

Ruby - Bug #4121

test_getpty_nonexistent

12/06/2010 01:44 PM - kyanagi (Kouhei Yanagita)

Status:	Closed	Backport:
Priority:	Normal	
Assignee:	kosaki (Motohiro KOSAKI)	
Target version:		
ruby -v:	ruby 1.9.3dev (2010-12-06 trunk 30091) [x86_64-linux]	

Description

=begin
CentOS 5.5 test_ptty.rb

while true; do make test-all TESTS='test_ptty.rb'; done

Debian lenny

\$ make test-all TESTS='test_ptty.rb'
./miniruby -I./lib -I.ext/common ./tool/runruby.rb --extout=.ext -- ./test/runner.rb test_ptty.rb
Run options:

Running tests:

.....(C-c)F.....

Finished tests in 2.729398s, 4.3966 tests/s, 10.6251 assertions/s.

1. Failure:
test_getpty_nonexistent(TestPTY) [/home/yanagi/tmp/ruby/test/test_ptty.rb:157]:
[\[ruby-dev:41965\]](#)
[Errno::ENOENT] exception expected, not
Class:
Message: <">
---Backtrace---
/home/yanagi/tmp/ruby/test/test_ptty.rb:159:in getbyte' /home/yanagi/tmp/ruby/test/test_ptty.rb:159:in getpty'
/home/yanagi/tmp/ruby/test/test_ptty.rb:159:in `block (2 levels) in test_getpty_nonexistent'

12 tests, 29 assertions, 1 failures, 0 errors, 0 skips
make: *** [yes-test-all] Error 1
=end

Related issues:
Related to Ruby - Bug #4157: test_ptty Failure Closed

Associated revisions

Revision 40240274 - 12/25/2010 05:31 AM - kosaki (Motohiro KOSAKI)

- ext/pty/pty.c (chfunc): Added rb_thread_atfork_before_exec(). We must reinitialize GVL when new process creation. Otherwise we may meet an insane deadlock. [Bug #4121][ruby-dev:42686]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@30350 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 6223c55b - 12/25/2010 09:37 AM - yugui (Yuki Sonoda)

merges r30350 from trunk into ruby_1_9_2.

```
* ext/pty/pty.c (chfunc): Added rb_thread_atfork_before_exec().
  We must reinitialize GVL when new process creation. Otherwise
  we may meet an insane deadlock. [Bug #4121][ruby-dev:42686]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_1_9_2@30362 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

History

#1 - 12/14/2010 07:05 PM - metanest (Makoto Kishimoto)

```
=begin
  FreeBSD8
  4AMD64

$ cpuset -l 0 make test-all TESTS='test_pty.rb'

CPU

$ cpuset -l 0 make test-all TESTS='-n test_getpty_nonexistent test_pty.rb'

=end
```

#2 - 12/14/2010 08:00 PM - kyanagi (Kouhei Yanagita)

```
=begin
  CentOS 5.5/Xeon L3426

make test-all TESTS="test_pty.rb"
→

make test-all TESTS="-n test_getpty_nonexistent test_pty.rb"
→

taskset -c 0 make test-all TESTS="test_pty.rb"
→

taskset -c 0 make test-all TESTS="-n test_getpty_nonexistent test_pty.rb"
→

=end
```

#3 - 12/22/2010 04:55 PM - nagachika (Tomoyuki Chikanaga)

```
=begin
  RHEL ES 3.8 Kernel 2.4.21-47.ELsmp, Xeon 5160(2core) x 2CPU
  Ubuntu 9.04 Kernel 2.6.28-19-generic, Pentium4 x 1CPU

  RHEL ES 4.8 Kernel 2.6.9-89.ELlargesmp, Xeon X5570(2core) x 4CPU

  gdb attach

gvl_acquire l.90 native_cond_wait

(gdb) p vm->gvl.waiting_threads
$2 = (struct rb_thread_struct * volatile) 0x832f8b8
(gdb) p th
$3 = (rb_thread_t *) 0x82117a0
(gdb) p vm->gvl.acquired
$4 = 0
(gdb) p th->thread_id
$5 = 4160292544
(gdb) p vm->gvl.waiting_threads->thread_id
$6 = 4156005280
(gdb) info thread
2 Thread 4156771232 (LWP 18806) 0xffff410 in __kernel_vsyscall ()
```

- 1 Thread 4160292544 (LWP 18804) 0xffffe410 in __kernel_vsyscall ()

```
(gdb) p vm->gvl.waiting_threads->native_thread_data.gvl_next
$7 = (struct rb_thread_struct *) 0x82117a0
(gdb) p vm->gvl.waiting_threads->native_thread_data.gvl_next->thread_id
$8 = 4160292544
(gdb) p vm->gvl.waiting_threads->native_thread_data.gvl_next->native_thread_data.gvl_next
$9 = (struct rb_thread_struct *) 0x0
```

