

Container Cluster Menggunakan Docker Swarm

1. Sediakan 3 Machine untuk, satu digunakan untuk Manager(mengatur perintah-perintah yang akan di jalankan) dan 2 machine (yang saya namakan node_1 dan node_2) yang digunakan untuk menjalankan perintah yang diteruskan dari Docker Manager.

```

root@manager:/home/axel031# hostname
manager
root@manager:/home/axel031#
root@node_1:/home/axel031# hostname
node_1
root@node_1:/home/axel031#
root@node_2:/home/axel031# hostname
node_2
root@node_2:/home/axel031#

```

192.168.100.200
192.168.100.100
192.168.100.90

2. Masukan Perintah (Docker Init), digunakan untuk memberikan akses id yang akan diberikan ke semua Node agar dapat berkomunikasi dengan Manager

```

root@worker:/home/axel031# docker swarm init --advertise-addr 192.168.100.200
Swarm initialized: current node (2o37uceoge95fn6oby1w4wu5g) is now a manager.

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

docker swarm join --token SWMTKN-1-30pgt4wlr65lvmwq0hgvg6zv12kz1lcx21xcbqflyzz6dg3x3f-cehgpmfpakt7se10u6hmr74z5 192.168.100.200:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

root@worker:/home/axel031#

```

Maka akan terlihat token/akses key yang dapat digunakan untuk menghubungkan Manager dan Node

3. Masukan Perintah (\$docker swarm join) ke masing-masing node yang sudah disediakan

```

root@node_1:/home/axel031# docker swarm join --token SWMTKN-1-30pgt4wlr65lvmwq0hgvg6zv12kz1lcx21xcbqflyzz6dg3x3f-cehgpmfpakt7se10u6hmr74z5 192.168.100.200:2377
This node joined a swarm as a worker.
root@node_1:/home/axel031#
root@node_2:/home/axel031# docker swarm join --token SWMTKN-1-30pgt4wlr65lvmwq0hgvg6zv12kz1lcx21xcbqflyzz6dg3x3f-cehgpmfpakt7se10u6hmr74z5 192.168.100.200:2377
This node joined a swarm as a worker.
root@node_2:/home/axel031#

```

Fungsinya untuk menghubungkan node_1 dan node_2 dengan Manager

4. Masukan Perintah pada machine Manager (\$docker node ls)

```

root@manager:/home/axel031# docker node ls

```

ID	HOSTNAME	STATUS	AVAILABILITY	MANAGER STATUS	ENGINE VERSION
2o37uceoge95fn6oby1w4wu5g *	manager	Ready	Active	Leader	19.03.5
kaljlb8ncvrd4846mb6f0c4ni	node_1	Ready	Active		19.03.5
asypa0n3l9wo87wbpelqgmjv9	node_2	Ready	Active		19.03.5

```

root@manager:/home/axel031#

```

Maka akan terlihat list yang terhubung dengan Manager

5. Create Docker Service pada manager

```

root@manager:/home/axel031/swarm# docker service create --name nginxaxel031 nginx
4ipduevvtlfuk8zeomkkwqwn
overall progress: 1 out of 1 tasks
1/1: running [=====>]
verify: Service converged
root@manager:/home/axel031/swarm# docker service ls

```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
4ipduevvtlfu	nginxaxel031	replicated	1/1	nginx:latest	

```

root@manager:/home/axel031/swarm#

```

6. \$ docker service scale <SERVICE-ID>=<NUMBER-OF-TASKS>

```

root@manager:/home/axel031/swarm# docker service scale 41pduevltlfu=3
41pduevltlfu scaled to 3
overall progress: 3 out of 3 tasks
1/3: running  [=====]
2/3: running  [=====]
3/3: running  [=====]
verify: Service converged
root@manager:/home/axel031/swarm# docker service ps nginxaxel031

```

ID	NAME	IMAGE	NODE	DESIRED STATE	CURRENT STATE	ERROR	PORTS
n65dozcokx7e	nginxaxel031.1	nginx:latest	node_1	Running	Running 2 minutes ago		
xbiypyd5cpn0	nginxaxel031.2	nginx:latest	node_2	Running	Running 21 seconds ago		
p50mfhjkdzik	nginxaxel031.3	nginx:latest	manager	Running	Running 21 seconds ago		

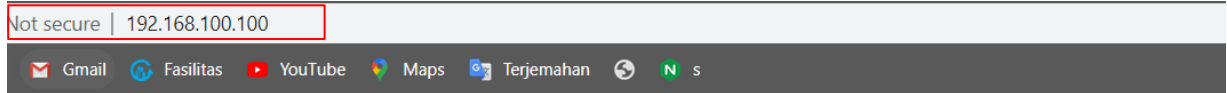
```

root@manager:/home/axel031/swarm#

```

Docker Scale digunakan untuk deploy service pada docker ke beberapa node yang kita inginkan. Maka akan tampak service yang sudah kita buat telah diarahkan ke node_1 dan node_2

7. Hasilnya maka nginx nya dapat kita akses menggunakan node_1 dan node_2

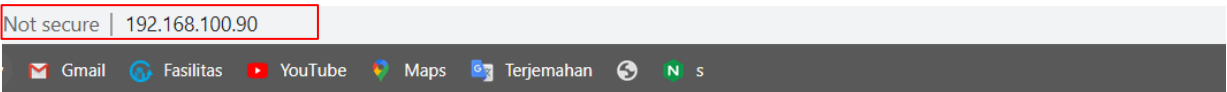


Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

Tambahan:

- Perintah Untuk Melepaskan swarm
docker swarm leave -force
- Spesifik informasi pada docker swarm manager
docker node inspect self --pretty