

Ruby - Bug #13698

Sort Methods Differ

06/29/2017 05:46 PM - sherrysarkar (Sherry Sarkar)

|                        |                                            |                                                           |
|------------------------|--------------------------------------------|-----------------------------------------------------------|
| <b>Status:</b>         | Rejected                                   |                                                           |
| <b>Priority:</b>       | Normal                                     |                                                           |
| <b>Assignee:</b>       |                                            |                                                           |
| <b>Target version:</b> |                                            |                                                           |
| <b>ruby -v:</b>        | ruby 2.3.3p222 (2016-11-21 revision 56859) | <b>Backport:</b> 2.2: UNKNOWN, 2.3: UNKNOWN, 2.4: UNKNOWN |

Description

Hello,

Issue:

Two different machines with the same ruby version return different results for the method "sort". One machine runs macOS and the other runs Linux. More specifically, when I run "ruby --version" in the macOS machine, I get "ruby 2.3.3p222 (2016-11-21 revision 56859) [x86\_64-darwin16]" and when I run "ruby --version" in the Linux machine, I get "ruby 2.3.3p222 (2016-11-21 revision 56859) [x86\_64-linux]".

Reproducibility:

If you run the following script in the two machines described above, you get different results.

```
arr = [{"id"=>"549741245", "changed"=>"2015-06-24T22:02:51Z"},
{"id"=>"549760170", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549760171", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549760172", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"551080187", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"551080188", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"551080189", "changed"=>"2015-06-29T21:49:24Z"}]
arr.sort { |a, b| b['changed'] <=> a['changed'] }
```

Results

The macOS machine returns

```
[{"id"=>"551080189", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"551080187", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"551080188", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"549760172", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549760170", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549760171", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549741245", "changed"=>"2015-06-24T22:02:51Z"}]
```

The Linux machine returns

```
[{"id"=>"551080187", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"551080188", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"551080189", "changed"=>"2015-06-29T21:49:24Z"},
{"id"=>"549760170", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549760171", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549760172", "changed"=>"2015-06-24T23:15:44Z"},
{"id"=>"549741245", "changed"=>"2015-06-24T22:02:51Z"}]
```

I would expect for sort (ruby 2.3.3p222) to return the same results given the same input.

Thanks!

History

#1 - 06/29/2017 05:51 PM - shevegen (Robert A. Heiler)

I get the same for the current ruby on linux (ruby 2.4.1p111 (2017-03-22 revision 58053) [i686-linux])

```
# => [{"id"=>"551080187", "changed"=>"2015-06-29T21:49:24Z"}, {"id"=>"551080188", "changed"=>"2015-06-29T21:49:24Z"}, {"id"=>"551080189", "changed"=>"2015-06-29T21:49:24Z"}, {"id"=>"549760170", "changed"=>"2015-06-24T23:15:44Z"}, {"id"=>"549760171", "changed"=>"2015-06-24T23:15:44Z"}, {"id"=>"549760172", "changed"=>"2015-06-24T23:15:44Z"}, {"id"=>"549741245", "changed"=>"2015-06-24T22:02:51Z"}]
```

Perhaps someone with ruby on mac can confirm the result by sherrysarkar.

## **#2 - 06/30/2017 05:06 AM - nobu (Nobuyoshi Nakada)**

- *Description updated*

- *Status changed from Open to Rejected*

Array#sort is not guaranteed as "stable".

You should compare other keys if they matter.