It would be useful for profilers to have more insight into garbage collection. Feature request: add event hooks for garbage collection start/stop. For the lazy sweep, start and stop events would also be interesting. Thanks.

Related issues:
Related to Ruby master - Feature #2565: adding hooks for better tracing
Closed 01/06/2010

#1 - 09/14/2012 05:15 PM - drbrain (Eric Hodel)
You can't add an event hook for the start of garbage collection. Ruby is out of space for creating the necessary objects.
I think #2565 is a better solution, even though it happens at a lower level.
Also note that there is API for collecting garbage collection and objects pace statistics that can be used for similar purposes.

#2 - 09/15/2012 01:13 AM - rogerdpack (Roger Pack)
hmm...correct me if I'm wrong (I'm trying to maintain the ruby-prof gem here) will the dtrace probes in #2565 help me if I'm running profiling in windows? Actually if a hook were added for "GC DONE" or the like, I could query using the API at that point, which would probably be enough. Feedbacks?

#3 - 09/21/2012 06:29 AM - headius (Charles Nutter)
I looked into this on JRuby/JVM last night, and found that they have recently added a nonstandard API for getting GC notifications as they happen. And they happen after the GC has occurred. They're informational.

Would be neat to have something standard in Ruby...especially now that I know we can implement it (on Java 7u4+ anyway).

FWIW, here's a gist I posted last night that implements GC::Profiler.report entirely in Ruby using the JVM APIs:

https://gist.github.com/3754108

- Charlie

On Fri, Sep 14, 2012 at 9:13 AM, rogerdpack (Roger Pack) rogerpack2005@gmail.com wrote:

hmm...correct me if I'm wrong (I'm trying to maintain the ruby-prof gem here) will the dtrace probes in #2565 help me if I'm running profiling in windows? Actually if a hook were added for "GC DONE" or the like, I could query using the API at that point, which would probably be enough. Feedbacks?
Target version:

It would be useful for profilers to have more insight into garbage collection. Feature request: add event hooks for garbage collect start/stop. For the lazy sweep, start and stop events would also be interesting.

Thanks.

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http://bugs.ruby-lang.org/

#4 - 11/20/2012 11:28 PM - mame (Yusuke Endoh)
- Status changed from Open to Assigned
- Assignee set to authorNari (Narihiro Nakamura)
- Target version set to 2.6

#5 - 01/10/2013 11:29 PM - Anonymous

On 9/20/12, Charles Oliver Nutter headius@headius.com wrote:

I looked into this on JRuby/JVM last night, and found that they have recently added a nonstandard API for getting GC notifications as they happen. And they happen after the GC has occurred. They're informational.

Sweet that's what I have been looking for.

Would be neat to have something standard in Ruby...especially now that I know we can implement it (on Java 7u4+ anyway).

FWIW, here's a gist I posted last night that implements GC::Profiler.report entirely in Ruby using the JVM APIs:

https://gist.github.com/3754108

It might be interesting to try and integrate the ruby-prof gem more with native jruby sometime.

Cheers!
-roger-

#6 - 06/05/2013 11:27 AM - authorNari (Narihiro Nakamura)
- Status changed from Assigned to Closed

Fixed at r40940.
(ticket is here: https://bugs.ruby-lang.org/issues/8107)

Thank you.