



Docker Certified Associate (DCA)

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Session 6

- Docker Swarm Init
- Docker Swarm usefull Command
- Docker Service
- Docker Network

Docker Swarm

- swarm init
- swarm join
- service create
- service inspect
- service ls
- service rm
- service scale
- service ps
- service update

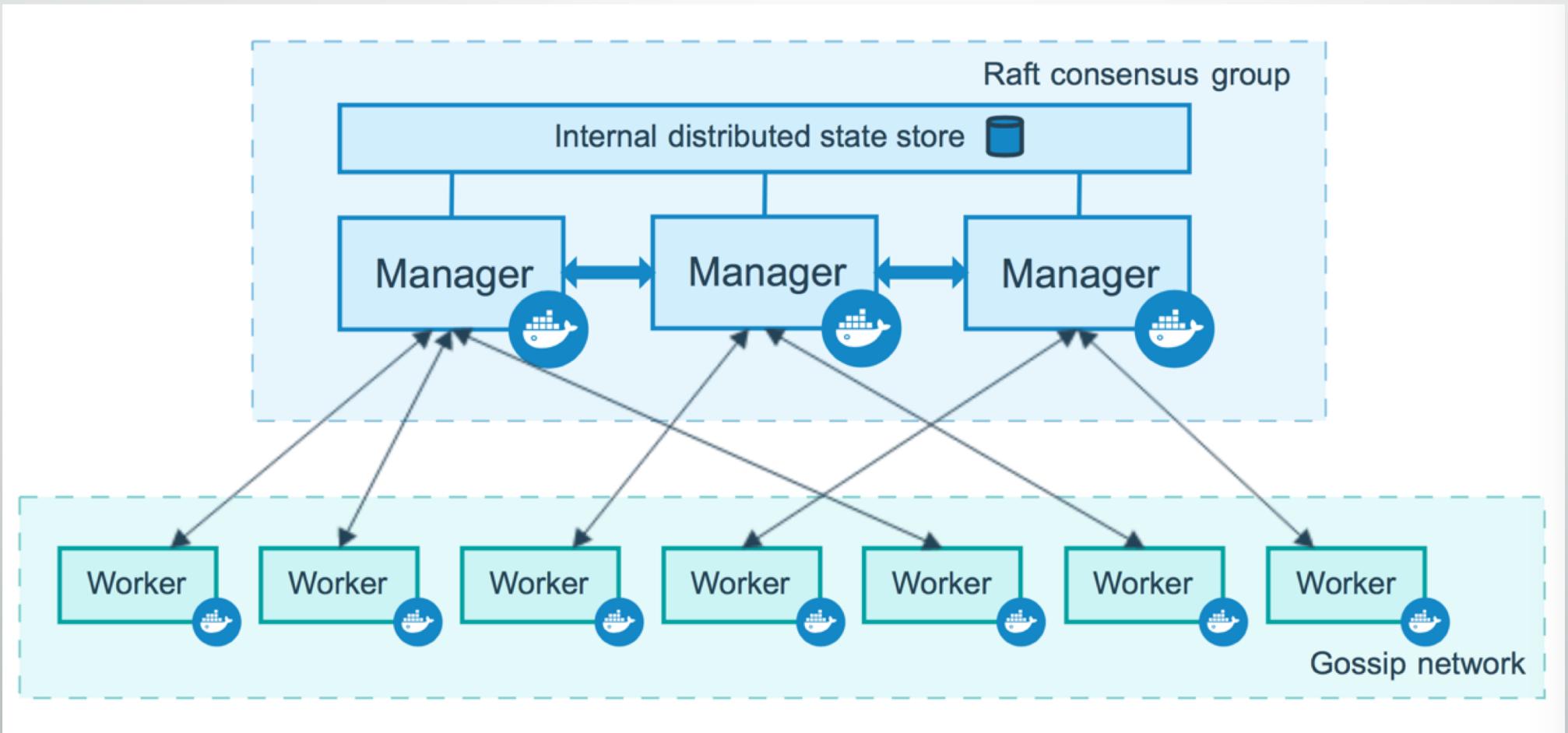
Docker Swarm init

- docker swarm init [OPTIONS]
-
-
- Important :
- --advertise-addr
- --listen-addr

Docker Swarm init

- **Example:**
- \$ docker swarm init --advertise-addr 192.168.99.121
- Swarm initialized: current node (bvz81updecsj6wjz393c09vti) is now a manager.
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- To add a worker to this swarm, run the following command:
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- docker swarm join \
- --token SWMTKN-1-3pu6hszjas19xyp7ghgosyx9k8atbfcr8p2is99znpv26u2lkl-1awwxuwuwd3z9j1z3puu7rcgdbx \
- 172.17.0.2:2377
-
- To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

Manager Vs Worker



Docker Swarm join

- swarm join
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- Docker swarm join-token worker
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- Docker swarm join-token manager

