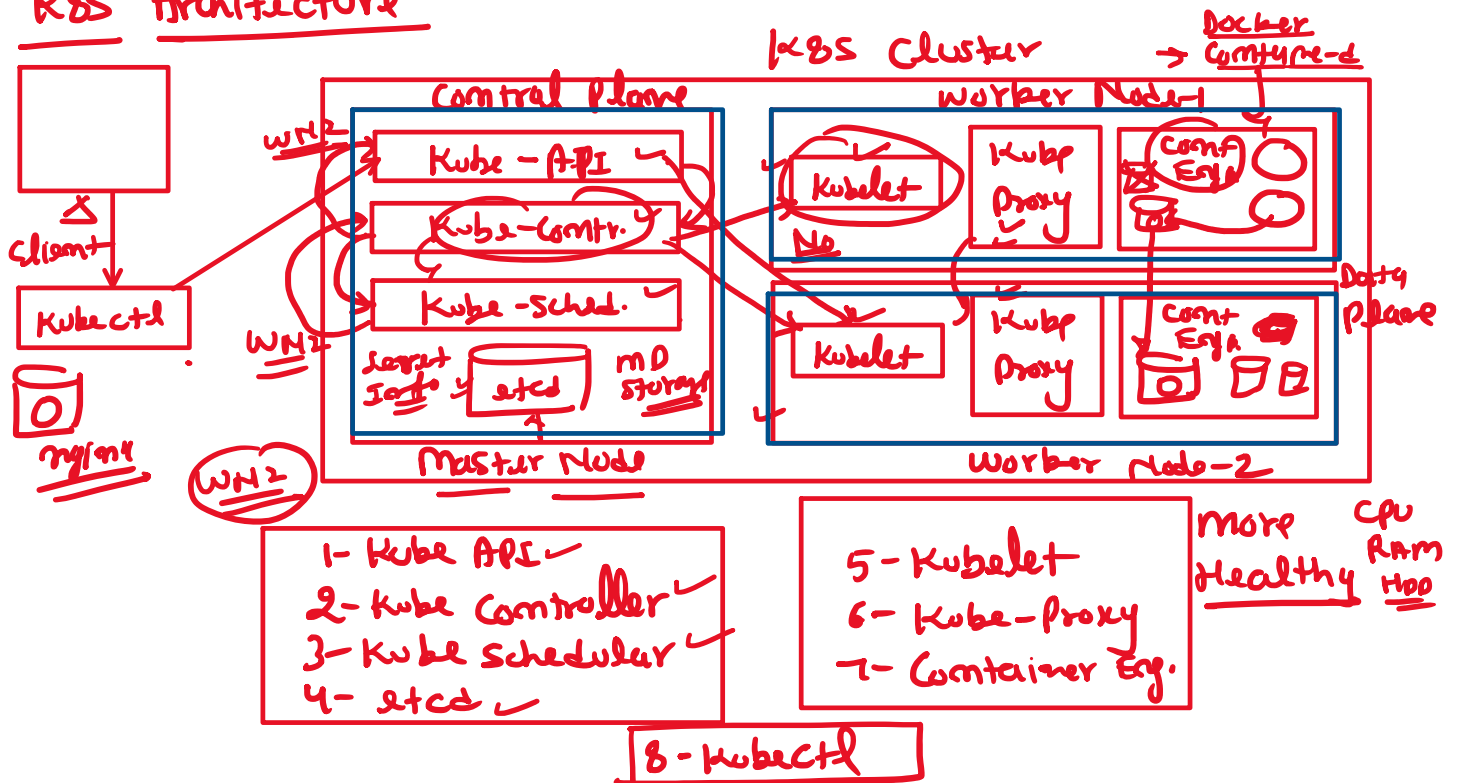


Day-1 Recap

- Container Orchestration Tool
 - Pod
 - Service (30000 - 32767)
 - Replicaset (replica = 3)
 - Deployment (version rollout) roll back
- HA
FT

