###Install Kubernet Cluster: - <https://geekflare.com/kubernetes-dashboard/>

// https://kubernetes.io/docs/setup/production-environment/tools/kubeadm/install-kubeadm/

# Install & setup cluster on master node

cat /etc/os-release

yum update

vi /etc/hosts

192.168.1.30 k8s-master

192.168.1.40 worker-node1

192.168.1.50 worker-node2

setenforce 0

sed -i 's/^SELINUX=enforcing$/SELINUX=permissive/' /etc/selinux/config

yum install firewall\*

7 vi fire.sh

firewall-cmd --permanent --add-port=6443/tcp

firewall-cmd --permanent --add-port=2379-2380/tcp

firewall-cmd --permanent --add-port=10250/tcp

firewall-cmd --permanent --add-port=10251/tcp

firewall-cmd --permanent --add-port=10252/tcp

firewall-cmd --permanent --add-port=10255/tcp

firewall-cmd --permanent --add-port=30000-32767/tcp

# sh fire.sh

10. systemctl restart firewalld ; ; firewall-cmd –-reload ; firewall-cmd --list-ports

12 echo '1' > /proc/sys/net/bridge/bridge-nf-call-iptables

13 swapoff -a

14 cat <<EOF | sudo tee /etc/yum.repos.d/kubernetes.repo

[kubernetes]

name=Kubernetes

baseurl=https://packages.cloud.google.com/yum/repos/kubernetes-el7-\$basearch

enabled=1

gpgcheck=1

repo\_gpgcheck=1

gpgkey=https://packages.cloud.google.com/yum/doc/yum-key.gpg https://packages.cloud.google.com/yum/doc/rpm-package-key.gpg

exclude=kubelet kubeadm kubectl

EOF

15 yum install kubeadm docker –y

# yum install -y kubelet kubeadm kubectl --disableexcludes=kubernetes

sudo systemctl enable --now kubelet

16 systemctl enable docker ; systemctl start docker; systemctl enable kubelet; systemctl start kubelet

17. kubeadm init ## Initialize Kubernetes

18. mkdir -p $HOME/.kube

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

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

###Deploy pod network to the cluster

21. export kubever=$(kubectl version | base64 | tr -d '\n')

22. kubectl apply -f https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml

#### kubectl apply -f "https://cloud.weave.works/k8s/net?k8s-version=**$(**kubectl version | base64 | tr -d '\n'**)**"

(not used)

// https://v1-17.docs.kubernetes.io/docs/setup/production-environment/tools/kubeadm/create-cluster-kubeadm/

23. kubectl get node

### #**steps on each worker node**

1. cat /etc/os-release

2. yum update

3 vi /etc/hosts

192.168.1.30 k8s-master

192.168.1.40 worker-node1

192.168.1.50 worker-node2

4 setenforce 0

5 sed -i --follow-symlinks 's/SELINUX=enforcing/SELINUX=disabled/g' /etc/sysconfig/selinux

6 yum install firewall\*

7 vi fire.sh

firewall-cmd --permanent --add-port=6443/tcp

firewall-cmd --permanent --add-port=2379-2380/tcp

firewall-cmd --permanent --add-port=10250/tcp

firewall-cmd --permanent --add-port=10251/tcp

firewall-cmd --permanent --add-port=10252/tcp

firewall-cmd --permanent --add-port=10255/tcp

firewall-cmd --permanent --add-port=30000-32767/tcp

# sh fire.sh

8 systemctl restart firewalld ; firewall-cmd –-reload ; firewall-cmd --list-ports

12 echo '1' > /proc/sys/net/bridge/bridge-nf-call-iptables

13 swapoff -a

14 cat <<EOF | sudo tee /etc/yum.repos.d/kubernetes.repo

[kubernetes]

name=Kubernetes

baseurl=https://packages.cloud.google.com/yum/repos/kubernetes-el7-\$basearch

enabled=1

gpgcheck=1

repo\_gpgcheck=1

gpgkey=https://packages.cloud.google.com/yum/doc/yum-key.gpg https://packages.cloud.google.com/yum/doc/rpm-package-key.gpg

exclude=kubelet kubeadm kubectl

EOF

15 yum install kubeadm docker -y

16 systemctl enable docker ; systemctl start docker; systemctl enable kubelet; systemctl start kubelet

17. kubeadm join 103.129.97.133:6443 --token smm1p1.k99pqmyvhezho8br \

--discovery-token-ca-cert-hash sha256:70c9255549fc7304f38cad8091312c50a78a25e482fd340e99ee70483612e64a

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_it has work

1 hostname master.onliveserver.om

2 vi /etc/hostname

3 vi /etc/hosts

4 setenforce 0

5 sed -i 's/^SELINUX=enforcing$/SELINUX=permissive/' /etc/selinux/config

6 getenforce

7

cat <<EOF | sudo tee /etc/yum.repos.d/kubernetes.repo

[kubernetes]

name=Kubernetes

baseurl=https://packages.cloud.google.com/yum/repos/kubernetes-el7-\$basearch

enabled=1

gpgcheck=1

repo\_gpgcheck=1

gpgkey=https://packages.cloud.google.com/yum/doc/yum-key.gpg https://packages.cloud.google.com/yum/doc/rpm-package-key.gpg

exclude=kubelet kubeadm kubectl

EOF

8#9:- yum install -y kubelet kubeadm kubectl --disableexcludes=kubernetes

10 systemctl enable --now kubelet

11 lsmod | grep br\_netfilter

12 cat <<EOF | sudo tee /etc/modules-load.d/k8s.conf

br\_netfilter

EOF

13 cat <<EOF | sudo tee /etc/sysctl.d/k8s.conf

net.bridge.bridge-nf-call-ip6tables = 1

net.bridge.bridge-nf-call-iptables = 1

EOF

14 sysctl --system

15 swapoff -a

16 vi /etc/fstab

17 free -

18 yum install firewalld

19 vi fire.sh

20 systemctl restart firewalld

21 sh fire.sh

22 systemctl enable firewalld

23 firewall-cmd –reload

30 kubeadm init

31 echo '1' > /proc/sys/net/bridge/bridge-nf-call-iptables

32 kubeadm init

33 cat /proc/sys/net/ipv4/ip\_forward

34 echo '1' > /proc/sys/net/ipv4/ip\_forward

35 cat /proc/sys/net/ipv4/ip\_forward

36 kubeadm init

37 yum update

38 kubeadm init

39 vi /etc/resolv.conf

40 yum install kubeadm docker -y

41 kubeadm init

42 systemctl restart kubelet docker

43 systemctl enable docker ; systemctl start docker; systemctl enable kubelet; systemctl start kubelet

44 kubeadm init

45 mkdir -p $HOME/.kube ; sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config ; sudo chown $(id -u):$(id -g) $HOME/.kube/config ; export KUBECONFIG=/etc/kubernetes/admin.conf

46 kubectl apply -f https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml

47 kubectl get pods -A

48 kubectl apply -f https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml

49 kubectl get pods -A

50 hostname

51 history

// <https://github.com/flannel-io/flannel#deploying-flannel-manually>