```
00000000 vm->gvl_waiting_threads 0 fork 00000000 rb_thread_t 0000000000000000
```

```
000000000000000000000000
```

```
#0 0xffffe410 in __kernel_vsyscall ()
#1 0x00837cf6 in pthread_cond_wait@@GLIBC_2.3.2 ()
from /lib/tls/libpthread.so.0
#2 0x0814759b in native_cond_wait (cond=0x8211824, mutex=0x82114f4)
at thread_pthread.c:266
#3 0x08147297 in gvl_acquire (vm=0x82114f0, th=0x82117a0)
at thread_pthread.c:90
#4 0x08149478 in blocking_region_end (th=0x82117a0, region=0xffffa398)
at thread.c:1048
#5 0x0814a950 in do_select (n=11, read=0x0, write=0x84aa728, except=0x0,
timeout=0x0) at thread.c:2521
#6 0x0814aaba in rb_thread_wait_fd_rw (fd=10, read=0) at thread.c:2575
#7 0x0814ab1b in rb_thread_fd_writable (fd=10) at thread.c:2597
#8 0x0806a4ba in io_fflush (fptr=0x83365a0) at io.c:676
#9 0x0806b0aa in rb_io_flush (io=137483980) at io.c:1091
#10 0x080ac18e in rb_fork_err (status=0x0, chfunc=0xf7bfc599,
charg=0xffffa6ac, fds=4, errmsg=0xffffa68c "", errmsg_buflen=32)
at process.c:2575
#11 0xf7bfc768 in establishShell (argc=1, argv=0xf7c351bc, info=0xffffa710,
SlaveName=0xffffa700 "/dev/pts/21") at pty.c:248
#12 0xf7bfd261 in pty_getpty (argc=1, argv=0xf7c351bc, self=137648620)
at pty.c:545
#13 0x08134070 in call_cfunc (func=0xf7bfcf07 <pty_getpty>, recv=137648620,
len=-1, argc=1, argv=0xf7c351bc) at vm_insnhelper.c:316
#14 0x081349b4 in vm_call_cfunc (th=0x82117a0, reg_cfp=0xf7cb4bbc, num=1,
recv=137648620, blockptr=0x0, me=0x849b1a8) at vm_insnhelper.c:403
#15 0x08134e7e in vm_call_method (th=0x82117a0, cfp=0xf7cb4bbc, num=1,
blockptr=0x0, flag=0, id=16952, me=0x849b1a8, recv=137648620)
at vm_insnhelper.c:525
#16 0x081394c7 in vm_exec_core (th=0x82117a0, initial=0) at insns.def:1010
#17 0x081442d0 in vm_exec (th=0x82117a0) at vm.c:1150
#18 0x08142fd9 in invoke_block_from_c (th=0x82117a0, block=0xf7cb4d88,
self=138349680, argc=1, argv=0xffffb170, blockptr=0x0, cref=0x0)
at vm.c:561
#19 0x081430ea in vm_yield (th=0x82117a0, argc=1, argv=0xffffb170) at vm.c:591
#20 0x081404af in rb_yield_0 (argc=1, argv=0xffffb170) at vm_eval.c:740
#21 0x081404e8 in rb_yield (val=137536340) at vm_eval.c:750
#22 0x081597f7 in rb_ary_collect (ary=137536260) at array.c:2160
#23 0x08134080 in call_cfunc (func=0x8159756 <rb_ary_collect>, recv=137536260,
len=0, argc=0, argv=0xf7c35108) at vm_insnhelper.c:319
#24 0x081349b4 in vm_call_cfunc (th=0x82117a0, reg_cfp=0xf7cb4d74, num=0,
recv=137536260, blockptr=0xf7cb4d88, me=0x8272d40) at vm_insnhelper.c:403
#25 0x08134e7e in vm_call_method (th=0x82117a0, cfp=0xf7cb4d74, num=0,
blockptr=0xf7cb4d88, flag=0, id=1568, me=0x8272d40, recv=137536260)
at vm_insnhelper.c:525
#26 0x081394c7 in vm_exec_core (th=0x82117a0, initial=0) at insns.def:1010
#27 0x081442d0 in vm_exec (th=0x82117a0) at vm.c:1150
#28 0x08142fd9 in invoke_block_from_c (th=0x82117a0, block=0xf7cb4e38,
self=138349680, argc=1, argv=0xffffbbd0, blockptr=0x0, cref=0x0)
at vm.c:561
#29 0x081430ea in vm_yield (th=0x82117a0, argc=1, argv=0xffffbbd0) at vm.c:591
#30 0x081404af in rb_yield_0 (argc=1, argv=0xffffbbd0) at vm_eval.c:740
#31 0x081404e8 in rb_yield (val=137648400) at vm_eval.c:750
#32 0x0815793d in rb_ary_each (ary=137546080) at array.c:1429
#33 0x08134080 in call_cfunc (func=0x81578cb <rb_ary_each>, recv=137546080,
len=0, argc=0, argv=0xf7c350c0) at vm_insnhelper.c:319
#34 0x081349b4 in vm_call_cfunc (th=0x82117a0, reg_cfp=0xf7cb4e24, num=0,
recv=137546080, blockptr=0xf7cb4e38, me=0x82725a8) at vm_insnhelper.c:403
#35 0x08134e7e in vm_call_method (th=0x82117a0, cfp=0xf7cb4e24, num=0,
blockptr=0xf7cb4e38, flag=0, id=424, me=0x82725a8, recv=137546080)
at vm_insnhelper.c:525
#36 0x081394c7 in vm_exec_core (th=0x82117a0, initial=0) at insns.def:1010
#37 0x081442d0 in vm_exec (th=0x82117a0) at vm.c:1150
```

