**Ceph分布式文件系统集群搭建说明文档**

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准备设备:Centos 7.4服务器三台(物理机)

admin-node(mon&osd)主节点

node1(osd)

node2(osd)

标准化分区



**1.三台分别修改主机名(每台设备)**

hostnamectl set-hostname admin-node

hostnamectl set-hostname node1

hostnamectl set-hostname node2

**2.修改hosts增加(每台设备)**

172.18.42.220 admin-node

172.18.42.221 node1

172.18.42.222 node2

**3.关闭防火墙及se(每台设备)**

systemctl stop firewalld.service

systemctl disable firewalld.service

vi /etc/sysconfig/selinux

SELINUX=enforcing改为disabled

保存然后退出

setenforce 0

查看selinux状态

getenforce

**4.添加ssh免密码登录**

每个osd节点执(创建免登录目录)

mkdir /root/.ssh/

主节点执行(生成秘钥)

mkdir /root/.ssh/

ssh-keygen -t rsa

cat id\_rsa.pub > authorized\_keys

分别将秘钥文件发送给osd服务器

scp /root/.ssh/authorized\_keys node1:/root/.ssh

scp /root/.ssh/authorized\_keys node2:/root/.ssh

**5.验证免登录是否成功(主节点执行)**

ssh admin-node

ssh node1

ssh node2

**6.切换国内样源(每台设备执行)**

清理原始源数据及缓存

yum clean all

rm -rf /etc/yum.repos.d/\*.repo

下载阿里源

wget -O /etc/yum.repos.d/CentOS-Base.repo <http://mirrors.aliyun.com/repo/Centos-7.repo>

wget -O /etc/yum.repos.d/epel.repo <http://mirrors.aliyun.com/repo/epel-7.repo>

添加ceph源

vi /etc/yum.repos.d/ceph.repo

[ceph]

name=ceph

baseurl=http://mirrors.aliyun.com/ceph/rpm-jewel/el7/x86\_64/

gpgcheck=0

[ceph-noarch]

name=cephnoarch

baseurl=http://mirrors.aliyun.com/ceph/rpm-jewel/el7/noarch/

gpgcheck=0

重新生成缓存

yum makecache

**7.安装ceph(每台设备)**

yum install ceph

**8.安装自动化配置程序(主节点执行)**

yum install ceph-deploy

**9.创建集群配置文件(主节点执行)**

mkdir /my-cluster

cd /my-cluster

ceph-deploy new admin-node

在原文件上添加

vi ceph.conf

osd pool default size = 3

**10.补全集群依赖文件(主节点执行)**

ceph-deploy install admin-node node1 node2

中间会应为自动化配置修正为国外官方节点报错3次,重新执行至全部通过即可

**11.生成集群配置及秘钥(主节点执行)**

ceph-deploy mon create-initial

**12.添加集群存储目录(主节点执行)**

sudo mkdir /var/local/osd0

sudo chmod -R 777 /var/local/osd0/

ssh node1

sudo mkdir /var/local/osd1

sudo chmod -R 777 /var/local/osd1/

exit

ssh node2

sudo mkdir /var/local/osd2

sudo chmod -R 777 /var/local/osd2/

exit

13.激活osd(主节点执行)

ceph-deploy osd prepare admin-node:/var/local/osd0 node1:/var/local/osd1 node2:/var/local/osd2

ceph-deploy osd activate admin-node:/var/local/osd0 node1:/var/local/osd1 node2:/var/local/osd2

ceph-deploy admin admin-node node1 node2

每台设备上执行一遍

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

检查集群状态

ceph -s

ceph osd tree



二、开启RGW服务

1.进入主节点的部署目录下面

cd my-cluster

2.为主节点安装rgw

ceph-deploy install --rgw admin-node

3.创建rgw用户，生成access secret key

radosgw-admin user create --uid="testuser" --display-name="First User"

#ceph-deploy install --rgw admin-node

#ceph-deploy rgw create admin-node

#radosgw-admin user create --uid="crmfile" --display-name="crmfile"