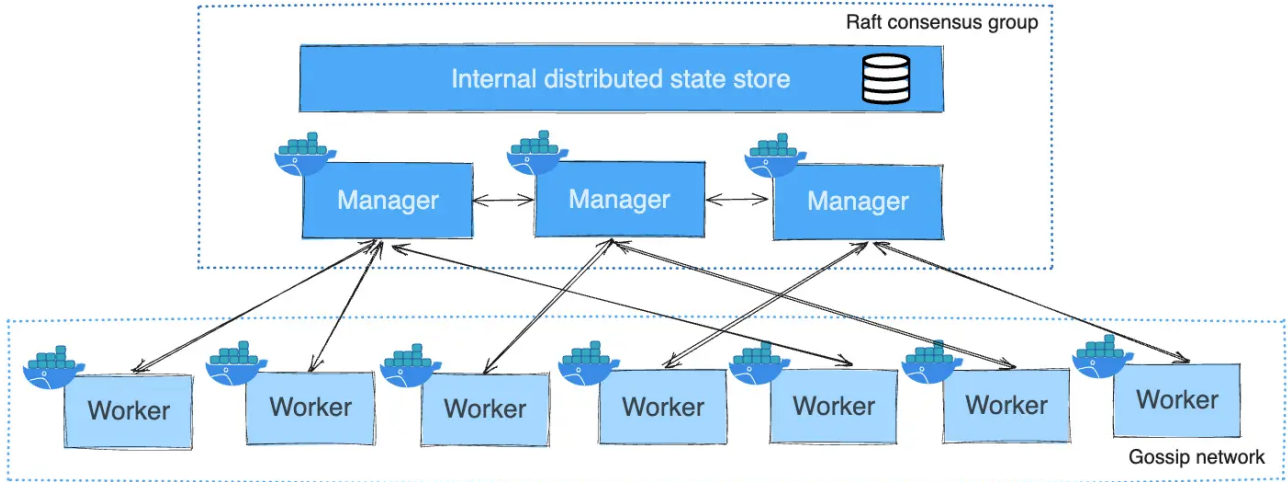


Docker Swarm ??

- [LXC Docker Swarm \[1\]\[1\]\[1\]](#)
- [Docker Swarm \[1\]\[1\]\[1\]\[1\]\[1\]](#)

LXC Docker Swarm ????



The diagram illustrates the Docker Swarm Mode architecture. It shows a cluster of three Docker Engine nodes. Each node contains Docker and Service components. The nodes are connected to a central Cluster. The diagram shows the flow of traffic from the Cluster to the Docker Engine nodes, then to the Docker components, and finally to the Services.

????

 PVE **LXC** **LXC** **(nesting)**

managers **workers**

managers 10.0.0.150

workers-1 10.0.0.151

workers-2 10.0.0.152

???Swarm

managers **--advertise-addr** **IP**

--default-addr-pool  Swarm  10.0.0.0/8  IP
 Overlay 

```
docker swarm init --advertise-addr 10.0.0.150 --default-addr-pool 10.20.0.0/16
```

--	--	--	--	--	--	--	--	--

token

workers ☐ ☐ ☐ ☐ ☐

token

```
docker swarm join --token SWMTKN-1-3pu6hszjas19xyp7ghgosyx9k8atbfc8p2is99znp26u2lkl-1awwxuud3z9jlz3puu7rcgdbx 10.0.0.150:2377
```

[illegible]

```
root@docker-1:~# docker node ls
```

ID	HOSTNAME	STATUS	AVAILABILITY	MANAGER STATUS	ENGINE
VERSION					
x46rx0e108vhrxe354xom40w8 *	docker-1	Ready	Active	Leader	29.0.2
j96spq2xa7lx7oaw0qfhdava3	docker-2	Ready	Active		29.0.2
v7flruyfi6glooxdasvx3a9n0	docker-3	Ready	Active		29.0.2

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LXC

Overlay

ingress ☐ ☐ ☐ ☐ ☐ ☐

```
nsenter --net=/run/docker/netns/ingress_sbox sysctl -w net.ipv4.ip_forward=1
```

