

Ruby 1.8 - Bug #216

Memory leaks in 1.8.6p230 and p238

07/03/2008 07:32 AM - igal (Igal Koshevoy)

Status:	Closed
Priority:	Normal
Assignee:	
Target version:	
ruby -v:	
Description	
=begin WARNING: Do not use Ruby 1.8.6 releases p230 through p238 in production! There are bugs in the Ruby interpreter that cause it leak memory. Please use a Ruby release that's based on a patched version of the p111 or p114 code until this is resolved. I've put together code which demonstrates this at: http://pastie.org/226715 -igal =end	

Associated revisions

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
#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 0x000055946cd243a in mjit_add_class_serial (class_serial=class_serial@entry=404225) at mjit.c:1414
#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 0x000055946cef6b1f in vm_call_cfunc_with_frame (ci=0x5594710c06b0, cc=, calling=, reg_cfp=0x7fc7bdc4df00, ec=0x55946da519c8) at
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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=, 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=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=0x7ffd6f6cce00, 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

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 0x000055946cef6b1f 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=, 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 0x000055946cef6b1f 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=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_insnhelper.c:1928
#85 vm_call_cfunc (ec=0x55946da519c8, reg_cfp=0x7fc7bdc4e168, calling=, ci=0x5594708700a0, cc=) at vm_insnhelper.c:1944
#86 0x000055946cf03ea3 in vm_call_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e168, calling=, ci=, cc=) at vm_insnhelper.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_insnhelper.c:1928
#98 vm_call_cfunc (ec=0x55946da519c8, reg_cfp=0x7fc7bdc4e478, calling=, ci=0x55946ed0d090, cc=) at vm_insnhelper.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_insnhelper.c:1928
#110 vm_call_cfunc (ec=0x55946da519c8, reg_cfp=0x7fc7bdc4e4e8, calling=, ci=0x55946e8552a0, cc=) at vm_insnhelper.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_insnhelper.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_insnhelper.c:1928
#127 vm_call_cfunc (ec=0x55946da519c8, reg_cfp=0x7fc7bdc4e590, calling=, ci=0x5594744d8280, cc=) at vm_insnhelper.c:1944
#128 0x000055946cf03ea3 in vm_call_method (ec=0x55946da519c8, cfp=0x7fc7bdc4e590, calling=, ci=, cc=) at vm_insnhelper.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=0x7ffd6f6ccee0, 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=94095998891400, iseq=0x55946e4dae10, ec=0x55946da519c8) at vm.c:1005
#188 invoke_iseq_block_from_c (ec=0x55946da519c8, captured=0x7fc7bdc4eae8, self=94095998891400, 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 0x000055946cfb61f 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 0x000055946cfb61f 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 0x000055946cfb61f 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 0x000055946cfb61f 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 - 07/03/2008 11:39 PM - rabarca (Rolando Abarca)

```
=begin
do you have a more specific test?
=end
```

#2 - 07/03/2008 11:51 PM - igal (Igal Koshevoy)

```
=begin
Rolando Abarca: No, my test merely proves that a memory leak exists, but doesn't identify where. If you or someone else has time to try to build a
more specific test, it'd be much appreciated because it'll be much easier for the developers to identify the actual cause of the memory leak and
address it.
=end
```

#3 - 07/04/2008 06:07 AM - Anonymous

```
=begin
For what it's worth:
```

I seem to be experiencing the memory leak in p256 as well:

ruby 1.8.6 (2008-06-30 patchlevel 256) [i686-linux]

I don't know much about it yet, but I'm seeing the leak in two completely different long-running processes, neither of which is based on anything Rails-related. (One is a server running nitro/og/webrick, the other is a home-grown game admin system.)

Regards,

Bill

=end

#4 - 07/04/2008 06:31 AM - Anonymous

=begin

I can also confirm memory leaks running a bunch of different ruby code including rails, merb and various daemons.

-Ezra

=end

#5 - 07/05/2008 05:46 AM - rabarca (Rolando Abarca)

=begin

Here are some other tests, and here are my results. VmSize is displayed before and after running the main loop (check the test files).

