

Volumes

Volumes:

- Kubernetes supports many types of volumes
- A pod can use any number of volume types simultaneously

Types of Volumes:

- Persistent Volumes:
 - Attaching an external storage to a pod
 - Data will persist after pod termination
- Ephemeral Volumes:
 - Only exists as long as pod exists
 - Intended for temporary storage
- Projected Volumes:
 - Maps several existing volumes sources into the same directory
- Volume Snapshot:
 - Archiving a volume configurations and its data for rollbacks or backup

Persistent Volume:

- A piece of storage in the cluster that has been provisioned by admin
- PV is similar to node, as in cluster resource

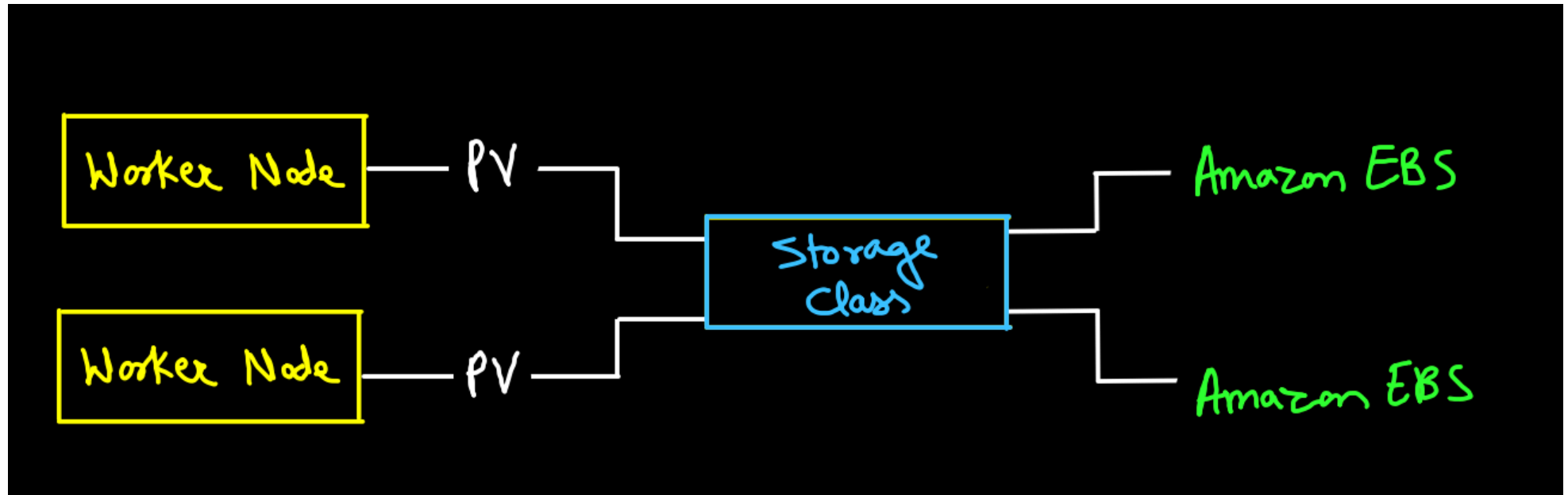
- PV does not reside within a node or a pod
- PVs are volume plugins like volumens but have a lifecycle independent of any individual pod that uses the PV.
- Mounting pod directly to a stroage is not allowed

Storage class:

Storage class contains:

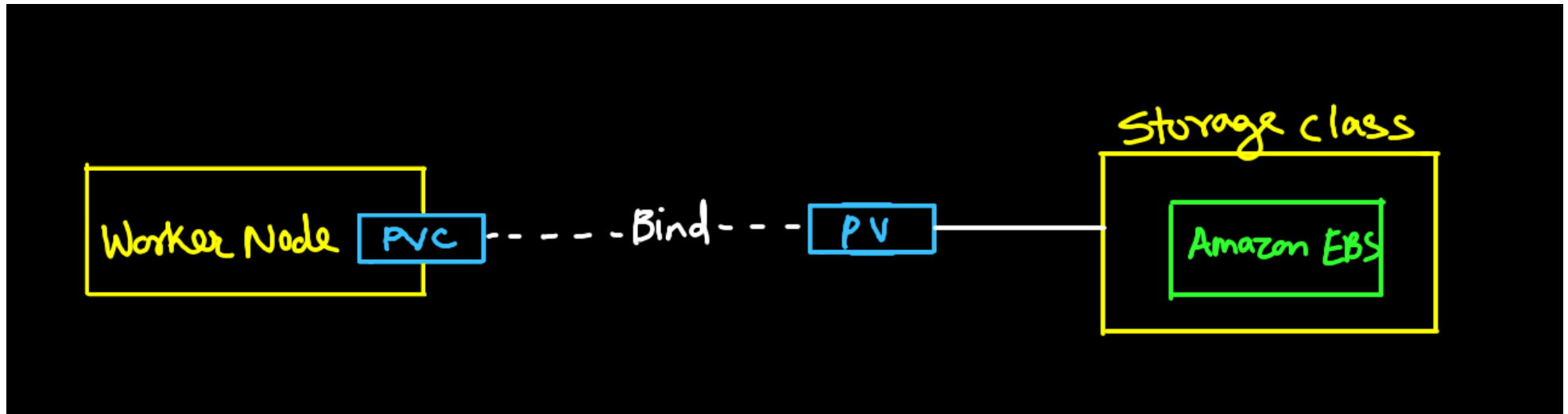
1. Provisioner
2. Parameters
3. reclaimPolicy

```
provisioner: kubernetes.io/aws-ebs
```



Persistent Volume Claim:

A PVC asked for a type of storage, and if a PV that meets the criteria is matched, the PV is claimed and bound.



ConfigMaps:

A ConfigMap is api object used to store **Non confidential data** in key-value pairs for pods

