

## Ruby trunk - Bug #178

### File.open on sprintf-formatted string fails with encoding conversion error on OS X

06/18/2008 09:44 AM - drbrain (Eric Hodel)

<b>Status:</b>	Closed	
<b>Priority:</b>	Normal	
<b>Assignee:</b>	naruse (Yui NARUSE)	
<b>Target version:</b>		
<b>ruby -v:</b>		<b>Backport:</b>
<b>Description</b>		
=begin String#% and File.open are interacting strangely on OS X, so files opened with a sprintf formatted string raise an ArgumentError:  \$ ruby19 -vwe 'File.new("foo" % [])' ruby 1.9.0 (2008-06-18 revision 15873) [i686-darwin9.3.0] -e:1:in initialize': transcoding not supported (from US-ASCII to UTF8-MAC) (ArgumentError) from -e:1:innew' from -e:1:in ``  Using just "foo" as the filename works fine:  \$ ruby19 -we 'File.new("foo")'  As does String#<<:  \$ ruby19 -we 'File.new("foo" << "")' =end		

#### Associated revisions

##### Revision e3e8af93 - 02/16/2018 02:45 PM - k0kubun (Takashi Kokubun)

mjit.c: fix deadlock on class serial increment

This is reported by @hasimo. Fixing a case like this:

```
#0 Ill_lock_wait () at ../sysdeps/unix/sysv/linux/x86_64/lowlevellock.S:135
#1 0x00007fc7bd824dbd in __GI_pthread_mutex_lock (mutex=mutex@entry=0x55946d294440 ) at ../nptl/pthread_mutex_lock.c:80 4
#2 0x000055946cec54d9 in rb_native_mutex_lock (lock=lock@entry=0x55946d294440 ) at thread_pthread.c:211
#3 0x000055946cde10ca in CRITICAL_SECTION_START (msg=0x55946cfb5423 "mjit_gc_start_hook", level=4) at mjit.c:392
#4 mjit_gc_start_hook () at mjit.c:412
#5 0x000055946cda0dfe in gc_enter (event=0x55946cfaf91e "gc_rest", objspace=0x55946da51760) at gc.c:6623
#6 gc_rest (objspace=objspace@entry=0x55946da51760) at gc.c:6515
#7 0x000055946cd9f1cf in gc_rest (objspace=0x55946da51760) at gc.c:7841
#8 objspace_malloc_increase (objspace=objspace@entry=0x55946da51760, new_size=, old_size=old_size@entry=0,
type=type@entry=MEMOP_TYPE_MALLOC, mem=0x7fc7a4439010) at gc.c:7842
#9 0x000055946cda1706 in objspace_malloc_fixup (size=, mem=0x7fc7a4439010, objspace=0x55946da51760) at gc.c:7910
#10 objspace_xmalloc0 (objspace=0x55946da51760, size=, size@entry=3145728) at gc.c:7939
#11 0x000055946cda3620 in ruby_xmalloc0 (size=3145728) at gc.c:8006
#12 ruby_xmalloc (size=size@entry=3145728) at gc.c:8015
#13 0x000055946ce93f4c in st_init_table_with_size (type=0x55946d28da30 , size=) at st.c:602
#14 0x000055946ce94287 in rebuild_table (tab=tab@entry=0x55946db669f0) at st.c:777
#15 0x000055946ce963f7 in rebuild_table_if_necessary (tab=0x55946db669f0) at st.c:1139
#16 st_add_direct_with_hash (hash=8577035585096733536, value=20, key=808451, tab=0x55946db669f0) at st.c:1207
#17 st_update (tab=0x55946db669f0, key=key@entry=808451, func=, arg=140726472841392) at st.c:1512
#18 0x000055946cda9e27 in tbl_update (optional_arg=, func=, key=, hash=) at hash.c:561
#19 rb_hash_aset (hash=94095983218480, key=key@entry=808451, val=val@entry=20) at hash.c:1654
#20 0x000055946cde243a in mjit_add_class_serial (class_serial=class_serial@entry=404225) at mjit.c:1414 3
#21 0x000055946cefcfab in rb_next_class_serial () at vm.c:321
#22 0x000055946cf48324 in class_alloc (klass=, flags=28) at class.c:178
#23 rb_include_class_new (module=module@entry=94096115733840, super=0) at class.c:820
#24 0x000055946cf487ac in include_modules_at (klass=klass@entry=94096135960920, c=, module=, module@entry=94096115734160,
search_super=search_super@entry=1) at class.c:913
#25 0x000055946cf48ac8 in rb_include_module (klass=94096135960920, module=module@entry=94096115734160) at class.c:870
#26 0x000055946cd84993 in rb_mod_undef_features (module=94096115734160, include=) at eval.c:1178
#27 0x000055946cf06829 in vm_call0_cfunc_with_frame (ci=0x7ffd6f6c9a20, cc=0x7ffd6f6c9ba0, argv=0x7ffd6f6c9a30,
calling=0x7ffd6f6c9a30, ec=0x55946da519c8) at vm_eval.c:87
```

#28 vm\_call0\_cfunc (argv=0x7ffd6f6c9ba0, cc=0x7ffd6f6c9ba0, ci=0x7ffd6f6c9a20, calling=0x7ffd6f6c9a30, ec=0x55946da519c8) at vm\_eval.c:102  
#29 vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6c9ae0, ci=ci@entry=0x7ffd6f6c9ad0, cc=cc@entry=0x7ffd6f6c9b00, argv=argv@entry=0x7ffd6f6c9ba0) at vm\_eval.c:133  
#30 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6c9ba0, argc=1, id=4849, recv=94096115734160, ec=0x55946da519c8) at vm\_eval.c:60  
#31 rb\_call0 (ec=0x55946da519c8, recv=94096115734160, mid=4849, mid@entry=94096135960920, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6c9ba0, scope=scope@entry=CALL\_FCALL, self=94096135960920) at vm\_eval.c:302  
#32 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x7ffd6f6c9ba0, argc=1, mid=94096135960920, recv=) at vm\_eval.c:595  
#33 rb\_funcallv (recv=, mid=mid@entry=4849, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6c9ba0) at vm\_eval.c:825  
#34 0x000055946cd848a7 in rb\_mod\_include (argc=0, argv=0x7fc7bdb4fce8, module=94096135960920) at eval.c:1203  
#35 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594710c06b0, cc=, calling=, reg\_cfp=0x7fc7bdc4df00, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#36 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4df00, calling=, ci=0x5594710c06b0, cc=) at vm\_inshelper.c:1944  
#37 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#38 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#39 0x000055946cf035fc in invoke\_block (captured=0x7ffd6f6ca0a0, opt\_pc=, type=, cref=0x559476c23930, self=94096135960920, iseq=0x559471335ee0, ec=0x55946da519c8) at vm.c:1005  
#40 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7ffd6f6ca0a0, self=94096135960920, argc=, argv=, passed\_block\_handler=0, cref=0x559476c23930, is\_lambda=0) at vm.c:1057  
#41 0x000055946cf04520 in invoke\_block\_from\_c\_bh (ec=ec@entry=0x55946da519c8, block\_handler=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108, cref=, is\_lambda=, is\_lambda@entry=0, force\_blockarg=0, passed\_block\_handler=0) at vm.c:1075  
#42 0x000055946cf04958 in vm\_yield\_with\_cref (is\_lambda=0, cref=, argv=0x7ffd6f6ca108, argc=1, ec=0x55946da519c8) at vm.c:1112  
#43 yield\_under (under=94096135960920, self=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108) at vm\_eval.c:1572  
#44 0x000055946cf04b12 in rb\_mod\_module\_exec (argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108, mod=) at vm\_eval.c:1770  
#45 0x000055946ce00fc6 in rb\_mod\_initialize (module=94096135960920) at object.c:1978  
#46 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6ca130, cc=0x7fc7bdb4fc98, argv=0x7fc7bdb4fc98, calling=0x7ffd6f6ca140, ec=0x55946da519c8) at vm\_eval.c:87  
#47 vm\_call0\_cfunc (argv=0x7fc7bdb4fc98, cc=0x7fc7bdb4fc98, ci=0x7ffd6f6ca130, calling=0x7ffd6f6ca140, ec=0x55946da519c8) at vm\_eval.c:102  
#48 vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6ca1f0, ci=ci@entry=0x7ffd6f6ca1e0, cc=cc@entry=0x7ffd6f6ca210, argv=argv@entry=0x7fc7bdb4fc98) at vm\_eval.c:133  
#49 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7fc7bdb4fc98, argc=0, id=3057, recv=94096135960920, ec=0x55946da519c8) at vm\_eval.c:60  
#50 rb\_call0 (ec=0x55946da519c8, recv=recv@entry=94096135960920, mid=mid@entry=3057, argc=argc@entry=3057, argv=argv@entry=0x0, scope=scope@entry=CALL\_FCALL, self=94095983466120) at vm\_eval.c:302  
#51 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x0, argc=3057, mid=3057, recv=94096135960920) at vm\_eval.c:595  
#52 rb\_funcallv (recv=recv@entry=94096135960920, mid=mid@entry=3057, argc=argc@entry=0, argv=argv@entry=0x7fc7bdb4fc98) at vm\_eval.c:825  
#53 0x000055946cd89673 in rb\_obj\_call\_init (obj=obj@entry=94096135960920, argc=argc@entry=0, argv=argv@entry=0x7fc7bdb4fc98) at eval.c:1590  
#54 0x000055946ce048a1 in rb\_class\_s\_new (argc=0, argv=0x7fc7bdb4fc98, klass=) at object.c:2153  
#55 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x559471339c80, cc=, calling=, reg\_cfp=0x7fc7bdc4dfa8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#56 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4dfa8, calling=, ci=0x559471339c80, cc=) at vm\_inshelper.c:1944  
#57 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#58 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#59 0x000055946cf03274 in invoke\_bmethod (ec=ec@entry=0x55946da519c8, iseq=iseq@entry=0x55946f15cbcb0, self=self@entry=94096115734640, me=me@entry=0x559475664e28, type=type@entry=572653825, opt\_pc=0, captured=0x55947158e8a0) at vm.c:1026  
#60 0x000055946cf03534 in invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x55947158e8a0, self=94096115734640, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=1) at vm.c:1060  
#61 0x000055946cf036ce in invoke\_block\_from\_c\_proc (ec=, proc=, self=, argc=1, argv=, passed\_block\_handler=, is\_lambda=) at vm.c:1150  
#62 0x000055946cf03811 in vm\_invoke\_bmethod (block\_handler=, argv=, argc=1, self=, proc=, ec=0x55946da519c8) at vm.c:1175  
#63 vm\_call\_bmethod\_body (ci=, cc=0x55946f625960, argv=, calling=0x7ffd6f6ca9b0, ec=0x55946da519c8) at vm\_inshelper.c:1971  
#64 vm\_call\_bmethod (ec=0x55946da519c8, cfp=0x7fc7bdc4e0c0, calling=0x7ffd6f6ca9b0, ci=, cc=0x55946f625960) at vm\_inshelper.c:1988  
#65 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e0c0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#66 0x000055946cf0e63e in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:797  
#67 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#68 0x000055946cf06767 in vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6cad00, ci=ci@entry=0x7ffd6f6cacf0, cc=cc@entry=0x7ffd6f6cad20, argv=argv@entry=0x7ffd6f6cadb0) at vm\_eval.c:129  
#69 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6cadb0, argc=1, id=3681, recv=94096115734640, ec=0x55946da519c8) at vm\_eval.c:60  
#70 rb\_call0 (ec=0x55946da519c8, recv=recv@entry=94096115734640, mid=3681, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cad90, scope=scope@entry=CALL\_FCALL, self=94095983452880) at vm\_eval.c:302  
#71 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x7ffd6f6cad90, argc=1, mid=, recv=94096115734640) at vm\_eval.c:595  
#72 rb\_funcallv (recv=recv@entry=94096115734640, mid=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cadb0) at vm\_eval.c:825  
#73 0x000055946cf477d2 in rb\_class\_inherited (super=super@entry=94096115734640, klass=class@entry=94096135961440) at class.c:625  
#74 0x000055946cf0f796 in vm\_declare\_class (super=, cbase=94096094868200, flags=, id=847387) at vm\_inshelper.c:3134  
#75 vm\_define\_class (super=, cbase=, flags=, id=847387) at vm\_inshelper.c:3167  
#76 vm\_find\_or\_create\_class\_by\_id (super=, cbase=, flags=, id=847387) at vm\_inshelper.c:3196  
#77 vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:685  
#78 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#79 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x559471f1b548) at vm.c:2046  
#80 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94096135872160, wrap=wrap@entry=0) at load.c:611  
#81 0x000055946cdd41f1 in rb\_require\_internal (fname=94096135872400, fname@entry=94096135872440, safe=0) at load.c:992