Test files are here: <http://pastie.org/227949>

test04.rb is the only one not leaking.

```
rolando@dev02:~/sandbox/ruby_memory_test$ ruby run_tests.rb
```

```
test01.rb
```

```
ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]
```

```
VmSize: 3108 kB
```

```
VmSize: 3240 kB
```

```
ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]
```

```
VmSize: 3116 kB
```

```
VmSize: 96968 kB
```

```
====
```

```
test02.rb
```

```
ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]
```

```
VmSize: 2972 kB
```

```
VmSize: 3104 kB
```

```
ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]
```

```
VmSize: 2984 kB
```

```
VmSize: 115580 kB
```

```
====
```

```
test03.rb
```

```
ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]
```

```
VmSize: 2972 kB
```

```
VmSize: 3104 kB
```

```
ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]
```

```
VmSize: 2984 kB
```

```
VmSize: 115580 kB
```

```
====
```

```
test04.rb
```

```
ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]
```

```
VmSize: 2976 kB
```

```
VmSize: 2976 kB
```

```
ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]
```

```
VmSize: 2984 kB
```

```
VmSize: 2984 kB
```

regards,

rolando./

=end

#6 - 07/05/2008 08:56 AM - igal (Igal Koshevoy)

=begin

Rolando Abarca,

Excellent work, your sample code clearly demonstrates the memory leak and narrows its location. I can confirm that p238 and p265 leak memory on the first three tests, while p111ubuntu is fine.

I've played with this further and provided a broader series of Regexp related methods that are affected: <http://pastie.org/228006>

-igal
=end

#7 - 07/05/2008 03:50 PM - matz (Yukihiko Matsumoto)

=begin
Hi,

In message "Re: [ruby-core:17608] [Ruby 1.8 - Bug #216] Memory leaks in 1.8.6p230 and p238"
on Sat, 5 Jul 2008 08:53:17 +0900, Igal Koshevoy redmine@ruby-lang.org writes:

[Excellent work, your sample code clearly demonstrates the memory leak and narrows its location. I can confirm that p238 and p265 leak memory on the first three tests, while p111ubuntu is fine.

The following patch from ruby_1_8 should fix the leak. Could you try?

```
matz.
```

Index: re.c

=====

--- re.c (revision 16437)

+++ re.c (revision 16438)

@@ -927,6 +927,7 @@

}

```
if (result < 0) {
```

- re_free_registers(®s);

```
rb_backref_set(Qnil);
```

```
return result;
```

```
}
```

@@ -943,6 +944,7 @@

```
}
```

```
re_copy_registers(RMATCH(match)->regs, &regs);
```

- re_free_registers(®s);

```
RMATCH(match)->str = rb_str_new4(str);
```

```
rb_backref_set(match);
```

=end

#8 - 07/06/2008 02:22 AM - igal (Igal Koshevoy)

=begin

Good news, I think the memory leak problem is fixed.

I've applied Matz's re.c patch to my copy of p265 (head of ruby_1_8_6) and ran it against (1) my earlier test which used a complete Rails stack, (2) Rolando Abarca's contributed tests, and (3) my later tests for String/Regexp. Memory usage for all these is now stable.

Matz, thank you so much for resolving this. And thank you Rolando for contributing the specific test case that helped isolate the leak.

-igal
=end

#9 - 07/06/2008 04:19 AM - rabarca (Rolando Abarca)

=begin

Hi,

On Jul 5, 2008, at 2:46 AM, Yukihiko Matsumoto wrote:

The following patch from ruby_1_8 should fix the leak. Could you try?

```
matz.
```

yes, it works fine :-)

Here are the results from my tests:

test01.rb

ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]

VmSize: 3108 kB

VmSize: 3240 kB

ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]

VmSize: 3116 kB

VmSize: 3248 kB

====

test02.rb

ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]

VmSize: 2972 kB

VmSize: 3104 kB

ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]

VmSize: 2988 kB

VmSize: 3120 kB

====

test03.rb

ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]

VmSize: 2972 kB

VmSize: 3104 kB

ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]

VmSize: 2984 kB

VmSize: 3116 kB

====

test04.rb

ruby 1.8.6 (2007-09-24 patchlevel 111) [i686-linux]

VmSize: 2976 kB

VmSize: 2976 kB

ruby 1.8.6 (2008-07-03 patchlevel 265) [i686-linux]

VmSize: 2988 kB

VmSize: 2988 kB

meaning HEAD from ruby_1_8_6 does not leak after applying your patch.

thanks!

--

Rolando Abarca M.

=end

#10 - 07/07/2008 08:57 AM - matz (Yukihiro Matsumoto)

- *Status changed from Open to Closed*

=begin

=end