

HELM



Package manager for Kubernetes #
To package YAML files and distribute them
two private and public repository

Helm charts :-

- Bundle of YAML files
- create your own HELM chart with Helm
- push them to Helm repo.
- download and use existing ones

Directory structure:

mychart /
chart.yaml
values.yaml
charts /
templates /
...

Top level mychart folder → name of chart
meta info about chart
values for template
chart dependencies
the actual template files

• `helm install <chartname>`
Template files will be filled with the values from
values.yaml

• Value injection is value override hat

• Release management

There is server, it keeps track of all chart
executions

help install, upgrade, rollback.

K8s Volume

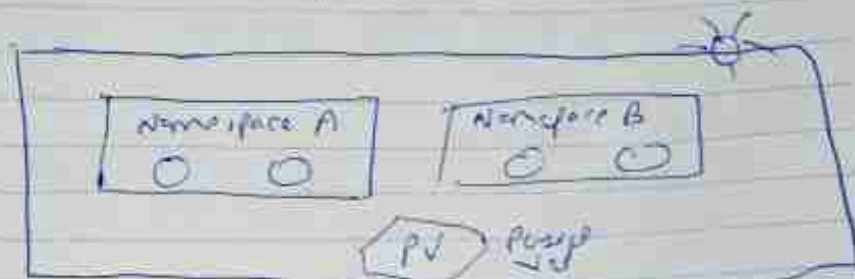
1) Persistent Volume

2) Persistent Volume Claim (PVC)



3) Storage class

Storage in K8s is external plugin to cluster



Local vs Remote,

- Admin provision storage resource
- User ~~create claim~~ create claim to PV

Storage class provides PV dynamically when PVC claim it provision - automate.

Stateful Set for stateful applications: -
deployment vs stateful set

when pod restarts,

if address changes

some old endpoint stops some

1) What is K8s ~~service~~ service

Persistent stable IP in service

It also provides load balancing.

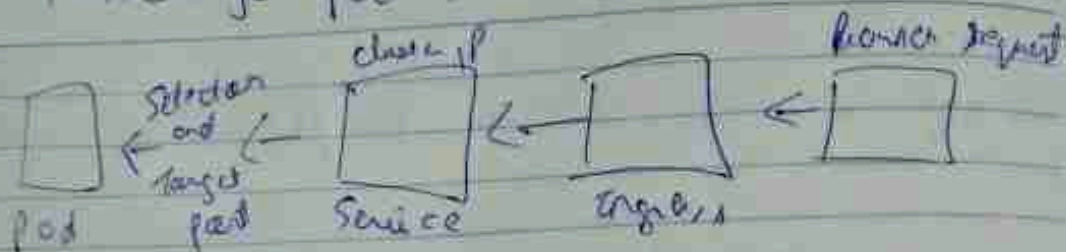
Loose coupling
within and outside cluster

* Cluster IP Service - when cluster is default.



To check IP address

Kubectl get pod -o wide



n) Headless Service
pod want to talk directly with specific pod
using DNS lookup

n) Node port

n) ClusterIP