Ruby master - Bug #1934

Segmentation fault

08/13/2009 06:20 AM - jeheine (Julia Heine)

Status: Closed
Priority: Normal
Assignee: authorNari (Narihiro Nakamura)
Target version: 2.0.0

ruby -v: ruby 1.9.1p129 (2009-05-12 revision 23412) [386-darwin9]

Backport:

Description

When executing the program attached, I get the following segmentation fault. The segmentation fault is reproducible, but not at a deterministic point in the evaluation (so far somewhere between the 170th and the 205th prime). On previous patch-levels, I also got the segmentation fault.

/Users/julia/Ruby/Euler/euler060a.rb:85: [BUG] Segmentation fault
ruby 1.9.1p129 (2009-05-12 revision 23412) [386-darwin9]

-- control frame -------
c:0017 p:---- s:0059 b:0059 l:000058 d:000058 FINISH
c:0016 p:---- s:0057 b:0057 l:000056 d:000056 CFUNC :each

c:0014 p:---- s:0049 b:0049 l:000048 d:000048 FINISH
c:0013 p:---- s:0047 b:0047 l:000046 d:000046 CFUNC :each

c:0011 p:---- s:0039 b:0039 l:000038 d:000038 FINISH
c:0010 p:---- s:0037 b:0037 l:000036 d:000036 CFUNC :call

c:0009 p:0018 s:0033 b:0033 l:000025 d:000032 BLOCK /opt/local/lib/ruby/1.9/1.9.1/prime.rb:265
c:0008 p:---- s:0031 b:0031 l:000030 d:000030 FINISH

c:0006 p:0049 s:0026 b:0026 l:000025 d:000025 METHOD /opt/local/lib/ruby/1.9/1.9.1/prime.rb:137


c:0002 p:---- s:0004 b:0004 l:000033 d:000033 FINISH

c:0001 p:0000 s:0002 b:0002 l:000034 d:000534 TOP :26660

-- Ruby level backtrace information---------------------------------------------
/Users/julia/Ruby/Euler/euler060a.rb:85:in block (3 levels) in <main>'
/Users/julia/Ruby/Euler/euler060a.rb:85:ineach'
/Users/julia/Ruby/Euler/euler060a.rb:85:in block (2 levels) in <main>'
/Users/julia/Ruby/Euler/euler060a.rb:82:ineach'
/Users/julia/Ruby/Euler/euler060a.rb:82:in block in <main>'
/opt/local/lib/ruby/1.9/1.9.1/prime.rb:265:incall'
/opt/local/lib/ruby/1.9/1.9.1/prime.rb:265:in block in each'
/opt/local/lib/ruby/1.9/1.9.1/prime.rb:264:inloop'
/opt/local/lib/ruby/1.9/1.9.1/prime.rb:264:in each'
/opt/local/lib/ruby/1.9/1.9.1/prime.rb:137:ineach'
(eval):3:in each'
/Users/julia/Ruby/Euler/euler060a.rb:58:in'

-- C level backtrace information ---------------------------------------------

[NOTE]
You may encounter a bug of Ruby interpreter. Bug reports are welcome.
For details: http://www.ruby-lang.org/bugreport.html
=end
I could reproduce the bug, but with ruby 1.9.2dev (2009-11-17 trunk 25805) [i386-darwin9.8.0], can't reproduce. It seems a 1.9.1 specific bug.

