

Ruby trunk - Bug #14373

Methods with more than 32 keyword arguments with default values have some of the arguments set to default despite being passed in.

01/18/2018 05:23 PM - sk (SK Liew)

Status: Closed	
Priority: Normal	
Assignee:	
Target version:	
ruby -v: ruby 2.5.0p0 (2017-12-25 revision 61468) [x86_64-linux], ruby 2.4.0p0 (2016-12-24 revision 57164) [x86_64-linux]	Backport: 2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN

Description

```
class Test
  # 33 keyword arguments
  def test1(a0: '', a1: '', a2: '', a3: '', a4: '', a5: '', a6: '', a7: '', a8: '', b0: '', b1: ''
, b2: '', b3: '', b4: '', b5: '', b6: '', b7: '', b8: '', c0: '', c1: '', c2: '', c3: '', c4: ''
c5: '', c6: '', c7: '', c8: '', d0: '', d1: '', d2: '', d3: '', d4: '', d5: '')
    puts a1
    puts d5
    puts '-----'
  end
  # 32 keyword arguments
  def test2(a0: '', a1: '', a2: '', a3: '', a4: '', a5: '', a6: '', a7: '', a8: '', b0: '', b1: ''
, b2: '', b3: '', b4: '', b5: '', b6: '', b7: '', b8: '', c0: '', c1: '', c2: '', c3: '', c4: ''
c5: '', c6: '', c7: '', c8: '', d0: '', d1: '', d2: '', d3: '', d4: '')
    puts a1
    puts d4
    puts '-----'
  end
end
puts 'Test1 with a1, expects a1, prints nothing in 2.5, prints a1 in 2.4 and 2.3'
Test.new.test1(a1: 'a1')

puts 'Test1 with a1 and d5, expects a1 and d5 but only prints a1'
Test.new.test1(a1: 'a1', d5: 'd5')

puts 'Test1 with d5, expects d5 but prints nothing'
Test.new.test1({d5: 'd5'})

puts 'Test2 with a1 and d4, as expected'
Test.new.test2(a1: 'a1', d4: 'd4')

puts 'Test2 with a1, as expected'
Test.new.test2(a1: 'a1')
```

The code above describes the issues. I noticed that Ruby 2.5 behaves slightly differently from 2.3 and 2.4 (as described in the first test case).

Associated revisions

Revision fb839332 - 01/19/2018 03:09 AM - nobu (Nobuyoshi Nakada)

vm_inshelper.c: fix many keyword arguments

- vm_inshelper.c (vm_check_keyword): if the index exceeds the width of unspecified bits, that argument is specified. unspecified_bits still be a fixnum if the actual arguments do not exceed the limit, regardless the formal parameters size. [ruby-core:84921] [Bug #14373]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@61940 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 61940 - 01/19/2018 03:09 AM - nobu (Nobuyoshi Nakada)

vm_inshelper.c: fix many keyword arguments

- `vm_inshelper.c (vm_check_keyword)`: if the index exceeds the width of unspecified bits, that argument is specified. `unspecified_bits` still be a fixnum if the actual arguments do not exceed the limit, regardless the formal parameters size. [ruby-core:84921] [Bug #14373]

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`vm_inshelper.c`: fix many keyword arguments

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Revision 12c0cc01 - 01/19/2018 04:23 AM - nobu (Nobuyoshi Nakada)

`vm_args.c`: fix `KW_SPECIFIED_BITS_MAX`

- `vm_args.c (KW_SPECIFIED_BITS_MAX)`: subtracted 1bit for `FIXNUM_FLAG`. [ruby-core:84921] [Bug #14373]
- `vm_inshelper.c (vm_check_keyword)`: unsigned for bit operation.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@61945 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 61945 - 01/19/2018 04:23 AM - nobu (Nobuyoshi Nakada)

`vm_args.c`: fix `KW_SPECIFIED_BITS_MAX`

- `vm_args.c (KW_SPECIFIED_BITS_MAX)`: subtracted 1bit for `FIXNUM_FLAG`. [ruby-core:84921] [Bug #14373]
- `vm_inshelper.c (vm_check_keyword)`: unsigned for bit operation.

Revision 61945 - 01/19/2018 04:23 AM - nobu (Nobuyoshi Nakada)

`vm_args.c`: fix `KW_SPECIFIED_BITS_MAX`

- `vm_args.c (KW_SPECIFIED_BITS_MAX)`: subtracted 1bit for `FIXNUM_FLAG`. [ruby-core:84921] [Bug #14373]
- `vm_inshelper.c (vm_check_keyword)`: unsigned for bit operation.

History

#1 - 01/18/2018 06:33 PM - shevegen (Robert A. Heiler)

I ran the code and indeed, this is very strange behaviour.

The biggest surprise to me was the "prints nothing in 2.5, prints a1 in 2.4 and 2.3" part. I know way too little to say anything but to me this looks like a bug/regression.

I guess your code example could be used for new tests to ensure that the functionality does not disappear in new ruby releases, if it is a bug that is. :) (I just can't think of a reason why it would work on ruby 2.4 but not 2.5)

#2 - 01/19/2018 03:09 AM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Closed

Applied in changeset [trunk|r61940](#).

`vm_inshelper.c`: fix many keyword arguments

- `vm_inshelper.c (vm_check_keyword)`: if the index exceeds the width of unspecified bits, that argument is specified. `unspecified_bits` still be a fixnum if the actual arguments do not exceed the limit, regardless the formal parameters size. [ruby-core:84921] [Bug #14373]