# Ceph - Bug #11493

## mon: adding exsting pool as tier with --force-nonempty clobbers removed_snaps

04/28/2015 08:18 PM - Sage Weil

| | | | |
|---|---|---|---|
| **Status:** | Resolved | **% Done:** | 0% |
| **Priority:** | Urgent | **Spent time:** | 0.00 hour |
| **Assignee:** | Sage Weil | | |
| **Category:** | | | |
| **Target version:** | | | |
| **Source:** | Community (user) | **Affected Versions:** | |
| **Tags:** | | **ceph-qa-suite:** | |
| **Backport:** | firefly,hammer | **Pull request ID:** | |
| **Regression:** | No | **Crash signature (v1):** | |
| **Severity:** | 3 - minor | **Crash signature (v2):** | |
| **Reviewed:** | | | |

### Description

1. images had snapshots (and removed_snaps)

2. images was added as a tier **of** img, and img's removed_snaps was copied to images, clobbering the removed_snaps value (see OSDMap::Incremental::propagate_snaps_to_tiers)

3. tiering relation was undone, but removed_snaps was still gone

4. on OSD startup, when we load the PG, removed_snaps is initialized with the older map. later, in PGPool::update(), we assume that removed_snaps alwasy grows (never shrinks) and we trigger an assert.

To fix this I think we need to do 2 things:

1. make the OSD forgiving out removed_snaps getting smaller. This is probably a good thing anyway: once we know snaps are removed on all OSDs we can prune the interval_set in the OSDMap. Maybe.

2. Fix the mon to prevent this from happening, **even** when --force-nonempty is specified. (This is the root cause.)

### Related issues:

| | | |
|---|---|---|
| Related to Ceph - Bug #7915: ./include/interval_set.h: 385: FAILED assert(_si... | **Duplicate** | **03/31/2014** |
| Copied to Ceph - Backport #12312: mon: adding exsting pool as tier with --for... | **Resolved** | **04/28/2015** |
| Copied to Ceph - Backport #12314: mon: adding exsting pool as tier with --for... | **Resolved** | **04/28/2015** |

## Associated revisions

### Revision bbec53ed - 05/15/2015 05:39 PM - Sage Weil

mon: prevent pool with snapshot state from being used as a tier

If we add a pool with snap state as a tier the snap state gets clobbered by OSDMap::Incremental::propogate_snaps_to_tiers(), and may prevent OSDs from starting. Disallow this.

Include a test.

Fixes: #11493
Backport: hammer, giant, firefly
Signed-off-by: Sage Weil <sage@redhat.com>

**Revision 13c8d58d - 06/15/2015 07:25 PM - Sage Weil**

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by OSDMap::Incremental::propogate_snaps_to_tiers(), and may prevent OSDs
from starting.  Disallow this.

Include a test.

Fixes: #11493
Backport: hammer, giant, firefly
Signed-off-by: Sage Weil <sage@redhat.com>
(cherry picked from commit bbec53edf9e585af4e20bbc9ba9057d6fdfda342)

**Revision d7f53442 - 10/05/2015 01:14 PM - Sage Weil**

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by OSDMap::Incremental::propogate_snaps_to_tiers(), and may prevent OSDs
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Backport: hammer, giant, firefly
Signed-off-by: Sage Weil <sage@redhat.com>
(cherry picked from commit bbec53edf9e585af4e20bbc9ba9057d6fdfda342)

Conflicts:
qa/workunits/cephtool/test.sh
properly co-exist with "# make sure we can't create an ec pool tier"
src/mon/OSDMonitor.cc
properly co-exist with preceding "if (tp->ec_pool())"
(The changes to both files would have applied cleanly if
 https://github.com/ceph/ceph/pull/5389 had not been merged first.)

## History

**#1 - 04/28/2015 08:19 PM - Sage Weil**

*- Description updated*

**#2 - 04/28/2015 09:37 PM - Sage Weil**

*- Status changed from New to Fix Under Review*


https://github.com/ceph/ceph/pull/4485


**#3 - 05/29/2015 09:24 PM - Samuel Just**

*- Status changed from Fix Under Review to Resolved*                                                    *3/3*

*- Regression set to No*


**#4 - 07/13/2015 06:06 PM - Nathan Cutler**

*- Status changed from Resolved to Pending Backport*

*- Backport set to firefly,hammer*


**#5 - 07/13/2015 06:07 PM - Nathan Cutler**

master commit: https://github.com/ceph/ceph/commit/bbec53edf9e585af4e20bbc9ba9057d6fdfda342


**#6 - 10/20/2015 07:31 PM - Loïc Dachary**

*- Status changed from Pending Backport to Resolved*