Docker Swarm join

- Important Note:
- Adding more managers does NOT mean increased scalability or higher performance. In general, the opposite is true.
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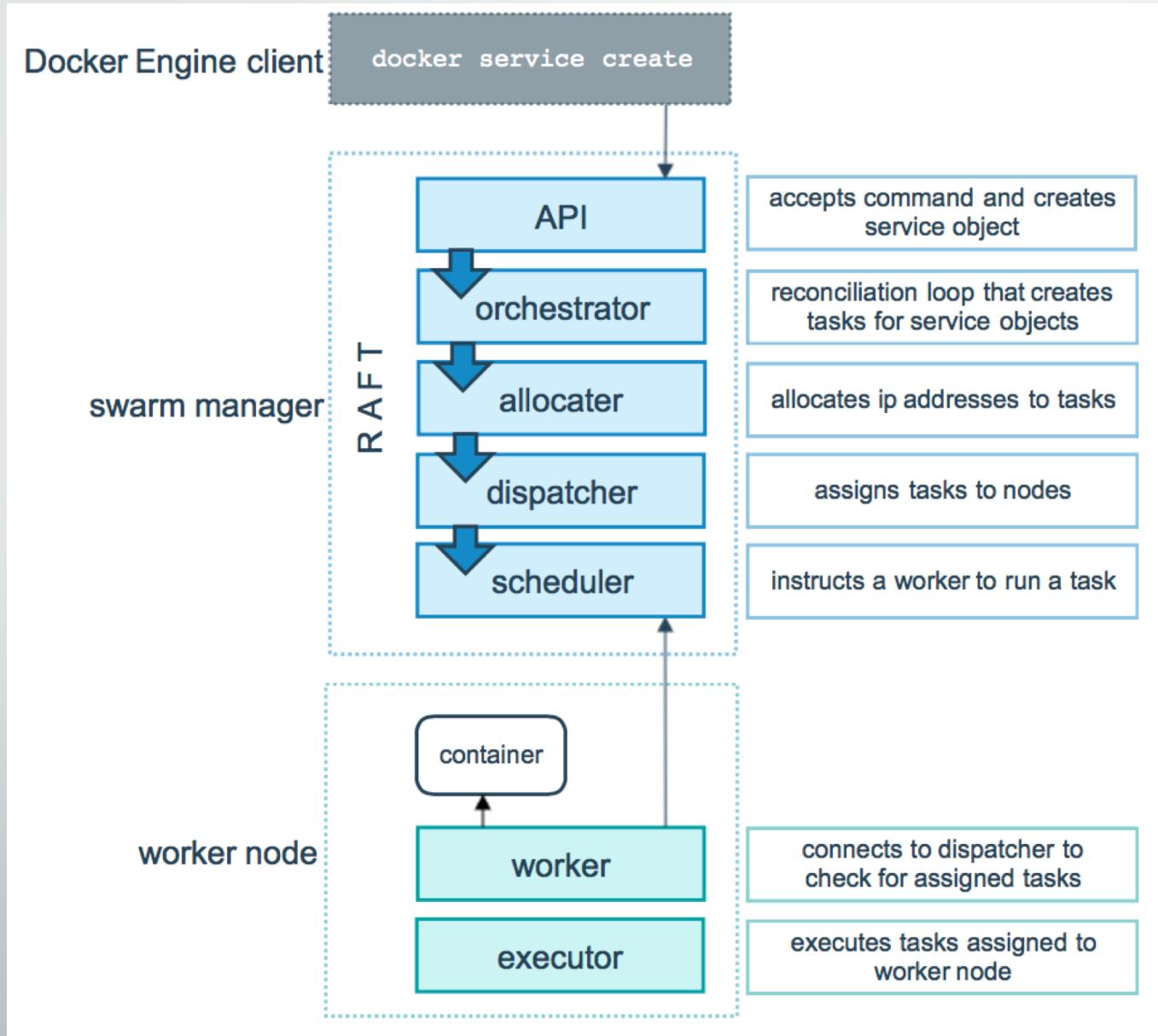
Docker Node change role

- Convert worker to manager:
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- docker node promote node_name
-
-
- Convert manager to worker:
- docker node demote. node_name

