节点IP地址：192.168.30.141

节点主机名：k8s-master-01

证书存放目录：/etc/kubernetes/kube-proxy/ssl/

配置文件目录：/etc/kubernetes/kube-proxy/conf/

日志存放目录：/var/log/kubernetes/kube-proxy/

创建所需目录

mkdir -p /etc/kubernetes/kube-proxy/{ssl,conf} \

/var/log/kubernetes/kube-proxy/

创建证书签名请求

cd /usr/local/src/ssl

cat > kube-proxy-csr.json <<EOF

{

"CN": "system:kube-proxy",

"hosts": [],

"key": {

"algo": "rsa",

"size": 2048

},

"names": [{

"C": "CN",

"L": "BeiJing",

"ST": "BeiJing",

"OU": "System"

}]

}

EOF

生成证书和私钥

cfssl gencert -ca=/etc/kubernetes/ssl/ca.pem \

-ca-key=/etc/kubernetes/ssl/ca-key.pem \

-config=/etc/kubernetes/ssl/ca-config.json \

-profile=kubernetes kube-proxy-csr.json | cfssljson -bare kube-proxy

复制证书和私钥到证书存放目录

cp kube-proxy-key.pem kube-proxy.pem /etc/kubernetes/kube-proxy/ssl/

生成kubeconfig文件

kubectl config set-cluster kubernetes \

--certificate-authority=/etc/kubernetes/ssl/ca.pem \

--embed-certs=true \

--server=https://192.168.30.141:6443 \

--kubeconfig=kube-proxy.kubeconfig

kubectl config set-credentials system:kube-proxy \

--client-certificate=/etc/kubernetes/kube-proxy/ssl/kube-proxy.pem \

--client-key=/etc/kubernetes/kube-proxy/ssl/kube-proxy-key.pem \

--embed-certs=true \

--kubeconfig=kube-proxy.kubeconfig

kubectl config set-context system:kube-proxy@kubernetes \

--cluster=kubernetes --user=system:kube-proxy \

--kubeconfig=kube-proxy.kubeconfig

kubectl config use-context system:kube-proxy@kubernetes \

--kubeconfig=kube-proxy.kubeconfig

复制kubeconfig文件到配置文件目录

cp kube-proxy.kubeconfig /etc/kubernetes/kube-proxy/conf/

创建配置文件

cat > /etc/kubernetes/kube-proxy/conf/kube-proxy.conf <<EOF

KUBE\_PROXY\_OPTS="--logtostderr=false \

--feature-gates=SupportIPVSProxyMode=true \

--proxy-mode=ipvs \

--ipvs-min-sync-period=5s \

--ipvs-sync-period=5s \

--ipvs-scheduler=rr \

--v=2 \

--log-dir=/var/log/kubernetes/kube-proxy/ \

--config=/etc/kubernetes/kube-proxy/conf/kube-proxy-config.yml"

EOF

cat > /etc/kubernetes/kube-proxy/conf/kube-proxy-config.yml <<EOF

apiVersion: kubeproxy.config.k8s.io/v1alpha1

kind: KubeProxyConfiguration

bindAddress: 0.0.0.0

metricsBindAddress: 0.0.0.0:10249

clientConnection:

kubeconfig: /etc/kubernetes/kube-proxy/conf/kube-proxy.kubeconfig

clusterCIDR: 10.244.0.0/16

mode: ipvs

EOF

创建服务文件

cat > /usr/lib/systemd/system/kube-proxy.service <<EOF

[Unit]

Description=Kubernetes Proxy

After=network.target

[Service]

EnvironmentFile=-/etc/kubernetes/kube-proxy/conf/kube-proxy.conf

ExecStart=/usr/bin/kube-proxy \$KUBE\_PROXY\_OPTS

Restart=on-failure

LimitNOFILE=65536

[Install]

WantedBy=multi-user.target

EOF

启动服务并设置为开机自启动

systemctl daemon-reload

systemctl start kube-proxy

systemctl enable kube-proxy

systemctl status kube-proxy

注：如果当前系统内核低于4.1版本，请将内核升级至4.1以上版本。

教程文档：https://github.com/shadowmktk/kubernetes/blob/master/docs/升级系统内核.docx