Webhook

Kube-OVN supports allocation static IP addresss along with dynamical addresss which means we should hold static IP addresses don't allow others using it.

Pre-request

Kube-OVN without webhook

Cert-Manager

To install

The webhook needs https so we using cert-manager here to generate the certificate. Normally cert-manager doesn't use hostNetwork so it needs CNI to allocate IP addresses. As a result, we should install ovn, kube-ovn, cert-manager before webhook.

Example: Assume you have two deployments have ip conflict.

deployment1.yaml

apiVersion: apps/v1

kind: Deployment

metadata:

 namespace: ovn-test

 name: starter-backend1

 labels:

 app: starter-backend1

spec:

 replicas: 2

 selector:

 matchLabels:

 app: starter-backend1

 template:

 metadata:

 labels:

 app: starter-backend1

 annotations:

 ovn.kubernetes.io/ip\_pool: 10.16.0.15,10.16.0.16

 spec:

 containers:

 - name: backend

 image: nginx:alpine

# kubectl create -f deployment1.yaml

deployment.apps/starter-backend1 created

deployment2.yaml

apiVersion: apps/v1

kind: Deployment

metadata:

 namespace: ovn-test

 name: starter-backend2

 labels:

 app: starter-backend2

spec:

 replicas: 2

 selector:

 matchLabels:

 app: starter-backend2

 template:

 metadata:

 labels:

 app: starter-backend2

 annotations:

 ovn.kubernetes.io/ip\_pool: 10.16.0.15,10.16.0.16

 spec:

 containers:

 - name: backend

 image: nginx:alpine

# kubectl create -f deployment2.yaml

Error from server (overlap): error when creating "deployment2.yaml": admission webhook "pod-ip-validaing.kube-ovn.