**EKS SETUP**

**# Install AWS CLI**

curl "https://awscli.amazonaws.com/awscli-exe-linux-x86\_64.zip" -o "awscliv2.zip"

sudo apt install unzip

unzip awscliv2.zip

sudo ./aws/install

aws configure

Add the access key id, secret access key & region

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**#Install Terraform**

sudo apt-get update && sudo apt-get install -y gnupg software-properties-common curl

curl -fsSL https://apt.releases.hashicorp.com/gpg | sudo gpg --dearmor -o /usr/share/keyrings/hashicorp-archive-keyring.gpg

echo "deb [signed-by=/usr/share/keyrings/hashicorp-archive-keyring.gpg] https://apt.releases.hashicorp.com $(lsb\_release -cs) main" | sudo tee /etc/apt/sources.list.d/hashicorp.list

sudo apt-get update && sudo apt-get install terraform -y

terraform -version

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**# Kubeconfig**

aws eks --region ap-south-1 update-kubeconfig --name devopsshack-cluster

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**# Kubectl**

curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl"

curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl.sha256"

sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl

kubectl version --client

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**#EKSCTL**

curl -sLO "https://github.com/weaveworks/eksctl/releases/latest/download/eksctl\_$(uname -s)\_amd64.tar.gz"

tar -xzf eksctl\_$(uname -s)\_amd64.tar.gz

sudo mv eksctl /usr/local/bin

eksctl version

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**# HELM**

sudo apt update && sudo apt upgrade -y

curl https://raw.githubusercontent.com/helm/helm/main/scripts/get-helm-3 | bash

if this command doesn’t work then try below commands

wget https://get.helm.sh/helm-v3.14.0-linux-amd64.tar.gz

tar -zxvf helm-v3.14.0-linux-amd64.tar.gz

sudo mv linux-amd64/helm /usr/local/bin/helm

helm version

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eksctl utils associate-iam-oidc-provider --region ap-south-1 --cluster devopsshack-cluster --approve

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eksctl create iamserviceaccount \

--region ap-south-1 \

--name ebs-csi-controller-sa \

--namespace kube-system \

--cluster devopsshack-cluster \

--attach-policy-arn arn:aws:iam::aws:policy/service-role/AmazonEBSCSIDriverPolicy \

--approve \

--override-existing-serviceaccounts

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**# Setup Nginx-ingress, cert-manager, aws-ebs-csi-driver**

kubectl apply -k "github.com/kubernetes-sigs/aws-ebs-csi-driver/deploy/kubernetes/overlays/stable/ecr/?ref=release-1.11"

kubectl apply -f <https://raw.githubusercontent.com/kubernetes/ingress-nginx/main/deploy/static/provider/cloud/deploy.yaml>

kubectl apply -f <https://github.com/cert-manager/cert-manager/releases/download/v1.12.0/cert-manager.yaml>

**# Deploy Storage Class**

**vi sc.yaml**

apiVersion: storage.k8s.io/v1

kind: StorageClass

metadata:

name: ebs-sc

provisioner: ebs.csi.aws.com

parameters:

type: gp3

fsType: ext4

reclaimPolicy: Retain

volumeBindingMode: WaitForFirstConsumer

kubectl apply -f sc.yaml