

KubernetesIn30Days

challenge:-

#Day 7:-

① service

② Types of services.

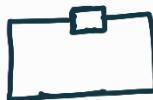
③ Kubectl svc cmd's.

① Service :- An object that connects with/to your Pod. The way to expose an application on a set of Pods as a Network service.

- Pods are mortal, disposable
- IPs are not static
- service will provide us static Endpoint to Pod.

Types of services:-

① NodePort



② clusterIP



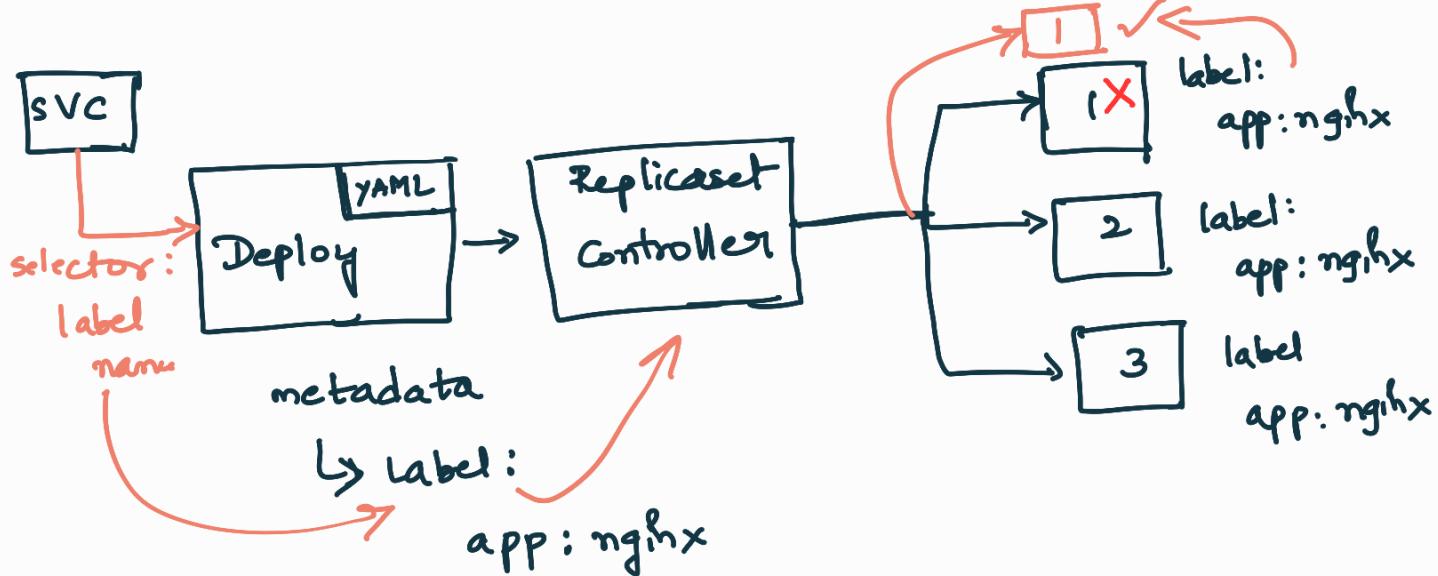
③ Load Balancer



kubectl create -f <service>.yaml

kubectl get svc

kubectl describe svc <service-name>



service object in Kubernetes has following Advantages

such as : ① Load Balancing

② service Discovery

③ Exposing application to external

① clusterIP :-

- 1) The Application is still accessible only on Inside k8 cluster.
- 2) Offers service discovery and Load Balancing

② NodePort :-

- 1) can be able access if someone has access to Node or Node allow the request.

