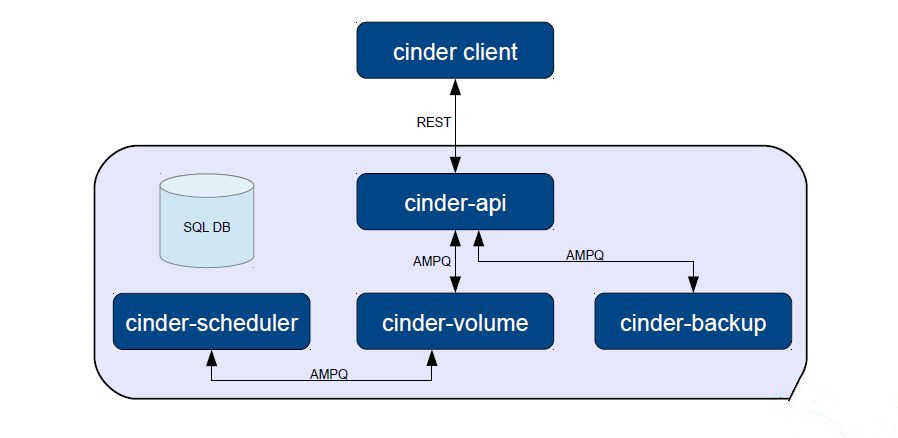
# Cinder cluster部署

## 修改记录:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **版本号** | **拟制人/**  **修改人** | **拟制/**  **修改日期** | **更改理由** | **主要更改内容**  **（写要点即可）** |
| 1.9.0 | Wangyc | 2017/4/28 | 初稿 | Cinder cluster |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Cinder图解



## Cinder基本概念

Cinder提供持久化块存储，.一个独立的volume可以灵活的挂载和卸载到不同的VM实例（就好比我们的一块硬盘拔插了）。VM实例可以用cinder volume作为启动盘。Block Storage服务无法提供类似于NFS的共享存储。一个块设备同时只能挂在到一个VM实例。

## Controller05 上部署cinder

### 数据库创建

dbpasswd=root12#$

mysql -uroot -p$dbpasswd -e "CREATE DATABASE cinder;"

mysql -uroot -p$dbpasswd -e "GRANT ALL PRIVILEGES ON cinder.\* TO 'cinder'@'localhost' IDENTIFIED BY 'cinder12#$';"mysql -uroot -p$dbpasswd -e "GRANT ALL PRIVILEGES ON cinder.\* TO 'cinder'@'192.168.1.5' IDENTIFIED BY 'cinder12#$';"

mysql -uroot -p$dbpasswd -e "GRANT ALL PRIVILEGES ON cinder.\* TO 'cinder'@'192.168.1.6' IDENTIFIED BY 'cinder12#$';"

mysql -uroot -p$dbpasswd -e "GRANT ALL PRIVILEGES ON cinder.\* TO 'cinder'@'192.168.1.7' IDENTIFIED BY 'cinder12#$';"

mysql -uroot -p$dbpasswd -e "flush privileges;"

### 创建cinder用户及endpoint

source /root/admin-openrc

openstack user create --domain default cinder --password cinder12#$

openstack role add --project service --user cinder admin

openstack service create --name cinder --description "OpenStack Block Storage" volume

openstack service create --name cinderv2 --description "OpenStack Block Storage" volumev2

openstack endpoint create --region RegionOne volume public http://ctrl.openstack.com:8776/v1/%\(tenant\_id\)s

openstack endpoint create --region RegionOne volume internal http://ctrl.openstack.com:8776/v1/%\(tenant\_id\)s

openstack endpoint create --region RegionOne volume admin http://ctrl.openstack.com:8776/v1/%\(tenant\_id\)s

openstack endpoint create --region RegionOne volumev2 public http://ctrl.openstack.com:8776/v2/%\(tenant\_id\)s

openstack endpoint create --region RegionOne volumev2 internal http://ctrl.openstack.com:8776/v2/%\(tenant\_id\)s

openstack endpoint create --region RegionOne volumev2 admin [http://ctrl.openstack.com:8776/v2/%\(tenant\_id\)s](http://ctrl.openstack.com:8776/v2/%25\(tenant_id\)s)

### yum安装cinder

yum install -y openstack-cinder

### cinder配置文件配置

/etc/cinder/cinder.conf

[DEFAULT]

transport\_url = rabbit://openstack:openstack12%23%24@192.168.1.5,openstack:openstack12%23%24@192.168.1.6,openstack:openstack12%23%24@192.168.1.7

auth\_strategy = keystone

my\_ip = 192.168.1.5

glance\_api\_version = 2

osapi\_volume\_listen = 192.168.1.5

image\_upload\_use\_cinder\_backend = True

image\_upload\_use\_internal\_tenant = True

[BACKEND]

