**Ways to install k8s**

**Kubeadm**

**Minikube**

**Kops**

**K8s in gcp**

**IMPORTANT POINTS NEED TO TAKE CARE:**

1. **USE ONLY UBUNTU 20.0 while creating ec2 machine. Latest ubuntu 22… will give error**
2. **IN SECURITY GROUP ALLOW ALL TRAFFIC …otherwise in step2 you will get error when you try to copy the join command in the nodes saying that your docker is using old version**

**Step1:**

**On Master & worker node**

**sudo su**

**apt-get update**



**apt-get install docker.io -y**



**service docker restart**

**curl -s https://packages.cloud.google.com/apt/doc/apt-key.gpg | apt-key add -**



**echo "deb http://apt.kubernetes.io/ kubernetes-xenial main" >/etc/apt/sources.list.d/kubernetes.list**

**apt-get update**

**apt install kubeadm=1.20.0-00 kubectl=1.20.0-00 kubelet=1.20.0-00 -y**

**Step2:**

**On Master:**

**kubeadm init --pod-network-cidr=192.168.0.0/16**

**>Copy the token and paste it into the worker node.  
(if you get an error here saying that you are using old docker version…then you have not enabled all traffic in security group)**

**Step3:**

**On Master:**

**exit**

**mkdir -p $HOME/.kube**

**sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config**

**sudo chown $(id -u):$(id -g) $HOME/.kube/config**

**step4:**

**On Master:**

kubectl apply -f https://docs.projectcalico.org/v3.9/manifests/calico.yaml

**kubectl apply -f https://raw.githubusercontent.com/kubernetes/ingress-nginx/controller-v0.49.0/deploy/static/provider/baremetal/deploy.yaml**

**Our Kubernetes installation and configuration are complete**