

Ceph - Subtask #815

Feature # 801 (Resolved): librados: allow access to multiple clusters

Remove globals & partition g\_conf

02/17/2011 09:08 AM - Greg Farnum

<b>Status:</b>	Resolved	<b>% Done:</b>	100%
<b>Priority:</b>	High	<b>Spent time:</b>	0.00 hour
<b>Assignee:</b>	Colin McCabe		
<b>Category:</b>			
<b>Target version:</b>	v0.31		
<b>Source:</b>		<b>Reviewed:</b>	
<b>Tags:</b>		<b>Affected Versions:</b>	
<b>Backport:</b>		<b>Pull request ID:</b>	
<b>Description</b>			
This bug is to track the progress of removing globals and setting up g_conf so it can be used as a parameter rather than a global.			
<b>Subtasks:</b>			
Subtask # 839: Globals cleanup. Replace g_conf.name with g_conf.entity_name.to_str(). R...			Resolved
Subtask # 840: Clean separation between different components of initialization			Resolved
Subtask # 841: don't call daemon_init in library code			Resolved
Subtask # 842: initialization: have appropriate library-specific defaults			Resolved
Subtask # 843: Decouple dout from g_conf			Resolved
Subtask # 844: g_conf should become a pointer			Resolved
Subtask # 845: g_conf should not be defined in library code.			Resolved
Subtask # 846: De-globalize SimpleMessenger, etc.			Resolved
Subtask # 1160: introduce CephContext to some structures in common/			Resolved
Subtask # 1164: initialize g_ceph_context in common_preinit			Resolved
Subtask # 1227: write tests of libceph, librgw, librados library thread-safety			Rejected
Subtask # 1231: NUM_THREADS=3 testrados segfaults			Rejected

History

#1 - 02/17/2011 09:11 AM - Greg Farnum

So one issue that occurred to me with setting this up is that we have a number of things that really **ought** to be globals. For instance, right now the SimpleMessenger can take a single Throttler and use that to restrict the flow of incoming and outgoing messages based on config options in g\_conf. While it's good to remove the globals, it's entirely possible that clients will have connections to multiple clusters but still want to have a total limit on how much memory is devoted to caching messages. We'll need some way of implementing that!

#2 - 02/17/2011 02:21 PM - Colin McCabe

Good point. Some things probably should be global. However, we have a lot of things that library clients **don't** want to be global as globals now. That's the problem.

Also, even things that should be global, it's not good to have global constructors that do a lot of work. Global constructor time is scary.

#3 - 03/07/2011 10:42 AM - Colin McCabe

- Target version changed from 12 to v0.26
- Estimated time set to 0.00 h

#4 - 06/20/2011 12:06 PM - Sage Weil

- Estimated time set to 0.00 h

**#5 - 07/05/2011 09:30 AM - Colin McCabe**

- Status changed from In Progress to Resolved

- Estimated time set to 0.00 h

This bug was really all about refactoring stuff to be thread-safe. Now, that task has been completed.

It's time to start testing and fixing any issues that were uncovered. That will be done in bug [#1257](#).

Colin.