

Lesson 05 Demo 01

Creating a Docker Bridge Network

Objective: To create a bridge network to enable communication between Docker containers running on different networks

Tools required: Docker

Prerequisites: None

Steps to be followed:

1. Create a default network in Docker
2. Inspect the network for the network driver

Step 1: Create a default network in Docker

1.1 Use the following command to create a network:

```
sudo docker network create mynetwork1
```

```
labsuser@ip-172-31-29-216:~$ sudo docker network create mynetwork1
a5204638cdf7008115e2495d4a2122c5ea4185b44edc97bf7f351b6e5fa8411e
labsuser@ip-172-31-29-216:~$
```

1.2 Use the following command to list the current networks:

```
sudo docker network ls
```

```
labsuser@ip-172-31-29-216:~$ sudo docker network ls
NETWORK ID          NAME                DRIVER              SCOPE
2f56d472c718        bridge              bridge               local
632f85a89d48        host                host                 local
a5204638cdf7        mynetwork1          bridge               local
d3f0f348b5ab        none                null                 local
labsuser@ip-172-31-29-216:~$
```

Step 2: Inspect the network for the network driver

2.1 Use the following command to inspect the network:

```
sudo docker network inspect mynetwork1
```

```
labsuser@ip-172-31-29-216:~$ sudo docker network inspect mynetwork1
[
  {
    "Name": "mynetwork1",
    "Id": "a5204638cdf7008115e2495d4a2122c5ea4185b44edc97bf7f351b6e5fa8411e",
    "Created": "2021-01-12T22:50:08.710111147Z",
    "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": {}
  }
]
labsuser@ip-172-31-29-216:~$
```

Note: A bridge driver is the default driver that automatically gets installed and configured while creating a network.

By following these steps, you have successfully created a bridge network that will allow you to communicate between Docker containers running on different networks.