**Ceph 部署文档**

1. 部署Ceph存储平台

1. 安装环境

本次是在前面OpenStack平台上继续部署，OpenStack的4个节点也同时作为ceph存储节点，controller作为ceph的部署节点，mon节点与osd节点，其他节点都作为mon节点与osd节点。对应关系如下：

controller (admin Node,ceph-deploy ,mon.node1,osd.0)

compute1 (mon.node2,osd.1)

compute2 (mon.node3,osd.2)

compute3 (mon.node4,osd.3)

2. 配置Ceph源，每个Ceph节点上都要配置：

cat> /etc/yum.repos.d/ceph.repo <<eof

[Ceph-noarch]

name=Ceph noarch packages

baseurl=http://download.ceph.com/rpm-hammer/el7/noarch

priority=1

enabled=1

gpgcheck=1

type=rpm-md

gpgkey=https://download.ceph.com/keys/release.asc

[Ceph]

name=Ceph packages

baseurl=http://download.ceph.com/rpm-hammer/el7/x86\_64/

priority=1

enabled=1

gpgcheck=1

type=rpm-md

gpgkey=https://download.ceph.com/keys/release.asc

[ceph-source]

name=Ceph source packages

baseurl=http://download.ceph.com/rpm-hammer/el7/SRPMS/

enabled=1

gpgcheck=1

type=rpm-md

gpgkey=https://download.ceph.com/keys/release.asc

eof

yum update -y && yum install -y ceph-deploy

3. 做免密码认证，在controller节点上操作

su - root

ssh-keygen

一路回车

做免密码认证

ssh-copy-id root@controller

ssh-copy-id root@compute1

ssh-copy-id root@compute2

ssh-copy-id root@compute3

cat > ~/.ssh/config <<eof

Host controller

Hostname controller

User root

Host compute1

Hostname compute1

User root

Host compute2

Hostname compute2

User root

Host compute3

Hostname compute3

User root

eof

4. 在每个Ceph节点上

su - root

sudo visudo

将 Defaults requiretty 修改为：

Defaults:root !requiretty

脚本

sed -i '/Defaults requiretty/a\

Defaults:root !requiretty' /etc/sudoers

sed -i 's/Defaults requiretty/\

#Defaults requiretty/' /etc/sudoers

5. 在 controller 节点上

mkdir /root/my-cluster

cd /root/my-cluster

创建集群

ceph-deploy new controller compute1 compute2 compute3

修改配置文件

vi /root/my-cluster/ceph.conf 在[global]下添加如下:

osd pool default size = 2

public network = 10.0.33.0/24

cluster network = 172.168.33.0/24

安装软件包

ceph-deploy install controller compute1 compute2

初始化mon服务

ceph-deploy mon create-initial

6. 准备 OSD 存储挂在目录

ssh controller

sudo mkdir -p /ceph-vol/osd0

exit

ssh compute1

sudo mkdir -p /ceph-vol/osd1

exit

ssh compute2

sudo mkdir -p /ceph-vol/osd2

exit

ssh compute3

sudo mkdir -p /ceph-vol/osd4

exit

7. 准备OSD并激活

ceph-deploy osd prepare controller:/ceph-vol/osd0 compute1:/ceph-vol/osd1 compute2:/ceph-vol/osd2 compute3:/ceph-vol/osd3

ceph-deploy osd activate controller:/ceph-vol/osd0 compute1:/ceph-vol/osd1 compute2:/ceph-vol/osd2 compute3:/ceph-vol/osd3

8. 分发配置文件与key到每个节点

ceph-deploy admin controller compute1 compute2 compute3

在每个Ceph节点上修改权限

sudo chmod +r /etc/ceph/ceph.client.admin.keyring

1. 在任意一台ceph节点上

查看ceph节点的运行状态

ceph health

ceph -s

查看osd状态

ceph osd tree

至此，Ceph存储平台已经搭建好了。