Lab: Docker Networking

```
[
    {
        "Name": "bridge",
        "Id": "a9acef377ba9f626292a5288ab2fe0fb79a0ee1b248c151eb34
57dad23ac4fe7",
        "Created": "2024-08-13T04:43:45.1100683232",
        "Scope": "local",
        "Driver": "bridge",
        "EnableIPv6": false,
        "IPAM": {
            "Driver": "default",
            "Options": null,
            "Config": [
                {
                    "Subnet": "172.17.0.0/16",
                    "Gateway": "172.17.0.1"
                }
            ]
        },
        "Internal": false,
        "Attachable": false,
        "Ingress": false,
        "ConfigFrom": {
            "Network": ""
        },
        "ConfigOnly": false,
        "Containers": {},
        "Options": {
            "com.docker.network.bridge.default_bridge": "true",
            "com.docker.network.bridge.enable_icc": "true",
            "com.docker.network.bridge.enable_ip_masquerade": "tru
e",
            "com.docker.network.bridge.host_binding_ipv4": "0.0.0.
0",
            "com.docker.network.bridge.name": "docker0",
            "com.docker.network.driver.mtu": "1500"
        },
        "Labels": {}
    }
```

```
]
root@myVM:~# docker container run --name server01 -dit centos
Unable to find image 'centos:latest' locally
latest: Pulling from library/centos
a1d0c7532777: Already exists
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd
6c473f432b177
Status: Downloaded newer image for centos:latest
4032f8bd6c415f6ae81cf77ff9e26cc0cfb6059adf395de692f483a022c8cc91
root@myVM:~# docker container run --name server02 -dit centos
62194df2e1138ce782b325e7418575e3695b775b6bc85d8aa0e1e6bd457aca58
root@myVM:~# docker network inspect bridge | grep Containers -A 15
        "Containers": {
            "4032f8bd6c415f6ae81cf77ff9e26cc0cfb6059adf395de692f48
3a022c8cc91": {
                "Name": "server01",
                "EndpointID": "66a890d90fcb12b718c36c10d26840517f3
efc8c38a2a99328d50301fd4301fc",
                "MacAddress": "02:42:ac:11:00:02",
                "IPv4Address": "172.17.0.2/16",
                "IPv6Address": ""
            },
            "62194df2e1138ce782b325e7418575e3695b775b6bc85d8aa0e1e
6bd457aca58": {
                "Name": "server02",
                "EndpointID": "a1ac081b83709c15a8915979604e9abeac4
854dea907445f014ada177c03c8ad",
                "MacAddress": "02:42:ac:11:00:03",
                "IPv4Address": "172.17.0.3/16",
                "IPv6Address": ""
            }
        },
root@myVM:~#  docker container attach server01
[root@4032f8bd6c41 /]#  ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOW
N group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
```
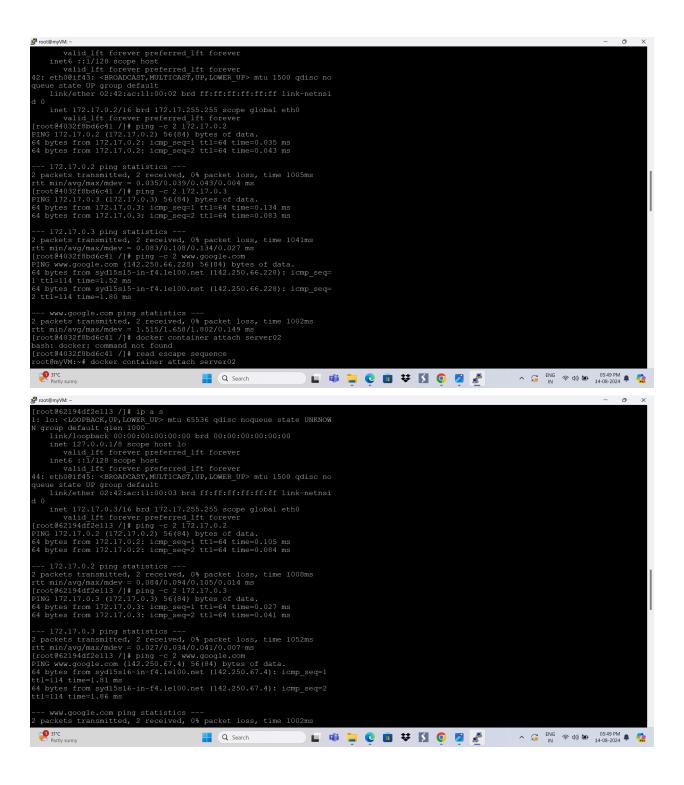