Docker Swarm Service Create

- \$ docker service create --name redis redis:3.0.6

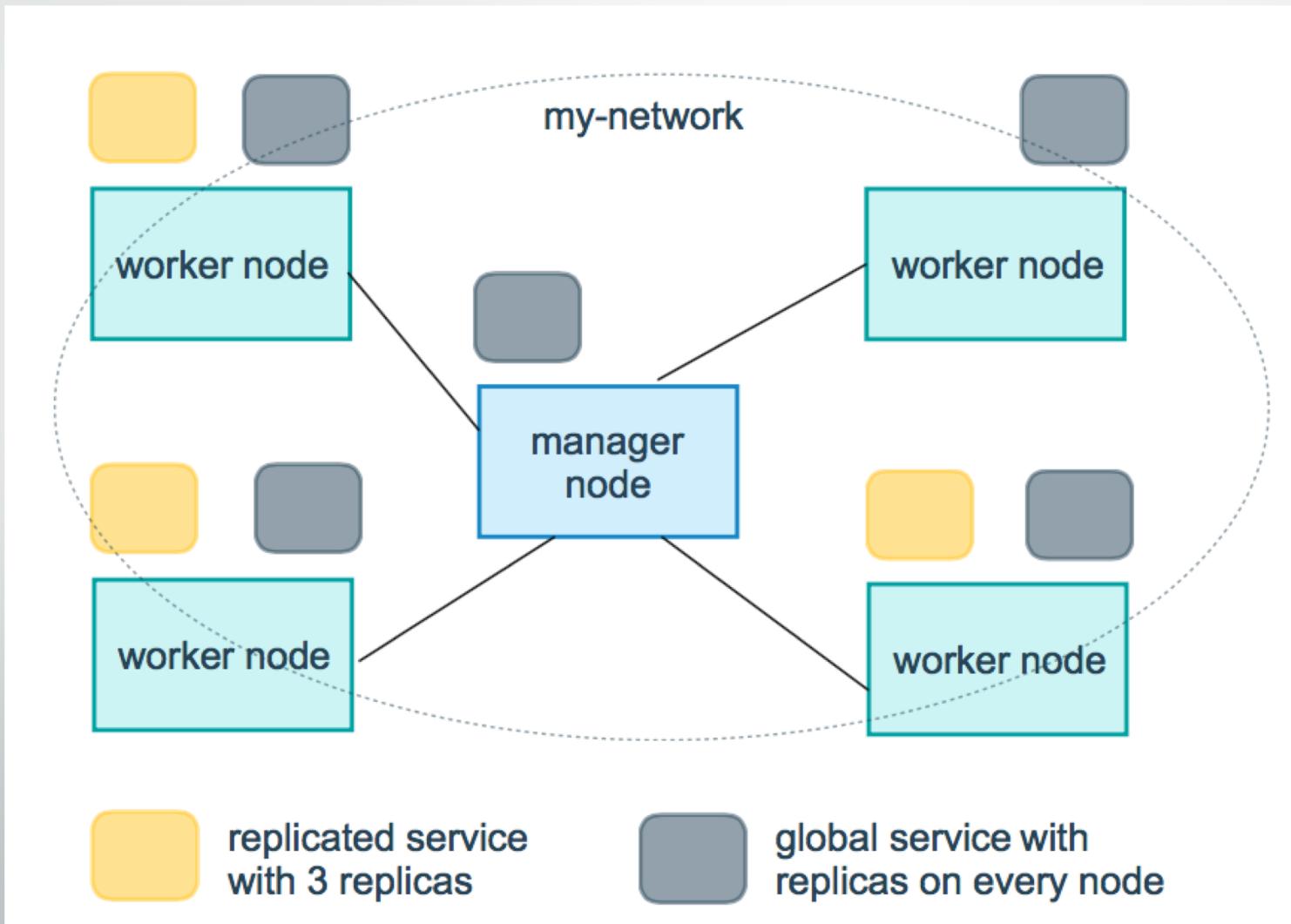
Docker Swarm Service create Flow



Docker Swarm Service Create

- \$ docker service create --mode global --name redis2 redis:3.0.6
-
-
-

Replicated VS global services



Docker Swarm Service Create

- docker service create --name redis --replicas=5 redis:3.0.6

Docker Swarm Secret

- docker secret create [OPTIONS] SECRET file|-
-
-
- date |md5sum|awk '{print \$1}' | docker secret create my_secret -
-

Docker Swarm Secret

- docker secret inspect my_secret

Consuming Docker Secrets

- docker service create --name my_test_app --secret my_secret eono1/infinite
-
- The secret is now stored to a temporary file system (tmpfs) under /run/secrets/my_secret

docker service update

- docker service update [OPTIONS] SERVICE
- 1. docker service update --limit-cpu 2 redis

docker service update

- docker service create \
 --name=myservice \
 --mount \
 type=volume,source=test-data,target=/somewhere \
 nginx:alpine \
 myservice

docker service update

- docker service update \
 • --mount-add \
 type=volume,source=other-volume,target=/somewhere-else \
 Myservice

docker service update

- docker service update --mount-rm /somewhere myservice

docker service update

- docker service update \
 - --publish-add published=8080,target=80 \
 - myservice

docker service update

- docker service update \
 • --network-rm my-network \
 • --network-add name=my-network,alias=web1 \
 • myservice

Roll back to the previous version of a service

- `$ docker service update --replicas=5 web`
- `$ docker service ls`

- `$ docker service update --rollback web`
- `$ docker service ls`

Add or remove secrets

- docker service update \
- --secret-add source=ssh-2,target=ssh-2 \
- --secret-rm ssh-1 \
- myservice