

Ceph luminous安装

```
cd cac
ceph-deploy install cac-214 cac-225 cac-226 cac-227 cac-228
```

```
ceph-deploy new cac-214 cac-225 cac-226 cac-227 cac-228
```

```
[cephuser@cac-214 cac]$ cat ceph.conf
[global]
fsid = b2edde56-df52-4466-9d39-311f0f65d879
mon_initial_members = cac-214, cac-225, cac-226, cac-227, cac-228
mon_host = 10.64.19.214,10.64.19.225,10.64.19.226,10.64.19.227,10.64.19.228
auth_cluster_required = cephx
auth_service_required = cephx
auth_client_required = cephx

mon_allow_pool_delete=true

[mgr]
mgr modules = dashboard
```

推送配置文件

```
ceph-deploy mon create-initial
```

推送密钥

```
ceph-deploy admin cac-214 cac-225 cac-226 cac-227 cac-228
```

激活OSD

```
ceph-deploy osd create --bluestore cac-214:/dev/sdf cac-214:/dev/sdg cac-214:/dev/sdh cac-214:/dev/sdi cac-214:/dev/sdj \
cac-225:/dev/sdf cac-225:/dev/sdg cac-225:/dev/sdh cac-225:/dev/sdi cac-225:/dev/sdj \
cac-226:/dev/sdf cac-226:/dev/sdg cac-226:/dev/sdh cac-226:/dev/sdi cac-226:/dev/sdj \
cac-227:/dev/sdf cac-227:/dev/sdg cac-227:/dev/sdh cac-227:/dev/sdi cac-227:/dev/sdj \
cac-228:/dev/sdf cac-228:/dev/sdg cac-228:/dev/sdh cac-228:/dev/sdi cac-228:/dev/sdj \
--zap-disk
```

查看选举信息

```
ceph quorum_status --format json-pretty
```

查看OSD状态

```
ceph osd tree
ID CLASS WEIGHT TYPE NAME STATUS REWEIGHT PRI-AFF
-1 90.96489 root default
-3 18.19298 host cac-214
0 hdd 3.63860 osd.0 up 1.00000 1.00000
1 hdd 3.63860 osd.1 up 1.00000 1.00000
2 hdd 3.63860 osd.2 up 1.00000 1.00000
3 hdd 3.63860 osd.3 up 1.00000 1.00000
4 hdd 3.63860 osd.4 up 1.00000 1.00000
-5 18.19298 host cac-225
5 hdd 3.63860 osd.5 up 1.00000 1.00000
6 hdd 3.63860 osd.6 up 1.00000 1.00000
7 hdd 3.63860 osd.7 up 1.00000 1.00000
8 hdd 3.63860 osd.8 up 1.00000 1.00000
10 hdd 3.63860 osd.10 up 1.00000 1.00000
-7 18.19298 host cac-226
9 hdd 3.63860 osd.9 up 1.00000 1.00000
11 hdd 3.63860 osd.11 up 1.00000 1.00000
12 hdd 3.63860 osd.12 up 1.00000 1.00000
13 hdd 3.63860 osd.13 up 1.00000 1.00000
15 hdd 3.63860 osd.15 up 1.00000 1.00000
-9 18.19298 host cac-227
14 hdd 3.63860 osd.14 up 1.00000 1.00000
16 hdd 3.63860 osd.16 up 1.00000 1.00000
18 hdd 3.63860 osd.18 up 1.00000 1.00000
21 hdd 3.63860 osd.21 up 1.00000 1.00000
22 hdd 3.63860 osd.22 up 1.00000 1.00000
-11 18.19298 host cac-228
17 hdd 3.63860 osd.17 up 1.00000 1.00000
19 hdd 3.63860 osd.19 up 1.00000 1.00000
20 hdd 3.63860 osd.20 up 1.00000 1.00000
23 hdd 3.63860 osd.23 up 1.00000 1.00000
24 hdd 3.63860 osd.24 up 1.00000 1.00000
```

```
cat /var/lib/ceph/osd/ceph-0/type
```

```
parted /dev/sdf print
Model: ATA HUS726040ALA610 (scsi)
Disk /dev/sdf: 4001GB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags:
Number Start End Size File system Name Flags
1 1049kB 106MB 105MB xfs ceph data
2 106MB 4001GB 4001GB ceph block
```

配置MGR

```
ceph-deploy mgr create cac-214 cac-225 cac-226 cac-227 cac-228
```

再次查看激活状态：

ceph -s

```
[root@cac-214 cac]# ceph -s
cluster:
  id:         b2edde56-df52-4466-9d39-311f0f65d879
  health:     HEALTH_WARN
             clock skew detected on mon.cac-225, mon.cac-226, mon.cac-227, mon.cac-228

services:
  mon: 5 daemons, quorum cac-214,cac-225,cac-226,cac-227,cac-228
  mgr: cac-214(active), standbys: cac-226, cac-225, cac-227, cac-228
  osd: 25 osds: 25 up, 25 in

data:
  pools:   0 pools, 0 pgs
  objects: 0 objects, 0 bytes
  usage:    26628 MB used, 93122 GB / 93148 GB avail
  pgs:     
```

```
ceph config-key put mgr/dashboard/server_addr 10.64.19.214
ceph config-key put mgr/dashboard/server_port 7000
ceph mgr module enable dashboard
ceph mgr module ls
```

配置Ceph fs

```
ceph-deploy mds create cac-214 cac-225 cac-226 cac-227 cac-228
```

查看时钟信息：

```
ceph --admin-daemon /var/run/ceph/ceph-osd.0.asok config show | grep clock
```

pg_num设置

少于5个OSD设置pg_num为128

5到10个OSD将pg_num设置为512

10到50个OSD将pg_num设置为1024

如果有超过50个OSD，您需要了解自己的权衡和如何计算pg_num值

要自己计算pg_num值，可以通过pgcalc工具来帮助：<http://ceph.com/pgcalc/>

<http://www.51niux.com/?id=165>

创建存储池：

```
# ceph osd pool create cephfs_data <pg_num>  
# ceph osd pool create cephfs_metadata <pg_num>
```

```
ceph osd pool create cephfs_data 1024  
ceph osd pool create cephfs_metadata 1024
```

创建文件系统

```
ceph fs new cephfs cephfs_metadata cephfs_data
```