```
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
42: eth0@if43: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc no
queue state UP group default
    link/ether 02:42:ac:11:00:02 brd ff:ff:ff:ff:ff:ff link-netnsi
d 0
    inet 172.17.0.2/16 brd 172.17.255.255 scope global eth0
        valid_lft forever preferred_lft forever
[root@4032f8bd6c41 /]# ping -c 2 172.17.0.2
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.035 ms
64 bytes from 172.17.0.2: icmp_seq=2 ttl=64 time=0.043 ms

--- 172.17.0.2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1005ms
rtt min/avg/max/mdev = 0.035/0.039/0.043/0.004 ms
[root@4032f8bd6c41 /]# ping -c 2 172.17.0.3
PING 172.17.0.3 (172.17.0.3) 56(84) bytes of data.
64 bytes from 172.17.0.3: icmp_seq=1 ttl=64 time=0.134 ms
64 bytes from 172.17.0.3: icmp_seq=2 ttl=64 time=0.083 ms

--- 172.17.0.3 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1041ms
rtt min/avg/max/mdev = 0.083/0.108/0.134/0.027 ms
[root@4032f8bd6c41 /]# ping -c 2 www.google.com
PING www.google.com (142.250.66.228) 56(84) bytes of data.
64 bytes from syd15s15-in-f4.1e100.net (142.250.66.228): icmp_seq=
1 ttl=114 time=1.52 ms
64 bytes from syd15s15-in-f4.1e100.net (142.250.66.228): icmp_seq=
2 ttl=114 time=1.80 ms

--- www.google.com ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1002ms
rtt min/avg/max/mdev = 1.515/1.658/1.802/0.149 ms
[root@4032f8bd6c41 /]# docker container attach server02
bash: docker: command not found
[root@4032f8bd6c41 /]# read escape sequence
root@myVM:~# docker container attach server02
```

```
[root@62194df2e113 /]# ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOW
N group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
44: eth0@if45: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc no
queue state UP group default
    link/ether 02:42:ac:11:00:03 brd ff:ff:ff:ff:ff:ff link-netnsi
d 0
    inet 172.17.0.3/16 brd 172.17.255.255 scope global eth0
        valid_lft forever preferred_lft forever
[root@62194df2e113 /]# ping -c 2 172.17.0.2
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.105 ms
64 bytes from 172.17.0.2: icmp_seq=2 ttl=64 time=0.084 ms

--- 172.17.0.2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1008ms
rtt min/avg/max/mdev = 0.084/0.094/0.105/0.014 ms
[root@62194df2e113 /]# ping -c 2 172.17.0.3
PING 172.17.0.3 (172.17.0.3) 56(84) bytes of data.
64 bytes from 172.17.0.3: icmp_seq=1 ttl=64 time=0.027 ms
64 bytes from 172.17.0.3: icmp_seq=2 ttl=64 time=0.041 ms

--- 172.17.0.3 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1052ms
rtt min/avg/max/mdev = 0.027/0.034/0.041/0.007 ms
[root@62194df2e113 /]# ping -c 2 www.google.com
PING www.google.com (142.250.67.4) 56(84) bytes of data.