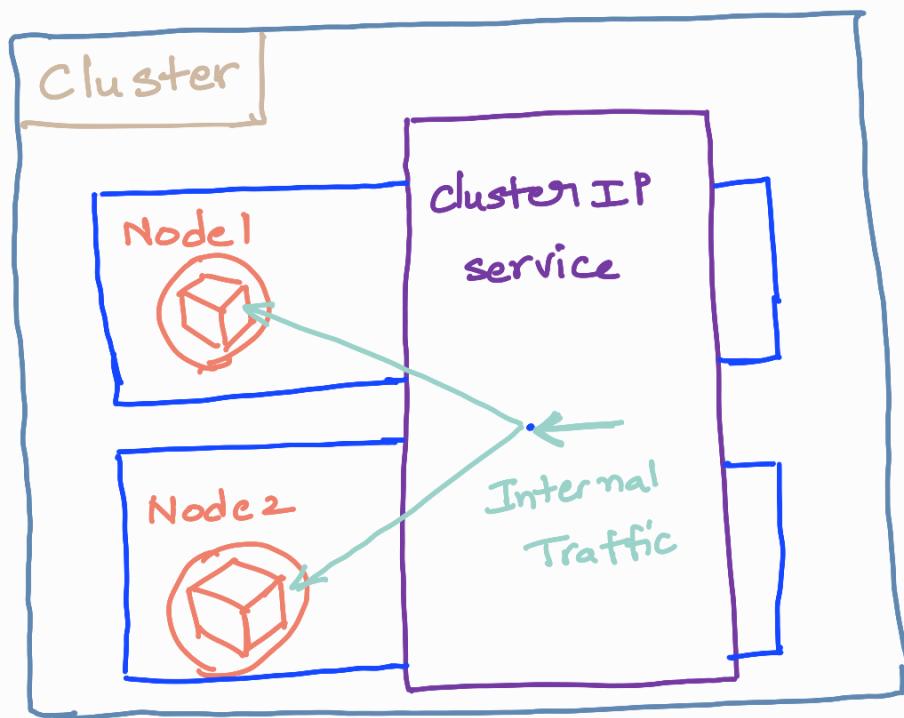
- 2) It will also offers all features of service.

3) Load Balancer:-

- 1) It'll allow anyone in the world can access the application
- 2) EKS, AKS will use the Application LB to manage load.

clusterIP :-

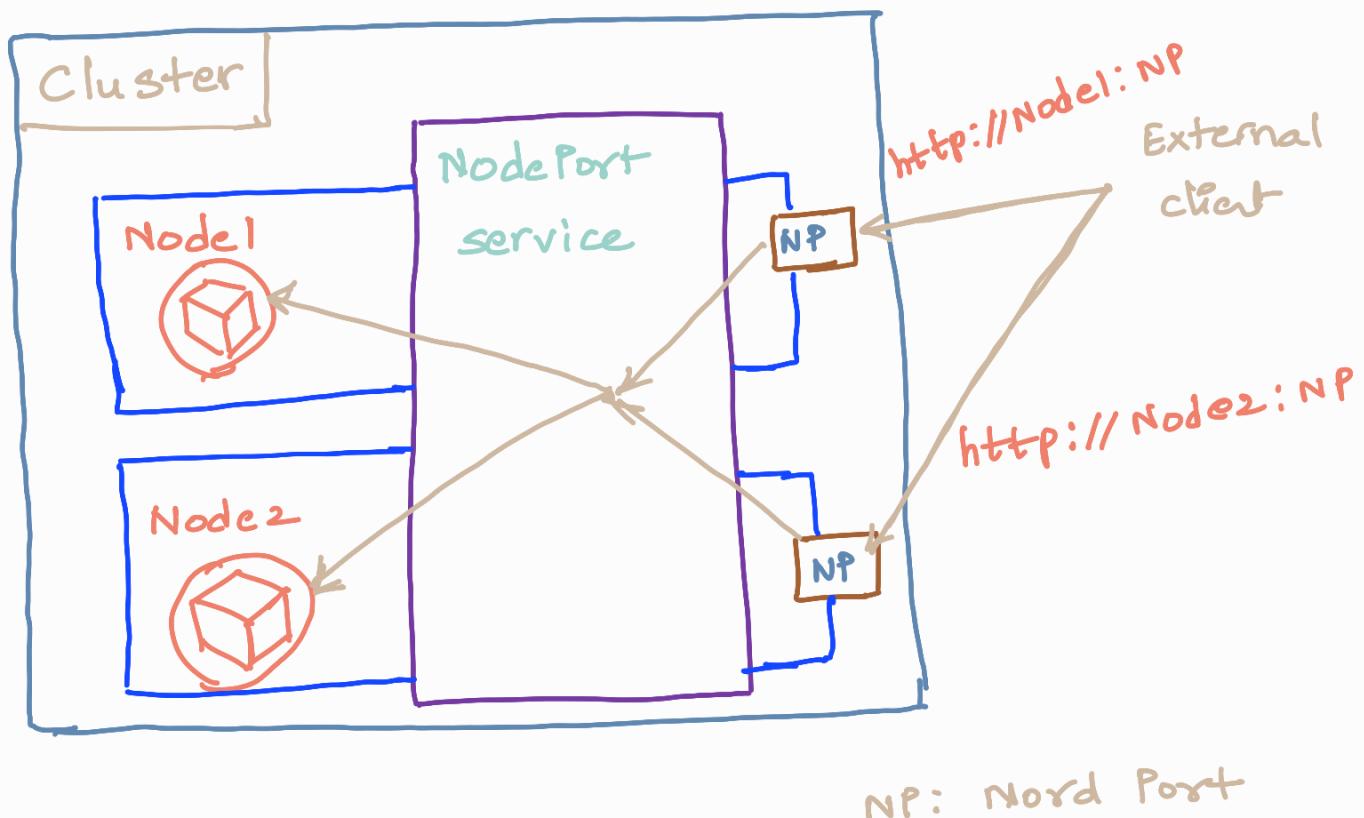
- clusterIP services exposes pods to internal network traffic.
- use case might be, you may expose a database to other pods via a clusterIP.



