

Listing networks

```
yolsuh@lenovo:~$ docker network ls
NETWORK ID        NAME        DRIVER        SCOPE
b2bbd5c53cb3     bridge     bridge        local
0f91c4d3fc30     host       host          local
ccd2890de244     none       null          local
yolsuh@lenovo:~$
```

The default bridge network

```
yolsuh@lenovo:~$ docker network inspect bridge
[
  {
    "Name": "bridge",
    "Id": "b2bbd5c53cb3ccd506592edd6504557417209db4fcea4964ee4bbe7f910bd41a",
    "Created": "2022-03-26T04:09:11.1453914Z",
    "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": {
      "64faab6e0f9c8f7d307aa584446e1b9c93cd47c69992a867808bd95e891043b3": {
        "Name": "apache",
        "EndpointID": "9e7eb3aab82f63eab258b400c0cf60b693ec9caeb830aea0ad0d54adfb8eb849",
        "MacAddress": "02:42:ac:11:00:02",
        "IPv4Address": "172.17.0.2/16",
        "IPv6Address": ""
      }
    }
  }
]
```

```
yolsuh@lenovo:~$ docker run --rm -d --name dummy suhrab/ping:latest
e8df7e0acf0403e084ad635ddc3bb03a05c3d62233c94e1463c1c9141051d309
yolsuh@lenovo:~$ docker network inspect bridge
[
  {
    "Name": "bridge",
    "Id": "b2bbd5c53cb3ccd506592edd6504557417209db4fce4e964ee4bbe",
    "Created": "2022-03-26T04:09:11.1453914Z",
    "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": {
      "64faab6e0f9c8f7d307aa584446e1b9c93cd47c69992a867808bd95e"
    }
  }
]
```

```
yolsuh@lenovo:~$ docker run --rm -d -e PING_TARGET=172.17.0.2 --name pinger suhrab/ping:latest
a18530e9cf8d653bde9e8038a704bcfc64ed1b6115ab5c07817ab8cd4fe0f56b
yolsuh@lenovo:~$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
8 hours ago    Up 8 hours  0.0.0.0:80->80/tcp      apache
yolsuh@lenovo:~$ docker logs pinger
Error: No such container: pinger
yolsuh@lenovo:~$ docker logs pinger --no-trunc
```

```
yolsuh@lenovo:~$ docker run --rm -d -e PING_TARGET=dummy --name pinger suhrab/ping:latest
52351ab313a9bb5de5e481d7562e72b8146742df3d5afa2272159d34dd8f8e88
yolsuh@lenovo:~$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
64faab6e0f9c   httpd:2.4  "httpd-foreground"      8 hours ago    Up 8 hours    0.0.0.0:80->80/tcp
```

Managing custom networks

```

yolsuh@lenovo:~$ docker network create skynet
7a3629e0fd7bc2c0c52242dbdf17ee0310cbeac050a29affb6c66aec12856f85
yolsuh@lenovo:~$ docker network ls
NETWORK ID        NAME      DRIVER  SCOPE
b2bbd5c53cb3     bridge   bridge  local
0f91c4d3fc30     host     host    local
ccd2890de244     none     null    local
7a3629e0fd7b     skynet   bridge  local
yolsuh@lenovo:~$ docker network inspect skynet
[
  {
    "Name": "skynet",
    "Id": "7a3629e0fd7bc2c0c52242dbdf17ee0310cbeac050a29affb6c66aec12856f85",
    "Created": "2022-03-26T18:40:05.0657636Z",
    "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": {}
  }
]
yolsuh@lenovo:~$

```

Adding containers to a network

```

yolsuh@lenovo:~$ docker run --rm -d --network skynet --name dummy suhrab/ping:latest
4c12dde55d8de4c36b8487df5bba320fb17dba9323ca19c48810ff43952a6706
yolsuh@lenovo:~$ docker run --rm -d --network skynet -e PING_TARGET=dummy --name pinger suhrab/ping:latest
9c16f9d05f526f89cbad6e1af59edb8d7d8289717faaf58b3a4463e3d29704a2
yolsuh@lenovo:~$

```

Connecting between containers in a network

```
yolsuh@lenovo:~$ docker run --rm -d --name widgetdb --network skynet -p 5432 postgres
Unable to find image 'postgres:latest' locally
latest: Pulling from library/postgres
ae13dd578326: Already exists
723e40c35aaf: Pull complete
bf97ae6a09b4: Pull complete
2c965b3c8cbd: Pull complete
c3cefa46a015: Pull complete
64a7315fc25c: Pull complete
b9846b279f7d: Pull complete
ed988fb8e7d9: Pull complete
ed4bb4fd8bb5: Pull complete
ead27f1733c8: Pull complete
7d493bacd383: Pull complete
0920535e8417: Pull complete
db76d5bdbf2c: Pull complete
Digest: sha256:14a621708fddaf5620fb3dea3e313e8afc3615b6fe0b824ff929692823952144
Status: Downloaded newer image for postgres:latest
86edb2e27bfddb1554a697b3fc653d3c9a6ac5d3b3e662fb6666e18e88094884
yolsuh@lenovo:~$ docker run --rm -d --name widgetdb --network skynet -p 5432 postgres
20fa69fd33d11fb75e0d6d9feb7aec9f1f97a71c64b6f2f185be2108f20b1b20
yolsuh@lenovo:~$ docker run --rm -d --name gadgetdb --network skynet -p 5432 postgres
yolsuh@lenovo:~$
```