

External ETCD (部署)

External etcd 是指将 etcd 部署在 Kubernetes 集群之外，通过 API 与集群进行通信。

etcd 是一个分布式键值数据库，用于存储集群的配置信息。在 Kubernetes 中，etcd 用于存储集群的元数据，如节点信息、Pod 信息等。

部署 etcd 的步骤如下：

- 1. 准备 etcd 的二进制文件。可以从 [etcd 官网](#) 下载。
- 2. 配置 etcd 的配置文件。包括 etcd.conf 和 etcd.yaml。
- 3. 启动 etcd 服务。使用 systemd 或 Docker 等方式。
- 4. 验证 etcd 集群是否正常工作。使用 etcdctl 工具。

Etcd 部署在 Kubernetes 集群之外，可以通过 Kubespray 或 Kubeadm 部署。以下是一个示例配置，etcd 部署在 Control Node 上。

- Control Node (Ubuntu 22.04): 192.168.1.90
- Master Node (CentOS 7): 192.168.1.150
- Worker Node (CentOS 7): 192.168.1.160
- ETCD Node (CentOS 7): 192.168.1.170
- ETCD Node 2 (CentOS 7): 192.168.1.180
- ETCD Node 3 (CentOS 7): 192.168.1.190

Kubespray 部署 etcd

Kubespray 是一个用于部署 Kubernetes 集群的工具。它使用 Ansible 来管理集群的部署。以下是一个示例配置，etcd 部署在 Control Node 上。

```
vi inventory/mycluster/hosts.yml

all:
  hosts:
    node1:
      ansible_host: 192.168.1.150      # 指定节点的 IP 地址
      ip: 192.168.1.150
      access_ip: 192.168.1.150
    node2:
```



```

PLAY RECAP *****
localhost      : ok=3    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
node1          : ok=791  changed=124  unreachable=0    failed=0    skipped=1272  rescued=0    ignored=6
node2          : ok=696  changed=111  unreachable=0    failed=0    skipped=1122  rescued=0    ignored=1
node3          : ok=698  changed=112  unreachable=0    failed=0    skipped=1120  rescued=0    ignored=1
node4          : ok=516  changed=72   unreachable=0    failed=0    skipped=759   rescued=0    ignored=0
node5          : ok=152  changed=27   unreachable=0    failed=0    skipped=375   rescued=0    ignored=1

Thursday 08 June 2023  06:52:43 +0000 (0:00:00.133)    0:24:40.064 *****
=====
download : download_file | Download item ----- 46.81s
download : download_container | Download image if required ----- 42.53s
download : download_container | Download image if required ----- 41.14s
kubernetes/control-plane : Joining control plane node to the cluster. ----- 39.65s
download : download_container | Download image if required ----- 38.67s
download : download_container | Download image if required ----- 36.16s
kubernetes/kubeadm : Join to cluster ----- 32.41s
download : download_container | Download image if required ----- 30.47s
download : download_container | Download image if required ----- 27.02s

```

00 000 00 000 0000 00 000 00 00 00:

it is normal that when you use the `kubectl get nodes` command from your master node, you will not see the etcd nodes included in the output. The `kubectl get nodes` command provides information about the worker nodes in your cluster, not the etcd nodes.

Etcd nodes are not considered as part of the worker node pool and are typically not included in the output of the `kubectl get nodes` command. Etcd operates as a separate distributed key-value store that stores the cluster's state and configuration information. It is responsible for providing data persistence and coordination among the control plane components.