

RADOS - Feature #38616

Improvements to auto repair

03/06/2019 10:38 PM - David Zafman

Status: Resolved	% Done: 0%
Priority: Normal	Spent time: 0.00 hour
Assignee: David Zafman	
Category:	
Target version:	
Source:	Affected Versions:
Tags:	Component(RADOS):
Backport: nautilus	Pull request ID: 26942
Reviewed:	
Description	
We should allow auto repair for bluestore pools since it has built in checksums. Currently, we are limited to erasure coded pools.	
In order to trigger a auto repair when regular scrub detects errors, any errors should immediately schedule a deep-scrub.	
Add a new pg state flag "failed_repair" when repairs can't fix all errors. This may be tricky to implement because pg repair ends as a recovery operation.	
Set failed_repair if primary repair triggered by a client read fails.	
Add a count of number of objects that are repaired to PG stats and OSD stats.	
Related issues:	
Copied to RADOS - Backport #38983: nautilus: Improvements to auto repair	Resolved

History

#1 - 03/07/2019 02:12 AM - David Zafman

OSD stats might have to be in meta collection

#2 - 03/14/2019 02:46 PM - David Zafman

- Status changed from New to In Progress

- Pull request ID set to 26942

#3 - 03/14/2019 04:45 PM - David Zafman

I don't think we need to set "failed_repair" if primary can't recover itself on a read error. We are already setting "recovery_unfound" PG state.

If a primary read gets an EIO for example, but we are unable to read another replica this is the resulting PG:

```
PG_STAT OBJECTS MISSING_ON_PRIMARY DEGRADED MISPLACED UNFOUND BYTES OMAP_BYTES* OMAP_KEYS* LOG DISK_LOG
STATE STATE_STAMP VERSION REPORTED UP UP_PRIMARY ACTING ACTING_PRIMARY LAST_SCRUB
SCRUB_STAMP LAST_DEEP_SCRUB DEEP_SCRUB_STAMP SNAPTRIMQ_LEN
1.0 2 1 1 0 1 3138 0 0 2 2 active+recovery_unfound+degraded 2019-03-14 09:22:36.159974 11'2
16:27 [1,0] 1 [1,0] 1 0'0 2019-03-14 09:21:56.003113 0'0 2019-03-14 09:21:56.003113 0
```

#4 - 03/23/2019 12:33 AM - David Zafman

- Backport set to nautilus

#5 - 03/26/2019 11:49 PM - David Zafman

- Status changed from *In Progress* to *Pending Backport*

#6 - 03/27/2019 01:37 AM - David Zafman

Also need to backport 0fb951963ff9d03a592bad0d4442049603195e25 with this.

#7 - 03/27/2019 04:24 PM - Nathan Cutler

- Copied to Backport #38983: *nautilus: Improvements to auto repair added*

#8 - 04/03/2019 04:37 AM - David Zafman

- Status changed from *Pending Backport* to *Resolved*