

Day-3 C Kubernetes

Kubernetes → Orchestration Tool



Orchestra



Container Orchestration Tool

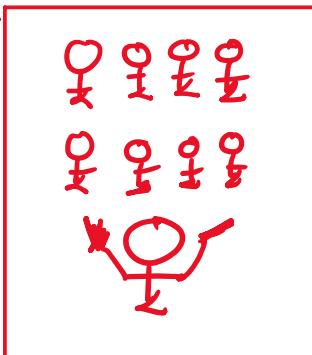
Docker

Docker

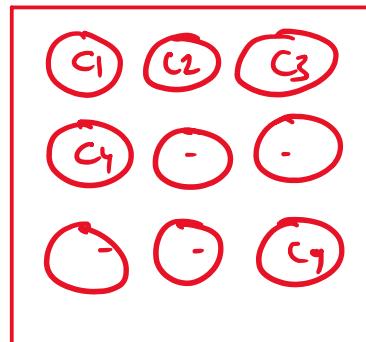
↳ Containerization

Shipping

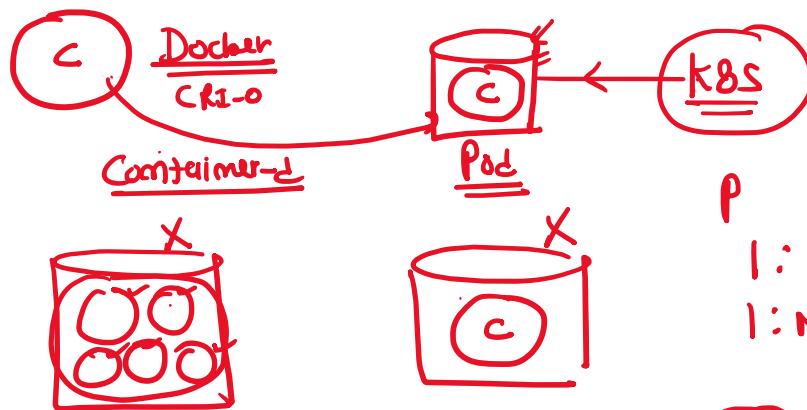
Docker Swarm
X
Kubernetes
2015 CNCF



Orchestration



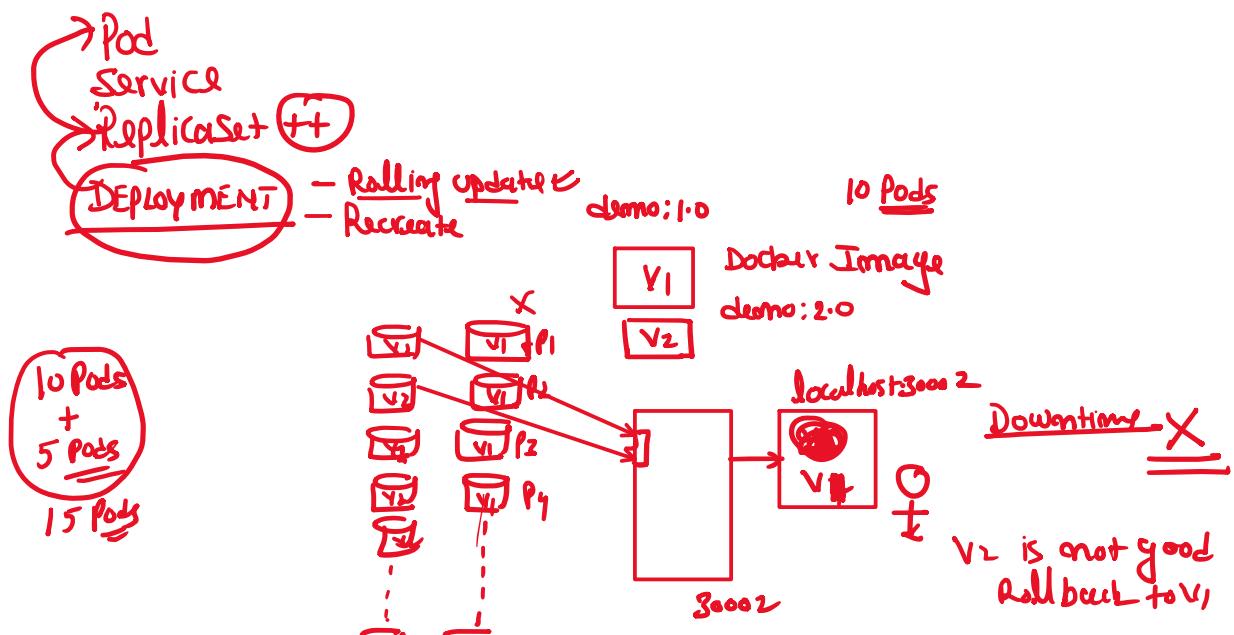
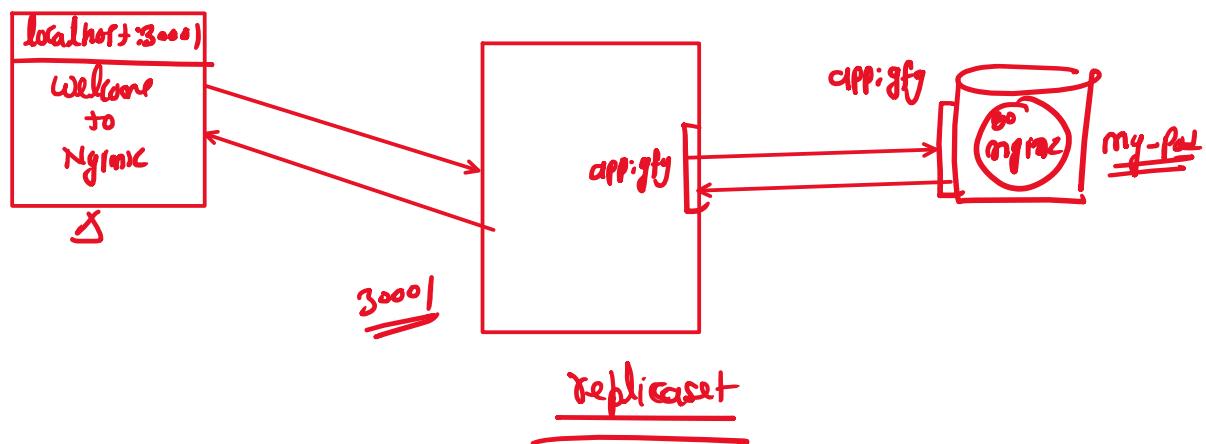
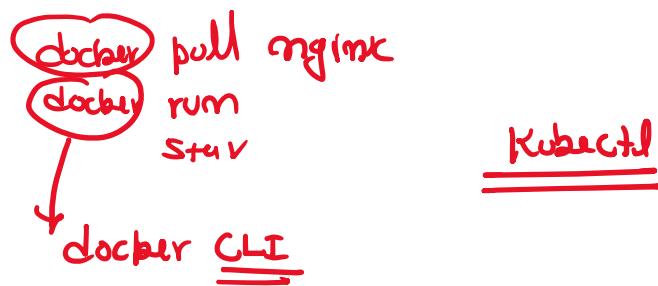
Kubernetes (K8S)



P C
1:1 ↘
1:N



1) Pod
 2) Service





- V2 is not good
Roll back to V1

Kubectl rollout undo deployment dep-name

```
PS D:\KUBERNETES-LAB> kubectl get all
NAME                                         READY   STATUS        RESTARTS   AGE
pod/deployment-rolling-55d9548f96-2gk87    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-2w42f    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-ftn6t    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-jk9hg    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-m292k    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-phhbp    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-ppz2z    0/1    ContainerCreating   0          2s
pod/deployment-rolling-55d9548f96-x6vsq    0/1    ContainerCreating   0          2s
pod/deployment-rolling-77645b5c47-6h2zs    1/1    Running         0          105s
