

Case Study 3

Create three instances on docker hub playground (one manager and two worker nodes) and run the below commands -

1. On Manager node -
docker swarm init - -advertise-addr <your-host-ip>
2. The above command will return a command in response like below -
docker swarm join - -token <token> <your-host-ip>:<your-host-port>

Run this returned command on both the worker nodes, to make them join the swarm cluster.

3. On all three nodes, you would be able to see like below -

docker network ls

```
[node1 ~]$ docker network ls
NETWORK ID          NAME                DRIVER             SCOPE
a57ca4254927        bridge              bridge              local
e304ccd5946b        docker_gwbridge     bridge              local
2ec8798b0692        host                host                local
y4qms6pn1o3j        ingress             overlay             swarm
9282ce21726d        none                null                local
```

4. To deploy a simple nginx "service" with a replica set of 3 on the cluster, run the below command on the manager node -

**docker service create - -name myNginxService - -replicas 3 -p 31000:80
nginx:latest**

5. Verify using below commands -

docker service ls

```
[node1 ~]$ docker service ls
ID                NAME                MODE                REPLICAS  IMAGE                PORTS
jr41iaiwhliv     myNginxService     replicated          3/3       nginx:latest        *:31000->80/tcp
```

docker service ps myNginxService

```
[node1 ~]$ docker service ps myNginxService
```

ID	NAME	IMAGE	NODE	DESIRED	STATE
lnlbl9dbo094	myNginxService.1	nginx:latest	node1	Running	
vur5pzs20p3t	myNginxService.2	nginx:latest	node2	Running	
mwyli5pm0qpg	myNginxService.3	nginx:latest	node3	Running	