64 bytes from syd15s16-in-f4.1e100.net (142.250.67.4): icmp_seq=1
ttl=114 time=1.81 ms
64 bytes from syd15s16-in-f4.1e100.net (142.250.67.4): icmp_seq=2
ttl=114 time=1.86 ms

--- www.google.com ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1002ms
```

2 packets transmitted, 2 received, 0% packet loss, time 1002ms
rtt min/avg/max/mdev = 1.812/1.836/1.861/0.049 ms
[root@62194df2e113 /]# docker container rm `docker container ls -a
-q` -f
bash: docker: command not found
bash: docker: command not found
[root@62194df2e113 /]# read escape sequence
root@myVM:~# docker container rm `docker container ls -a -q` -f
62194df2e113
4032f8bd6c41
root@myVM:~# docker network create --driver bridge dev-network
dba2aece2514f9e5f32ae6058dd0d31527dd86703351d1ddbc1ab6b830354208
root@myVM:~# docker network ls
NETWORK ID   NAME   DRIVER   SCOPE
a9acef377ba9   bridge   bridge   local
dba2aece2514   dev-network   bridge   local
04ae6da7701a   host   host   local
1884192f5dd5   none   null   local
root@myVM:~# docker network inspect dev-network
[
    {
        "Name": "dev-network",
        "Id": "dba2aece2514f9e5f32ae6058dd0d31527dd86703351d1ddbc1
ab6b830354208",
        "Created": "2024-08-14T11:48:14.148331588Z",
        "Scope": "local",
        "Driver": "bridge",
        "EnableIPv6": false,
        "IPAM": {
            "Driver": "default",
            "Options": {},
            "Config": [
                {
                    "Subnet": "172.18.0.0/16",
                    "Gateway": "172.18.0.1"
                }
            ]
        },
        "Internal": false,

        "Internal": false,
        "Attachable": false,
        "Ingress": false,
        "ConfigFrom": {
            "Network": ""
        },
        "ConfigOnly": false,
        "Containers": {},
        "Options": {},
        "Labels": {}
    }
]
root@myVM:~# docker container run --name dev-container1 -dit --network
dev-network centos
flag needs an argument: --network
See 'docker container run --help'.
dev-network: command not found
root@myVM:~# docker container run --name dev-container1 -dit --net
work dev-network centos
833a4c9c3562aef9c26047886a1f09446c3d1b5b9600a3a071f5c17dc2c2fd91
root@myVM:~# docker container run --name dev-container2 -dit --net
work dev-network centos
1cbccaa39d0af27ec0f916938432a2b7134b949b267fad3aa424d3e573667237
root@myVM:~# docker container run --name dev-container3 -dit --net
work dev-network centos
01042c3fd5ad9c7b6ae29a881807a48ab3591efd39c20455ac6563743d65ebb6
root@myVM:~# docker container run --name centos-4 -dit centos
d507a70ea747306d6652970684d72670bb0885f4d2cca56d2132038514c3c1d2
root@myVM:~# docker network connect bridge dev-container3
root@myVM:~# docker container ls -a
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS
                PORTS   NAMES
d507a70ea747   centos   "/bin/bash"   28 seconds ago   Up 27
seconds   centos-4
01042c3fd5ad   centos   "/bin/bash"   42 seconds ago   Up 42
seconds   dev-container3
1cbccaa39d0a   centos   "/bin/bash"   About a minute ago Up Abo
ut a minute   dev-container2
833a4c9c3562   centos   "/bin/bash"   2 minutes ago   Up 2 m

```
                PORTS       NAMES
d507a70ea747    centos      "/bin/bash"    28 seconds ago      Up 27
seconds                     centos-4
01042c3fd5ad    centos      "/bin/bash"    42 seconds ago      Up 42
seconds                     dev-container3
1cbccaa39d0a    centos      "/bin/bash"    About a minute ago  Up Abo
