KOPS

KOPS stands for Kubernetes operations.  
  
Kops will not just help you to create, delete and manage your Kubernetes cluster, It also provision the necessary cloud infrastructure automatically.  
  
Supports multiple OS. You can either provision directly or generate terraform manifest

Self-healing. Everything is created within ASG  
  
Install Kubectl  
Text

Description automatically generated

Check the Kubectl version



Install KOPS

Graphical user interface, text

Description automatically generated

Install AWS CLI

A screenshot of a computer

Description automatically generated

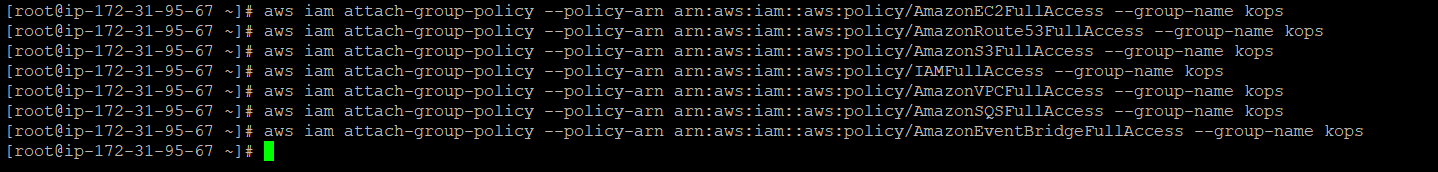
Create a IAM Account for KOPS which will be used to setup K8s cluster using KOPS

Create IAM user group

A screenshot of a computer

Description automatically generated with medium confidence

Attach the policies to the KOPS group



Add user KOPS and assign the user to KOPS group

A screenshot of a computer

Description automatically generated with medium confidence

Create IAM access key for user KOPS

Text

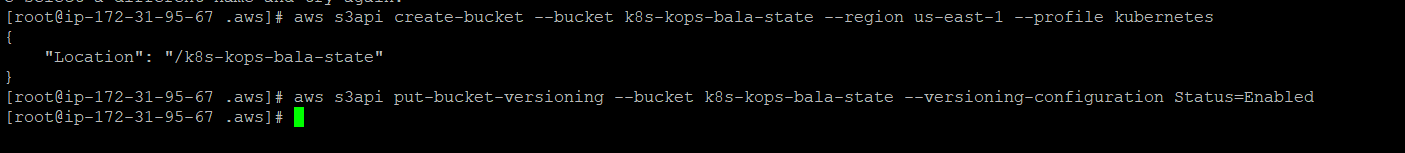
Description automatically generated

Use the KOPS user to provision k8s cluster.

A screenshot of a computer

Description automatically generated with medium confidence

Create an S3 bucket to store the Kubernetes cluster state



For a gossip-based cluster, make sure the name ends with k8s.local. For example:

kops create cluster k8s-cluster.k8s.local --node-count=2 --zones="us-east-1a,us-east-1b" --node-size=t2.medium --master-size=t2.medium --networking=calico --topology=private --bastion=true --state=s3://k8s-kops-bala-state --yes

Create K8s cluster using KOPS

Text

Description automatically generated

Check the resources created automatically for you in AWS

Graphical user interface, text, application, email

Description automatically generated

Check the status using kubectl

Text

Description automatically generated

Validate the cluster

Text

Description automatically generated

Get the cluster name

