

# Docker

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# Create a MAC VLAN network

## Description

The command below is an example of creating a layer 2 macvlan network in docker. In the example below, the network I am using is 10.128.140.0/24 on interface ens160. You will have to replace the subnet and interface according to your install.

## Conifguration

```
❏ docker network create -d macvlan --subnet=10.128.140.0/24 --gateway 10.128.140.1 -o parent=ens160 L2-Connect
```

and this is how you add a VLAN network

```
❏ docker network create -d macvlan --subnet=172.16.8.0/22 --gateway 172.16.8.1 -o parent=ens192.40 Data-40-L2-Connect
```

After creation of the network you can take a look to make sure it exists

```
❏ root@container:~# docker network ls
```

NETWORK ID	NAME	DRIVER	SCOPE
01734d37ed78	L2-Connect	macvlan	local
310563fabcd7	bridge	bridge	local
4bc024cbd7cc	host	host	local
d2879a267450	none	null	local

# Deploy Portainer on a MAC VLAN network

## Description

On the previous page I showed how to create a layer 2 macvlan network that allows you to deploy containers in the same network as the host itself. This example will show you how to deploy Portainer CE using the layer 2 macvlan network we created.

## Configuration

```
root@container:~# docker run -d --network L2-Connect --ip=10.128.140.31 --  
dns=1.1.1.1 --name=Portainer --restart=always -v  
/var/run/docker.sock:/var/run/docker.sock -v portainer_data:/data  
portainer/portainer-ce:latest
```

Once the container has been created you can run the docker container ls command to see the deployed container.

```
root@container:~# docker container ls
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS
PORTS	NAMES			
cd30907cabe6	portainer/portainer-ce:latest	"/portainer"	10 minutes ago	Up
10 minutes	Portainer			