

## Ruby trunk - Bug #15558

### Should Exception#exception copy the backtrace?

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

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

#### 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)?