pod/deployment-rolling-77645b5c47-fq95c    1/1    Running         0          105s
pod/deployment-rolling-77645b5c47-gv2d8    1/1    Running         0          105s
pod/deployment-rolling-77645b5c47-hhpf8    1/1    Running         0          105s
pod/deployment-rolling-77645b5c47-hl7ch    1/1    Running         0          105s
pod/deployment-rolling-77645b5c47-hqmch    1/1    Running         0          105s
pod/deployment-rolling-77645b5c47-kv5bt    1/1    Terminating     0          105s
pod/deployment-rolling-77645b5c47-n8rrd    1/1    Terminating     0          105s
pod/deployment-rolling-77645b5c47-sxvv2    1/1    Terminating     0          105s
pod/deployment-rolling-77645b5c47-tjjjkp   1/1    Running         0          105s

NAME           TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)      AGE
service/kubernetes   ClusterIP   10.96.0.1       <none>        443/TCP     72m
service/nodeport-service   NodePort    10.110.61.122  <none>        80:30001/TCP  59m

NAME           READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/deployment-rolling   7/10    8           7           105s

NAME           DESIRED   CURRENT   READY   AGE
replicaset.apps/deployment-rolling-55d9548f96  8    8    0    2s
replicaset.apps/deployment-rolling-77645b5c47  10   7    7    105s
```

