**Understanding Docker Lifecycle:**

https://k21academy.com/docker-kubernetes/docker-container-lifecycle-management/

**Committing changes in a Container:**

[How to Commit Changes to a Docker Image (With Example)https://phoenixnap.com › ... › DevOps and Development](https://phoenixnap.com/kb/how-to-commit-changes-to-docker-image)

**Docker Volumes:**

https://docs.docker.com/get-started/05\_persisting\_data/

**Installing docker compose:**

<https://docs.docker.com/compose/install/>

**Docker compose example:**

<https://docs.docker.com/compose/gettingstarted/>

**Docker Basic Information:**

<https://docs.docker.com/get-started/>

**Docker Swarm:**

1. **Overview:**

<https://docs.docker.com/engine/swarm/key-concepts/>

1. **Key Concepts:**

<https://docs.docker.com/engine/swarm/key-concepts/>

1. How swarm works:

https://docs.docker.com/engine/swarm/how-swarm-mode-works/nodes/

1. **Installation and configuration:**- a. 1. Allocating elastic IP

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/elastic-ip-addresses-eip.html#using-instance-addressing-eips-allocating>

* B . assign elastic IP to instance

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/elastic-ip-addresses-eip.html#using-instance-addressing-eips-associating

* C. Installation of swarm

<https://docs.docker.com/engine/swarm/swarm-tutorial/>

**Steps:**

1. Install docker on all the nodes.
2. Elastic IP for the master swarm node.

### Open protocols and ports between the hosts.

The following ports must be available. On some systems, these ports are open by default.

* **TCP port 2377** for cluster management communications
* **TCP** and **UDP port 7946** for communication among nodes
* **UDP port 4789** for overlay network traffic

1. Start the installation:

<https://docs.docker.com/engine/swarm/swarm-tutorial/create-swarm/>

1. Add nodes to the swarm:

<https://docs.docker.com/engine/swarm/swarm-tutorial/add-nodes/>

# Deploy a service to the swarm

https://docs.docker.com/engine/swarm/swarm-tutorial/deploy-service/