I can reproduce this on trunk by running euler060a.rb:

```
run@paint:/tmp → ruby 475
# of primes: 2 results: [] prime: 7 process time: 0.1
# of primes: 3 results: [] prime: 11 process time: 0.1
# of primes: 4 results: [] prime: 13 process time: 0.1
# of primes: 5 results: [] prime: 17 process time: 0.1
# of primes: 6 results: [] prime: 19 process time: 0.1
# of primes: 7 results: [] prime: 23 process time: 0.1
# of primes: 8 results: [] prime: 29 process time: 0.1
# of primes: 9 results: [] prime: 31 process time: 0.1
# of primes: 10 results: [] prime: 37 process time: 0.1
# of primes: 11 results: [] prime: 41 process time: 0.11
# of primes: 12 results: [] prime: 43 process time: 0.11
# of primes: 13 results: [] prime: 47 process time: 0.11
# of primes: 14 results: [] prime: 53 process time: 0.11
# of primes: 15 results: [] prime: 59 process time: 0.11
# of primes: 16 results: [] prime: 61 process time: 0.11
# of primes: 17 results: [] prime: 67 process time: 0.12
# of primes: 18 results: [] prime: 71 process time: 0.12
# of primes: 19 results: [] prime: 73 process time: 0.12
# of primes: 20 results: [] prime: 79 process time: 0.13
# of primes: 21 results: [] prime: 83 process time: 0.13
# of primes: 22 results: [] prime: 89 process time: 0.14
# of primes: 23 results: [] prime: 97 process time: 0.14
# of primes: 24 results: [] prime: 101 process time: 0.14
# of primes: 25 results: [] prime: 103 process time: 0.14
# of primes: 26 results: [] prime: 107 process time: 0.15
# of primes: 27 results: [] prime: 109 process time: 0.16
# of primes: 28 results: [] prime: 113 process time: 0.16
# of primes: 29 results: [] prime: 127 process time: 0.16
# of primes: 30 results: [] prime: 131 process time: 0.17
# of primes: 31 results: [] prime: 137 process time: 0.18
# of primes: 32 results: [] prime: 139 process time: 0.19
# of primes: 33 results: [] prime: 149 process time: 0.2
# of primes: 34 results: [] prime: 151 process time: 0.21
# of primes: 35 results: [] prime: 157 process time: 0.22
# of primes: 36 results: [] prime: 163 process time: 0.23
# of primes: 37 results: [] prime: 167 process time: 0.24
# of primes: 38 results: [] prime: 173 process time: 0.26
# of primes: 39 results: [] prime: 179 process time: 0.26
# of primes: 40 results: [] prime: 181 process time: 0.27
# of primes: 41 results: [] prime: 191 process time: 0.28
# of primes: 42 results: [] prime: 193 process time: 0.29
# of primes: 43 results: [] prime: 197 process time: 0.3
# of primes: 44 results: [] prime: 199 process time: 0.32
# of primes: 45 results: [] prime: 211 process time: 0.33
# of primes: 46 results: [] prime: 223 process time: 0.34
# of primes: 47 results: [] prime: 227 process time: 0.38
# of primes: 48 results: [] prime: 229 process time: 0.38
# of primes: 49 results: [] prime: 233 process time: 0.38
# of primes: 50 results: [] prime: 239 process time: 0.4
# of primes: 51 results: [] prime: 241 process time: 0.41
# of primes: 52 results: [] prime: 251 process time: 0.43
# of primes: 53 results: [] prime: 257 process time: 0.44
# of primes: 54 results: [] prime: 263 process time: 0.46
# of primes: 55 results: [] prime: 269 process time: 0.47
# of primes: 56 results: [] prime: 271 process time: 0.5
# of primes: 57 results: [] prime: 277 process time: 0.52
# of primes: 58 results: [] prime: 281 process time: 0.54
# of primes: 59 results: [] prime: 283 process time: 0.56
# of primes: 60 results: [] prime: 293 process time: 0.58
# of primes: 61 results: [] prime: 307 process time: 0.6
# of primes: 62 results: [] prime: 311 process time: 0.62
```
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</table>
# of primes: 138 results: []  prime: 809  process time: 15.42
# of primes: 139 results: []  prime: 811  process time: 15.87
# of primes: 140 results: []  prime: 821  process time: 16.32
# of primes: 141 results: []  prime: 823  process time: 17.48
# of primes: 142 results: []  prime: 827  process time: 17.99
# of primes: 143 results: []  prime: 829  process time: 18.69
# of primes: 144 results: []  prime: 839  process time: 19.19
# of primes: 145 results: []  prime: 853  process time: 19.82

