mkdir pv-data && cd pv-data

echo "Welcome to Kubernetes persistence volume lesson" > index.html

mkdir volume-lessons && cd volume-lessons

techpro-pv.yaml

apiVersion: v1

kind: PersistentVolume

metadata:

  name: techpro-pv-vol

  labels:

    type: local

spec:

  storageClassName: manual

  capacity:

    storage: 5Gi

  accessModes:

    - ReadWriteOnce

  hostPath:

    path: "/home/ubuntu/pv-data"

kubectl apply -f techpro-pv.yaml

kubectl get pv techpro-pv-vol

techpro-pv-claim.yaml(İstemci yaml dosyası)

apiVersion: v1

kind: PersistentVolumeClaim

metadata:

  name: techpro-pv-claim

spec:

  storageClassName: manual

  accessModes:

    - ReadWriteOnce

  resources:

    requests:

      storage: 5Gi

kubectl apply -f techpro-pv-claim.yaml

kubectl get pvc techpro-pv-claim

apiVersion: v1

kind: Pod

metadata:

  name: techpro-pod

  labels:

    app: techpro-web

spec:

  volumes:

    - name: techpro-pv-storage

      persistentVolumeClaim:

        claimName: techpro-pv-claim

  containers:

    - name: techpro-pv-container

      image: nginx

      ports:

        - containerPort: 80

          name: "http-server"

      volumeMounts:

        - mountPath: "/usr/share/nginx/html"

          name: techpro-pv-storage

kubectl apply -f techpro-pod.yaml

kubectl get pod techpro-pod

kubectl exec -it techpro-pod -- /bin/bash

curl http://localhost/

kubectl expose pod techpro-pod --port=80 --type=NodePort

kubectl get svc

kubectl delete pod techpro-pod

kubectl delete pvc techpro-pv-claim

kubectl delete pv techpro-pv-vol

mkdir emptydir && cd emptydir

nginx.yaml

apiVersion: v1

kind: Pod

metadata:

  name: nginx-pod

  labels:

    app: nginx

spec:

  containers:

  - name: mynginx

    image: nginx:1.19

    ports:

    - containerPort: 80

    volumeMounts:

      - mountPath: /test

        name:  emptydir-test

  volumes:

  - name: emptydir-test

    emptyDir: {}

kubectl apply -f nginx.yaml

kubectl exec -it nginx-pod -- bash

root@nginx-pod:/# ls

bin dev docker-entrypoint.sh home lib64 mnt proc run srv test usr

boot docker-entrypoint.d etc lib media opt root sbin sys tmp var

root@nginx-pod:/# cd test

root@nginx-pod:/test# echo "Hello World" > hello.txt

root@nginx-pod:/test# cat hello.txt

Hello World

Worker-Noda giriyoruz ve orada containerD yüklü bu yüzden docker ps –a gibi komutlar çalışmaz aşağıdaki komutları girmemiz lazım:

sudo ctr --namespace k8s.io containers ls

sudo ctr --namespace k8s.io tasks rm -f <container-id>

sudo ctr --namespace k8s.io containers delete <container-id>

Tekrar master noda geçelim

kubectl exec -it nginx-pod -- bash

root@nginx-pod:/# ls

bin   dev                  docker-entrypoint.sh  home  lib64  mnt  proc  run   srv  test  usr

boot  docker-entrypoint.d  etc lib   media  opt  root  sbin  sys  tmp   var

root@nginx-pod:/# cd test/

root@nginx-pod:/test# cat hello.txt

Hello World

kubectl delete pod nginx-pod