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To setup the EKS cluster in aws to follow the documentation

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https://github.com/suffixscope/kubernetes.git

or follow the below steps

Launch new Ubuntu VM using AWS Ec2 ( t2.medium )

Connect to machine and install kubectl using below commands

Step-1

# curl -o kubectl https://amazon-eks.s3.us-west-2.amazonaws.com/1.19.6/2021-01-05/bin/linux/amd64/kubectl

chmod +x ./kubectl

sudo mv ./kubectl /usr/local/bin

kubectl version --short --client

Install AWS CLI latest version using below commands

# sudo apt install unzip

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

unzip awscliv2.zip

sudo ./aws/install

aws --version

Install eksctl using below commands

# curl --silent --location "https://github.com/weaveworks/eksctl/releases/latest/download/eksctl\_$(uname -s)\_amd64.tar.gz" | tar xz -C /tmp

sudo mv /tmp/eksctl /usr/local/bin

eksctl version

Step - 2 : Create IAM role & attach to EKS Management Host

Create New Role using IAM service ( Select Usecase - ec2 )

Add below permissions for the role

IAM - fullaccess

VPC - fullaccess

EC2 - fullaccess

CloudFomration - fullaccess

Administrator - acces

Enter Role Name (eksroleec2)

Attach created role to EKS Management Host (Select EC2 => Click on Security => Modify IAM Role => attach IAM role we have created)

Step - 3 : Create EKS Cluster using eksctl

Syntax:

eksctl create cluster --name cluster-name

--region region-name

--node-type instance-type

--nodes-min 2

--nodes-max 2 \ --zones ,

N. Virgina:

eksctl create cluster --name vinodses-cluster4 --region us-east-1 --node-type t2.medium --zones us-east-1a,us-east-1b

Mumbai:

eksctl create cluster --name vinodses-cluster4 --region ap-south-1 --node-type t2.medium --zones ap-south-1a,ap-south-1b

# kubectl get nodes

We should be able to see EKS cluster nodes

Delete Cluster and other resources we have used in AWS Cloud

# eksctl delete cluster --name vinodses-cluster4 --region ap-south-1

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Kubernetes resources

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2 Services

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