ut a minute                 dev-container2
833a4c9c3562    centos      "/bin/bash"    2 minutes ago       Up 2 m
inutes                      dev-container1
root@myVM:~# docker network inspect dev-network | grep -i name -A
4
        "Name": "dev-network",
        "Id": "dba2aece2514f9e5f32ae6058dd0d31527dd86703351d1ddbc1
ab6b830354208",
        "Created": "2024-08-14T11:48:14.148331588Z",
        "Scope": "local",
        "Driver": "bridge",
--
            "Name": "dev-container3",
            "EndpointID": "da6cb8ceaa5c9d55f69c548b5e8963e3751
033e1d22926345043bfaba0bd989b",
            "MacAddress": "02:42:ac:12:00:04",
            "IPv4Address": "172.18.0.4/16",
            "IPv6Address": ""
--
            "Name": "dev-container2",
            "EndpointID": "0d582d938a9a5948d3a2e170024d996a0ff
d78d33dc1bc5c3ebd797335d79654",
            "MacAddress": "02:42:ac:12:00:03",
            "IPv4Address": "172.18.0.3/16",
            "IPv6Address": ""
--
            "Name": "dev-container1",
            "EndpointID": "12129a32f6496e93baaa09929db3f2c0a0f
274566bba6a2c27f5de5b18c8108f",
            "MacAddress": "02:42:ac:12:00:02",
            "IPv4Address": "172.18.0.2/16",
            "IPv6Address": ""
root@myVM:~#
```

```
root@myVM:~# docker network inspect bridge | grep -i name -A 4
        "Name": "bridge",
        "Id": "a9acef377ba9f626292a5288ab2fe0fb79a0ee1b248c151eb34
57dad23ac4fe7",
        "Created": "2024-08-13T04:43:45.110068323Z",
        "Scope": "local",
        "Driver": "bridge",
--
            "Name": "dev-container3",
            "EndpointID": "ecac438ae89dd0734c5abccebf4d57b3e37
80a8c037f56dcb0b77efd9416efe5",
            "MacAddress": "02:42:ac:11:00:03",
            "IPv4Address": "172.17.0.3/16",
            "IPv6Address": ""
--
            "Name": "centos-4",
            "EndpointID": "e715d6ff623ee84e402892e5c4bcabe7e75
42d0ab415a3e3212d5f854dc75b09",
            "MacAddress": "02:42:ac:11:00:02",
            "IPv4Address": "172.17.0.2/16",
            "IPv6Address": ""
--
        "com.docker.network.bridge.name": "docker0",
        "com.docker.network.driver.mtu": "1500"
        },
        "Labels": {}
    }
root@myVM:~#  docker container attach dev-container1
[root@833a4c9c3562 /]# ping -c 2 dev-container1
PING dev-container1 (172.18.0.2) 56(84) bytes of data.
64 bytes from 833a4c9c3562 (172.18.0.2): icmp_seq=1 ttl=64 time=0.
028 ms
64 bytes from 833a4c9c3562 (172.18.0.2): icmp_seq=2 ttl=64 time=0.
058 ms

--- dev-container1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1043ms
rtt min/avg/max/mdev = 0.028/0.043/0.058/0.015 ms
[root@833a4c9c3562 /]# ping -c 2 dev-container2
```

```
80a8c037f56dcb0b77efd9416efe5",
                "MacAddress": "02:42:ac:11:00:03",
                "IPv4Address": "172.17.0.3/16",
                "IPv6Address": ""

                "Name": "centos-4",
                "EndpointID": "e715d6ff623ee84e402892e5c4bcabe7e75
42d0ab415a3e3212d5f854dc75b09",
                "MacAddress": "02:42:ac:11:00:02",
                "IPv4Address": "172.17.0.2/16",
                "IPv6Address": ""

            "com.docker.network.bridge.name": "docker0",
            "com.docker.network.driver.mtu": "1500"
        },
        "Labels": {}
    }
root@myVM:~#  docker container attach dev-container1
[root@833a4c9c3562 /]# ping -c 2 dev-container1
PING dev-container1 (172.18.0.2) 56(84) bytes of data.
64 bytes from 833a4c9c3562 (172.18.0.2): icmp_seq=1 ttl=64 time=0.
