2--ceph归档命令

目录

准备工作

版本说明

系统内核版本:2.6.32

发行版版本: CentOS6.7--64bit

ceph程序包版本:0.94.5

演示环境说明

主机名称	角色	运行实例
node6-1	mon&osd	mon.node6-1，osd.0，osd.1，osd.2
node6-2	mon&osd	mon.node6-2，osd3，osd.4，osd.5
node6-3	mon&osd	mon.node6-3，osd6，osd.7，osd.8
node6-4	osd	osd.8，osd.9，osd.10
node6-5	osd	osd.11，osd.12，osd.13

ceph命令

ceph命令通用选项

选项	作用
-i infile	将指定文件作为输入文件，该选项只在特定命令中使用
-o outfile	将指定命令的结果输出至指定文件，该选项只在特定命令中使用
-c ceph.conf或--conf=ceph.conf	将指定文件作为配置文件
--id CLIENT_ID或--user CLIENT_ID	用于指定认证客户端id
--name CLIENT_NAME，-n CLIENT_NAME	用于指定认证客户端名称
--cluster CLUSTER	用于指定ceph集群名称
--admin-daemon ADMIN_SOCKET	用于指定守护进程套接字
--admin-socket ADMIN_SOCKET_NOPE	
-s或--status	显示集群状态
-w或--watch	实时显示集群状态变化
--watch-debug	显示debug类别事件通知
--watch-info	显示info类别事件通知
--watch-sec	显示security类别事件通知
--watch-warn	显示warn类别事件通知
--watch-error	显示error类别事件通知
-v或--version	显示ceph版本
--verbose	显示详细的动态输出信息
--concise	显示简单的动态输出信息
-f {json,json-pretty,xml,xml-pretty,plain}或--format	指定格式进行输出
--connect-timeout CLUSTER_TIMEOUT	设定与ceph集群连接的超时时长

auth命令

所有auth命令

auth命令

```
[root@node6-1 ~]# ceph -h |grep auth
auth add <entity> {<caps> [<caps>...]}   add auth info for <entity> from input
auth caps <entity> <caps> [<caps>...]    update caps for <name> from caps
auth del <entity>                        delete all caps for <name>
auth export {<entity>}                   write keyring for requested entity, or
auth get <entity>                        write keyring file with requested key
auth get-key <entity>                    display requested key
auth get-or-create <entity> {<caps>      add auth info for <entity> from input
auth get-or-create-key <entity> {<caps>  get, or add, key for <name> from
auth import                              auth import: read keyring file from -i
auth list                                list authentication state
auth print-key <entity>                  display requested key
auth print_key <entity>                  display requested key
```

查看认证状态

查看认证状态

```
[root@node6-1 ~]# ceph auth list
installed auth entries:

osd.0
        key: AQDO1LBWI/tUFhAAvvYKLUyGGcLD3SfJBuRZ7A==
        caps: [mon] allow profile osd
        caps: [osd] allow *
osd.1
        key: AQCu1rBWP3TCHhAAqVClXBIvi32TUBplzlZr6w==
        caps: [mon] allow profile osd
        caps: [osd] allow *
osd.2
        key: AQDI3LBWJuO4LxAAnSTg6OWot1ezOnB/kGSrxw==
        caps: [mon] allow rwx
        caps: [osd] allow *
osd.3
        key: AQDC4bBWukUGJBAAZaltPsHi9RXegaRRfMLb3w==
        caps: [mon] allow rwx
        caps: [osd] allow *
client.admin
        key: AQBmObBW/r+PAhAABInB79j6YkuQY5WBNbnziw==
        auid: 0
        caps: [mds] allow
        caps: [mon] allow *
        caps: [osd] allow *
client.bootstrap-mds
        key: AQCVO7BWKa3PDRAATseWo02pC6hUxyPuwtL+0A==
        caps: [mon] allow profile bootstrap-mds
client.bootstrap-rgw
        key: AQCUO7BWUc8tNBAAQ594VFZDzJGuKOrwQ85/Pw==
        caps: [mon] allow profile bootstrap-rgw
```

添加指定实例的认证信息

添加指定实例的认证信息

```
# 使用方法: ceph auth get-or-create 实例名称 对象1 权限1 对象2 权限2
[root@node6-1 ~]# ceph auth get-or-create client.user mds 'allow' osd 'allow *' mon 'allow rwx'
# 查看添加得到的认证信息
[root@node6-1 ~]# cat auth list| grep -A 4 "client.user"
[client.user]
 key: AQAZCdBW4cnDARAA01lRersDvA0WJqMft2MI7g==

 caps: [mds] allow
 caps: [mon] allow rwx
 caps: [osd] allow *
```

