

rgw - Bug #37765

RGW returns one byte more data than the requested range from the SLO object.

12/26/2018 11:32 AM - Andrey Groshev

Status: Resolved	% Done: 0%
Priority: Normal	Spent time: 0.00 hour
Assignee:	
Category:	
Target version:	
Source:	Affected Versions: v13.2.2
Tags:	ceph-qa-suite:
Backport: nautilus,mimic,luminous	Pull request ID: 25962
Regression: No	Crash signature (v1):
Severity: 1 - critical	Crash signature (v2):
Reviewed:	
Description <p>We found that data is corrupted in static large objects (SLO swift API) when using nginx as a GET cache. Nginx downloads a file not in a single file, but as a slice using the "Content-Range" header. At first it seemed to be missing a few bytes at the end of the full object. Their number was one less than the number of slices for which the file was downloaded. But the size of the final file was correct! The analysis showed that in each slice all the headers are correct, but at the end of the data one extra byte! Apparently nginx adds slices to the buffer without checking the match of the header and the data actually received, and the last slice either does not fit completely into the buffer or is cut off. I tried to repeat this behavior on the same file but loaded not as SLO, but in one file and the behavior did not repeat. I attach two screenshots. One with normal behavior when not using SLO. And in the other, when I request a part of the SLO object. It can be seen that I request a range from 0 to 3. In the response headers - everything is correct, 4 bytes, from 0 to 3. But in TCP packet 5 bytes of data, not 4. Just through cURL it does not show, because cURL cuts off extra bytes.</p>	
Related issues:	
Copied to rgw - Backport #41125: nautilus: RGW returns one byte more data tha...	Resolved
Copied to rgw - Backport #41126: mimic: RGW returns one byte more data than t...	Resolved
Copied to rgw - Backport #41127: luminous: RGW returns one byte more data tha...	Rejected

History

#1 - 03/28/2019 05:58 PM - Casey Bodley

- Pull request ID set to 25962

#2 - 08/02/2019 02:05 PM - Matt Benjamin

- Status changed from New to Pending Backport

- Backport set to nautilus,mimic,luminous

#3 - 08/05/2019 11:09 PM - Patrick Donnelly

- Copied to Backport #41125: nautilus: RGW returns one byte more data than the requested range from the SLO object. added

#4 - 08/05/2019 11:09 PM - Patrick Donnelly

- Copied to Backport #41126: mimic: RGW returns one byte more data than the requested range from the SLO object. added

#5 - 08/05/2019 11:09 PM - Patrick Donnelly

- Copied to Backport #41127: luminous: RGW returns one byte more data than the requested range from the SLO object. added

#6 - 01/27/2021 07:13 PM - Nathan Cutler

- Status changed from Pending Backport to Resolved

While running with --resolve-parent, the script "backport-create-issue" noticed that all backports of this issue are in status "Resolved" or "Rejected".

Files

range-bug-with-SLO.png	200 KB	12/26/2018	Andrey Groshev
range-nobug-without-SLO.png	194 KB	12/26/2018	Andrey Groshev