31 March 2024 06:35

31.03.2024

K8S → | M WN | cluster

cluster ✓
(K8S objects)

SRC → DF → image → Registry → { Cont creation } ↓ K8S replace

Mandatory

Mandatory

Manifest files

cluster - Nodes

dev clus - tstcluster

↓
bouncue :- SRC.

dev env

tst env

stg env

prod env

(?)

cluster

tst cluster

non prod -

{ kubeadm } → (exam)
↓
managed cluster

x4

17th CKA

{ Kubeadm } [Simplifies the K8S cluster creation]
kubelet → Agent
(✓ Kubectl) → cli

(Aw | Az | Gcp) → [3 vm's]
↓
(t2 micro)

(2cpu's)

dev | dev | Adm

master
control plane

K K K — w1 — dataplane

K K K — w2 — dp

K. K. K

successful → (practise) Not x Realtime x

✓ volume ✓

✓ (RBAC) ✓

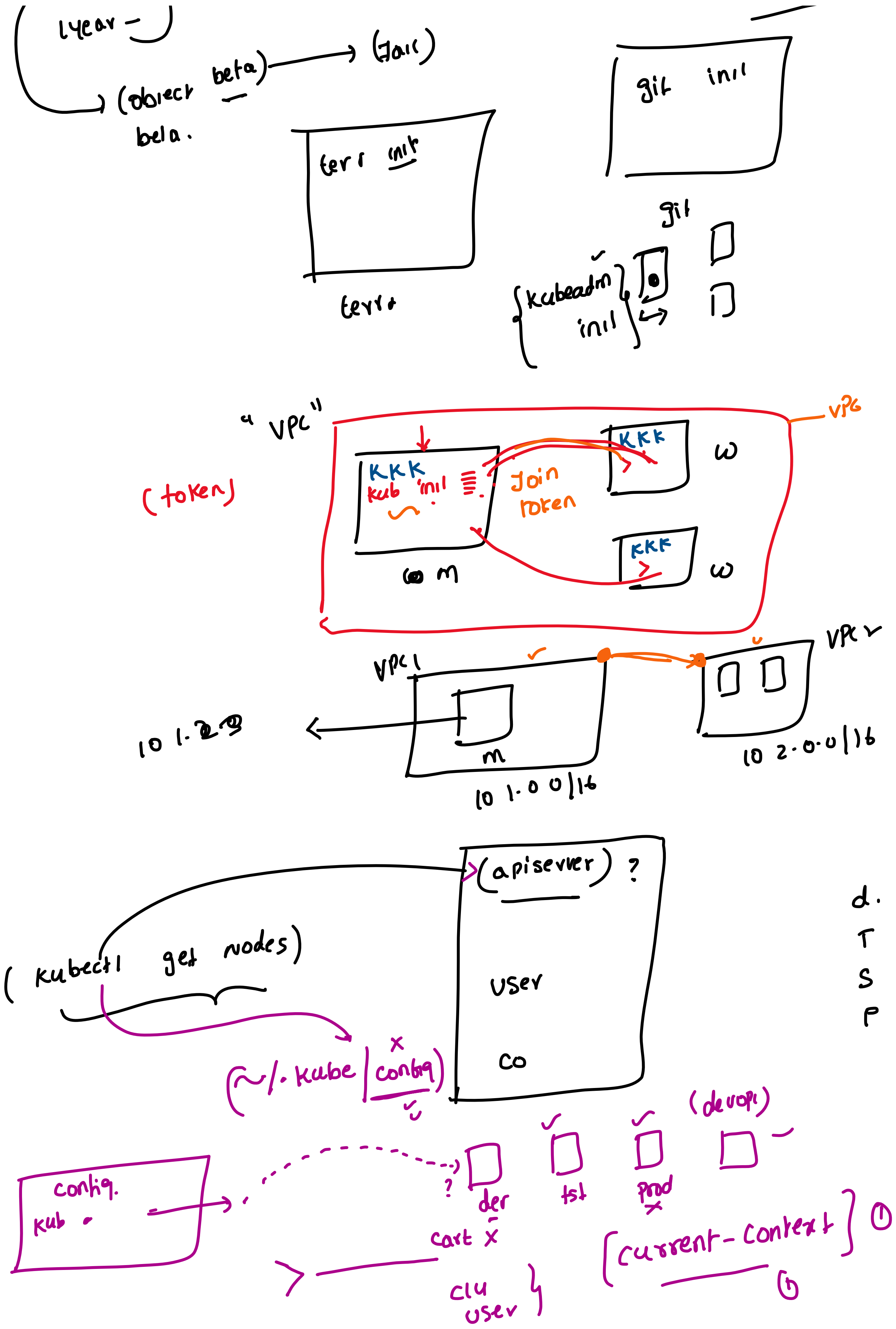
Kubelet
↳ workerNode (?)

