

Volumes

Volumes & Mounts

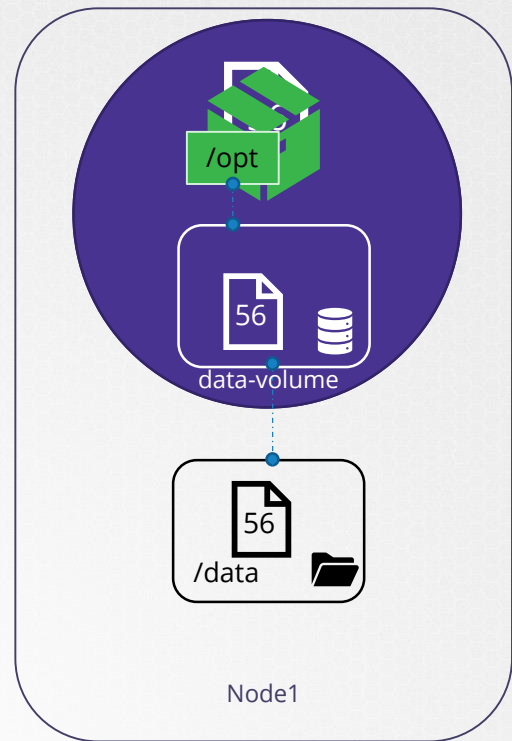
```
apiVersion: v1
kind: Pod
metadata:
  name: random-number-generator
spec:
  containers:
    - image: alpine
      name: alpine
      command: ["/bin/sh", "-c"]
      args: ["shuf -i 0-100 -n 1 >> /opt/number.out;"]
      volumeMounts:
        - mountPath: /opt
          name: data-volume
```

```
volumes:
- name: data-volume
  hostPath:
    path: /data
    type: Directory
```

→ Mounting Path

Binding

→ Creation



Volume Types

this is deprecated however

```
volumes:  
- name: data-volume  
  awsElasticBlockStore:  
    volumeID: <volume-id>  
    fsType: ext4
```

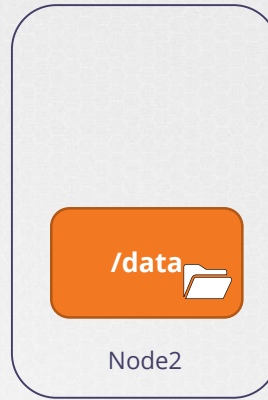
← Reference
← DEP
← AWS Vol



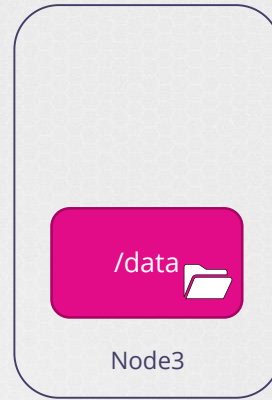
data-volume



Node1



Node2

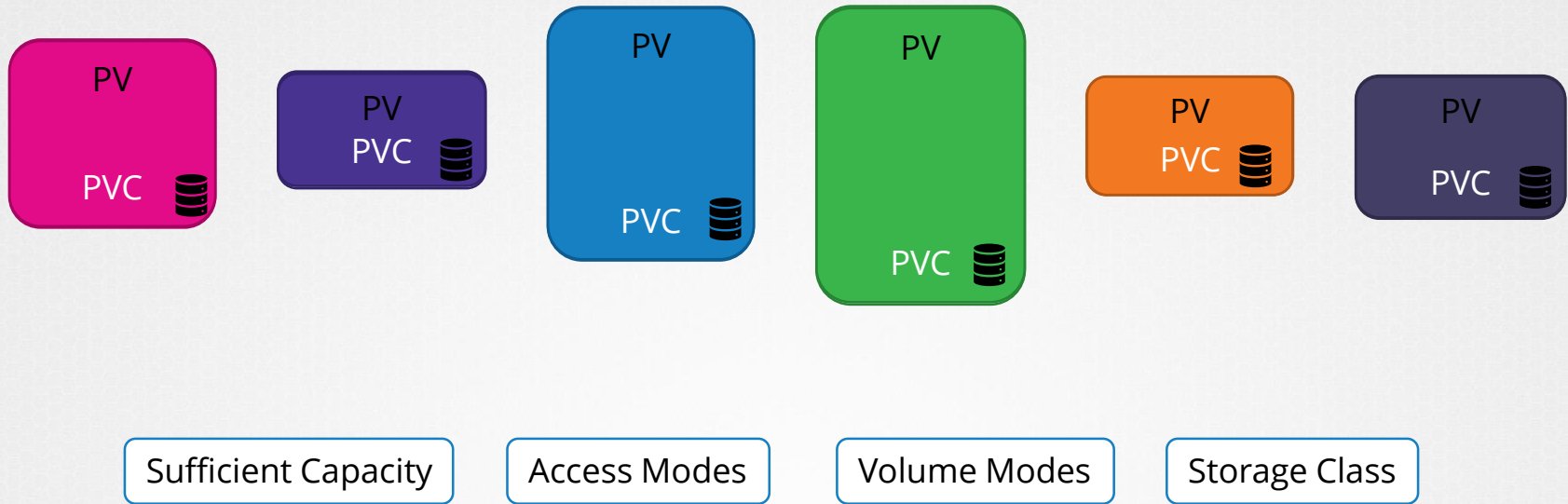


Node3



Persistent Volumes

| Binding



Persistent Volume Claim

pvc-definition.yaml

```
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  name: myclaim
spec:
  accessModes:
    - ReadWriteOnce
  resources:
    requests:
      storage: 500Mi
```

▶ kubectl create -f pvc-definition.yaml

pv-definition.yaml

```
apiVersion: v1
kind: PersistentVolume
metadata:
  name: pv-vol1
spec:
  accessModes:
    - ReadWriteOnce
  capacity:
    storage: 1Gi
  awsElasticBlockStore:
    volumeID: <volume-id>
    fsType: ext4
```

→ ReadWriteMany
→ ReadOnlyMany
→ ReadWriteOnce

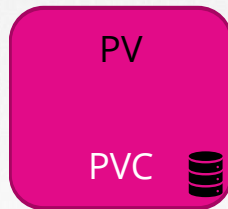
View PVCs

```
▶ kubectl get persistentvolumeclaim
```

NAME	STATUS	VOLUME	CAPACITY	ACCESS MODES	STORAGECLASS	AGE
myclaim	Bound	pv-vol1	1Gi	RWO		43m

Delete PVCs

```
▶ kubectl delete persistentvolumeclaim myclaim  
persistentvolumeclaim "myclaim" deleted
```



persistentVolumeReclaimPolicy: Recycle



Default is → Delete
So after the Pod gets
deleted, PV will be
deleted also