

## Backport193 - Backport #7720

### Process.daemon does not clean up background Ruby threads, leading to hang at exit

01/22/2013 02:33 AM - benweint (Ben Weintraub)

<b>Status:</b>	Rejected	
<b>Priority:</b>	Normal	
<b>Assignee:</b>	usa (Usaku NAKAMURA)	
<b>Description</b>		
<p>Process.fork appears to make special considerations for Ruby background threads so that they are cleaned up in the child process after fork (since fork() only duplicates the calling thread). Process.daemon also relies on fork internally, but does not make the same considerations, leading to a hang at exit in a daemonized process that had multiple Ruby threads prior to calling Process.daemon.</p> <p>The attached daemon.rb demonstrates the issue. It will call either Process.daemon (default) or Process.fork (if you pass 'fork' as the first arg).</p> <p>If you pass nothing, causing it to call Process.daemon, the daemonized Ruby process will still think it has two threads, and will hang indefinitely on exit, in a loop in rb_thread_terminate_all. If you pass 'fork' as the first argument, the forked child does not hang, and appears to have only one Ruby thread (the one that called Process.fork).</p> <p>It looks like rb_thread_atfork() is the relevant call in the fork case that makes this work, but it doesn't appear to be called in the daemon case.</p>		
<b>Related issues:</b>		
Has duplicate Ruby master - Bug #7798: <code>Process.daemon</code> ...		<b>Closed</b> <b>02/07/2013</b>

#### History

##### #1 - 01/23/2013 10:44 AM - samg (Sam Goldstein)

This seems to be the underlying cause of the bad interaction between resque and new relic described at <https://github.com/defunkt/resque/issues/578>

##### #2 - 01/25/2013 12:08 PM - ko1 (Koichi Sasada)

Does this issue remain on trunk?  
(Should we modify trunk before 2.0?)

##### #3 - 01/26/2013 01:44 AM - kosaki (Motohiro KOSAKI)

trunk doesn't have an issue. fork and daemon make the same result.

##### #4 - 01/30/2013 06:43 PM - usa (Usaku NAKAMURA)

- Status changed from Open to Assigned  
- Assignee set to usa (Usaku NAKAMURA)

So, what's the difference?

##### #5 - 01/30/2013 06:44 PM - usa (Usaku NAKAMURA)

- Tracker changed from Bug to Backport  
- Project changed from Ruby master to Backport193

##### #6 - 10/21/2017 12:15 PM - usa (Usaku NAKAMURA)

- Status changed from Assigned to Rejected

1.9.3 is out of date

#### Files

daemon.rb	306 Bytes	01/22/2013	benweint (Ben Weintraub)
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