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Práctica 3: Docker Swarm

Iniciamos swarm, lanzamos el token el los otros 2 nodos y visualizamos

```
 kubeadm init --apiserver-advertise-address $(hostname -i) --pod-network-cidr 10.5.0.0/16


 2. Initialize cluster networking:

kubectl apply -f https://raw.githubusercontent.com/cloudnativelabs/kube-router/master/daemonset/kubeadm-kuberouter.yaml


 3. (Optional) Create an nginx deployment:

 kubectl apply -f https://raw.githubusercontent.com/kubernetes/website/master/content/en/examples/application/nginx-app.yaml


                        The PWK team.



[node1 ~]$ docker swarm init --advertise-addr 192.168.23
Error response from daemon: advertise address must be a non-zero IP address or network interface (with optional port number)
[node1 ~]$ docker swarm init --advertise-addr 192.168.0.23
Swarm initialized: current node (w3dwuoppvdsw1zy26znzsz68o) is now a manager.

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

    docker swarm join --token SWMTKN-1-2ywhjpkdnf9xk2eugjpo812zfnng97hiyr0m2zjsgy3zx3mt37-8dvnbe9jzgzj79ad9p8bdpnjw 192.168.0.23:2377

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

[node1 ~]$ docker node ls
ID                            HOSTNAME   STATUS    AVAILABILITY   MANAGER STATUS   ENGINE VERSION
w3dwuoppvdsw1zy26znzsz68o *   node1      Ready     Active         Leader           20.10.1
d77oiopydzamcdpm7tee2c5h3     node2      Ready     Active                          20.10.1
e3i1qaebryjmomu2g62xu4zj6     node3      Ready     Active                          20.10.1
[node1 ~]$
```

Lanzamos el servicio web

```
[node1 ~]$ docker service create --name web --replicas 3 --mount type=bind,src=/etc/hostname,ds
t=/usr/share/nginx/html/index.html,readonly --publish published=8080,target=80 nginx
27r6dlkmmqiqa2khw4k1r3qpc
overall progress: 3 out of 3 tasks
1/3: running   [==================================================>]
2/3: running   [==================================================>]
3/3: running   [==================================================>]
verify: Service converged
[node1 ~]$
```

Comprobamos los nodos

```
[node1 ~]$ curl http://192.168.0.13:8080
node1
[node1 ~]$ curl http://192.168.0.13:8080
node3
[node1 ~]$ curl http://192.168.0.13:8080
node2
[node1 ~]$ docker service ps web
ID             NAME      IMAGE          NODE      DESIRED STATE   CURRENT STATE           ERROR
     PORTS
nkgwfaivvf4p   web.1     nginx:latest   node1     Running         Running 2 minutes ago

7g1filt53s9s   web.2     nginx:latest   node2     Running         Running 2 minutes ago

re34y05r9xld   web.3     nginx:latest   node3     Running         Running 2 minutes ago

[node1 ~]$
```

Escalamos a 2 nodos

```
[node1 ~]$ docker service scale web=2
web scaled to 2
overall progress: 2 out of 2 tasks
1/2: running
2/2: running
verify: Service converged
[node1 ~]$ docker service ps web
ID             NAME      IMAGE          NODE      DESIRED STATE   CURRENT STATE           ERROR
     PORTS
nkgwfaivvf4p   web.1     nginx:latest   node1     Running         Running 5 minutes ago

7g1filt53s9s   web.2     nginx:latest   node2     Running         Running 5 minutes ago

[node1 ~]$
```

Detenemos un nodo

```
[node2 ~]$ docker swarm leave
Node left the swarm.
[node2 ~]$
```

Reactivación de nodos

```
[node1 ~]$ docker node ps
ID             NAME      IMAGE          NODE      DESIRED STATE   CURRENT STATE           ERROR     PORTS
nkgwfaivvf4p   web.1     nginx:latest   node1     Running         Running 10 minutes ago
[node1 ~]$ docker service ps web
ID             NAME        IMAGE          NODE      DESIRED STATE   CURRENT STATE            ERROR     PORTS
nkgwfaivvf4p   web.1       nginx:latest   node1     Running         Running 10 minutes ago
v9gxhnowp3en   web.2       nginx:latest   node3     Running         Running 6 seconds ago
7g1filt53s9s    \_ web.2   nginx:latest   node2     Shutdown        Running 10 minutes ago
[node1 ~]$
```