**TALLER 17**

**4.** Preferimos la privada pues podemos tener control en el acceso que tienen otros a ella, y además dado que es fija, es decir, no cambia al parar los nodos.

**5.**

sudo docker swarm join --token SWMTKN-1-0thecpx1jalq0g0kohp9rs0995d2zhqvwulz92pgyv9yzxjena-92vk99y3v94p6u0ixohew27u3 54.236.51.111:2377

**6.**

Client:

Debug Mode: false

Server:

Containers: 1

Running: 0

Paused: 0

Stopped: 1

Images: 1

Server Version: 19.03.13

Storage Driver: overlay2

Backing Filesystem: extfs

Supports d\_type: true

Native Overlay Diff: true

Logging Driver: json-file

Cgroup Driver: cgroupfs

Plugins:

Volume: local

Network: bridge host ipvlan macvlan null overlay

Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog

Swarm: active

NodeID: 56ha6b8wt1yuo99y0mc3y6nvy

Is Manager: true

ClusterID: n85arsk1h4hsq61dci6l1qcld

Managers: 1

Nodes: 4

Default Address Pool: 10.0.0.0/8

SubnetSize: 24

Data Path Port: 4789

Orchestration:

Task History Retention Limit: 5

Raft:

Snapshot Interval: 10000

Number of Old Snapshots to Retain: 0

Heartbeat Tick: 1

Election Tick: 10

Dispatcher:

Heartbeat Period: 5 seconds

CA Configuration:

Expiry Duration: 3 months

Force Rotate: 0

Autolock Managers: false

Root Rotation In Progress: false

Node Address: 34.207.62.88

Manager Addresses:

34.207.62.88:2377

Runtimes: runc

Default Runtime: runc

Init Binary: docker-init

containerd version: 8fba4e9a7d01810a393d5d25a3621dc101981175

runc version: dc9208a3303feef5b3839f4323d9beb36df0a9dd

init version: fec3683

Security Options:

apparmor

seccomp

Profile: default

Kernel Version: 5.4.0-1024-aws

Operating System: Ubuntu 20.04.1 LTS

OSType: linux

Architecture: x86\_64

CPUs: 1

Total Memory: 978.6MiB

Name: ip-172-31-52-138

ID: NDMC:I5JN:GXB2:VSMQ:36ID:MOBG:F2IA:RVN2:RN2M:EVXA:4C52:7HZW

Docker Root Dir: /var/lib/docker

Debug Mode: false

Registry: https://index.docker.io/v1/

Labels:

Experimental: false

Insecure Registries:

127.0.0.0/8

Live Restore Enabled: false

WARNING: No swap limit supportClient:

Debug Mode: false

Server:

Containers: 2

Running: 1

Paused: 0

Stopped: 1

Images: 2

Server Version: 19.03.13

Storage Driver: overlay2

Backing Filesystem: extfs

Supports d\_type: true

Native Overlay Diff: true

Logging Driver: json-file

Cgroup Driver: cgroupfs

Plugins:

Volume: local

Network: bridge host ipvlan macvlan null overlay

Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog

Swarm: active

NodeID: e1khy3hhge6l438bx1dvwy20c

Is Manager: true

ClusterID: wgjbq6hzr74rpz5efgfdzyqse

Managers: 1

Nodes: 4

Default Address Pool: 10.0.0.0/8

SubnetSize: 24

Data Path Port: 4789

Orchestration:

Task History Retention Limit: 5

Raft:

Snapshot Interval: 10000

Number of Old Snapshots to Retain: 0

Heartbeat Tick: 1

Election Tick: 10

Dispatcher:

Heartbeat Period: 5 seconds

CA Configuration:

Expiry Duration: 3 months

Force Rotate: 0

Autolock Managers: false

Root Rotation In Progress: false

Node Address: 54.236.51.111

Manager Addresses:

54.236.51.111:2377

Runtimes: runc

Default Runtime: runc

Init Binary: docker-init

containerd version: 8fba4e9a7d01810a393d5d25a3621dc101981175

runc version: dc9208a3303feef5b3839f4323d9beb36df0a9dd

init version: fec3683

Security Options:

apparmor

seccomp

Profile: default

Kernel Version: 5.4.0-1029-aws

Operating System: Ubuntu 20.04.1 LTS

OSType: linux

Architecture: x86\_64

CPUs: 1

Total Memory: 978.6MiB

Name: ip-172-31-52-138

ID: NDMC:I5JN:GXB2:VSMQ:36ID:MOBG:F2IA:RVN2:RN2M:EVXA:4C52:7HZW

Docker Root Dir: /var/lib/docker

Debug Mode: false

Registry: https://index.docker.io/v1/

Labels:

