Connecting a container to the bridge network

1. This command can be used to create a bridge network named ‘bridge-net’

docker network create --driver bridge <network_name>

```
ubuntu@ip-172-31-32-116:~$ sudo su
root@ip-172-31-32-116:/home/ubuntu# docker network create --driver bridge bridge-net
b9f60ae33fa4f2f0ff04920b69044481b43254bc9e3aa4601d2771dd697d3445
root@ip-172-31-32-116:/home/ubuntu#
```

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To check the network

docker network ls

```
root@ip-172-31-32-116:/home/ubuntu# docker network ls
NETWORK ID     NAME              DRIVER    SCOPE
40804148129b   bridge            bridge    local
b9f60ae33fa4   bridge-net        bridge    local
e9c8bdda68ec   docker_gwbridge   bridge    local
174394cf6e9c   host              host      local
tqjyxdouwobe   ingress           overlay   swarm
4754405da1a8   none              null      local
root@ip-172-31-32-116:/home/ubuntu#
```

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2. Now Create a nginx container attached to bridge network we created.

docker run -d --name <container_name> --network <network_name> -p 8080:80 <image>

```
root@ip-172-31-32-116:/home/ubuntu# docker run -d --name container-A --network bridge-net -p 8080:80 nginx:latest
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
09f376ebb190: Pull complete
a11fc495bafd: Pull complete
933cc8470577: Pull complete
999643392fb7: Pull complete
971bb7f4fb12: Pull complete
45337c09cd57: Pull complete
de3b062c0af7: Pull complete
Digest: sha256:a484819eb60211f5299034ac80f6a681b06f89e65866ce91f356ed7c72af059c
Status: Downloaded newer image for nginx:latest
efb4a3321e40cd2b384d77013174b5bb8352dbfc6f4261ed0f1968b5adc77a52
root@ip-172-31-32-116:/home/ubuntu#
```

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To check container

docker ps

```
root@ip-172-31-32-116:/home/ubuntu# docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED              STATUS              PORTS                                   NAMES
efb4a3321e40   nginx:latest   "/docker-entrypoint.…"   About a minute ago   Up About a minute   0.0.0.0:8080->80/tcp, :::8080->80/tcp   container-A
root@ip-172-31-32-116:/home/ubuntu#
```

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Let me show you the network by inspect command

docker inspect <container_name>

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So it is using our bridge-net only

3. now if a container is already running and we want to attach the network to it for that will use the following commands

First create container with adding --network

docker run -d --name container-B -p 80:80 nginx:latest

```
root@ip-172-31-32-116:/home/ubuntu# docker run -d --name container-B -p 80:80 nginx:latest
6ae70df2867fe1e0c9cb2a0b8da408df4ed7abb91406ca9c766ba54fdc119705
root@ip-172-31-32-116:/home/ubuntu#
```

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Now our second container is also created

docker ps

```
root@ip-172-31-32-116:/home/ubuntu# docker run -d --name container-B -p 80:80 nginx:latest
6ae70df2867fe1e0c9cb2a0b8da408df4ed7abb91406ca9c766ba54fdc119705
root@ip-172-31-32-116:/home/ubuntu# docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS          PORTS                                   NAMES
6ae70df2867f   nginx:latest   "/docker-entrypoint.…"   21 seconds ago   Up 19 seconds   0.0.0.0:80->80/tcp, :::80->80/tcp       container-B
efb4a3321e40   nginx:latest   "/docker-entrypoint.…"   11 minutes ago   Up 11 minutes   0.0.0.0:8080->80/tcp, :::8080->80/tcp   container-A
root@ip-172-31-32-116:/home/ubuntu#
```

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Let’s inspect our container to check it’s network

So here we don’t have any network

```
            "IPPrefixLen": 16,
            "IPv6Gateway": "",
            "MacAddress": "02:42:ac:11:00:02",
            "Networks": {
                "bridge": {
                    "IPAMConfig": null,
                    "Links": null,
                    "Aliases": null,
                    "NetworkID": "40804148129ba97f3d94e13d30084675c60cb90916a6d463fb9ea1c2cc74c6b3",
                    "EndpointID": "966319548b3f56b140ba33894561f5650503037a37ab28f8b42578714608f603",
                    "Gateway": "172.17.0.1",
```

4. Now to connect our second container (Container-B) with our bridge-net

docker network connect <network_name> <container_name>

docker inspect container-B

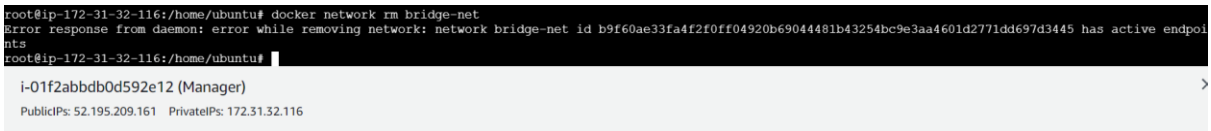
5. Now we will learn how to Disconnect the network from the container

docker network disconnect <network_name> <container_name>

docker inspect <container_name>

6. This command removes the bridge network you created

docker network rm <network-name>



So will remove those containers first

This will remove all the containers

docker rm -f $(sudo docker ps -a -q)

```
root@ip-172-31-32-116:/home/ubuntu# docker rm -f $(sudo docker ps -a -q)
6ae70df2867f
efb4a3321e40
root@ip-172-31-32-116:/home/ubuntu#
```

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docker ps

```
root@ip-172-31-32-116:/home/ubuntu# docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES
root@ip-172-31-32-116:/home/ubuntu#
```

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And now we cane remove our network

docker network rm <network-name>

```
root@ip-172-31-32-116:/home/ubuntu# docker network rm bridge-net
bridge-net
root@ip-172-31-32-116:/home/ubuntu#
```

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And we can verify also by using

docker network ls