



DOCKER

Docker Swarm : Intro

Docker : Docker Swarm

- 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 : Docker Swarm

- **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 : Docker Swarm

- **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.

Docker : Docker Swarm

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

Will see you in Next Lecture...

Thank you!

A close-up photograph of a hand holding a black marker, writing the words 'Thank you!' in a cursive script on a white surface. The hand is positioned on the right side of the frame, with the fingers gripping the marker. The text is written in a dark, fluid cursive style. The background is plain white.

See you in next lecture ...