**Kubectl Deployment using Kubeadm:**

We need 2 Ubuntu 16.04 machines.

On 2/2 nodes apply security group having all traffic opened.

**On Master: (You should be logged in as root)**

1. sudo apt-get update -y
2. sudo apt-get install -y apt-transport-https
3. curl -s https://packages.cloud.google.com/apt/doc/apt-key.gpg | apt-key add
4. vi /etc/apt/sources.list.d/kubernetes.list
   1. deb http://apt.kubernetes.io/ kubernetes-xenial main
5. sudo apt-get update -y
6. sudo apt-get install -y docker.io
7. sudo apt-get install -y kubelet kubeadm kubectl kubernetes-cni

Lets initialize the cluster master node using kubeadm init

1. kubeadm init

**Copy the complete line containing word (token will diff for everybody)**

kubeadm join 172.31.28.172:6443 --token gomedr.cia0tinm2uwuonlz --discovery-token-ca-cert-hash sha256:3cd1224f4775aaacc4c0bfd7ec350c2ce7754f3f09f6c4fbb8601151d6d459c1

**To Run kubectl utility perform following action on master node**

1. mkdir -p $HOME/.kube
2. sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config
3. sudo chown $(id -u):$(id -g) $HOME/.kube/config

**Installing CNI Network**

1. sysctl net.bridge.bridge-nf-call-iptables=1
2. export kubever=$(kubectl version | base64 | tr -d '\n')
3. kubectl apply -f "https://cloud.weave.works/k8s/net?k8s-version=$kubever"

**On Worker Node : (You should be logged in as root)**

1. sudo apt-get update -y
2. sudo apt-get install -y apt-transport-https
3. curl -s https://packages.cloud.google.com/apt/doc/apt-key.gpg | apt-key add
4. vi /etc/apt/sources.list.d/kubernetes.list
5. deb http://apt.kubernetes.io/ kubernetes-xenial main
6. sudo apt-get update -y
7. sudo apt-get install -y docker.io
8. sudo apt-get install -y kubelet kubeadm kubectl kubernetes-cni

**Join the worker node to the Cluster**

1. kubeadm join 172.31.28.172:6443 --token gomedr.cia0tinm2uwuonlz --discovery-token-ca-cert-hash sha256:3cd1224f4775aaacc4c0bfd7ec350c2ce7754f3f09f6c4fbb8601151d6d459c1

**Check that the second node has joined the cluster and ready.**

kubectl get nodes (Status of all the node should be ready)