导入认证信息

导入认证信息

```
# 使用方法: ceph auth import -i keyring文件路径
[root@node6-1 ~]# ceph auth import -i /var/lib/ceph/mds/ceph-nc1/keyring
imported keyring
# 查看通过导入生成的认证信息
[root@node6-1 ~]# ceph auth list | grep -A 4 "mds.nc1"
installed auth entries:
mds.nc1
        key: AQBO/bNWNmJaIRAAMUpyZmE9LiVxIzLd/iij5Q==
        caps: [mds] allow *
        caps: [mon] allow rwx
        caps: [osd] allow *
```

删除指定实例及其认证信息

删除指定实例及其认证信息

```
# 使用方法: ceph auth del 实例名称
[root@node6-1 ~]# ceph auth del mds.nc1
updated
```

mon命令

所有mon命令

所有mon命令

```
mon add <name> <IPaddr[:port]>          add new monitor named <name> at <addr>
mon dump {<int[0-]>}                    dump formatted monmap (optionally from epoch)
mon getmap {<int[0-]>}                  get monmap
mon remove <name>                       remove monitor named <name>
mon stat                                summarize monitor status
mon_status                              report status of monitors
```

显示mon的状态汇总信息

显示mon的状态汇总信息

```
[root@node6-1 ~]# ceph mon stat
e3: 3 mons at {node6-1=192.168.5.50:6789/0,node6-2=192.168.5.51:6789/0,node6-3=192.168.5.49:6789/0}, election epoch 44, quorum 0,1,2 node6-3,node6-1,node6-2
```

显示mon的状态信息

显示mon的状态信息

```
[root@node6-1 ~]# ceph mon_status
{"name":"node6-3","rank":0,"state":"leader","election_epoch":44,"quorum":[0,1,2],"outside_quorum":[],"extra_probe_peers":[],"sync_provider":[],"monmap":{"epoch":3,"fsid":"e283ffab-3777-40f2-b5be-f5d266cc5ad1","modified":"2016-02-23 22:21:10.974090","created":"2016-02-23 22:06:08.292073","mons":[{"rank":0,"name":"node6-3","addr":"192.168.5.49:6789\/0"},{"rank":1,"name":"node6-1","addr":"192.168.5.50:6789\/0"},{"rank":2,"name":"node6-2","addr":"192.168.5.51:6789\/0"}]}}
```

格式化输出mon map信息

格式化输出mon map信息

```
[root@node6-1 ~]# ceph mon dump
dumped monmap epoch 3
epoch 3
fsid e283ffab-3777-40f2-b5be-f5d266cc5ad1
last_changed 2016-02-23 22:21:10.974090
created 2016-02-23 22:06:08.292073
0: 192.168.5.49:6789/0 mon.node6-3
1: 192.168.5.50:6789/0 mon.node6-1
2: 192.168.5.51:6789/0 mon.node6-2
```

输出mon map并保存至指定文件中

显示mon的状态汇总信息

```
[root@node6-1 ~]# ceph mon getmap -o /tmp/monmap.bin
got monmap epoch 3
# 查看mon map输出文件类型为数据类型文件
[root@node6-1 ~]# file /tmp/monmap.bin
/tmp/monmap.bin: DBase 3 data file
```

删除当前集群中指定的mon

显示mon的状态汇总信息

```
[root@node6-1 ~]# ceph mon remove node6-3
removed mon.node6-3 at 192.168.5.49:6789/0, there are now 2 monitors
# 查看集群状态
[root@node6-1 ~]# ceph -s
2016-02-26 19:01:39.084491 7fbd0451b700  0 -- :/1025868 >> 192.168.5.49:6789/0 pipe(0x7fbd00066010 sd=3
:0 s=1 pgs=0 cs=0 l=1 c=0x7fbd0005c730).fault
    cluster e283ffab-3777-40f2-b5be-f5d266cc5ad1
     health HEALTH_WARN
            too many PGs per OSD (409 > max 300)
     monmap e4: 2 mons at {node6-1=192.168.5.50:6789/0,node6-2=192.168.5.51:6789/0}
            election epoch 46, quorum 0,1 node6-1,node6-2
     osdmap e248: 15 osds: 15 up, 15 in
      pgmap v1582: 2048 pgs, 1 pools, 0 bytes data, 0 objects
            607 MB used, 374 GB / 374 GB avail
                2048 active+clean
```

