

## Ruby master - Bug #10640

### build fail with mingw-w64 gcc 4.9.2 due to configure NET\_LUID check

12/24/2014 04:52 PM - jonforums (Jon Forums)

<b>Status:</b>	Third Party's Issue	
<b>Priority:</b>	Normal	
<b>Assignee:</b>	nobu (Nobuyoshi Nakada)	
<b>Target version:</b>	2.2.0	
<b>ruby -v:</b>	ruby 2.1.5p273 (2014-11-13 revision 48404) [i386-mingw32]	<b>Backport:</b> 2.0.0: UNKNOWN, 2.1: DONE

#### Description

On my Win8.1 x64 system I get the following build fail when building ruby\_2\_1 and ruby\_2\_2 using a 32bit gcc 4.9.2 toolchain from the mingw-w64 project [mingw-w64 32bit 4.9.2 toolchain](#)

The build fail does not occur on ruby\_2\_0\_0. I have not tried building trunk.

```
# build using overridden rubyinstaller build recipe
rake ruby21 make_opt=-j8 local=C:\Users\Jon\Documents\RubyDev\ruby-git openssl=1.0.1j libffi=
3.2.1 rbreadline=0.5.1 dkver=mingw64-32-4.9.2
...
```

```
compiling ../../../../ruby-git/win32/win32.c
../../../../ruby-git/win32/win32.c:3889:7: error: conflicting types for 'NET_LUID'
    } NET_LUID;
      ^
```

```
In file included from C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/
include/iptypes.h:14:0,
      from C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/
include/iphlpapi.h:15,
      from ../../../../ruby-git/include/ruby/win32.h:41,
      from ../../../../ruby-git/include/ruby/defines.h:163,
      from ../../../../ruby-git/include/ruby/ruby.h:29,
      from ../../../../ruby-git/win32/win32.c:24:
```

```
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ifdef.h:93:3:
note: previous declaration of 'NET_LUID' was here
    } NET_LUID, *PNET_LUID;
      ^
```

```
Makefile:349: recipe for target 'win32/win32.o' failed
make: *** [win32/win32.o] Error 1
```

The following patch fixes the mingw-w64 build, but I have not tested it using a mingw.org based toolchain. Given [nobu's commit comment](#) I suspect this simple patch is not applicable to both mingw-w64 and mingw.org toolchains due to header file differences.

```
diff --git a/configure.in b/configure.in
index e132076..4a25dde 100644
--- a/configure.in
+++ b/configure.in
@@ -1103,7 +1103,7 @@ main()
     { test "$target_cpu" = x64 && ac_cv_func___builtin_setjmp=no; }
     AC_CHECK_TYPE([NET_LUID], [], [],
                   [:@include <windows.h>
-                   @:@include <iphlpapi.h>])
+                   @:@include <ifdef.h>])
     if test x"$ac_cv_type_NET_LUID" = xyes; then
         AC_DEFINE(HAVE_TYPE_NET_LUID, 1)
     fi
```

#### Associated revisions

Revision 44e0cd19 - 12/25/2014 04:59 AM - nobu (Nobuyoshi Nakada)

configure.in: workaround of mingw-w64

- configure.in (NET\_LUID): include also ifdef.h as a workaround of a bug in mingw-w64 header. [ruby-core:67103] [Bug #10640]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@48988 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

**Revision 48988 - 12/25/2014 04:59 AM - nobu (Nobuyoshi Nakada)**

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**Revision e13315da - 12/25/2014 08:27 AM - nobu (Nobuyoshi Nakada)**

configure.in: include winsock2.h

- configure.in (NET\_LUID): include winsock2.h instead of windows.h. patch by Jon Forums in [ruby-core:67125]. [Bug #10640]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@48997 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

**Revision 48997 - 12/25/2014 08:27 AM - nobu (Nobuyoshi Nakada)**

configure.in: include winsock2.h

- configure.in (NET\_LUID): include winsock2.h instead of windows.h. patch by Jon Forums in [ruby-core:67125]. [Bug #10640]

