Kubernetes v1.20 installation - Ubuntu

The issue is with the latest version of Kubernetes. This is a bug in version 1.22. Installing an older version (1.20) will resolve the issue. Create a new instance and follow the below steps,

1. Install docker.

Execute the below command to switch to the root user,

sudo su

Create a file with the below command,

nano docker.sh

Add the below contents in this file,

swapoff -a

apt update -y

apt install -y docker.io

systemctl enable docker

systemctl start docker

Now execute the below commands to run the above file and install docker,

chmod -R 777 docker.sh

./docker.sh

2. Install Kubernetes

Create a file with the below command,

nano kubernetes.sh

Add the below contents in this file,

sudo apt-get update && sudo apt-get install -y apt-transport-https curl

curl -s [https://packages.cloud.google.com/apt/doc/apt-key.gpg](https://packages.cloud.google.com/apt/doc/apt-key.gpg#Cases/dv/_blank) | sudo apt-key add -

cat <<EOF | sudo tee /etc/apt/sources.list.d/kubernetes.list

deb [https://apt.kubernetes.io/](https://apt.kubernetes.io/#Cases/dv/_blank) kubernetes-xenial main

EOF

sudo apt-get update

sudo apt-get install -y kubelet=1.20.2-00 kubeadm=1.20.2-00 kubectl=1.20.2-00

sudo apt-mark hold kubelet kubeadm kubectl

Now execute the below commands to run the above file and install Kubernetes,

chmod -R 777 kubernetes.sh

./kubernetes.sh

3. Initialize the cluster with the below command,

kubeadm init --apiserver-advertise-address=<your private IP address> --pod-network-cidr=192.168.0.0/16 --ignore-preflight-errors all

Change the private IP accordingly.

When the cluster is initialized Successfully it will print the kubeadm join command. Note that command as you will have to execute it in the worker node to connect it to the master later.

Now, execute the below commands in the master one-by-one,

exit

mkdir -p $HOME/.kube

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

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

kubectl apply -f [https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml](https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml#Cases/dv/_blank)

4. Follow the Step 1 and 2 in worker node as well

5. Now execute the kubeadm join command in the worker node from the root user

6. Now execute the below command in the master node,

kubectl get nodes