--	--	--	--

GitHub dcwestra

DockerSwarmLXC

Docker

??Portainer?Agent

--	--

PortainerSwarm

--	--	--	--	--	--	--	--

[illegible]

```
curl -L https://downloads.portainer.io/ce-lts/portainer-agent-stack.yml -o portainer-agent-  
stack.yml
```

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Portainer [][][][][][][][]

portainer-agent-stack.yml 

```
version: '3.2'
```

```
services:
```

agent:

```
image: portainer/agent:lts
```

volumes:

```
- /var/run/docker.sock:/var/run/docker.sock
- /var/lib/docker/volumes:/var/lib/docker/volumes
networks:
  - agent_network
deploy:
  mode: global
  placement:
    constraints: [node.platform.os == linux]
```

```
portainer:
  image: 6053537/portainer-ce:latest
  command: -H tcp://tasks.agent:9001 --tlsskipverify
  ports:
    - "9443:9443"
    - "9000:9000"
    - "8000:8000"
  volumes:
    - portainer_data:/data
  networks:
    - agent_network
  deploy:
    mode: replicated
    replicas: 1
    placement:
      constraints: [node.role == manager]
```

```
networks:
  agent_network:
    driver: overlay
    attachable: true
```

```
volumes:
  portainer_data:
```

```
docker stack deploy -c portainer-agent-stack.yml portainer
```

Portainer Agent

```
root@docker-1:~# docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED
--------------	-------	---------	---------

STATUS	PORTS	NAMES
8a157c104fdc	6053537/portainer-ce:latest	"/portainer -H tcp://ip:9443" About an hour ago Up
About an hour	8000/tcp, 9000/tcp, 0.0.0.0:9443->9443/tcp, [::]:9443->9443/tcp	
portainer_portainer.1.ofwefrgf28mgc9s78ulpm8l45		
2b0713e79ea3	portainer/agent:lbs	"/agent" About an hour ago Up
About an hour	0.0.0.0:9001->9001/tcp, [::]:9001->9001/tcp	
portainer_agent.x46rx0e108vhrxe354xom40w8.8pf2g1dy8gwsaq9tazf1vcr1r		

https://ip:9443 Portainer Swram

PORTAINER.IO

COMMUNITY EDITION

主

仪表盘

模板

堆栈

服务

容器

镜像

网络

卷

配置

密钥

Swarm

详情

设置

注册表

管理

用户相关

Community Edition 2.33.3 LTS

Swarm

Cluster overview

🔔 ⚙️ 👤 jason

Cluster status

Nodes	3
Docker API version	1.52
Total CPU	6
Total memory	6.44 GB

Go to cluster visualizer

Nodes

搜索...

Name	Role	CPU	Memory	Engine	IP Address	Status	Availability
docker-2	worker	2	2.1 GB	29.0.2	10.0.0.151	ready	active
docker-3	worker	2	2.1 GB	29.0.2	10.0.0.152	ready	active
docker-1	manager	2	2.1 GB	29.0.2	10.0.0.150	ready	active

每页项目数 10

Docker Swarm ??????

??Swarm

□□	worker□□	manager□□□□□□□□	worker□□	command
----	----------	-----------------	----------	---------

```
docker swarm join-token worker
```

```
root@docker-1:~# docker swarm join-token worker
```

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

```
docker swarm join --token SWMTKN-1-3pmzdoteij6zbnf844068h9pukc-4rfw7oiyyihqx35eg3ncuzw29
10.0.0.150:2377
```

□□	manager□□	manager□□□□□□□□	manager□□	command
----	-----------	-----------------	-----------	---------

```
docker swarm join-token manager
```

```
root@docker-1:~# docker swarm join-token manager
```

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

```
docker swarm join --token SWMTKN-1-3pmzdoteij6zbnf8g120abdfjukc-cckot0r7ii8e3xu3b6bngxz26
10.0.0.150:2377
```

??Swarm