

Creating a network before building docker-compose.yml file

```
k before the stack is deployed
yuviljan@m1:~$ sudo docker network create -d overlay testservice
9a1bnp9ax46jz8sycy8j7xxvn
yuviljan@m1:~$ sudo docker stack deploy -c docker-compose.yml medihabs
```

Deploying stack on swarm mode

```
a minute ago
yuviljan@m1:~$ sudo docker stack deploy -c docker-compose.yml medihabs
Ignoring unsupported options: build, links, restart

Ignoring deprecated options:

container_name: Setting the container name is not supported.

Updating service medihabs_nginx (id: 57u4ygnjnioebqbn7owvndtwl)
Updating service medihabs_phpmyadmin (id: 9xh22exa9eyptskrlowb0afjg)
Updating service medihabs_php-fpm (id: kdzhositwjbfd643jgwtel8rw)
Updating service medihabs_db (id: 5hx9adhsq96enyu57zf2qxg66)
Updating service medihabs_redis (id: 0ag36agcxs06sc2jdgtyp33z)
yuviljan@m1:~$ sudo docker stack ps medihabs -f desired-state=running
```

Services are distributed among different nodes.

```
yuviljan@m1:~$ sudo docker stack ps medihabs -f desired-state=running
ID                NAME                IMAGE                NODE                DESIRED STATE        CURRENT STATE
srhd6bfvpowo      medihabs_db.1        mariadb:latest       worker02            Running              Running about
a minute ago
r8r6sy9scuz5      medihabs_php-fpm.1    php:7.4-fpm          m1                  Running              Running about
a minute ago
nnxp5fh9qbe7      medihabs_phpmyadmin.1 phpmyadmin/phpmyadmin:latest worker01            Running              Running about
a minute ago
vrzhmd6pzecp      medihabs_redis.1      redis:latest          m1                  Running              Running about
a minute ago
yuviljan@m1:~$
```

Scaling phpMyAdmin service

```
medihabs_phpmyadmin. Error: No such service: medihabs_phpmyadmin
yuviljan@m1:~$ sudo docker service scale medihabs_phpmyadmin=3
medihabs_phpmyadmin scaled to 3
overall progress: 3 out of 3 tasks
1/3: running [=====>]
2/3: running [=====>]
3/3: running [=====>]
verify: Service converged
yuviljan@m1:~$ sudo docker stack ps medihabs -f desired-state=running
ID                NAME                IMAGE                NODE                DESIRED STATE        CURRENT STATE
srhd6bfvpowo      medihabs_db.1        mariadb:latest       worker02            Running              Running 12 min
utes ago
r8r6sy9scuz5      medihabs_php-fpm.1    php:7.4-fpm          m1                  Running              Running 12 min
utes ago
nnxp5fh9qbe7      medihabs_phpmyadmin.1 phpmyadmin/phpmyadmin:latest worker01            Running              Running 12 min
utes ago
11e1l44ee5dk      medihabs_phpmyadmin.2 phpmyadmin/phpmyadmin:latest worker02            Running              Running 9 seco
nds ago
4x6uj9qnis6d      medihabs_phpmyadmin.3 phpmyadmin/phpmyadmin:latest m1                  Running              Running 29 sec
onds ago
vrzhmd6pzecp      medihabs_redis.1      redis:latest          m1                  Running              Running 12 min
utes ago
yuviljan@m1:~$
```

After suspending worker01 the container of phpMyAdmin got allocated to worker02

```
verify: Service converged
yuviljan@m1:~$ sudo docker stack ps medihabs -f desired-state=running
ID                NAME                PORTS                IMAGE                NODE                DESIRED STATE        CURRENT STATE        AGE
srhd6bfvpowo     medihabs_db.1       mariadb:latest      worker02             Running             Running             12 min
utes ago
r8r6sy9scuz5     medihabs_php-fpm.1  php:7.4-fpm         m1                   Running             Running             12 min
utes ago
nnxp5fh9qbe7     medihabs_phpmyadmin.1  phpmyadmin/phpmyadmin:latest  worker01             Running             Running             12 min
utes ago
1leil44ee5dk     medihabs_phpmyadmin.2  phpmyadmin/phpmyadmin:latest  worker02             Running             Running             9 seco
nds ago
4x6uj9qnis6d     medihabs_phpmyadmin.3  phpmyadmin/phpmyadmin:latest  m1                   Running             Running             29 sec
onds ago
vrzhmd6pzecp     medihabs_redis.1     redis:latest         m1                   Running             Running             12 min
utes ago
yuviljan@m1:~$ sudo docker node ls
ID                HOSTNAME                STATUS                AVAILABILITY                MANAGER STATUS                ENGINE VERSION
2x45wft81qg08monkc29ssi34 * m1                      Ready                  Active                      Leader                         20.10.20
sbtrtssw9vohi4xxpposta0az7 worker01                 Down                   Active                      20.10.20
ql48qif75ip5hms1456clj1pu worker02                 Ready                  Active                      20.10.20
yuviljan@m1:~$ sudo docker stack ps medihabs -f desired-state=running
ID                NAME                PORTS                IMAGE                NODE                DESIRED STATE        CURRENT STATE        AGE
srhd6bfvpowo     medihabs_db.1       mariadb:latest      worker02             Running             Running             14 min
utes ago
r8r6sy9scuz5     medihabs_php-fpm.1  php:7.4-fpm         m1                   Running             Running             14 min
utes ago
lv5flnj6687t     medihabs_phpmyadmin.1  phpmyadmin/phpmyadmin:latest  worker02             Running             Running             10 sec
onds ago
1leil44ee5dk     medihabs_phpmyadmin.2  phpmyadmin/phpmyadmin:latest  worker02             Running             Running             2 minu
tes ago
4x6uj9qnis6d     medihabs_phpmyadmin.3  phpmyadmin/phpmyadmin:latest  m1                   Running             Running             2 minu
tes ago
vrzhmd6pzecp     medihabs_redis.1     redis:latest         m1                   Running             Running             14 min
utes ago
yuviljan@m1:~$
```