

Ruby master - Feature #14141

Add a method to Exception for retrieving formatted exception for logging purpose (Exception#{formatted,display})

11/29/2017 09:34 AM - sorah (Sorah Fukumori)

Status: Closed	
Priority: Normal	
Assignee: matz (Yukihiko Matsumoto)	
Target version:	
Description	
Most people want to log caught exceptions to stderr (or somewhere else) then continues their program as usual.	
<pre>def the_program # ... raise "failure!" # ... rescue RuntimeError => e \$stderr.puts "#{e.message} (#{e.class})\n\t#{e.backtrace.join("\n\t")}" retry end</pre>	
I'm very bored to write error logging many time... I want to log errors in the default format of Ruby, just like the following:	
<pre>rescue RuntimeError => e e.display # ...</pre>	
From Ruby 2.5, we've started branching error formatting on TTY-ness of \$stderr. It'd be bit more useful if we can log using the same format with the format which Ruby determines.	
Ruby already has Object#display. One consideration is to retrieve formatted String from Exception object, but the current error logging code (eval_error.c) depends on IO, so I want to start from just having Exception#display. I think most use case is just to log errors into IO.	
Related issues:	
Related to Ruby master - Bug #14324: Should Exception#full_message include es...	Closed

Associated revisions

Revision 0d771889 - 12/12/2017 11:47 AM - sorah (Sorah Fukumori)

error.c(exc_full_message): Exception#full_message

Add a method to retrieve a String expression of an exception, formatted in the same way that Ruby prints an uncaught exception out.

[Feature #14141]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@61154 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 61154 - 12/12/2017 11:47 AM - sorah (Sorah Fukumori)

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[Feature #14141]

History

#1 - 11/29/2017 12:35 PM - matz (Yukihiko Matsumoto)

Do you really want display that prints to IO or some other method that generates a formatted string?

Matz.

#2 - 11/29/2017 01:01 PM - sorah (Sorah Fukumori)

At least that satisfies my need. I think advanced error logging can be achieved by existing Exception#{class,message,backtrace}.

#3 - 11/29/2017 01:03 PM - sorah (Sorah Fukumori)

- File 1.patch added

#4 - 11/29/2017 01:04 PM - sorah (Sorah Fukumori)

- File 2.patch added

#5 - 11/29/2017 01:04 PM - sorah (Sorah Fukumori)

- File deleted (1.patch)

#6 - 11/30/2017 07:38 AM - nobu (Nobuyoshi Nakada)

Kernel#display outputs to STDOUT by the default.

<https://github.com/nobu/ruby/tree/feature/Exception%23display>

#7 - 11/30/2017 10:13 AM - sorah (Sorah Fukumori)

- File 0002-Add-Exception-display-to-log-exception.patch added

- File 0001-Add-Exception-formatted-to-get-a-formatted-string.patch added

Hmm. Changed my mind. Implemented Exception#formatted with this patch.

I'm not sure this name is proper, suggestions appreciated

#8 - 11/30/2017 10:35 AM - sorah (Sorah Fukumori)

- Subject changed from Exception#display to display same formatted text for IO to Add a method to Exception for retrieving formatted exception for logging purpose (Exception#{formatted,display})

#9 - 11/30/2017 10:37 AM - sorah (Sorah Fukumori)

- Assignee set to matz (Yukihiko Matsumoto)

- Status changed from Open to Assigned

#10 - 11/30/2017 05:47 PM - Eregon (Benoit Daloze)

+1 on an easy way to get a formatted exception.

BTW, "#{e.message} (#{e.class})\n\t#{e.backtrace.join("\n\t")}"

is slightly different than what the C code does, if the message spans multiple lines (then the (#{e.class}) is still on the first line).

#11 - 12/01/2017 08:53 AM - sorah (Sorah Fukumori)

is slightly different than what the C code does, if the message spans multiple lines (then the (#{e.class}) is still on the first line).

meh, yes, I just gave up to write the exact Ruby code with the C-level behavior...

#12 - 12/04/2017 08:50 AM - matsuda (Akira Matsuda)

I'm not sure this name is proper, suggestions appreciated

How about "to_formatted_s"?

Active Support has this method for some core classes, and so I guess this name may sound familiar to the Rails people.

https://github.com/rails/rails/blob/07788c7/activesupport/lib/active_support/core_ext/time/conversions.rb#L26-L41

#13 - 12/12/2017 07:10 AM - akr (Akira Tanaka)

How about Exception#long_message or full_message ?

#14 - 12/12/2017 07:28 AM - sorah (Sorah Fukumori)

In [DeveloperMeeting20171212Japan](#). We concluded to add Exception#formatted in the proposed patch, as #full_message in Ruby 2.5

Several considerations are pointed out:

- Q. Does the method interact with \$stderr.tty? ?
 - Yes.
 - Q. Is it imaginable?
 - The motivation is to have a method to retrieve the same formatted string that Ruby prints out in the execution context at the timing of method call (TTY-ishness)
- Q. Naming
 - long_message which follows existing #message
 - full_message is more familiar (Rails has a similarly named method)
- Q. What if the method accepts some arguments to specify formatting option? (e.g., coloring, backtrace direction)
 - (Proposed implementation changes formatting from \$stderr.tty?)
 - I'd like to start with the minimum implementation. We can decide to add options afterward.

[matz \(Yukihiro Matsumoto\)](#): please approve.

#15 - 12/12/2017 07:42 AM - matz (Yukihiro Matsumoto)

Hi,

full_message is approved.

Matz.

#16 - 12/12/2017 11:47 AM - sorah (Sorah Fukumori)

- Status changed from Assigned to Closed

Applied in changeset [trunk|r61154](#).

error.c(exc_full_message): Exception#full_message

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[Feature [#14141](#)]

#17 - 01/08/2018 10:54 AM - Eregon (Benoit Daloze)

- Related to Bug [#14324](#): Should Exception#full_message include escape sequences? added

Files

2.patch	8.74 KB	11/29/2017	sorah (Sorah Fukumori)
0001-Add-Exception-formatted-to-get-a-formatted-string.patch	8.36 KB	11/30/2017	sorah (Sorah Fukumori)
0002-Add-Exception-display-to-log-exception.patch	1.99 KB	11/30/2017	sorah (Sorah Fukumori)