028 ms
64 bytes from 833a4c9c3562 (172.18.0.2): icmp_seq=2 ttl=64 time=0.
058 ms

--- dev-container1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1043ms
rtt min/avg/max/mdev = 0.028/0.043/0.058/0.015 ms
[root@833a4c9c3562 /]# ping -c 2 dev-container2
PING dev-container2 (172.18.0.3) 56(84) bytes of data.
64 bytes from dev-container2.dev-network (172.18.0.3): icmp_seq=1
ttl=64 time=0.127 ms
64 bytes from dev-container2.dev-network (172.18.0.3): icmp_seq=2
ttl=64 time=0.084 ms

--- dev-container2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1022ms
rtt min/avg/max/mdev = 0.084/0.105/0.127/0.023 ms
[root@833a4c9c3562 /]#
```

```
[root@833a4c9c3562 /]# ping -c 2 dev-container2
PING dev-container2 (172.18.0.3) 56(84) bytes of data.
64 bytes from dev-container2.dev-network (172.18.0.3): icmp_seq=1
ttl=64 time=0.093 ms
64 bytes from dev-container2.dev-network (172.18.0.3): icmp_seq=2
ttl=64 time=0.084 ms

--- dev-container2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1002ms
rtt min/avg/max/mdev = 0.084/0.088/0.093/0.010 ms
[root@833a4c9c3562 /]# ping -c 2 dev-container3
PING dev-container3 (172.18.0.4) 56(84) bytes of data.
64 bytes from dev-container3.dev-network (172.18.0.4): icmp_seq=1
ttl=64 time=0.127 ms
64 bytes from dev-container3.dev-network (172.18.0.4): icmp_seq=2
ttl=64 time=0.083 ms

--- dev-container3 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1014ms
rtt min/avg/max/mdev = 0.083/0.105/0.127/0.022 ms
[root@833a4c9c3562 /]#  ping -c 2 centos-4
ping: centos-4: Name or service not known
[root@833a4c9c3562 /]# docker container attach dev-container3
bash: docker: command not found
[root@833a4c9c3562 /]# docker container attach dev-container3
bash: docker: command not found
[root@833a4c9c3562 /]# read escape sequence
root@myVM:~# docker container attach dev-container3
[root@01042c3fd5ad /]# docker container attach dev-container3
bash: docker: command not found
[root@01042c3fd5ad /]#  ping -c 2 dev-container1
PING dev-container1 (172.18.0.2) 56(84) bytes of data.
64 bytes from dev-container1.dev-network (172.18.0.2): icmp_seq=1
ttl=64 time=0.108 ms
64 bytes from dev-container1.dev-network (172.18.0.2): icmp_seq=2
ttl=64 time=0.081 ms

--- dev-container1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1046ms
```

```
rtt min/avg/max/mdev = 0.081/0.094/0.108/0.016 ms
[root@01042c3fd5ad /]# ping -c 2 dev-container2
PING dev-container2 (172.18.0.3) 56(84) bytes of data.
