

Ruby trunk - Bug #9959

TracePoint can invoke inconsistent call event with bmethod

06/19/2014 10:47 AM - ko1 (Koichi Sasada)

Status: Assigned	
Priority: Normal	
Assignee: ko1 (Koichi Sasada)	
Target version:	
ruby -v: 2.2	Backport: 2.0.0: REQUIRED, 2.1: DONE

Description

define_method bmethod call return

```
define_method(:method_test_argument_error_on_bmethod){|correct_key: 1|}
```

```
def test_argument_error_on_bmethod
  events = []
  curr_thread = Thread.current
  TracePoint.new(:call, :return){|tp|
    next if curr_thread != Thread.current
    events << [tp.event, tp.method_id]
  }.enable do
    begin
      method_test_argument_error_on_bmethod(wrong_key: 2)
    rescue => e
      # ignore
    end
  end
end
```

```
assert_equal [], events # should be empty.
end
```

```
TestSetTraceFunc#test_argument_error_on_bmethod [test_settracefunc.rb:1258]:
<[]> expected but was
<[[:call, :method_test_argument_error_on_bmethod]]>.
```

```
Proc TracePoint(call)
Proc Proc
return
```

bmethod call/return

Index: vm.c

```
-----
--- vm.c      (revision 46463)
+++ vm.c      (working copy)
@@ -715,15 +715,17 @@
     const rb_block_t *blockptr, const NODE *cref,
     VALUE defined_class, int splattable)
 {
-   if (SPECIAL_CONST_P(block->iseq))
+   if (SPECIAL_CONST_P(block->iseq)) {
     return Qnil;
+   }
+   else if (BUILTIN_TYPE(block->iseq) != T_NODE) {
+ VALUE ret;
+ const rb_iseq_t *iseq = block->iseq;
+ const rb_control_frame_t *cfp;
+ int i, opt_pc, arg_size = iseq->arg_size;
-   int type = block_proc_is_lambda(block->proc) ?
-   VM_FRAME_MAGIC_LAMBDA : VM_FRAME_MAGIC_BLOCK;
```

```

-
+ int type = block_proc_is_lambda(block->proc) ? VM_FRAME_MAGIC_LAMBDA : VM_FRAME_MAGIC_BLOCK;
+ const rb_method_entry_t *me = th->passed_bmethod_me;
+ th->passed_bmethod_me = 0;
+ cfp = th->cfp;

+ for (i=0; i<argc; i++) {
@@ -733,7 +735,7 @@
+ opt_pc = vm_yield_setup_args(th, iseq, argc, cfp->sp, blockptr,
+ (type == VM_FRAME_MAGIC_LAMBDA) ? splattable+1 : 0);

- if (th->passed_bmethod_me != 0) {
+ if (me != 0) {
+ /* bmethod */
+ vm_push_frame(th, iseq, type | VM_FRAME_FLAG_FINISH | VM_FRAME_FLAG_BMETHOD,
+ self, defined_class,
@@ -740,8 +742,10 @@
+ VM_ENVVAL_PREV_EP_PTR(block->ep),
+ iseq->iseq_encoded + opt_pc,
+ cfp->sp + arg_size, iseq->local_size - arg_size,
- th->passed_bmethod_me, iseq->stack_max);
- th->passed_bmethod_me = 0;
+ me, iseq->stack_max);
+
+ RUBY_DTRACE_METHOD_ENTRY_HOOK(th, me->klass, me->called_id);
+ EXEC_EVENT_HOOK(th, RUBY_EVENT_CALL, self, me->called_id, me->klass, Qnil);
+ }
+ else {
+ vm_push_frame(th, iseq, type | VM_FRAME_FLAG_FINISH,
@@ -756,7 +760,15 @@
+ th->cfp->ep[-1] = (VALUE)cref;
+ }

- return vm_exec(th);
+ ret = vm_exec(th);
+
+ if (me) {
+ /* bmethod */
+ EXEC_EVENT_HOOK(th, RUBY_EVENT_RETURN, self, me->called_id, me->klass, ret);
+ RUBY_DTRACE_METHOD_RETURN_HOOK(th, me->klass, me->called_id);
+ }
+
+ return ret;
+ }
+ else {
+ return vm_yield_with_cfunc(th, block, self, argc, argv, blockptr);
Index: vm_inshelper.c
=====
--- vm_inshelper.c (revision 46462)
+++ vm_inshelper.c (working copy)
@@ -1615,17 +1615,11 @@
+ rb_proc_t *proc;
+ VALUE val;

- RUBY_DTRACE_METHOD_ENTRY_HOOK(th, ci->me->klass, ci->me->called_id);
- EXEC_EVENT_HOOK(th, RUBY_EVENT_CALL, ci->recv, ci->me->called_id, ci->me->klass, Qnil);
-
+ /* control block frame */
+ th->passed_bmethod_me = ci->me;
+ GetProcPtr(ci->me->def->body.proc, proc);
+ val = vm_invoke_proc(th, proc, ci->recv, ci->defined_class, ci->argc, argv, ci->blockptr);

- EXEC_EVENT_HOOK(th, RUBY_EVENT_RETURN, ci->recv, ci->me->called_id, ci->me->klass, val);
- RUBY_DTRACE_METHOD_RETURN_HOOK(th, ci->me->klass, ci->me->called_id);
-
+ return val;
+ }
}

```

Associated revisions

Revision 370212a8 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@46464 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 46464 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

Revision 46464 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

Revision 46464 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

Revision 46464 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

Revision 46464 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

Revision 46464 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- `vm.c (invoke_block_from_c)`: move call/return event timing for `bmethod`. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- `vm_inshelper.c (vm_call_bmethod_body)`: ditto.
- `test/ruby/test_settracefunc.rb`: add a test.

Revision e0c00fcc - 07/30/2014 04:37 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r46464: [Backport #9959]

```
* vm.c (invoke_block_from_c): move call/return event timing for
  bmethod. It can invoke inconsistent call event if this call raises
  argument error.
  [Bug #9959]
```

```
* vm_inshelper.c (vm_call_bmethod_body): ditto.
```

```
* test/ruby/test_settracefunc.rb: add a test.
```

Revision 47013 - 07/30/2014 04:37 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r46464: [Backport #9959]

```
* vm.c (invoke_block_from_c): move call/return event timing for
  bmethod. It can invoke inconsistent call event if this call raises
  argument error.
  [Bug #9959]
```

```
* vm_insnhelper.c (vm_call_bmethod_body): ditto.
```

```
* test/ruby/test_settracefunc.rb: add a test.
```

History

#1 - 06/19/2014 10:49 AM - ko1 (Koichi Sasada)

- Status changed from Open to Closed

- % Done changed from 0 to 100

Applied in changeset [r46464](#).

- vm.c (invoke_block_from_c): move call/return event timing for bmethod. It can invoke inconsistent call event if this call raises argument error. [Bug #9959]
- vm_insnhelper.c (vm_call_bmethod_body): ditto.
- test/ruby/test_settracefunc.rb: add a test.

#2 - 07/30/2014 04:38 PM - nagachika (Tomoyuki Chikanaga)

- Backport changed from 2.0.0: REQUIRED, 2.1: REQUIRED to 2.0.0: REQUIRED, 2.1: DONE

Backported into ruby_2_1 branch at r47013.

#3 - 08/31/2014 07:49 AM - usa (Usaku NAKAMURA)

- Status changed from Closed to Assigned

```
2.0.0 trunk else
```

#4 - 01/05/2018 09:00 PM - naruse (Yui NARUSE)

- Target version deleted (2.2.0)