

## 13-persistentvolume

PersistentVolume (PV) What it is PersistentVolume is a cluster-level storage resource provisioned manually or dynamically. When to use Durable data beyond Pod lifecycle Shared storage policy management Key fields `spec.capacity.storage` `spec.accessModes:` `ReadWriteOnce`, `ReadOnlyMany`, `ReadWriteMany`  
`spec.persistentVolumeReclaimPolicy:` `Retain`, `Delete`, `Recycle` (legacy)  
`spec.storageClassName` Common commands `bash` `kubectl get pv` `kubectl describe pv pv-manual-1` `kubectl delete pv pv-manual-1` YAML example `yaml`  
`apiVersion: v1`  
`kind: PersistentVolume`  
`metadata: name: pv-manual-1`  
`spec: capacity: storage: 10Gi volumeMode: Filesystem accessModes: - ReadWriteOnce persistentVolumeReclaimPolicy: Retain storageClassName: manual hostPath: path: /data/pv-manual-1`  
Practical notes PV is cluster-scoped; PVC is namespaced. Prefer dynamic provisioning with StorageClass for production.