

Ruby - Bug #3690

method_missing in a BasicObject's singleton class - infinite recursion segfaults

08/13/2010 10:07 PM - rbjl (Jan Lelis)

Status:	Rejected	Backport:
Priority:	Normal	
Assignee:		
Target version:		
ruby -v:	ruby 1.9.3dev (2010-05-26 trunk 28028) [i686-linux]	

Description

```
=begin
```

segfaults with all versions that I tested (1.9.3, 1.9.2, 1.9.1)

```
obj = BasicObject.new

def obj.method_missing(m, *args, &block)
  send( m, *args, &block )
end

puts obj.seg
=end
```

History

#1 - 08/14/2010 10:29 AM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Rejected

```
=begin
Yes, it does recurse infinitely with any objects.
That's what you code does.

=end
```

#2 - 08/15/2010 12:34 AM - rbjl (Jan Lelis)

```
=begin
But it does not throw a SystemStackError
=end
```

#3 - 08/15/2010 01:50 AM - RickDeNatale (Rick DeNatale)

```
=begin
Well it does on my Mac

→ rvm use 1.9.2
Using ruby 1.9.2 preview1

~
→ ruby -e'obj = BasicObject.new
quote>
quote> def obj.method_missing(m, *args, &block)
quote> send( m, *args, &block )
quote> end
quote> puts obj.seg'
-e:4:in method_missing': stack level too deep (SystemStackError) from -e:4:in method_missing'
from -e:4:in method_missing' from -e:4:in method_missing'
from -e:4:in method_missing' from -e:4:in method_missing'
from -e:4:in method_missing' from -e:4:in method_missing'
from -e:4:in method_missing' ... 1253 levels... from -e:4:in method_missing'
from -e:4:in method_missing' from -e:4:in method_missing'
from -e:7:in ``
```

=end

#4 - 08/15/2010 02:25 AM - runpaint (Run Paint Run Run)

- *File segfault added*

=begin

I can reproduce on ruby 1.9.3dev (2010-08-13 trunk 28973) [i686-linux] with the OP's script. Attached the output.

=end

#5 - 08/15/2010 02:45 AM - Eregon (Benoit Daloze)

=begin

On 14 August 2010 17:34, Jan Lelis redmine@ruby-lang.org wrote:

Issue [#3690](#) has been updated by Jan Lelis.

But it does not throw a SystemStackError

At me (OS X), it depends quite much.
(ruby 1.9.3dev (2010-08-13) [x86_64-darwin10.4.0], ruby 1.9.2dev (2010-08-09 revision 28936) [x86_64-darwin10.4.0])

Running with 1.9.{2,3} as a script produce a SystemStackError.

However, sometimes, running in IRB or with 'GC.stress = true' cause segfault, with 1.9.3.

So it is a 1.9.3-specific problem at me. (1.9.2 with GC.stress take a while so I suppose there is no problem)

B.D.

=end

#6 - 08/18/2010 12:12 AM - rbjl (Jan Lelis)

- *File seg.txt added*

=begin

=end

Files

segfault	313 KB	08/15/2010	runpaint (Run Paint Run Run)
seg.txt	314 KB	08/18/2010	rbjl (Jan Lelis)