Dynamic Volume Provisioning in Amazon EKS

Dynamic Volume Provisioning in Amazon EKS

Step 1: Create a StorageClass

```yaml
apiVersion: storage.k8s.io/v1
kind: StorageClass
metadata:
  name: gp2
provisioner: kubernetes.io/aws-ebs
parameters:
  type: gp2
reclaimPolicy: Retain
volumeBindingMode: WaitForFirstConsumer
```

Apply with:

```bash
kubectl apply -f storageclass.yaml
```

Step 2: Create a PersistentVolumeClaim (PVC)

```yaml
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  name: ebs-claim
spec:
  accessModes:
    - ReadWriteOnce
  storageClassName: gp2
  resources:
    requests:
      storage: 4Gi
```

Apply with:

```bash
kubectl apply -f pvc.yaml
```

Step 3: Mount the PVC in a Pod

```yaml
apiVersion: v1
kind: Pod
metadata:
  name: ebs-volume-pod
spec:
  containers:
    - name: app
      image: busybox
      command: [ "sleep", "3600" ]
      volumeMounts:
        - mountPath: "/data"
          name: ebs-volume
```