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#### Revision 713de756 - 12/25/2014 08:33 AM - naruse (Yui NARUSE)

merge revision(s) 48997: [Backport #10640]

```
* configure.in (NET_LUID): include winsock2.h instead of windows.h.  
  patch by Jon Forums in [ruby-core:67125]. [Bug #10640]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby\_2\_2@48998 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

#### Revision 48998 - 12/25/2014 08:33 AM - naruse (Yui NARUSE)

merge revision(s) 48997: [Backport #10640]

```
* configure.in (NET_LUID): include winsock2.h instead of windows.h.  
  patch by Jon Forums in [ruby-core:67125]. [Bug #10640]
```

#### Revision 12ef4f02 - 01/20/2015 08:31 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r44876,r47130,r48988,r48997: [Backport #10640] [Backport #10679]

```
configure.in: use C99
```

```
* configure.in: ISO9899:1999 is necessary for strtoll() on FreeBSD
```

10, (and may be possibly other platforms).

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```
* configure.in (NET_LUID): include winsock2.h instead of windows.h.  
  patch by Jon Forums in [ruby-core:67125]. [Bug #10640]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby\_2\_1@49356 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

#### Revision 49356 - 01/20/2015 08:31 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r44876,r47130,r48988,r48997: [Backport #10640] [Backport #10679]

```
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  patch by Jon Forums in [ruby-core:67125]. [Bug #10640]
```

## History

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### #1 - 12/25/2014 04:56 AM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Third Party's Issue

As iphlpapi.h should include ifdef.h via iptypes.h, in fact both of Microsoft SDK's and cygwin mignw's do it, it seems a bug of that mingw-w64 header.

There are too many mingws.

### #2 - 12/25/2014 06:42 AM - jonforums (Jon Forums)

This is strange as the mingw-w64 headers appear to have the same include chain for NET\_LUID. I will try building trunk to confirm your update.

[iphlpapi.h](#)

|

[iptypes.h](#)

|

[ifdef.h](#)

### #3 - 12/25/2014 07:34 AM - jonforums (Jon Forums)

I still get the same NET\_LUID conflict failure when building trunk at r48989.

Config.log shows this ugliness

```
It was created by configure, which was  
generated by GNU Autoconf 2.69. Invocation command line was
```

```

$ ../../../../ruby-git/configure --enable-shared --disable-install-doc debugflags=-g CPPFLAGS=-DFD_SETSIZE=2048
DLDFLAGS=-static-libgcc --prefix=C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/ruby21_mingw
...
configure:8794: checking for NET_LUID
configure:8794: gcc -c -O3 -fno-omit-frame-pointer -fno-fast-math -g -DFD_SETSIZE=2048 -D_WIN32_WINNT=0x050
1 -D__MINGW_USE_VC2005_COMPAT conftest.c >&5
In file included from C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/neti
oapi.h:10:0,
      from C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/iph1
papi.h:16,
      from conftest.c:30:
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ws2ipdef.h:71:3: error: un
known type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY si_family;
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ws2ipdef.h:76:3: error: un
known type name 'SOCKADDR_STORAGE'
  SOCKADDR_STORAGE gf_group;
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ws2ipdef.h:79:3: error: un
known type name 'SOCKADDR_STORAGE'
  SOCKADDR_STORAGE gf_slist[1];
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ws2ipdef.h:84:3: error: un
known type name 'SOCKADDR_STORAGE'
  SOCKADDR_STORAGE gr_group;
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ws2ipdef.h:89:3: error: un
known type name 'SOCKADDR_STORAGE'
  SOCKADDR_STORAGE gsr_group;
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/ws2ipdef.h:90:3: error: un
known type name 'SOCKADDR_STORAGE'
  SOCKADDR_STORAGE gsr_source;
  ^
In file included from C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/iph1
papi.h:16:0,
      from conftest.c:30:
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:108:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family;
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:368:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:403:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:416:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:433:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:438:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:446:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:495:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:508:3: error: u
nknown type name 'ADDRESS_FAMILY'
  ADDRESS_FAMILY Family,
  ^

```

