

Ruby - Bug #555

method_missing in Gem module removes some necessary methods

09/10/2008 06:54 AM - matsuda (Akira Matsuda)

Status:	Closed	
Priority:	Normal	
Assignee:	drbrain (Eric Hodel)	
Target version:	1.9.1 Release Candidate	
ruby -v:		Backport:
Description =begin I found something strange in Ruby 1.9 bundled Rubygems(gem_prelude.rb). (1) there's a method named default_dir in Gem module, which returns a certain directory name Gem.default_dir #=> "/Users/matsuda/ruby/lib/ruby/gems/1.9.0" (2) call a missing method on Gem module to make a method_missing call Gem.foo NoMethodError: undefined method foo' for Gem:Module from gem_prelude.rb:192:in method_missing' from (irb):12 from /Users/matsuda/ruby/bin/irb19:12:in `` (3) method_missing undefs Gem::GEM_PRELUDE_METHODS.each methods inside Gem.method_missing -> QuickLoader.load_full_rubygems_library (4) Gem.default_dir still alive Gem.default_dir #=> "/Users/matsuda/ruby/lib/ruby/gems/1.9.0" (5) invoke method_missing again Gem.foo /Users/matsuda/ruby/lib/ruby/1.9.0/rubygems.rb:82: warning: already initialized constant MUTEX /Users/matsuda/ruby/lib/ruby/1.9.0/rubygems.rb:84: warning: already initialized constant RubyGemsPackageVersion /Users/matsuda/ruby/lib/ruby/1.9.0/rubygems.rb:89: warning: already initialized constant WIN_PATTERNS /Users/matsuda/ruby/lib/ruby/1.9.0/rubygems.rb:742: warning: already initialized constant MARSHAL_SPEC_DIR /Users/matsuda/ruby/lib/ruby/1.9.0/rubygems.rb:744: warning: already initialized constant YAML_SPEC_DIR NoMethodError: undefined method foo' for Gem:Module from gem_prelude.rb:192:in method_missing' from (irb):14 from /Users/matsuda/ruby/bin/irb19:12:in `` (6) Gem.default_dir disappears! Gem.default_dir NameError: undefined method default_dir' for Gem' from gem_prelude.rb:78:in undef_method' from gem_prelude.rb:78:in block in singletonclass' from gem_prelude.rb:77:in each' from gem_prelude.rb:77:in singletonclass' from gem_prelude.rb:76:in load_full_rubygems_library' from gem_prelude.rb:191:in method_missing' from (irb):15 from /Users/matsuda/ruby/bin/irb19:12:in `` I noticed that some gems don't work well on Ruby 1.9 because of this behavior. Ruby version: revision 19146 gem -v: 1.2.0.1824 =end		

History

#1 - 09/10/2008 11:18 PM - ko1 (Koichi Sasada)

- Assignee set to drbrain (Eric Hodel)

=begin

=end

#2 - 09/28/2008 04:40 PM - yugui (Yuki Sonoda)

- Category set to lib

- Target version set to 1.9.0-5

=begin

=end

#3 - 12/07/2008 10:02 PM - yugui (Yuki Sonoda)

- Target version changed from 1.9.0-5 to 1.9.1 Release Candidate

=begin

=end

#4 - 12/11/2008 10:33 AM - yugui (Yuki Sonoda)

=begin

I'll ask Eric whether it still happens

=end

#5 - 12/12/2008 07:19 AM - drbrain (Eric Hodel)

=begin

I think this patch would fix it:

Index: gem_prelude.rb

--- gem_prelude.rb (revision 20650)

+++ gem_prelude.rb (working copy)

@@ -172,6 +172,7 @@ if defined?(Gem) then

with the real RubyGems

```
GEM_PRELUDE_METHODS = Gem.methods(false)
```

- GEM_PRELUDE_METHODS << :method_missing

```
begin
```

```
  verbose, debug = $VERBOSE, $DEBUG
```

but I get a crash:

(gdb) run -v test.rb

Starting program: /usr/local/bin/ruby19 -v test.rb

Reading symbols for shared libraries +++... done

ruby 1.9.1 (2008-12-12 revision 20648) [i386-darwin9.5.0]

[...]

Program received signal EXC_BAD_ACCESS, Could not access memory.

Reason: KERN_PROTECTION_FAILURE at address: 0x0000012c

0x0010f1dd in vm_exec (th=0x200710) at vm.c:1071

1071 epc = cfp->pc - cfp->iseq->iseq_encoded;

(gdb) bt

#0 0x0010f1dd in vm_exec (th=0x200710) at vm.c:1071

#1 0x0010f914 in rb_iseq_eval (iseqval=4094920) at vm.c:1246

#2 0x0002efa9 in ruby_exec_node (n=0x3e7bc8, file=0x0) at eval.c:205

#3 0x000317ee in ruby_run_node (n=0x3e7bc8) at eval.c:233

#4 0x00001f5f in main (argc=3, argv=0x200540) at main.c:35

=end

#6 - 12/12/2008 07:41 AM - drbrain (Eric Hodel)

=begin

May I commit this patch? It is correct:

Index: gem_prelude.rb

```
--- gem_prelude.rb (revision 20650)
+++ gem_prelude.rb (working copy)
@@ -194,7 +194,13 @@ if defined?(Gem) then
```

```
module QuickLoader
```

```
  • [REDACTED]
  • [REDACTED]
  • [REDACTED]
  • [REDACTED]
  • [REDACTED]
    Gem::GEM_PRELUDE_METHODS.each do |method_name|
      undef_method method_name
```

It passes this test:

```
$ cat test.rb
Gem.foo rescue nil
Gem.foo rescue nil
p Gem.default_dir
```

```
$ ruby19 -v test.rb
ruby 1.9.1 (2008-12-12 revision 20648) [i386-darwin9.5.0]
"/usr/local/lib/ruby19/gems/1.9.1"
```

```
=end
```

#7 - 12/21/2008 12:11 AM - yugui (Yuki Sonoda)

- *Due date set to 12/24/2008*

```
=begin
```

```
=end
```

#8 - 12/23/2008 08:07 AM - drbrain (Eric Hodel)

- *Status changed from Open to Closed*

- *% Done changed from 0 to 100*

```
=begin
```

Applied in changeset r20923.

```
=end
```