OSD命令

所有OSD命令

osd命令

```
[root@node6-1 ~]# ceph --help
... ... # 省略部分
osd blacklist add|rm <EntityAddr>        add (optionally until <expire> seconds
 {<float[0.0-]>}                          from now) or remove <addr> from
                                          blacklist
osd blacklist ls                         show blacklisted clients
osd blocked-by                           print histogram of which OSDs are
                                          blocking their peers
osd create {<uuid>}                      create new osd (with optional UUID)
osd crush add <osdname (id|osd.id)>      add or update crushmap position and
 <float[0.0-]> <args> [<args>...]         weight for <name> with <weight> and
```

```
                                        location <args>
osd crush add-bucket <name> <type>      add no-parent (probably root) crush
                                        bucket <name> of type <type>
osd crush create-or-move <osdname (id|  create entry or move existing entry
 osd.id)> <float[0.0-]> <args> [<args>..  for <name> <weight> at/to location
 .]                                     <args>
osd crush dump                          dump crush map
osd crush get-tunable straw_calc_version get crush tunable <tunable>
osd crush link <name> <args> [<args>...] link existing entry for <name> under
                                        location <args>
osd crush move <name> <args> [<args>...] move existing entry for <name> to
                                        location <args>
osd crush remove <name> {<ancestor>}    remove <name> from crush map (
                                        everywhere, or just at <ancestor>)
osd crush rename-bucket <srcname>       rename bucket <srcname> to <dstname>
 <dstname>
osd crush reweight <name> <float[0.0-]> change <name>'s weight to <weight> in
                                        crush map
osd crush reweight-all                  recalculate the weights for the tree
                                        to ensure they sum correctly
osd crush reweight-subtree <name>       change all leaf items beneath <name>
 <float[0.0-]>                          to <weight> in crush map
osd crush rm <name> {<ancestor>}        remove <name> from crush map (
                                        everywhere, or just at <ancestor>)
osd crush rule create-erasure <name>    create crush rule <name> for erasure
 {<profile>}                            coded pool created with <profile> (
                                        default default)
osd crush rule create-simple <name>     create crush rule <name> to start from
 <root> <type> {firstn|indep}           <root>, replicate across buckets of
                                        type <type>, using a choose mode of
                                        <firstn|indep> (default firstn; indep
                                        best for erasure pools)
osd crush rule dump {<name>}            dump crush rule <name> (default all)
osd crush rule list                     list crush rules
osd crush rule ls                       list crush rules
osd crush rule rm <name>                remove crush rule <name>
osd crush set                           set crush map from input file
osd crush set <osdname (id|osd.id)>     update crushmap position and weight
 <float[0.0-]> <args> [<args>...]       for <name> to <weight> with location
                                        <args>
osd crush set-tunable straw_calc_       set crush tunable <tunable> to <value>
 version <int>
osd crush show-tunables                 show current crush tunables
osd crush tree                          dump crush buckets and items in a tree
                                        view
osd crush tunables legacy|argonaut|     set crush tunables values to <profile>
 bobtail|firefly|hammer|optimal|default
osd crush unlink <name> {<ancestor>}    unlink <name> from crush map (
                                        everywhere, or just at <ancestor>)
osd deep-scrub <who>                    initiate deep scrub on osd <who>
osd df {plain|tree}                     show OSD utilization
osd down <ids> [<ids>...]               set osd(s) <id> [<id>...] down
osd dump {<int[0-]>}                    print summary of OSD map
osd erasure-code-profile get <name>     get erasure code profile <name>