#82 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94096135872440) at load.c:1038  
#83 rb\_f\_require (obj=, fname=94096135872440) at load.c:820  
#84 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594708700a0, cc=, calling=, reg\_cfp=0x7fc7bdc4e168, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#85 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e168, calling=, ci=0x5594708700a0, cc=) at vm\_inshelper.c:1944  
#86 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e168, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#87 0x000055946cf0e63e in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:797  
#88 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#89 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4e490, opt\_pc=, type=, cref=0x0, self=94096096426480, iseq=0x55946e49f0b8, ec=0x55946da519c8) at vm.c:1005  
#90 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4e490, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#91 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#92 vm\_yield (argc=1, argv=0x7ffd6f6cb938, ec=) at vm.c:1120  
#93 rb\_yield\_0 (argv=0x7ffd6f6cb938, argc=1) at vm\_eval.c:980  
#94 rb\_yield\_1 (val=94096130169040) at vm\_eval.c:986  
#95 rb\_yield (val=) at vm\_eval.c:996  
#96 0x000055946cf2113d in rb\_ary\_each (ary=94096076222560) at array.c:1820  
#97 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946ed0d090, cc=, calling=, reg\_cfp=0x7fc7bdc4e478, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#98 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e478, calling=, ci=0x55946ed0d090, cc=) at vm\_inshelper.c:1944  
#99 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#100 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#101 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4e500, opt\_pc=, type=, cref=0x0, self=94096096426480, iseq=0x55946e49f298, ec=0x55946da519c8) at vm.c:1005  
#102 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4e500, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#103 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#104 vm\_yield (argc=1, argv=0x7ffd6f6cbdf8, ec=) at vm.c:1120  
#105 rb\_yield\_0 (argv=0x7ffd6f6cbdf8, argc=1) at vm\_eval.c:980  
#106 rb\_yield\_1 (val=94096095502480) at vm\_eval.c:986  
#107 rb\_yield (val=) at vm\_eval.c:996  
#108 0x000055946cf2113d in rb\_ary\_each (ary=94096095328480) at array.c:1820  
#109 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e8552a0, cc=, calling=, reg\_cfp=0x7fc7bdc4e4e8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#110 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e4e8, calling=, ci=0x55946e8552a0, cc=) at vm\_inshelper.c:1944  
#111 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#112 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#113 0x000055946cf06767 in vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6cc2d0, ci=ci@entry=0x7ffd6f6cc2c0, cc=cc@entry=0x7ffd6f6cc2f0, argv=argv@entry=0x7ffd6f6cc390) at vm\_eval.c:129  
#114 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6cc390, argc=0, id=135807, recv=94096096186440, ec=0x55946da519c8) at vm\_eval.c:60  
#115 rb\_call0 (ec=0x55946da519c8, recv=94096096186440, mid=135807, argc=, argv=argv@entry=0x8, scope=scope@entry=CALL\_PUBLIC, self=94095993048320) at vm\_eval.c:302  
#116 0x000055946cf0a31a in rb\_call (scope=CALL\_PUBLIC, argv=0x8, argc=, mid=, recv=) at vm\_eval.c:595  
#117 rb\_funcall\_with\_block (recv=, mid=, argc=argc@entry=0, argv=argv@entry=0x7ffd6f6cc390, passed\_procval=passed\_procval@entry=8) at vm\_eval.c:857  
#118 0x000055946ceb319c in rb\_sym\_proc\_call (mid=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cc388, passed\_proc=passed\_proc@entry=8) at string.c:10480  
#119 0x000055946cf0477c in vm\_yield\_with\_symbol (block\_handler=0, argv=0x7ffd6f6cc388, argc=1, symbol=, ec=) at vm\_inshelper.c:2573  
#120 invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1084  
#121 vm\_yield (argc=1, argv=0x7ffd6f6cc388, ec=) at vm.c:1120  
#122 rb\_yield\_0 (argv=0x7ffd6f6cc388, argc=1) at vm\_eval.c:980  
#123 rb\_yield\_1 (val=94096096186440) at vm\_eval.c:986  
#124 rb\_yield (val=) at vm\_eval.c:996  
#125 0x000055946cf2113d in rb\_ary\_each (ary=94095993048320) at array.c:1820  
#126 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594744d8280, cc=, calling=, reg\_cfp=0x7fc7bdc4e590, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#127 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e590, calling=, ci=0x5594744d8280, cc=) at vm\_inshelper.c:1944  
#128 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e590, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#129 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#130 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#131 0x000055946cf035fc in invoke\_block (captured=0x7ffd6f6cc8e0, opt\_pc=, type=, cref=0x559474604128, self=94096096426480, iseq=0x5594745027e8, ec=0x55946da519c8) at vm.c:1005  
#132 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7ffd6f6cc8e0, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x559474604128, is\_lambda=0) at vm.c:1057  
#133 0x000055946cf04520 in invoke\_block\_from\_c\_bh (ec=ec@entry=0x55946da519c8, block\_handler=, argc=argc@entry=1, argv=argv@entry=0x7fc7bdb4f7f8, cref=, is\_lambda=, is\_lambda@entry=0, force\_blockarg=0, passed\_block\_handler=0) at vm.c:1075  
#134 0x000055946cf04958 in vm\_yield\_with\_cref (is\_lambda=0, cref=, argv=0x7fc7bdb4f7f8, argc=1, ec=0x55946da519c8) at vm.c:1112

#135 yield\_under (under=94096093646040, self=, argc=1, argv=0x7fc7bdb4f7f8) at vm\_eval.c:1572  
#136 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e5cd230, cc=, calling=, reg\_cfp=0x7fc7bdc4e600, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#137 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e600, calling=, ci=0x55946e5cd230, cc=) at vm\_inshelper.c:1944  
#138 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#139 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#140 0x000055946cf035fc in invoke\_block (captured=0x5594744c4fb0, opt\_pc=, type=, cref=0x0, self=94095990659320, iseq=0x55946e192aa0, ec=0x55946da519c8) at vm.c:1005  
#141 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x5594744c4fb0, self=94095990659320, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#142 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#143 vm\_yield (argc=1, argv=0x7ffd6f6ccdc8, ec=) at vm.c:1120  
#144 rb\_yield\_0 (argv=0x7ffd6f6ccdc8, argc=1) at vm\_eval.c:980  
#145 rb\_yield\_1 (val=94096094867920) at vm\_eval.c:986  
#146 rb\_yield (val=) at vm\_eval.c:996  
#147 0x000055946cf2113d in rb\_ary\_each (ary=94096094867160) at array.c:1820  
#148 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6cce00, cc=0x7ffd6f6cce70, argv=0x7fc7bdb4f6b8, calling=0x7ffd6f6cce50, ec=0x55946da519c8) at vm\_eval.c:87  
#149 vm\_call0\_cfunc (argv=0x7fc7bdb4f6b8, cc=0x7ffd6f6cce70, ci=0x7ffd6f6cce00, calling=0x7ffd6f6cce50, ec=0x55946da519c8) at vm\_eval.c:102  
#150 vm\_call0\_body (ec=0x55946da519c8, calling=calling@entry=0x7ffd6f6cce00, ci=ci@entry=0x7ffd6f6cceb0, cc=cc@entry=0x7ffd6f6ccce0, argv=0x7fc7bdb4f6b8) at vm\_eval.c:133  
#151 0x000055946cf06c50 in vm\_call0 (me=, argv=, argc=, id=, recv=, ec=) at vm\_eval.c:60  
#152 rb\_vm\_call (ec=, recv=, id=, argc=, argv=, me=) at vm\_eval.c:209  
#153 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946dba2780, cc=, calling=, reg\_cfp=0x7fc7bdc4e7c0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#154 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e7c0, calling=, ci=0x55946dba2780, cc=) at vm\_inshelper.c:1944  
#155 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e7c0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#156 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#157 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#158 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946dfed3a8) at vm.c:2046  
#159 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095988939080, wrap=wrap@entry=0) at load.c:611  
#160 0x000055946cdd41f1 in rb\_require\_internal (fname=94095988939160, fname@entry=94095988939200, safe=0) at load.c:992  
#161 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94095988939200) at load.c:1038  
#162 rb\_f\_require (obj=, fname=94095988939200) at load.c:820  
#163 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946dffa920, cc=, calling=, reg\_cfp=0x7fc7bdc4e948, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#164 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e948, calling=, ci=0x55946dffa920, cc=) at vm\_inshelper.c:1944  
#165 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e948, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#166 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#167 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#168 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946dfef438) at vm.c:2046  
#169 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993039280, wrap=wrap@entry=0) at load.c:611  
#170 0x000055946cdd41f1 in rb\_require\_internal (fname=fname@entry=94095993043840, safe=0) at load.c:992  
#171 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94095993043840) at load.c:1038  
#172 rb\_f\_require (obj=, fname=94095993043840) at load.c:820  
#173 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946ea12160, cc=, calling=, reg\_cfp=0x7fc7bdc4e9b8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#174 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e9b8, calling=, ci=0x55946ea12160, cc=) at vm\_inshelper.c:1944  
#175 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e9b8, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#176 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#177 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#178 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e3d7c48) at vm.c:2046  
#179 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095988920840, wrap=) at load.c:611  
#180 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095988920840) at load.c:642  
#181 rb\_f\_load (argc=, argv=) at load.c:710  
#182 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e7c96e0, cc=, calling=, reg\_cfp=0x7fc7bdc4ea28, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#183 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ea28, calling=, ci=0x55946e7c96e0, cc=) at vm\_inshelper.c:1944  
#184 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ea28, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#185 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#186 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#187 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4eae8, opt\_pc=, type=, cref=0x0, self=9409598891400, iseq=0x55946e4dae10, ec=0x55946da519c8) at vm.c:1005  
#188 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4eae8, self=9409598891400, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#189 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075

