

Ruby 1.8 - Bug #2376

Kernel.__method__ rubyspec failures for 1.8.*

11/16/2009 08:56 PM - vvs (Vladimir Sizikov)

| | |
|------------------------|--|
| Status: | Open |
| Priority: | Normal |
| Assignee: | |
| Target version: | |
| ruby -v: | ruby 1.8.7 (2009-11-09 patchlevel 202) [i686-linux] |

Description

=begin

The specs pass on MRI 1.9 and on JRuby, but fail on MRI 1.8.7, 1.8.*.

```
mspec -t /opt/ruby187-dev/bin/ruby core/kernel/methodspec.rb -fs  
ruby 1.8.7 (2009-11-09 patchlevel 202) [i686-linux]
```

Kernel.method

- returns the current method, even when aliased (FAILED - 1)
- returns the original name when aliased method (FAILED - 2)
- returns the caller from blocks too (FAILED - 3)
- returns the caller from define_method too
- returns the caller from block inside define_method too
- returns the caller from a define_method called from the same class
- returns method name even from eval
- returns nil when not called from a method (FAILED - 4)

1)

Kernel.method returns the current method, even when aliased FAILED

Expected :send

to equal :f

```
/opt/work/mspec.git/lib/mspec/expectations/expectations.rb:15:in fail_with'  
/opt/work/mspec.git/lib/mspec/matchers/base.rb:8:in =='  
/opt/work/rubyspec.git/core/kernel/shared/method.rb:9  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'  
/opt/work/rubyspec.git/core/kernel/__method__spec.rb:3:in all?'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in each'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in all?'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:163:in process'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in each'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in process'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:36:in describe'  
/opt/work/mspec.git/lib/mspec/runner/object.rb:11:in describe'  
/opt/work/rubyspec.git/core/kernel/methodspec.rb:5  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in load'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in each'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:41:in process'  
/opt/work/mspec.git/lib/mspec/commands/mspec-run.rb:87:in run'  
/opt/work/mspec.git/lib/mspec/utils/script.rb:217:in main'  
/opt/work/mspec.git/bin/mspec-run:8
```

2)

Kernel.**method** returns the original name when aliased method FAILED

Expected :send
to equal :f

```
/opt/work/mspec.git/lib/mspec/expectations/expectations.rb:15:in fail_with'  
/opt/work/mspec.git/lib/mspec/matchers/base.rb:8:in =='  
/opt/work/rubyspec.git/core/kernel/shared/method.rb:13  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'  
/opt/work/mspec.git/lib/mspec/expectations/expectations.rb:15:in all?'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in each'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in all?'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:163:in process'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in each'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in process'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:36:in describe'  
/opt/work/mspec.git/lib/mspec/runner/object.rb:11:in describe'  
/opt/work/rubyspec.git/core/kernel/methodspec.rb:5  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in load'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in each'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:41:in process'  
/opt/work/mspec.git/lib/mspec/commands/mspec-run.rb:87:in run'  
/opt/work/mspec.git/lib/mspec/utils/script.rb:217:in main'  
/opt/work/mspec.git/bin/mspec-run:8
```

3)

Kernel.**method** returns the caller from blocks too FAILED

Expected [:send, :send]
to equal [:h, :h]

```
/opt/work/mspec.git/lib/mspec/expectations/expectations.rb:15:in fail_with'  
/opt/work/mspec.git/lib/mspec/matchers/base.rb:8:in =='  
/opt/work/rubyspec.git/core/kernel/shared/method.rb:20  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'  
/opt/work/mspec.git/lib/mspec/expectations/expectations.rb:15:in all?'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in each'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in all?'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:163:in process'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in each'  
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in process'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:36:in describe'  
/opt/work/mspec.git/lib/mspec/runner/object.rb:11:in describe'  
/opt/work/rubyspec.git/core/kernel/methodspec.rb:5  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in load'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in each'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in files'  
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:41:in process'  
/opt/work/mspec.git/lib/mspec/commands/mspec-run.rb:87:in run'  
/opt/work/mspec.git/lib/mspec/utils/script.rb:217:in main'  
/opt/work/mspec.git/bin/mspec-run:8
```

4)

Kernel.**method** returns nil when not called from a method FAILED

```
Expected :send
to equal nil
```

```
/opt/work/mspec.git/lib/mspec/expectations/expectations.rb:15:in fail_with'
/opt/work/mspec.git/lib/mspec/matchers/base.rb:8:in=='
/opt/work/rubyspec.git/core/kernel/shared/method.rb:49
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'
/opt/work/rubyspec.git/core/kernel/shared/___method___.rb:43:in all?'
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in each'
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in all?'
/opt/work/mspec.git/lib/mspec/runner/context.rb:135:in protect'
/opt/work/mspec.git/lib/mspec/runner/context.rb:163:in process'
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in each'
/opt/work/mspec.git/lib/mspec/runner/context.rb:155:in process'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:36:in describe'
/opt/work/mspec.git/lib/mspec/runner/object.rb:11:in describe'
/opt/work/rubyspec.git/core/kernel/methodspec.rb:5
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in load'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in instance_eval'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:67:in protect'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:55:in files'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in each'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:49:in files'
/opt/work/mspec.git/lib/mspec/runner/mspec.rb:41:in process'
/opt/work/mspec.git/lib/mspec/commands/mspec-run.rb:87:in run'
/opt/work/mspec.git/lib/mspec/utils/script.rb:217:in main'
/opt/work/mspec.git/bin/mspec-run:8
```

Finished in 0.012987 seconds

1 file, 8 examples, 8 expectations, 4 failures, 0 errors

=end

History

#1 - 11/30/2009 12:32 AM - vvs (Vladimir Sizikov)

=begin

Can we please get an official response whether this is a bug in MRI 1.8.7 or is it intentional. Then we'll update RubySpecs accordingly.

