

Ruby master - Bug #15911

Missing TracePoint return event for ||=

06/11/2019 08:00 AM - cfis (Charlie Savage)

Status:	Closed		
Priority:	Normal		
Assignee:			
Target version:			
ruby -v:	ruby 2.6.3p62 (2019-04-16 revision 67580) [x86_64-darwin18]	Backport:	2.4: UNKNOWN, 2.5: UNKNOWN, 2.6: UNKNOWN

Description

While updating ruby-prof, I ran into an issue while profiling rails that caused ruby-prof to show an incorrect method invocation tree. This is caused by the use of the ||= operator in minitest.

Here is a small test case:

```
class Operators
  def self.should_be_called_by_test
    end

  def self.test
    self.a
    should_be_called_by_test
  end

  def self.b=(value)
    end

  def self.b
    end

  def self.a
    self.b ||= :random
  end
end

tp = TracePoint.new(:call, :c_call, :return, :c_return) do |event|
  p [event.event, event.method_id]
end

tp.enable do
  Operators.test
end
```

This is the result:

```
[:call, :test]
[:call, :a]
[:call, :b]
[:return, :b]
[:call, :b=]
[:return, :b=]
<----- Missing [:return, :a]
[:call, :should_be_called_by_test]
[:return, :should_be_called_by_test]
[:return, :test]
```

Notice there is a missing :return event for the :a method. From my experiments, ||= works if the left hand side is not a method call (say @b ||=1) but fails if it is.

Note this works correctly on the latest version of ruby 2.5 - ruby 2.5.5p157 (2019-03-15 revision 67260) [x86_64-darwin18].

The minitest code which this bug is triggered by:

```
module ActiveSupport
  class TestCase < ::Minitest::Test
    Assertion = Minitest::Assertion

    class << self
      def test_order=(new_order)
        ActiveSupport.test_order = new_order
      end

      def test_order
        ActiveSupport.test_order ||= :random
      end
    end
  end
end
```

Related issues:

Related to Ruby master - Bug #15578: Missing TracePoint return event when a c...

Closed

History

#1 - 06/11/2019 08:01 AM - cfis (Charlie Savage)

- Description updated

#2 - 06/11/2019 08:04 AM - cfis (Charlie Savage)

- Description updated

#3 - 06/11/2019 08:05 AM - cfis (Charlie Savage)

- Description updated

#4 - 06/11/2019 08:11 AM - cfis (Charlie Savage)

- ruby -v set to ruby 2.6.3p62 (2019-04-16 revision 67580) [x86_64-darwin18]

- Description updated

#5 - 06/11/2019 08:23 AM - cfis (Charlie Savage)

- Description updated

#6 - 06/11/2019 10:06 AM - mame (Yusuke Endoh)

- Related to Bug #15578: Missing TracePoint return event when a conditional is used before a rescue added

#7 - 06/11/2019 10:08 AM - mame (Yusuke Endoh)

- Status changed from Open to Closed

Thank you for your report.

I can reproduce the issue at ruby 2.6.3, and cannot do at master branch. It looks like the issue is already fixed by 1bc6c3f40777ca10d8e7df38b775b0bb81a25881. Please wait for the backport.