

Add nodes to the swarm

Estimated reading time: 2 minutes

Once you've created a swarm (<https://docs.docker.com/engine/swarm/swarm-tutorial/create-swarm/>) with a manager node, you're ready to add worker nodes.

1. Open a terminal and ssh into the machine where you want to run a worker node. This tutorial uses the name `worker1` .
2. Run the command produced by the `docker swarm init` output from the Create a swarm (<https://docs.docker.com/engine/swarm/swarm-tutorial/create-swarm/>) tutorial step to create a worker node joined to the existing swarm:

```
$ docker swarm join \
  --token SWMTKN-1-49nj1cmql0jkz5s954yi3oex3nedyz0fb0xx14ie
39trti4wxv-8v xv8rssmk743ojnwacrr2e7c \
  192.168.99.100:2377
```

This node joined a swarm as a worker.

If you don't have the command available, you can run the following command on a manager node to retrieve the join command for a worker:

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

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

```
docker swarm join \
  --token SWMTKN-1-49nj1cmql0jkz5s954yi3oex3nedyz0fb0xx14i
e39trti4wxv-8v xv8rssmk743ojnwacrr2e7c \
  192.168.99.100:2377
```

3. Open a terminal and ssh into the machine where you want to run a second worker node. This tutorial uses the name `worker2` .

4. Run the command produced by the `docker swarm init` output from the Create a swarm (<https://docs.docker.com/engine/swarm/swarm-tutorial/create-swarm/>) tutorial step to create a second worker node joined to the existing swarm:

```
$ docker swarm join \
  --token SWMTKN-1-49nj1cmql0jkz5s954yi3oex3nedyz0fb0xx14ie3
  9trti4wxv-8vxv8rssmk743ojnwacrr2e7c \
  192.168.99.100:2377
```

This node joined a swarm as a worker.

5. Open a terminal and ssh into the machine where the manager node runs and run the `docker node ls` command to see the worker nodes:

ID	HOSTNAME	STATUS	AVAILABILITY
MANAGER STATUS			
03g1y59jwfg7cf99w4lt0f662	worker2	Ready	Active
9j68exjopxe7wfl6yuxml7a7j	worker1	Ready	Active
dxn1zf6l61qsb1josjja83ngz *	manager1	Ready	Active
Leader			

The `MANAGER` column identifies the manager nodes in the swarm. The empty status in this column for `worker1` and `worker2` identifies them as worker nodes.

Swarm management commands like `docker node ls` only work on manager nodes.

What's next?

Now your swarm consists of a manager and two worker nodes. In the next step of the tutorial, you deploy a service (<https://docs.docker.com/engine/swarm/swarm-tutorial/deploy-service/>) to the swarm.

tutorial (<https://docs.docker.com/glossary/?term=tutorial>), cluster management ([https://docs.docker.com/glossary/?term=cluster management](https://docs.docker.com/glossary/?term=cluster%20management)), swarm (<https://docs.docker.com/glossary/?term=swarm>)