Experimental: false

Insecure Registries:

127.0.0.0/8

Live Restore Enabled: false

WARNING: No swap limit support

**7.**

ID HOSTNAME STATUS AVAILABILITY MANAGER STATUS ENGINE VERSION

e1khy3hhge6l438bx1dvwy20c \* ip-172-31-52-138 Ready Active Leader 19.03.13

ypim9nevkgg264x2wuafnb1ww ubunsamPC Ready Active 19.03.13

**Podemos ver todos los nodos en el swarm, en este caso solo el manager y mi pc: ubunsamPC.**

**9.**

ID HOSTNAME STATUS AVAILABILITY MANAGER STATUS ENGINE VERSION

mpqjvwikwiwptm8s6cgl91nzq ip-172-31-20-223 Ready Active 19.03.13

yz1y1l558rylct2z1plcdwr3h ip-172-31-24-14 Ready Active 19.03.13

e1khy3hhge6l438bx1dvwy20c \* ip-172-31-52-138 Ready Active Leader 19.03.13

ypim9nevkgg264x2wuafnb1ww ubunsamPC Ready Active 19.03.13

**Podemos ver que los nodos de las instancias workers fueron incluidos.**

**10.**

sudo docker service create --replicas 1 --name holamundo alpine ping google.com

sudo docker service create: se crea un nuevo servicio.

--replicas 1: número de tareas, en este caso una

--name holamundo: nombre del servicio, en este caso holamundo

alpine: se elige la imagen de la distribución Linux Alpine Linux

ping google.com: se hace un ping a google.com

**11.**

ID NAME MODE REPLICAS IMAGE PORTS

aok8q0ttvac9 holamundo replicated 1/1 alpine:latest

**Podemos ver el servicio recién creado.**

**12.**

Con –-pretty vemos la configuración del servicio de una forma ordenada y clara. Sin –-pretty leemos el archivo json donde están las características y configuración del servicio.

**14.**

ID NAME IMAGE NODE DESIRED STATE CURRENT STATE ERROR PORTS

neaxpdhqcnwl holamundo.1 alpine:latest ip-172-31-52-138 Running Running 29 seconds ago

El servicio se está ejecutando en la instancia manager, la IP privada de la instancia manager es 172.31.52.138.

**17.**

ID NAME IMAGE NODE DESIRED STATE CURRENT STATE ERROR PORTS

neaxpdhqcnwl holamundo.1 alpine:latest ip-172-31-52-138 Running Running 5 minutes ago

u0guqk3vlrtj holamundo.2 alpine:latest ip-172-31-24-14 Running Running 18 seconds ago

bw6sim4gfuc2 holamundo.3 alpine:latest ip-172-31-20-223 Running Running 19 seconds ago

ofd0jvgr48fu holamundo.4 alpine:latest ubunsamPC Running Running 19 seconds ago

**18.**

**(worker2) ip-172-31-20-223**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

5048f8d7417d alpine:latest "ping google.com" About a minute ago Up About a minute holamundo.3.bw6sim4gfuc2kd2gs23ishu0j

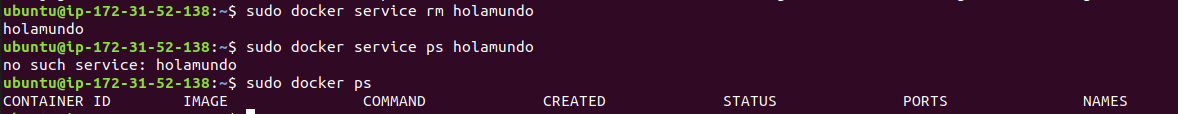
**(worker1) ip-172-31-24-14**

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

b401bf1d84c9 alpine:latest "ping google.com" 3 minutes ago Up 3 minutes holamundo.2.u0guqk3vlrtjcwgtyifv2kmaj

**19.**

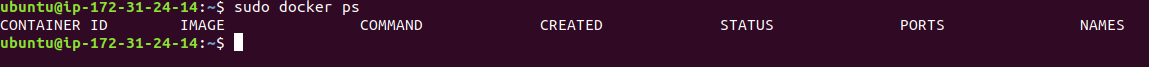
**En instancia manager:**

****

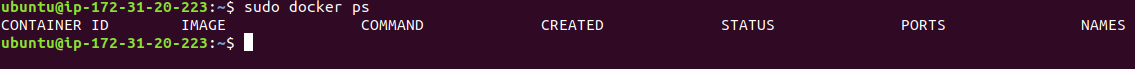
**En mi pc, ubunsamPC:**

****

**En (worker1) ip-172-31-24-14:**

****

**En (worker2) ip-172-31-20-223:**

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