osd erasure-code-profile ls             list all erasure code profiles
osd erasure-code-profile rm <name>      remove erasure code profile <name>
osd erasure-code-profile set <name>     create erasure code profile <name>
 {<profile> [<profile>...]}             with [<key[=value]> ...] pairs. Add a
                                        --force at the end to override an
```

```
                                        existing profile (VERY DANGEROUS)
osd find <int[0-]>                      find osd <id> in the CRUSH map and
                                        show its location
osd getcrushmap {<int[0-]>}             get CRUSH map
osd getmap {<int[0-]>}                  get OSD map
osd getmaxosd                           show largest OSD id
osd in <ids> [<ids>...]                 set osd(s) <id> [<id>...] in
osd lost <int[0-]> {--yes-i-really-mean- mark osd as permanently lost. THIS
 it}                                    DESTROYS DATA IF NO MORE REPLICAS
                                        EXIST, BE CAREFUL
osd ls {<int[0-]>}                      show all OSD ids
osd lspools {<int>}                     list pools
osd map <poolname> <objectname>         find pg for <object> in <pool>
osd metadata <int[0-]>                  fetch metadata for osd <id>
osd out <ids> [<ids>...]                set osd(s) <id> [<id>...] out
osd pause                               pause osd
osd perf                                print dump of OSD perf summary stats
osd pg-temp <pgid> {<id> [<id>...]}     set pg_temp mapping pgid:[<id> [<id>...
                                        ]] (developers only)
osd primary-affinity <osdname (id|osd.  adjust osd primary-affinity from 0.0 <=
 id)> <float[0.0-1.0]>                   <weight> <= 1.0
osd primary-temp <pgid> <id>            set primary_temp mapping pgid:<id>|-1 (
                                        developers only)
osd repair <who>                        initiate repair on osd <who>
osd reweight <int[0-]> <float[0.0-1.0]> reweight osd to 0.0 < <weight> < 1.0
osd reweight-by-pg <int[100-]>          reweight OSDs by PG distribution
 {<poolname> [<poolname>...]}           [overload-percentage-for-
                                        consideration, default 120]
osd reweight-by-utilization {<int[100-  reweight OSDs by utilization [overload-
 ]>}                                    percentage-for-consideration, default
                                        120]
osd rm <ids> [<ids>...]                 remove osd(s) <id> [<id>...] in
osd scrub <who>                         initiate scrub on osd <who>
osd set full|pause|noup|nodown|noout|   set <key>
 noin|nobackfill|norebalance|norecover|
 noscrub|nodeep-scrub|notieragent
osd setcrushmap                         set crush map from input file
osd setmaxosd <int[0-]>                 set new maximum osd value
osd stat                                print summary of OSD map
osd thrash <int[0-]>                    thrash OSDs for <num_epochs>
osd tier add <poolname> <poolname> {--  add the tier <tierpool> (the second
 force-nonempty}                        one) to base pool <pool> (the first
                                        one)
osd tier add-cache <poolname>           add a cache <tierpool> (the second one)
 <poolname> <int[0-]>                   of size <size> to existing pool
                                        <pool> (the first one)
osd tier cache-mode <poolname> none|    specify the caching mode for cache
 writeback|forward|readonly|readforward| tier <pool>
 readproxy
osd tier remove <poolname> <poolname>   remove the tier <tierpool> (the second
                                        one) from base pool <pool> (the first
                                        one)
osd tier remove-overlay <poolname>      remove the overlay pool for base pool
                                        <pool>
osd tier set-overlay <poolname>         set the overlay pool for base pool
 <poolname>                             <pool> to be <overlaypool>
osd tree {<int[0-]>}                    print OSD tree
osd unpause                             unpause osd
osd unset full|pause|noup|nodown|noout| unset <key>
```

```
 noin|nobackfill|norebalance|norecover|
 noscrub|nodeep-scrub|notieragent
... ... # 省略部分
```

