Bug #8996: pthread_mutex lock EINVAL

Status: Closed
Priority: Normal
Assignee: ko1 (Koichi Sasada)

Target version:

Description
ruby crashes leaving a stacktrace. Cause is pthread_mutex_lock EINVAL

Based on the ruby source line where the problem happens (line 121 below)

```ruby
119 def stop
120       if @tcpServerThread
121         @tcpServerThread.raise StandardError,"stop"
122      end
123 end
```

I suspect that the problem is there is a kind of race condition where @tcpServerThread has actually been destroyed (or is in the process of being destroyed) between lines 120 and 121. I am guessing that this results in thread_pthread.c (line 212 where the error occurs) checking that the pthread_mutex is either available or in EBUSY state, and throwing an error when it is not.

I'm not sure how one would solve it though...

Kind regards

Steve
check thread deadness correctly.

merge revision(s) 57595: [Backport #8996]

check thread deadness correctly.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_4@57906 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

check thread deadness correctly.

check thread deadness correctly.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_3@58027 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

check thread deadness correctly.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_2@58108 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

check thread deadness correctly.

check thread deadness correctly.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_1@58108 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

check thread deadness correctly.

#1 - 11/10/2015 05:01 PM - sylvain.joyeux (Sylvain Joyeux)
  - ruby -v changed from ruby 2.0.0p195 (2013-05-14 revision 40734) [x86_64-linux] to ruby 2.2.2p95 (2015-04-13 revision 50295) [x86_64-linux]
  - Backport deleted (1.9.3: UNKNOWN, 2.0.0: UNKNOWN)

Got the same issue in the same conditions with

- ruby 2.2.2p95 (2015-04-13 revision 50295) [x86_64-linux]
- ruby 2.1.6p336 (2015-04-13 revision 50298) [x86_64-linux]

The OP diagnosis seem to be the right one, the following very simple script allows to reproduce in a few seconds on 2.1.6

```ruby
while true
  t = Thread.new { }
```
(I don't have a 2.2 install handy, can't run it on 2.2 but I guess it would work there as well)

#2 - 09/19/2016 12:39 PM - sylvain.joyeux (Sylvain Joyeux)
- ruby -v changed from ruby 2.2.2p95 (2015-04-13 revision 50295) [x86_64-linux] to 2.2.2p95 2.3.1p112

still happening on 2.3.1

#3 - 09/20/2016 04:21 AM - noahgibbs (Noah Gibbs)
Also occurs on latest head of master (Git commit c9dd5918f40dc6df3a237f634b9689bfbb591662, git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@56188 b2dd03c8-39d4-4d8f-98ff-823fe69b080e).

#4 - 10/11/2016 07:10 AM - shyouhei (Shyouhei Urabe)
- Assignee set to ko1 (Koichi Sasada)
- Status changed from Open to Assigned

#5 - 02/10/2017 08:17 AM - ko1 (Koichi Sasada)
- Status changed from Assigned to Closed

r57595 fixes this problem. Sorry for late response and thank you for your great simple reproducing code!

#6 - 02/10/2017 11:22 AM - nagachika (Tomoyuki Chikanaga)
- Backport set to 2.2: REQUIRED, 2.3: REQUIRED, 2.4: REQUIRED

I filled Backport field according to the reported version.

#7 - 03/12/2017 01:00 PM - naruse (Yui NARUSE)
- Backport changed from 2.2: REQUIRED, 2.3: REQUIRED, 2.4: REQUIRED to 2.2: REQUIRED, 2.3: REQUIRED, 2.4: DONE

ruby_2_4 r57906 merged revision(s) 57595.

#8 - 03/19/2017 09:22 PM - nagachika (Tomoyuki Chikanaga)
- Backport changed from 2.2: REQUIRED, 2.3: REQUIRED, 2.4: DONE to 2.2: REQUIRED, 2.3: DONE, 2.4: DONE

ruby_2_3 r58027 merged revision(s) 57595.

#9 - 03/25/2017 05:27 PM - usa (Usaku NAKAMURA)
- Backport changed from 2.2: REQUIRED, 2.3: DONE, 2.4: DONE to 2.2: DONE, 2.3: DONE, 2.4: DONE

ruby_2_2 r58108 merged revision(s) 57595.