1.28.1 → (1.29) upgrade — beta

1 year -

PSP → x

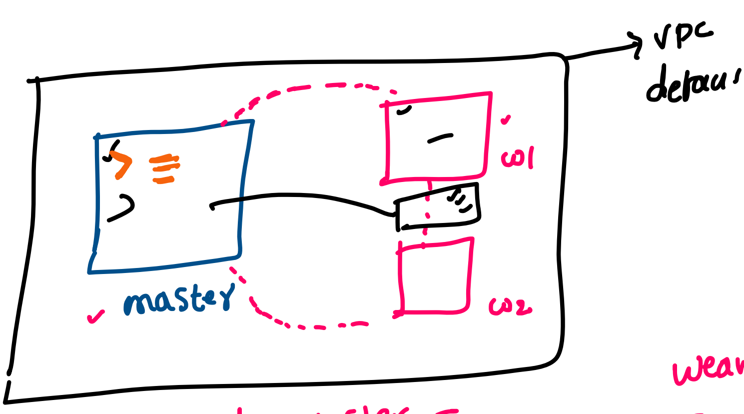
beta) → (fail)


1year
(object beta)
(GA)
beta.
terr init
terr
git init
git
{kubeadm init}
"VPC"
(token)
KKK
kub init
join token
w
m
VPC
VPC1
VPC2
m
10 1.0 0/16
10 2.0.0/16
(kubectl get nodes)
(apiserver) ?
user
co
d.
T
S
P
(~/.kube/config)
(devops)
config.
kub
dev
tst
prod
cert
clu
user
[current-context]

AWS
GKE
AKS
on 400 A (hu)
open

→ 5/6
→ 12

[CNI]

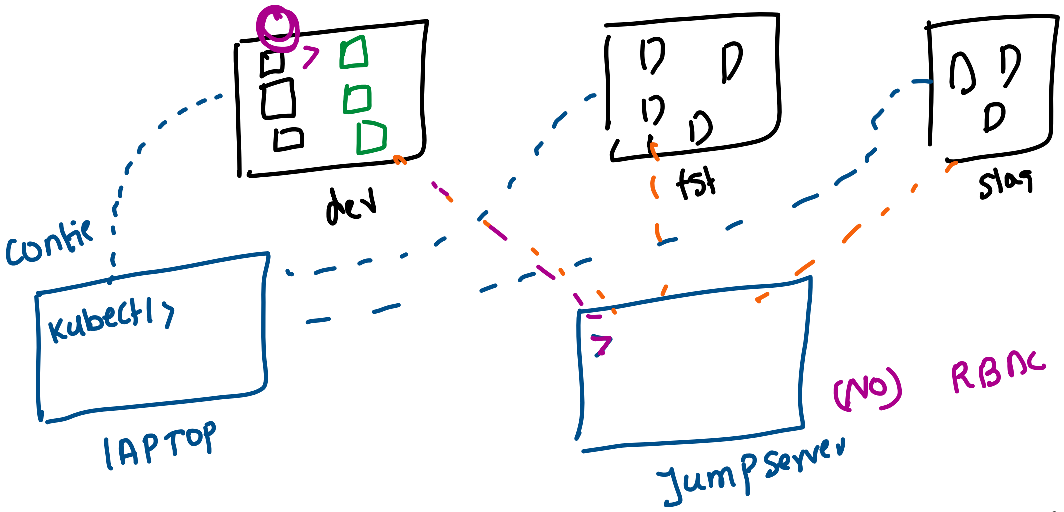


- dev-cluster -

weave
flannel

Azure
AWS
GCP

(kubectl get nodes)
↑
(master)