```

C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:517:3: error: unknown type name 'ADDRESS_FAMILY'
    ADDRESS_FAMILY Family,
    ^
In file included from C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/iphlpapi.h:16:0,
                 from confstest.c:30:
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:537:3: error: unknown type name 'ADDRESS_FAMILY'
    ADDRESS_FAMILY Family,
    ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:547:3: error: unknown type name 'ADDRESS_FAMILY'
    ADDRESS_FAMILY Family,
    ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:555:3: error: unknown type name 'ADDRESS_FAMILY'
    ADDRESS_FAMILY Family,
    ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:565:3: error: unknown type name 'ADDRESS_FAMILY'
    ADDRESS_FAMILY Family,
    ^
C:/Users/Jon/Documents/RubyDev/ri-git/sandbox/devkit/mingw/i686-w64-mingw32/include/netioapi.h:575:3: error: unknown type name 'ADDRESS_FAMILY'
    ADDRESS_FAMILY Family,
    ^
configure:8794: $? = 1
configure: failed program was:
| /* confdefs.h */
| #define PACKAGE_NAME ""
| #define PACKAGE_TARNAME ""
| #define PACKAGE_VERSION ""
| #define PACKAGE_STRING ""
| #define PACKAGE_BUGREPORT ""
| #define PACKAGE_URL ""
| #define CANONICALIZATION_FOR_MATHN 1
| #define RUBY_MSVCRT_VERSION 60
| #define STDC_HEADERS 1
| #define HAVE_SYS_TYPES_H 1
| #define HAVE_SYS_STAT_H 1
| #define HAVE_STDLIB_H 1
| #define HAVE_STRING_H 1
| #define HAVE_MEMORY_H 1
| #define HAVE_STRINGS_H 1
| #define HAVE_INTTYPES_H 1
| #define HAVE_STDINT_H 1
| #define HAVE_UNISTD_H 1
| #define __EXTENSIONS__ 1
| #define _ALL_SOURCE 1
| #define _GNU_SOURCE 1
| #define _POSIX_PTHREAD_SEMANTICS 1
| #define _TANDEM_SOURCE 1
| #define RUBY_SYMBOL_EXPORT_BEGIN _Pragma("GCC visibility push(default)")
| #define RUBY_SYMBOL_EXPORT_END _Pragma("GCC visibility pop")
| /* end confdefs.h. */
| #include <windows.h>
|         #include <ifdef.h>
|         #include <iphlpapi.h>
|
| int
| main ()
| {
| if (sizeof (NET_LUID))
|     return 0;
|     ;
|     return 0;
| }
configure:8794: result: no
...
configure:23820: result: ruby library version = 2.2.0
configure:24011: creating ./config.status
...
ac_cv_type_NET_LUID=no
...

```

#### #4 - 12/25/2014 08:08 AM - jonforums (Jon Forums)

This patch allows me to build trunk at r48993 and get #define HAVE\_TYPE\_NET\_LUID 1 populated in config.h

```
diff --git a/configure.in b/configure.in
index ae08fa0..375ef55 100644
--- a/configure.in
+++ b/configure.in
@@ -1102,8 +1102,7 @@ main()
     ac_cv_func_malloc_usable_size=no
     { test "$target_cpu" = x64 && ac_cv_func___builtin_setjmp=no; }
     AC_CHECK_TYPE([NET_LUID], [], [],
-                 [:@include <windows.h>
-                 @:@include <ifdef.h>
+                 [:@include <winsock2.h>
+                 @:@include <iphlpapi.h>])
     if test x"$ac_cv_type_NET_LUID" = xyes; then
         AC_DEFINE(HAVE_TYPE_NET_LUID, 1)
```

#### #5 - 01/20/2015 07:27 PM - nagachika (Tomoyuki Chikanaga)

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

see [#10679](#)

#### #6 - 01/20/2015 08:32 PM - nagachika (Tomoyuki Chikanaga)

- Backport changed from 2.0.0: UNKNOWN, 2.1: REQUIRED to 2.0.0: UNKNOWN, 2.1: DONE

r44876,r47130,r48988,r48997 were backported into ruby\_2\_1 at r49356