A Kubernetes service is **a logical abstraction for a deployed group of pods in a cluster** (which all perform the same function). Since pods are ephemeral, a service enables a group of pods, which provide specific functions (web services, image processing, etc.) to be assigned a name and unique IP address (clusterIP).

[root@ip-172-31-27-78 centos]# vi service.yml

apiVersion: v1

kind: Service

metadata:

namespace: surya

name: my-service

spec:

selector:

app: MyApp

ports:

- protocol: TCP

port: 80

targetPort: 9376

[root@ip-172-31-27-78 centos]# kubectl create -f service.yml

service/my-service created

[root@ip-172-31-27-78 centos]# kubectl get svc

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 20h

[root@ip-172-31-27-78 centos]# kubectl get svc -n surya

NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE

my-service ClusterIP 10.103.217.68 <none> 80/TCP 4m29s

[root@ip-172-31-27-78 centos]# kubectl describe svc my-service

Error from server (NotFound): services "my-service" not found

[root@ip-172-31-27-78 centos]# kubectl describe svc my-service -n surya

Name: my-service

Namespace: surya

Labels: <none>

Annotations: <none>

Selector: app=MyApp

Type: ClusterIP

IP: 10.103.217.68

Port: <unset> 80/TCP

TargetPort: 9376/TCP

Endpoints: <none>

Session Affinity: None

Events: <none>

[root@ip-172-31-27-78 centos]# kubectl get pods -n surya

NAME READY STATUS RESTARTS AGE

nginx-8n5dg 1/1 Running 0 49m

nginx-j47xp 1/1 Running 0 49m

nginx-n6jhb 1/1 Running 0 49m

[root@ip-172-31-27-78 centos]# kubectl get pods -n surya -o wide

NAME READY STATUS RESTARTS AGE IP NODE NOMINATED NODE READINESS GATES

nginx-8n5dg 1/1 Running 0 49m 192.168.225.139 ip-172-31-23-173.ec2.internal <none> <none>

nginx-j47xp 1/1 Running 0 49m 192.168.225.138 ip-172-31-23-173.ec2.internal <none> <none>

nginx-n6jhb 1/1 Running 0 49m 192.168.225.137 ip-172-31-23-173.ec2.internal <none> <none>

[root@ip-172-31-27-78 centos]# kubectl describe svc my-service -n surya

Name: my-service

Namespace: surya

Labels: <none>

Annotations: <none>

Selector: app=MyApp

Type: ClusterIP

IP: 10.103.217.68

Port: <unset> 80/TCP

TargetPort: 9376/TCP

Endpoints: <none>{ **per suppose u delete the pod then automatically new pod created and shows here}**

Session Affinity: None

Events: <none>