Kubernetes installation :-

1: Basic requirement -. 2x CPU & 2GB RAM

2) Disable Swap memory

Swpoff --a

Disable SELinux

Setenforce 0

Disable Firewall

Systemctl stop firewalld

3) Host entry

Vim /etc/hosts

Both master & worker node entry on all node

{ip addddress domain\_name shortname}

4) install docker

1: yum remove docker docker-client-latest docker-common docker-latest docker-latest-logrotate docker-engine podman runc

2: yum install yum-utils -y

Yum-config-manager –add-repo <https://download.docker.com/linux/centos/docker-ce.repo>

Yum install docker-ce

Systemctl start docker

Systemctl enable docker

Docker run hello-word

5 containerd error

If there is error related to containerd

Vim /etc/containerd/config.toml- install plugin

#Disabled\_plugin =[cri]

#####################################3

Add these lines below disabled\_plugin=[cri

] in /etc/containerd/config.toml

version = 2

[plugins]

[plugins."io.containerd.grpc.v1.cri"]

[plugins."io.containerd.grpc.v1.cri".containerd]

[plugins."io.containerd.grpc.v1.cri".containerd.runtimes]

[plugins."io.containerd.grpc.v1.cri".containerd.runtimes.runc]

runtime\_type = "io.containerd.runc.v2"

[plugins."io.containerd.grpc.v1.cri".containerd.runtimes.runc.options]

#############################

Systemctl restart containerd

6) Install Kubernetes tools

Kubeadm install (follow documentation on Kubernetes.io documentation& follw install kubeadm on all node)

Minikube: 1master & 1 worker node

Kubeadm --> install larget cluster

**NowOnly on master node run**

Kubeadm init

Login to cluster node

Connect worker node to master node

Kubectl get nodes

Mkdir .kube in roots home dir

Cp /etc/Kubernetes/admin.conf /root/.kube/config

Connect to worker node

You have to take token from master node and paste to worker node with which you can connect

Token can be generate with following command

Kubeadm token generate

Kubeadm token list

Kubeadm token create

Kubeadm token create –print-join-command

Copy token from kudeadm init output from master node (to create new token again you can reset kubeadm reset then again kubeadm init )

Paste that command on worker node

4: install calico on matsre node

Calico.yaml search follow documentation for kubenetes on 50 less than node

curl https://raw.githubusercontent.com/projectcalico/calico/v3.29.1/manifests/calico.yaml -O

Kubectl apply -f calico.yaml

Kubectl get pods -n kube-system

Kubectl get nodes

After calico installation on master node