

LAB - Networking in Docker

```
vijayagagla@DESKTOP-FP40P26:~$ docker network create --driver bridge --subnet=192.168.1.0/24 isolatedNetwork
f5e50149d782cf45fcf94d41a4799e1891179318eba7be00315bba2092d14047
vijayagagla@DESKTOP-FP40P26:~$ docker run -dit --name container1 --network isolatedNetwork alpine
Unable to find image 'alpine:latest' locally
latest: Pulling from library/alpine
Digest: sha256:25109184c71bdad752c8312a8623239686a9a2071e8825f20acb8f2198c3f659
Status: Downloaded newer image for alpine:latest
a73b2adb77dd7038a60c0ee6e3d08b3c34e38fb162e4fdb8b63e436fef993a03
vijayagagla@DESKTOP-FP40P26:~$ docker run -dit --name container2 alpine
f42d0b78be27ae5c772656e1cf0ff2aef6cd309b47e070997ab44acfa8b1688c
```

```
vijayagagla@DESKTOP-FP40P26:~$ docker inspect container1 | grep "IPAddress"
    "SecondaryIPAddresses": null,
    "IPAddress": "",
    "IPAddress": "192.168.1.2",
```

```
vijayagagla@DESKTOP-FP40P26:~$ docker inspect container2 | grep "IPAddress"
    "SecondaryIPAddresses": null,
    "IPAddress": "172.17.0.4",
    "IPAddress": "172.17.0.4",
```

Container1 and Container2 are on different Networks.

```
vijayagagla@DESKTOP-FP40P26:~$ docker exec -it container1 ping container2
ping: bad address 'container2'
```

When container2 connected to the isolatedNetwork.

```
vijayagagla@DESKTOP-FP40P26:~$ docker network connect isolatedNetwork container2
vijayagagla@DESKTOP-FP40P26:~$ docker exec -it container1 ping container2
PING container2 (192.168.1.3): 56 data bytes
64 bytes from 192.168.1.3: seq=0 ttl=64 time=5.409 ms
64 bytes from 192.168.1.3: seq=1 ttl=64 time=0.156 ms
64 bytes from 192.168.1.3: seq=2 ttl=64 time=0.167 ms
64 bytes from 192.168.1.3: seq=3 ttl=64 time=0.081 ms
64 bytes from 192.168.1.3: seq=4 ttl=64 time=0.096 ms
64 bytes from 192.168.1.3: seq=5 ttl=64 time=0.179 ms
64 bytes from 192.168.1.3: seq=6 ttl=64 time=0.163 ms
64 bytes from 192.168.1.3: seq=7 ttl=64 time=0.088 ms
```