AWS EKS

Command to create a EKS Cluster:

eksctl create cluster -r eu-central-1 --name **Testing-new1-rsc-cluster** --version 1.13 --nodegroup-name **test1-new-dev-workers** --node-type t3.medium --nodes 2 --nodes-min 1 --nodes-max 3 --node-ami auto --vpc-private-subnets=subnet-0889f4d7b1641748d,subnet-0ebca37dc8f461b1d -P

Command to list all EKS Cluster:

Installation of EKSctl tool : https://docs.aws.amazon.com/eks/latest/userguide/getting-started-eksctl.html

eksctl get cluster --region=eu-central-1

```
C:\Users\hariharan.v>eksctl get cluster --region=eu-central-1

NAME REGION

Testing-new1-rsc-cluster eu-central-1
dev-jenkinsx-demo eu-central-1
dev44 eu-central-1
edison-build04 eu-central-1
edison2 eu-central-1
eu-central-1
```

Command to list Nodegroup:

eksctl get nodegroup --region=eu-central-1 --cluster=Testing-new1-rsc-cluster

```
C:\Users\hariharan.v>eksctl get nodegroup --region=eu-central-1 --cluster=Testing-new1-rsc-cluster
CLUSTER NODEGROUP CREATED MIN SIZE MAX SIZE DESIRED CAPACITY INSTANCE TYPE IMAGE ID
Testing-new1-rsc-cluster test1-new-dev-workers 2019-08-13T07:57:38Z 1 3 2 t3.medium ami-0b7127e7a2a3
8802a
```

Installing aws-iam-authenticator:

https://docs.aws.amazon.com/eks/latest/userguide/install-aws-iam-authenticator.html

aws eks update-kubeconfig --name Testing-new1-rsc-cluster --region=eu-central-1

PS C:\Users\hariharan.v> <mark>aws eks update-kubeconfig --name Testing-new1-rsc-cluster --region=eu-central-1</mark>
Updated context arn:aws:eks:eu-central-1:656460558808:cluster/Testing-new1-rsc-cluster in C:\Users\hariharan.v\.kube\config

Managing Users or IAM Roles for your Cluster:

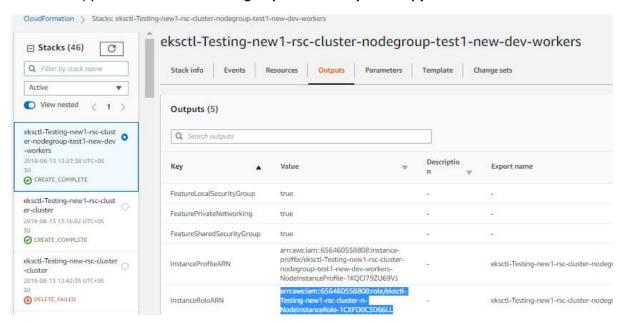
https://docs.aws.amazon.com/eks/latest/userguide/add-user-role.html

aws-auth-cm.yaml:

```
apiVersion: vl
2
      kind: ConfigMap
3
    metadata:
       name: aws-auth
5
       namespace: kube-system
6
    □data:
    mapRoles: |
    - rolearn: arn:aws:iam::656460558808:role/eksctl-Testing-newl-rsc-cluster-n-NodeInstanceRole-1CXPCDC3D66LU
           username: system:node:{{EC2PrivateDNSName}}
           groups:
             - system:bootstrappers
11
             - system:nodes
```

Role Arn:

We must copy role ARN from CFT nodegroup stack -> Output -> Copy Role Arn



Installing Kubectl: https://kubernetes.io/docs/tasks/tools/install-kubectl/

kubectl.exe apply -f .\aws-auth-cm.yaml

Command to list nodes:

kubectl.exe get nodes

Single Screenshot Example: