

Ruby master - Bug #15558

Should Exception#exception copy the backtrace?

01/23/2019 04:18 PM - Eregon (Benoit Daloze)

Status: Closed	
Priority: Normal	
Assignee: Eregon (Benoit Daloze)	
Target version:	
ruby -v: ruby 2.6.0p0 (2018-12-25 revision 66547) [x86_64-linux]	Backport: 2.4: UNKNOWN, 2.5: UNKNOWN, 2.6: UNKNOWN
Description Currently it does not on MRI: <pre>ruby -e 'begin raise "foo"; rescue => e; c=e.exception "bar"; p c.backtrace; end' nil</pre> But it does on JRuby 9.2.5.0 and TruffleRuby 1.0.0-rc11: <pre>truffleruby -e 'begin raise "foo"; rescue => e; c=e.exception "bar"; p e.backtrace; end' ["-e:1:in `<main>'"]</pre> This means in some cases, code needs about this difference such as in https://github.com/asciidoctor/asciidoctor/blob/41da20a47a8da96966ef3ec1c2f509e07e7920e3/lib/asciidoctor.rb#L1322-L1338 More context in: https://github.com/oracle/truffleruby/issues/1542#issuecomment-456850066	

Associated revisions

Revision 8b2e1ca1 - 09/02/2019 07:47 AM - nobu (Nobuyoshi Nakada)

Do not clear backtrace in Exception#exception

[Bug #15558]

History

#1 - 03/22/2019 10:41 PM - Eregon (Benoit Daloze)

[nobu \(Nobuyoshi Nakada\)](#) and other MRI committers: what do you think?

It's somewhat inconsistent with Exception#clone which does copy the backtrace.

Would it make sense to follow JRuby and TruffleRuby's behavior, by copying the backtrace too, here?

#2 - 03/23/2019 09:43 PM - Eregon (Benoit Daloze)

BTW, MRuby 2.0.0 also copies the backtrace (because it implements Exception#exception as clone + setting the message):

```
$ mruby -e 'begin raise "foo"; rescue => e; c=e.exception "bar"; p c.backtrace; end'
["-e:1"]
```

MRI also clones (with rb_obj_clone), but exc_init resets the backtrace to nil.

So should exc_exception() just call rb_ivar_set(exc, id_mesg, argv[0]); instead of exc_initialize (which kind of initializes the object twice)?

#3 - 06/04/2019 12:20 PM - Eregon (Benoit Daloze)

I plan to fix this and copy the backtrace too in MRI, because it looks not intentional and inconsistent.

Anyone against?

#4 - 06/05/2019 08:19 PM - Eregon (Benoit Daloze)

- Assignee set to Eregon (Benoit Daloze)

#5 - 07/29/2019 07:56 AM - ko1 (Koichi Sasada)

I'm not sure the intention, but

Japanese document shows how to use it:

```
# http://rurema.clear-code.com/2.6.0/method/Exception/i/exception.html
begin
  ... # do something
rescue => e
  raise e.exception("an error occurs during hogehoge process") # detailed message
end
```

If this method is intended to be raised immediately, the empty backtrace is reasonable.

#6 - 09/02/2019 04:28 PM - nobu (Nobuyoshi Nakada)

- *Status changed from Open to Closed*