64 bytes from dev-container2.dev-network (172.18.0.3): icmp_seq=1
ttl=64 time=0.125 ms
64 bytes from dev-container2.dev-network (172.18.0.3): icmp_seq=2
ttl=64 time=0.087 ms

--- dev-container2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1017ms
rtt min/avg/max/mdev = 0.087/0.106/0.125/0.019 ms
[root@01042c3fd5ad /]#  ping -c 2 172.17.0.2
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.140 ms
64 bytes from 172.17.0.2: icmp_seq=2 ttl=64 time=0.074 ms

--- 172.17.0.2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1047ms
rtt min/avg/max/mdev = 0.074/0.107/0.140/0.033 ms
[root@01042c3fd5ad /]# ping -c 2 centos-4
ping: centos-4: Name or service not known
[root@01042c3fd5ad /]# docker network create --subnet 172.25.0.0/1
6 new-net01
bash: docker: command not found
[root@01042c3fd5ad /]# ^C
[root@01042c3fd5ad /]#  docker network create --subnet 172.25.0.0/16 new-net01
bash: docker: command not found
[root@01042c3fd5ad /]# docker network create --subnet 172.25.0.0/1
6 new-net01
bash: docker: command not found
[root@01042c3fd5ad /]# docker network create --subnet 172.25.0.0/1
6 new-net01
bash: docker: command not found
[root@01042c3fd5ad /]# docker network inspect new-net01
bash: docker: command not found
[root@01042c3fd5ad /]# ping -c 2 centos-4
ping: centos-4: Name or service not known
[root@01042c3fd5ad /]# read escape sequence
root@myVM:~# docker network create --subnet 172.25.0.0/16 new-net0
```

28°C Partly cloudy   Search   ENG IN   07:14 PM 14-08-2024

```
1
fb25249e851c23dc379ce2b328ae8556adece293a246a5e8e0c265211e58cf97
root@myVM:~# docker network inspect new-net01
[
    {
        "Name": "new-net01",
        "Id": "fb25249e851c23dc379ce2b328ae8556adece293a246a5e8e0c
265211e58cf97",
        "Created": "2024-08-14T13:24:58.958257729Z",
        "Scope": "local",
        "Driver": "bridge",
        "EnableIPv6": false,
        "IPAM": {
            "Driver": "default",
            "Options": {},
            "Config": [
                {
                    "Subnet": "172.25.0.0/16"
                }
            ]
        },
        "Internal": false,
        "Attachable": false,
        "Ingress": false,
        "ConfigFrom": {
            "Network": ""
        },
        "ConfigOnly": false,
        "Containers": {},
        "Options": {},
        "Labels": {}
    }
]
root@myVM:~#  docker container run --name web01 -dit --network=new
-net01 nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
e4fff0779e6d: Pull complete
9c4e4e507b08: Pull complete
```

28°C Partly cloudy   Search   ENG IN   07:15 PM 14-08-2024

```
9c4e4e507b08: Pull complete
85664e7b25d6: Pull complete
e9d00ba15cc0: Pull complete
ca3474dd2ca6: Pull complete
472851929ad7: Pull complete
ed60582f2661: Pull complete
Digest: sha256:98f8ec75657d21b924fe4f69b6b9bff2f6550ea48838af479d8
894a852000e40
Status: Downloaded newer image for nginx:latest
28c6a489024a4c2484e2a4f2352fd38ef68027816c9cd3dc1fb83af44a02dc3b
root@myVM:~# docker container inspect web01 | grep -i ipaddress
            "SecondaryIPAddresses": null,
            "IPAddress": "",
                    "IPAddress": "172.25.0.2",
root@myVM:~# docker container run --name web02 -dit --network=new-
net01 --ip 172.25.0.10 nginx
a683d16a9c02ee3ed58576b093404fe1b0bd853a6c2a19bf99ca9d5140ef24b8
root@myVM:~# docker network ls
NETWORK ID      NAME           DRIVER     SCOPE
a9acef377ba9    bridge         bridge     local
dba2aece2514    dev-network    bridge     local
04ae6da7701a    host           host       local
fb25249e851c    new-net01      bridge     local
1884192f5dd5    none           null       local
root@myVM:~# docker network disconnect new-net01 web02
