

k8s

<https://zahui.fan/posts/34d8fad0/>

- kubeadm

```
kubectl -n kube-system get configmap kubeadm-config -o jsonpath='{.data.ClusterConfiguration}'> kubeadm.yaml
```

- SANs

certSANs **extraArgs** **masterIP**

controlPlaneEndpoint: kube-api-server:6443

.....

```
apiServer:  
certSANs:  
  # master hostname ip  
  - kube-api-server  
  - 5-10.vpclub.io  
  - 5-11.vpclub.io  
  - 5-12.vpclub.io  
  - 192.168.5.10  
  - 192.168.5.11  
  - 192.168.5.12  
  - 192.168.5.200  
extraArgs:  
  authorization-mode: Node, RBAC  
timeoutForControlPlane: 4m0s  
apiVersion: kubeadm.k8s.io/v1beta2  
certificatesDir: /etc/kubernetes/pki  
clusterName: kubernetes  
controlPlaneEndpoint: kube-api-server:6443 #  
controllerManager: {}  
dns:  
  type: CoreDNS
```

```
etcd:  
  local:  
    dataDir: /var/lib/etcd  
imageRepository: registry.aliyuncs.com/google_containers  
kind: ClusterConfiguration  
kubernetesVersion: v1.20.15  
networking:  
  dnsDomain: cluster.local  
  podSubnet: 10.244.0.0/16  
  serviceSubnet: 10.96.0.0/12  
scheduler: {}
```



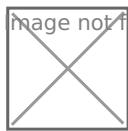
- 安装 kubernetes

```
mkdir -p /data/vpclub/kubernetes-bak/kubernetes-20240619  
cp /etc/kubernetes/** /data/vpclub/kubernetes-bak/kubernetes-20240619 -rf
```

- 生成证书

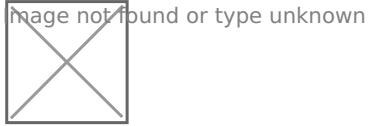
```
# 生成证书  
rm /etc/kubernetes/pki/apiserver.key -rf  
rm /etc/kubernetes/pki/apiserver.crt  
  
# 生成证书  
kubeadm init phase certs apiserver --config kubeadm.yaml
```

```
# 生成证书  
openssl x509 -in /etc/kubernetes/pki/apiserver.crt -text
```



- `cluster-info`

```
# server  kube- api- server  
kubectl -n kube-public edit cm cluster-info
```



- `kubeadm`

```
kubeadm init phase upload-config kubeadm --config kubeadm.yaml
```

```
#  kubeadm- config  
kubectl edit cm kubeadm- config -n kube-system
```

- `Apiserver`

```
kubectl delete pod kube-apiserver-5-10.vpclub.io kube-controller-manager-5-10.vpclub.io -n kube-system
```

- `KUBE-VIP`

```
#  VIP  
#
```

```
docker run --network host --rm swr.cn-south-1.myhuaweicloud.com/vp-whdev/all-in-devops/kube-vip:v0.6.0 manifest pod --interface=eth0 --vip 192.168.5.200 --controlplane --services --arp --leaderElection | tee /etc/kubernetes/manifests/kube-vip.yaml
```

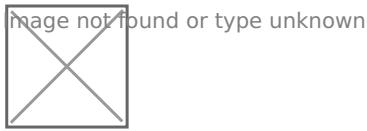
```
#  VIP, ping
```

```
ping kube- api- server
```

```
ping 192.168.5.200
```

- 服务器, kube-apiserver 服务 kube-api-server

```
vi /etc/kubernetes/kubelet.conf  
# 修改为本机IP  
vi /etc/kubernetes/controller-manager.conf  
# 修改为本机IP  
vi /etc/kubernetes/scheduler.conf
```



- kubelet 服务

```
systemctl restart kubelet  
kubectl delete pod -n kube-system kube-controller-manager-5-10.vpclub.io  
kubectl delete pod -n kube-system kube-scheduler-5-10.vpclub.io
```

- kube-proxy 服务 server 与 kube-apiserver

```
kubectl edit configmap kube-proxy -n kube-system  
  
# kube-proxy  
kubectl rollout restart daemonset kube-proxy -n kube-system
```

- kubectl 命令

```
vi ~/.kube/config  
vi /etc/kubernetes/admin.conf  
# 本地文件  
kubectl cluster-info
```

- master 命令

```
echo "$(kubeadm token create --print-join-command) --control-plane --certificate-key $(kubeadm init phase upload-certs --upload-certs | tail -1)"
```

本地文件 master 命令

- `node`

```
kubeadm token create --print-join-command
```

```
#13  
21 05:51:12  
21 18:01:59
```