#190 vm\_yield (argc=1, argv=0x7ffd6f6ce8e8, ec=) at vm.c:1120  
#191 rb\_yield\_0 (argv=0x7ffd6f6ce8e8, argc=1) at vm\_eval.c:980  
#192 rb\_yield\_1 (val=94095988924840) at vm\_eval.c:986  
#193 rb\_yield (val=) at vm\_eval.c:996  
#194 0x000055946cf2113d in rb\_ary\_each (ary=94095988920960) at array.c:1820  
#195 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e421000, cc=, calling=, reg\_cfp=0x7fc7bdc4ead0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#196 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ead0, calling=, ci=0x55946e421000, cc=) at vm\_inshelper.c:1944  
#197 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ead0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#198 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#199 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#200 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e35f2c0) at vm.c:2046  
#201 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095992643280, wrap=) at load.c:611  
#202 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095992643280) at load.c:642  
#203 rb\_f\_load (argc=, argv=) at load.c:710  
#204 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e24bb20, cc=, calling=, reg\_cfp=0x7fc7bdc4ec58, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#205 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ec58, calling=, ci=0x55946e24bb20, cc=) at vm\_inshelper.c:1944  
#206 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ec58, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#207 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#208 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#209 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e3a7390) at vm.c:2046  
#210 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993616120, wrap=) at load.c:611  
#211 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095993616120) at load.c:642  
#212 rb\_f\_load (argc=, argv=) at load.c:710  
#213 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e6a00d0, cc=, calling=, reg\_cfp=0x7fc7bdc4ecc8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#214 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ecc8, calling=, ci=0x55946e6a00d0, cc=) at vm\_inshelper.c:1944  
#215 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ecc8, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#216 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#217 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#218 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e470100) at vm.c:2046  
#219 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993672200, wrap=) at load.c:611  
#220 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095993672200) at load.c:642  
#221 rb\_f\_load (argc=, argv=) at load.c:710  
#222 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e3306a0, cc=, calling=, reg\_cfp=0x7fc7bdc4efa0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#223 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4efa0, calling=, ci=0x55946e3306a0, cc=) at vm\_inshelper.c:1944  
#224 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4efa0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#225 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#226 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#227 0x000055946cf119d5 in rb\_iseq\_eval\_main (iseq=iseq@entry=0x55946e4bbba0) at vm.c:2057  
#228 0x000055946cd83d54 in ruby\_exec\_internal (n=0x55946e4bbba0) at eval.c:247  
#229 0x000055946cd87fdf in ruby\_exec\_node (n=0x55946e4bbba0) at eval.c:311  
#230 ruby\_run\_node (n=) at eval.c:303  
#231 0x000055946cd831bf in main (argc=22, argv=0x7ffd6f6d0148) at ./main.c:42

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@62433 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

## Revision 62433 - 02/16/2018 02:45 PM - k0kubun (Takashi Kokubun)

mjit.c: fix deadlock on class serial increment

This is reported by @hasimo. Fixing a case like this:

```
#0 Ill_lock_wait () at ../sysdeps/unix/sysv/linux/x86_64/lowlevellock.S:135
#1 0x00007fc7bd824dbd in __GI_pthread_mutex_lock (mutex=mutex@entry=0x55946d294440 ) at ../nptl/pthread_mutex_lock.c:80 4
#2 0x000055946cec54d9 in rb_native_mutex_lock (lock=lock@entry=0x55946d294440 ) at thread_pthread.c:211
#3 0x000055946cde10ca in CRITICAL_SECTION_START (msg=0x55946cfb5423 "mjit_gc_start_hook", level=4) at mjit.c:392
#4 mjit_gc_start_hook () at mjit.c:412
#5 0x000055946cda0dfe in gc_enter (event=0x55946cfaf91e "gc_rest", objspace=0x55946da51760) at gc.c:6623
#6 gc_rest (objspace=objspace@entry=0x55946da51760) at gc.c:6515
#7 0x000055946cd9f1cf in gc_rest (objspace=0x55946da51760) at gc.c:7841
#8 objspace_malloc_increase (objspace=objspace@entry=0x55946da51760, new_size=, old_size=old_size@entry=0,
type=type@entry=MEMOP_TYPE_MALLOC, mem=0x7fc7a4439010) at gc.c:7842
#9 0x000055946cda1706 in objspace_malloc_fixup (size=, mem=0x7fc7a4439010, objspace=0x55946da51760) at gc.c:7910
#10 objspace_xmalloc0 (objspace=0x55946da51760, size=, size@entry=3145728) at gc.c:7939
#11 0x000055946cda3620 in ruby_xmalloc0 (size=3145728) at gc.c:8006
#12 ruby_xmalloc (size=size@entry=3145728) at gc.c:8015
#13 0x000055946ce93f4c in st_init_table_with_size (type=0x55946d28da30 , size=) at st.c:602
#14 0x000055946ce94287 in rebuild_table (tab=tab@entry=0x55946db669f0) at st.c:777
```

