

Ruby - Bug #11501

About priority of a hash element when using {**hash1, **hash2} literal

09/02/2015 06:24 AM - studio3104 (Satoshi SUZUKI)

Status:	Closed		
Priority:	Normal		
Assignee:	nagachika (Tomoyuki Chikanaga)		
Target version:			
ruby -v:	ruby 2.1.3p242 (2014-09-19 revision 47630) [x86_64-darwin13.0]	Backport:	2.0.0: DONTNEED, 2.1: DONTNEED, 2.2: DONE
Description When creating a new hash using { **hash1, **hash2 } literal, there are different behaviors between 2.2.0 or later and 2.1.7 or earlier like below. • ruby 2.2.0p0 (2014-12-25 revision 49005) [x86_64-darwin13] • ruby 2.1.3p242 (2014-09-19 revision 47630) [x86_64-darwin13.0] <pre>[1] pry(main)> hash1 = { duplicate_key: 1, key: 1 } => {:duplicate_key=>1, :key=>1} [2] pry(main)> hash2 = { duplicate_key: 3 } => {:duplicate_key=>3} [3] pry(main)> { **hash1, **hash2 } => {:duplicate_key=>3, :key=>1} [4] pry(main)></pre> • ruby 2.1.7p400 (2015-08-18 revision 51632) [x86_64-darwin13.0] <pre>[1] pry(main)> hash1 = { duplicate_key: 1, key: 1 } => {:duplicate_key=>1, :key=>1} [2] pry(main)> hash2 = { duplicate_key: 3 } => {:duplicate_key=>3} [3] pry(main)> { **hash1, **hash2 } => {:duplicate_key=>1, :key=>1} [4] pry(main)></pre> It seems that the behavior has changed from 2.2.0, however there is no mention in any documents as far as I searched. • https://github.com/ruby/ruby/blob/v2_2_0/NEWS • https://www.ruby-lang.org/en/news/2014/12/25/ruby-2-2-0-released/ Is this intended change? Please check this and give me a opinion. Warm Regards.			
Related issues:			
Related to Ruby - Bug #10315: Override policy for duplicated keywords		Closed	10/02/2014

Associated revisions

Revision 75c5b0afe416506c5cde70d916e4692fa0b1c6fb - 12/12/2015 08:17 AM - nagachika (Tomoyuki Chikanaga)

- doc/NEWS-0.2.2: add description about incompatible change in Hash duplicated key overriding policy. [Bug #10315] [Bug #11501]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@53050 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 75c5b0af - 12/12/2015 08:17 AM - nagachika (Tomoyuki Chikanaga)

- doc/NEWS-0.2.2: add description about incompatible change in Hash duplicated key overriding policy. [Bug #10315] [Bug #11501]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@53050 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 4aeace7321cd9e3f617c610253a843deabe0dafc - 12/12/2015 08:25 AM - nagachika (Tomoyuki Chikanaga)

merge revision(s) 53050: [Backport #11501]

```
* doc/NEWS-0.2.2: add description about incompatible change in Hash
  duplicated key overriding policy. [Bug #10315] [Bug #11501]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_2@53051 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 4aeace73 - 12/12/2015 08:25 AM - nagachika (Tomoyuki Chikanaga)

merge revision(s) 53050: [Backport #11501]

```
* doc/NEWS-0.2.2: add description about incompatible change in Hash
  duplicated key overriding policy. [Bug #10315] [Bug #11501]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_2@53051 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

History

#1 - 09/02/2015 06:34 AM - studio3104 (Satoshi SUZUKI)

- Description updated

#2 - 09/02/2015 06:51 AM - studio3104 (Satoshi SUZUKI)

- Description updated

#3 - 09/02/2015 06:54 AM - studio3104 (Satoshi SUZUKI)

- Description updated

#4 - 10/07/2015 07:22 AM - nagachika (Tomoyuki Chikanaga)

- Status changed from Open to Assigned

- Assignee set to matz (Yukihiro Matsumoto)

Hello, satoshi san.

Thank you for your report.

