Ruby master - Bug #17419
`binding.eval` backtrace differente
12/21/2020 05:38 PM - vo.x (Vit Ondruch)

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
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<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
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<tr>
<td>Assignee:</td>
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<td>Target version:</td>
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<tr>
<td>Backport:</td>
<td>2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN</td>
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<table>
<thead>
<tr>
<th>Description</th>
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<td>Can somebody elaborate why there is different output for Ruby 2.7 vs Ruby 3.0?</td>
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```ruby
$ ruby -v
ruby 2.7.2p137 (2020-10-01 revision 5445e04352) [x86_64-linux]

$ ruby -e 'begin
  binding.eval(%|raise "oops"|)
  rescue Exception => exc
  puts exc.backtrace
  end
-
  -e:3:in `<main>'
  -e:3:in `eval'
  -e:3:in `<main>'

$ ruby -v
ruby 3.0.0rc1 (2020-12-20 master 8680ae9cbd) [x86_64-linux]

$ ruby -e 'begin
  binding.eval(%|raise "oops"|)
  rescue Exception => exc
  puts exc.backtrace
  end
-
  (eval):1:in `<main>'
  -e:3:in `eval'
  -e:3:in `<main>'
```

IOW the first line of backtrace is different. Is this expected? This is causing test failures:

https://github.com/rails/web-console/issues/301

### Related issues:
- Related to Ruby master - Bug #17160: Wrong exception backtrace

### Associated revisions

Revision 4a18cc7f - 12/22/2020 12:04 AM - mame (Yusuke Endoh)
NEWS.md: mention the behavior change of Binding#eval

[Bug #17419]

### History

#1 - 12/21/2020 05:44 PM - vo.x (Vit Ondruch)
- Related to Bug #17160: Wrong exception backtrace added
I think this is an intended change; it was explained via a link to a comment in another issue (I think by mame or someone else, where matz commented on reverting the behaviour). If I remember the reason, the changed backtrace confused many ruby users over the years, and it seemed better to go back to the state prior to the change, hopefully lessening the confusion in the process. :D

(Not sure if NEWS mentions this, but if not then perhaps a link should be there, or just a short explanation in NEWS itself.)

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- Status changed from Open to Closed

This change is expected, see #4352.

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Replacing `b.eval(src)` with `b.eval(src, *b.source_location)` will solve the issue.

However, #4352 focused on only Kernel#eval. I was not aware about the behavior change of Binding#eval. I've just added an explanation to NEWS.md at 4a18cc7f604c259415d933acd9fd00234733cab6.