#15 0x000055946ce963f7 in rebuild\_table\_if\_necessary (tab=0x55946db669f0) at st.c:1139  
#16 st\_add\_direct\_with\_hash (hash=8577035585096733536, value=20, key=808451, tab=0x55946db669f0) at st.c:1207  
#17 st\_update (tab=0x55946db669f0, key=key@entry=808451, func=, arg=140726472841392) at st.c:1512  
#18 0x000055946cda9e27 in tbl\_update (optional\_arg=, func=, key=, hash=) at hash.c:561  
#19 rb\_hash\_aset (hash=94095983218480, key=key@entry=808451, val=val@entry=20) at hash.c:1654  
#20 0x000055946cde243a in mjit\_add\_class\_serial (class\_serial=class\_serial@entry=404225) at mjit.c:1414 3  
#21 0x000055946cefcfab in rb\_next\_class\_serial () at vm.c:321  
#22 0x000055946cf48324 in class\_alloc (klass=, flags=28) at class.c:178  
#23 rb\_include\_class\_new (module=module@entry=94096115733840, super=0) at class.c:820  
#24 0x000055946cf487ac in include\_modules\_at (klass=klass@entry=94096135960920, c=, module=, module@entry=94096115734160, search\_super=search\_super@entry=1) at class.c:913  
#25 0x000055946cf48ac8 in rb\_include\_module (klass=94096135960920, module=module@entry=94096115734160) at class.c:870  
#26 0x000055946cd84993 in rb\_mod\_append\_features (module=94096115734160, include=) at eval.c:1178  
#27 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6c9a20, cc=0x7ffd6f6c9ba0, argv=0x7ffd6f6c9ba0, calling=0x7ffd6f6c9a30, ec=0x55946da519c8) at vm\_eval.c:87  
#28 vm\_call0\_cfunc (argv=0x7ffd6f6c9ba0, cc=0x7ffd6f6c9ba0, ci=0x7ffd6f6c9a20, calling=0x7ffd6f6c9a30, ec=0x55946da519c8) at vm\_eval.c:102  
#29 vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6c9ae0, ci=ci@entry=0x7ffd6f6c9ad0, cc=cc@entry=0x7ffd6f6c9b00, argv=argv@entry=0x7ffd6f6c9ba0) at vm\_eval.c:133  
#30 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6c9ba0, argc=1, id=4849, recv=94096115734160, ec=0x55946da519c8) at vm\_eval.c:60  
#31 rb\_call0 (ec=0x55946da519c8, recv=94096115734160, mid=4849, mid@entry=94096135960920, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6c9ba0, scope=scope@entry=CALL\_FCALL, self=94096135960920) at vm\_eval.c:302  
#32 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x7ffd6f6c9ba0, argc=1, mid=94096135960920, recv=) at vm\_eval.c:595  
#33 rb\_funcallv (recv=, mid=mid@entry=4849, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6c9ba0) at vm\_eval.c:825  
#34 0x000055946cd848a7 in rb\_mod\_include (argc=0, argv=0x7fc7bdb4fce8, module=94096135960920) at eval.c:1203  
#35 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594710c06b0, cc=, calling=, reg\_cfp=0x7fc7bdc4df00, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#36 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4df00, calling=, ci=0x5594710c06b0, cc=) at vm\_inshelper.c:1944  
#37 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#38 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#39 0x000055946cf035fc in invoke\_block (captured=0x7ffd6f6ca0a0, opt\_pc=, type=, cref=0x559476c23930, self=94096135960920, iseq=0x559471335ee0, ec=0x55946da519c8) at vm.c:1005  
#40 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7ffd6f6ca0a0, self=94096135960920, argc=, argv=, passed\_block\_handler=0, cref=0x559476c23930, is\_lambda=0) at vm.c:1057  
#41 0x000055946cf04520 in invoke\_block\_from\_c\_bh (ec=ec@entry=0x55946da519c8, block\_handler=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108, cref=, is\_lambda=, is\_lambda@entry=0, force\_blockarg=0, passed\_block\_handler=0) at vm.c:1075  
#42 0x000055946cf04958 in vm\_yield\_with\_cref (is\_lambda=0, cref=, argv=0x7ffd6f6ca108, argc=1, ec=0x55946da519c8) at vm.c:1112  
#43 yield\_under (under=94096135960920, self=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108) at vm\_eval.c:1572  
#44 0x000055946cf04b12 in rb\_mod\_module\_exec (argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108, mod=) at vm\_eval.c:1770  
#45 0x000055946ce00fc6 in rb\_mod\_initialize (module=94096135960920) at object.c:1978  
#46 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6ca130, cc=0x7fc7bdb4fc98, argv=0x7fc7bdb4fc98, calling=0x7ffd6f6ca140, ec=0x55946da519c8) at vm\_eval.c:87  
#47 vm\_call0\_cfunc (argv=0x7fc7bdb4fc98, cc=0x7fc7bdb4fc98, ci=0x7ffd6f6ca130, calling=0x7ffd6f6ca140, ec=0x55946da519c8) at vm\_eval.c:102  
#48 vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6ca1f0, ci=ci@entry=0x7ffd6f6ca1e0, cc=cc@entry=0x7ffd6f6ca210, argv=argv@entry=0x7fc7bdb4fc98) at vm\_eval.c:133  
#49 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7fc7bdb4fc98, argc=0, id=3057, recv=94096135960920, ec=0x55946da519c8) at vm\_eval.c:60  
#50 rb\_call0 (ec=0x55946da519c8, recv=recv@entry=94096135960920, mid=mid@entry=3057, argc=argc@entry=3057, argv=argv@entry=0x0, scope=scope@entry=CALL\_FCALL, self=94095983466120) at vm\_eval.c:302  
#51 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x0, argc=3057, mid=3057, recv=94096135960920) at vm\_eval.c:595  
#52 rb\_funcallv (recv=recv@entry=94096135960920, mid=mid@entry=3057, argc=argc@entry=0, argv=argv@entry=0x7fc7bdb4fc98) at vm\_eval.c:825  
#53 0x000055946cd89673 in rb\_obj\_call\_init (obj=obj@entry=94096135960920, argc=argc@entry=0, argv=argv@entry=0x7fc7bdb4fc98) at eval.c:1590  
#54 0x000055946ce048a1 in rb\_class\_s\_new (argc=0, argv=0x7fc7bdb4fc98, klass=) at object.c:2153  
#55 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x559471339c80, cc=, calling=, reg\_cfp=0x7fc7bdc4dfa8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#56 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4dfa8, calling=, ci=0x559471339c80, cc=) at vm\_inshelper.c:1944  
#57 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#58 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#59 0x000055946cf03274 in invoke\_bmethod (ec=ec@entry=0x55946da519c8, iseq=iseq@entry=0x55946f15cbc0, self=self@entry=94096115734640, me=me@entry=0x559475664e28, type=type@entry=572653825, opt\_pc=0, captured=0x55947158e8a0) at vm.c:1026  
#60 0x000055946cf03534 in invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x55947158e8a0, self=94096115734640, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=1) at vm.c:1060  
#61 0x000055946cf036ce in invoke\_block\_from\_c\_proc (ec=, proc=, self=, argc=1, argv=, passed\_block\_handler=, is\_lambda=) at vm.c:1150  
#62 0x000055946cf03811 in vm\_invoke\_bmethod (block\_handler=, argv=, argc=1, self=, proc=, ec=0x55946da519c8) at vm.c:1175  
#63 vm\_call\_bmethod\_body (ci=, cc=0x55946f625960, argv=, calling=0x7ffd6f6ca9b0, ec=0x55946da519c8) at vm\_inshelper.c:1971  
#64 vm\_call\_bmethod (ec=0x55946da519c8, cfp=0x7fc7bdc4e0c0, calling=0x7ffd6f6ca9b0, ci=, cc=0x55946f625960) at vm\_inshelper.c:1988  
#65 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e0c0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#66 0x000055946cf0e63e in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:797  
#67 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#68 0x000055946cf06767 in vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6cad00, ci=ci@entry=0x7ffd6f6cacf0, cc=cc@entry=0x7ffd6f6cad20, argv=argv@entry=0x7ffd6f6cadb0) at vm\_eval.c:129

#69 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6cadb0, argc=1, id=3681, recv=94096115734640, ec=0x55946da519c8) at vm\_eval.c:60  
#70 rb\_call0 (ec=0x55946da519c8, recv=recv@entry=94096115734640, mid=3681, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cad90, scope=scope@entry=CALL\_FCALL, self=94095983452880) at vm\_eval.c:302  
#71 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x7ffd6f6cad90, argc=1, mid=, recv=94096115734640) at vm\_eval.c:595  
#72 rb\_funcallv (recv=recv@entry=94096115734640, mid=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cadb0) at vm\_eval.c:825  
#73 0x000055946cf477d2 in rb\_class\_inherited (super=super@entry=94096115734640, klass=klass@entry=94096135961440) at class.c:625  
#74 0x000055946cf0f796 in vm\_declare\_class (super=, cbase=94096094868200, flags=, id=847387) at vm\_inshelper.c:3134  
#75 vm\_define\_class (super=, cbase=, flags=, id=847387) at vm\_inshelper.c:3167  
#76 vm\_find\_or\_create\_class\_by\_id (super=, cbase=, flags=, id=847387) at vm\_inshelper.c:3196  
#77 vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:685  
#78 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#79 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x5594711f548) at vm.c:2046  
#80 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94096135872160, wrap=wrap@entry=0) at load.c:611  
#81 0x000055946cdd41f1 in rb\_require\_internal (fname=94096135872400, fname@entry=94096135872440, safe=0) at load.c:992  
#82 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94096135872440) at load.c:1038  
#83 rb\_f\_require (obj=, fname=94096135872440) at load.c:820  
#84 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594708700a0, cc=, calling=, reg\_cfp=0x7fc7bdc4e168, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#85 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e168, calling=, ci=0x5594708700a0, cc=) at vm\_inshelper.c:1944  
#86 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e168, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#87 0x000055946cf0e63e in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:797  
#88 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#89 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4e490, opt\_pc=, type=, cref=0x0, self=94096096426480, iseq=0x55946e49f0b8, ec=0x55946da519c8) at vm.c:1005  
#90 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4e490, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#91 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#92 vm\_yield (argc=1, argv=0x7ffd6f6cb938, ec=) at vm.c:1120  
#93 rb\_yield\_0 (argv=0x7ffd6f6cb938, argc=1) at vm\_eval.c:980  
#94 rb\_yield\_1 (val=94096130169040) at vm\_eval.c:986  
#95 rb\_yield (val=) at vm\_eval.c:996  
#96 0x000055946cf2113d in rb\_ary\_each (ary=94096076222560) at array.c:1820  
#97 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946ed0d090, cc=, calling=, reg\_cfp=0x7fc7bdc4e478, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#98 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e478, calling=, ci=0x55946ed0d090, cc=) at vm\_inshelper.c:1944  
#99 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#100 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#101 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4e500, opt\_pc=, type=, cref=0x0, self=94096096426480, iseq=0x55946e49f298, ec=0x55946da519c8) at vm.c:1005  
#102 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4e500, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#103 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#104 vm\_yield (argc=1, argv=0x7ffd6f6cbdf8, ec=) at vm.c:1120  
#105 rb\_yield\_0 (argv=0x7ffd6f6cbdf8, argc=1) at vm\_eval.c:980  
#106 rb\_yield\_1 (val=94096095502480) at vm\_eval.c:986  
#107 rb\_yield (val=) at vm\_eval.c:996  
#108 0x000055946cf2113d in rb\_ary\_each (ary=94096095328480) at array.c:1820  
#109 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e8552a0, cc=, calling=, reg\_cfp=0x7fc7bdc4e4e8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#110 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e4e8, calling=, ci=0x55946e8552a0, cc=) at vm\_inshelper.c:1944  
#111 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#112 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#113 0x000055946cf06767 in vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6cc2d0, ci=ci@entry=0x7ffd6f6cc2c0, cc=cc@entry=0x7ffd6f6cc2f0, argv=argv@entry=0x7ffd6f6cc390) at vm\_eval.c:129  
#114 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6cc390, argc=0, id=135807, recv=94096096186440, ec=0x55946da519c8) at vm\_eval.c:60  
#115 rb\_call0 (ec=0x55946da519c8, recv=94096096186440, mid=135807, argc=, argv=argv@entry=0x8, scope=scope@entry=CALL\_PUBLIC, self=94095993048320) at vm\_eval.c:302  
#116 0x000055946cf0a31a in rb\_call (scope=CALL\_PUBLIC, argv=0x8, argc=, mid=, recv=) at vm\_eval.c:595  
#117 rb\_funcall\_with\_block (recv=, mid=, argc=argc@entry=0, argv=argv@entry=0x7ffd6f6cc390, passed\_procval=passed\_procval@entry=8) at vm\_eval.c:857  
#118 0x000055946ceb319c in rb\_sym\_proc\_call (mid=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cc388, passed\_proc=passed\_proc@entry=8) at string.c:10480  
#119 0x000055946cf0477c in vm\_yield\_with\_symbol (block\_handler=0, argv=0x7ffd6f6cc388, argc=1, symbol=, ec=) at vm\_inshelper.c:2573  
#120 invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1084  
#121 vm\_yield (argc=1, argv=0x7ffd6f6cc388, ec=) at vm.c:1120  
#122 rb\_yield\_0 (argv=0x7ffd6f6cc388, argc=1) at vm\_eval.c:980  
#123 rb\_yield\_1 (val=94096096186440) at vm\_eval.c:986  
#124 rb\_yield (val=) at vm\_eval.c:996

