

Persistent Volume

Persistent Volume definition YAML

```
apiVersion: v1
kind: PersistentVolume
metadata:
  name: my-pv-volume
  labels:
    type: local
spec:
  storageClassName: manual
  capacity:
    storage: 10Gi
  accessModes:
    - ReadWriteOnce
  hostPath:
    path: "/mnt/data"
```



1 Create mount directory on host

```
$ sudo mkdir /mnt/data
```

```
$ sudo sh -c "echo 'Hello from Kubernetes Storage' > /mnt/data/index.html"
```

```
$ cat /mnt/data/index.html
```

Persistent Volume Claim definition YAML

```
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  name: my-pv-claim
spec:
  storageClassName: manual
  accessModes:
    - ReadWriteOnce
  resources:
    requests:
      storage: 3Gi
```



2 List out persistent volumes

```
$ kubectl get pv
```

3 List out persistent volume claims

```
$ kubectl get pvc
```

Pod definition YAML

```
apiVersion: v1
kind: Pod
metadata:
  name: my-pv-pod
spec:
  volumes:
    - name: my-pv-storage
      persistentVolumeClaim:
        claimName: my-pv-claim
  containers:
    - name: my-pv-container
      image: nginx
      ports:
        - containerPort: 80
          name: "http-server"
      volumeMounts:
        - mountPath: "/usr/share/nginx/html"
          name: my-pv-storage
```