显示OSD map的汇总信息

显示OSD map的汇总信息

```
[root@node6-1 ~]# ceph osd stat
     osdmap e241: 16 osds: 15 up, 15 in
```

显示OSD tree

显示OSD tree

```
[root@node6-1 ~]# ceph osd tree
ID  WEIGHT  TYPE NAME                     UP/DOWN REWEIGHT PRIMARY-AFFINITY
-17 0.07199 failure-domain sata-02
-15 0.07199     replica-domain replica-02
-16 0.07199         osd-domain osd-04
  9 0.02399             osd.9                 up  1.00000          1.00000
 10 0.02399             osd.10                up  1.00000          1.00000
 11 0.02399             osd.11                up  1.00000          1.00000
-12 0.21599 failure-domain sata-01
 -8 0.21599     replica-domain replica-01
 -9 0.07199         osd-domain osd-01
  0 0.02399             osd.0                 up  1.00000          1.00000
  1 0.02399             osd.1                 up  1.00000          1.00000
  2 0.02399             osd.2                 up  1.00000          1.00000
-10 0.07199         osd-domain osd-02
  3 0.02399             osd.3                 up  1.00000          1.00000
  4 0.02399             osd.4                 up  1.00000          1.00000
  5 0.02399             osd.5                 up  1.00000          1.00000
-11 0.07199         osd-domain osd-03
  6 0.02399             osd.6                 up  1.00000          1.00000
  7 0.02399             osd.7                 up  1.00000          1.00000
  8 0.02399             osd.8                 up  1.00000          1.00000
 -1 0.35095 root default
 -5 0.07300     rack rack-01
 -2 0.07300         host node6-1
  0 0.02399             osd.0                 up  1.00000          1.00000
  1 0.02399             osd.1                 up  1.00000          1.00000
  2 0.02399             osd.2                 up  1.00000          1.00000
 -6 0.07300     rack rack-02
 -3 0.07300         host node6-2
  3 0.02399             osd.3                 up  1.00000          1.00000
  4 0.02399             osd.4                 up  1.00000          1.00000
  5 0.02399             osd.5                 up  1.00000          1.00000
 -7 0.07300     rack rack-03
 -4 0.07300         host node6-3
  6 0.02399             osd.6                 up  1.00000          1.00000
  7 0.02399             osd.7                 up  1.00000          1.00000
  8 0.02399             osd.8                 up  1.00000          1.00000
-14 0.07199     rack rack-04
-13 0.07199         host node6-4
  9 0.02399             osd.9                 up  1.00000          1.00000
 10 0.02399             osd.10                up  1.00000          1.00000
 11 0.02399             osd.11                up  1.00000          1.00000
-18 0.05997     host node6-5
 12 0.01999         osd.12                    up  1.00000          1.00000
 13 0.01999         osd.13                    up  1.00000          1.00000
 14 0.01999         osd.14                    up  1.00000          1.00000
```

显示OSD的延迟汇总信息

显示OSD的延迟汇总信息

```
[root@node6-1 ~]# ceph osd perf
osd fs_commit_latency(ms) fs_apply_latency(ms)
  0                   18                  21
  1                   19                  23
  2                   22                  25
  3                   15                  18
  4                   22                  26
  5                   20                  27
  6                   32                  37
  7                   31                  37
  8                   33                  38
```

查看OSD的使用率

查看OSD的使用率

```
[root@node6-1 ~]# ceph osd df
ID WEIGHT  REWEIGHT SIZE   USE    AVAIL  %USE VAR
 9 0.02399  1.00000 25588M 36108k 25552M 0.14 0.88
10 0.02399  1.00000 25588M 36108k 25552M 0.14 0.88
11 0.02399  1.00000 25588M 36108k 25552M 0.14 0.88
 0 0.02399  1.00000 25587M 45864k 25542M 0.18 1.12
 1 0.02399  1.00000 25587M 45556k 25543M 0.17 1.11
 2 0.02399  1.00000 25587M 40756k 25547M 0.16 0.99
 3 0.02399  1.00000 25588M 44180k 25544M 0.17 1.08
 4 0.02399  1.00000 25588M 44400k 25544M 0.17 1.08
 5 0.02399  1.00000 25588M 43992k 25545M 0.17 1.07
 6 0.02399  1.00000 25587M 39756k 25548M 0.15 0.97
 7 0.02399  1.00000 25587M 47656k 25540M 0.18 1.16
 8 0.02399  1.00000 25587M 46884k 25541M 0.18 1.14
 0 0.02399  1.00000 25587M 45864k 25542M 0.18 1.12
 1 0.02399  1.00000 25587M 45556k 25543M 0.17 1.11
 2 0.02399  1.00000 25587M 40756k 25547M 0.16 0.99
 3 0.02399  1.00000 25588M 44180k 25544M 0.17 1.08
 4 0.02399  1.00000 25588M 44400k 25544M 0.17 1.08
 5 0.02399  1.00000 25588M 43992k 25545M 0.17 1.07
 6 0.02399  1.00000 25587M 39756k 25548M 0.15 0.97
 7 0.02399  1.00000 25587M 47656k 25540M 0.18 1.16
 8 0.02399  1.00000 25587M 46884k 25541M 0.18 1.14
 9 0.02399  1.00000 25588M 36108k 25552M 0.14 0.88
10 0.02399  1.00000 25588M 36108k 25552M 0.14 0.88
11 0.02399  1.00000 25588M 36108k 25552M 0.14 0.88
12 0.01999  1.00000 25588M 36108k 25552M 0.14 0.88
13 0.01999  1.00000 25588M 36108k 25552M 0.14 0.88
14 0.01999  1.00000 25588M 36108k 25552M 0.14 0.88
              TOTAL   374G   601M   374G 0.16
MIN/MAX VAR: 0.88/1.16  STDDEV: 0.02
```