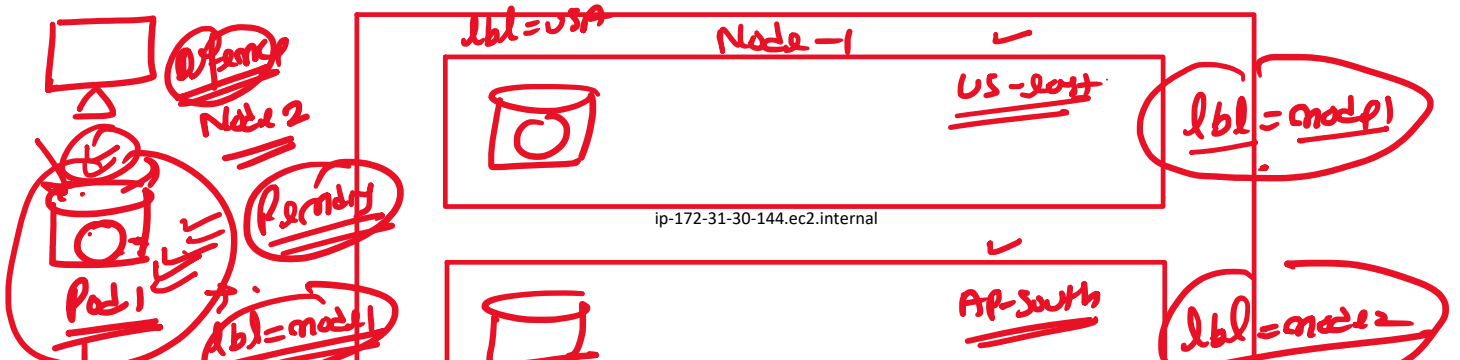
K8S Architecture

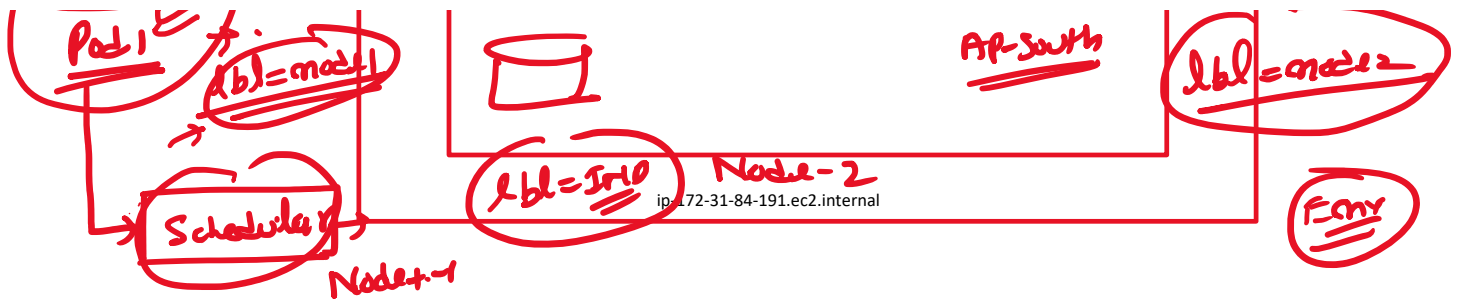


Node Selector

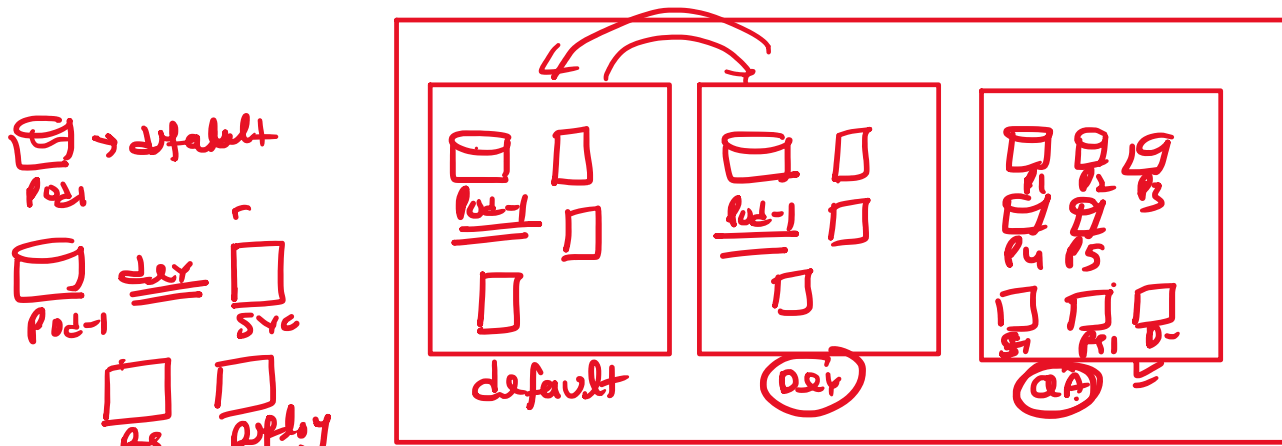
