

Docker Cluster

한국정보교육원

[클라우드 데브옵스(DEVOPS) 엔지니어 및 관리자 양성과정]

박용진

Docker Swarm Cluster

```
[root@manager:~]# docker --version  
Docker version 23.0.1, build a5ee5b1
```

```
[root@worker1:~]# docker --version  
Docker version 23.0.1, build a5ee5b1
```

```
[root@worker2:~]# docker --version  
Docker version 23.0.1, build a5ee5b1
```

Manager, worker(1~2) – Version

Docker Swarm Cluster

```
[root@manager:~]# systemctl status firewalld
(firewalld.service - firewalld - dynamic firewall daemon)
   Loaded: loaded (/usr/lib/systemd/system/firewalld.service; disabled; vendor preset: enabled)
   Active: inactive (dead)
     Docs: man:firewalld(1)
```

Linux Firewall (disable , stop)

Docker Swarm Cluster

```
[root@manager:~]# docker node ls
```

ID	HOSTNAME	STATUS	AVAILABILITY	MANAGER STATUS	ENGINE VERSION
agjkkf2heic1u4vr2n2phn0bf *	manager	Ready	Active	Leader	23.0.1
5oe1n18o248dvmjzsphwfb16	worker1	Ready	Active	Reachable	23.0.1
f6bxnnblg3581g4vrkktge3ry	worker2	Ready	Active		23.0.1

Clustering

Docker Service

```
[root@manager:~]# docker service create -d --name Apache --replicas=3 --limit-memory 200m --reserve-memory 100m --mount type=volume,source=Apach-volume,destination=/usr/local/apache2/htdocs httpd:latest  
sozc9o95hp8cbnwk6vm238sxq  
[root@manager:~]#  
docker service create -d --name Nginx --replicas=3 --limit-memory 120m --reserve-memory 100m --mount type=volume,source=Nginx-volume,destination=/usr/share/nginx/html/ nginx:latest  
6wy7lmcy pb26mb40it09u9c4r
```

Nginx Reserve Memory 100M, Limit Memory 120M, Apache volume mount, Replicas = 3
Apache Reserve Memory 100M, Limit Memory 200M, Nginx volume mount, Replicas = 3

Docker Service

```
[root@manager:~]# docker volume ls
DRIVER      VOLUME NAME
local       44b546f6950cc7c3db35626cada0c907b6e2ed49bce5b3d997cc4ffe46b27bc0
local       Apach-volume
local       Nginx-volume
```

Apache Volume, Nginx Volume

Docker Service

```
[root@manager:~]# docker service ls
```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
sozc9o95hp8c	Apache	replicated	3/3	httpd:latest	
6wy7lmcypb26	Nginx	replicated	3/3	nginx:latest	

Replica

Portainer

