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 ovsdb-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
9432f0f0a0f1    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"}
```

Demo

Thanks!