- clusterIP services expose the smallest surface area and should be used for pods that only need to be exposed to other pods in the cluster

NodePort :-

→ NodePort service that directs traffic to any of Node Port on each Node to the respective pods that matches label mentioned

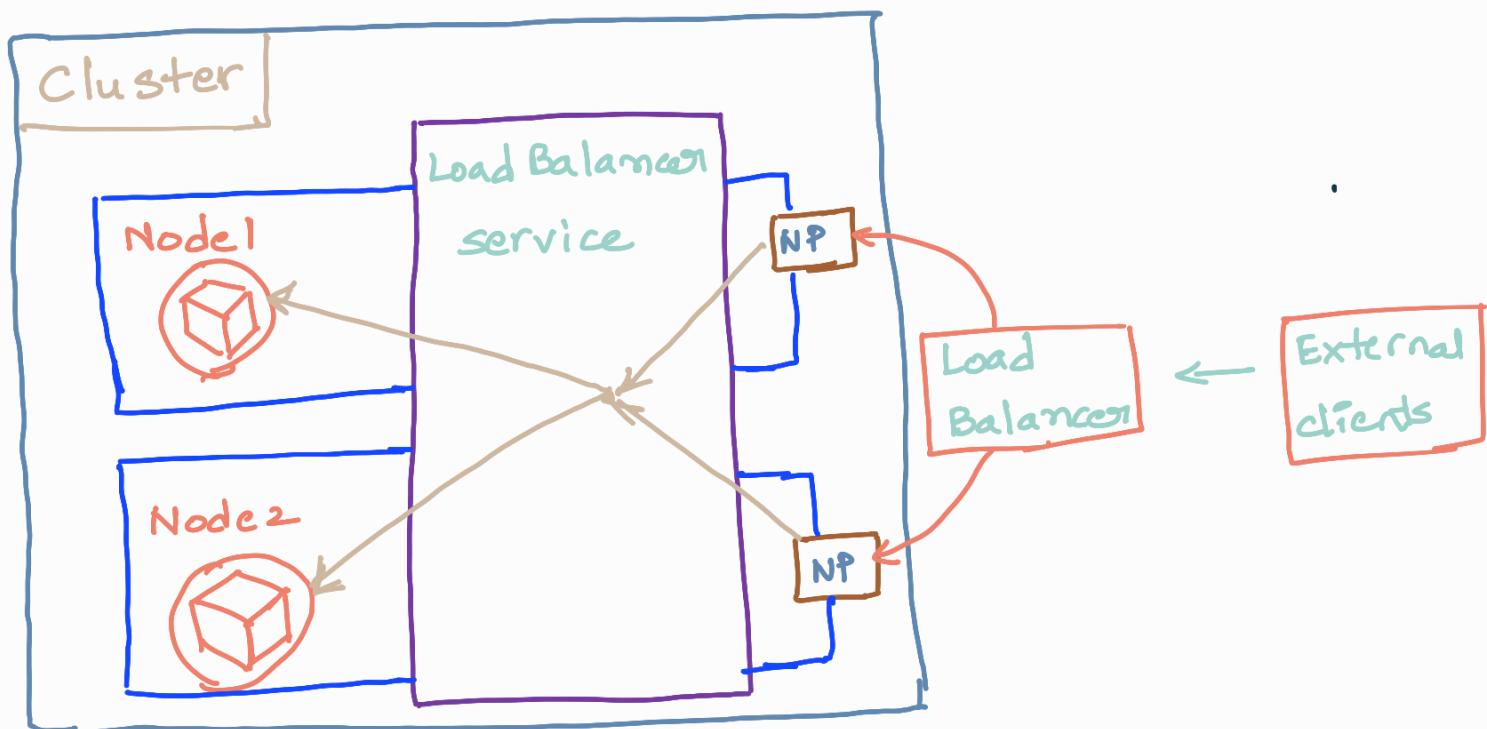


- Here External people should have access to Nodes then only they can access application
- Node Port range starts from 30000-32768 but we can customize the range
- Not useful for Production Env. Mostly used for testing & dev purpose.

Load Balancers:-

→ The traffic directs from any port (80/443) on a public LB and can be routed to application port. again using labels & selectors.

Ex:- EKS on AWS uses ELB service as load balancer.



- This is the most common use case for production scenario.
- It is also costs you as per CSP charges for Load Balancer.