#125 0x000055946cf2113d in rb\_ary\_each (ary=94095993048320) at array.c:1820  
#126 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594744d8280, cc=, calling=, reg\_cfp=0x7fc7bdc4e590, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#127 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e590, calling=, ci=0x5594744d8280, cc=) at vm\_inshelper.c:1944  
#128 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e590, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#129 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#130 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#131 0x000055946cf035fc in invoke\_block (captured=0x7ffd6f6cc8e0, opt\_pc=, type=, cref=0x559474604128, self=94096096426480, iseq=0x5594745027e8, ec=0x55946da519c8) at vm.c:1005  
#132 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7ffd6f6cc8e0, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x559474604128, is\_lambda=0) at vm.c:1057  
#133 0x000055946cf04520 in invoke\_block\_from\_c\_bh (ec=ec@entry=0x55946da519c8, block\_handler=, argc=argc@entry=1, argv=argv@entry=0x7fc7bdb4f7f8, cref=, is\_lambda=, is\_lambda@entry=0, force\_blockarg=0, passed\_block\_handler=0) at vm.c:1075  
#134 0x000055946cf04958 in vm\_yield\_with\_cref (is\_lambda=0, cref=, argv=0x7fc7bdb4f7f8, argc=1, ec=0x55946da519c8) at vm.c:1112  
#135 yield\_under (under=94096093646040, self=, argc=1, argv=0x7fc7bdb4f7f8) at vm\_eval.c:1572  
#136 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e5cd230, cc=, calling=, reg\_cfp=0x7fc7bdc4e600, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#137 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e600, calling=, ci=0x55946e5cd230, cc=) at vm\_inshelper.c:1944  
#138 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#139 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#140 0x000055946cf035fc in invoke\_block (captured=0x5594744c4fb0, opt\_pc=, type=, cref=0x0, self=94095990659320, iseq=0x55946e192aa0, ec=0x55946da519c8) at vm.c:1005  
#141 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x5594744c4fb0, self=94095990659320, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#142 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#143 vm\_yield (argc=1, argv=0x7ffd6f6ccdc8, ec=) at vm.c:1120  
#144 rb\_yield\_0 (argv=0x7ffd6f6ccdc8, argc=1) at vm\_eval.c:980  
#145 rb\_yield\_1 (val=94096094867920) at vm\_eval.c:986  
#146 rb\_yield (val=) at vm\_eval.c:996  
#147 0x000055946cf2113d in rb\_ary\_each (ary=94096094867160) at array.c:1820  
#148 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6cce00, cc=0x7ffd6f6cce70, argv=0x7fc7bdb4f6b8, calling=0x7ffd6f6cce50, ec=0x55946da519c8) at vm\_eval.c:87  
#149 vm\_call0\_cfunc (argv=0x7fc7bdb4f6b8, cc=0x7ffd6f6cce70, ci=0x7ffd6f6cce00, calling=0x7ffd6f6cce50, ec=0x55946da519c8) at vm\_eval.c:102  
#150 vm\_call0\_body (ec=0x55946da519c8, calling=calling@entry=0x7ffd6f6cce00, ci=ci@entry=0x7ffd6f6cce00, cc=cc@entry=0x7ffd6f6ccce0, argv=0x7fc7bdb4f6b8) at vm\_eval.c:133  
#151 0x000055946cf06c50 in vm\_call0 (me=, argv=, argc=, id=, recv=, ec=) at vm\_eval.c:60  
#152 rb\_vm\_call (ec=, recv=, id=, argc=, argv=, me=) at vm\_eval.c:209  
#153 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946dba2780, cc=, calling=, reg\_cfp=0x7fc7bdc4e7c0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#154 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e7c0, calling=, ci=0x55946dba2780, cc=) at vm\_inshelper.c:1944  
#155 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e7c0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#156 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#157 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#158 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946dfed3a8) at vm.c:2046  
#159 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095988939080, wrap=wrap@entry=0) at load.c:611  
#160 0x000055946cdd41f1 in rb\_require\_internal (fname=fname@entry=94095988939160, fname@entry=94095988939200, safe=0) at load.c:992  
#161 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94095988939200) at load.c:1038  
#162 rb\_f\_require (obj=, fname=94095988939200) at load.c:820  
#163 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946dffa920, cc=, calling=, reg\_cfp=0x7fc7bdc4e948, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#164 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e948, calling=, ci=0x55946dffa920, cc=) at vm\_inshelper.c:1944  
#165 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e948, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#166 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#167 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#168 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946dfef438) at vm.c:2046  
#169 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993039280, wrap=wrap@entry=0) at load.c:611  
#170 0x000055946cdd41f1 in rb\_require\_internal (fname=fname@entry=94095993043840, safe=0) at load.c:992  
#171 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94095993043840) at load.c:1038  
#172 rb\_f\_require (obj=, fname=94095993043840) at load.c:820  
#173 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946ea12160, cc=, calling=, reg\_cfp=0x7fc7bdc4e9b8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#174 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e9b8, calling=, ci=0x55946ea12160, cc=) at vm\_inshelper.c:1944  
#175 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e9b8, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#176 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#177 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#178 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e3d7c48) at vm.c:2046  
#179 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095988920840, wrap=) at load.c:611



#180 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095988920840) at load.c:642  
#181 rb\_f\_load (argc=, argv=) at load.c:710  
#182 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e7c96e0, cc=, calling=, reg\_cfp=0x7fc7bdc4ea28, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#183 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ea28, calling=, ci=0x55946e7c96e0, cc=) at vm\_inshelper.c:1944  
#184 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ea28, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#185 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#186 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#187 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4eae8, opt\_pc=, type=, cref=0x0, self=9409598891400, iseq=0x55946e4dae10, ec=0x55946da519c8) at vm.c:1005  
#188 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4eae8, self=9409598891400, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#189 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#190 vm\_yield (argc=1, argv=0x7ffd6f6ce8e8, ec=) at vm.c:1120  
#191 rb\_yield\_0 (argv=0x7ffd6f6ce8e8, argc=1) at vm\_eval.c:980  
#192 rb\_yield\_1 (val=94095988924840) at vm\_eval.c:986  
#193 rb\_yield (val=) at vm\_eval.c:996  
#194 0x000055946cf2113d in rb\_ary\_each (ary=94095988920960) at array.c:1820  
#195 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e421000, cc=, calling=, reg\_cfp=0x7fc7bdc4ead0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#196 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ead0, calling=, ci=0x55946e421000, cc=) at vm\_inshelper.c:1944  
#197 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ead0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#198 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#199 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#200 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e35f2c0) at vm.c:2046  
#201 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095992643280, wrap=) at load.c:611  
#202 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095992643280) at load.c:642  
#203 rb\_f\_load (argc=, argv=) at load.c:710  
#204 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e24bb20, cc=, calling=, reg\_cfp=0x7fc7bdc4ec58, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#205 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ec58, calling=, ci=0x55946e24bb20, cc=) at vm\_inshelper.c:1944  
#206 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ec58, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#207 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#208 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#209 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e3a7390) at vm.c:2046  
#210 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993616120, wrap=) at load.c:611  
#211 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095993616120) at load.c:642  
#212 rb\_f\_load (argc=, argv=) at load.c:710  
#213 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e6a00d0, cc=, calling=, reg\_cfp=0x7fc7bdc4ecc8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#214 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ecc8, calling=, ci=0x55946e6a00d0, cc=) at vm\_inshelper.c:1944  
#215 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ecc8, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#216 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#217 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#218 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e470100) at vm.c:2046  
#219 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993672200, wrap=) at load.c:611  
#220 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095993672200) at load.c:642  
#221 rb\_f\_load (argc=, argv=) at load.c:710  
#222 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e3306a0, cc=, calling=, reg\_cfp=0x7fc7bdc4efa0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#223 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4efa0, calling=, ci=0x55946e3306a0, cc=) at vm\_inshelper.c:1944  
#224 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4efa0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#225 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#226 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#227 0x000055946cf119d5 in rb\_iseq\_eval\_main (iseq=iseq@entry=0x55946e4bbba0) at vm.c:2057  
#228 0x000055946cd83d54 in ruby\_exec\_internal (n=0x55946e4bbba0) at eval.c:247  
#229 0x000055946cd87fd9 in ruby\_exec\_node (n=0x55946e4bbba0) at eval.c:311  
#230 ruby\_run\_node (n=) at eval.c:303  
#231 0x000055946cd831bf in main (argc=22, argv=0x7ffd6f6d0148) at ./main.c:42

#### Revision 62433 - 02/16/2018 02:45 PM - k0kubun (Takashi Kokubun)

mjit.c: fix deadlock on class serial increment

This is reported by @hasimo. Fixing a case like this:

#0 **lll\_lock\_wait ()** at **./sysdeps/unix/sysv/linux/x86\_64/lowlevellock.S:135**

#1 **0x00007fc7bd824dbd in \_\_GI\_pthread\_mutex\_lock** (mutex=mutex@entry=0x55946d294440 ) at **./nptl/pthread\_mutex\_lock.c:80**

#2 **0x000055946cec54d9 in rb\_native\_mutex\_lock** (lock=lock@entry=0x55946d294440 ) at **thread\_pthread.c:211**

