

K8S Cluster:

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

<https://kubernetes.io/docs/setup/production-environment/container-runtimes/#docker>

<https://docs.docker.com/engine/install/ubuntu/>

ON ALL SERVERS:

- Create 3 ubuntu 16 server with t2.medium
- Install docker
- `sudo apt-get remove docker docker-engine docker.io containerd runc`
- `sudo apt-get update`
- `sudo apt-get install \`
 `ca-certificates \`
 `curl \`
 `gnupg \`
 `Lsb-release`
- `curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg`
 `--dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg`
- `echo \`
- `"deb [arch=$(dpkg --print-architecture)`
 `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`
- `sudo apt-get install docker-ce docker-ce-cli containerd.io`
- `sudo mkdir /etc/docker`

- `cat <<EOF | sudo tee /etc/docker/daemon.json`

```
{  
  "exec-opts": ["native.cgroupdriver=systemd"],  
  "log-driver": "json-file",  
  "log-opts": {  
    "max-size": "100m"  
  },  
  "storage-driver": "overlay2"  
}
```

EOF

- `sudo systemctl enable docker`
- `sudo systemctl daemon-reload`
- `sudo systemctl restart docker`

• Installing kubeadm, kubelet and kubectl

- `sudo apt-get update`
- `sudo apt-get install -y apt-transport-https ca-certificates curl`
- `sudo curl -fsSLo /usr/share/keyrings/kubernetes-archive-keyring.gpg https://packages.cloud.google.com/apt/doc/apt-key.gpg`
- `echo "deb [signed-by=/usr/share/keyrings/kubernetes-archive-keyring.gpg] https://apt.kubernetes.io/ kubernetes-xenial main" | sudo tee /etc/apt/sources.list.d/kubernetes.list`
- `sudo apt-get update`
- `sudo apt-get install -y kubelet kubeadm kubectl`
- `sudo apt-mark hold kubelet kubeadm kubectl`

ON Master

- Kubeadm init

Your Kubernetes control-plane has initialized successfully!

ON MASTER :

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

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

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

```
kubectl get nodes
```

```
kubectl get pods
```

On master as root:

```
# kubectl apply -f
```

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

ON NODES:

```
kubeadm join 172.31.31.201:6443 --token yhw2d8.3bs6uy3sdk7io3a6 \
```

--discovery-token-ca-cert-hash

**sha256:dce968b1437bd4f2dc122cfc2416003186a0bf744ac17767f4e2f053fe4
34586**