Label Key: value

Key

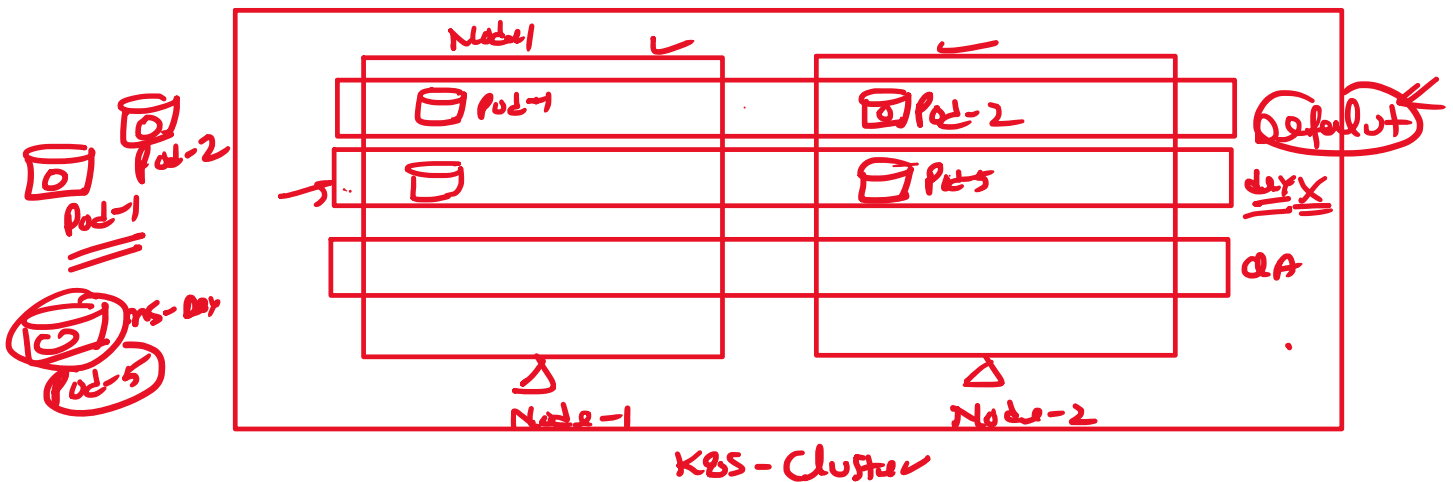




Namespace



- ① Put Similar Object/Resource Together
- ② Name Collision Avoidance
- ③ Style Point Control

