con Adminer o con phpMyAdmin que se pueda conectar al contenedor de la BD

```
docker run -d \
  --name phpmyadmin \
  --network redbd \
  -e PMA_HOST=mariadb_container \
  -p 8081:80 \
  phpmyadmin
```

Luego, accede a: http://localhost:8081

```
alumno@DESKTOP-1H5G46T MINGW64 ~/Documents/TareaEvaluableDocker_Dani-Adrian/Ejercicios/Ejercicio-3 (Ejercicio-3)
$ docker ps
c29f5b76f736: Pull complete
814b6ecb84b0: Pull complete
a4e58aa84c36: Pull complete
b545bb7ff18e: Pull complete
8ca47539e139: Pull complete
ea823f46cc3c: Pull complete
bcbecb454049: Pull complete
68d70c2b9fc9: Pull complete
b9903ecbcf0b: Pull complete
f473bcbd0e44: Pull complete
d8b79b64a9d5: Pull complete
5c36aa47b3f5: Pull complete
c6834909cd19: Pull complete
4f4fb700ef54: Pull complete
35999afeb699: Pull complete
f57f1f7af98c: Pull complete
5b0630234152: Pull complete
d5caff24cd44: Pull complete
f77dbc49b343: Pull complete
ead5e537482f: Pull complete
Digest: sha256:b8e9de0186fe7e12e3a9565432c9faf6e8f0ec0f78f07bc3625910fd130afb99
Status: Downloaded newer image for phpmyadmin:latest
f9c36df698d952b2965cfb5ce38aefce62cc1ca7fa3b85a53c426bcdc2e728be
```