Personally, it does look like a bug to me.

MRI 1.9 and JRuby pass those specs and that seems to be the correct behavior.

=end

#2 - 12/06/2009 01:19 AM - shugo (Shugo Maeda)

- File `___method___.spec.rb` added

=begin

It seems that most of the failures are not due to **method**.

The attached specs, which does not use `Kernel#send`, results in only one failure. However, the following failure is strange.

```
$ mspec -t ruby-1_8 core/kernel/methodspec.rb
ruby 1.8.8dev (2009-12-05 revision 26022) [i686-linux]
.....F
```

1)

Kernel.**method** returns nil when not called from a method FAILED

Expected :config

to equal nil

```
/home/shugo/src/mspec/lib/mspec/expectations/expectations.rb:15:in fail_with'
/home/shugo/src/mspec/lib/mspec/matchers/base.rb:8:in=='
/home/shugo/src/rubyspec/core/kernel/methodspec.rb:52
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:67:in instance_eval'
```

```
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:67:inprotect'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:135:in protect'  
/home/shugo/src/rubyspec/core/kernel/___method___spec.rb:46:inall?'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:135:in each'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:135:inall?'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:135:in protect'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:163:inprocess'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:155:in each'  
/home/shugo/src/mspec/lib/mspec/runner/context.rb:155:inprocess'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:36:in describe'  
/home/shugo/src/mspec/lib/mspec/runner/object.rb:11:indescribe'  
/home/shugo/src/rubyspec/core/kernel/methodspec.rb:9  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:55:in load'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:55:infiles'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:67:in instance_eval'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:67:inprotect'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:55:in files'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:49:ineach'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:49:in files'  
/home/shugo/src/mspec/lib/mspec/runner/mspec.rb:41:inprocess'  
/home/shugo/src/mspec/lib/mspec/commands/mspec-run.rb:87:in run'  
/home/shugo/src/mspec/lib/mspec/utils/script.rb:217:inmain'  
/home/shugo/src/mspec/bin/mspec-run:8
```

Finished in 0.014296 seconds

1 file, 8 examples, 8 expectations, 1 failure, 0 errors

"config" may be a method of mspec, but it's not found in the stack trace.
A **method** call outside mspec returns nil.

=end

#3 - 12/09/2009 10:27 AM - brixen (Brian Shirai)

=begin
Hi Shugo,

My question is why do the existing specs pass in 1.9 (ie ruby 1.9.2dev (2009-10-30 trunk 25579) [i386-darwin9.8.0]) and not in 1.8.7 (ie ruby 1.8.7 (2009-06-12 patchlevel 174) [i686-darwin9.8.0]).

Shouldn't the specs pass the same in both versions when using #send or #send?

=end

#4 - 12/09/2009 11:03 AM - shugo (Shugo Maeda)

=begin
Hi Brian,

2009/12/9 Brian Ford redmine@ruby-lang.org:

My question is why do the existing specs pass in 1.9 (ie ruby 1.9.2dev (2009-10-30 trunk 25579) [i386-darwin9.8.0]) and not in 1.8.7 (ie ruby 1.8.7 (2009-06-12 patchlevel 174) [i686-darwin9.8.0]).

Shouldn't the specs pass the same in both versions when using #send or #send?

I guess Kernel#send doesn't push a frame in 1.9, but does in 1.8.

```
defiant:ruby$ ruby-trunk -ve 'def foo; puts caller; end; send(:foo)'  
ruby 1.9.2dev (2009-12-05 trunk 26022) [i686-linux]  
-e:1:in <main>'  
defiant:ruby$ ruby-1_8 -ve 'def foo; puts caller; end; send(:foo)'  
ruby 1.8.8dev (2009-12-05 revision 26022) [i686-linux]  
-e:1:insend'  
-e:1
```

I'm not sure which behavior is reasonable, but it may be better to leave it implementation defined.

FYI, IronRuby pushes a frame the same as 1.8, and Rubinius and JRuby doesn't.

--

Shugo Maeda

=end

#5 - 12/09/2009 04:43 PM - brixen (Brian Shirai)

=begin
Hi Shugo,

Thank you for the explanation. I understand now.

I'm concerned with simply saying this should be implementation defined. That's a really slippery slope. People's code will rely on this behavior. And it seems important enough to specify. Could we please get Matz's opinion on this.

I will change the specs to not use #send or #send but rather call #method or #callee (on 1.9) directly. I will also add version-specific specs for the behavior with #send, at least for now. Implementations are always free to add not_compliant_on guards.

Thanks,
Brian
=end

#6 - 12/11/2009 10:22 AM - shugo (Shugo Maeda)

=begin
Hi,

2009/12/9 Brian Ford redmine@ruby-lang.org:

I'm concerned with simply saying this should be implementation defined. That's a really slippery slope. People's code will rely on this behavior. And it seems important enough to specify. Could we please get Matz's opinion on this.

Matz said that he prefer the behavior of Ruby 1.8.
How do you feel, ko1?

--
Shugo Maeda

=end

Files

| | | | |
|-------------------|---------|------------|---------------------|
| __method__spec.rb | 1.16 KB | 12/06/2009 | shugo (Shugo Maeda) |
|-------------------|---------|------------|---------------------|