I've checked the behaviors on each versions from 2.1.0-2.1.7, 2.2.0-2.2.4, and trunk(2.3-head).

script: hashes.rb

```
a = {a: 1, b: 2}
b = {a: 42}
p({ **a, **b })
```

results

```
→ for v in 2.1.0 2.1.1 2.1.2 2.1.3 2.1.4 2.1.5 2.1.6 2.1.7 2.2.0 2.2.1 2.2.2 2.2.3 2.3.0-dev; do rbenv shell $
v; ruby -v hashes.rb; done
ruby 2.1.0p0 (2013-12-25 revision 44422) [x86_64-darwin13.0]
{:a=>1, :b=>2}
ruby 2.1.1p76 (2014-02-24 revision 45161) [x86_64-darwin13.0]
{:a=>1, :b=>2}
ruby 2.1.2p95 (2014-05-08 revision 45877) [x86_64-darwin13.0]
{:a=>1, :b=>2}
ruby 2.1.3p242 (2014-09-19 revision 47630) [x86_64-darwin13.0]
{:a=>1, :b=>2}
ruby 2.1.4p265 (2014-10-27 revision 48166) [x86_64-darwin13.0]
{:a=>1, :b=>2}
ruby 2.1.5p273 (2014-11-13 revision 48405) [x86_64-darwin14.0]
{:a=>1, :b=>2}
ruby 2.1.6p336 (2015-04-13 revision 50298) [x86_64-darwin14.0]
{:a=>1, :b=>2}
ruby 2.1.7p400 (2015-08-18 revision 51632) [x86_64-darwin14.0]
{:a=>1, :b=>2}
ruby 2.2.0p0 (2014-12-25 revision 49005) [x86_64-darwin13]
{:a=>42, :b=>2}
ruby 2.2.1p85 (2015-02-26 revision 49769) [x86_64-darwin14]
{:a=>42, :b=>2}
ruby 2.2.2p95 (2015-04-13 revision 50295) [x86_64-darwin14]
{:a=>42, :b=>2}
ruby 2.2.3p173 (2015-08-18 revision 51636) [x86_64-darwin14]
```

```
{:a=>42, :b=>2}  
ruby 2.3.0dev (2015-10-07 trunk 52068) [x86_64-darwin14]  
{:a=>42, :b=>2}
```

It seems that the behavior was changed between 2.1 <-> 2.2 series.

I don't know its intended or not.

In my personal opinion, I feel the latter (behavior of 2.2, 2.3) is reasonable because it's consistent with Hash#merge.

If matz admit this change, I'd like to add "Hash's incompatible changes" section in NEWS file on ruby_2_2 branch.

#5 - 10/10/2015 01:26 AM - wanabe (_ wanabe)

git bisect shows the change was introduced by [#10315](#).

I guess it is intended.

#6 - 10/10/2015 01:27 AM - wanabe (_ wanabe)

- Related to Bug [#10315](#): Override policy for duplicated keywords added

#7 - 10/10/2015 01:48 AM - wanabe (_ wanabe)

Oops, many revisions references [#10315](#).

Sorry, r47878 is the revision.

#8 - 10/30/2015 07:21 AM - nagachika (Tomoyuki Chikanaga)

- Assignee changed from matz (Yukihiro Matsumoto) to nagachika (Tomoyuki Chikanaga)

- Backport changed from 2.0.0: UNKNOWN, 2.1: UNKNOWN, 2.2: UNKNOWN to 2.0.0: DONTNEED, 2.1: DONTNEED, 2.2: REQUIRED

wanabe san, thank you for your investigation!

According to [#10315](#), It's intentional change.

I'll add comment for it in NEWS in ruby_2_2 and doc/NEWS-2.2.0 in trunk.

#9 - 12/12/2015 08:17 AM - nagachika (Tomoyuki Chikanaga)

- Status changed from Assigned to Closed

Applied in changeset r53050.

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- doc/NEWS-0.2.2: add description about incompatible change in Hash duplicated key overriding policy. [Bug [#10315](#)] [Bug [#11501](#)]

#10 - 12/12/2015 08:26 AM - nagachika (Tomoyuki Chikanaga)

- Backport changed from 2.0.0: DONTNEED, 2.1: DONTNEED, 2.2: REQUIRED to 2.0.0: DONTNEED, 2.1: DONTNEED, 2.2: DONE

Add description to NEWS about this on ruby_2_2 branch (I committed in doc/NEWS-2.2.0 on trunk and backport it) at r53051.