475:83: [BUG] Segmentation fault
ruby 1.9.3dev (2010-06-01 trunk 28120) [i686-linux]

-- control frame ----------
c:0018 p:---- s:0000 b:0060 l:000059 d:000059 CFUNC :combination
c:0017 p:---- s:0058 b:0058 l:000057 d:000057 CFUNC :each
c:0016 p:---- s:0056 b:0056 l:000055 d:000055 CFUNC :to_a

c:0014 p:---- s:0048 b:0048 l:000047 d:000047 FINISH

c:0013 p:---- s:0046 b:0046 l:000045 d:000045 CFUNC :each

c:0012 p:0155 s:0043 b:0043 l:001001ee4 d:0000042 BLOCK 475:82
c:0011 p:---- s:0038 b:0038 l:000037 d:000037 FINISH
c:0010 p:---- s:0036 b:0036 l:000035 d:000035 CFUNC :call

c:0008 p:---- s:0030 b:0030 l:000029 d:000029 FINISH


c:0003 p:0086 s:0009 b:0009 l:001001ee4 d:0000e0 EVAL 475:58

c:0002 p:---- s:0004 b:0004 l:000003 d:000003 FINISH
c:0001 p:0000 s:0002 b:0002 l:001001ee4 d:001ee4 TOP

-- Ruby level backtrace information ------------------------------------------
475:83:in `<main>'
/usr/local/lib/ruby/1.9.1/forwardable.rb:182:in `each'
/usr/local/lib/ruby/1.9.1/prime.rb:269:in `each'
/usr/local/lib/ruby/1.9.1/prime.rb:269:in `loop'
/usr/local/lib/ruby/1.9.1/prime.rb:270:in `inblock in each'
/usr/local/lib/ruby/1.9.1/prime.rb:270:in `call'
475:82:in `block in '
475:82:in `each'
475:83:in `block (2 levels) in '
475:83:in `to_a'
475:83:in `each'

-- C level backtrace information -------------------------------------------
ruby(rb_vm_bugreport+0xa5) [0x8161375]
ruby() [0x81a0069]
ruby(rb_bug+0x28) [0x81a0118]
ruby() [0x80f4088]
[0xd9a410]
ruby() [0x817300c]
ruby() [0x817512d]
ruby() [0x81520b9]
ruby() [0x8157895]
ruby(rb_iterate+0xac) [0x814d11c]
ruby(rb_block_call+0x30) [0x814d2a5]
ruby() [0x819da59]
ruby() [0x814cf55]
ruby() [0x8158541]
ruby() [0x815a8e8]
ruby() [0x815e2c6]
ruby(rb_yield+0x50) [0x815f6c0]
ruby(rb_ary_each+0x41) [0x8170dc1]
ruby() [0x8158541]
ruby() [0x815a8e8]
ruby() [0x815e2c6]
ruby(rb_vm_invoke_proc+0x76) [0x8151ba6]
You may have encountered a bug in the Ruby interpreter or extension libraries. Bug reports are welcome. For details: http://www.ruby-lang.org/bugreport.html
Aborted
#3 - 06/27/2010 11:47 PM - mame (Yusuke Endoh)
- Status changed from Open to Assigned
- Assignee set to author Nari (Narihiro Nakamura)
- Target version set to 2.0.0
Hi,
I confirmed this issue at r28115 of trunk. This issue has been fixed at r28191 in ruby_1_9_2, but not in trunk because the code is quite different between 1_9_2 and trunk because of lazy sweep feature, which is included only in trunk. Narihiro, who is the author of lazy sweep, is assigned. Here is a log by valgrind:
...
# of primes: 129 results: [] prime: 739 process time: 189.97
# of primes: 130 results: [] prime: 743 process time: 197.16
# of primes: 131 results: [] prime: 751 process time: 205.02
...
% begin
This issue was solved with changeset r28472.
Julia, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.
% end

Files

---
euler060a.rb | 3.47 KB | 08/13/2009 | jeheine (Julia Heine)