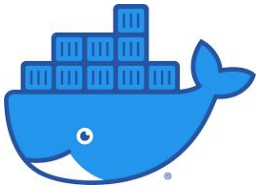
Kubernetes Networking

CNM(Container Network Model)



Docker

CNI

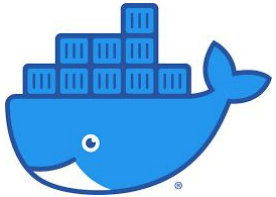
CNI(Container Network Interface)

- calico
- flannel
- AWS CNI
- Weave
- Romana
- ACI (cisco)
- Multos

CNM (container network model)

Company - docker

Runtime engine - docker



CNI(container networking model interface)

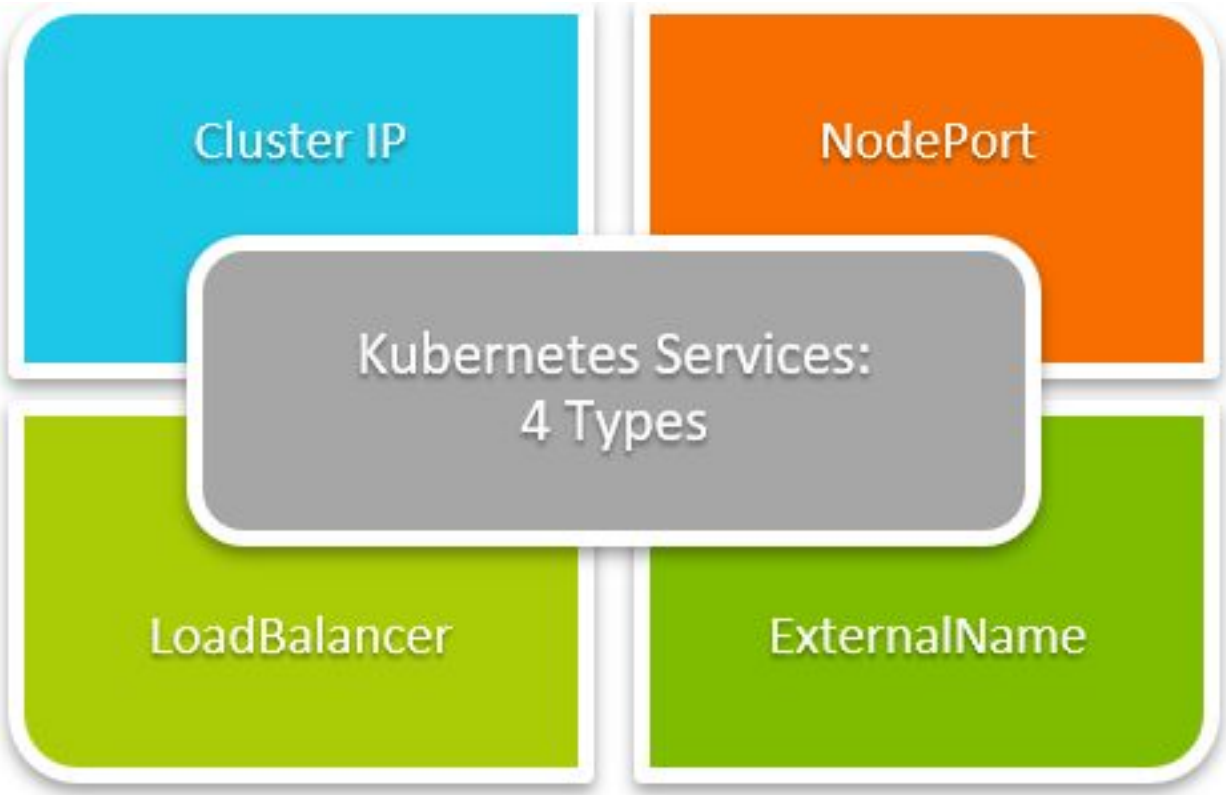
Company - CoreOS

Runtime engine - RKT

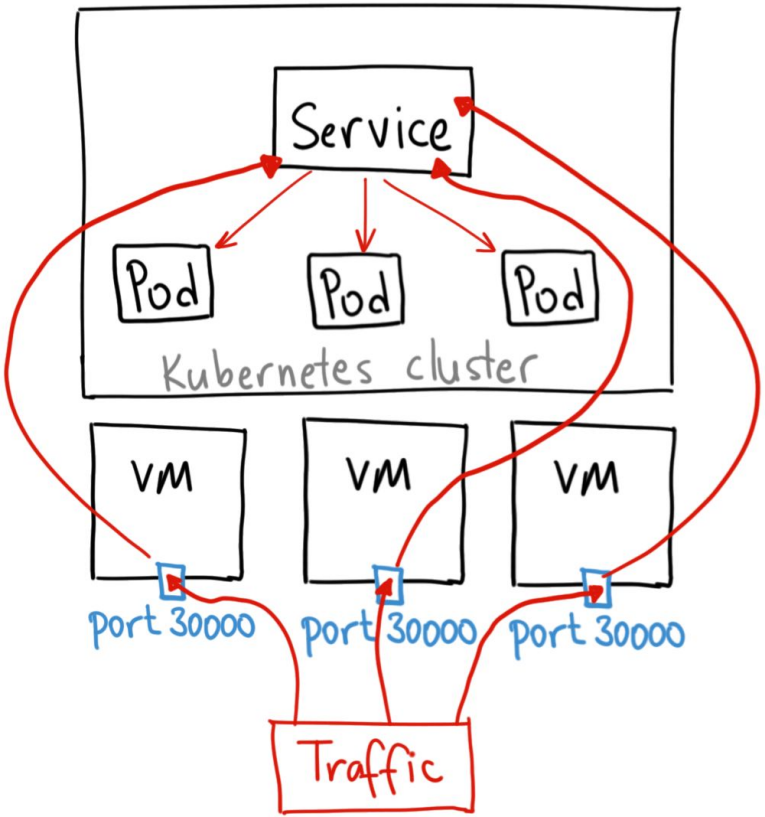
Service in k8s

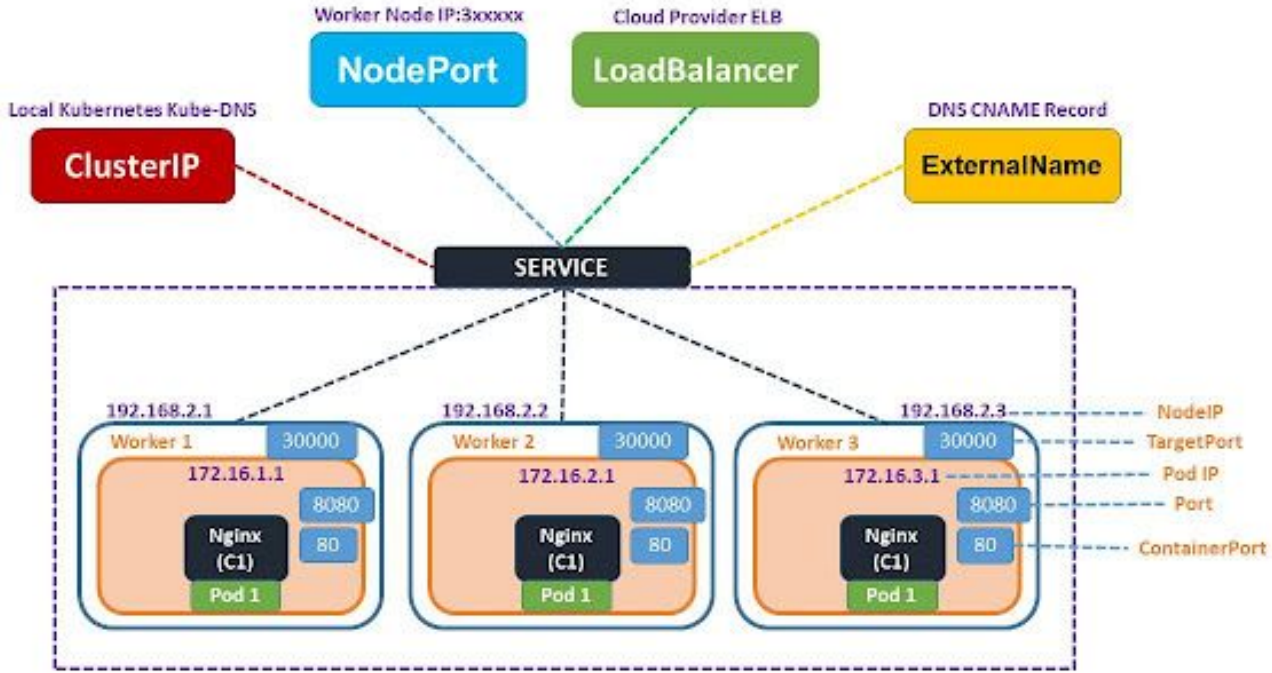
Service is a method for exposing a network application that is running as one or more Pods in your cluster.

Each Service object defines a logical set of endpoints (usually these endpoints are Pods) .


Cluster IP
NodePort
Kubernetes Services:
4 Types
LoadBalancer
ExternalName

NodePort


Service
Pod
Pod
Pod
Kubernetes cluster
VM
VM
VM
port 30000
port 30000
port 30000
Traffic


Worker Node IP:3xxxxx
Cloud Provider ELB
NodePort
LoadBalancer
Local Kubernetes Kube-DNS
DNS CNAME Record
ClusterIP
ExternalName
SERVICE
192.168.2.1
Worker 1
30000
172.16.1.1
8080
Nginx
(C1)
80
Pod 1
192.168.2.2
Worker 2
30000
172.16.2.1
8080
Nginx
(C1)
80
Pod 1
192.168.2.3
Worker 3
30000
172.16.3.1
8080
Nginx
(C1)
80
Pod 1
NodeIP
TargetPort
Pod IP
Port
ContainerPort