EKS CLI Installation

Here we are using AWS CloudShell Terminal.

$ sudo -i : Switch to root user

aws -- version : Check AWS CLI

aws configure : Here skip all step as blank

1. Download kubectl:

curl -LO https://storage.googleapis.com/kubernetesrelease/release/${KUBECTL_VERSION}/bin/linux/amd64/kubectl

2. Make it executable:

chmod +x ./kubectl

- Changes the permissions of the downloaded file to make it executable.

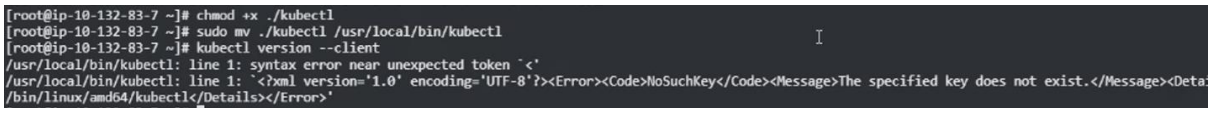
3. Move it to a system path:

sudo mv ./kubectl /usr/local/bin/kubectl

- Moves the kubectl binary to /usr/local/bin, making it accessible from anywhere in the terminal.

4. Check kubectl version:

kubectl version --client



Note- Ignore error.

5. Installing eksctl

Download and extract eksctl:

curl --silent --location "https://github.com/weaveworks/eksctl/releases/latest/download/eksctl_Linux_amd64.tar.gz" | tar xz -C /tmp

- Downloads the latest version of eksctl and extracts it to the /tmp directory.

6. Move eksctl to a system path:

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

- Moves the eksctl binary to /usr/local/bin for easier access.

7. Make eksctl executable: - Sets executable permissions for the eksctl binary.

sudo chmod +x /usr/local/bin/eksctl

8. Check eksctl version:

eksctl version

```
[root@ip-10-132-83-7 ~]# eksctl version
0.190.0
```

9. Creating and Managing an EKS Cluster:

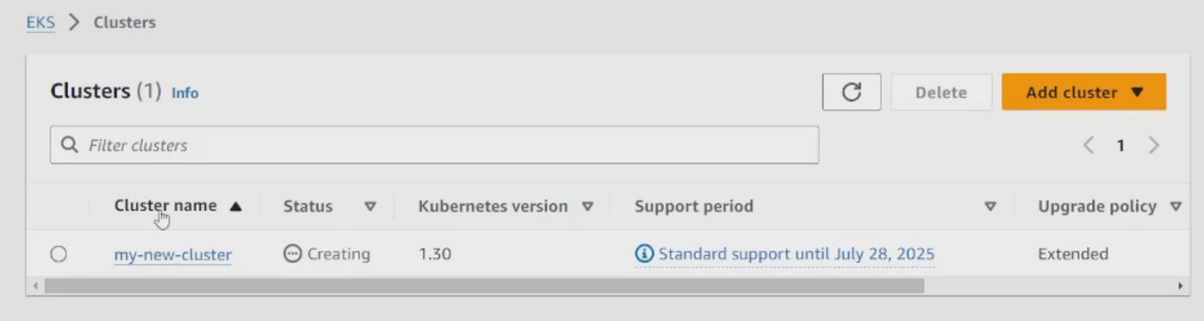
Create an EKS cluster:

eksctl create cluster --name my-new-cluster --region ap-south-1 --nodegroup-name my-nodes --node-type t3.medium --nodes 1 --nodes-min 1 --nodes-max 1 –managed

-- Creates a new EKS cluster named my-new-cluster in the specified region with a managed node group named my-nodes. It specifies instance type (t3.medium) and the desired, minimum, and maximum number of nodes (all set to 1).

```
[root@ip-10-132-83-7 ~]# eksctl create cluster --name my-new-cluster --region ap-south-1 --nodegroup-name my-nodes --node-type t3.medium --nodes 1
--nodes-min 1 --nodes-max 1 --managed
2024-09-25 15:21:20 [ℹ]  eksctl version 0.190.0
2024-09-25 15:21:20 [ℹ]  using region ap-south-1
2024-09-25 15:21:20 [ℹ]  setting availability zones to [ap-south-1c ap-south-1a ap-south-1b]
2024-09-25 15:21:20 [ℹ]  subnets for ap-south-1c - public:192.168.0.0/19 private:192.168.96.0/19
2024-09-25 15:21:20 [ℹ]  subnets for ap-south-1a - public:192.168.32.0/19 private:192.168.128.0/19
2024-09-25 15:21:20 [ℹ]  subnets for ap-south-1b - public:192.168.64.0/19 private:192.168.160.0/19
2024-09-25 15:21:20 [ℹ]  nodegroup "my-nodes" will use "" [AmazonLinux2/1.30]
2024-09-25 15:21:20 [ℹ]  using Kubernetes version 1.30
2024-09-25 15:21:20 [ℹ]  creating EKS cluster "my-new-cluster" in "ap-south-1" region with managed nodes
2024-09-25 15:21:20 [ℹ]  will create 2 separate CloudFormation stacks for cluster itself and the initial managed nodegroup
```

10. Check EKS from console



It takes some time to create Cluster & also node.