# UbutnuServer18.04部署k8s 1.13.4

## Master和Node共同的操作

### ssh登录

### 关闭防火墙

$ sudo ufw disable

### 开启IPV4转发

$ sudo vim /etc/sysctl.conf

打开注释

net.ipv4.ip\_forward = 1

使之生效

$ sudo sysctl -p

### 禁止swap

$ sudo swapoff -a

$ sudo vim /etc/fstab

注释掉swap挂载

### 配置iptables

$ sudo tee /etc/sysctl.d/k8s.conf <<-'EOF'

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

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

EOF

$ sudo sysctl --system

### 安装docker

$ sudo apt-get remove docker docker-engine docker.io

$ sudo apt-get install \

apt-transport-https \

ca-certificates \

curl \

software-properties-common

$ curl -fsSL https://mirrors.aliyun.com/docker-ce/linux/ubuntu/gpg | sudo apt-key add -

$ sudo add-apt-repository \

"deb [arch=amd64] https://mirrors.aliyun.com/docker-ce/linux/ubuntu \

$(lsb\_release -cs) \

stable"

$ sudo apt-get install -y docker-ce=18.06.1~ce~3-0~ubuntu

$ sudo systemctl enable docker && sudo systemctl start docker

$ sudo usermod -aG docker username

### 添加docker配置

$ sudo tee /etc/docker/daemon.json <<-'EOF'

{

"registry-mirrors": ["https://xxxxxxxx.mirror.aliyuncs.com"],

"iptables": false,

"ip-masq": false,

"storage-driver": "overlay2",

"graph": "/home/username/docker"

}

EOF

$ sudo systemctl restart docker

### 安装kubeadm,kubectl,kubelet

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

$ sudo curl -s https://mirrors.aliyun.com/kubernetes/apt/doc/apt-key.gpg | sudo apt-key add -

$ sudo tee /etc/apt/sources.list.d/kubernetes.list <<-'EOF'

deb https://mirrors.aliyun.com/kubernetes/apt kubernetes-xenial main

EOF

$ sudo apt-get update

$ sudo apt-get install -y kubelet=1.13.4-00 kubeadm=1.13.4-00 kubectl=1.13.4-00

$ sudo apt-mark hold kubelet=1.13.4-00 kubeadm=1.13.4-00 kubectl=1.13.4-00

$ sudo systemctl enable kubelet && sudo systemctl start kubelet

### 9. 下载必要的镜像

$ ./image\_pull.sh

注：镜像的版本可以通过命令查看

$ sudo kubeadm config images list --kubernetes-version=v1.13.4

## Master部署

### 初始化

$ sudo kubeadm init --pod-network-cidr=10.244.0.0/16 --kubernetes-version=v1.13.4

### 配置kubectl

$ mkdir -p $HOME/.kube

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

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

### 将master加入工作节点

$ kubectl taint nodes --all node-role.kubernetes.io/master-

### 配置flannel

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

## 生成永久token和秘钥，记录备用

$ kubeadm token create --ttl 0

$ openssl x509 -pubkey -in /etc/kubernetes/pki/ca.crt | openssl rsa -pubin -outform der 2>/dev/null | openssl dgst -sha256 -hex | sed 's/^.\* //'

## Node部署

### node加入集群的命令

$ sudo kubeadm join master\_ip:6443 --token your\_token --discovery-token-ca-cert-hash sha256:your\_sha256