

## Ruby master - Bug #8400

### skip `Rinda::TestRingFinger` tests on platforms not implementing `getifaddrs()`

05/13/2013 08:56 AM - jonforums (Jon Forums)

|   |                  |
|---|------------------|
| <b>Status:</b> Closed   |                  |
| <b>Priority:</b> Normal   |                  |
| <b>Assignee:</b>  |                  |
| <b>Target version:</b>  |                  |
| <b>ruby -v:</b> ruby -v: ruby 2.1.0dev (2013-05-12 trunk 40676) [i386-mingw32]  | <b>Backport:</b> |
| <b>Description</b>  |                  |
| The 32 and 64bit trunk builds at ci.rubyinstaller.org are failing make test-all   |                  |
| 32bit => <a href="http://ci.rubyinstaller.org/view/Ruby%20Trunk/job/ruby-trunk-x86-test-all/1333/console">http://ci.rubyinstaller.org/view/Ruby%20Trunk/job/ruby-trunk-x86-test-all/1333/console</a>                    |                  |
| 64bit => <a href="http://ci.rubyinstaller.org/view/Ruby%20Trunk/job/ruby-trunk-x64-test-all/1218/console">http://ci.rubyinstaller.org/view/Ruby%20Trunk/job/ruby-trunk-x64-test-all/1218/console</a>                    |                  |
| as is my Win7 32bit system because non applicable tests are being allowed to fail with NotImplementedError rather than being skipped:   |                  |
| [ 1948/13374] Rinda::TestRingFinger#test_make_socket_ipv6_multicast = 0.00 s  |                  |
| 7) Error:   |                  |
| Rinda::TestRingFinger#test_make_socket_ipv6_multicast:  |                  |
| NotImplementedError: getifaddrs() function is unimplemented on this machine   |                  |
| c:/Users/Jon/Documents/RubyDev/ruby-git/test/rinda/test_rinda.rb:535:in getifaddrs'   |                  |
| c:/Users/Jon/Documents/RubyDev/ruby-git/test/rinda/test_rinda.rb:535:inprepare_ipv6'  |                  |
| c:/Users/Jon/Documents/RubyDev/ruby-git/test/rinda/test_rinda.rb:665:in `test_make_socket_ipv6_multicast'   |                  |
| [ 1949/13374] Rinda::TestRingFinger#test_make_socket_ipv6_multicast_hops = 0.00 s   |                  |
| 8) Error:   |                  |
| Rinda::TestRingFinger#test_make_socket_ipv6_multicast_hops:   |                  |
| NotImplementedError: getifaddrs() function is unimplemented on this machine   |                  |
| c:/Users/Jon/Documents/RubyDev/ruby-git/test/rinda/test_rinda.rb:535:in getifaddrs'   |                  |
| c:/Users/Jon/Documents/RubyDev/ruby-git/test/rinda/test_rinda.rb:535:inprepare_ipv6'  |                  |
| c:/Users/Jon/Documents/RubyDev/ruby-git/test/rinda/test_rinda.rb:679:in `test_make_socket_ipv6_multicast_hops'  |                  |
| Also, after you've made a commit, I ask that you swing by <a href="http://ci.rubyinstaller.org/">http://ci.rubyinstaller.org/</a> to double-check that your commit didn't break the relevant mingw-based Windows build. |                  |
| Jon   |                  |

## History

### #1 - 05/14/2013 12:38 AM - jonforums (Jon Forums)

[usa \(Usaku NAKAMURA\)](#), nice...just scanning r40693 :) ;)

Looks like NET\_LUID redef when using mingw-w64 headers is cause of this fail

<http://ci.rubyinstaller.org/view/Ruby%20Trunk/job/ruby-trunk-x86-build/1514/console>

Mingw-w64 headers do this

L14: <http://mingw-w64.svn.sourceforge.net/viewvc/mingw-w64/tags/v2.0.6/mingw-w64-headers/include/iptypes.h?revision=5856&view=markup>

L87: <http://mingw-w64.svn.sourceforge.net/viewvc/mingw-w64/tags/v2.0.6/mingw-w64-headers/include/ifdef.h?revision=5856&view=markup>

Haven't looked at mingw.org or msvc headers to see if simple #ifdef for mingw-w64 would be a potential fix.