(NO) RBAC

(CNI plugin)

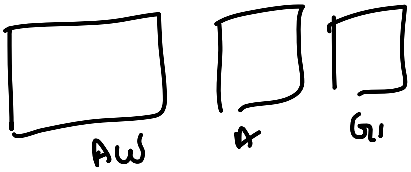
(NOT Ready)
↑

(Core DNS Pending) 3
→ kube

[(flan) x
cal
wea

→ Network po

(1hr)



devops

(SAME)

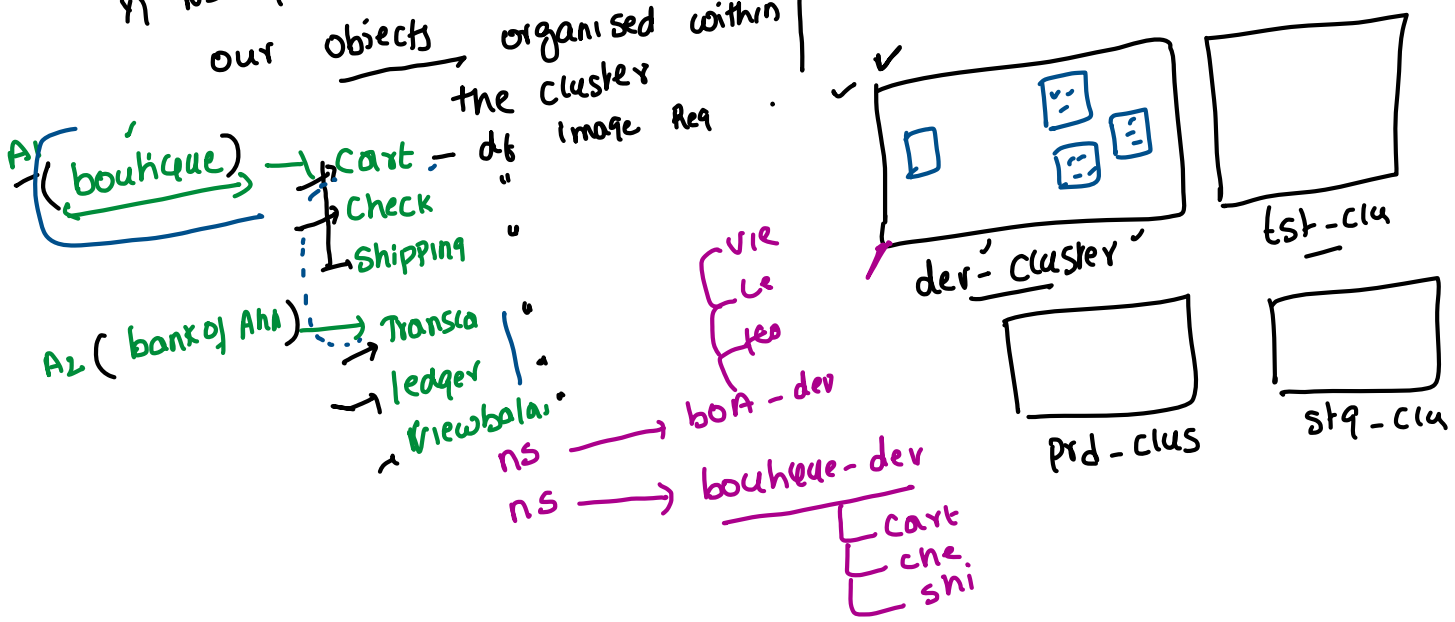
[mast | w1 w2] (dev-cluster)

