

搭建etcd集群（2台机器也可以运行，生产还是建议3台）

选择本次机器编号 141 148 146

关闭防火墙，禁止开机启动（开发环境）

systemctl stop firewalld.service

systemctl disable firewalld.service

安装etcd

sudo apt-get -y install etcd

~~创建etcd系统用户：~~

~~sudo groupadd -system etcd~~

~~sudo useradd -s /sbin/nologin -system -g etcd etcd~~

将/var/lib/etcd/目录所有权设置为etcd用户：

sudo chown -R etcd:etcd /var/lib/etcd/

配置etcd版本

vim /etc/profile

export ETCDCCTL\_API=3

source /etc/profile

清理etcd目录文件

rm -rf /var/lib/etcd/

本次部署集群采用静态发现（预先配置）

节点名称 ip

master 10.0.0.148 对外开放2379,内网开放2380

node1 10.0.0.141 对外开放2379,内网开放2380

node2 10.0.0.146 对外开放2379,内网开放2380

etcd 集群配置

vim /etc/default/etcd # 如果有内容请清空

master节点etcd 配置

```
1 #[Member]
2 ETCD_DATA_DIR="/var/lib/etcd/default.etcd"
3 ETCD_LISTEN_PEER_URLS="http://0.0.0.0:2380"
4 ETCD_LISTEN_CLIENT_URLS="http://0.0.0.0:2379"
5 ETCD_NAME="master"
6 #
7 #[Clustering]
8 ETCD_INITIAL_ADVERTISE_PEER_URLS="http://localhost:2380"
9 ETCD_ADVERTISE_CLIENT_URLS="http://10.0.0.148:2379"
10 ETCD_INITIAL_CLUSTER="master=http://localhost:2380,node1=http://10.0.0.141:2380,node2=http://10.0.0.146:2380"
11 ETCD_INITIAL_CLUSTER_TOKEN="etcd-cluster"
12 ETCD_INITIAL_CLUSTER_STATE="new"
```

node1节点配置

```
1 #[Member]
2 ETCD_DATA_DIR="/var/lib/etcd/default.etcd"
```

```

3 ETCD_LISTEN_PEER_URLS="http://0.0.0.0:2380"
4 ETCD_LISTEN_CLIENT_URLS="http://0.0.0.0:2379"
5 ETCD_NAME="node1"
6 #
7 #[Clustering]
8 ETCD_INITIAL_ADVERTISE_PEER_URLS="http://localhost:2380"
9 ETCD_ADVERTISE_CLIENT_URLS="http://10.0.0.141:2379"
10 ETCD_INITIAL_CLUSTER="master=http://10.0.0.148:2380,node1=http://localhost:2380,node2=http://10.0.0.146:2380"
11 ETCD_INITIAL_CLUSTER_TOKEN="etcd-cluster"
12 ETCD_INITIAL_CLUSTER_STATE="new"

```

#### node2节点配置

```

1 #[Member]
2 ETCD_DATA_DIR="/var/lib/etcd/default.etcd"
3 ETCD_LISTEN_PEER_URLS="http://0.0.0.0:2380"
4 ETCD_LISTEN_CLIENT_URLS="http://0.0.0.0:2379"
5 ETCD_NAME="node2"
6 #
7 #[Clustering]
8 ETCD_INITIAL_ADVERTISE_PEER_URLS="http://localhost:2380"
9 ETCD_ADVERTISE_CLIENT_URLS="http://10.0.0.146:2379"
10 ETCD_INITIAL_CLUSTER="master=http://10.0.0.148:2380,node1=http://10.0.0.141:2380,node2=http://localhost:2380"
11 ETCD_INITIAL_CLUSTER_TOKEN="etcd-cluster"
12 ETCD_INITIAL_CLUSTER_STATE="new"

```

#### 每台机器上启动etcd

```

systemctl daemon-reload
systemctl enable etcd
systemctl start etcd

```

#### 查看集群成员信息

```
etcdctl member list
```

#### 查看当前节点状态

v3

```
etcdctl --write-out=table endpoint status
```

v2

```
etcdctl cluster-health
```

#### 查看集群状态

```
etcdctl --write-out=table --endpoints=10.211.55.141:2379,10.211.55.146:2379,10.211.55.148:2379 endpoint status
```

```

+-----+-----+-----+-----+-----+-----+-----+
|  ENDPOINT  | ID      | VERSION | DB SIZE | IS LEADER | RAFT TERM | RAFT INDEX |
+-----+-----+-----+-----+-----+-----+-----+
| 10.10.10.141:2379 | 2d7cf5f6dba3701b | 3.3.11 | 20 kB | false | 51 | 14 |
| 10.10.10.146:2379 | 82728d7983f11483 | 3.3.11 | 20 kB | false | 51 | 14 |
| 10.10.10.148:2379 | 219e420ad76edca4 | 3.3.11 | 20 kB | true  | 51 | 14 |
+-----+-----+-----+-----+-----+-----+-----+

```

#### 集群检查检查

```
etcdctl --write-out=table --endpoints=10.211.55.141:2379,10.211.55.146:2379,10.211.55.148:2379 endpoint health
```

```
10.10.10.141:2379 is healthy: successfully committed proposal: took = 2.663904ms
```

```
10.10.10.146:2379 is healthy: successfully committed proposal: took = 2.615449ms
```

```
10.10.10.148:2379 is healthy: successfully committed proposal: took = 2.651264ms
```

在master上执行

```
etcdctl put hello yanga
```

```
etcdctl get hello
```

在其他节点上执行

```
etcdctl get hello
```

在任意副本节点指向

```
etcdctl put world qiangy
```

```
etcdctl get world
```

在其他节点执行

```
etcdctl get world
```

使用部署：

```
export ETCDCTL_API=3
```

```
export ETCDV3_SERVER_URL=http://10.211.55.141:2379,http://10.211.55.146:2379,http://10.211.55.148:2379
```

部署参考

<https://etcd.io/docs/v3.1.12/demo/>