Kubernetes

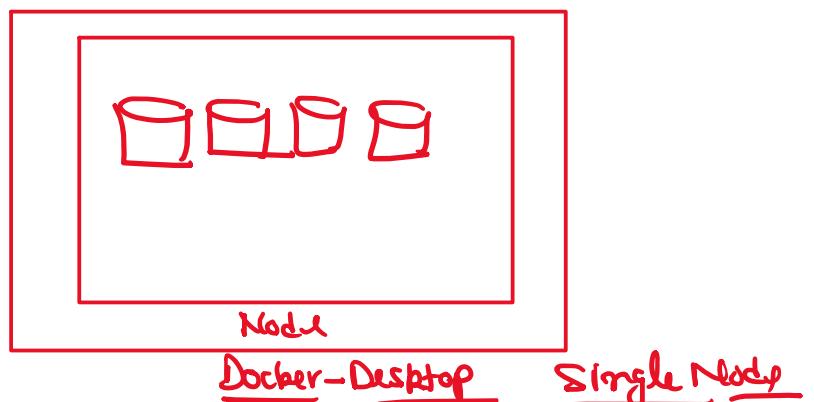
- Pod
- Service
- Replicaset
- Deployment
- K8S Architecture
- Namespace ↴
- Quota ↴
- Configmap

Core Object

K

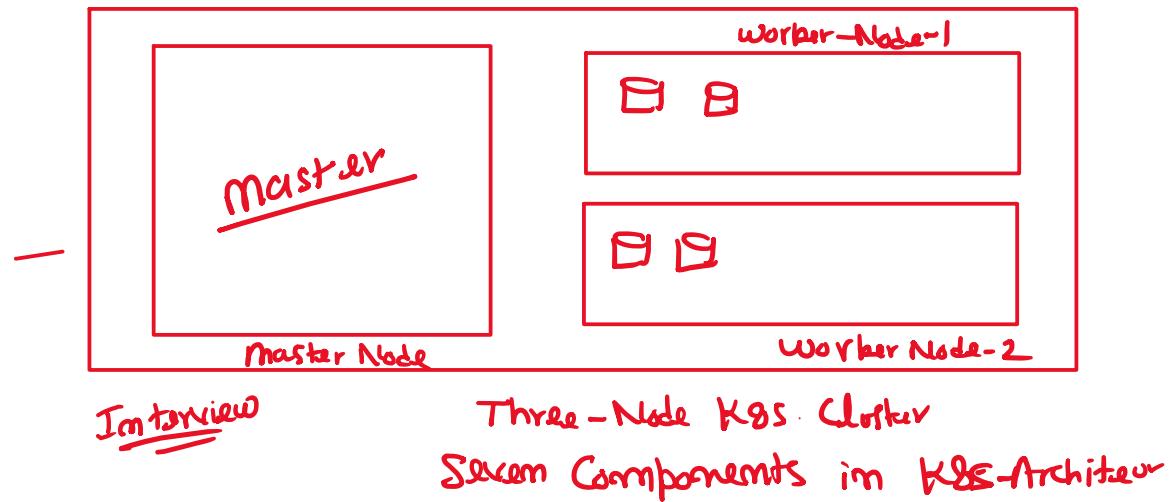
AWS
EKS

Cloud Native Services



Kubectl get Nodes

Architecture of K8S



DOUBT SESSION