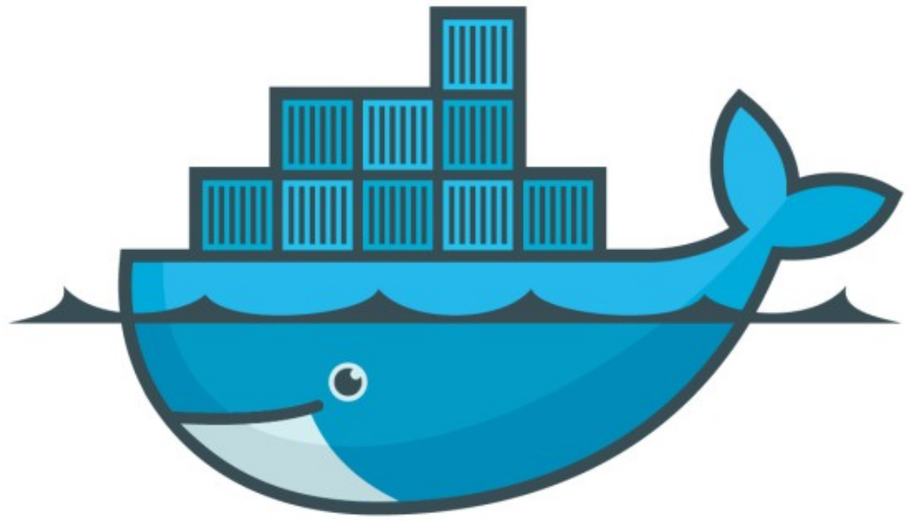

DOCKER

Docker Swarm : Intro

- Problem Statement :
- How to Scale Containers?
- How to manage Containers or re-create if they Fails/Crash?
- How to Upgrade the Service with Zero DownTime?
- How to Manage Containers on VMs, Nodes?

- Docker Swarm :
- Docker Swarm is a clustering and scheduling tool for Docker containers.
- Swarm is Docker's native support for orchestrating clusters of Docker engines.
- Orchestration : Define nodes. Define services. Set how many nodes you want to run and where, and you're done.
- At a high level, Swarm takes multiple Docker Engines running on different hosts and lets you use them together.

- Docker Swarm : Docker Swarm have Two Type of Nodes Master(Manager) and Worker.
- Every swarm starts out with one manager node designated as the leader.
- Swarm is highly available thanks to its implementation of the **Raft algorithm**.
- **Raft Algo** : The leader node is constantly checking in with its fellow manager nodes and syncing their states.

- Task Scheduling :
- Load Balancing :
- Rolling Updates :
- Security :

Will see you in Next Lecture…

See you in next lecture …