Bug #7276
TestFile#test_utime failure
11/05/2012 02:40 AM - jonforums (Jon Forums)

<table>
<thead>
<tr>
<th>Status</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
<td>Normal</td>
</tr>
<tr>
<td>Assignee</td>
<td>nobu (Nobuyoshi Nakada)</td>
</tr>
<tr>
<td>Target version</td>
<td>2.0.0</td>
</tr>
<tr>
<td>ruby -v</td>
<td>ruby 2.0.0dev (2012-11-04 trunk 37467) [i386-mingw32]</td>
</tr>
</tbody>
</table>

**Description**

I'm currently travelling and am in UTC-5. I get the following make test-all failure on Win7 32bit with mingw-w64 gcc 4.7.2. It appears that trunk@37467 is not handling daylight savings time correctly.

I'm not going to have time to try to repro on my Arch system, but can anyone else in UTC-5 (or other DST observing region) repro on either a Win7 or Linux system?

```
[ 3509/11467] TestFile#test_utime = 0.00 s
5) Failure:
    test_utime(TestFile) [c:/Jenkins/workspace/ruby-trunk-svn/test/ruby/test_file.rb:287]:
    [ruby-core:44776],
    expected but was
    ...
Finished tests in 641.449135s, 17.8767 tests/s, 4150.9932 assertions/s.
11467 tests, 2662651 assertions, 1 failures, 0 errors, 83 skips
```

**Related issues**

Related to Backport193 - Backport #6385: mtime vie File.stat(filename).utime ...
Closed 05/01/2012

**Associated revisions**

Revision 111b8614 - 01/30/2013 08:08 AM - nobu (Nobuyoshi Nakada)

`win32.h: revert r37337`

- include/ruby/win32.h (fstat): revert r37337, which uses _fstati64() instead of fstati64() on mingw32. [Bug #7276]

```
      git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@38992 b2dd03c8-39d4-4d8f-98ff-823fe69b080e
```

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History

#1 - 11/05/2012 02:50 AM - jonforums (Jon Forums)
Appears to be a trunk regression as TestFile#test_utime passes on ruby_1_9_3@37334

C:\Jenkins\workspace\ruby-1_9_3-svn\ruby -v test\ruby\test_file.rb
ruby 1.9.3p305 (2012-10-26 revision 37334) [i386-mingw32]
Run options:

Running tests:

............................
Finished tests in 1.154402s, 27.7200 tests/s, 127.3387 assertions/s.

#2 - 11/05/2012 11:10 PM - mame (Yusuke Endoh)
- Status changed from Open to Assigned
- Assignee set to nobu (Nobuyoshi Nakada)

#3 - 11/18/2012 12:35 PM - jonforums (Jon Forums)
Ping.

This is the only test-all fail I have when building trunk on Win7 with mingw-w64 gcc 4.7.2.

This fail does not show up at http://ci.rubyinstaller.org/ because the current build slaves reside in an area that doesn't participate in the daylight savings time circus.

#4 - 11/18/2012 11:29 PM - luislavena (Luis Lavena)
- Assignee changed from nobu (Nobuyoshi Nakada) to usa (Usaku NAKAMURA)

Nakamura-san,

Do you have any idea about this? Nobu seems not responding so perhaps you can help us figure out the best solution for this.

Thank you.

#5 - 11/19/2012 12:59 AM - jonforums (Jon Forums)
No failure when building trunk@37710 on Arch 3.6.6 with gcc 4.7.2

#6 - 11/26/2012 03:01 PM - h.shirosaki (Hiroshi Shirosaki)
This seems due to r37337. I don't know the reason of r37337, but reverting the commit (use rb_w32_fstati64 for fstat) will fix this.

#7 - 11/26/2012 03:57 PM - usa (Usaku NAKAMURA)
- Assignee changed from usa (Usaku NAKAMURA) to nobu (Nobuyoshi Nakada)

#8 - 12/02/2012 02:21 AM - jonforums (Jon Forums)
This still fails as of r38131 on my Win7 32bit system. Given Shirosaki-san's comment, what's preventing this from being quickly fixed on trunk?

Since this bug is not made visible by the rubyinstaller CI (build slave location) I will manually run any tests or builds you need in order to validate the fix. Let me know what you need.

#9 - 01/09/2013 01:36 AM - jonforums (Jon Forums)
Status? Is this planned to be fixed for 2.0.0?
This is the only failure I get when building trunk (make test-all and make test) with mingw-w64 4.7.2 32bit on Win7.

As stated previously, you don't see this failure at http://ci.rubyinstaller.org/ because Luis' build slaves are located in an uneffected timezone.

#10 - 01/28/2013 11:24 PM - phasis68 (Heesob Park)
This daylight savings time bug is described at http://www.codeproject.com/Articles/1144/Beating-the-Daylight-Savings-Time-bug-and-getting and http://support.microsoft.com/kb/158588/en-us

The workaround is using the Windows API call instead of using the C library call.

#11 - 01/29/2013 01:21 PM - jonforums (Jon Forums)
Nobu-san: why was r37337 required and rb_w32_fstati64 no longer correct?

Heesob: good read. After reverting r37337 as per Hiroshi's comment, I get 0 fails on trunk@38966 (Win7 32bit + mingw-w64 4.7.2) because fstat -> rb_w32_fstati64 (win32/win32.c:4474) rather than fstat -> _fstati64 which causes mingw-w64 to use msvcrt's _fstati64 (i686-w64-mingw32/include/_mingw_stat64.h:12)

http://msdn.microsoft.com/en-us/library/221w8e43%28v=vs.90%29.aspx

Given the info you linked, do you think the current rb_w32_fstati64 is a valid workaround? Does reverting r37337 also work for you on Win8?

#12 - 01/29/2013 01:45 PM - phasis68 (Heesob Park)
Reverting r37337 works on Windows 8.

I think the only drawback to rb_w32_fstati64 is a little performance loss.

#13 - 01/30/2013 04:59 PM - nobu (Nobuyoshi Nakada)
I don't remember the reason well, probably some mingw failed to link the dll or extension libraries. But I can't find which failed, so revert it.

#14 - 01/30/2013 05:08 PM - nobu (Nobuyoshi Nakada)
- Status changed from Assigned to Closed
- % Done changed from 0 to 100

This issue was solved with changeset r38992. Jon, thank you for reporting this issue. Your contribution to Ruby is greatly appreciated. May Ruby be with you.

win32.h: revert r37337

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03/17/2020