



云原生实战

使用KubeVirt管理虚拟机负载

刘远清--KubeSphere Virtualization后端开发

Agenda

KubeVirt的部署

使用KubeVirt创建虚拟机

虚拟机的启动和停止

创建虚拟机快照与恢复快照

虚拟机的迁移

Kubevirt运行在Kubernetes之上，先准备Kubernetes环境。本实战使用kubeykey构建Kubernetes环境

```
export VERSION=v0.46.1
```

```
echo $VERSION
```

```
kubectl create -f https://github.com/kubevirt/kubevirt/releases/download/${VERSION}/kubevirt-operator.yaml
```

```
kubectl create configmap kubevirt-config -n kubevirt --from-literal debug.useEmulation=true --from-literal feature-gates=Macvtap,LiveMigration,Snapshot
```

```
kubectl create -f https://github.com/kubevirt/kubevirt/releases/download/${VERSION}/kubevirt-cr.yaml
```

```
wget https://kubevirt.io/labs/manifests/vm.yaml  
kubectl apply -f vm.yaml  
kubectl get vm
```

```
virtctl start testvm  
virtctl stop testvm  
virtctl restart testvm
```

创建虚拟机快照与恢复快照

```
cat <<EOF > snap.yaml
apiVersion: snapshot.kubevirt.io/v1alpha1
kind: VirtualMachineSnapshot
metadata:
  name: snap-testvm
spec:
  source:
    apiGroup: kubevirt.io
    kind: VirtualMachine
    name: testvm
EOF
kubectl create -f snap.yaml
kubectl get virtualmachinesnapshot.snapshot.kubevirt.io
```

```
cat <<EOF > resore-snap.yaml
apiVersion: snapshot.kubevirt.io/v1alpha1
kind: VirtualMachineRestore
metadata:
  name: restore-testvm
spec:
  target:
    apiGroup: kubevirt.io
    kind: VirtualMachine
    name: testvm
  virtualMachineSnapshotName: snap-testvm
EOF
kubectl create -f resore-snap.yaml
kubectl get virtualmachinerestore.snapshot.kubevirt.io
```

```
kubectl apply -f vm.yaml  
virtctl start testvm  
virtctl migrate testvm
```

Reference

<https://kubevirt.io/>



谢谢观看