将指定OSD置为down状态

标记指定OSD为down状态

```
[root@node6-1 ~]# ceph osd down 8
marked down osd.8.
# 查看指定OSD状态
[root@node6-1 ~]# ceph osd tree |grep osd.8
  8 0.02399             osd.8                down  1.00000          1.00000
```

将指定OSD置为out状态

将指定OSD置为out状态

```
[root@node6-1 ~]# ceph osd out osd.8
marked out osd.8.
# 查看指定OSD状态
[root@node6-1 ~]# ceph osd tree |grep osd.8
  8 0.02399             osd.8                  up         0          1.00000
# 查看ceph集群状态
[root@node6-1 ~]# ceph -s
    cluster e283ffab-3777-40f2-b5be-f5d266cc5ad1
     health HEALTH_WARN
            27 pgs stuck unclean
            too many PGs per OSD (414 > max 300)
     monmap e3: 3 mons at
{node6-1=192.168.5.50:6789/0,node6-2=192.168.5.51:6789/0,node6-3=192.168.5.49:6789/0}
            election epoch 44, quorum 0,1,2 node6-3,node6-1,node6-2
     osdmap e229: 15 osds: 15 up, 14 in; 346 remapped pgs
      pgmap v1448: 2048 pgs, 1 pools, 0 bytes data, 0 objects
            541 MB used, 349 GB / 349 GB avail
                1702 active+clean
                 346 active+remapped
```

将指定OSD置为in状态

将指定OSD置为in状态

```
[root@node6-1 ~]# ceph osd in osd.8
marked in osd.8.
# 查看指定OSD状态
[root@node6-1 ~]# ceph osd tree |grep osd.8
  8 0.02399             osd.8                  up  1.00000          1.00000
# 查看ceph集群状态
[root@node6-1 ~]# ceph -s
    cluster e283ffab-3777-40f2-b5be-f5d266cc5ad1
     health HEALTH_WARN
            4 pgs peering
            4 pgs stuck inactive
            350 pgs stuck unclean
            too many PGs per OSD (386 > max 300)
     monmap e3: 3 mons at
{node6-1=192.168.5.50:6789/0,node6-2=192.168.5.51:6789/0,node6-3=192.168.5.49:6789/0}
            election epoch 44, quorum 0,1,2 node6-3,node6-1,node6-2
     osdmap e236: 15 osds: 15 up, 15 in
      pgmap v1462: 2048 pgs, 1 pools, 0 bytes data, 0 objects
            583 MB used, 374 GB / 374 GB avail
                1698 active+clean
                 346 active+remapped
                   4 peering
```

显示集群当前最大的OSD id

显示集群当前最大的OSD id

```
[root@node6-1 ~]# ceph osd getmaxosd
max_osd = 15 in epoch 236
```

设置当前集群最大的OSD id

设置当前集群最大的OSD id

```
[root@node6-1 ~]# ceph osd setmaxosd 100
set new max_osd = 100
[root@node6-1 ~]# ceph osd getmaxosd
max_osd = 100 in epoch 237
```

设置指定OSD在集群中的weight

设置指定OSD在集群中的weight

```
# 查看指定OSD设置前的权重值
[root@node6-1 ~]# ceph osd tree | grep osd.14
 14 0.01999         osd.14                     up  1.00000          1.00000
# 使用方法: ceph osd crush set OSD实例名称 权重值 OSD参数
[root@node6-1 ~]# ceph osd crush set osd.14 2.00 host=node6-5
set item id 14 name 'osd.14' weight 2 at location {host=node6-5} to crush map
# 查看指定OSD设置后的权重值
[root@node6-1 ~]# ceph osd tree | grep osd.14
 14 2.00000         osd.14                     up  1.00000          1.00000
```

