



OVN

Open vSwitch

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Deploying multi chassis OVN using docker in docker

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What we'll be discussing today

- Simple way to deploy (fake) multi node OVN using docker in docker (or container in container)
- How it is useful

Container in container setup

- A simple bash script - <https://github.com/numansiddique/ovn-fake-multinode>
- The idea and the base code is taken from the openshift origin's dind scripts - <https://github.com/openshift/origin/tree/release-3.11/images/dind>
- Each container represents a chassis running
 - ovs-vswitchd
 - ovn-controller
 - OVN ovnsdb-servers (in the db container)

Building the image

Steps

1. Clone the repo
2. Build the container images

```
#export OVN_SRC_PATH=<path_to_ovn_src>
```

```
# export OVS_SRC_PATH=<path_to_ovs_src>
```

```
# ./ovn_cluster.sh build
```

```
# docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
ovn/ovn-multi-node	latest	f81125184378	4 days ago	1.37GB
ovn/cinc	latest	91b8b8252940	3 weeks ago	856MB

Running the OVN fake multinode setup

Steps

1. Start openvswitch in your host.
2. Run the script as

```
# ./ovn_cluster.sh start
```

```
# [root@nummac ovn-fake-multinode]# docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
669e0410cbd6	ovn/ovn-multi-node	"/usr/sbin/dind_init"	14 seconds ago	Up 13 seconds		ovn-chassis-3
68e1cc93a73b	ovn/ovn-multi-node	"/usr/sbin/dind_init"	15 seconds ago	Up 14 seconds		ovn-chassis-2
9432fofoaofi	ovn/ovn-multi-node	"/usr/sbin/dind_init"	16 seconds ago	Up 15 seconds		ovn-chassis-1
f3da59a82937	ovn/ovn-multi-node	"/usr/sbin/dind_init"	16 seconds ago	Up 15 seconds		ovn-central

Running the OVN fake multinode setup

```
[root@nummac ovn-fake-multinode]# docker exec -it ovn-central ovn-sbctl show
```

```
Chassis ovn-chassis-2
```

```
  hostname: ovn-chassis-2
```

```
  Encap geneve
```

```
    ip: "172.17.0.4"
```

```
    options: {csum="true"}
```

```
Chassis ovn-chassis-1
```

```
  hostname: ovn-chassis-1
```

```
  Encap geneve
```

```
    ip: "172.17.0.3"
```

```
    options: {csum="true"}
```

```
Chassis ovn-central
```

```
  hostname: ovn-central
```

```
  Encap geneve
```

```
    ip: "172.17.0.2"
```

```
    options: {csum="true"}
```

```
Chassis ovn-chassis-3
```

```
  hostname: ovn-chassis-3
```

```
  Encap geneve
```

```
    ip: "172.17.0.5"
```

```
    options: {csum="true"}
```

The top of the page features a decorative header with a dark grey background. It contains various technical and geometric elements: a large green circle with a white arrow pointing right, a smaller green circle with a white arrow pointing right, and several grey hexagons and rectangles. There are also green dashed lines and a grid pattern. The word "Demo" is centered in the white space below the header.

Demo

Thanks!