root@myVM:~#  docker container run --name web03 -dit --network=hos
t nginx
f59fad46dd7575c77d88e3811704c8d845bc55734e4a692b0a46c8fe83a96a2b
root@myVM:~# docker container inspect web03 |grep -i NetworkMode
            "NetworkMode": "host",
root@myVM:~# curl 192.168.100.10
^C
root@myVM:~# curl 192.168.100.10
^C
root@myVM:~# curl 10.0.0.4:8080
curl: (7) Failed to connect to 10.0.0.4 port 8080 after 0 ms: Coul
dn't connect to server
root@myVM:~# ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOW
```

```
        valid_lft forever preferred_lft forever
52: vethe2f7206@if51: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 q
disc noqueue master br-dba2aece2514 state UP group default
    link/ether 1e:c4:f5:a7:85:51 brd ff:ff:ff:ff:ff:ff link-netnsi
d 2
    inet6 fe80::1cc4:f5ff:fea7:8551/64 scope link
        valid_lft forever preferred_lft forever
54: vethc6503aa@if53: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 q
disc noqueue master docker0 state UP group default
    link/ether 6a:3d:b2:81:70:0c brd ff:ff:ff:ff:ff:ff link-netnsi
d 3
    inet6 fe80::683d:b2ff:fe81:700c/64 scope link
        valid_lft forever preferred_lft forever
56: vetha75d387@if55: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 q
disc noqueue master docker0 state UP group default
    link/ether 4e:90:f9:9b:57:d0 brd ff:ff:ff:ff:ff:ff link-netnsi
d 2
    inet6 fe80::4c90:f9ff:fe9b:57d0/64 scope link
        valid_lft forever preferred_lft forever
57: br-fb25249e851c: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qd
isc noqueue state UP group default
    link/ether 02:42:15:cd:d2:3b brd ff:ff:ff:ff:ff:ff
    inet 172.25.0.1/16 brd 172.25.255.255 scope global br-fb25249e
851c
        valid_lft forever preferred_lft forever
    inet6 fe80::42:15ff:fecd:d23b/64 scope link
        valid_lft forever preferred_lft forever
59: veth75545f9@if58: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 q
disc noqueue master br-fb25249e851c state UP group default
    link/ether 92:3d:bb:f7:b7:4d brd ff:ff:ff:ff:ff:ff link-netnsi
d 4
    inet6 fe80::903d:bbff:fef7:b74d/64 scope link
        valid_lft forever preferred_lft forever
root@myVM:~# curl 10.0.0.4:8080
curl: (7) Failed to connect to 10.0.0.4 port 8080 after 0 ms: Coul
dn't connect to server
root@myVM:~# curl 10.0.0.4
<!DOCTYPE html>
<html>
```

```
</body>
</html>
root@myVM:~# docker container rm `docker container ls -a -q` -f
f59fad46dd75
a683d16a9c02
28c6a489024a
d507a70ea747
01042c3fd5ad
lcbccaa39d0a
833a4c9c3562
root@myVM:~#  docker image rm `docker image ls -a -q` -f
Untagged: nginx:latest
Untagged: nginx@sha256:98f8ec75657d21b924fe4f69b6b9bff2f6550ea4883
8af479d8894a852000e40
Deleted: sha256:900dca2a61f5799aabe662339a940cf444dfd39777648ca6a9
53f82b685997ed
Deleted: sha256:50c0e25eb83913b501a8ea5445575936a6b228d8c98098e802
235f0d80fab3d6
Deleted: sha256:7e38d53ae3e73beedea84c21c8c0b5d08815296c825da3ec1c
33bbd97f7aa349
Deleted: sha256:70ac6af7ddbdb2f6a0141751efbcb194e044c7adc386fd03ca
e6f03dc30d22e2
Deleted: sha256:6d3481c4d68045ed132f620a6e0b058d62f570ebf6b63ab57b
54dcb94c960dac
Deleted: sha256:a290c3a72a0fd2ebbe9a6d930a66e52ae5cbb2622a4af034bf
8356d53689a2c8
Deleted: sha256:a690310e45ce7d870bcf3283c9845c5cffc55e04b2a32d7035
cee6b96bacec87
Deleted: sha256:9853575bc4f955c5892dd64187538a6cd02dba6968eba92018
54876a7a257034
Untagged: centos:latest
Untagged: centos@sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534
bbdee55bd6c473f432b177
Deleted: sha256:5d0da3dc976460b72c77d94c8a1ad043720b0416bfc16c52c4
5d4847e53fadb6
root@myVM:~# docker network rm new-net01 dev-network
new-net01
dev-network
root@myVM:~#
```