4

#3 0x000055946cde10ca in CRITICAL\_SECTION\_START (msg=0x55946cfb5423 "mjit\_gc\_start\_hook", level=4) at mjit.c:392  
#4 mjit\_gc\_start\_hook () at mjit.c:412  
#5 0x000055946cda0dfe in gc\_enter (event=0x55946cfaf91e "gc\_rest", objspace=0x55946da51760) at gc.c:6623  
#6 gc\_rest (objspace=objspace@entry=0x55946da51760) at gc.c:6515  
#7 0x000055946cd9f1cf in gc\_rest (objspace=0x55946da51760) at gc.c:7841  
#8 objspace\_malloc\_increase (objspace=objspace@entry=0x55946da51760, new\_size=, old\_size=old\_size@entry=0, type=type@entry=MEMOP\_TYPE\_MALLOC, mem=0x7fc7a4439010) at gc.c:7842  
#9 0x000055946cda1706 in objspace\_malloc\_fixup (size=, mem=0x7fc7a4439010, objspace=0x55946da51760) at gc.c:7910  
#10 objspace\_xmalloc0 (objspace=0x55946da51760, size=, size@entry=3145728) at gc.c:7939  
#11 0x000055946cda3620 in ruby\_xmalloc0 (size=3145728) at gc.c:8006  
#12 ruby\_xmalloc (size=size@entry=3145728) at gc.c:8015  
#13 0x000055946ce93f4c in st\_init\_table\_with\_size (type=0x55946d28da30, size=) at st.c:602  
#14 0x000055946ce94287 in rebuild\_table (tab=tab@entry=0x55946db669f0) at st.c:777  
#15 0x000055946ce963f7 in rebuild\_table\_if\_necessary (tab=0x55946db669f0) at st.c:1139  
#16 st\_add\_direct\_with\_hash (hash=8577035585096733536, value=20, key=808451, tab=0x55946db669f0) at st.c:1207  
#17 st\_update (tab=0x55946db669f0, key=key@entry=808451, func=, arg=140726472841392) at st.c:1512  
#18 0x000055946cda9e27 in tbl\_update (optional\_arg=, func=, key=, hash=) at hash.c:561  
#19 rb\_hash\_aset (hash=94095983218480, key=key@entry=808451, val=val@entry=20) at hash.c:1654  
#20 0x000055946cde243a in mjit\_add\_class\_serial (class\_serial=class\_serial@entry=404225) at mjit.c:1414 3  
#21 0x000055946cefcfab in rb\_next\_class\_serial () at vm.c:321  
#22 0x000055946cf48324 in class\_alloc (klass=, flags=28) at class.c:178  
#23 rb\_include\_class\_new (module=module@entry=94096115733840, super=0) at class.c:820  
#24 0x000055946cf487ac in include\_modules\_at (klass=klass@entry=94096135960920, c=, module=, module@entry=94096115734160, search\_super=search\_super@entry=1) at class.c:913  
#25 0x000055946cf48ac8 in rb\_include\_module (klass=94096135960920, module=module@entry=94096115734160) at class.c:870  
#26 0x000055946cd84993 in rb\_mod\_append\_features (module=94096115734160, include=) at eval.c:1178  
#27 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6c9a20, cc=0x7ffd6f6c9ba0, argv=0x7ffd6f6c9ba0, calling=0x7ffd6f6c9a30, ec=0x55946da519c8) at vm\_eval.c:87  
#28 vm\_call0\_cfunc (argv=0x7ffd6f6c9ba0, cc=0x7ffd6f6c9ba0, ci=0x7ffd6f6c9a20, calling=0x7ffd6f6c9a30, ec=0x55946da519c8) at vm\_eval.c:102  
#29 vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6c9ae0, ci=ci@entry=0x7ffd6f6c9ad0, cc=cc@entry=0x7ffd6f6c9b00, argv=argv@entry=0x7ffd6f6c9ba0) at vm\_eval.c:133  
#30 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7ffd6f6c9ba0, argc=1, id=4849, recv=94096115734160, ec=0x55946da519c8) at vm\_eval.c:60  
#31 rb\_call0 (ec=0x55946da519c8, recv=94096115734160, mid=4849, mid@entry=94096135960920, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6c9ba0, scope=scope@entry=CALL\_FCALL, self=94096135960920) at vm\_eval.c:302  
#32 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x7ffd6f6c9ba0, argc=1, mid=94096135960920, recv=) at vm\_eval.c:595  
#33 rb\_funcallv (recv=, mid=mid@entry=4849, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6c9ba0) at vm\_eval.c:825  
#34 0x000055946cd848a7 in rb\_mod\_include (argc=0, argv=0x7fc7bdb4fce8, module=94096135960920) at eval.c:1203  
#35 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594710c06b0, cc=, calling=, reg\_cfp=0x7fc7bdc4df00, ec=0x55946da519c8) at vm\_insnhelper.c:1928  
#36 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4df00, calling=, ci=0x5594710c06b0, cc=) at vm\_insnhelper.c:1944  
#37 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#38 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#39 0x000055946cf035fc in invoke\_block (captured=0x7ffd6f6ca0a0, opt\_pc=, type=, cref=0x559476c23930, self=94096135960920, iseq=0x559471335ee0, ec=0x55946da519c8) at vm.c:1005  
#40 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7ffd6f6ca0a0, self=94096135960920, argc=, argv=, passed\_block\_handler=0, cref=0x559476c23930, is\_lambda=0) at vm.c:1057  
#41 0x000055946cf04520 in invoke\_block\_from\_c\_bh (ec=ec@entry=0x55946da519c8, block\_handler=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108, cref=, is\_lambda=, is\_lambda@entry=0, force\_blockarg=0, passed\_block\_handler=0) at vm.c:1075  
#42 0x000055946cf04958 in vm\_yield\_with\_cref (is\_lambda=0, cref=, argv=0x7ffd6f6ca108, argc=1, ec=0x55946da519c8) at vm.c:1112  
#43 yield\_under (under=94096135960920, self=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108) at vm\_eval.c:1572  
#44 0x000055946cf04b12 in rb\_mod\_module\_exec (argc=argc@entry=1, argv=argv@entry=0x7ffd6f6ca108, mod=) at vm\_eval.c:1770  
#45 0x000055946ce00fc6 in rb\_mod\_initialize (module=94096135960920) at object.c:1978  
#46 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6ca130, cc=0x7fc7bdb4fc98, argv=0x7fc7bdb4fc98, calling=0x7ffd6f6ca140, ec=0x55946da519c8) at vm\_eval.c:87  
#47 vm\_call0\_cfunc (argv=0x7fc7bdb4fc98, cc=0x7fc7bdb4fc98, ci=0x7ffd6f6ca130, calling=0x7ffd6f6ca140, ec=0x55946da519c8) at vm\_eval.c:102  
#48 vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7ffd6f6ca1f0, ci=ci@entry=0x7ffd6f6ca1e0, cc=cc@entry=0x7ffd6f6ca210, argv=argv@entry=0x7fc7bdb4fc98) at vm\_eval.c:133  
#49 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7fc7bdb4fc98, argc=0, id=3057, recv=94096135960920, ec=0x55946da519c8) at vm\_eval.c:60  
#50 rb\_call0 (ec=0x55946da519c8, recv=recv@entry=94096135960920, mid=mid@entry=3057, argc=argc@entry=3057, argv=argv@entry=0x0, scope=scope@entry=CALL\_FCALL, self=94095983466120) at vm\_eval.c:302  
#51 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x0, argc=3057, mid=3057, recv=94096135960920) at vm\_eval.c:595  
#52 rb\_funcallv (recv=recv@entry=94096135960920, mid=mid@entry=3057, argc=argc@entry=0, argv=argv@entry=0x7fc7bdb4fc98) at vm\_eval.c:825  
#53 0x000055946cd89673 in rb\_obj\_call\_init (obj=obj@entry=94096135960920, argc=argc@entry=0, argv=argv@entry=0x7fc7bdb4fc98) at eval.c:1590  
#54 0x000055946ce048a1 in rb\_class\_s\_new (argc=0, argv=0x7fc7bdb4fc98, klass=) at object.c:2153  
#55 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x559471339c80, cc=, calling=, reg\_cfp=0x7fc7bdc4dfa8, ec=0x55946da519c8) at vm\_insnhelper.c:1928  
#56 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4dfa8, calling=, ci=0x559471339c80, cc=) at vm\_insnhelper.c:1944  
#57 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#58 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#59 0x000055946cf03274 in invoke\_bmethod (ec=ec@entry=0x55946da519c8, iseq=iseq@entry=0x55946f15bc00, self=self@entry=94096115734640, me=me@entry=0x559475664e28, type=type@entry=572653825, opt\_pc=0, captured=0x55947158e8a0) at

vm.c:1026  
#60 0x000055946cf03534 in invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x55947158e8a0, self=94096115734640, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=1) at vm.c:1060  
#61 0x000055946cf036ce in invoke\_block\_from\_c\_proc (ec=, proc=, self=, argc=1, argv=, passed\_block\_handler=, is\_lambda=) at vm.c:1150  
#62 0x000055946cf03811 in vm\_invoke\_bmethod (block\_handler=, argv=, argc=1, self=, proc=, ec=0x55946da519c8) at vm.c:1175  
#63 vm\_call\_bmethod\_body (ci=, cc=0x55946f625960, argv=, calling=0x7fd6f6ca9b0, ec=0x55946da519c8) at vm\_inshelper.c:1971  
#64 vm\_call\_bmethod (ec=0x55946da519c8, cfp=0x7fc7bdc4e0c0, calling=0x7fd6f6ca9b0, ci=, cc=0x55946f625960) at vm\_inshelper.c:1988  
#65 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e0c0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#66 0x000055946cf0e63e in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:797  
#67 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#68 0x000055946cf06767 in vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7fd6f6cad00, ci=ci@entry=0x7fd6f6cacf0, cc=cc@entry=0x7fd6f6cad20, argv=argv@entry=0x7fd6f6cadb0) at vm\_eval.c:129  
#69 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7fd6f6cadb0, argc=1, id=3681, recv=94096115734640, ec=0x55946da519c8) at vm\_eval.c:60  
#70 rb\_call0 (ec=0x55946da519c8, recv=recv@entry=94096115734640, mid=3681, argc=argc@entry=1, argv=argv@entry=0x7fd6f6cad90, scope=scope@entry=CALL\_FCALL, self=94095983452880) at vm\_eval.c:302  
#71 0x000055946cf07b9b in rb\_call (scope=CALL\_FCALL, argv=0x7fd6f6cad90, argc=1, mid=, recv=94096115734640) at vm\_eval.c:595  
#72 rb\_funcallv (recv=recv@entry=94096115734640, mid=, argc=argc@entry=1, argv=argv@entry=0x7fd6f6cadb0) at vm\_eval.c:825  
#73 0x000055946cf477d2 in rb\_class\_inherited (super=super@entry=94096115734640, klass=klass@entry=94096135961440) at class.c:625  
#74 0x000055946cf0f796 in vm\_declare\_class (super=, cbase=94096094868200, flags=, id=847387) at vm\_inshelper.c:3134  
#75 vm\_define\_class (super=, cbase=, flags=, id=847387) at vm\_inshelper.c:3167  
#76 vm\_find\_or\_create\_class\_by\_id (super=, cbase=, flags=, id=847387) at vm\_inshelper.c:3196  
#77 vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:685  
#78 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#79 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x559471f1b548) at vm.c:2046  
#80 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94096135872400, wrap=wrap@entry=0) at load.c:611  
#81 0x000055946cdd41f1 in rb\_require\_internal (fname=94096135872400, fname@entry=94096135872440, safe=0) at load.c:992  
#82 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94096135872440) at load.c:1038  
#83 rb\_f\_require (obj=, fname=94096135872440) at load.c:820  
#84 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594708700a0, cc=, calling=, reg\_cfp=0x7fc7bdc4e168, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#85 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e168, calling=, ci=0x5594708700a0, cc=) at vm\_inshelper.c:1944  
#86 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e168, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#87 0x000055946cf0e63e in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:797  
#88 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#89 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4e490, opt\_pc=, type=, cref=0x0, self=94096096426480, iseq=0x55946e49f0b8, ec=0x55946da519c8) at vm.c:1005  
#90 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4e490, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#91 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#92 vm\_yield (argc=1, argv=0x7fd6f6cb938, ec=) at vm.c:1120  
#93 rb\_yield\_0 (argv=0x7fd6f6cb938, argc=1) at vm\_eval.c:980  
#94 rb\_yield\_1 (val=94096130169040) at vm\_eval.c:986  
#95 rb\_yield (val=) at vm\_eval.c:996  
#96 0x000055946cf2113d in rb\_ary\_each (ary=94096076222560) at array.c:1820  
#97 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946ed0d090, cc=, calling=, reg\_cfp=0x7fc7bdc4e478, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#98 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e478, calling=, ci=0x55946ed0d090, cc=) at vm\_inshelper.c:1944  
#99 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#100 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#101 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4e500, opt\_pc=, type=, cref=0x0, self=94096096426480, iseq=0x55946e49f298, ec=0x55946da519c8) at vm.c:1005  
#102 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4e500, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#103 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#104 vm\_yield (argc=1, argv=0x7fd6f6cbdf8, ec=) at vm.c:1120  
#105 rb\_yield\_0 (argv=0x7fd6f6cbdf8, argc=1) at vm\_eval.c:980  
#106 rb\_yield\_1 (val=94096095502480) at vm\_eval.c:986  
#107 rb\_yield (val=) at vm\_eval.c:996  
#108 0x000055946cf2113d in rb\_ary\_each (ary=94096095328480) at array.c:1820  
#109 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e8552a0, cc=, calling=, reg\_cfp=0x7fc7bdc4e4e8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#110 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e4e8, calling=, ci=0x55946e8552a0, cc=) at vm\_inshelper.c:1944  
#111 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#112 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#113 0x000055946cf06767 in vm\_call0\_body (ec=ec@entry=0x55946da519c8, calling=calling@entry=0x7fd6f6cc2d0, ci=ci@entry=0x7fd6f6cc2c0, cc=cc@entry=0x7fd6f6cc2f0, argv=argv@entry=0x7fd6f6cc390) at vm\_eval.c:129  
#114 0x000055946cf074b2 in vm\_call0 (me=, argv=0x7fd6f6cc390, argc=0, id=135807, recv=94096096186440, ec=0x55946da519c8) at vm\_eval.c:60