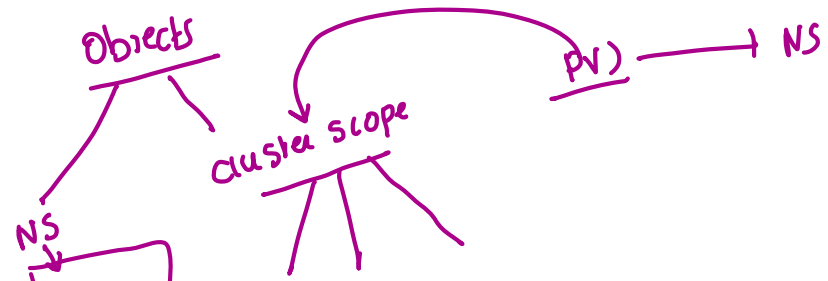
(developer)
SRC code →
↓
DF
↓
image → Registry → (deploy) kubernetes

"NAMESPACE"

x) NS is logically dividing our cluster to deploy resources. dv ts st l

y) NS provide a way to keep our objects organised within the cluster





"objects" → (Pods) xxxx

clu (kubeadm)

ns → kubectl

(objects create)

objects

(data represent)

xml

x) imperative

x) declarative.

Pod. RS R.

kubect creat ns

[YAML] (yaml)

xml
** yaml
JSON

(key: value)

k v
→ name: siva
k Fruit: apple ✓

Fruit: Apple
car: benz
color - blue

Array. lists.
Fruits:
- Apple ✓
- orangle.
- Pear -

KV | list Array | Dl/map ✓

Dic | map
Apple:
color: red
Fat: x
Car: y

kind: Pod ✓
cont
list { - c1 → name: c1 / im: xy } MAP
- c2

Fruits:

lis ← - Banana
Col: va
cor - val } Dict

- orange
Col: va
Co: vi

- mango

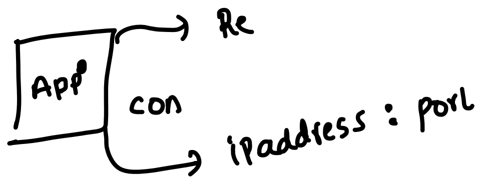
Yaml

[Pod]

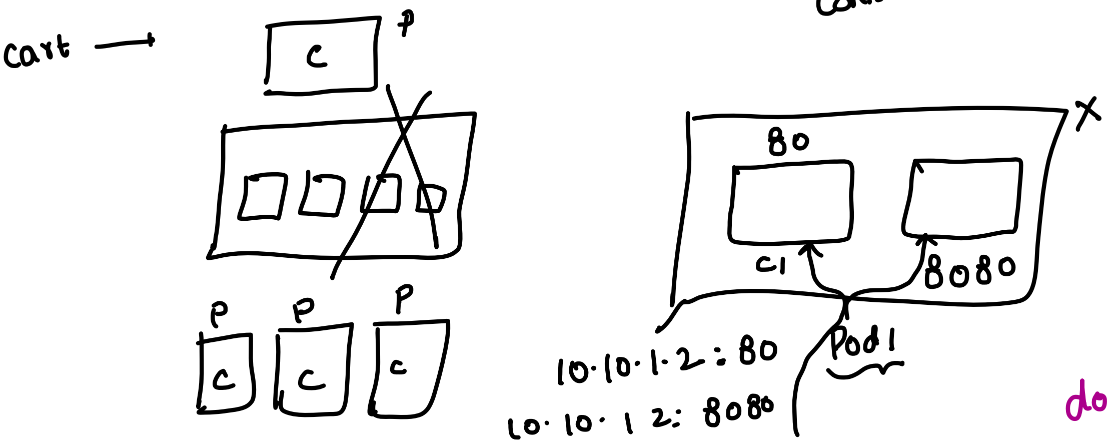
app deploy)
K8s doesn't dep con dire.
└→ containers
Pod.
└ image

Contar
cart ap
Pod
Pod.
[pod] Resources
cont 2.

