

## fs - Bug #18166

### monitor cannot start because of "FAILED assert(info.state == MDSMap::STATE\_STANDBY)"

12/07/2016 09:43 AM - guotao Yao

|                        |                  |                           |            |
|------------------------|------------------|---------------------------|------------|
| <b>Status:</b>         | Resolved         | <b>Start date:</b>        | 12/07/2016 |
| <b>Priority:</b>       | Normal           | <b>Due date:</b>          |            |
| <b>Assignee:</b>       | John Spray       | <b>% Done:</b>            | 0%         |
| <b>Category:</b>       |                  | <b>Estimated time:</b>    | 0.00 hour  |
| <b>Target version:</b> |                  | <b>Spent time:</b>        | 0.00 hour  |
| <b>Source:</b>         | Community (user) | <b>Affected Versions:</b> |            |
| <b>Tags:</b>           |                  | <b>ceph-qa-suite:</b>     |            |
| <b>Backport:</b>       | jewel, kraken    | <b>Release:</b>           |            |
| <b>Regression:</b>     | No               | <b>Component(FS):</b>     | MDSMonitor |
| <b>Severity:</b>       | 3 - minor        | <b>Needs Doc:</b>         | No         |
| <b>Reviewed:</b>       |                  |                           |            |

#### Description

ceph version: v10.2.3  
operation system: ubuntu 14.04  
linux kernel version: 3.13.0

#### Description:

I test for cephfs, and I have two mds, when I start by 'start ceph-mds-all', the mds cluster is OK, two mds is OK, one is active, and another is standby. But when I test the option of hot-standby in command, problem has arisen.

#### I have three nodes:

ceph1: monitor + mds + osd  
ceph2: monitor + mds + osd  
ceph3: monitor + osd

#### Procedure:

1. start two mds
2. stop the mds in standby state
3. perform command: "ceph-mds --cluster=ceph -i ceph2 --setuser ceph --setgroup ceph --hot-standby 0"  
at this step, mds cannot start, so I do next:
4. restart monitor service

at this time, I found that a monitor(ceph1) is down. When I restart the down monitor, the monitor is up, but, the other monitor(ceph2) is down.

#### monitor log:

```
-132> 2016-12-07 08:59:38.803492 7f9a7a2f3480 10 mon.ceph3@-1(probing).paxoservice(mdsmap 1..438)
refresh
-131> 2016-12-07 08:59:38.803506 7f9a7a2f3480 10 mon.ceph3@-1(probing).mds e0 update_from_paxos
version 438, my e 0
-130> 2016-12-07 08:59:38.803642 7f9a7a2f3480 10 mon.ceph3@-1(probing).mds e0 update_from_paxos
got 438
-129> 2016-12-07 08:59:38.803686 7f9a7a2f3480 4 mon.ceph3@-1(probing).mds e438 new map

-128> 2016-12-07 08:59:38.803723 7f9a7a2f3480 0 mon.ceph3@-1(probing).mds e438 print_map
e438
enable_multiple, ever_enabled_multiple: 0,0
compat: compat={},rocompat={},incompat={1=base v0.20,2=client writeable ranges,3=default file layo
uts on dirs,4=dir inode in separate object,5=mds uses versioned encoding,6=dirfrag is stored in om
ap,8=file layout v2}
```

```
Filesystem 'first_cephfs' (1)
fs_name first_cephfs
epoch 436
flags 8
created 2016-11-16 06:06:34.376616
modified 2016-11-23 11:37:26.768424
tableserver 0
root 0
session_timeout 60
session_autoclose 300
max_file_size 1099511627776
last_failure 0
last_failure_osd_epoch 68
compat compat={},rocompat={},incompat={1=base v0.20,2=client writeable ranges,3=default file layouts on dirs,4=dir inode in
separate object,5=mds uses versioned encoding,6=dirfrag is stored in omap,8=file layout v2}
max_mds 1
in 0
up {0=58523}
failed
damaged
stopped
data_pools 1
metadata_pool 2
inline_data disabled
58523: 10.10.38.40:6806/13750 'ceph1' mds.0.433 up:active seq 70
```