#115 rb\_call0 (ec=0x55946da519c8, recv=94096096186440, mid=135807, argc=, argv=argv@entry=0x8, scope=scope@entry=CALL\_PUBLIC, self=94095993048320) at vm\_eval.c:302  
#116 0x000055946cf0a31a in rb\_call (scope=CALL\_PUBLIC, argv=0x8, argc=, mid=, recv=) at vm\_eval.c:595  
#117 rb\_funcall\_with\_block (recv=, mid=, argc=argc@entry=0, argv=argv@entry=0x7ffd6f6cc390, passed\_proccval=passed\_proccval@entry=8) at vm\_eval.c:857  
#118 0x000055946ceb319c in rb\_sym\_proc\_call (mid=, argc=argc@entry=1, argv=argv@entry=0x7ffd6f6cc388, passed\_proc=passed\_proc@entry=8) at string.c:10480  
#119 0x000055946cf0477c in vm\_yield\_with\_symbol (block\_handler=0, argv=0x7ffd6f6cc388, argc=1, symbol=, ec=) at vm\_inshelper.c:2573  
#120 invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1084  
#121 vm\_yield (argc=1, argv=0x7ffd6f6cc388, ec=) at vm.c:1120  
#122 rb\_yield\_0 (argv=0x7ffd6f6cc388, argc=1) at vm\_eval.c:980  
#123 rb\_yield\_1 (val=94096096186440) at vm\_eval.c:986  
#124 rb\_yield (val=) at vm\_eval.c:996  
#125 0x000055946cf2113d in rb\_ary\_each (ary=94095993048320) at array.c:1820  
#126 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x5594744d8280, cc=, calling=, reg\_cfp=0x7fc7bdc4e590, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#127 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e590, calling=, ci=0x5594744d8280, cc=) at vm\_inshelper.c:1944  
#128 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e590, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#129 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#130 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#131 0x000055946cf035fc in invoke\_block (captured=0x7ffd6f6cc8e0, opt\_pc=, type=, cref=0x559474604128, self=94096096426480, iseq=0x5594745027e8, ec=0x55946da519c8) at vm.c:1005  
#132 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7ffd6f6cc8e0, self=94096096426480, argc=, argv=, passed\_block\_handler=0, cref=0x559474604128, is\_lambda=0) at vm.c:1057  
#133 0x000055946cf04520 in invoke\_block\_from\_c\_bh (ec=ec@entry=0x55946da519c8, block\_handler=, argc=argc@entry=1, argv=argv@entry=0x7fc7bdb4f7f8, cref=, is\_lambda=, is\_lambda@entry=0, force\_blockarg=0, passed\_block\_handler=0) at vm.c:1075  
#134 0x000055946cf04958 in vm\_yield\_with\_cref (is\_lambda=0, cref=, argv=0x7fc7bdb4f7f8, argc=1, ec=0x55946da519c8) at vm.c:1112  
#135 yield\_under (under=94096093646040, self=, argc=1, argv=0x7fc7bdb4f7f8) at vm\_eval.c:1572  
#136 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e5cd230, cc=, calling=, reg\_cfp=0x7fc7bdc4e600, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#137 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e600, calling=, ci=0x55946e5cd230, cc=) at vm\_inshelper.c:1944  
#138 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#139 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#140 0x000055946cf035fc in invoke\_block (captured=0x5594744c4fb0, opt\_pc=, type=, cref=0x0, self=94095990659320, iseq=0x55946e192aa0, ec=0x55946da519c8) at vm.c:1005  
#141 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x5594744c4fb0, self=94095990659320, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#142 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#143 vm\_yield (argc=1, argv=0x7ffd6f6ccdc8, ec=) at vm.c:1120  
#144 rb\_yield\_0 (argv=0x7ffd6f6ccdc8, argc=1) at vm\_eval.c:980  
#145 rb\_yield\_1 (val=94096094867920) at vm\_eval.c:986  
#146 rb\_yield (val=) at vm\_eval.c:996  
#147 0x000055946cf2113d in rb\_ary\_each (ary=94096094867160) at array.c:1820  
#148 0x000055946cf06829 in vm\_call0\_cfunc\_with\_frame (ci=0x7ffd6f6cce00, cc=0x7ffd6f6cce70, argv=0x7fc7bdb4f6b8, calling=0x7ffd6f6cce50, ec=0x55946da519c8) at vm\_eval.c:87  
#149 vm\_call0\_cfunc (argv=0x7fc7bdb4f6b8, cc=0x7ffd6f6cce70, ci=0x7ffd6f6cce00, calling=0x7ffd6f6cce50, ec=0x55946da519c8) at vm\_eval.c:102  
#150 vm\_call0\_body (ec=0x55946da519c8, calling=calling@entry=0x7ffd6f6cce00, ci=ci@entry=0x7ffd6f6cceb0, cc=cc@entry=0x7ffd6f6ccce0, argv=0x7fc7bdb4f6b8) at vm\_eval.c:133  
#151 0x000055946cf06c50 in vm\_call0 (me=, argv=, argc=, id=, recv=, ec=) at vm\_eval.c:60  
#152 rb\_vm\_call (ec=, recv=, id=, argc=, argv=, me=) at vm\_eval.c:209  
#153 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946dba2780, cc=, calling=, reg\_cfp=0x7fc7bdc4e7c0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#154 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e7c0, calling=, ci=0x55946dba2780, cc=) at vm\_inshelper.c:1944  
#155 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e7c0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#156 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#157 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#158 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946dfed3a8) at vm.c:2046  
#159 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095988939080, wrap=wrap@entry=0) at load.c:611  
#160 0x000055946cdd41f1 in rb\_require\_internal (fname=94095988939160, fname@entry=94095988939200, safe=0) at load.c:992  
#161 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94095988939200) at load.c:1038  
#162 rb\_f\_require (obj=, fname=94095988939200) at load.c:820  
#163 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946dfa920, cc=, calling=, reg\_cfp=0x7fc7bdc4e948, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#164 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e948, calling=, ci=0x55946dfa920, cc=) at vm\_inshelper.c:1944  
#165 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e948, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#166 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#167 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#168 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946dfef438) at vm.c:2046  
#169 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993039280, wrap=wrap@entry=0) at