设置当前集群中OSD的flags

设置当前集群中OSD的flags

```
[root@node6-1 ~]# ceph osd stat
     osdmap e242: 15 osds: 15 up, 15 in
# OSD可用flags:
full|pause|noup|nodown|noout|noin|nobackfill|norebalance|norecover|noscrub|nodeep-scrub|notieragent
[root@node6-1 ~]# ceph osd set nodown
set nodown
# 查看设置flags之后的OSD状态
[root@node6-1 ~]# ceph osd stat
     osdmap e243: 15 osds: 15 up, 15 in
            flags nodown
```

取消设置当前集群中OSD的flags

取消设置当前集群中OSD的flags

```
[root@node6-1 ~]# ceph osd unset nodown
unset nodown
[root@node6-1 ~]# ceph osd stat
     osdmap e244: 15 osds: 15 up, 15 in
```

pool命令

所有pool命令

所有pool命令

```
[root@node6-1 ~]# ceph --help
... ... # 省略部分
osd pool create <poolname> <int[0-]>     create pool
 {<int[0-]>} {replicated|erasure}
 {<erasure_code_profile>} {<ruleset>}
 {<int>}
osd pool delete <poolname> {<poolname>}  delete pool
 {--yes-i-really-really-mean-it}
osd pool get <poolname> size|min_size|   get pool parameter <var>
 crash_replay_interval|pg_num|pgp_num|
 crush_ruleset|hit_set_type|hit_set_
 period|hit_set_count|hit_set_fpp|auid|
 target_max_objects|target_max_bytes|
 cache_target_dirty_ratio|cache_target_
 full_ratio|cache_min_flush_age|cache_
 min_evict_age|erasure_code_profile|min_
 read_recency_for_promote|write_fadvise_
 dontneed
osd pool get-quota <poolname>            obtain object or byte limits for pool
osd pool ls {detail}                     list pools
osd pool mksnap <poolname> <snap>        make snapshot <snap> in <pool>
osd pool rename <poolname> <poolname>    rename <srcpool> to <destpool>
osd pool rmsnap <poolname> <snap>        remove snapshot <snap> from <pool>
osd pool set <poolname> size|min_size|   set pool parameter <var> to <val>
 crash_replay_interval|pg_num|pgp_num|
 crush_ruleset|hashpspool|nodelete|
 nopgchange|nosizechange|hit_set_type|
 hit_set_period|hit_set_count|hit_set_
 fpp|debug_fake_ec_pool|target_max_
 bytes|target_max_objects|cache_target_
 dirty_ratio|cache_target_full_ratio|
 cache_min_flush_age|cache_min_evict_
 age|auid|min_read_recency_for_promote|
 write_fadvise_dontneed <val> {--yes-i-
 really-mean-it}
osd pool set-quota <poolname> max_       set object or byte limit on pool
 objects|max_bytes <val>
osd pool stats {<name>}                  obtain stats from all pools, or from
                                          specified pool
... ...# 省略部分
```

显示ceph中的所有pool

显示ceph中的所有pool

```
[root@node6-1 ~]# ceph osd pool ls
rbd
test01
scbench
```

显示ceph中所有pool或指定pool的状态

设置当前集群最大的OSD id

```
# 使用方法 ceph osd pool stats {pool名称}
[root@node6-1 ~]# ceph osd pool stats
pool rbd id 0
  nothing is going on
pool test01 id 1
  nothing is going on
pool scbench id 2
  nothing is going on
```

创建新的pool并指定相关参数

创建新的pool并指定相关参数

```
# 使用方法: ceph osd pool create pool名称 pg数量 pgp数量
[root@node6-1 ~]# ceph osd pool create test_pool 2048 2048
pool 'test_pool' created
```

查看指定pool的指定参数

查看指定pool的指定参数

```
# 使用方法: ceph osd pool get pool名称 参数名称
[root@node6-1 ~]# ceph osd pool get test_pool pgp_num
pgp_num: 2048
```

对指定pool重命名

对指定pool重命名

```
# 使用方法: ceph osd pool rename 原名称 新名称
[root@node6-1 ~]# ceph osd pool rename test_pool new_pool
pool 'test_pool' renamed to 'new_pool'
[root@node6-1 ~]# ceph osd pool ls
rbd
test01
scbench
new_pool
```

删除指定pool

删除指定pool

```
# 使用方法: ceph osd pool delete pool名称 pool名称 --yes-i-really-really-mean-it
[root@node6-1 ~]# ceph osd pool delete new_pool new_pool --yes-i-really-really-mean-it
pool 'new_pool' removed
[root@node6-1 ~]# ceph osd pool ls
rbd
test01
scbench
```