Standby daemons:

```
39073: 10.10.38.41:6805/12990 'ceph2' mds.-1.0 up:standby seq 1 (standby for rank 0)
```

```
-8> 2016-12-07 08:59:38.825925 7f9a7a2f3480 10 mon.ceph3@0(leader).paxoservice(mdsmap 1..438) ele
ction_finished
-7> 2016-12-07 08:59:38.825926 7f9a7a2f3480 10 mon.ceph3@0(leader).paxoservice(mdsmap 1..438)
_active
-6> 2016-12-07 08:59:38.825928 7f9a7a2f3480 7 mon.ceph3@0(leader).paxoservice(mdsmap 1..438)
_active creating new pending
-5> 2016-12-07 08:59:38.825939 7f9a7a2f3480 10 mon.ceph3@0(leader).mds e438 create_pending e43
9
-4> 2016-12-07 08:59:38.825943 7f9a7a2f3480 10 mon.ceph3@0(leader).mds e438 e438: 1/1/1 up {0=
ceph1=up:active}, 1 up:standby
-3> 2016-12-07 08:59:38.825960 7f9a7a2f3480 20 mon.ceph3@0(leader).mds e438 gid 39073 is stand
by and following nobody
-2> 2016-12-07 08:59:38.825966 7f9a7a2f3480 10 mon.ceph3@0(leader).mds e438 setting to follo
w mds rank 0
-1> 2016-12-07 08:59:38.826000 7f9a6ffff700 5 asok(0x7f9a839eb480) AdminSocket: request 'get_
command_descriptions' '' to 0x7f9a83a44270 returned 2165 bytes
0> 2016-12-07 08:59:38.828473 7f9a7a2f3480 -1 mon/MDSMonitor.cc: In function 'bool MDSMonitor
::maybe_promote_standby(std::shared_ptr<Filesystem>)' thread 7f9a7a2f3480 time 2016-12-07 08
:59:38.825971
mon/MDSMonitor.cc: 2797: FAILED assert(info.state == MDSMap::STATE_STANDBY)
```

```
ceph version 10.2.3 (ecc23778eb545d8dd55e2e4735b53cc93f92e65b)
```

```
1: (ceph::__ceph_assert_fail(char const*, char const*, int, char const*)+0x8b) [0x7f9a79e329fb]
2: (MDSMonitor::maybe_promote_standby(std::shared_ptr<Filesystem>)+0x976) [0x7f9a79b73016]
3: (MDSMonitor::tick()+0x397) [0x7f9a79b76fa7]
4: (MDSMonitor::on_active()+0x15) [0x7f9a79b6d0a5]
5: (PaxosService::_active()+0x1df) [0x7f9a79af92ef]
6: (PaxosService::election_finished()+0x67) [0x7f9a79af9a47]
7: (Monitor::win_election(unsigned int, std::set<int, std::less<int>, std::allocator<
int>&> &, unsigned long, MonCommand const*, int, std::set<int, std::less<int>, std::all
ocator<int>&> > const*)+0x236) [0x7f9a79abb336]
8: (Monitor::win_standalone_election()+0x158) [0x7f9a79abb738]
9: (Monitor::bootstrap()+0xa03) [0x7f9a79abc283]
```

```
10: (Monitor::init()+0x190) [0x7f9a79abc590]
11: (main()+0x24ca) [0x7f9a79a32a4a]
12: (__libc_start_main()+0xf5) [0x7f9a76ff6ec5]
13: (()+0x2609ca) [0x7f9a79a849ca]
NOTE: a copy of the executable, or `objdump -rds &lt;executable&gt;` is needed to interpret this.
```

**Related issues:**

|  |                 |
|--|-----------------|
| Copied to fs - Backport #18282: jewel: monitor cannot start because of "FAILE... | <b>Resolved</b> |
| Copied to fs - Backport #18283: kraken: monitor cannot start because of "FAIL... | <b>Closed</b>   |

**History****#1 - 12/07/2016 05:01 PM - Greg Farnum**

- Project changed from Ceph to fs
- Component(FS) MDSMonitor added

So this cluster is freshly-created with version 10.2.3?

Can you upload the monitor log with ceph-post-file? (Preferably one with "debug mon = 20" set.)

Maybe the assert is just bad because the MDS was in standby but got marked as failed, but I'd like to see the log to make sure.

**#2 - 12/08/2016 06:01 AM - guotao Yao**

- File ceph-mon.ceph3.log added

The attachment is the log of crash monitor.  
Thanks!

**#3 - 12/08/2016 04:23 PM - John Spray**

- Status changed from New to Verified

It looks like MDSMonitor::maybe\_promote\_standby is iterating over pending\_fsmap.standby\_daemons, but inside the loop calling try\_standby\_replay, which modifies standby\_daemons (via assign\_standby\_replay).

**#4 - 12/08/2016 05:38 PM - John Spray**

- Status changed from Verified to Need Review
- Assignee set to John Spray
- Backport set to jewel

<https://github.com/ceph/ceph/pull/12395>

**#5 - 12/14/2016 12:56 PM - John Spray**

- Status changed from Need Review to Pending Backport
- Backport changed from jewel to jewel kraken

**#6 - 12/16/2016 02:42 PM - Nathan Cutler**

- Copied to Backport #18282: jewel: monitor cannot start because of "FAILED assert(info.state == MDSMap::STATE\_STANDBY)" added

**#7 - 12/16/2016 02:42 PM - Nathan Cutler**

- Copied to Backport #18283: kraken: monitor cannot start because of "FAILED assert(info.state == MDSMap::STATE\_STANDBY)" added

**#8 - 01/31/2017 01:13 PM - Nathan Cutler**

- Backport changed from jewel kraken to jewel, kraken

**#9 - 04/14/2017 09:39 PM - Nathan Cutler**

kraken backport is unnecessary (fix already in v11.2.0)

**#10 - 04/14/2017 09:39 PM - Nathan Cutler**

- Status changed from Pending Backport to Resolved

**Files**

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|                    |        |            |            |
|--------------------|--------|------------|------------|
| ceph-mon.ceph3.log | 105 KB | 12/08/2016 | guotao Yao |
|--------------------|--------|------------|------------|