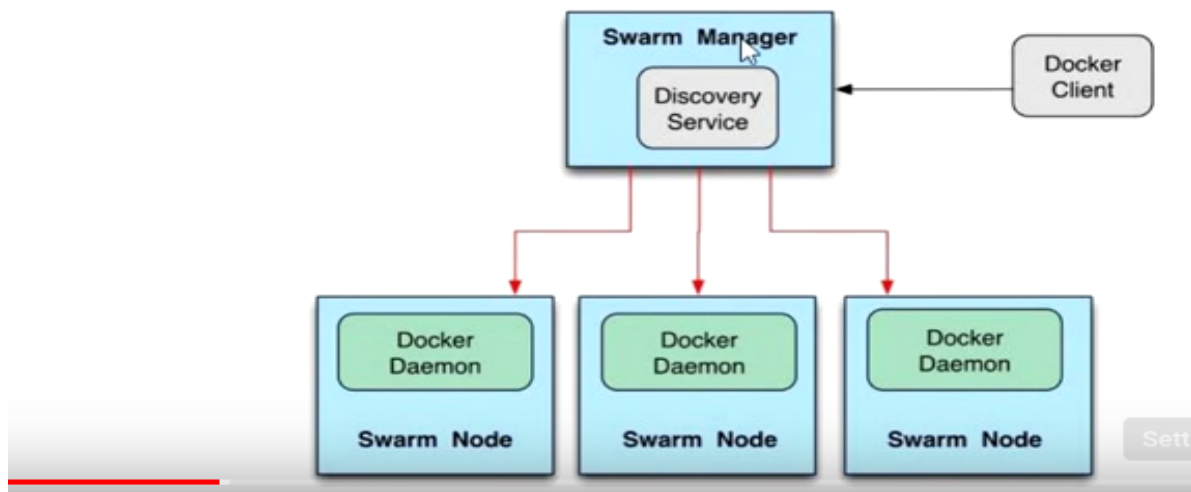


Docker swarm - introduction

Docker Swarm Architecture



- Container orchestrating tool , means we can handle **multiple containers** running in **multiple host machines**.
- Each machine is a node in docker swarm.
- We have 'm' number of docker daemon in 'n' number of host machines also known as **worker nodes** .
- We have one node identified as a **manager node**.
- Containers usually run in worker nodes .
- **Services are controlled in manager nodes.**

SWARM INITIALISATION

- **sudo docker swarm init --advertise-addr 192.168.1.11**
- Ip address is selected so that other machines can access it .

```
Swarm initialized: current node (50jvkvr17khkx30w6in06h8pz) is now a manager.

To add a worker to this swarm, run the following command:

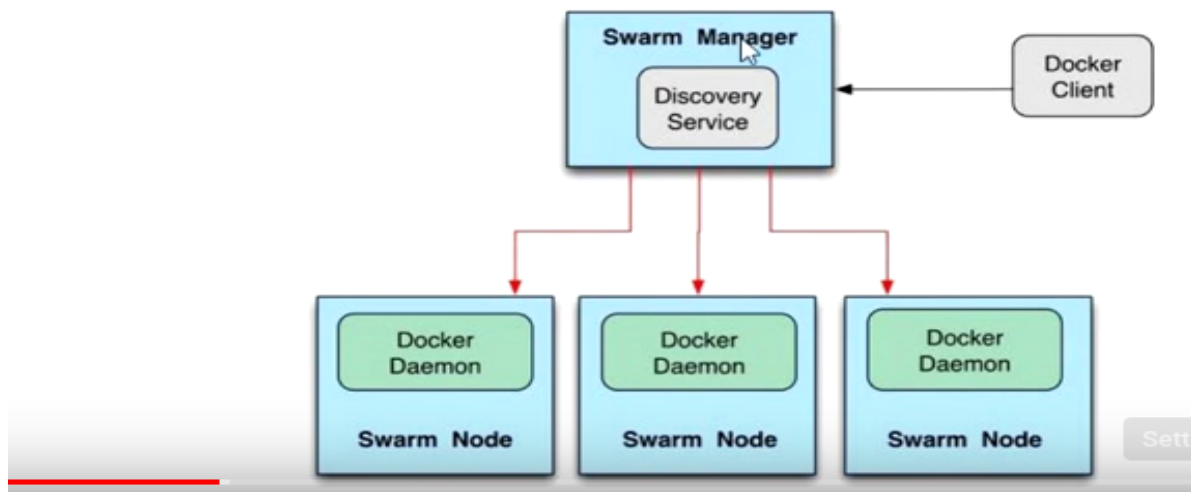
    docker swarm join --token SWMTKN-1-0pqqegth7z6tljz2kwxgo9has40d06sllxj0l7x79dp6dlwzi-6audplwxfpgg34atei79rtafi 192.168.2
11:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions. SELVA Tech & ITO
selva@docker-master:~$
```

(copy the join commands)

Docker swarm - introduction

Docker Swarm Architecture



- Use the join command in worker machines to join the swarm. After successful joins use the below command on manager node to see available nodes in swarm

SWARM NODE

- **docker node demote <node name>** Demotes an existing manager so that it is no longer a manager.
- **docker node inspect <node name>** returns information about nodes in json format.
- **docker node ls** lists all nodes under manager.
- **docker node promote <node name>** promotes a node to a manager node.
- **docker node ps <node name>** lists all running process in a node
- **docker node rm <node name>**

DOCKER SERVICES

- **sudo docker service create --replicas 2 -p 80:80 --name web1 httpd**
- httpd is the image name.
- It runs the image service in two nodes in swarm.
- **sudo docker service create --mode global -p 80:81 --name web1 httpd**
- It runs the image service in all nodes in swarm.

Docker swarm - introduction

Docker Swarm Architecture