### #2 - 05/14/2013 03:07 AM - jonforums (Jon Forums)

test file build results with 32bit compilers => cl, mingw.org 4.2.6, mingw-w64 4.7.2, mingw-w64 4.8.0

<https://gist.github.com/jonforums/5570163>

### #3 - 05/14/2013 01:08 PM - jonforums (Jon Forums)

usa, below is the quick patch I needed in order to build on win7 32bit with mingw-w64 gcc 4.7.4. The patch solved the make test-all failures and make test still passed.

```
### make test-all results
...
[11522/13375] TestSprintf#test_float = 0.00 s
72) Failure:
TestSprintf#test_float [c:/Users/Jon/Documents/RubyDev/ruby-git/test/ruby/test_sprintf.rb:193]:
[ruby-dev:42551].
<"0x1p+2"> expected but was
<"0x1p+1">.
```

Finished tests in 847.472473s, 15.7822 tests/s, 2649.6365 assertions/s.  
13375 tests, 2245494 assertions, 1 failures, 0 errors, 101 skips

ruby -v: ruby 2.1.0dev (2013-05-14 trunk 40710) [i386-mingw32]  
make: \*\*\* [yes-test-all] Error 1

```
### make test results
...
gcc version 4.7.3 (rubenvb-4.7.4-release)
sample/test.rb:gc OK 4 27K 1210 62
test succeeded
PASS all 964 tests
...
Driver is ruby 2.1.0dev (2013-05-14 trunk 40710) [i386-mingw32]
Target is ruby 2.1.0dev (2013-05-14 trunk 40710) [i386-mingw32]
```

KNOWNBUGS.rbPASS 0  
No tests, no problem

The first hunk below is a throwaway hack to fix the problem that if\_nametoindex in ext/socket/ifaddr.c:143 is only available on vista or greater. In the current rubyinstaller recipes we currently define -D\_WIN32\_WINNT=0x501 so without this hunk I get link errors.

<http://msdn.microsoft.com/en-us/library/windows/desktop/bb408409%28v=vs.85%29.aspx>

I believe the second hunk is more robust than r40721 because it appears that your NET\_LUID struct is needed only by mingw.org toolchains, not msvc or mingw-w64. I don't know when I'll next have time to look at this, but plan to check that that the second hunk is valid and works on my mingw.org toolchain.

Given the os version issues with if\_nametoindex I think the real fix is an emulation function similar to what cygwin does. Likely an #ifdef \_WIN32\_WINNT >= 0x600 that uses the real if\_nametoindex and falls back to an emulated fcn.

What do you think?

```
diff --git a/ext/socket/extconf.rb b/ext/socket/extconf.rb
index 88e7366..b7810d0 100644
--- a/ext/socket/extconf.rb
+++ b/ext/socket/extconf.rb
@@ -442,7 +442,7 @@ EOF
```

```
if ipv6
if $mingw


- $CPPFLAGS << " -D_WIN32_WINNT=0x501" unless $CPPFLAGS.include?("_WIN32_WINNT")
- $CPPFLAGS << " -D_WIN32_WINNT=0x601" end ipv6lib = nil class << (fmt = "unknown") diff --git a/win32/win32.c b/win32/win32.c index 2489942..f3d4b2c 100644 --- a/win32/win32.c +++ b/win32/win32.c @@ -3762,7 +3762,7 @@ str2guid(const char *str, GUID *guid) }

```

```
/* License: Ruby's */
-#ifndef IFDEF
+#if !defined(MSC_VER) && !defined(_MINGW64_VERSION_MAJOR)
typedef struct {
uint64_t Value;
struct {
```

#### #4 - 05/14/2013 11:22 PM - jonforums (Jon Forums)

Related, should windows-specific implementation for this issue be moved from win32.c to a networking specific file (win32/net.c ?) and the build scripts updated similar to what Shiroasaki-san did for win32/file.c?

win32.c is a 150k, 6900 line pandora's box of awesomeness, and I'm for putting it on a diet.

#### #5 - 01/30/2014 01:57 AM - hsbt (Hiroshi SHIBATA)

- Target version changed from 2.1.0 to 2.2.0

**#6 - 01/05/2018 09:00 PM - naruse (Yui NARUSE)**

- Target version deleted (2.2.0)

**#7 - 08/10/2019 04:42 AM - jeremyevans0 (Jeremy Evans)**

- Backport deleted (1.9.3: UNKNOWN, 2.0.0: UNKNOWN)

- Status changed from Open to Closed

This should be fixed by [66ee8a17852bb7657712afd3ac088a8b9b293d71](#);