**xóa docker-engine khi cài dở bị treo**

sudo kill -9 <pid>

sudo rm /var/lib/dpkg/lock

sudo dpkg --configure -a

sudo rm /var/lib/apt/lists/lock

sudo rm /var/cache/apt/archives/lock

sudo rm -rf /var/lib/docker

sudo rm -rf /var/lib/containerd

apt remove docker -y

sudo apt-get remove docker docker-engine docker.io containerd runc -y

**cài đặt docker, kubernetes**

sudo apt-get update -y

sudo apt-get install \

apt-transport-https \

ca-certificates \

curl \

gnupg \

lsb-release -y

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg -Y

echo \

"deb [arch=amd64 signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu \

$(lsb\_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

sudo apt-get update -y

sudo apt-get install docker-ce docker-ce-cli containerd.io -y

apt-cache madison docker-ce

sudo docker run hello-world

sudo dpkg -i /path/to/package.deb

sudo docker run hello-world

curl -fsSL https://get.docker.com -o get-docker.sh

DRY\_RUN=1 sh ./get-docker.sh

curl -fsSL https://get.docker.com -o get-docker.sh

sudo sh get-docker.sh

curl -fsSL https://test.docker.com -o test-docker.sh

sudo sh test-docker.sh

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | apt-key add -

sudo add-apt-repository \

"deb [arch=amd64] https://download.docker.com/linux/ubuntu \

$(lsb\_release -cs) \

stable"

sudo apt-get update && apt-get install docker-ce -y

cat > /etc/docker/daemon.json <<EOF

{

"exec-opts": ["native.cgroupdriver=systemd"],

"log-driver": "json-file",

"log-opts": {

"max-size": "100m"

},

"storage-driver": "overlay2"

}

EOF

mkdir -p /etc/systemd/system/docker.service.d

systemctl daemon-reload

systemctl restart docker

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 | sudo apt-key add -

echo "deb https://apt.kubernetes.io/ kubernetes-xenial main" | sudo tee /etc/apt/sources.list.d/kubernetes.list

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

chmod 777 /etc/apt/sources.list.d/

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

deb https://apt.kubernetes.io/ kubernetes-xenial main

EOF

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

br\_netfilter

EOF

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

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

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

EOF

sudo sysctl --system

sudo apt-get update -y

sudo apt-get install -y kubelet kubeadm kubectl

sudo apt-mark hold kubelet kubeadm kubectl

kubeadm init

calico

* Cài đặt Calico với kho dữ liệu API Kubernetes, 50 nút trở xuống

curl https://docs.projectcalico.org/manifests/calico.yaml -O

kubectl apply -f calico.yaml

curl [https://docs.projectcalico.org/manifests/calico-etcd.yaml -o calico.yaml](https://docs.projectcalico.org/manifests/calico-etcd.yaml%20-o%20calico.yaml)

kubectl apply -f calico.yaml

* Cài đặt Calico với kho dữ liệu API Kubernetes, hơn 50 nút

curl [https://docs.projectcalico.org/manifests/calico-typha.yaml -o calico.yaml](https://docs.projectcalico.org/manifests/calico-typha.yaml%20-o%20calico.yaml)

kubectl apply -f calico.yaml