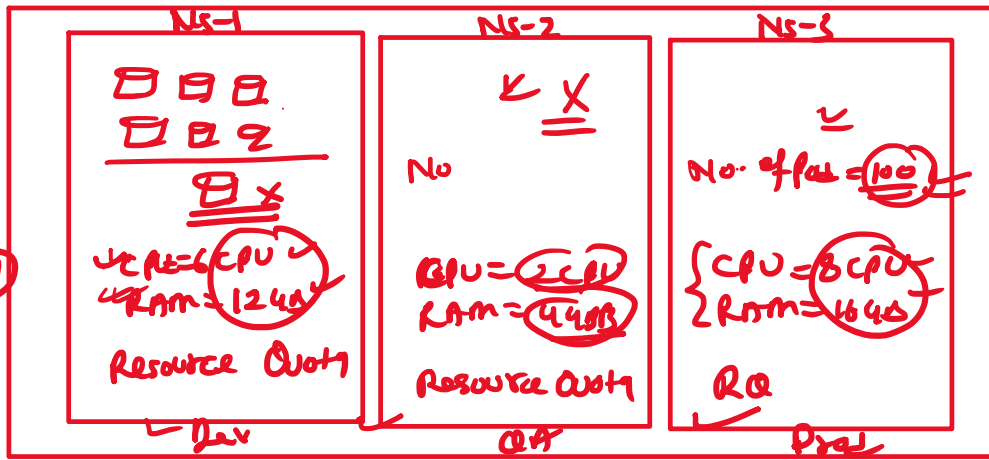


dev
QA

Resource Quota in Namespace

CPU-16
RAM-32GB

Dev
QA
Prod



K8S-Cluster

Deployment

Rolling update

Recreate

V2
V1

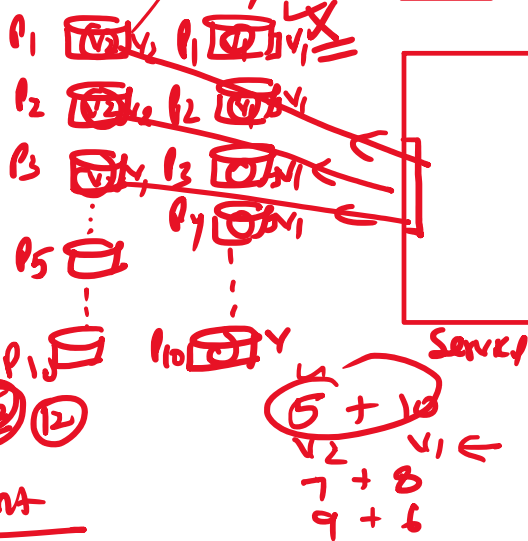
10 replicates
5 max

V1 → V2

No down time

Pod=10
+5
Pod=15
50% - 60%

Max surge = 5
15
12



Server

V2
V1
User

Deployment

Rolling update

Recreate

V2
V1

gap

2 sec

V1 → V2

2 sec

Down time

Pod=10
down time
Prod



Server

V2
V1
User

Prod



Server

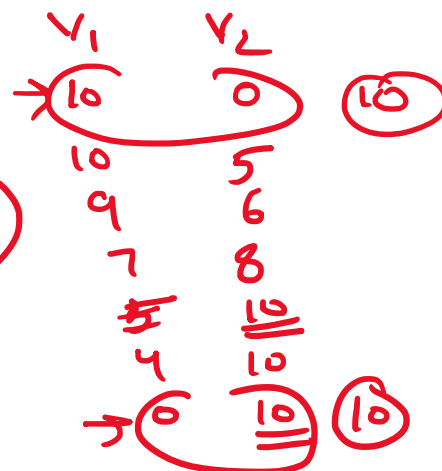
User

App

→ Live → Production

Bank
Spam
Ecom

Rolling update

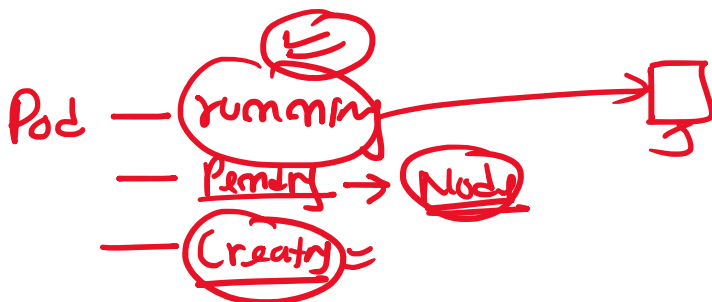


App

Test
Dev

Recreate

Survey
Feedback
Static website



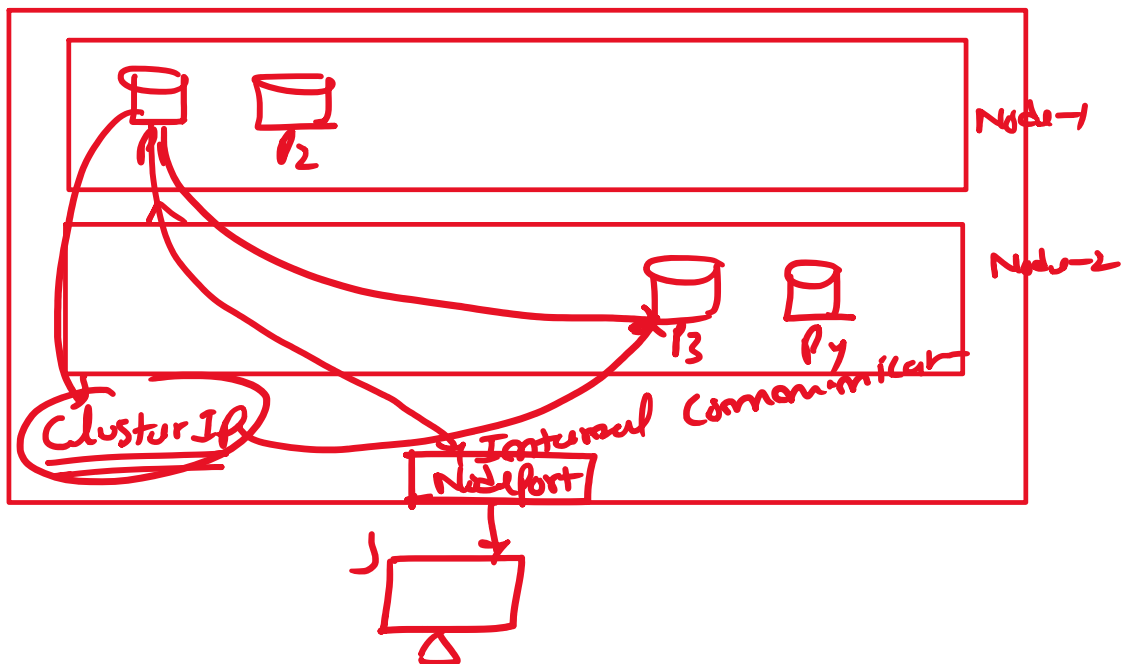
NAME	READY	STATUS	RESTARTS	AGE
pod/deployment-rolling-57794c794f-bh75r	1/1	Running	0	39m
pod/deployment-rolling-57794c794f-jhzbq	1/1	Running	0	39m
pod/deployment-rolling-57794c794f-r9xsp	1/1	Running	0	39m
pod/deployment-rolling-57794c794f-sdxnq	1/1	Running	0	39m
pod/deployment-rolling-57794c794f-t6f2l	1/1	Running	0	39m
pod/deployment-rolling-57794c794f-xs9fh	1/1	Running	0	39m
pod/deployment-rolling-57794c794f-zx4xr	1/1	Running	0	39m
pod/deployment-rolling-7fc657966-6lwm4	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-8fnrh	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-d5mcp	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-fwtwd	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-gklcj	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-npv8w	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-v48b9	1/1	Running	0	5s
pod/deployment-rolling-7fc657966-z2x9d	1/1	Running	0	5s

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
service/kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	18h
service/nodeport-service	NodePort	10.100.221.158	<none>	80:30001/TCP	30m

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
deployment.apps/deployment-rolling	15/10	8	7	39m

NAME	DESIRED	CURRENT	READY	AGE
replicaset.apps/deployment-rolling-57794c794f	7	7	7	39m
replicaset.apps/deployment-rolling-7fc657966	8	8	8	5s

PS C:\Users\Administrator\day-2>



```
PS C:\Users\Administrator\day-2> kubectl get all
```

NAME	READY	STATUS	RESTARTS	AGE
pod/deployment-recreate-6b57d7c75c-s9mgn	1/1	Terminating	0	79s

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
service/kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	18h
service/nodeport-service	NodePort	10.100.221.158	<none>	80:30001/TCP	55m

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
deployment.apps/deployment-recreate	0/10	0	0	4m17s

NAME	DESIRED	CURRENT	READY	AGE
replicaset.apps/deployment-recreate-58b6d7f86	0	0	0	4m17s
replicaset.apps/deployment-recreate-6b57d7c75c	0	0	0	80s

PS C:\Users\Administrator\day-2>