1Pod – 1Contain



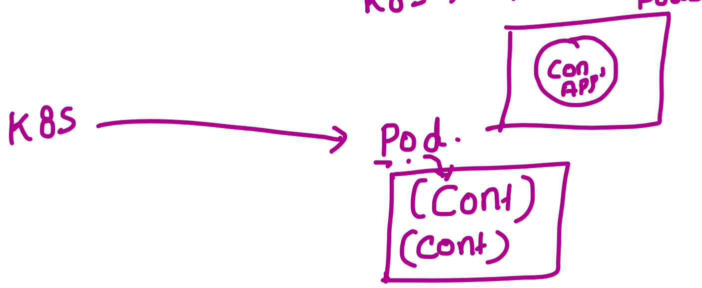
Pod has ip address, where as containa inside the pod share Port numb



do → container

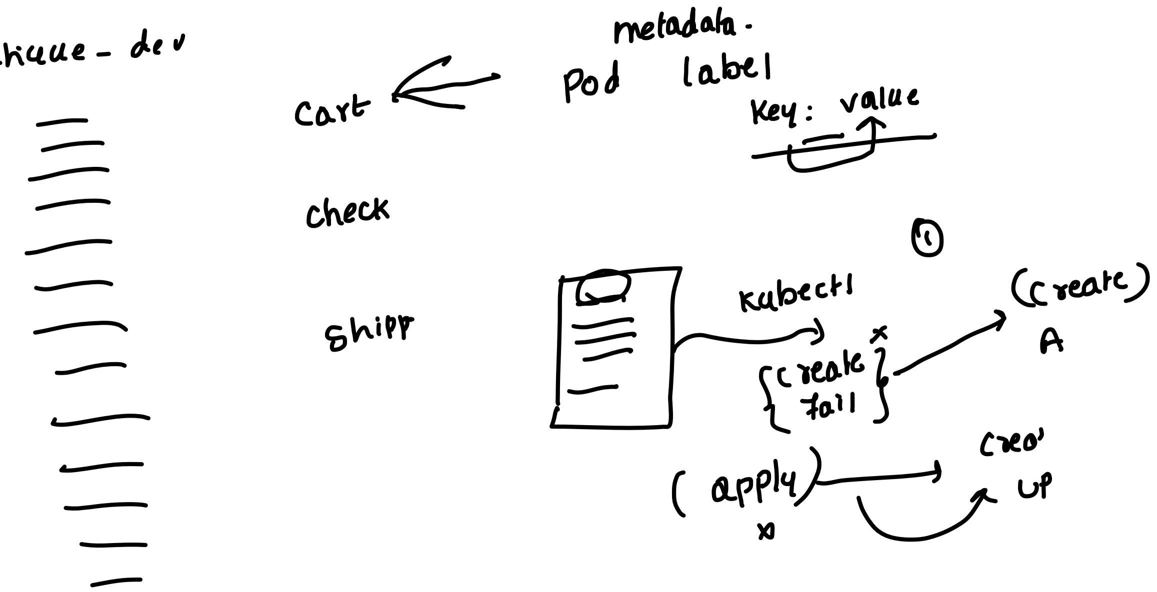
K8S → pods

1). (kuber → yaml) ns. Po



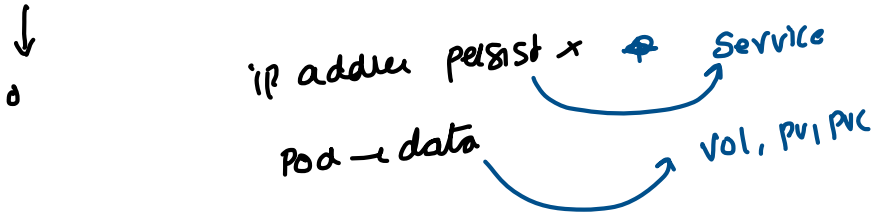
2)

boutique-dev



Pod — can delete (or) restart + controller

ip addre persist × Service


IP address persist
Service
Pod — data
vol, pv, pvc