[BRCD\_FABRIC\_EXAMPLE]

[CISCO\_FABRIC\_EXAMPLE]

[COORDINATION]

[FC-ZONE-MANAGER]

[KEY\_MANAGER]

[barbican]

[cors]

[cors.subdomain]

[database]

connection = mysql+pymysql://cinder:cinder12#$@ctrl.openstack.com/cinder

[key\_manager]

[keystone\_authtoken]

auth\_uri = http://ctrl.openstack.com:5000

auth\_url = http://ctrl.openstack.com:35357

memcached\_servers = 192.168.1.5:11211,192.168.1.6:11211,192.168.1.7:11211

auth\_type = password

project\_domain\_name = Default

user\_domain\_name = Default

project\_name = service

username = cinder

password = cinder12#$

[matchmaker\_redis]

[oslo\_concurrency]

lock\_path = /var/lib/cinder/tmp

[oslo\_messaging\_amqp]

[oslo\_messaging\_notifications]

[oslo\_messaging\_rabbit]

[oslo\_messaging\_zmq]

[oslo\_middleware]

[oslo\_policy]

[oslo\_reports]

[oslo\_versionedobjects]

[ssl]

### 数据库同步

su -s /bin/sh -c "cinder-manage db sync" cinder

### nova 配置支持cinder

/etc/nova/nova.conf

[cinder]

os\_region\_name = RegionOne

systemctl restart openstack-nova-api.service

systemctl start openstack-cinder-api.service openstack-cinder-scheduler.service

### glance 配置支持cinder

/etc/glance/glance-api.conf

stores = file, http, swift, cinder

show\_multiple\_locations = True

### controller06 controller07节点

与controller05上部署cinder一致，无需数据库同步操作。

### Controller上启动cinder

systemctl restart openstack-cinder-api.service openstack-cinder-scheduler.service

## Node节点部署cinder

### yum安装节点cinder服务

yum install lvm2 openstack-cinder openstack-utils targetcli python-keystone ntpdate –y

yum install -y scsi-target-utils

service tgtd start

chkconfig tgtd on

systemctl enable lvm2-lvmetad.service

systemctl restart lvm2-lvmetad.service

### 新增磁盘

pvcreate /dev/sdb

vgcreate cinder-volumes /dev/sdb

vim /etc/lvm/lvm.conf

filter = [ "a/sda/", "a/sdb/", "r/.\*/"]

systemctl restart lvm2-lvmetad.service

### cinder节点配置文件配置

/etc/cinder/cinder.conf

[DEFAULT]

transport\_url = rabbit://openstack:openstack12%23%24@192.168.1.5,openstack:openstack12%23%24@192.168.1.6,openstack:openstack12%23%24@192.168.1.7

auth\_strategy = keystone

enabled\_backends = lvm

my\_ip = 192.168.1.10

glance\_api\_servers = http://ctrl.openstack.com:9292

glance\_api\_version = 2

osapi\_volume\_listen = 192.168.1.5

iscsi\_helper = lioadm

image\_upload\_use\_cinder\_backend = True

image\_upload\_use\_internal\_tenant = True

allowed\_direct\_url\_schemes = cinder

volume\_driver = cinder.volume.drivers.lvm.LVMVolumeDriver

[BACKEND]

[BRCD\_FABRIC\_EXAMPLE]

[CISCO\_FABRIC\_EXAMPLE]

[COORDINATION]

[FC-ZONE-MANAGER]

[KEY\_MANAGER]

[barbican]

[cors]

[cors.subdomain]

[database]

connection = mysql+pymysql://cinder:cinder12#$@ctrl.openstack.com/cinder

[key\_manager]

[keystone\_authtoken]

auth\_uri = http://ctrl.openstack.com:5000

auth\_url = http://ctrl.openstack.com:35357

memcached\_servers = 192.168.1.5:11211,192.168.1.6:11211,192.168.1.7:11211

auth\_type = password

project\_domain\_name = Default

user\_domain\_name = Default

project\_name = service

username = cinder

password = cinder12#$

[matchmaker\_redis]

[oslo\_concurrency]

lock\_path = /var/lib/cinder/tmp

[oslo\_messaging\_amqp]

[oslo\_messaging\_notifications]

[oslo\_messaging\_rabbit]

[oslo\_messaging\_zmq]

[oslo\_middleware]

[oslo\_policy]

[oslo\_reports]

[oslo\_versionedobjects]

[ssl]

### node上启动cinder

systemctl restart openstack-cinder-volume.service