```
#38 0x08142fd9 in invoke_block_from_c (th=0x82117a0, block=0xf7cb4f40,
self=138349680, argc=1, argv=0xffffc630, blockptr=0x0, cref=0x0)
at vm.c:561
#39 0x081430ea in vm_yield (th=0x82117a0, argc=1, argv=0xffffc630) at vm.c:591
#40 0x081404af in rb_yield_0 (argc=1, argv=0xffffc630) at vm_eval.c:740
#41 0x081404e8 in rb_yield (val=137647980) at vm_eval.c:750
#42 0x0815793d in rb_ary_each (ary=137546320) at array.c:1429
#43 0x08134080 in call_cfunc (func=0x81578cb <rb_ary_each>, recv=137546320,
len=0, argc=0, argv=0xf7c35054) at vm_insnhelper.c:319
#44 0x081349b4 in vm_call_cfunc (th=0x82117a0, reg_cfp=0xf7cb4f2c, num=0,
recv=137546320, blockptr=0xf7cb4f40, me=0x82725a8) at vm_insnhelper.c:403
#45 0x08134e7e in vm_call_method (th=0x82117a0, cfp=0xf7cb4f2c, num=0,
blockptr=0xf7cb4f40, flag=0, id=424, me=0x82725a8, recv=137546320)
at vm_insnhelper.c:525
#46 0x081394c7 in vm_exec_core (th=0x82117a0, initial=0) at insns.def:1010
#47 0x081442d0 in vm_exec (th=0x82117a0) at vm.c:1150
#48 0x08144aa6 in rb_iseq_eval_main (iseqval=136494340) at vm.c:1391
#49 0x08059780 in ruby_exec_internal (n=0x822bd04) at eval.c:225
#50 0x08059867 in ruby_exec_node (n=0x822bd04) at eval.c:272
#51 0x08059841 in ruby_run_node (n=0x822bd04) at eval.c:265
#52 0x080583ae in main (argc=4, argv=0xffffd1b4) at main.c:38

=end
```

#4 - 12/22/2010 05:09 PM - kosaki (Motohiro KOSAKI)

- Category set to core
- Status changed from Open to Assigned
- Assignee set to kosaki (Motohiro KOSAKI)

```
=begin
#####

=end
```

#5 - 12/22/2010 07:10 PM - kosaki (Motohiro KOSAKI)

```
=begin
#####trunk#####
fork#####GVL#####GVL#####acquire#####fork#####
#####

#####Process#fork()#####fork#####IO#popen#####rb_thread_atfork#####
#####GVL#####

#####
#####Chikanaga#####
```

commit f54418b71f57e00d4a50bd86bf7d18b8b5195287
Author: matz matz@b2dd03c8-39d4-4d8f-98ff-823fe69b080e
Date: Mon Nov 27 09:23:38 2000 +0000

matz

git-svn-id: [svn+ssh://ci.ruby-lang.org/ruby/trunk@1053_b2dd03c8-39d4-4d8f-98ff-823fe69b080e](https://ci.ruby-lang.org/ruby/trunk@1053_b2dd03c8-39d4-4d8f-98ff-823fe69b080e)

+Mon Nov 27 00:10:08 2000 Yukihiro Matsumoto matz@ruby-lang.org
+

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

commit e4cf9c59fda102a80aa767c3a66a4738e26f6213
Author: ko1 ko1@b2dd03c8-39d4-4d8f-98ff-823fe69b080e
Date: Sun Nov 28 13:00:49 2010 +0000

```
* thread_pthread.c: remove pthread_atfork().
```

```
git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@29963 b2dd03c8-39d4-4d8f-98ff-823fe6
```

=end

#6 - 12/25/2010 02:37 PM - kosaki (Motohiro KOSAKI)

- *Status changed from Assigned to Closed*

- *% Done changed from 0 to 100*

=begin

This issue was solved with changeset r30350.

Kouhei, thank you for reporting this issue.

Your contribution to Ruby is greatly appreciated.

May Ruby be with you.

=end