## Ruby master - Bug #5355

**Sync_m**にBug #5195やBug #5258と同様のバグ

09/23/2011 11:53 AM - Glass_saga (Masaki Matsushita)

| Status: | Closed |
| Priority: | Normal |
| Assignee: | kosaki (Motohiro KOSAKI) |
| Target version: | 2.0.0 |
| Backport: | |
| ruby -v: | ruby 1.9.4dev (2011-09-20 trunk 33301) [x86_64-linux] |

### Description

```ruby
=begin
Sync_mにBug #5195やBug #5258と同様のバグがあります。
require 'sync'
class Foo; include Sync_m; end
foo = Foo.new
foo.sync_lock(:EX)
t = Thread.new { foo.sync_lock(:EX) }
nil until t.stop?
p foo.sync_waiting
t.wakeup
nil until t.stop?
p foo.sync_waiting

[#, #]
[#, #]
```
```
foo.sync_upgrade_waiting
foo.sync_waiting
```
```
t.wakeup
```
```
nil until t.stop?
p foo.sync_upgrade_waiting
p foo.sync_waiting
t.wakeup
nil until t.stop?
p foo.sync_upgrade_waiting
p foo.sync_waiting
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
```
複数のスレッドが共有ロックを保持している時にあるスレッドが共有ロックから排他ロックへ昇格しようとした場合、共有ロックの開放を待つスレッドは@sync_upgrade_waitingにpushされますが、この状態からそのスレッドを起こすと、@sync_upgrade_waitingではなく@sync_waitingにThread.currentがpushされます。

また、http://redmine.ruby-lang.org/issues/5258#note-2と同様の問題ですが、ロックの開放待ちで寝ているスレッドに例外を発生させると、@waitingにpushされたスレッドはそのまま放置されてしまいます。

```ruby
require 'sync'
class Foo; include Sync_m; end
foo = Foo.new
foo.sync_lock(:EX)
t = Thread.new { foo.sync_lock(:EX) }
nil until t.stop?
p foo.sync_waiting
t.raise
nil while t.alive?
p foo.sync_waiting
```

実行結果:

```
[#]
[#]
```

以上の問題を解決するpatchを添付します。

Related issues:
Related to Ruby master - Bug #5195: Queue#pop/sleepのThread::wakeup/Thread::sleep/Queue... Closed 08/16/2011
Related to Ruby master - Bug #5258: SizedQueueにBug #5195と同じ問題 Closed 09/01/2011
Has duplicate Ruby master - Bug #6911: Sync_m#sync_unlockでThreadErrorが発生する... Closed 08/23/2012

Associated revisions
Revision 2248a8ce - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- `lib/sync.rb` (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- `test/thread/test_sync.rb` (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise):
new test.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@36936 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 36936 - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- `lib/sync.rb` (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- `test/thread/test_sync.rb` (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise):
new test.
Revision 36936 - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- lib/sync.rb (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- test/thread/test_sync.rb (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise): new test.

Revision 36936 - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- lib/sync.rb (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- test/thread/test_sync.rb (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise): new test.

Revision 36936 - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- lib/sync.rb (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- test/thread/test_sync.rb (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise): new test.

Revision 36936 - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- lib/sync.rb (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- test/thread/test_sync.rb (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise): new test.

Revision 36936 - 09/09/2012 11:34 AM - kosaki (Motohiro KOSAKI)

- lib/sync.rb (Sync_m#sync_lock): Fixed wakeup/raise unsafe code. Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]
- test/thread/test_sync.rb (test_sync_lock_and_wakeup, test_sync_upgrade_and_wakeup, test_sync_lock_and_raise): new test.

History

#1 - 12/30/2011 05:10 PM - ayumin (Ayumu AIZAWA)
#2 - 12/30/2011 05:18 PM - kosaki (Motohiro KOSAKI)
とおなじく小崎さんにAssignしますよ

#3 - 03/18/2012 06:46 PM - shyouhei (Shyouhei Urabe)
- Status changed from Open to Assigned

#4 - 09/09/2012 08:34 PM - kosaki (Motohiro KOSAKI)
- Status changed from Assigned to Closed
- % Done changed from 0 to 100

This issue was solved with changeset r36936.
Masaki, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

- lib/sync.rb (Sync_m#sync_lock): Fixed wakeup/raise unsafe code.
  Patched by Masaki Matsushita. [Bug #5355] [ruby-dev:44521]

- test/thread/test_sync.rb (test_sync_lock_and_wakeup,
  test_sync_upgrade_and_wakeup, test_sync_lock_and_raise):
  new test.

#5 - 09/09/2012 08:51 PM - kosaki (Motohiro KOSAKI)
これも #5195と同じく timeout moduleのexceptionに見えなさそうensure関数を使う必要がある

Files

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>patch.diff</td>
<td>1.16 KB</td>
<td>09/23/2011</td>
<td>Glass_saga (Masaki Matsushita)</td>
</tr>
</tbody>
</table>