load.c:611  
#170 0x000055946cdd41f1 in rb\_require\_internal (fname=fname@entry=94095993043840, safe=0) at load.c:992  
#171 0x000055946cdd4493 in rb\_require\_safe (safe=, fname=94095993043840) at load.c:1038  
#172 rb\_f\_require (obj=, fname=94095993043840) at load.c:820  
#173 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946ea12160, cc=, calling=, reg\_cfp=0x7fc7bdc4e9b8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#174 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4e9b8, calling=, ci=0x55946ea12160, cc=) at vm\_inshelper.c:1944  
#175 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e9b8, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#176 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#177 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#178 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e3d7c48) at vm.c:2046  
#179 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095988920840, wrap=) at load.c:611  
#180 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095988920840) at load.c:642  
#181 rb\_f\_load (argc=, argv=) at load.c:710  
#182 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e7c96e0, cc=, calling=, reg\_cfp=0x7fc7bdc4ea28, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#183 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ea28, calling=, ci=0x55946e7c96e0, cc=) at vm\_inshelper.c:1944  
#184 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ea28, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#185 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#186 0x000055946cf02f4c in vm\_exec (ec=ec@entry=0x55946da519c8) at vm.c:1804  
#187 0x000055946cf035fc in invoke\_block (captured=0x7fc7bdc4eae8, opt\_pc=, type=, cref=0x0, self=9409598891400, iseq=0x55946e4dae10, ec=0x55946da519c8) at vm.c:1005  
#188 invoke\_iseq\_block\_from\_c (ec=0x55946da519c8, captured=0x7fc7bdc4eae8, self=9409598891400, argc=, argv=, passed\_block\_handler=0, cref=0x0, is\_lambda=0) at vm.c:1057  
#189 0x000055946cf04699 in invoke\_block\_from\_c\_bh (argc=, passed\_block\_handler=, cref=, is\_lambda=, force\_blockarg=, argv=, block\_handler=, ec=) at vm.c:1075  
#190 vm\_yield (argc=1, argv=0x7ffd6f6ce8e8, ec=) at vm.c:1120  
#191 rb\_yield\_0 (argv=0x7ffd6f6ce8e8, argc=1) at vm\_eval.c:980  
#192 rb\_yield\_1 (val=94095988924840) at vm\_eval.c:986  
#193 rb\_yield (val=) at vm\_eval.c:996  
#194 0x000055946cf2113d in rb\_ary\_each (ary=94095988920960) at array.c:1820  
#195 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e421000, cc=, calling=, reg\_cfp=0x7fc7bdc4ead0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#196 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ead0, calling=, ci=0x55946e421000, cc=) at vm\_inshelper.c:1944  
#197 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ead0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#198 0x000055946cf0cb05 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:716  
#199 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#200 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e35f2c0) at vm.c:2046  
#201 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095992643280, wrap=) at load.c:611  
#202 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095992643280) at load.c:642  
#203 rb\_f\_load (argc=, argv=) at load.c:710  
#204 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e24bb20, cc=, calling=, reg\_cfp=0x7fc7bdc4ec58, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#205 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ec58, calling=, ci=0x55946e24bb20, cc=) at vm\_inshelper.c:1944  
#206 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ec58, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#207 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#208 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#209 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e3a7390) at vm.c:2046  
#210 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993616120, wrap=) at load.c:611  
#211 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095993616120) at load.c:642  
#212 rb\_f\_load (argc=, argv=) at load.c:710  
#213 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e6a00d0, cc=, calling=, reg\_cfp=0x7fc7bdc4ecc8, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#214 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4ecc8, calling=, ci=0x55946e6a00d0, cc=) at vm\_inshelper.c:1944  
#215 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4ecc8, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#216 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#217 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#218 0x000055946cf118d1 in rb\_iseq\_eval (iseq=iseq@entry=0x55946e470100) at vm.c:2046  
#219 0x000055946cdd2164 in rb\_load\_internal0 (ec=ec@entry=0x55946da519c8, fname=fname@entry=94095993672200, wrap=) at load.c:611  
#220 0x000055946cdd2850 in rb\_load\_internal (wrap=0, fname=94095993672200) at load.c:642  
#221 rb\_f\_load (argc=, argv=) at load.c:710  
#222 0x000055946cefb61f in vm\_call\_cfunc\_with\_frame (ci=0x55946e3306a0, cc=, calling=, reg\_cfp=0x7fc7bdc4efa0, ec=0x55946da519c8) at vm\_inshelper.c:1928  
#223 vm\_call\_cfunc (ec=0x55946da519c8, reg\_cfp=0x7fc7bdc4efa0, calling=, ci=0x55946e3306a0, cc=) at vm\_inshelper.c:1944  
#224 0x000055946cf03ea3 in vm\_call\_method (ec=0x55946da519c8, cfp=0x7fc7bdc4efa0, calling=, ci=, cc=) at vm\_inshelper.c:2417  
#225 0x000055946cf0b5c2 in vm\_exec\_core (ec=ec@entry=0x55946da519c8, initial=initial@entry=0) at /tmp/ruby-build.20180216151216.13740/ruby-trunk/insns.def:779  
#226 0x000055946cf02f4c in vm\_exec (ec=0x55946da519c8) at vm.c:1804  
#227 0x000055946cf119d5 in rb\_iseq\_eval\_main (iseq=iseq@entry=0x55946e4bbba0) at vm.c:2057  
#228 0x000055946cd83d54 in ruby\_exec\_internal (n=0x55946e4bbba0) at eval.c:247

#229 0x000055946cd87fdf in ruby\_exec\_node (n=0x55946e4bbba0) at eval.c:311  
#230 ruby\_run\_node (n=) at eval.c:303  
#231 0x000055946cd831bf in main (argc=22, argv=0x7ffd6f6d0148) at ./main.c:42

## History

---

### #1 - 06/18/2008 01:41 PM - Anonymous

=begin

I'm not sure why UTF8-MAC was introduced. UTF8-MAC indeed isn't supported currently for transcoding.

I don't even know what UTF8-MAC is. It is defined as a replica of UTF-8 in enc/utf\_8.c. It is not defined at <http://www.iana.org/assignments/character-sets>.

It may be that it is an attempt to refer to the fact that UTF-8 usually is used in decomposed form (NFD) on the Mac. But that would not be relevant for opening a file, because the Mac OS accepts any kind of normalization, and converts to NFD by itself (similar to a file system that accepts both upper- and lower-case, but internally uses only one case).

Also, the issues of normalization is orthogonal to what kind of encoding form is used for Unicode, and therefore adding it to an encoding is something that we should consider much more carefully. Overall, UTF-8 should be UTF-8, it's a bad idea to create variants.

Regards, Martin.

At 09:42 08/06/18, Eric Hodel wrote:

Issue [#178](#) has been reported by Eric Hodel.

---

Bug [#178](#): File.open on sprintf-formatted string fails with encoding conversion error on OS X  
<http://redmine.ruby-lang.org/issues/show/178>

Author: Eric Hodel  
Status: Open  
Priority: Normal  
Assigned to:  
Category:  
Target version:

String#% and File.open are interacting strangely on OS X, so files opened with a sprintf formatted string raise an ArgumentError:

```
$ ruby19 -vwe 'File.new("foo" % [])'  
ruby 1.9.0 (2008-06-18 revision 15873) [i686-darwin9.3.0]  
-e:1:in initialize': transcoding not supported (from US-ASCII to UTF8-MAC)  
(ArgumentError)  
from -e:1:innew'  
from -e:1:in ``
```

Using just "foo" as the filename works fine:

```
$ ruby19 -we 'File.new("foo")'
```

As does String#<<:

```
$ ruby19 -we 'File.new("foo" << "")'
```

---

You have received this notification because you have either subscribed to it, or are involved in it.

To change your notification preferences, please click here:  
<http://redmine.ruby-lang.org/my/account>

### Martin J. Duerst, Assoc. Professor, Aoyama Gakuin University  
### <http://www.sw.it.aoyama.ac.jp>   mailto:[duerst@it.aoyama.ac.jp](mailto:duerst@it.aoyama.ac.jp)

=end

**#2 - 06/18/2008 03:37 PM - naruse (Yui NARUSE)**

- Status changed from Open to Closed
- Assignee set to naruse (Yui NARUSE)
- % Done changed from 0 to 100

=begin

This problem is from the same bug of Bug [#179](#), and it was fixed at r17403.

Thanks,

It may be that it is an attempt to refer to the fact that UTF-8 usually is used in decomposed form (NFD) on the Mac. But that would not be relevant for opening a file, because the Mac OS accepts any kind of normalization, and converts to NFD by itself (similar to a file system that accepts both upper- and lower-case, but internally uses only one case).

Yeah, that's true when you write to filesystem, but when you read from filesystem you may want to know whether they are composed or decomposed.

=end

**#3 - 06/18/2008 05:33 PM - Anonymous**

=begin

At 15:36 08/06/18, Yui NARUSE wrote:

Issue [#178](#) has been updated by Yui NARUSE.

Status changed from Open to Closed  
Assigned to set to Yui NARUSE  
% Done changed from 0 to 100

This problem is from the same bug of Bug [#179](#), and it was fixed at r17403.

Thanks,

Great, thanks!

It may be that it is an attempt to refer to the fact that UTF-8 usually is used in decomposed form (NFD) on the Mac. But that would not be relevant for opening a file, because the Mac OS accepts any kind of normalization, and converts to NFD by itself (similar to a file system that accepts both upper- and lower-case, but internally uses only one case).

Yeah, that's true when you write to filesystem, but when you read from filesystem you may want to know whether they are composed or decomposed.

That may indeed be the case. But this really only applies to filenames (and maybe similar names of resources) on the Mac. For such a small subset of data, I think it's overkill if as a consequence, processing together with other data is blocked (as we saw in the bug report).

As far as I understand, it doesn't apply to file contents or other data on the Mac. Also, as soon as you concatenate two strings, there is no guarantee that NFD is kept (unless of course you implement separate string concatenation for this specific encoding). In general, the best thing to do if you want to know is to check, and the best thing if you want to be sure is to check, and then to change if necessary. But we still have to implement this (maybe for -3?).

[Also, if the meaning of UTF8-MAC is really NFD, it might be better to actually call it that way.]

Regards, Martin.

### Martin J. Duerst, Assoc. Professor, Aoyama Gakuin University  
### <http://www.sw.it.aoyama.ac.jp>   mailto:[duerst@it.aoyama.ac.jp](mailto:duerst@it.aoyama.ac.jp)

=end

**#4 - 06/19/2008 01:45 AM - naruse (Yui NARUSE)**

=begin

Martin Duerst wrote:

It may be that it is an attempt to refer to the fact that UTF-8 usually is used in decomposed form (NFD) on the Mac. But that would not be relevant for opening a file, because the Mac OS accepts any kind of normalization, and converts to NFD by itself (similar to a file system that accepts both upper- and lower-case, but internally uses only one case).

Yeah, that's true when you write to filesystem, but when you read from filesystem you may want to know whether they are composed or decomposed.

That may indeed be the case. But this really only applies to filenames (and maybe similar names of resources) on the Mac. For such a small subset of data, I think it's overkill if as a consequence, processing together with other data is blocked (as we saw in the bug report).

This bug is derived from other point.

As far as I understand, it doesn't apply to file contents or other data on the Mac. Also, as soon as you concatenate two strings, there is no guarantee that NFD is kept (unless of course you implement separate string concatenation for this specific encoding). In general, the best thing to do if you want to know is to check, and the best thing if you want to be sure is to check, and then to change if necessary. But we still have to implement this (maybe for -3?).

Off course, the encoding of other data on the mac may be other than UTF8-MAC: that's may be composed UTF-8. I intend that strings labeled as UTF8-MAC may needed to be converted or normalized. If you don't care about it, you can use `force_encoding`.

[Also, if the meaning of UTF8-MAC is really NFD, it might be better to actually call it that way.]

not real NFD, Apple's NFD as I commented in `enc/utf_8.c`.

--

NARUSE, Yui [naruse@airemix.jp](mailto:naruse@airemix.jp)

=end