

## Compte rendu tp 6

Initialize the Swarm :

```
ubuntu@ubuntu-virtual-machine:~$ docker swarm init --advertise-addr $(hostname -i)
Swarm initialized: current node (y5daxhrdt6fikymuvhxm9jxv1) is now a manager.

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

    docker swarm join --token SWMTKN-1-0fdzi77i2xx2rewbitfajs2fc99wwcw5tcderalp7lsxc40oim-ctbr5xsexcm9wdn0l4c7p791d 127.0.1.1:2377

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

Show Swarm Members :

```
ubuntu1@ubuntu1-virtual-machine:~$ docker swarm join --token SWMTKN-1-0fdzi77i2xx2rewbitfajs2fc99wwcw5tcderalp7lsxc40oim-ctbr5xsexcm9wdn0l4c7p791d 192.168.150.128
This node joined a swarm as a worker.
```

Clone the Voting App

```
root@ubuntu-virtual-machine:/home/ubuntu# docker node ls
```

ID	ENGINE VERSION	HOSTNAME	STATUS	AVAILABILITY	MANAGER	STAT
rwt7vskf3qcaxe3ge154rvl75	28.0.1	ubuntu1-virtual-machine	Ready	Active		
y5daxhrdt6fikymuvhxm9jxv1 *	27.5.1	ubuntu-virtual-machine	Ready	Active	Leader	

Deploy a Stack and list the Stack Services:

```
root@ubuntu-virtual-machine:/home/ubuntu# git clone https://github.com/docker/example-voting-app
Cloning into 'example-voting-app'...
remote: Enumerating objects: 1179, done.
remote: Total 1179 (delta 0), reused 0 (delta 0), pack-reused 1179 (from 1)
Receiving objects: 100% (1179/1179), 1.21 MiB | 133.00 KiB/s, done.
Resolving deltas: 100% (448/448), done.
root@ubuntu-virtual-machine:/home/ubuntu# cd example-voting-app
```

```

root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# cat docker-stack.yml
# this file is meant for Docker Swarm stacks only
# trying it in compose will fail because of multiple replicas trying to bind to the same port
# Swarm currently does not support Compose Spec, so we'll pin to the older version 3.9

version: "3.9"

services:
  redis:
    image: redis:alpine
    networks:
      - frontend

  db:
    image: postgres:15-alpine
    environment:
      POSTGRES_USER: "postgres"
      POSTGRES_PASSWORD: "postgres"
    volumes:
      - db-data:/var/lib/postgresql/data
    networks:
      - backend

  vote:
    image: dockersamples/examplevotingapp_vote
    ports:
      - 8080:80
    networks:
      - frontend
    deploy:
      replicas: 2

  result:
    image: dockersamples/examplevotingapp_result
    ports:
      - 8081:80
    networks:
      - backend

```

```

root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# docker stack deploy --compose-fi
le=docker-stack.yml voting_stack
Since --detach=false was not specified, tasks will be created in the background.
In a future release, --detach=false will become the default.
Creating network voting_stack_backend
Creating network voting_stack_frontend
Creating service voting_stack_worker
Creating service voting_stack_redis
Creating service voting_stack_db
Creating service voting_stack_vote
Creating service voting_stack_result
root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# docker stack ls
NAME                SERVICES
voting_stack        5

```

Getting details on each service within the stack:

```
root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# docker stack services voting_stack
```

ID	NAME PORTS	MODE	REPLICAS	IMAGE
4x9kflrw7u1g	voting_stack_db	replicated	0/1	postgres:15-alpine
a3nujorxivdu	voting_stack_redis	replicated	0/1	redis:alpine
wesd2ish0x3h result:latest	voting_stack_result *:8081->80/tcp	replicated	0/1	dockersamples/examplevotingapp_r
e7w950vh35hf ote:latest	voting_stack_vote *:8080->80/tcp	replicated	0/2	dockersamples/examplevotingapp_v
bo7yw0iyt0t5 orker:latest	voting_stack_worker	replicated	0/2	dockersamples/examplevotingapp_w

Seeing the list of the tasks of the vote service:

```
root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# docker service ps voting_stack_vote
```

ID	NAME	IMAGE	MODE
cvsuc05zfkhu	voting_stack_vote.1	dockersamples/examplevotingapp_vote:latest	Running
62jk9ptf4vi4	voting_stack_vote.2	dockersamples/examplevotingapp_vote:latest	Running

```
root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# docker service scale voting_stack_vote=5
```

voting\_stack\_vote scaled to 5  
overall progress: 5 out of 5 tasks  
1/5: running  
2/5: running  
3/5: running  
4/5: running  
5/5: running  
verify: Service voting\_stack\_vote converged

```
root@ubuntu-virtual-machine:/home/ubuntu/example-voting-app# docker stack services voting_stack
```

ID	NAME PORTS	MODE	REPLICAS	IMAGE
4x9kflrw7u1g	voting_stack_db	replicated	1/1	postgres:15-alpine
a3nujorxivdu	voting_stack_redis	replicated	1/1	redis:alpine
wesd2ish0x3h result:latest	voting_stack_result *:8081->80/tcp	replicated	1/1	dockersamples/examplevotingapp_r
e7w950vh35hf ote:latest	voting_stack_vote *:8080->80/tcp	replicated	5/5	dockersamples/examplevotingapp_v
bo7yw0iyt0t5 orker:latest	voting_stack_worker	replicated	2/2	dockersamples/examplevotingapp_w